

**BURNOUT, WORK ENGAGEMENT AND SENSE OF COHERENCE IN NURSES  
WORKING AT A CENTRAL HOSPITAL IN KWAZULU-NATAL**

by

**TALENT MATURURE**

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the degree of

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## DECLARATION

I, Talent Maturure, student number 34424334, declare that this dissertation of limited scope, entitled **“Burnout, work engagement and sense of coherence in nurses working at a central hospital in KwaZulu-Natal”**, is my own work, and that all the sources that I have used or have quoted from have been indicated and acknowledged by means of complete references. The dissertation has not in part or in full been previously submitted for any other degree or examination at this or any other university.

I further declare that ethical clearance to conduct the research was obtained from the Department of Industrial and Organisational Psychology and the participating organisation which is a central hospital in KwaZulu-Natal.

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Talent Maturure

March 2016

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## SUMMARY

Burnout, work engagement and sense of coherence in nurses working at a central hospital in  
KwaZulu-Natal

by

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The key objective of this study was to determine the relationship between burnout (measured by the Maslach Burnout Inventory – Human Services Survey (MBI-HSS)), work engagement (measured by the Utrecht Work Engagement Scale), and sense of coherence (measured by the Orientation of Life Questionnaire developed by Antonovsky (1987)). A quantitative study using a cross-sectional survey research design was conducted on a randomly selected sample (N = 178) of nurses at a central hospital in Kwa-Zulu Natal.

A theoretical relationship was established between the variables. The empirical relationship revealed statistically significant negative relationship between burnout and work engagement. A statistically significant negative relationship was also established between burnout and SOC.

The findings add valuable knowledge to industrial and organisational psychology and can be applied to promote employee and organisational wellness.

### KEY TERMS

**Burnout, work engagement, sense of coherence, emotional exhaustion, cynicism, personal accomplishment, vigour, dedication, absorption, comprehensibility, manageability, meaningfulness.**

## TABLE OF CONTENTS

<b>Declaration</b> .....	<b>ii</b>
<b>Acknowledgements</b> .....	<b>iii</b>
<b>Summary</b> .....	<b>iv</b>
<b>Table of contents</b> .....	<b>v</b>
<b>List of Tables</b> .....	<b>x</b>
<b>List of Figures</b> .....	<b>xi</b>
<b>CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH</b> .....	<b>1</b>
<b>1.1 BACKGROUND AND MOTIVATION FOR THE STUDY</b> .....	<b>1</b>
<b>1.2 PROBLEM STATEMENT</b> .....	<b>6</b>
<b>1.3 AIMS OF THE RESEARCH</b> .....	<b>7</b>
1.3.1 The general aim of the study .....	7
1.3.2 The specific aims of the research .....	7
1.3.2.1 <i>The specific aims relating to the literature review</i> .....	7
1.3.2.2 <i>The specific aims relating to the empirical study:</i> .....	8
1.3.3 Formulation of the hypotheses .....	8
<b>1.4 THE PARADIGM PERSPECTIVE</b> .....	<b>8</b>
1.4.1 Relevant Paradigms .....	9
1.4.1.1 <i>Positive Psychology Paradigm</i> .....	9
1.4.1.2 <i>Behaviourist Paradigm</i> .....	9
1.4.1.3 <i>Positivist Paradigm</i> .....	10
1.4.2 Meta-theoretical statements .....	10
1.4.2.1 <i>Personnel Psychology</i> .....	11
1.4.2.2 <i>Organisational Psychology</i> .....	11
1.4.2.3 <i>Psychometrics</i> .....	11
<b>1.5 RESEARCH DESIGN</b> .....	<b>12</b>
1.5.1 Research Variables .....	12
1.5.2 Reliability and validity .....	12
1.5.2.1 <i>Reliability</i> .....	13
1.5.2.2 <i>Validity</i> .....	13
1.5.3 Unit of analysis.....	13
1.5.4 Methods to ensure ethical research principles .....	14
<b>1.6 RESEARCH METHOD</b> .....	<b>14</b>
1.6.1 Phase 1: Literature review .....	15
1.6.2 Phase 2: Empirical investigation and interpretation .....	15

1.6.2.1 Sample/Research participants .....	16
1.6.2.2 Measuring instruments .....	16
1.6.2.3 Administering the research procedure.....	17
1.6.2.4 Statistical analysis .....	18
1.6.2.5 Hypothesis testing.....	18
1.6.2.6 Results.....	18
1.6.3 PHASE 3: CONCLUSIONS .....	18
<b>1.7 CHAPTER LAYOUT .....</b>	<b>19</b>
<b>1.8 CHAPTER SUMMARY .....</b>	<b>19</b>
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	<b>20</b>
<b>2.1 BURNOUT .....</b>	<b>20</b>
2.1.1 An overview of burnout.....	20
2.1.2 Burnout defined .....	20
2.1.3 Components of burnout .....	23
2.1.3.1 Emotional Exhaustion.....	23
2.1.3.2 Cynicism .....	24
2.1.3.3 Personal accomplishment.....	24
2.1.4 The effects of burnout in the workplace .....	25
<b>2.2 WORK ENGAGEMENT .....</b>	<b>27</b>
2.2.1 An overview of work engagement.....	27
2.2.2 Work engagement defined.....	29
2.2.3 Components of work engagement .....	31
2.2.3.1 Vigour .....	31
2.2.3.2 Dedication.....	31
2.2.3.3 Absorption.....	32
2.2.4 Underlying rationale of work engagement .....	32
2.2.5 Application of work engagement in the workplace.....	35
<b>2.3 SENSE OF COHERENCE .....</b>	<b>37</b>
2.3.1 An overview of sense of coherence .....	37
2.3.2 Sense of coherence defined .....	38
2.3.3 Components of sense of coherence .....	38
2.3.3.1 Comprehensibility.....	39
2.3.3.2 Manageability.....	40
2.3.3.3 Meaningfulness .....	40
2.3.4 Underlying rationale of sense of coherence.....	40
2.3.5 Application of sense of coherence in the workplace .....	42
<b>2.4 INTEGRATION OF THE THREE VARIABLES .....</b>	<b>45</b>
2.4.1 Burnout and work engagement.....	45

2.4.2 Burnout and sense of coherence .....	46
2.4.3 Work engagement and sense of coherence.....	48
<b>2.5 CHAPTER SUMMARY .....</b>	<b>49</b>
<b>CHAPTER 3: RESEARCH ARTICLE .....</b>	<b>51</b>
<b>BURNOUT, WORK ENGAGEMENT AND SENSE OF COHERENCE IN NURSES     WORKING AT A CENTRAL HOSPITAL IN KWAZULU-NATAL.....</b>	<b>51</b>
<b>INTRODUCTION.....</b>	<b>53</b>
<b>Background to the study .....</b>	53
<b>LITERATURE REVIEW.....</b>	<b>54</b>
Burnout.....	54
Work engagement.....	56
Sense of coherence .....	58
The relationship between burnout, work engagement and sense of coherence .....	60
Context of the study.....	61
Research objectives .....	62
The potential value added by the study .....	63
<b>RESEARCH DESIGN.....</b>	<b>63</b>
<b>Research approach .....</b>	63
<b>Research method .....</b>	64
Research participants.....	64
Measuring instruments .....	66
Maslach Burnout Inventory-Human Services Survey (MBI-HSS).....	66
Utretch Work Engagement Scale (UWES).....	67
Orientation to Life Questionnaire (OLQ) .....	67
Research procedure .....	68
Statistical analysis .....	68
<b>RESULTS .....</b>	<b>69</b>
Descriptive statistics.....	69
Reliability .....	69
Descriptive statistics: burnout, work engagement and sense of coherence.....	71
Pearson product-moment correlation analysis: Burnout and work engagement.....	73
Pearson product-moment correlation analysis: Burnout and SOC.....	73
Pearson product-moment correlation analysis: Work engagement and SOC .....	74
Inferential statistics: multiple regression analysis .....	76
<b>DISCUSSION .....</b>	<b>78</b>
Research aim 1: To determine the empirical relationship between burnout, work engagement and sense of coherence of nurses working in a central hospital in KwaZulu-Natal.....	79

Research aim 2: To determine whether work engagement and sense of coherence predict burnout .....	81
Conclusion: Implications for human resource management practices .....	81
Limitations of the study .....	82
Recommendations for future research .....	82
<b>REFERENCES .....</b>	<b>84</b>
<b>CHAPTER 4: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS .....</b>	<b>94</b>
<b>4.1 INTRODUCTION .....</b>	<b>94</b>
<b>4.2 CONCLUSIONS .....</b>	<b>94</b>
4.2.1 Conclusions regarding the literature review .....	94
4.2.2 Conclusions regarding the empirical study .....	96
4.2.2.1 <i>Research aim 1: To determine the empirical relationship between burnout, work engagement and sense of coherence of nurses working in a central hospital in KwaZulu-Natal .....</i>	<i>96</i>
4.2.2.2 <i>Research aim 2: To determine whether work engagement and sense of coherence predict burnout .....</i>	<i>96</i>
4.2.3 Conclusions regarding the central hypothesis .....	97
4.2.4 Conclusions regarding contributions to the field of industrial and organisational psychology .....	97
<b>4.3 LIMITATIONS .....</b>	<b>98</b>
<b>4.4 RECOMMENDATIONS .....</b>	<b>98</b>
<b>4.5 CHAPTER SUMMARY .....</b>	<b>98</b>
<b>REFERENCES .....</b>	<b>99</b>



## LIST OF TABLES

<b>Table 2.1 Burnout definitions (Adapted from Paine, 1982, p. 30).....</b>	<b>21</b>
<b>Table 2.2: SOC translated to the everyday level at a workplace. Adapted from Hanson (2007, p. 137)......</b>	<b>45</b>
<b>Table 2.3: A theoretical comparison of burnout, work engagement and sense of coherence ...</b>	<b>49</b>
<b><u>RESEARCH ARTICLE</u></b>	
<b>Table 1: Biographical information of the nurses in the sample.....</b>	<b>65</b>
<b>TABLE 2: Reliability coefficients (N = 178) .....</b>	<b>70</b>
<b>Table 3: Descriptive statistics of the constructs .....</b>	<b>72</b>
<b>Table 4: Pearson correlation product analysis.....</b>	<b>75</b>
<b>Table 5: Multiple regression analysis with burnout as dependent and work engagement and sense of coherence as independent variables .....</b>	<b>76</b>

## LIST OF FIGURES

<b>Figure 2.1: The dimensions of burnout.....</b>	<b>23</b>
<b>Figure 2.2: The Job-Demand Resources model of work engagement. Adapted from Bakker &amp; Demerouti (2007).....</b>	<b>33</b>
<b>Figure 2.3: The dimensions of sense of coherence.....</b>	<b>39</b>

## **CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH**

The research described in this dissertation explores the relationship between burnout, work engagement and sense of coherence in nurses working at a central hospital in KwaZulu-Natal. Chapter 1 contains the background and motivation, the problem statement, the aims, paradigm perspective, research design and method as well as the chapter layout of the research. A graphic representation of the research process is provided in Figure 1.1 which is also linked to the chapter layout.

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

A stable and productive health service is of vital importance to any country (Van der Colff & Rothmann, 2009). It is the desire of any society to have optimally functioning health workers as these provide essential services to all members of society. The importance of work performed by health care employees in any society cannot be overemphasised as their services are essential and invaluable to all members of society. However, it is of concern to note that these health care service providers also suffer from stress and burnout (Van der Colff & Rothmann, 2009). According to Estry-Behar, Van der Heijden, Oginska, Camerino, Le Nezet, Conway, and Fry (2007), European healthcare institutions are encountering difficulties recruiting and retaining highly qualified nurses due to their working conditions which have generated a great deal of dissatisfaction and high levels of burnout. Similarly, in the South African context, studies show that workers in the health and services sector are working in stressful environments which make them more susceptible to burnout (Bezuidenhout & Cilliers, 2010; Koekemoer & Mostert, 2006; Naudé & Rothmann, 2006; Rothmann, 2003; Rothmann & Malan, 2011; Van der Colff & Rothmann, 2009).

According to Koekemoer and Mostert (2006), health care employees in South Africa face a myriad challenges which include overcrowded hospitals and high patient loads. Moreover, there is an alarming turnover of nursing employees which is precipitated by budgetary constraints and poor working conditions resulting in staff shortages and ever increasing workloads for the remaining staff (Stanz & Greyling, 2010). Also, research has shown that individuals who socialise or work with people are prone to experience stress or burnout (Van der Colff & Rothmann, 2009). Although Hans Selye (1970) pointed out that without stress there is no life, as stress is required to heighten

effective decision-making, Walinga and Rowe (2013) believe that stress can be debilitating if it becomes chronic or overwhelming to an employee. Furthermore, according to Walinga and Rowe (2013), as an individual's psychological and physical resources become overwhelmed, negative symptoms emerge such as depression, memory loss, poor attention, anger, inefficiency and exhaustion which are detrimental to optimal functioning at any workplace. In recent years there have been complaints about poor service delivery in hospitals and this has been attributed to work overload and lack of resources which have made nursing staff susceptible to burnout (Hall, 2004).

Burnout has been a research focus area for many years and its impact is felt in organisations (Glass, McKnight, & Valdimarsdottir, 1993; McKnight & Glass, 1995; Schaufeli & Janczur, 1994) including hospitals (Bezuidenhout & Cilliers, 2010; Buys & Rothmann, 2010; Van der Colff & Rothmann, 2009) which present the focus area of the current study. However, there has been a shift from a pathological view to a positive psychology paradigm (Seligman & Csikszentmihalyi, 2000; Strümpfer, 1990). Therefore studies on positive constructs such as work engagement (Chughtai & Buckley, 2008; Macey & Schneider, 2008; Saks, 2006; Takawira, Coetzee, & Schreuder, 2014) and sense of coherence (Harry & Coetzee, 2013; Johnston, de Bruin, Györkös, Geldenhuys, Massoudi, & Rossier, 2013; Muller & Rothmann, 2009) have also been on the rise and have focused on the definition of these constructs, their effect on performance, coping, career adaptability and turnover, etc. The current study focuses on the relationship between burnout, work engagement and sense of coherence in nurses working at a central hospital.

Burnout impacts negatively on the wellbeing and performance of employees. It has been suggested that burnout affects mostly employees in the care and services industry (Bezuidenhout & Cilliers, 2010; Naudé & Rothmann, 2006; Rothmann & Malan, 2011; Van der Colff & Rothmann, 2009). Hence the current research focused on the nursing environment with a desire to find out the relationship between burnout, work engagement and sense of coherence.

Maslach and Jackson (1981) defined burnout as a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do people work. Schaufeli and Enzmann (1998, p. 36) on the other hand, defined burnout as “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterised by exhaustion, which is accompanied by

distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work.” While according to Van Doornen, Houtveen, Langelaan, Bakker, Van Rhenen, and Schaufeli (2009), burnout is a syndrome primarily caused by chronic high job demands, poor job resources and insufficient recovery. Although different, all these definitions highlight the negative and immobilising nature of burnout.

Three components of burnout are emotional exhaustion, cynicism and reduced personal accomplishment (Naudé & Rothmann, 2006). Emotional exhaustion refers to feelings of depleted physical and emotional resources and prompts actions in workers to distance themselves emotionally and cognitively from their work (Van der Colff & Rothmann, 2009). Cynicism refers to distancing oneself from people with whom one is in direct contact in the working environment (Buys & Rothmann, 2010). Lack of personal accomplishment is the tendency to evaluate one’s work with recipients negatively (Van der Colff & Rothmann, 2009).

Work engagement is defined as a positive fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). Vigour refers to high levels of persistence, energy, and mental resilience while working and willingness to invest in one’s effort (Van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). Dedication refers to being strongly involved in one’s work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge (Naudé & Rothmann, 2006). Absorption refers to being fully concentrated and deeply engrossed in one’s work, whereby time passes quickly and having difficulties with detaching oneself from work (Van Beek et al., 2012).

In expounding on the components of work engagement, Rothmann and Rothmann (2010) noted that the three work engagement components can be categorised as physical, cognitive and emotional. The physical component occurs when an employee becomes physically involved in a task and shows a positive affective state; the cognitive component is exhibited through alertness at work and experiencing absorption and involvement; and the emotional component is experienced when feeling connected to one’s job or others whilst working (Rothmann & Rothmann, 2010).

In their study, Rothmann and Rothmann (2010) found that job resources were positively related to employee engagement, and hence organisations can enhance employee wellness by supporting their employee with adequate resources. This same view is expressed by Naudé and Rothmann (2006) who noted that job and personal resources enhance engagement levels.

According to Antonovsky (1987, p.19), sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence characterised by “(1) the stimuli deriving one’s internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli, and (3) these demands are challenges, worthy of investment and engagement”.

Sense of coherence is comprised of three components, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987). Comprehensibility refers to the extent to which the person perceives the stimuli from both within and without as clear, ordered structured and consistent information and on the basis of which one can expect that these stimuli will in future also be explicable or predictable (Strümpfer, 1990). Manageability refers to the extent to which a person perceives the events of higher life as experiences that are bearable or even better challenges that can be met (Strümpfer, 1990). Meaningfulness refers to the extent to which the person feels that life makes sense emotionally rather than cognitively (Strümpfer, 1990).

According to Strümpfer (1990), whilst it is true that regardless of differences in the availability of resources, people differ in how they transform their potential into actuality. He found that people with a stronger sense of coherence are more likely to have a readiness and willingness to exploit the resources they have at their disposal, hence the current research sought to establish the relationship between burnout and sense of coherence.

Work engagement which is classified as a positive emotion has brought with it mixed conceptions about the relationship between burnout and work engagement. According to Schaufeli et al. 2002 work engagement is the hypothetical antipode of burnout. In fact, according to Schaufeli and

Bakker (2010), the two constructs are exact opposites. However, according to Bezuidenhout and Cilliers (2010) these two constructs are not exact opposites. Thus, regardless of the different views of researchers, burnout and work engagement are part of the workplace dynamics which need to be understood in order to promote work engagement or help eradicate burnout.

Sense of coherence has proved to be critical in employees including nurses (Antonovsky, 1987). It helps employees to feel in charge of their circumstances, view their tasks as manageable and achievable, and hence it is likely to moderate the relationship between burnout and work engagement (Strümpfer, 1990).

According to Rothmann and Rothmann (2010), work engagement is important in any organisation as it helps predict organisational outcomes such as productivity. Research (Bezuidenhout & Cilliers, 2010; Mendes & Stander, 2011; Rothmann & Rothmann, 2010) has shown that understanding the relationships between burnout, work engagement and sense of coherence can be very important to organisations as it helps them develop effective and efficient organisational strategies. Mendes and Stander (2011) showed that the boundary between these constructs remains focus point for further study.

According to Hopkins (2011), there is a relationship between job demands, burnout, job resources and engagement; however, not much research has been done in this area especially in the South African context. Buitendach and Field (2011) noted that much research has concentrated on positive psychology in terms of concepts of engagement and sense of coherence, and they recommend that further study of the relationship between these constructs be conducted, thus providing another reason for conducting the current study.

Van Der Colff and Rothmann (2009) found that the experience of the depletion of emotional resources and the feelings of cynicism by registered nurses were associated with stress due to job demands and lack of organisational support. The current study will add more insights for industrial and organisational psychologists and human resource managers in understanding the dynamics between burnout, work engagement and sense of coherence of employees in an ever-changing

workplace. The research findings of this study will hopefully contribute to the body of knowledge of positive psychology in the South African context. They will also inform the organisation about the current levels of burnout, work engagement and sense of coherence found in employees which may in turn influence policy formulation.

## **1.2 PROBLEM STATEMENT**

The 21st century workplace has changed. It has been impacted by technological, social, economic and globalisation issues, and the protean career has become dominant. Employees have to deal with these changes on a continual basis, as well as with other strenuous factors, especially if they are working in the services sector, and are thus vulnerable to burnout (Van der Colff & Rothmann, 2009). The emergence of work engagement and sense of coherence, both being positive psychological constructs, can help alleviate the effects of burnout; however, there is a need for understanding the relationship between these constructs (Bezuidenhout & Cilliers, 2010).

Organisations need to understand the relationship between burnout, work engagement and sense of coherence in order for them to design measures which can help curb the negative effects of burnout and promote wellness in the workplace and which might boost optimal functioning of both employees and organisations (Coetzee & Cilliers, 2001). Currently, very little research evidence exists on the moderating relationship between burnout, work engagement and sense of coherence (Buys & Rothmann, 2010).

To address the above issues, this research was designed to answer the following literature and empirical questions:

Research questions with regard to the literature review:

- How is burnout conceptualised in the literature?
- How is work engagement conceptualised in the literature?
- How is sense of coherence conceptualised in the literature?
- Is there a theoretical relationship between burnout, work engagement and sense of coherence?



Research questions with regard to the empirical study:

- What is the nature of the empirical relationship between burnout, work engagement and sense of coherence as manifested in a sample of nurses working in a central hospital in KwaZulu-Natal?
- Do work engagement and sense of coherence predict burnout?
- What recommendations and areas for future research based on the research findings can be proposed for the field of industrial and organisational psychology?
- What recommendations can be made to the organisation with regard to the impact of positive psychology in the workplace?

### **1.3 AIMS OF THE RESEARCH**

Based on the empirical questions highlighted above, the following aims were developed:

#### **1.3.1 The general aim of the study**

The general aim of the study was to investigate the relationship between burnout, work engagement and sense of coherence.

#### **1.3.2 The specific aims of the research**

The following aims were formulated for the literature review and empirical study:

##### *1.3.2.1 The specific aims relating to the literature review*

The specific aims relating to the literature review were as follows:

- To conceptualise burnout
- To conceptualise work engagement
- To conceptualise sense of coherence
- To explain the theoretical relationship between burnout, work engagement and sense of coherence

### *1.3.2.2 The specific aims relating to the empirical study:*

The specific aims relating to the empirical study were as follows:

- To determine the empirical relationship between burnout, work engagement and sense of coherence in nurses working in a central hospital in KwaZulu-Natal
- To determine whether work engagement and sense of coherence predict burnout in a statistically significant way
- To draw conclusions, highlight limitations and make recommendations for future research and the organisation with regard to employee wellness policy

### **1.3.3. Formulation of the hypotheses**

According to Neuman (2003), a hypothesis is a proposition to be tested or a tentative statement of a relationship between two variables. Two types of hypotheses are the null hypothesis (which predicts no relationship between variables) and the alternative hypothesis (which predicts that there is a relationship between variables). The research hypothesis was driven by the research aim to investigate the relationship between burnout, work engagement and sense of coherence.

The above discussion led to the establishment of the hypotheses stated below.

H<sub>0</sub>: There is no statistically significant relationship between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal.

H<sub>1</sub>: There is a statistically significant relationship between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal.

## **1.4 THE PARADIGM PERSPECTIVE**

According to Terre Blanche, Durrheim, and Painter (2006), paradigms are all-encompassing systems of interrelated practice and thinking that define for researchers the nature of their enquiry along ontology (the nature of reality that is to be studied and what can be known) and epistemology (the nature of the relationship between the researcher and what can be known). A paradigm can also be seen as a model for conducting normal research with the purpose of establishing appropriate

facts, matching facts and theory, and articulation of theory (Mouton & Marais, 1991). In terms of this definition, paradigms play a pivotal role in the conducting of research as they help specify the nature of reality to be studied and what can be known. These paradigms, constructs, meta-theoretical statements and relevant models are discussed below.

### **1.4.1 Relevant Paradigms**

In the current research study, the paradigms of positive psychology, behaviourism and the positivism served to guide the study.

#### *1.4.1.1 Positive Psychology Paradigm*

Positive psychology focuses on human optimal functioning, enhancing and using human strengths (Seligman & Csikszentmihalyi, 2000), psychological strengths and flourishing (Coetzee & Cilliers, 2001). In positive psychology the emphasis is on the positive rather than the negative aspects of human behaviour and wellbeing (Bergh & Geldenhuys, 2013). Burnout, work engagement and sense of coherence are presented in this study in terms of the positive psychology paradigm. Whilst burnout is a negative construct, according to the positive psychology paradigm, its negative effects are acknowledged and mediated by mobilizing human strengths such as coping, resilience, optimism, employee engagement and emotional intelligence (Coetzee & Viviers, 2007)

#### *1.4.1.2 Behaviourist Paradigm*

Behaviourists posit that behaviour should be observable, can be studied objectively, modified and can be learned (Bergh & Theron, 2009). Behaviour can also be controlled and predicted (Bergh & Theron, 2009). Behaviourism is concerned with finding out what factors determine human behaviour and such knowledge is then used to predict and control human behaviour (McComb, 2011). According to Meyer, Moore, and Viljoen (2003), behaviourism is based on the object of the study, method used, the thinking that directs the theoretical explanations and the objective of the study. Thus the current study sought to find the relationship between burnout, work engagement and sense of coherence by determining human behaviour in the workplace.

### *1.4.1.3 Positivist Paradigm*

Terre Blanche et al. (2006) highlighted three main research paradigm approaches, namely the positivist, interpretive, and constructionist approaches. The positivist approach was applied in the current study as the principles of objectivity, empiricism and quantitativism had to be applied (Sarantakos, 2005). The ontological assumption of the positivist paradigm is that the physical and the social world exist separately, and the researcher can discover this world through measurement (Terre Blanche et al., 2006). The positivist approach shows that hypotheses and theories can be empirically tested and verified (Terre Blanche et al., 2006). The current research made use of objective and standardised measurements to investigate the relationship between burnout, work engagement and sense of coherence.

### **1.4.2 Meta-theoretical statements**

Meta-theoretical statements are statements which include models, theories and paradigms which help in the understanding of different concepts. According to Mouton and Marais (1991), no scientific findings can be conclusively proved on the basis of empirical research data only; researchers are thus compelled to make assumptions justifying specific theories, methodological strategies and models that are not necessarily tested in the specific study but form the definitive context of the study. This study was conducted within the discipline of industrial psychology which is defined as the scientific study of people within their work environment (Muchinsky, 2009). It is a field of study of human behaviour which utilises psychology principles and assumptions to understand and influence human behaviour in organisational processes (Bergh & Theron, 2009). The current research falls into the industrial psychology field of study as it seeks to address issues which affect employees in the workplace. Sub-fields of industrial psychology include organisational psychology, personnel psychology, research methodology, career psychology, ergonomics, occupational psychological assessment, employee and organisational wellness, employee relations and consumer psychology. Some of the sub-fields of industrial and organisational psychology relevant to the current study are discussed below (Bergh & Geldenhuys, 2013).

#### *1.4.2.1 Personnel Psychology*

Personnel psychology is a subfield within industrial and organisational psychology. According to Cascio (as cited in Muchinsky, 2009), personnel psychology is an applied psychology that focuses on individual differences in behaviour and job performance and on methods of measuring and predicting such performance. Personnel psychology includes activities such as job analysis and criterion development, psychological assessment, employee selection and placement, employee reward and remuneration, employee training and development, career development support, employee performance evaluation, attracting and retaining scarce and critical talent (Schreuder & Coetzee, 2010). Burnout, work engagement and sense of coherence which are measured in this research study fall within personnel psychology, as they provide information that is crucial for human resources management in the workplace.

#### *1.4.2.2 Organisational Psychology*

Organisational psychology focuses on the study of work organisations as systems involving individual employees and work groups as well as the structure and dynamics of organisations (Bergh & Geldenhuys, 2013). Organisational psychology is also a subfield within industrial and organisational psychology. Organisational psychology facilitates positive psychological capital or resources such as sense of coherence, optimism, self-efficacy, work engagement, locus of control, etc. in organisations and employees which promote employee wellbeing (Schreuder & Coetzee, 2010). Bergh and Theron (2009) posited that employees experiencing high levels of wellbeing have greater ability to deal with stress at work, experience job satisfaction and contribute towards organisational effectiveness. Organisational psychology thus aims to enable employee satisfaction, productivity, employee adjustment and organisational efficiency; thus any processes which are supported by research information.

#### *1.4.2.3 Psychometrics*

Psychometrics is the study which focuses on the development and evaluation of psychological measuring instruments and the statistical analysis of assessment results to determine the value of psychological assessment and assessment instruments (Bergh & Theron, 2009). The constructs of

this study - burnout, work engagement and sense of coherence - are measured by means of standardised instruments, thus the relevance of this subfield.

## **1.5 RESEARCH DESIGN**

A research design is an arrangement of conditions for collection and analysis of data in a manner that aims to match relevance to the research purpose (Selltiz et al. as cited in Mouton & Marais, 1991). A research design is meant to ensure that eventual validity of research findings are maximised (Mouton & Marais, 1991). For the purpose of the current study, a cross-sectional survey design was used. According to Neuman (2003), cross-sectional survey designs are appropriate for research questions about self-reported beliefs or behaviours and they can measure many variables, test multiple hypotheses, infer temporal order from questions about past behaviour and characteristics. Thus a cross-sectional approach was deemed to be suitable for the current research study.

### **1.5.1 Research Variables**

A variable is an empirical construct which can take more than one value or intensity (Sarantakos, 2005). There are two main types of variables - dependent and independent variables. A dependent variable is a variable which is set to be affected by another variable, and an independent variable is a variable set to cause changes in another variable (Sarantakos, 2005). In this study, the independent variables are work engagement and sense of coherence, while burnout is the dependent variable.

### **1.5.2 Reliability and validity**

The processes which were used to ensure reliability and validity in the research study are explained below:

### *1.5.2.1 Reliability*

Reliability refers to the extent to which a particular technique or measure, if applied repeatedly to the same object, will be able to yield the same result each time (Sarantakos, 2005). In ensuring reliability of the current study, data was collected from only nurses working for the hospital and the instruments used were all standardised. In terms of data analysis, the Statistical Package for Social Sciences version 22 was used (Statistical Package for Social Sciences, 2014).

### *1.5.2.2 Validity*

Validity can be defined as the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration (Babbie & Mouton, 2011). Moreover, validity reflects the essential value of the study which is accepted and expected by researchers and users of the research findings (Sarantakos, 2005). In the current study, standardised measuring instruments, appropriate data analysis techniques, models and theories relevant to the research topic were used to ensure validity. A representative sample was used to ensure internal validity of the research findings; however, the results of the study cannot be generalised to broader populations as the sample was confined to nurses working for a single organisation.

### **1.5.3 Unit of analysis**

A unit of analysis refers to the “what” of a research study which may include the object, phenomenon, entity, process or the event the researcher is interested in (Babbie & Mouton, 2011). The unit of analysis can be classified into four units, namely individuals, groups, organisations, social objects and social interactions (Babbie & Mouton, 2011). For the current study, individuals and groups were used as the unit of analysis as the researcher was seeking to establish the relationship between burnout, work engagement and sense of coherence in nursing employees. Research data was collected from individual nurses who formed part of the sample and the results were analysed focusing on different groups, and thus individuals and groups were considered the unit of analysis in the current study.

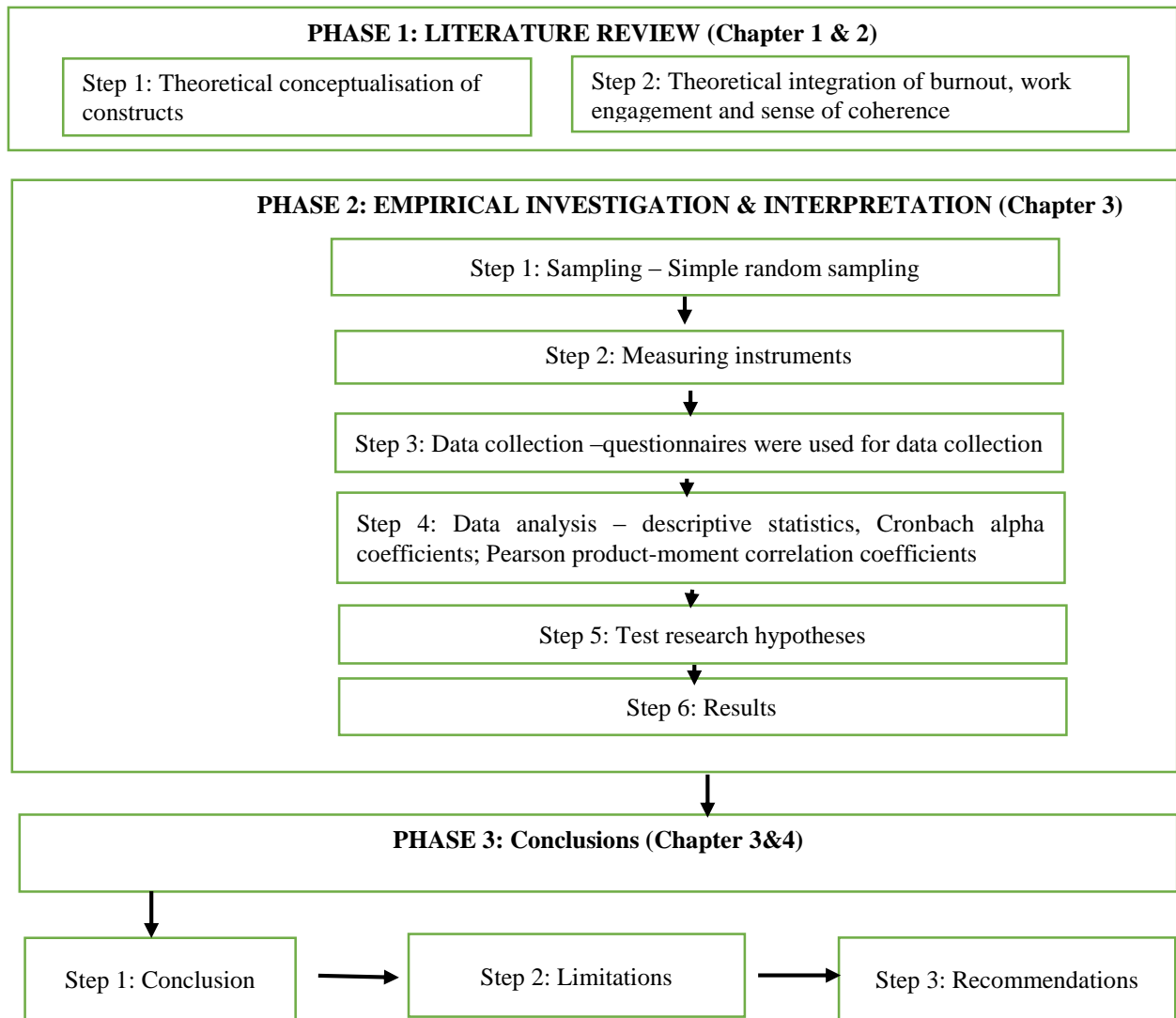
#### **1.5.4 Methods to ensure ethical research principles**

Ethical clearance to conduct the research was obtained from the Research Ethics Committee of the University of South Africa (Unisa). The research was guided by the ethical guidelines provided by the Health Professions Council of South Africa and the Department of Industrial and Organisational Psychology at Unisa. According to these guidelines, a researcher needs to obtain consent from the research participants, may not cause harm to the research participants and must maintain confidentiality. Informed consent was thus sought from all research participants. Research participants were requested to complete and sign a consent form that was attached to the questionnaires. As recommended by Babbie and Mouton (2011), the researcher ensured that no harm occurred to the participants, and kept and treated all the research information as confidential. The research participants were required to return their completed questionnaires in sealed envelopes to ensure confidentiality. The research results were shared with the organisation with some recommendations according to the research findings.

#### **1.6 RESEARCH METHOD**

The research process consisted of three phases, namely the literature review in which the variables were conceptualised; the empirical study, which involved selecting research participants, deciding on the measuring instruments, selecting the appropriate research procedure and carrying out a statistical analysis; and the last phase involved the interpretation of the results. The flow of the research process is depicted in Figure 1.1.





**Figure 1.1: Flow chart of Research method**

### 1.6.1 Phase 1: Literature review

The steps in the literature review phase were as follows:

Step 1: Conceptualisation of burnout, work engagement and sense of coherence from a theoretical perspective.

Step 2: A theoretical integration of burnout, work engagement and sense of coherence.

### 1.6.2 Phase 2: Empirical investigation and interpretation

The steps followed in the empirical part of the research are discussed below.

### *1.6.2.1 Sample/Research participants*

The researcher selected a sample of 300 research participants from a population of 700 nurses working at central hospital in KwaZulu-Natal. The sample was selected using a simple random sampling method which ensured equal chances of research participants to be selected (Sarantakos, 2005). This sampling method was used to ensure representativeness of the sample selected from the total population (Terre Blanche et al., 2006). A record of all nurses employed by the hospital was requested from the human resources department and the employees were assigned numbers which were used to select the research participants. After the allocation of numbers, research participants were randomly selected using random numbers and employee's assigned number for research selection.

### *1.6.2.2 Measuring instruments*

A questionnaire was developed for the collection of biographical data such as gender, age and qualifications as this was important for sample description. The Maslach Burnout Inventory – Human Services Survey (MBI-HSS) developed by Maslach and Jackson (1986) was used to measure the levels of burnout, the Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002) was used to measure the levels of engagement, and sense of coherence was measured using the Orientation of Life questionnaire (OLQ) (Antonovsky, 1987).

- a. The Maslach Burnout Inventory – Human Services Survey (MBI-HSS) was developed by Maslach and Jackson (1986). The MBI-HSS consists of 22 items reflecting personal feelings and attitudes of individuals; these are scored on a 7-point frequency scale, ranging from 0 (never) to 6 (every day). The three subscales of the MBI-HSS include emotional exhaustion (nine items - such as “I feel emotionally drained from my work”), cynicism (five items - such as “I feel I treat some recipients as if they were impersonal objects”) and personal accomplishment (eight items - such as “I have accomplished many worthwhile things in this job”) (Maslach & Jackson, 1986). Internal consistencies of the MBI-HSS were noted to be well above 0.70 Cronbach alpha level except for cynicism, and a test-retest reliability ranging from three months to a year was reported to range from 0.50 to 0.82 (Van der Colff & Rothmann, 2009). Maslach and Jackson (1986) reported alpha values of 0.77 for depersonalisation and 0.89 for exhaustion.

- b. The Utrecht Work Engagement Scale (UWES) measures work engagement, a positive work-related state of fulfilment that is characterised by vigour, dedication and absorption (Schaufeli et al., 2002). The UWES is made up of 17 items which are scored on a 6-point frequency rating scale, ranging from 0 (never) to 6 (always). According to Storm and Rothmann (2003), a 3-factor structure of the UWES has been validated for the South African context and has an internal consistency and reliability which ranges from 0.68 and 0.91, which are all above the recommended value of 0.60 (Pallant, 2001).
  
- c. Sense of coherence was measured by the Orientation of Life Questionnaire developed by Antonovsky (1987). It measures sense of coherence in terms of three sub-scores, namely comprehensibility, manageability and meaningfulness. The sense of coherence questionnaire comprising 29 self-rating items was used. Strümpfer and Wissing (1998) have confirmed the reliability and validity in various South African studies. Antonovsky (1993) reports an internal consistency of between 0.82 and 0.95, and a construct validity of between 0.38 and 0.72. According to Pallant (2001), a Cronbach alpha of 0.80 is appropriate for cognitive tests, 0.70 is suitable for ability tests, and for psychological constructs values below 0.70 can be expected.

#### *1.6.2.3 Administering the research procedure*

Questionnaires together with blank envelopes were given to the human resources department which helped with the distribution of the questionnaires to the participants. Questionnaires included a cover page with instructions to the participants and information on the assessments and the research. The consent form was also included in the questionnaire and which participants were requested to sign. Participants were given four weeks to complete and return the completed questionnaires to the human resources department. The researcher collected the completed questionnaires on a weekly basis to monitor participants' response. After the collection of all completed questionnaires, an analysis and interpretation of the research findings was done. Confidentiality was maintained at all times as the participants were required to return the completed questionnaires in sealed envelopes which meant that only the researcher had access to them.

#### *1.6.2.4 Statistical analysis*

In line with the quantitative approach, statistical analyses comprising descriptive statistics, such as the mean, standard deviation and correlations, were conducted. Multiple regression, Pearson product moment and the Statistical Package for Social Sciences (SPSS 22) programme were used for analysis. Correlations between burnout, work engagement and sense of coherence scores were examined to determine relations, and multiple regression analysis was used to determine whether work engagement and sense of coherence can predict burnout. Multiple regression is a method used to measure contributions made by independent variables in relation to the dependent variable (Terre Blanche et al., 2006).

#### *1.6.2.5 Hypothesis testing*

A hypothesis is a statement in which an assumed relationship or difference between variables is postulated (Mouton & Marais, 1991). At this stage hypothesis testing was conducted based on the proposed research hypotheses stated in section 1.3.3.

#### *1.6.2.6 Results*

Results were presented using tables and a discussion culminating in the interpretation of the results.

### **1.6.3 PHASE 3: CONCLUSIONS**

Conclusions about the empirical relationship between burnout, work engagement and sense of coherence were drawn.

Limitations based on observations during the study were discussed and recommendations for future research proposed.

## **1.7 CHAPTER LAYOUT**

### **Chapter 1:** Scientific orientation of the study

In this chapter, the introduction to the current study, background and motivation for the study, the problem statement, the aims of this study and variables, paradigm perspectives, meta-theoretical statements, the research design, measuring instruments and statistical analysis are discussed.

### **Chapter 2:** Literature review

Burnout, work engagement and sense of coherence are conceptualised in this chapter. This chapter also provides a discussion of the theoretical relationship between burnout, work engagement and sense of coherence.

### **Chapter 3:** Research article

This chapter takes the form of a research article covering the steps for phase 2 as highlighted in the graphical representation of how this research was conducted. The discussion includes the research methodology, the sample size, data collection, research instruments, and ethical considerations to ensure validity and reliability of the research study. It also focuses on the data analysis, results and integration of the research findings.

### **Chapter 4:** Conclusions, limitations and recommendations

In this chapter, an integrated discussion on the research conclusions, limitations and recommendations for both future research and the organisation is provided.

## **1.8 CHAPTER SUMMARY**

In this chapter the scientific orientation of the research was discussed, specifically, the background and motivation, the research problem, aims, the paradigm perspective and the research design. The research method and chapter layout were also depicted in a graph.

## **CHAPTER 2: LITERATURE REVIEW**

In this chapter burnout, work engagement and sense of coherence (SOC) are conceptualised. A review of relevant literature is provided on each construct and comprises an overview, definition, components, underlying rationale and application of the construct to the workplace. The chapter concludes with a discussion on the integration of burnout, work engagement and SOC.

### **2.1 BURNOUT**

In this section burnout will be discussed by providing a brief overview of burnout, definition of burnout, components of burnout, underlying rationale of burnout and the effects of burnout in the workplace.

#### **2.1.1 An overview of burnout**

The term “burnout” was first introduced by psychologist Herbert Freudenberger (1974) who described it as a negative job-related psychological state comprising a set of symptoms such as physical fatigue, emotional exhaustion and loss of motivation (Hakanen & Schaufeli, 2012). Freudenberger’s efforts were followed by Christian Maslach (1976) who defined burnout as a multi-dimensional stress syndrome consisting of mental fatigue (emotional exhaustion) and negative perceptions and feelings about clients or patients (cynicism), and a crisis in professional competence (reduced personal accomplishment).

Initially, burnout was assumed to occur in individuals who are in the helping professions such as health care, social services, or education. However, after some time of research work and practice, it was learned that burnout also exists outside the realm of the human services (Maslach & Leiter, 1997). The measurements of burnout which had specifically examined burnout in people doing “people work” thus had to be broadened to include all employees (Maslach & Leiter, 1997).

#### **2.1.2 Burnout defined**

Maslach and Jackson (1981) posited that burnout is a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do “people work” of some kind. They

pointed out that burnout is a three-dimensional syndrome of emotional exhaustion (i.e. the draining of emotional resources because of demanding interpersonal contacts with others), cynicism (i.e. a negative, callous and cynical attitude towards the recipients of one's care or services) and lack of accomplishment (i.e. the tendency to evaluate one's work with recipients negatively). According to Schaufeli and Bakker (2004), burnout is a metaphor that is commonly used to describe a state of mental weariness. González-Romá, Schaufeli, Bakker and Lloret (2006) posited that burnout is a reaction to chronic occupational stress characterised by the three dimensions as highlighted by Maslach and Jackson (1981).

Maslach (1982) reviewed several studies on burnout and compiled several definitions as outlined in Table 2.1 below.

**Table 2.1 Burnout definitions (Adapted from Paine, 1982, p. 30)**

- |  |
|--|
| <p>i) A syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among individuals who do “people work” of some kind.</p> <p>ii) A progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of the conditions of their work.</p> <p>iii) A state of physical, emotional, and mental exhaustion marked by physical depletion and chronic fatigue, feelings of helplessness and hopelessness, and the development of a negative self-concept and negative attitudes toward work, life, and other people.</p> <p>iv) A syndrome of inappropriate attitudes toward clients and self, often associated with uncomfortable physical and emotional symptoms.</p> <p>v) A state of exhaustion, irritability, and fatigue that markedly decreases the worker's effectiveness and capability.</p> <p>vi) To deplete oneself. To exhaust one's physical and mental resources. To wear oneself out by excessively striving to reach some unrealistic expectations imposed by oneself or by the values of society.</p> <p>vii) To wear oneself out doing what one has to do. An inability to mobilise interests and capabilities.</p> <p>viii) A malaise of the spirit. A loss of will.</p> <p>ix) To become debilitated, weakened, because of extreme demands on one's physical and/or mental energy.</p> <p>x) An accumulation of intense negative feelings that is so debilitating that a person withdraws from the situation in which those feelings are generated.</p> <p>xi) A pervasive mood of anxiety giving way to depression and despair.</p> <p>xii) A process in which a professional's attitudes and behaviour change in negative ways in response to job strain</p> <p>xiii) An inadequate coping mechanism used consistently by an individual to reduce stress.</p> <p>xiv) A condition produced by working too hard for too long in a high-pressure environment.</p> <p>xv) A debilitating psychological condition resulting from work-related frustrations, which results in lower employee productivity and morale.</p> |
|--|

According to Maslach (1982), although these definitions are different in terms of scope and their focus areas (for example, some only focus on the causes and some purely refer to psychological conditions), there are three common core threads in these definitions, namely:

- There is common agreement that burnout occurs at an individual level.
- Burnout is an internal psychological experience involving feelings, attitudes, motives and expectations.

- Burnout is a negative experience for the individual in that it concerns problems, distress, discomfort, dysfunction, and/or negative consequences.

In light of the above definitions, it should be noted that Maslach and Jackson (1981) focused mostly on three characteristics (emotional exhaustion, cynicism and personal accomplishment) not considering other factors such as exhaustion of physical and mental resources, malaise of spirit, feelings of helplessness and hopelessness which further describe the state of a burned-out individual (Schaufeli & Enzmann, 1998). Therefore burnout can be defined as a syndrome of exhaustion of physical, emotional, mental resources, malaise of the spirit, feelings of helplessness and hopelessness, cynicism and lack of personal accomplishment stimulated by chronic negative occupational stress.

According to Maslach and Leiter (1997), burnout is an index of dislocation between what people are and what they have to do. This index represents erosion in values, dignity, spirit, will, engagement with the job and emotions.

Schaufeli and Enzmann (1998, p. 36) defined burnout as “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work.” According to Nelson and Elsberry (1992), burnout is conceptualised as a dynamic, multidimensional process in which prolonged high levels of job stress propel individuals beyond their ability to cope and result in negative consequences. Leiter and Maslach (2004) posited that burnout is a psychological syndrome characterised by exhaustion, cynicism and inefficiency that is experienced in response to chronic job stress. Considering the foregoing definitions of burnout, burnout is then a psychological syndrome and a reaction to persistent negative experiences characterised by emotional exhaustion, cynicism and lack of competency which are a product of chronic responses to occupational stress. One can thus see that the researchers (Leiter & Maslach, 2004; Nelson & Elsberry, 1992) agreed on the outcome of burnout (exhaustion, reduced effectiveness and development of dysfunctional attitudes and behaviour); however, Nelson and Elsberry (1992) also introduce the element of coping, thus highlighting the fact that individuals who fail to cope are the ones who suffer burnout. In the current study burnout was conceptualised according to the descriptions of Schaufeli and Enzmann (1998) as they provide a comprehensive definition which contains both state (Maslach & Jackson, 1986) and process (Nelson & Elsberry, 1992) characteristics of burnout. State because it is a



condition in which those succumbing to burnout persistently operate in and process because it involves a spiral attitude and behaviour change in negative response to work demands. Both these are important for the study because nursing provides a work environment conducive to burnout as the nurses have to deal with people, work in shifts and are expected to balance job demands and resources.

### 2.1.3 Components of burnout

According to Maslach, Schaufeli and Leiter (2001), the three key dimensions of burnout are exhaustion, cynicism and professional efficacy. Moreover, dimensions of burnout are conceptualised differently depending on the nature of jobs under consideration (Maslach, Jackson & Leiter, 1996). In the helping professions, the components include emotional exhaustion, cynicism and low personal accomplishment and when considering other professions, the components would include exhaustion, cynicism and low professional efficacy. In the current study, these components related to the helping professions were used as the study focused on nurses. Each component is defined and explained below in Figure 2.1.

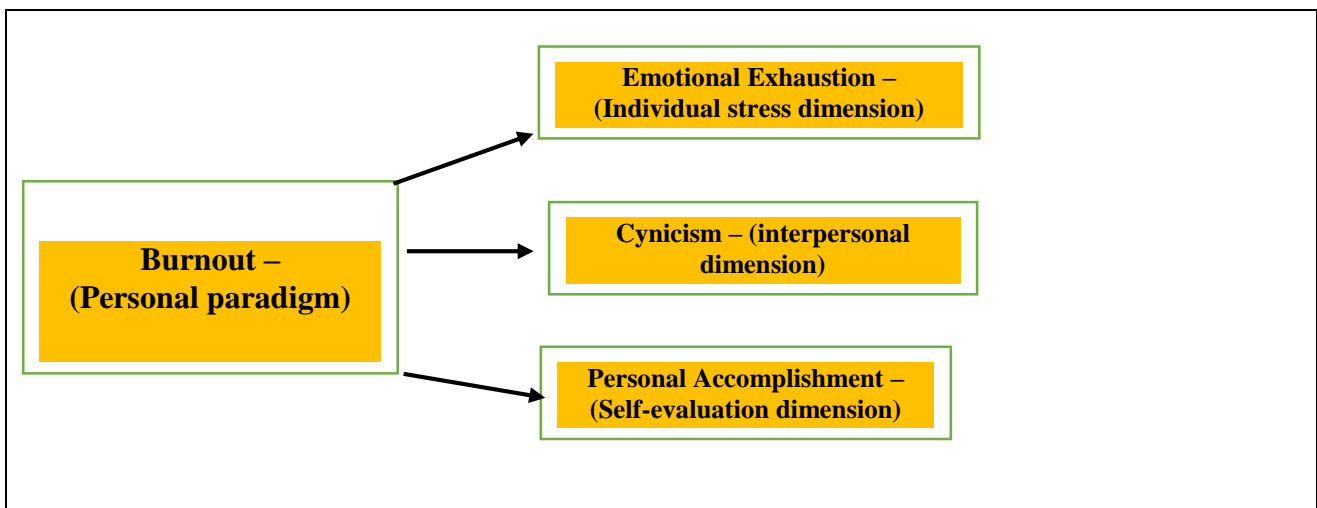


Figure 2.1: The dimensions of burnout

#### 2.1.3.1 Emotional Exhaustion

According to Schaufeli and Enzmann (1998), exhaustion is the key indicator of burnout which comprises four symptoms, namely a sense of reduced effectiveness, decreased motivation, and

dysfunctional attitudes and behaviours. Exhaustion is a wearing out, loss of energy, depletion, debilitation, fatigue, loss of feeling and concern, loss of trust, loss of interest and a loss of spirit (Paine, 1982). Maslach, Schaufeli and Leiter (2001) posited that the exhaustion component represents the basic individual stress dimension of burnout.

According to Maslach et al. (2001), exhaustion is not something that is simply experienced – rather, it prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with the work overload. They noted that in the human services, the emotional demands of the work can exhaust a service provider's capacity to be involved with and responsive to the needs of service recipients. Moreover, the exhaustion component of burnout is related to a range of negative outcomes for individuals and organisations, such as poor physical and mental health, low organisational commitment, turnover, poor performance, demanding or stressful aspects of work such as a high work load (Hopkins, 2011).

#### *2.1.3.2 Cynicism*

Cynicism refers to the interpersonal dimension of burnout which involves a negative, callous or detached response to various aspects of the job which reflects indifference or a distant attitude towards work in general (Schaufeli & Bakker, 2004). According to Paine (1982), the cynicism dimension is a negative shift in response to others, inappropriate attitudes toward clients, loss of idealism and irritability. In addition, cynicism represents the interpersonal component of burnout whereby an individual attempts to put distance between oneself and service recipients by actively ignoring the qualities that make them unique and engaging people (Maslach et al., 2001).

There is a strong relationship between exhaustion and cynicism. Cynicism is considered an immediate reaction to exhaustion whereby an individual attempts to put distance between self and work (Maslach & Leiter, 2008).

#### *2.1.3.3 Personal accomplishment*

Personal accomplishment refers to the self-evaluation dimension of burnout and is a feeling of competence, productivity and achievement at work (Maslach et al., 2001). According to Paine (1982), professional efficacy is comprised of a negative response toward oneself, one's personal accomplishments and can be described as depression, low morale, withdrawal, reduced productivity

or capability and an inability to cope. In addition, according to Rothmann (2008), reduced professional efficacy refers to feelings of insufficiency, incompetence, lack of achievement and underproductiveness.

#### **2.1.4 The effects of burnout in the workplace**

Research has shown that burnout has negative consequences for the individual, work groups, employer organisations and society as a whole. Negative consequences of burnout include deterioration in the quality of service (Golembiewski, Boudreau, Munzereider, & Luo, 1996; Maslach & Jackson, 1981). Humborstd, Humborstd and Whitfield (2007) found that burnout reduces staff's willingness to deliver quality services and that this effect was moderated by the individual's perceptions of the extent of organisational and supervisor support provided. Similarly, in a study involving Iranian nurses regarding burnout and productivity, Nayeri, Negarandeh, Vaismoradi, Ahmadi and Faghihzadeh (2009) found that emotional exhaustion and cynicism had significant negative correlations with productivity.

Furthermore, in a study conducted by Goodman and Boss (1999), where the researchers studied the relationship between turnover and the three dimensions of burnout (exhaustion, cynicism and personal accomplishment), it was found that employees who left the organisation had significantly higher burnout on all three dimensions than those who stayed. Van der Colff and Rothmann (2009) found that the experience of depletion of emotional resources and feelings of cynicism were associated with stress due to job demands and lack of organisational support and a weak sense of coherence. In an earlier study, Rothmann and Pieterse (2007) also found that overload predicted exhaustion whilst cynicism was predicted by limited growth opportunities, a lack of organisational support and a weak sense of coherence as alluded by Van der Colff and Rothmann (2009). According to Rothmann, Steyn and Mostert (2005), job stress which develops as a result of job demands and a lack of support leads to burnout. Maslach et al. (2001) posited that exhaustion or cynicism interfere with employee effectiveness at the workplace as it is difficult to gain a sense of accomplishment when feeling exhausted or when helping people to whom one is indifferent.

In their study on nurse turnover, Leiter and Maslach (2009) found that their findings supported the mediation model of burnout in which areas of work life (workload, control, reward, community, fairness and values) predicted burnout which in turn predicted turnover intentions. In terms of the

mediation model, workers' internal experience of strain plays a mediating role between the impact of external job demands (stressors) and work-related outcomes (such as absenteeism or illness) (Maslach & Leiter, 2008). Leiter and Maslach (2009) also found that cynicism was the key burnout dimension for turnover whilst value conflicts and inadequate rewards were the most critical areas of work life.

Maslach and Leiter (1997) posited that burnout is an erosion of employee's engagement with the job whereby what started as important, meaningful and challenging work becomes unpleasant, unfulfilling and meaningless, energy turns into exhaustion and involvement turns into cynicism. According to Vahey, Aiken, Sloane, Clarke and Vargas (2004), burnout is associated with negative health outcomes for human services workers such as psychological stress, somatic complaints and alcohol and drug abuse. They also noted that burnout can be costly to organisations as it leads to increased employee tardiness, absenteeism, turnover, decreased performance and difficulty in recruiting and retaining staff. Schaufeli (2003) similarly highlighted that burnout is likely to lead to increased absenteeism, job turnover, loss of productivity and poor performance, notions shared by Bakker and Costa (2014) who posited that there is a negative link between burnout and performance due to the fact that exhausted employees lack the concentration needed to perform well and thus make more mistakes.

According to Maslach et al. (2001), burnout is associated with various forms of job withdrawal such as absenteeism, intention to leave the job and turnover. They noted that burnout has negative effects even on those employees who remain in the organisation as it leads to lower productivity, decreased effectiveness at work, decreased job satisfaction and a reduced commitment to the job or the organisation. Hakanen and Schaufeli (2012) pointed out that burnout has cost implications for organisations as well as for society because it is related to higher absenteeism, chronic work disability, hospital admissions due to mental and cardiovascular disorders, high turnover and poor job performance. Bakker and Costa (2014) have also pointed out that burnout is not only negatively related to performance but is also related to sickness absenteeism. Moreover, according to Schaufeli, Bakker and Van Rhenen (2009), burnout predicts future absence duration but not absence frequency over a period of one year. Thus, once an employee is burned out, they are highly likely to absent themselves from work therefore compromising productivity in the process.

Burnout has negative consequences for both the individual and the organisation (Maslach & Leiter, 1997). For instance, burnout can be detrimental to health, ability to cope, serious deterioration of

job performance, cause psychological problems such as headaches, high blood pressure, muscle tension, chronic fatigue and inability to resolve problems. Concerning the effects of burnout on the organisation, Maslach and Leiter (1997) believe that organisations also suffer as the burned-out workforce cease to provide the dedication, creativity and productivity they once provided. Wright and Bonett (1997) found that there is a negative relationship between one dimension of burnout, emotional exhaustion and work performance, implying that burned-out individuals have difficulties performing their work optimally. Moreover, Bakker and Costa (2014) found that chronic burnout weakens the gain cycle of daily job resources, daily work engagement and daily job crafting. They also found that chronic burnout strengthens the loss cycle of daily job demands, daily exhaustion and daily self-undermining. Thus, chronic burnout impacts negatively on employees' vigour, perceptions and self-efficacy which in turn affect their performance.

Research (Bakker & Costa, 2014; Maslach & Leiter, 1997; Vahey et al., 2004) has thus shown that burnout has negative effects for both the organisation and the employee as it affects the employee's performance which results in poor organisational performance. Moreover, psychological stress, somatic complaints, alcohol and drug abuse, sickness and absenteeism result in organisations losing working hours and production. An understanding of burnout in the workplace is thus of paramount importance as it will help organisations develop strategies to curb this negative syndrome in the workplace.

## **2.2 WORK ENGAGEMENT**

A brief overview of work engagement, definition of work engagement, components of work engagement, underlying rationale of work engagement and the application of work engagement in the workplace are discussed next.

### **2.2.1 An overview of work engagement**

Work engagement is a positive psychology construct (Bakker & Demerouti, 2008). It is regarded by Maslach, Schaufeli and Leiter (2001) as an antipode of burnout and, according to Schaufeli et al. (2002), work engagement is an independent construct which comprises a positive, fulfilling state of mind that is characterised by vigour, dedication and absorption.

According to Saks (2006), work engagement can be understood in terms of the social exchange

theory which is based on reciprocity. This means employees who perceive higher organisational support would be more likely to reciprocate with greater levels of engagement in their jobs and in the organisation; employees who are provided with jobs that are high on the job characteristics would be more likely to reciprocate with greater job engagement and employees who have higher perceptions of procedural justice would be more likely to reciprocate with greater organisational engagement. This is similar to the arguments put forward by Robinson, Perryman and Hayday (2004) according to whom work engagement describes a two-way relationship between an employer and employee whereby both parties have to meet their contractual obligations.

According to Schaufeli and Bakker (2004), work engagement represents a motivational process that is driven by the availability of resources. This means work engagement flourishes where both job and personal resources are readily available. Concurring, Hakanen, Perhoniemi and Toppinen-Tanner (2008) referred to it as a positive gain spiral between job resources and work engagement, i.e. job resources lead to work engagement and work engagement leads to personal initiative which in turn has a positive impact on work unit-innovativeness which has an impact on work engagement which in turn helps in predicting future job resources. In addition, according to Bakker and Demerouti (2008), job resources such as supervisory coaching, financial rewards, performance feedback, autonomy, career opportunities and personal resources such as optimism, self-efficacy, self-esteem engage employees who reciprocate by working hard (vigour), getting involved (dedicated) and feeling happily engrossed (absorbed) in their work.

Kahn (1990) found that there were three psychological conditions associated with engagement or disengagement at work, namely meaningfulness, safety and availability. The element of meaningfulness (Kahn, 1990) appears to bring about the same effects on individuals with the same element as mentioned by Antonovsky (1987). Both meaningfulness and availability provoked some motivation which would result in an individual finding the reason to invest effort. According to Kahn (1990), workers were more engaged at work in situations that offered them more psychological meaningfulness (sense of return on investments of self in role performance) and psychological safety (sense of being able to show and employ self without fear of negative consequences for self-image, status, or career) and psychological availability (sense of possessing the physical, emotional, and psychological resources necessary for investing self in performances). Kahn's (1990) findings corroborate those of Bakker and Demerouti (2007) and Saks and Gruman (2014) according to whom job and personal resources are critical in the promotion of work engagement as work engagement thrives where there are sufficient resources. Kahn (1990) viewed

the work role as pivotal to work engagement while those who view work engagement as the positive antithesis of burnout regarded the employee's work activity or the work itself as important.

Thus, work engagement flourishes where there is a positive relationship between the employees and the organisation whereby the organisation has to offer a conducive working environment while the employee has to reciprocate through commitment and being productive (Kahn, 1990; Saks, 2006; Schaufeli & Bakker, 2004). The common theme that emerges is that work engagement is affected by job and organisational characteristics and organisation members, and that where there are more job resources and organisational support, work engagement thrives (Kahn, 1990; Saks, 2006).

### **2.2.2 Work engagement defined**

Schaufeli et al., 2002 defined work engagement as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption. They noted that work engagement is not a momentary and specific state, but a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual or behaviour. Similarly, according to Saks and Rothmann (2006), work engagement can also be seen as a state of mind, not focused on a specific object, event, individual or behaviour. Although work engagement is conceptualised as a stable phenomenon, it is not a fixed state as it changes and fluctuates (Bakker & Bal, 2010; Macey & Schneider, 2008).

Kahn (1990, p. 694) defined work engagement as "the harnessing of organisation member's selves to their work roles". Kahn (1990) pointed out that in work engagement people employ and express themselves physically, cognitively and emotionally during role performances. Saks (2006) also pointed out that work engagement has to do with how individuals employ themselves in the performance of their job. Rothbard (2001) defined work engagement as a two dimensional motivational construct comprised of identification (cognitive availability and the amount of time one spends thinking about the role) and absorption (intensity of one's focus on a role).

According to Maslach and Leiter (1997), work engagement is the opposite end on the burnout continuum. They highlighted that elements of work engagement (energy, involvement, and efficacy) are the direct opposites of the three dimensions of burnout (emotional exhaustion,

cynicism and professional efficacy). Thus, engaged employees feel energetic (ready to commit time and effort), involved (find work activities meaningful) and have a sense of accomplishment which is gained from work activities. In their view, burnout is an erosion of engagement, whereby “energy turns into exhaustion, involvement turns into cynicism and efficacy turns into ineffectiveness” (Maslach & Leiter, 1997, p. 24).

Christian, Garza and Slaughter (2011) defined work engagement as a relatively enduring state of mind referring to the simultaneous investment of personal energies in the experience or performance of work. They noted that work engagement refers to a psychological connection with the performance of work tasks rather an attitude towards the features of the organisation or the job.

According to Hakanen and Schaufeli (2012), there are two main approaches to conceptualise work engagement. First, work engagement is considered as a direct opposite of burnout (Maslach et al., 2001) whereby its elements (energy, involvement and efficacy) are seen as opposite to exhaustion, cynicism and lack of efficacy – the three constituting elements of burnout (Maslach & Leiter, 1997). According to another view, work engagement is considered independently of burnout and is defined as a positive, fulfilling state of mind that is characterised by vigour, dedication and absorption (Schaufeli et al., 2002); thus, contrary to those who suffer from burnout, engaged employees have a sense of energetic and effective connection with their work activities (Schaufeli, Bakker, & Salanova, 2006).

In view of the foregoing definitions of work engagement, it can be noted that there are two main perspectives which are prominent as reflected in Maslach and Leiter (1997) and Schaufeli et al. (2002). One perspective views work engagement as a state of mind characterised by vigour, absorption and dedication, while the other perspective views work engagement and burnout as direct poles on a continuum whereby “energy turns to exhaustion, involvement turns into cynicism and efficacy turns into ineffectiveness” (Maslach & Leiter, 1997, p. 24). Although these two lines of thought view work engagement from two different perspectives, there is a common thread in these perspectives: they both view engagement as characterised by energy, involvement and efficacy (Maslach & Leiter, 1997; Schaufeli et al., 2002). While Maslach and Leiter (1997) emphasise energy, involvement and efficacy, Schaufeli et al. (2002) focus on vigour, dedication and absorption which are all positive elements. However, Maslach and Leiter (1997) refer to positive elements which then turn negative (the work which one liked most becomes boring and uninteresting).



### **2.2.3 Components of work engagement**

According to Saks (2006), work engagement is a distinctive and unique construct that consists of cognitive, emotional and behavioural components that are associated with individual role performance. Work engagement can also be seen as having two critical components (Rothbard, 2001), namely attention (cognitive availability and the amount of time one spends thinking about the role) and absorption (being engrossed in a role and refers to the intensity of one's focus on a role). Schaufeli and Bakker (2003) posited that vigour, dedication and absorption comprise the three dimensions of work engagement. Maslach and Leiter (1997) referred to the three components of work engagement as energy, involvement and efficacy while Vinje and Mittlemark (2007) referred to the same as calling (a path to meaningfulness), zest (experience meaningfulness) and vitality (hold onto meaningfulness). In the current study, dimensions of work engagement were used as conceptualised by Schaufeli and Bakker (2003) as the preferred line of thought by the researcher based on two premises: (i) these three dimensions can be empirically measured by a psychometrically valid questionnaire (the Utrecht Work Engagement Scale), and (ii) these dimensions permit for a more accurate detection of where strengths and deficiencies exist in terms of each facet of work engagement (Chughtai & Buckley, 2008).

#### *2.2.3.1 Vigour*

Vigour is “characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work and persistence even in the face of difficulties” (Schaufeli et al., 2002, p. 74). Vigour represents the physical component of work engagement. Schaufeli et al. (2002); Maslach and Leiter (1997) agreed that engaged employees have high energy levels and are energetic. According to Mauno, Kinnunen and Ruokolainen (2007), vigour and persistence are the main characteristics of work engagement. They noted that vigour is considered a motivational concept as an employee who feels great vigour at work is highly motivated by their job and is likely to remain very persistent when encountering difficulties at work.

#### *2.2.3.2 Dedication*

Dedication is characterised by a sense of significance in one's work, feeling enthusiasm, inspiration, and pride and viewing work as a challenge (Schaufeli et al., 2002). Dedication epitomises the emotional component of work engagement. Maslach and Leiter (1997) posited that

engaged employees feel involved and find the work meaningful. They further pointed out that dedication in burned-out employees becomes cynicism (the opposite of dedication). Mauno et al. (2007) pointed out that this dimension of work engagement shares some conceptual similarity with job involvement; however, while dedication includes feelings of enthusiasm, inspiration, pride and challenge, job involvement solely focuses on the psychological importance of the job in an employee's life.

### *2.2.3.3 Absorption*

Absorption is “characterised by being fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work” (Schaufeli et al., 2002, p. 74). Absorption epitomises the cognitive component of work engagement. According to Rothmann (2008), absorption refers to an optimal state of experience where focused attention, a clear mind, effortless concentration, complete control, distortion of time and intrinsic enjoyment are experienced. Schaufeli et al. (2002) pointed out that being fully absorbed in one's work comes close to “flow” which is a state of optimal experience that is characterised by focused attention, clear mind, mind and body unison, effortless concentration, complete control, loss of self-consciousness, distortion of time, and intrinsic enjoyment (Csikszentmihalyi, 1990). Flow differs from work engagement in that flow is a more complex concept that includes many aspects and refers to rather particular, short-term “peak” experiences instead of a more pervasive and persistent state of mind, as is the case with work engagement (Schaufeli et al., 2002).

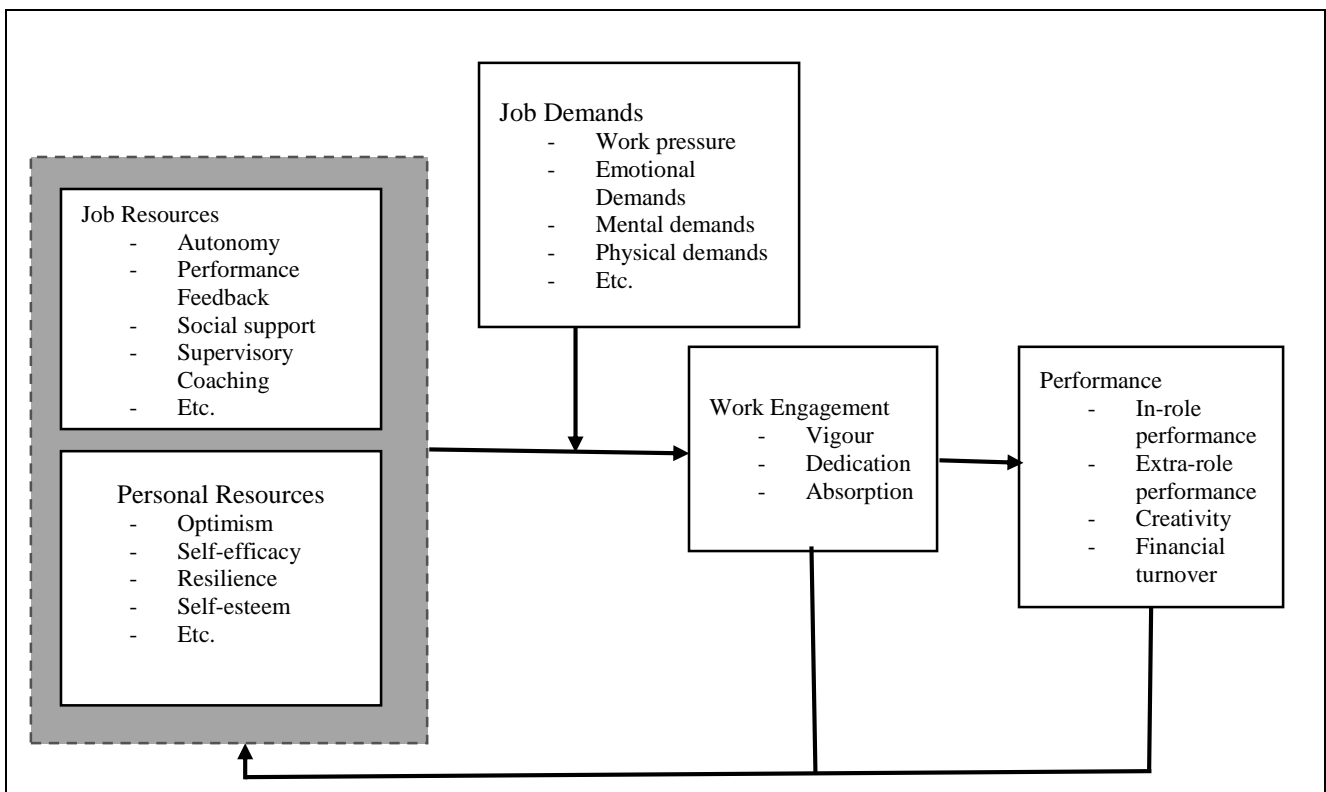
As Maslach and Leiter (1997) mentioned, the components of work engagement (vigour, dedication and absorption) are direct opposites of the three dimensions of burnout (exhaustion, depersonalisation and inefficacy). The following section expounds on the underlying rationale of work engagement.

## **2.2.4 Underlying rationale of work engagement**

The underlying rationale of work engagement is discussed based on previous research findings. The Job-Demands Resources (JD-R) model of work engagement (Figure 2.2) by Bakker and Demerouti (2007) was used as a framework to analyse work engagement. According to the JD-R model of work engagement, job resources (social support, performance feedback, skill variety and autonomy) start a motivational process which leads to work engagement and these resources are

used when employees are confronted with high job demands (work load, emotional and mental demands) (Bakker & Demerouti, 2007).

The JD-R model is premised on the basis that although work environments may differ in terms of characteristics, they can be classified into two broad categories, namely job demands and job resources (Bakker & Demerouti, 2007). Job demands refer to those physical, social, psychological efforts or skills that are associated with certain psychological and physiological costs such as high work pressure while job resources refer to those aspects of the job that are functional in achieving work goals, reduce job demands and associated costs, and stimulate personal growth, learning and development (Bakker & Demerouti, 2007).



**Figure 2.2: The Job-Demand Resources model of work engagement. Adapted from Bakker & Demerouti (2007)**

Bakker and Demerouti (2008) pointed out that both personal and job resources have a positive impact on work engagement which culminates in enhancement of job performance. Two key assumptions drawn from the JD-R model are that (i) job resources start a motivational process that leads to work engagement and consequently to higher performance, and (ii) job resources become more salient and gain their motivational potential when employees are confronted with high job demands (Bakker & Demerouti, 2008). Engaged employees perform well and are able to create

their own resources which enrich engagement to flourish and result in employees creating a positive gain spiral (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008).

The importance of job resources in promoting work engagement is evident (Hakanen, Bakker, & Schaufeli, 2006; Kuyuncu, Burke, & Fiksenbaum, 2006; Schaufeli & Bakker, 2004). Job resources such as personal initiative (Hakanen et al., 2008), feedback, social support and supervisory coaching (Schaufeli & Bakker, 2004), job control, feedback and variety (Salanova & Schaufeli, 2008) act as antecedents of work engagement; hence the promotion of these resources is critical in enhancing work engagement. According to Bakker and Demerouti (2007), (i) job resources reduce job demands and associated physiological and psychological costs, and (ii) are functional in achieving work goals and stimulate personal growth, learning and development. Furthermore, job resources help individuals to cope with job demands and buffer the effects of job demands on job strain and burnout and therefore facilitate work engagement (Saks & Gruman, 2014). According to Bakker and Demerouti (2007), job resources play either an intrinsic motivational role (because they foster employee's growth, learning and development) or an extrinsic motivational role (because they are instrumental in achieving work goals). Moreover, job resources can be located at any level in an organisation where at the organisational level job resources would include pay, career opportunities and job security; at interpersonal level, these would include supervisor and co-worker support and team climate; and at task level, job resources would include, skill variety, task identity, task significance, autonomy and performance feedback (Bakker & Demerouti, 2007). Expounding further on the extrinsic motivational role played by job resources, Bakker and Demerouti (2007) pointed out that work environments that offer many resources foster the willingness to dedicate employee's efforts and abilities to the work task.

Bakker and Leiter (2010) posited that work engagement is a positive fulfilling, affective-motivational state of work-related wellbeing. They viewed work engagement as a motivational concept whereby engaged employees feel compelled to strive towards challenging goals. Work engagement reflects the personal energy employees bring to their work; it reflects intense involvement at work; it describes employees' ability to bring their capacity to solving problems, connecting with people and developing innovation services (Bakker & Leiter, 2010; Maslach & Leiter, 1997). Work engagement thrives in settings that demonstrate strong connections between corporate and individual values. Bakker and Leiter (2010) posited that work engagement resonates with the broaden-and-build perspective of Fredrickson (1998) in which cognitive broadening lies at

the core of this perspective. Saks (2006) also pointed out that work engagement involves the active use of emotions and behaviours in addition to cognitions.

According to Bakker and Leiter (2010), engaged employees become absorbed in their work and experience flow which diminishes their response to distractions and during which they lose track of time. Saks (2006) pointed out that work engagement has to do with how individuals employ themselves in the performance of their job.

According to the JD-R model, job resources such as social support, performance feedback, skills variety, participating in decision making, autonomy and job demands such as work load, shift work, time pressure, physical, psychological, social, emotional and mental demands are prevalent within the nursing service profession (Bakker & Demerouti, 2007).

### **2.2.5 Application of work engagement in the workplace**

Schaufeli, Bakker, and Salanova (2006) posited that engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their jobs. Bakker, Schaufeli, Leiter, and Taris (2008) pointed out that engaged employees perform better than their non-engaged counterparts because they often experience positive emotions, experience better health, are able to create their own job and personal resources and they transfer their engagement to others.

According to Bargagliotti (2011), work engagement contributes to a distinctive body of nursing knowledge because it theoretically underpins the action of nurses and nurse managers as they create a practice environment that either supports safe and effective care or does not. Bargagliotti (2011) pointed out that the outcomes of nurses' work engagement are higher levels of personal initiative that are contagious, decreased hospital mortality rates and significantly higher financial profitability of organisations.

Rothmann and Storm (2003) found that engaged employees were focused on problem solving, able to develop strategies and effective ways of dealing with stressors. Bakker and Demerouti (2008) posited that engaged employees possess personal resources of optimism, self-efficacy, self-esteem, resilience and coping which helps them to control and impact their work environments

successfully.

Kahn (1990) pointed out that psychological conditions in the work context influence personal engagement and disengagement. Khan (1990, p. 703) postulated that organisation members seem to unconsciously ask themselves these three fundamental questions, a) “How meaningful is it for me to bring myself into this performance? b) How safe is to do so? c) How available am I to do so?” He highlighted that answers to these questions in each situation would result in personal engagement or disengagement. Therefore organisations can enhance work engagement in the workplace through creating working conditions which promote psychological meaningfulness, psychological safety and psychological availability as envisaged in the questions probed by employees. Gruman and Saks (2011) pointed out that work engagement can be achieved through an effective management system, more specifically an engagement management model, which meets Kahn’s (1990) three psychological conditions (psychological meaningfulness, psychological safety and psychological availability) which produce work engagement. The engagement management model starts with a performance agreement which outlines what employees will be expected to accomplish. The next component of the model is engagement facilitation which focuses on job design, leadership, coaching, supervisor support and training in order to facilitate the development of engagement. The next step involves performance and engagement appraisal and feedback with focus on perceptions of justice and trust as drivers of engagement. According to Gruman and Saks (2011), each component of the model contributes to employee engagement and a key part of the model is that performance management practices involved providing resources to employees which would lead to Kahn’s (1990) three psychological conditions that are associated with higher levels of engagement. Considering Kahn’s (1990) three psychological conditions and the engagement management model and their relationship with the JD-R model, it can be postulated that these perspectives facilitate work engagement as they trigger availability of resources which are likely to capacitate the employee to meet the job demands.

Gruman and Saks (2011) posited that there is a positive relationship between performance and work engagement. They noted that work engagement has both state and behavioural dimensions and alluded to the fact that it is behavioural management that leads directly to job performance. Vinje and Mittlemark (2007) found that there was high work engagement in nurses who have a deep feeling for the nursing profession as a calling and this contributed to a strong sense of duty and strict self-demand regarding one’s own and other’s levels of performance. Mengue, Auh, Fisher and Haddad (2012) also highlighted that more engagement is related to more service

employee performance. Therefore, organisations can utilise performance management systems as strategic tools to enhance work engagement which is highly likely to result in improved performance.

## **2.3 SENSE OF COHERENCE**

This section provides a brief overview, definition, components, underlying rationale and the application of sense of coherence in the workplace.

### **2.3.1 An overview of sense of coherence**

The sense of coherence (SOC) theory was developed by Aaron Antonovsky in the late 1970s (Antonovsky, 1979). SOC is a core concept of Antonovsky's salutogenic theory which is concerned with the relationship between health, stress and coping (Antonovsky, 1979). After observing that some people, regardless of being bombarded by multiple stressors, remained healthy and positive about their life, Antonovsky developed a new paradigm called salutogenesis (the origin of health) as an attempt to understand why some people stay healthy regardless of severe hardships (Antonovsky, 1979). He established that individuals from a young age up to thirty years old develop coping strategies which help them to perceive and manage life experiences throughout their life (Antonovsky, 1987). Antonovsky (1987) posited that a sense of coherence is developed as a single dimension of the individual's personality comprising comprehensibility, manageability and meaningfulness as its key components. Thus, sense of coherence is a dispositional orientation not a state or a trait (Antonovsky, 1987). It reflects an individual's capacity to respond to stressful situations and is an adaptive capacity of humans (Eriksson & Lindstrom, 2005; Griffiths, Ryan, & Foster, 2011). It has been found that SOC affects health, work and affective wellbeing (Eriksson & Lindstrom, 2005; Harry & Coetzee, 2011; Strümpfer, 2009).

Strümpfer (2003) pointed out that sense of coherence is a coping resource that is presumed to mitigate life stress by affecting the overall quality of an individual's cognitive and emotional appraisal of the stimuli that impact one, which is in turn is presumed to engender, sustain, and enhance health as well as strength. Antonovsky (1993a) described sense of coherence as the core of the organisation of a complex human system for successful processing of information and energy which makes a conflict resolution possible. Bekwa (2006) noted that sense of coherence is a way of life rather than a consequence of life, and Coetzee (2004) described it as one of the prominent

constructs in the wellness paradigm. Antonovsky (1979) posited that sense of coherence is the power of belief that internal and external environments are predictable and the confidence in the high probability that whatever the prediction, things will work out as well as can be reasonably expected.

### **2.3.2 Sense of coherence defined**

Antonovsky (1987, p. 19) defined sense of coherence as a

global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving one's internal and external environments in the course of living are structured, predictable and explicable, (2) the resources are available to one to meet the demands posed by these stimuli, and (3) these demands are challenges, worthy of investment and engagement.

Antonovsky (1979) proposed that sense of coherence is a personal paradigm which helps indicate an individual's overall view of the world. Sense of coherence expresses the extent to which one has a pervasive, enduring and dynamic feeling of coherence, welcoming situations in life as endurable, manageable, meaningful and worthy of commitment (Rothmann, Jackson, & Kruger, 2003). Rothmann, Jackson and Kruger (2003) posited that SOC appeals to the emotions and is not only experienced at the cognitive level as one views life as meaningful and making sense. It can be noted that SOC helps individuals to reveal how they perceive their life situations.

Having defined SOC, the following section will focus on exploring the components of sense of coherence.

### **2.3.3 Components of sense of coherence**

According to Antonovsky (1987), the three dimensions of sense of coherence are as follows: (i) comprehensibility – the cognitive component; (ii) manageability – the instrumental or behavioural component; and (iii) meaningfulness – the motivational component. In addition, Strümpfer (2003) noted that comprehensibility exists when stimuli from the environment are perceived to make cognitive sense; manageability occurs when stimuli are perceived as under the control of both the



individual and legitimate others; while meaningfulness is experienced when stimuli are perceived as motivationally relevant or when challenges are welcomed as worth engaging in.

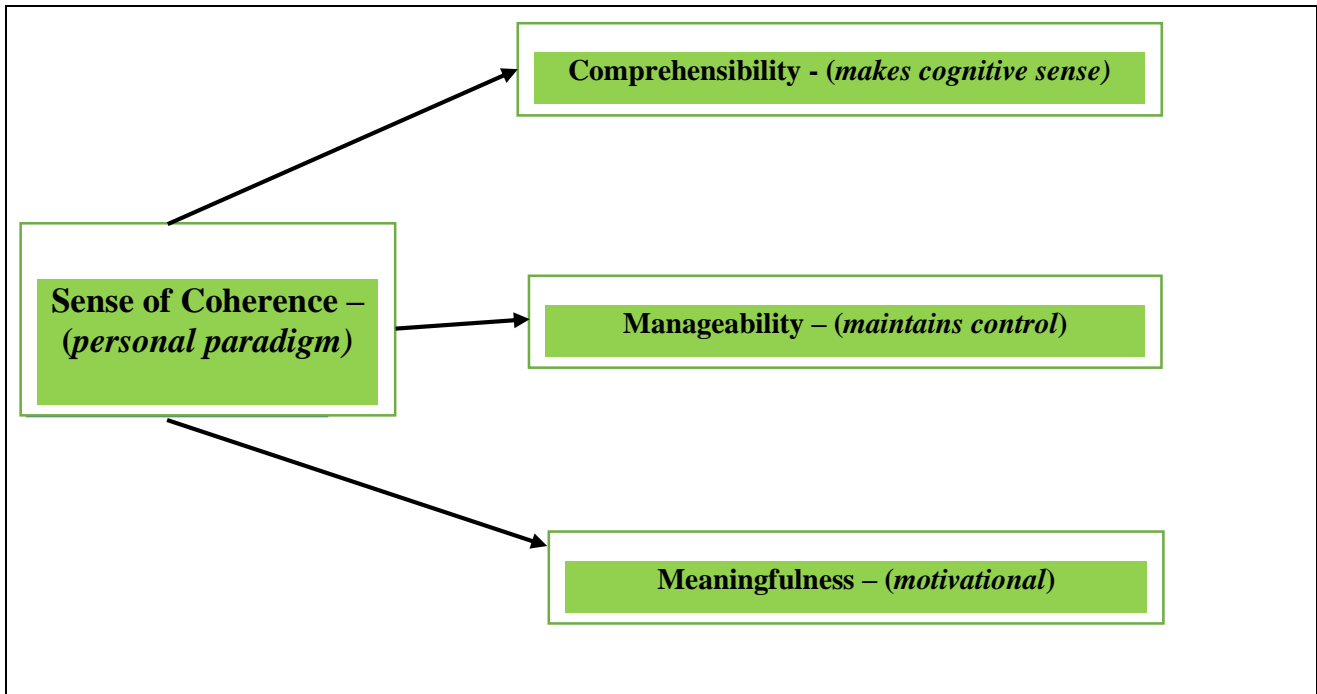


Figure 2.3: The dimensions of sense of coherence

### 2.3.3.1 Comprehensibility

According to Antonovsky (1979, p. 16), comprehensibility,

refers to the extent to which one perceives the stimuli that confront one, deriving from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than as noise, chaotic, disordered, random, accidental, inexplicable.

Comprehensibility is the cognitive component of SOC (Muller & Rothmann, 2009). Comprehensibility indicates the degree to which individuals perceive what confronts them as consistent, structured, clear and predictable, and that difficulties, demands or challenges currently experienced will be considered as comprehensible in future (Antonovsky, 1987). Rothmann, Steyn and Mostert (2005) posited that comprehensibility is an individual's ability to structure the world to

be understandable, meaningful, orderly, consistent and predictable.

According to Hanson (2007), comprehensibility at the workplace level is the ability to see a connection between different parts of the organisational system, the capacity to assimilate information, to interpret what is heard and seen, and draw conclusions about cause and effect.

#### *2.3.3.2 Manageability*

Antonovsky (1979) defined manageability as the extent to which one perceives that resources at one's disposal are adequate to meet the demands posed by the stimuli that bombard one. Manageability is the instrumental component of SOC; it refers to the extent to which individuals experience events in life as endurable or manageable and as new challenges (Muller & Rothmann, 2009). Thus, manageability deals with the capability and opportunity of individuals to influence their situation and their surroundings (Hanson, 2007).

#### *2.3.3.3 Meaningfulness*

Antonovsky (1979, p.18) defined meaningfulness as

the extent to which one feels that life makes sense emotionally, that at least some of the problems and demands posed by living are worth investing energy in, are worthy of commitment and engagement, are challenges that are “welcome” rather than burdens that one would much rather do without.

Meaningfulness is the motivational component of SOC (Muller & Rothmann, 2009). McComb (2011) posited that meaningfulness is the invocation of cognitions and emotion which motivates worthiness of commitment to perceived challenges. According to Strümpfer (2003), meaningfulness is experienced when situations and experiences are perceived as motivationally relevant in the form of desired challenges that are worth engaging with and investing oneself in.

### **2.3.4 Underlying rationale of sense of coherence**

The literature (Antonovsky, 1987; Csikszentmihalyi, 1990; Seligman & Csikszentmihalyi, 2000; Strümpfer, 1990) presents a paradigm shift from a pathogenic psychological approach to

salutogenesis as developed by Antonovsky (the origins of health). According to the salutogenic theory, the main focus is on health rather than on pathology, and sense of coherence is at the core of this perspective whereby it is used to determine an individual's health level (Antonovsky, 1987). The relationship between the pathogenic view and salutogenesis can be described in terms of a "health ease/disease continuum" whereby individuals are assumed to function between the two poles of terminal illness and total wellness (Strümpfer, 1990). The concept of the continuum implies that as long as an individual is alive, they possess some degree of health. Antonovsky (1987) posited that in a health ease/disease continuum, a person with a strong sense of coherence will be located towards the health pole while those with a low sense of coherence will be located towards the disease pole. The salutogenic perspective highlights how an individual moves towards the health end of the health ease/disease continuum and thus this perspective is useful in promoting wellness and helping individuals view their life experiences as comprehensible, manageable and meaningful.

Antonovsky (1979) found that people use what he called the general resistance resources (GRRs) to cope with a diversity of pathogens and stressors. Generalised resistance resources are categorised as physical and biochemical GRRs (such as immune suppressors), arte-factual-material resources (such as money and food), cognitive resources (such as intelligence and knowledge), interpersonal-relational resources (such as social support and commitment), the emotional GRRs of ego identity and the macro-sociocultural support such as rituals and religion (Strümpfer, 1990). According to Antonovsky (1987), GRRs create life experiences characterised by consistency, participation in shaping outcome and an underload-overload balance which gives rise to or reinforces a strong sense of coherence.

According to Antonovsky (1987), sense of coherence enables individuals to perceive the stimuli from the external and internal environment as structured and predictable (comprehensibility), to perceive the resources as available to meet the demands posed by the stimuli (manageability) and to view these demands as challenges worthwhile spending energy on (meaningfulness). It is most likely that a person with a weak SOC would perceive internal and external stimuli as noise, not information, as inexplicable disorder and chaos and as unpredictable in future, life events as unfortunate things that happen to her/him and would feel that nothing in life mattered much, and challenges are viewed as unwelcome demands and wearisome burdens (Antonovsky, 1987).

According to Strümpfer (1990, p. 269), someone with a strong SOC is more likely than someone

with a weak SOC:

- to comprehend the nature and dimensions of an acute or chronic stressor and to define or redefine it as one to which they need not succumb; consequently they are, on the one hand, more likely to avoid threats or health-endangering activities but, on the other hand, also more likely to engage in activities that are health-promoting, since they can identify more accurately that such efforts will pay off;
- to perceive stressors as manageable and therefore to select appropriate resources from those under their own control or available from others, rather than to react with helplessness;
- to be motivated to approach stressors as challenges worthy of engagement and investment of energy as promising meaningful awards rather than as paralysing threats and then to react with negative behaviour based on self-fulfilling prophecies.

Taking the underlying rationale of SOC into consideration, it can be concluded that SOC is very useful in understanding how people view their world and it also helps in the promotion of health as it assists individuals to see their lives, world and careers as comprehensible, manageable and meaningful.

### **2.3.5 Application of sense of coherence in the workplace**

Sense of coherence as a positive psychology construct has been found to be instrumental in helping individuals to cope with their life challenges, viewing them as ordered and structured, manageable, meaningful and worth investing one's effort as one believes that the challenges can be resolved (Antonovsky, 1987).

According to Antonovsky (1987), individuals with a high SOC are likely to see the tasks placed upon them as challenges, they are better or more able to impose structure on the tasks and to search for appropriate resources while those individuals with a low SOC are more likely to see tasks placed upon them as incomprehensible and potential sources of failure.

Strümpfer (2003) found that SOC may assist in warding off burnout and strengthening engagement inclinations. Antonovsky (1987) pointed out that SOC affects the coping strategies chosen by individuals in the workplace. According to Strümpfer (1990), an individual with a strong SOC will be able to understand the nature and dimensions of an acute stressor and will be able to cope by applying resources within that individual or other individuals' control rather than becoming

helpless.

A strong SOC is likely to result in the person doing the following (Strümpfer, 1990, p. 270):

- Make cognitive sense of the workplace, perceive its stimulation as clear, ordered, structured, consistent and predictable information.
- Perceive the work as consisting of experiences that are bearable, with which they can cope, and as challenges that they can meet by making use of personal resources or resources under the control of the legitimate others.
- Make emotional and motivational sense of work demands as welcome challenges, worthy of engaging in and investing their energies in.

According to Van der Colff and Rothmann (2009), the stronger the SOC a person has, the better their ability to employ cognitive, affective and instrumental strategies that are likely to improve coping and wellbeing. They also noted that a strong SOC might help employees understand stressors and regard them as manageable and meaningful while a low SOC could lead to job stress and eventually burnout. Moreover, it appears that a good organisational climate and low job insecurity are related to a strong SOC which is also linked to occupational wellbeing (Feldt, Kinnunen, & Mauno, 2000). According to Feldt et al. (2000), employees who experienced changes in an organisational climate and leadership relations showed changes in SOC as well as their wellbeing. Their findings thus highlight the important role that an organisational climate plays in enhancing SOC and wellbeing.

Other research (Amirkhan & Greaves, 2003; Semmer, 2003) showed that SOC levels impact on how individuals view their lives as it has been proved that individuals with a low SOC and those with a high SOC view their lives and work experiences differently. For instance, individuals with high scores and those with low scores on SOC differed regarding their perceptions of helping and restraining factors in their work and organisation (Muller & Rothmann, 2009). Muller and Rothmann (2009) also pointed out that an individual's SOC may either alleviate or aggravate reactions to a stressor and moderate the impact of occupational stressors on an individual's affective outcomes. Thus an understanding of low and high SOC can help organisations in developing health strategies which can boost SOC levels.

A sense of coherence can also be a useful tool in analysing the subjective wellness of an organisation's employees. For instance, Sairenchi, Haruyama, Ishikawa, Wada, Kimura and Muto

(2011) found that SOC may be able to predict the onset of depression in Japanese workers. Sairenchi et al. (2011) posited that SOC represented autonomous personal resources which are capable of contributing to subjective wellness.

Hanson (2007) reported that SOC is very useful in the promotion of health at any workplace. The table below shows how SOC can be conceptualised and applied as a basis for analysis and guidance when applying health promotion in the workplace. Elements related to the three components of SOC were used to enhance SOC at a workplace and the same can be replicated at any workplace as a health promotion strategy. The table shows how SOC can be used as a strategy to enhance employees' views concerning comprehensibility, manageability and meaningfulness of their work. Feldt et al. (2000) reported that the work environment provides a basis for comprehensibility and manageability, and that participation in decision making enhances meaningfulness. Since SOC appears to be shaped by life experiences in childhood and adolescence and can be modified (Antonovsky, 1987), SOC may provide a theoretical basis for analysis of work conditions and health promotion interventions as envisaged in Table 2.2.

According to Hanson (2007), a strong sense of coherence gives an increased capacity to choose and operate with appropriate coping strategies and also increases the chance of coping successfully which in turn gives rise to an experience which further reinforces an individual's sense of coherence. Oosthuizen and Van Lill (2008) found that individuals with a stronger SOC experienced low levels of stress as they were able to comprehend and manage stress while those with a weaker SOC experienced high levels of stress. A stronger sense of coherence helps employees to comprehend and manage their work experiences and improves their ability to cope with stress. Organisations can thus benefit from promoting work environments where employees can function optimally.

**Table 2.2: SOC translated to the everyday level at a workplace. Adapted from Hanson (2007, p. 137).**

<b>Comprehensibility</b>	<b>Manageability</b>	<b>Meaningfulness</b>
<b>Knowledge about</b>	<b>Resources and support</b>	<b>Motivation</b>
Surrounding world	Material and tools	Visions
Branch	People	Goals
Company's history	Clear organisation	Reasonable wage
Work context	Clear guidelines	Privileges/incentives
Working environment		
Own role	<b>Possibilities to influence</b>	<b>Values</b>
Changes	Pace of work	Ethics and morality
	Planning work	Core values
	Decisions	Just treatment
<b>Feedback from</b>		
Boss	<b>Competence</b>	<b>Positive experiences</b>
Colleagues at work	Work skills	Relation to colleagues
Customers/clients	Social competence	Relation to management
	Communicate	Humour
		Variation in work
	<b>Coping ability</b>	Recreational activities
	Physical coping ability	Self-esteem
	Mental coping ability	
	"Distancing" [unwinding from work]	
	Breaks for rest	

Considering the literature (Antonovsky, 1987; Feldt et al., 2000; Fourie, Rothmann & Van de Vijver, 2008; Hanson, 2007; Muller & Rothmann, 2009; Oosthuizen & Van Lill, 2008; Strümpfer, 1990), it can be concluded that SOC can be strategically used in organisations to enhance stress management capabilities, employee wellbeing and employee engagement, as well as preventing burnout in the workplace.

## **2.4 INTEGRATION OF THE THREE VARIABLES**

Under this section, a brief literature overview of the relationship between burnout and work engagement, burnout and SOC, work engagement and SOC is given integrating the three constructs.

### **2.4.1 Burnout and work engagement**

It has been proposed in the literature (Maslach & Leiter, 1997; Salanova, Gonzalez-Roma & Bakker, 2002; Schaufeli, Schaufeli & Bakker, 2004) that exhaustion and cynicism (the dimensions of burnout) are conceptual opposites of vigour and dedication (the core dimensions of work engagement). According to González-Romá, Schaufeli, Bakker and Lloret (2006), the core burnout

and work engagement dimensions can be seen as opposites of each other along two distinct bipolar dimensions - energy and identification. Maslach and Leiter (1997) postulated that when work engagement is conceptualised as the antithesis of burnout, the attributes of work engagement become energy, involvement and efficacy as the polar opposites of burnout.

Schaufeli et al. (2002), upholding the view that burnout and work engagement are opposite concepts, showed that two underlying dimensions have been identified of work-related wellbeing, namely (1) activation (ranging from exhaustion to vigour) and (2) identification (ranging from cynicism to dedication). Burnout is thus characterised by a combination of exhaustion (low activation) and cynicism (low identification), while work engagement is characterised by vigour (high activation) and dedication (high identification). Furthermore, while these other elements are direct opposites, reduced efficacy and absorption are conceptually distinct aspects that are not at the end points of some underlying continuum.

According to Schaufeli and Bakker (2004), burnout and work engagement are negatively related, where burnout is mainly predicted by job demands, and work engagement is exclusively predicted by available job resources. Burnout thus mediates the relationship between job demands and health problems, whereas work engagement mediates the relationship between job resources and turnover intentions.

In a study conducted by Hakanen and Schaufeli (2012), it was found that burnout and engagement are not direct opposites and both have unique incremental impacts on life satisfaction and depressive symptoms. According to Innstrand, Langballe and Falkum (2012), work engagement is more likely to be the antecedent for symptoms of depression and anxiety. Moreover, work engagement can be seen as the antipode of burnout and can also be considered as an independent, distinct concept that is related negatively to burnout (Kanste, 2011). In addition, there appears to be a statistically significant relationship between work engagement, problem focused coping, positive reinterpretation and growth (Rothmann, Jorgensen, & Hill, 2011).

#### **2.4.2 Burnout and sense of coherence**

According to Rothmann et al. (2003), canonical analysis showed that a weak SOC combined with stress due to job demands and a lack of resources were associated with all three components of



burnout. They also showed via structural equation modelling that SOC moderated the effects of job stress on exhaustion and that cynicism mediated the effects of exhaustion on personal accomplishment. Feldt et al. (2000) reported that SOC has been proven to have a strong relationship with life satisfaction, functional status, and psychological health while a weak SOC is linked to depression, anxiety, work stress, emotional exhaustion and burnout. Furthermore, Feldt (1997) found that employees with a high level of SOC experience less emotional exhaustion and are protected from the negative impact of some job-related stressors and have a decreased risk of developing burnout symptoms.

In a study consisting of 323 emergency workers in Gauteng, Naudé and Rothmann (2006) found that occupational stress (as a result of a lack of job resources) and a weak SOC predicted emotional exhaustion and cynicism. The assumption can thus be made that individuals with a weak sense of coherence are likely to experience burnout. According to Van der Colff and Rothmann (2009), the experience of depletion of emotional resources and feelings of cynicism in registered nurses were associated with stress due to job demands and a lack of organisational support and a weak SOC. Johnson, de Bruin, Györkös, Geldenhuys, Massoudi and Rossier (2013) reported that SOC has a direct negative effect on burnout.

An analysis on the definitions compiled by Maslach and Jackson (1981) (see Table 2.1) shows that working conditions can facilitate burnout and the consequences of burnout seem to equate with those experienced by someone who has a low sense of coherence (Antonovsky, 1987; Strümpfer, 2003). Thus, it appears that SOC has a negative relationship with burnout. Considering the definitions in Table 2.1, it can also be pointed out that burnout has a negative impact on an individual's perceptions or attitudes as provided in definitions (iv), (xii) and (x) whereby an individual will develop negativity towards their work or relationships while SOC dimensions such as meaningfulness and manageability act as psychological resources that help an individual to see challenges as manageable and worth exerting effort (Antonovsky, 1987).

According to Rothmann et al. (2003), a weak sense of coherence combined with stress because of job demands and lack of resources was associated with all three components of burnout. Thus, SOC moderated the effects of job stress on exhaustion, and cynicism mediated the effect of exhaustion on professional efficacy (Rothmann et al., 2003). Similarly, Johnston et al. (2013) reported that SOC moderates the effect of demands on burnout and has a protective function so that the demands-burnout relationship differs between those with a high SOC and those with a low SOC.

### **2.4.3 Work engagement and sense of coherence**

According to Van der Colff and Rothmann (2009), work engagement was predicted by a strong SOC and approaches of coping strategies. Vogt, Jenny and Bauer (2013) postulated that work SOC acted as a partial mediator between job resources and work engagement. Meaningfulness and vigour are positively related and are both regarded as motivational components of SOC and work engagement respectively (Maslach & Leiter, 1997; Muller & Rothmann, 2009; Strümpfer, 2009).

In their study, Van der Colff and Rothmann (2009) found that both emotional exhaustion and cynicism (a component of burnout) were moderately negatively related to work engagement and SOC.

Janse van Rensburg, Boonzaier and Boonzaier (2013) in their study on call centre employees found that personal resources such as SOC and job resources such as team effectiveness related significantly to work engagement. Thus, the promotion of activities which enhance personal resources such as SOC can help increase levels of employee engagement.

Table 2.3 provides a summary of definitions, dimensions and application/effects of the three constructs (burnout, work engagement and SOC). The literature review of the three constructs shows that there is a positive relationship between work engagement and SOC (Maslach & Leiter, 1997, Muller & Rothmann, 2009; Strümpfer, 2009), a mediational role between burnout, work engagement and SOC (Johnston et al. 2013), and a negative relationship between burnout and work engagement (Janse van Rensburg et al., 2013; Van der Colff & Rothmann, 2009). Based on the above, it can be hypothesised that there is a significant relationship between burnout, work engagement and SOC.

**Table 2.3: A theoretical comparison of burnout, work engagement and sense of coherence**

	<b>Burnout</b>	<b>Work engagement</b>	<b>Sense of coherence</b>
	Schaufeli and Enzmann (1998, p. 36)	Schaufeli et al. (2002, p. 74)	Antonovsky (1987, p.19)
<b>Definition</b>	“Burnout is a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work.”	“Work engagement is a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption.”	“Sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving one’s internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli, and (3) these demands are challenges, worthy of investment and engagement.”
<b>Dimensions</b>	Emotional exhaustion, cynicism and personal accumulation	Vigour, dedication and absorption	Comprehensibility, manageability and meaningfulness
<b>Application /effects of the construct on employees</b>	<ul style="list-style-type: none"> <li>- Results in poor employee wellbeing</li> <li>- Increases turnover intentions</li> <li>- Results in high absenteeism, time off, sick leave</li> </ul>	<ul style="list-style-type: none"> <li>- Enhances productivity</li> <li>- Reduces turnover intentions</li> <li>- Enhances employee commitment</li> </ul>	<ul style="list-style-type: none"> <li>- Enhances coping in the workplace</li> <li>- Promotes employee wellbeing</li> <li>- Mediates between job resources and work engagement</li> <li>- Helps employees see their tasks as structured and manageable.</li> </ul>

## 2.5 CHAPTER SUMMARY

In this chapter, positive psychology constructs, namely work engagement and sense of coherence were discussed. Burnout which results in psychopathology and illness in the workplace was also examined. A literature review on burnout, work engagement and sense of coherence was presented providing background information on each construct, its definition, components, underlying rationale and application of the construct in the workplace; a discussion of the integration of these three constructs concluded this chapter. This chapter concludes step 1 of phase 1 (literature review of constructs).

The specific theoretical aims of the research explored in this chapter are summarised below:

- To conceptualise burnout in the literature
- To conceptualise work engagement in the literature

- To conceptualise sense of coherence in the literature
- To explain the theoretical relationship between burnout, work engagement and sense of coherence in the literature

Chapter 3 is presented in the form of a research article covering the steps followed in phase 2 (sampling, measuring instruments, data collection, data analysis, test research hypothesis and results).

## CHAPTER 3: RESEARCH ARTICLE<sup>1</sup>

### **BURNOUT, WORK ENGAGEMENT AND SENSE OF COHERENCE IN NURSES WORKING AT A CENTRAL HOSPITAL IN KWAZULU-NATAL**

TALENT MATURURE

*DEPARTMENT OF INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY*

*UNISA*

#### **ABSTRACT**

**Orientation:** There has been increasing interest in promoting employee wellness in the workplace as healthy employees have proved to be productive and useful in achieving organisational objectives. The paradigm shift from the pathological perspective to a positive psychology orientation has prompted the need for psychological resources to enhance wellness and to combat negative experiences such as burnout.

**Research purpose:** The objective of the study was to determine the relationship between burnout (measured by the Maslach Burnout Inventory – Human Services Survey, MBI-HSS), work engagement (measured by the Utrecht Work Engagement Scale) and sense of coherence (measured by the Orientation of Life Questionnaire, SOC 29).

**Motivation for the study:** Research has shown that there is high prevalence of burnout in the nursing profession. Hence it is important to determine the relationship between burnout and some of the positive psychological constructs such as work engagement and sense of coherence (SOC).

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<sup>1</sup>Please note: The guidelines provided by the South African Journal of Industrial Psychology (SAJIP) have been used as a broad and general guideline for the framework of the research article. The research article in this chapter is therefore slightly more expanded than a typical article published in the SAJIP in order to adequately report and discuss the empirical study of the dissertation of limited scope.

**Research design, approach and method:** A cross-sectional survey design was used with a probability-based, simple random sample (N=178) of nursing staff at a central hospital in KwaZulu-Natal in South Africa.

**Main findings:** A theoretical relationship was established between the variables. The empirical relationship revealed statistically significant negative relationship between burnout and work engagement. A statistically significant negative relationship was also established between burnout and SOC.

**Practical/managerial implications:** An understanding of employee burnout, work engagement and sense of coherence levels and the relationship between these constructs can help industrial psychologists and human resources practitioners to develop relevant and effective wellness interventions in organisations.

**Contribution/value added:** The findings of this research contribute valuable knowledge to industrial and organisational psychology and human resources management in understanding the relationships between burnout, work engagement and sense of coherence for nurses working in the public sector.

**Key words:** Burnout; work engagement; sense of coherence; emotional exhaustion; cynicism; personal accomplishment; vigour; dedication; absorption; comprehensibility; manageability; meaningfulness.

## INTRODUCTION

Worldwide nursing work is regarded as an essential service critical to the health services. Unfortunately, research has shown that individuals who do social work or who work with people are prone to experience stress or burnout (Van der Colff & Rothmann, 2009). This is specifically applicable to nurses as they work in a stressful and emotionally exhaustive work environment (Carson, Bartlett, & Croucher, 1991; Coffey & Coleman, 2001; El-Jardali, Alameddine, Dumit, Dimassi, Jamal, & Maalouf, 2010; Fagin, Brown, Bartlett, Leary, & Carson, 1995; Stanz & Greyling, 2010). This is no different in South Africa where studies have shown that workers in the health and services sector are working in stressful environments which make them more susceptible to burnout (Bezuidenhout & Cilliers, 2010; Koekemoer & Mostert, 2006; Naudé & Rothmann, 2006; Rothmann & Malan, 2011; Van der Colff & Rothmann, 2009). However, research on positive psychology constructs has shown that healthy employees are able to function optimally and cope with their challenges (Bezuidenhout & Cilliers, 2010; Maslach & Jackson, 1981; Maslach & Leiter 1997; Van der Colff & Rothmann, 2009). It has also been shown that both employees and organisations can enhance their wellbeing which can result in increased productivity. It is thus imperative for organisations to understand how they can promote wellness in the workplace (Coetzee & Cilliers, 2001; Seligman & Csikszentmihalyi, 2000; Strümpfer, 1990). The current study sought to find the relationship between burnout, work engagement and sense of coherence (SOC) in nurses working in a central hospital.

### **Background to the study**

The importance of work performed by health care employees cannot be overemphasised as their services are invaluable to all members of society. However, as Koekemoer and Mostert (2006) point out, nursing staff in South Africa are facing a myriad challenges which include overcrowded hospitals and high patient loads. According to Stanz and Greyling (2010), the alarming turnover of nursing employees is precipitated by budgetary constraints and poor working conditions, resulting in staff shortages and high workload for the remaining staff. Hall (2004) indicated that there have been complaints about poor service delivery in hospitals and this has been attributed to work overload and lack of resources making nurses more susceptible to burnout. However, it has also emerged that engaged employees are productive and are committed to their work and organisation

(Macey & Schneider, 2008) and it is therefore crucial for any organisation to promote employee wellness.

The workplace in the 21<sup>st</sup> century has changed dramatically and has been impacted by technological, social and economic changes as well as by globalisation (Meister & Willyeard, 2010). These changes have precipitated alarming turnover rates of nursing employees as people have become more connected and mobile (Beukes & Botha, 2013; Stanz & Greyling, 2010). The protean career has become dominant and employees now have to deal with these changes and the accompanying stress factors; and thus employees working in the services sector are becoming increasingly vulnerable to burnout (Maslach & Leiter, 1997; Van der Colff & Rothmann, 2009). The emergence of work engagement and SOC, both being positive psychological constructs, can help alleviate the effects of burnout; however, there is a need for a better understanding of the relationship between these constructs in various occupations and environments (Bezuidenhout & Cilliers, 2010).

Organisations need to understand the relationship between burnout; work engagement and SOC in order for them to design measures which can help curb the negative effects of burnout and promote wellness in the workplace, which in turn might boost optimal functioning of both employees and organisations (Coetzee & Cilliers, 2001; Strümpfer, 1990; Van der Colff & Rothmann, 2009). Currently there is not enough research evidence on the relationship between burnout, work engagement and SOC (Bezuidenhout & Cilliers, 2010; Buys & Rothmann, 2010), specifically in the nursing work environment, and thus the current study may add value in this regard.

## **LITERATURE REVIEW**

The following section entails a brief outline of the key trends found in the literature on burnout, work engagement and SOC.

### **Burnout**

Schaufeli and Enzmann (1998, p. 36) defined burnout as “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterised by exhaustion, which is accompanied



by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work.” It is a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do “people work” of some kind (Maslach & Jackson, 1981). Burnout is a three-dimensional syndrome of emotional exhaustion (i.e. the draining of emotional resources because of demanding interpersonal contacts with others), depersonalisation (i.e. a negative, callous and cynical attitude towards the recipients of one’s care or services), and lack of accomplishment (i.e. the tendency to evaluate one’s work negatively) (Maslach & Jackson, 1981). Schaufeli and Bakker (2004) reported that burnout is a metaphor that is commonly used to describe a state of mental weariness. According to Maslach and Leiter (1997), burnout is an index of dislocation between what people are and what they have to do whereby this index represents an erosion in values, dignity, spirit, will, and engagement with the job and emotions.

Burnout is thus a psychological syndrome characterised by exhaustion, cynicism and inefficiency that is experienced in response to chronic job stress (Leiter & Maslach, 2004). Exhaustion is the key indicator of burnout which comprises four symptoms, namely distress, a sense of reduced effectiveness, decreased motivation and dysfunctional attitudes and behaviours (Schaufeli & Enzmann, 1998). Symptoms of exhausted employees include feeling worn out, experiencing loss of energy, depletion, debilitation, fatigue, loss of feeling and concern, loss of trust, loss of interest and a loss of spirit (Paine, 1982). Maslach, Schaufeli and Leiter (2001) hypothesised that the exhaustion component represents the basic individual stress dimension of burnout. Cynicism refers to the interpersonal dimension of burnout which involves a negative, callous or detached response to various aspects of the job which reflects indifference or a distant attitude towards work in general (Schaufeli & Bakker, 2004). According to Paine (1982), the depersonalisation dimension is a negative shift in responses to others, inappropriate attitudes toward clients, loss of idealism and irritability. Maslach et al. (2001) postulated that depersonalisation represents the interpersonal component of burnout whereby individuals attempt to put distance between themselves and service recipients by actively ignoring the qualities that make them unique and engaging people. There is thus a strong relationship between exhaustion and depersonalisation (Bezuidenhout & Cilliers, 2010).

Depersonalisation is considered an immediate reaction to exhaustion whereby an individual attempts to put a distance between self and work (Maslach & Leiter, 2008). Professional efficacy refers to the self-evaluation dimension of burnout and refers to a feeling of competence,

productivity and achievement at work (Maslach et al., 2001; Rothmann, 2008). Burnout is comprised of negative responses toward oneself, one's personal accomplishments and can be described as depression, low morale, withdrawal, reduced productivity or capability and an inability to cope (Maslach et al., 2001; Paine, 1982; Rothmann, 2008). Although these definitions of burnout present different views, what is common to them all is that burnout is negatively oriented and negatively impacts employee performance.

According to Maslach et al. (2001), burnout is the result of a mismatch in six areas of organisational life considered as organisational burnout antecedents: workload, control, rewards and recognition, community and social support, and perceived fairness and values. Koekemoer and Mostert (2006) found that nurses experienced high workload and were thus more likely to experience burnout. According to Bakker and Demerouti (2007), burnout develops as a result of high job demands which leads to exhaustion and, coupled with a lack of job resources, withdrawal and disengagement from work occurs. Burnout has a negative influence on the wellbeing of employees, especially in an emotionally demanding work environment such as that of nurses (Bezuidenhout & Cilliers, 2010). In a study involving Iranian nurses regarding burnout and productivity, Nayeri, Negarandeh, Vaismoradi, Ahmadi and Faghihzadeh (2009) found that emotional exhaustion and depersonalisation had significant negative correlations with productivity, and as a result the burned-out nurses were likely to distance themselves from patients and not perform as expected. Bakker and Costa (2014) reported that chronic burnout weakens the gain cycle of job resources and strengthens the loss cycle of daily job demands, exhaustion and self-undermining, and therefore burnout is likely to impact negatively on nursing employee's work engagement and performance.

## **Work engagement**

Since the emergence of work engagement, different views concerning its conceptualisation have been expressed by researchers (Kahn, 1990; Maslach & Leiter, 1997; Rothbard, 2001; Schaufeli, Salanova, Gonzalez-Romá, & Bakker, 2002). According to Maslach and Leiter (1997), work engagement is characterised by energy, involvement and efficacy in direct contrast with burnout where energy turns into exhaustion, involvement into cynicism and efficacy into ineffectiveness. Schaufeli et al. (2002) viewed work engagement as a distinct concept characterised by vigour,

dedication and absorption. Kahn (1990), on the other hand, posited that work engagement is the harnessing of employees to their work roles whereby people employ and express themselves physically, emotionally and mentally during role performance. Bakker, Leiter, Schaufeli and Taris (2008) alluded to Kahn (1990) when they highlighted the dialectical relationship between the person who drives personal energies and work role that allows the person to express themselves in this role. Work engagement appears to be characterised by high levels of energy and strong identification with one's work (Bakker et al., 2008). In the current study the view was taken that work engagement focuses on both the work role and the employee's experience of work activity as it helps to understand the tasks being performed and how the employees feel about their tasks.

Work engagement comprises three components, namely absorption, dedication and vigour (Schaufeli et al., 2002). Vigour is characterised by high levels of energy and mental resilience while working and the willingness to invest effort in one's work persistently even in difficult times (Bakker et al., 2008; Maslach & Leiter, 1997). Employees who feel vigour while working are motivated by their work and demonstrate perseverance in the face of difficulties (Mauno, Kinnunen, & Ruokolainen, 2007; Schaufeli et al., 2002). Dedication is characterised by involvement in one's work, experiencing a sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Absorption refers to being fully concentrating on and happily engrossed in one's work whereby time passes quickly and one has difficulty detaching oneself from work (Bakker et al., 2008). Vigour and dedication are considered direct opposites of burnout's two core symptoms of exhaustion and cynicism (Bakker et al., 2008).

According to the literature, there is growing evidence supporting the relationship between employees' work engagement and organisational outcomes such as organisational commitment and job satisfaction (Bakker & Demerouti, 2007; Salanova, Agut & Peiro, 2005; Sarti, 2014). Higher work engagement has also been associated with higher profit margins, revenue growth and organisational productivity (Saks, 2006; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009). According to Xanthopoulou et al. (2009), an engaged workforce can contribute immensely towards organisational performance and providing quality service.

It has also been found that higher levels of work engagement are associated with reduced counterproductive behaviours such as absenteeism and turnover intention (Maslach et al., 2001; Saks, 2006; Sarti, 2014; Schaufeli, Bakker, & Van Rhenen, 2009). According to Koyuncu, Burke and Fiksenbaum (2006), disengaged employees tend to distance and withdraw cognitively from

their work and thus work engagement is of paramount importance for any organisation including social service occupations such as nursing (Simpson, 2008).

Work engagement is classified as a positive emotion (Schaufeli et al., 2002). Its emergence has brought with it mixed conceptions on its relationship with burnout. Studies (Maslach & Leiter, 1997; Schaufeli & Bakker, 2010; Schaufeli et al., 2002) have shown that work engagement is viewed differently as a hypothetical antipode of burnout whereby work engagement is characterised by energy, involvement and efficacy and burnout is characterised by exhaustion, cynicism and ineffectiveness. The second view is the one expressed by Schaufeli et al. (2002). They postulated that burnout and work engagement are two distinct negatively related states of mind as opposed to being two ends on the same continuum. Regardless of the different views, burnout and work engagement are part of the workplace dynamics which need to be understood in order to promote work engagement or help eradicate burnout.

### **Sense of coherence**

According to Antonovsky (1987, p. 19), sense of coherence (SOC) is a

global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli, and (3) these demands are challenges, worthy of investment and engagement.

Sense of coherence is a personal paradigm which helps indicate an individual's overall view of the world (Antonovsky, 1979). It expresses the extent to which one has a pervasive, enduring and dynamic feeling of coherence, welcoming situations in life as endurable, manageable, meaningful and worthy of commitment (Rothmann, Jackson, & Kruger, 2003). According to Rothmann et al. (2003), SOC appeals to the emotions and not only at the cognitive level as one views life as meaningful and making sense.

According to Antonovsky (1979; 1987), SOC is comprised of three core components, namely comprehensibility (the cognitive component), manageability (the instrumental or behavioural component) and meaningfulness (the motivational component). Comprehensibility refers to the extent to which individuals perceive the stimuli from the internal and external environments, as making cognitive sense, as information that is ordered, consistent, structured, and clear, rather than as chaotic, random, accidental and inexplicable (Antonovsky, 1979). Comprehensibility indicates the degree to which individuals perceive what confronts them as consistent, structured, clear and predictable, so that whatever difficulties, demands or challenges are currently experienced will be considered as comprehensible in future (Antonovsky, 1987; Rothmann, Steyn, & Mostert, 2005). Manageability refers to the extent to which one perceives that resources at one's disposal are adequate to meet the demands posed by the stimuli that bombard one (Antonovsky, 1979). According to Hanson (2007), manageability deals with the capability and opportunity of individuals to influence their situation and their surroundings. Meaningfulness refers to the extent to which one feels that life makes sense emotionally, and problems and demands posed by living are perceived as challenges (Antonovsky, 1979). According to McComb (2011), meaningfulness is the invocation of cognitions and emotion which motivate worthiness of commitment to perceived challenges. Strümpfer (2003) pointed out that meaningfulness is experienced when situations and experiences are perceived as motivationally relevant in the form of desired challenges that are worth engaging with and investing oneself in.

According to Naudé and Rothmann (2006), SOC is a general coping resource assumed to alleviate life stress by affecting the overall quality of cognitive and emotional appraisal of stimuli that impact on the individual. Sense of coherence can also be seen as a personal resource, which acts as a form of resilience to stress and buffer against burnout (Harry & Coetzee, 2011). Although SOC is not a coping strategy itself, its stress buffering effects may influence the choice of coping strategies selected by individuals (Antonovsky, 1987). In a study conducted by Armirkhan and Greaves (2003), it was found that there are three mechanisms that underlie the health promoting benefits of SOC, namely (a) perceptual, (b) cognitive, and (c) behavioural mechanisms. Armirkhan and Greaves (2003) showed that a strong SOC impacts on perception, such that individuals with a strong SOC were likely to view more life events as having coherence, and concerning behavioural influence, individuals with a strong SOC used more instrumental and fewer avoidant responses to cope with stressors.

Research results indicated that SOC levels affect how individuals view their lives and work experiences differently (Amirkhan & Greaves, 2003; Semmer, 2003). According to Antonovsky (1987), individuals with higher SOC view their lives and work experiences as manageable, comprehensible and meaningful and those with low SOC view their lives and work experiences as meaningless and unmanageable. According to Strümpfer (1990), individuals with a strong SOC are likely to perceive their workplace stimulation as clear, ordered, structured and predictable consisting of experiences that are bearable. Such individuals cope and meet challenges by availing themselves of personal resources under the control of others and making emotional and motivational sense of work demands and welcoming challenges as worthy of engaging and investing their energy.

Sense of coherence has been shown to be critical in employees, including nurses (Antonovsky, 1987), as it helps them to feel in charge of their circumstances, view their tasks as manageable and achievable. Thus, SOC is likely to moderate the relationship between burnout and work engagement (Strümpfer, 1990). According to Rothmann and Rothmann (2010), the importance of work engagement plays a critical role as it helps predict organisational outcomes such as productivity. Furthermore, research has shown that understanding the relationships between burnout, work engagement and SOC can help organisations develop effective and efficient organisational strategies for improving employee wellbeing (Bezuidenhout & Cilliers, 2010; Mendes & Stander, 2011; Rothmann & Rothmann, 2010). For Mendes and Stander (2011) the boundary between these constructs is important and warrants further study.

### **The relationship between burnout, work engagement and sense of coherence**

The literature on the relationship between burnout and work engagement shows that these two constructs are viewed as direct opposites (Maslach & Leiter, 1997; Maslach, Schaufeli, & Leiter, 2001; Schaufeli & Bakker, 2004; Schaufeli et al., 2002). According to Maslach and Leiter (1997), work engagement is an antithesis of burnout with components of work engagement, energy, involvement and efficacy as the polar opposites of burnout. Components of burnout (exhaustion and cynicism) are regarded as opposite to vigour and dedication (the core components of work engagement) (Schaufeli et al., 2002). According to Kanste (2011) and Schaufeli and Bakker (2004), burnout and work engagement are independent constructs which are negatively related.

It appears that work engagement alleviates the perceived levels of occupational stress (Maslach & Leiter, 1997; Schaufeli & Bakker, 2004). Moreover, according to Saks and Gruman (2014), work engagement is instrumental in enhancing positive organisational attitudes (job satisfaction and organisational commitment) and health outcomes. Engaged workers experience positive emotions, high energy and self-efficacy, and are more productive as compared to burned-out employees (Bakker & Demerouti, 2008; Bakker & Xanthopoulou, 2013).

Rothmann et al. (2003) and Van der Colff and Rothmann (2009) found that there was a positive relationship between work engagement and SOC whilst some researchers (Feldt, 1997; Naudé & Rothmann, 2006) found that there is a negative relationship between burnout constructs (emotional exhaustion and cynicism) and SOC. According to Antonovsky (1993a), SOC, though not a coping strategy on its own, provides a foundation for coping. Rothmann et al. (2003) found SOC to have negative correlations with the dimensions of burnout and further highlighted that SOC improves sense making, helps employees to view their lives and work experiences as manageable, comprehensible and meaningful. It can therefore be concluded that work engagement and SOC are likely to enhance nursing employees' coping capabilities in an environment which tends to impact negatively on their professional efficacy and energies.

### **Context of the study**

Nursing is defined as a “caring profession which cares for and treats a health care user to achieve or maintain health and where this is not possible, cares for a health care user so that he/she lives in comfort and with dignity until death” (Nursing Act, 2005, p. 6). Nurses are inclined to experience high job demands, low job control, lack of social support and are exposed to traumatic events which are likely to result in burnout (Adriaenssens, De Gucht, & Maes, 2014).

In an inauguration of the national nursing strategy in 2008, the minister of health pointed out that nursing in South Africa was experiencing a serious crisis characterised by an increased loss of experienced nursing professionals, low remuneration and poor or deteriorating working conditions which were impacting negatively on both the health care system and the nurse work (<http://www.sanc.co.za/archive/archive2008/linked%20files/nursing-strategy>). This status quo was noted by Hall (2004) who found that nurses in the public sector work under pressure, receive low

remuneration, face increased demands for health services and work with inadequate resources. According to the South African Nursing Council statistics report (<http://www.sanc.co.za/stats/stat2013/Distribution%202013xls.htm>), there was a ratio of 203 nurses per 100 000 of the population, though this compared favourably with the World Health Organisation's minimum of 200 nurses per 100 000. The patient/practitioner ratio points to the fact that the total number of nurses is not sufficient to address the health care demands and this shortage of nurses is leading to an increasingly high workload for the nursing staff who have to work with minimal resources.

In their study, Shamian and EL-Jardali (2007) found that heavy workloads, inflexible scheduling, excessive overtime and poor management are some of the key factors affecting nurse work. Studies have shown that the environments in which nurses work are an important determination of work-related outcomes such as burnout levels, nurse turnover and job satisfaction, and therefore an understanding of nursing and its environment is crucial in addressing wellness issues (Aiken, Cimiotti, Sloane, Smith, Flynn, & Neff, 2011; Cullen, 1995; Hall, 2004; Hasselhorn, Tackenberg, Kuemmerling, Wittenberg, Simon, & Conway, 2006; Van Bogaert, Clarke, Roelant, Meulemans, & Van de Heyning, 2010; Verhaeghe, Vlerick, De Backer, Van Maele, & Gemmel, 2008). It is therefore the aim of the current research study to contribute to this understanding as it explores the relationship between these constructs in terms of a positive psychology paradigm in order to help organisations promote wellness in the workplace.

## **Research objectives**

The general aim of the study was to investigate the relationship between burnout, work engagement and sense of coherence. The specific aims relating to the empirical study were to:

- determine the empirical relationship between burnout, work engagement and sense of coherence of nurses working for a central hospital in KwaZulu-Natal;
- determine whether work engagement and sense of coherence predict burnout;
- propose recommendations to the organisation with regard to employee wellness policy; and
- highlight areas for further research in the field of industrial and organisational psychology.

These research aims led to the formulation of the following hypotheses:



H<sub>0</sub>: There is no statistically significant relationship between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal.

H<sub>1</sub>: There is a statistically significant relationship between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal.

### **The potential value added by the study**

The study may add more insights for industrial and organisational psychologists and human resources managers in understanding the dynamics which take place between burnout, work engagement and sense of coherence in employees in the workplace. It may also contribute to the body of knowledge of positive psychology in the South African context and stimulate further research, promotion and understanding of burnout, work engagement and SOC. Moreover, it is hoped that the research findings will help the organisation understand their staff better in terms of the current levels of burnout, work engagement and SOC which in turn may help the hospital to design relevant workplace strategies to improve employee wellbeing.

## **RESEARCH DESIGN**

The aim of this research study was to determine the relationship between burnout, work engagement and SOC of nurses working at a central hospital in KwaZulu-Natal.

### **Research approach**

A cross-sectional survey design was used to measure the variables (burnout, work engagement and SOC) and report on the statistical correlation of these variables (Shaughnessy & Zechmeister, 1997). Cross-sectional survey designs are appropriate for research questions about self-reported beliefs or behaviours and they can measure many variables, test multiple hypotheses, and infer temporal order from questions about past behaviour and characteristics (Neuman, 2003). It is for these reasons that this type of design was selected for the study.

## **Research method**

The research method in this study included the following factors.

### **Research participants**

A sample of 300 research participants was drawn from a population of 700 nurses working at a central hospital in KwaZulu-Natal. The sample was selected using a simple random sampling method which ensured equal chances of research participants to be selected from the identified target population (Sarantakos, 2005). This sampling method ensures representativeness of the sample selected from the total population and generalisability of the research findings to the populations of a similar nature (Terre Blanche, Durrheim, & Painter, 2006). A record of all nurses employed by the hospital was requested from the human resources department and the employees were assigned numbers which were later used for the random selection of participants. After the allocation of numbers, research participants were randomly selected using random numbers and the employees' assigned numbers for research sample selection.

Of the selected 300 participants, 220 responses were received after the use of reminders to obtain a response rate of 75%. From the 220 responses, only 178 questionnaires (60% of the total sample) were usable. According to Babbie and Mouton (2011), a response rate of 50% is adequate for analysis and reporting.

The research participants comprised nurses, both male and female, with different qualifications, from different age groups; different marital status and tenure (see Table 1). In terms of gender, there were more female respondents than males - females comprised 92% of the sample and male respondents 8%. This is generally acceptable as the nursing career is taken up by more women than men (Stanz & Greyling, 2010). Also, Stanz and Greyling (2010) and Van der Colff (2009) found that there were more female nurse participants implying that there generally were more female nurses compared to their male counterparts.

In terms of age, 54% of the research participants were 39 years and older, 30% of the sample was aged between 29 and 38 years, 15% was aged between 23 years and 28 years, and 1% of the sample was 22 years or younger. Most of the research participants were thus mature individuals aged above

39 years and it was assumed that the information provided by the more mature participants could be relied upon as they were likely to have a greater understanding of their work experiences.

In terms of marital status, there were more married participants (58%), while 35% were single, 5% were divorced and 2% were widowed. With regard to educational qualifications, at least 50% of the research participants had a diploma in nursing, 33% had matric, at least 7% had a degree and 10% of the sample had different qualifications which included certificates in related nursing qualifications. In terms of positions held by participants, 44% of the sample were registered nurses, 31% were enrolled nurses, and 16% selected the option “other” indicating that their positions were not covered under specified positions in the questionnaire, 6% of the sample were unit managers, 2% were matrons, and 1% were supervisors.

**Table 1: Biographical information of the nurses in the sample**

<b>Variable</b>	<b>Category</b>	<b>frequency</b>	<b>%</b>
Gender	Male	14	8%
	Female	164	92%
Age	22 years and below	1	1%
	23 – 28 years	28	15%
	29 – 38 years	53	30%
	39 years and above	96	54%
Marital status	Single	61	35%
	Married	104	58%
	Divorced	9	5%
	Widowed	4	2%
Level of education	Matric	59	33%
	Diploma	88	49%
	Degree	13	7%
	Other	18	10%
Job Title	Enrolled nurses	56	33%
	Registered nurses	78	44%
	Other nurses	44	25%
Tenure	4 years and below	33	18%
	5 – 7 years	29	16%
	8 – 11 years	33	19%
	12 years and above	83	47%

In terms of tenure, 47% of the research participants had served the organisation for at least 12 years and more, 19% between 8 and 11 years, 16% between 5 and 7 years, and less than 19% had served for 4 years and less. Thus, most of the research participants had served the organisation for at least 12 years.

## **Measuring instruments**

A questionnaire was developed for the collection of biographical data such as gender, age and qualifications as this is important for sample description and for statistical analysis. The Maslach Burnout Inventory – Human Services Survey (MBI-HSS) developed by Maslach and Jackson (1986) was used to measure the levels of burnout. The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) was used to measure the levels of engagement, and SOC was measured using the Orientation to Life Questionnaire (Antonovsky, 1987). In the current study, the research instruments were scored and interpreted as provided in the literature (Antonovsky, 1987; Maslach & Leiter, 2001; Schaufeli et al., 2002). Personal accomplishment items of the Maslach Burnout Inventory – Human Services Survey (MBI-HSS) and 13 items of the Orientation to Life Questionnaire (OLQ) were reversed during scoring as per the instructions for the respective measures.

### *Maslach Burnout Inventory-Human Services Survey (MBI-HSS)*

The Maslach Burnout Inventory-Human Services Survey (MBI-HSS) developed by Maslach and Jackson (1986) was used to measure burnout. The MBI-HSS consists of 22 items reflecting personal feelings and attitudes of individuals, which are scored on a 7-point frequency scale ranging from 0 (never) to 6 (every day). The three subscales of the MBI-HSS include emotional exhaustion (nine items; such as *I feel emotionally drained from my work*), cynicism (five items; such as *I feel I treat some recipients as if they were impersonal object*) and personal accomplishment (eight items; such as *I have accomplished many worthwhile things in this job*) (Maslach & Jackson, 1986). Personal accomplishment items (8) of the Maslach Burnout Inventory – Human Services Survey (MBI-HSS) were reversed during scoring as per the instructions for this measure. Internal consistency of the MBI-HSS was noted to be well above 0.70, the Cronbach alpha level, except for cynicism and a test-retest reliability ranging from three months to a year, was reported to range from 0.50 to 0.82 (Van der Colff & Rothmann, 2009). Maslach and Jackson (1981) reported alpha values of 0.77 for cynicism and 0.89 for exhaustion.

### *Utrecht Work Engagement Scale (UWES)*

The Utrecht Work Engagement Scale (UWES) measures work engagement, a positive work-related state of fulfilment that is characterised by vigour, dedication and absorption (Schaufeli et al., 2002). The UWES is made up of 17 items which are scored on a 6-point frequency rating scale, ranging from 0 (never) to 6 (always). The UWES measures three dimensions of work engagement, namely vigour (six items, such as *I am bursting with energy in my work*), dedication (five items such as *I find my work full of meaning and purpose*) and absorption (six items, such as *When I am working, I forget everything else around me*) (Schaufeli et al., 2002). Items for each respective component were added to obtain the total score for each and the overall work engagement score was obtained through adding all scores from the three components. According to Storm and Rothmann (2003), a 3-factor structure of the UWES has been validated for the South African context and has an internal consistency reliability which ranges from 0.68 to 0.91.

### *Orientation to Life Questionnaire (OLQ)*

Sense of coherence was measured through the Orientation of Life Questionnaire developed by Antonovsky (1987). It measures sense of coherence in three sub-scores, namely comprehensibility, manageability and meaningfulness. The sense of coherence questionnaire comprising 29 self-rating items was used. The questionnaire is comprised of 11 items on comprehensibility (items such as *When you talk to people, do you have the feeling that they don't understand you?*), 10 items on manageability (items such as *In the past, when you had to do something which depended upon cooperation with others, did you have the feeling that it surely would get done or surely would not get done?*) and 8 items on meaningfulness (items such as *Do you have the feeling that you don't really care about what goes around you?*) 13 items of the Orientation to Life Questionnaire (OLQ) were reversed during scoring as per the instructions for this measure. Antonovsky (1993b) reported an internal consistency of between 0.82 and 0.95, and a construct validity of between 0.38 and 0.72. Strümpfer and Wissing (1998) confirmed the reliability and validity in various South African studies. They reported reliability indices ranging from 0.52 to 0.97, with a mean alpha of 0.87. According to Pallant (2001), a Cronbach alpha of 0.80 is appropriate for cognitive tests, and for psychological constructs, values below 0.70 can be accepted.

The Cronbach alpha of scores for burnout, work engagement and SOC were 0.80, 0.75 and 0.85 respectively, well above 0.70 (Pallant, 2001).

## **Research procedure**

After ethical clearance and permission to conduct the research was sought and granted, the research participants were informed of the purpose of the research through the hospital's supervisors. The first page of the questionnaire contained the purpose of the research, responding instructions and consent information. The research participants were informed of the anonymity and confidentiality with which the information would be handled. The participants were given three weeks to complete and return the questionnaires. After three weeks, participants were reminded to complete and return their questionnaires as a measure of enhancing the response rate. After the collection of questionnaires, the responses were captured and saved in electronic format which allowed statistical analyses to be performed.

## **Statistical analysis**

The statistical analysis of the research data was conducted using the Statistical Package for the Social Sciences (Pallant, 2001). The research data was tested for reliability using the Cronbach alpha coefficient. The Cronbach alpha coefficient was used to assess the internal consistency reliability of each of the constructs. The validity of the instrument was tested by performing a factor analysis to determine the variables that were closely correlated. The current study followed the guidelines for the social sciences provided by Cohen (1988) where correlation values  $\leq 0.29$  are practically significant (small effect); correlation values  $\geq .30 \leq .49$  are practically significant (medium effect); and correlation values  $\geq 0.50$  are practically significant (large effect). A cut-off point of 0.30 (medium effect) was set for the practical significance of correlation coefficients (Cohen, 1988).

The Pearson product-moment correlations were calculated to determine the strength or extent of the relationship between the variables. The 0.05 level of significance was used. All tests with p values less than 0.05 were considered to indicate that the correlation between the variables is statistically significantly different from zero.

Linear regression is an approach for modelling the relationship between a scalar dependent variable  $y$  and one or more independent variables denoted as  $x$ . Linear multiple regression analysis was used to determine the relationship between the three variables and to explore the proportion of variance in the dependent variable (burnout) that is explained by the independent variables (work

engagement and sense of coherence) (Bezuidenhout & Cilliers, 2010). Regression was used to determine whether the dimensions of both work engagement and SOC can predict burnout (Bezuidenhout & Cilliers, 2010). The adjusted coefficient of determination  $R^2$  was used to determine the amount of variability explained in the dependent variable.

In terms of descriptive statistics, the skewness of data and mean was calculated to determine the central tendency of the scores, and the standard deviations were calculated to determine how far apart observations were from the central value. Tests of normality and homogeneity of variance were performed to determine whether the data was normally distributed or not.

## **RESULTS**

In this section, the results of the empirical study are presented and reported on. The objective of the research was to determine the relationship between burnout, work engagement and SOC in nurses working at a central hospital

### **Descriptive statistics**

The descriptive statistics are discussed below. Table 2 shows the reliability of construct dimensions and Table 3 provides the descriptive statistics of the constructs. Table 4 shows the correlations for the dimensions of the measuring instruments for the sample of nurses.

### **Reliability**

The Cronbach alpha values were calculated for the sub-dimensions and total scores of the Burnout Inventory, Work Engagement and SOC scales as shown in Table 2. High values of alpha are often used (along with substantive arguments and possibly other statistical measures) as evidence that the items measure an underlying (or latent) construct. A Cronbach alpha of 0.70 or more is indicative of a reliable scale (Pallant, 2001). George and Mallery (2003) provide the following rules of thumb: if the coefficient alpha is  $> 0.9$  this is excellent,  $> 0.8$  is good,  $> 0.7$  is acceptable,  $> 0.6$  is questionable,  $> 0.5$  is poor and a value  $< 0.5$  is unacceptable.

**TABLE 2: Reliability coefficients (N = 178)**

<b>Area</b>	<b>No. of items</b>	<b>Cronbach alpha</b>	<b>Acceptable level</b>
Emotional exhaustion	9	0.78	Acceptable
Cynicism	5	0.55	Poor
Personal accomplishment	8	0.79	Acceptable
<b>Burnout</b>	<b>22</b>	<b>0.80</b>	<b>Good</b>
Vigour	6	0.54	Poor
Dedication	5	0.60	Questionable
Absorption	6	0.48	Unacceptable
<b>Work engagement</b>	<b>17</b>	<b>0.75</b>	<b>Acceptable</b>
Comprehensibility	11	0.74	Acceptable
Manageability	10	0.61	Questionable
Meaningfulness	8	0.72	Acceptable
<b>Sense of coherence</b>	<b>29</b>	<b>0.85</b>	<b>Good</b>

As indicated in Table 2, the sub-dimensions of cynicism, vigour, dedication and manageability had Cronbach alpha values of less than 0.7; while absorption was the lowest at 0,48. A Cronbach alpha of 0.48 was relatively low compared to studies by Bezuidenhout and Cilliers (2010) and Janse van Rensburg, Boonzaier, and Boonzaier (2013) where scores of 0.75 and 0.72 respectively were recorded. These sub-dimensions, especially absorption, should thus be interpreted with caution. However, the overall dimensions (burnout, 0.80; work engagement, 0.75 and sense of coherence, 0.85) had a Cronbach alpha of greater than 0.70 indicating acceptable levels of reliability. These values are similar to those obtained in studies by Bezuidenhout and Cilliers (2010).

The Cronbach's alpha for the MBI-HSS questionnaire ranged from 0.55 to 0.79. The Cronbach's alpha for the total MBI-HSS questionnaire was 0.80. The Cronbach's alpha for the UWES questionnaire ranged from 0.48 to 0.60. The Cronbach's alpha for the total UWES questionnaire was 0.75. The Cronbach's alpha for the SOC questionnaire ranged from 0.61 to 0.72. The Cronbach's alpha for the total SOC questionnaire was 0.85. Based on these results, the total scores were used for the purpose of interpretations in this article.



*Descriptive statistics: burnout, work engagement and sense of coherence*

Table 3 below shows the mean, standard deviation, skewness and kurtosis of the constructs measured in this study.

As reflected in Table 3, the total MBI-HSS mean average score was 70.26 (SD = 18.03) which is comparably lower than that found in the study by Bezuidenhout and Cilliers (2010) who found an average MBI score of 0.89. Emotional exhaustion had a mean score of 26.6 (SD = 10.76); the mean score of cynicism was 6.8 (SD = 5.69), while the mean component score of personal accomplishment was 10.4 (SD = 8.93). The respondents scored the highest on the subscale emotional exhaustion and the lowest on cynicism. This indicates that the respondents from the sample experienced reduced effectiveness, decreased motivation, dysfunctional attitudes and behaviours, loss of energy and fatigue (Paine, 1982). The skewness and kurtosis values for the MBI-HSS ranged between 0.37 and 0.41, thus falling within the -1 and +1 range of normality which is recommended for these coefficients (Howell, 2008).

Table 3 shows that the total UWES mean average score was 74.9 (SD = 14.25), which is comparably lower than that found in the study by Bezuidenhout and Cilliers (2010) who found an average UWES score of 0.87. The mean component score for vigour was 25.4 (SD = 6.37), dedication showed a mean score of 25.8 (SD = 4.86); and the mean score for absorption was 23.7 (SD = 6.44). The respondents scored the highest on the subscale dedication and the lowest on absorption. Respondents from the sample are therefore more inclined to have a sense of significance in their work, feeling enthusiasm, inspiration, pride and viewing work as a challenge.

The skewness outside range -1 and +1 indicated that the distribution of data was asymmetrical and not normally distributed. The skewness and kurtosis values for the UWES ranged between -1.03 and 1.43, thus falling slightly outside the -1 and +1 range of normality recommended for these coefficients (Howell, 2008).

**Table 3: Descriptive statistics of the constructs**

<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Skewness</b>	<b>Kurtosis</b>
Emotional exhaustion	26.6	10.76	-0.183	-0.253
Cynicism	6.8	5.69	0.859	0.121
Personal accomplishment	10.4	8.93	1.292	1.831
<b>Burnout</b>	<b>70.26</b>	<b>18.03</b>	<b>0.368</b>	<b>0.412</b>
Vigour	25.4	6.37	-0.718	0.917
Dedication	25.8	4.86	-1.306	1.121
Absorption	23.7	6.44	-0.329	-0.390
<b>Work engagement</b>	<b>74.9</b>	<b>14.25</b>	<b>-1.032</b>	<b>1.434</b>
Comprehensibility	49.0	12.0	-0.084	-0.023
Manageability	49.7	0.93	-0.025	0.976
Meaningfulness	43.7	8.78	-0.276	-1.019
<b>Sense of coherence</b>	<b>142.4</b>	<b>25.00</b>	<b>0.067</b>	<b>-0.485</b>

From Table 3 it can be seen that the total OLQ mean average score was 142.4 (SD = 25) which is comparably higher than that found in the study by Bezuidenhout and Cilliers (2010) who found an average SOC score of 128.22. Comprehensibility had a mean score of 49 (SD = 12); the mean score of manageability was 49.7 (SD = 0.93), while the mean component score of meaningfulness was 43.7 (SD = 8.78). The respondents scored the highest on the subscale manageability and the lowest on meaningfulness. This indicates that the respondents from the sample perceives that resources at their disposal are adequate to meet the demands posed by the stimuli that bombard them (Antonovsky, 1993a). The skewness and kurtosis values for the OLQ ranged between 0.07 and -0.49 falling within the -1 and +1 range of normality which is recommended for these coefficients (Howell, 2008). The summation of SOC items along a linear 29 to 203 distribution indicates a weaker to a stronger SOC.

### **Correlational statistics**

The Pearson product moment correlation was used to specify the relationships between the variables. A 5% level of significance was used. Table 4 lists the results of the correlation matrix.

### *Pearson product-moment correlation analysis: Burnout and work engagement*

Table 4 shows that the overall burnout construct related negatively and significantly to the overall work engagement construct ( $r = -0.35$ ;  $p > 0.3$ ). This indicates that burnout is negatively associated with work engagement, which was also confirmed in the research by Bezuidenhout and Cilliers (2010). Emotional exhaustion was associated both negatively and significantly with vigour ( $r = -.22$ ;  $p < 0.01$ ; statistically highly significant), and cynicism was associated both negatively and significantly with dedication ( $r = -0.21$ ;  $p < 0.01$ ; statistically highly significant). Emotional exhaustion and work engagement had a statistically and practically significant positive correlation ( $r = 0.00$ ;  $p < 0.01$ ; small effect), this was contrary to previous research where Van der Colff and Rothmann (2009) found that emotional exhaustion was moderately negatively related to work engagement. Schaufeli and Bakker (2001) found that burnout and work engagement were logically related, emotional exhaustion to vigour and cynicism to dedication. Considering relationships between emotional exhaustion and absorption and cynicism and absorption, a negative relationship was expected, however, in the current study, emotional exhaustion and absorption had a practically significant positive correlation ( $r = 0.28$ ;  $p < 0.01$ ; small effect) and cynicism and absorption had a practically significant positive correlation ( $r = 0.15$ ;  $p < 0.01$ ; small effect). Personal accomplishment was associated both negatively and significantly with vigour ( $r = -0.55$ ;  $p > 0.5$ ; large practical effect), dedication ( $r = -0.60$ ;  $p > 0.5$ ; large practical effect) and absorption ( $r = -0.46$ ;  $p > 0.3$ ; medium practical effect). Based on the above analysis, Hypothesis H<sub>1</sub> (*There is a statistically significant relationship between burnout and work engagement among nurses working at a central hospital in KwaZulu-Natal*) can be accepted.

### *Pearson product-moment correlation analysis: Burnout and SOC*

In terms of the relationship between burnout and SOC, Table 4 shows that the overall burnout construct related negatively and significantly to the overall sense of coherence construct ( $r = -0.46$ ;  $p > 0.3$ ). Cynicism was associated both negatively and significantly with comprehensibility ( $r = -0.33$ ;  $p > 0.3$ ; manageability ( $r = -0.32$ ;  $p > 0.3$ ; moderate practical effect); and meaningfulness ( $r = -0.40$ ;  $p > 0.3$ ; moderate practical effect), and thus burned-out employees are likely to view their work as less comprehensible, manageable and meaningful. Van der Colff and Rothmann (2009) also found that emotional exhaustion and cynicism were moderately negatively related to SOC. Based on the above analysis, Hypothesis H<sub>1</sub> (*There is a statistically significant relationship*

*between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal) can be accepted.*

*Pearson product-moment correlation analysis: Work engagement and SOC*

The overall work engagement construct was related both positively and significantly to the overall sense of coherence construct ( $r = 0.51$ ;  $p < 0.01$ ). This was in line with previous research by Van der Colff and Rothmann (2009) who found a correlation of 0.42 whilst Bezuidenhout and Cilliers (2010) found a correlation of 0.52 on work engagement and sense of coherence. Vigour was associated both positively and significantly with dedication ( $r = 0.60$ ;  $p > 0.5$ ; large practical effect), absorption ( $r = 0.43$ ;  $p > 0.3$ ; moderate practical effect), comprehensibility ( $r = 0.20$ ;  $p < 0.01$ ; statistically highly significant), and meaningfulness ( $r = 0.28$ ;  $p < 0.01$ ; statistically highly significant). Absorption was associated both positively and significantly with sense of coherence ( $r = 0.41$ ;  $p > 0.01$ ; large practical effect). The relationship between work engagement and SOC was at 0.41 therefore depicting a practically significant (medium effect) positive relationship between these two constructs (Cohen, 1988).

These results indicate that they are statistically highly significant as they surpassed the selected cut-off point of 0.30 except for work engagement and sense of coherence (Cohen, 1988). The results provide sufficient evidence to support the research hypothesis that there is a statistically significant relationship between burnout, work engagement and sense of coherence among nurses working at a central hospital in KwaZulu-Natal.

**Table 4: Pearson correlation product analysis**

Item	1	2	3	4	5	6	7	8	9	10	11	12
1.Emotional exhaustion	-											
2.Cynicism	0.43**	-										
3.Personal accomplishment	0.11	0.24**	-									
<b>4.Burnout</b>	0.79**	0.69**	0.64**	-								
5.Vigour	-0.22**	-0.18*	-0.55**	-0.46**	-							
6.Dedication	-0.07	-0.21**	-0.60**	-0.40**	0.60**	-						
7.Absorption	0.28**	0.15	-0.46**	-0.01	0.43**	0.41**	-					
<b>8.Work engagement</b>	0.00	-0.09	-0.66**	-0.35**	0.84**	0.79**	0.78**	-				
9.Comprehensability	-0.16*	-0.33**	-0.18*	-0.29**	0.20**	0.13	0.10	0.18*	-			
10.Manageability	-0.29**	-0.32**	-0.28**	-0.41**	0.13	0.14	-0.04	0.09	0.60**	-		
11.Meangingfulness	-0.29**	-0.40**	-0.35**	-0.47**	0.28**	0.30*	0.02	0.24**	0.70**	0.45**	-	
<b>12.Sense of coherence</b>	-0.28**	-0.4**	-0.31**	-0.46**	0.24**	0.22**	0.41**	0.51**	0.86**	0.82**	0.82**	-

\*p < 0.05 statistically significant

\*\* p < 0.01 statistically highly significant

Correlation values  $\leq 0.29$  are practically significant (small effect); correlation values  $\geq .30 \leq .49$  are practically significant (medium effect); correlation values  $\geq 0.50$  are practically significant (large effect).

*Inferential statistics: multiple regression analysis*

The correlation analysis matrix indicated that burnout had significant correlations with work engagement and sense of coherence and also indicated that both were negatively correlated with burnout. The results of the multiple regression analysis and stepwise regression analysis were all the same and the information is shown in Table 5.

Linear multiple regression analysis was conducted to assess whether or not work engagement and sense of coherence can statistically significantly predict burnout of nurses. All the independent variables were entered and the model predicted 27.7% of the variance in burnout ( $F = 33.471, p < 0.01, R^2 = 0.277$ ). The constant ( $\beta = 110.591, p < 0.01$ ), work engagement ( $\beta = -0.342, p < 0.01$ ) and sense of coherence ( $\beta = -0.289, p < 0.01$ ) were significant at the 5% level of significance. The results as highlighted by the standardised coefficients, work engagement and sense of coherence, were negatively related to burnout and were highly significant (p values less than 0.01).

**Table 5: Multiple regression analysis with burnout as dependent and work engagement and sense of coherence as independent variables**

Model	UNSTANDARDISED		STANDARDISED	T	P	F	R	R <sup>2</sup>	ADJUSTED R <sup>2</sup>
	COEFFICIENTS		COEFFICIENTS						
	<b>B</b>	<b>SE</b>	<b>Beta</b>						
<sup>1</sup> (Constant)	110.591	8.281		13.355	0.000*	33.471*	0.526	0.277	0.268*
Work engagement	-0.342	0.083	-0.270	-4.115	0.000*				
Sense of coherence	-0.289	0.047	-0.400	-6.098	0.000*				

\*p < 0.05

The results of the multiple regression analysis and stepwise regression analysis with emotional exhaustion as the dependent variable. The correlation analysis matrix indicated that emotional exhaustion had significant correlations with vigour, absorption, comprehensibility, manageability and meaningfulness. Absorption was the only one positively related to emotional exhaustion hence these variables may be possible predictors of emotional exhaustion.

In the first model where all the independent variables were entered, the model predicted 24.7% of the variance in emotional exhaustion ( $F = 10.662, p < 0.01, R^2 = 0.272$ ). The constant ( $\beta = 38.443, p < 0.01$ ), vigour ( $\beta = -0.638, p < 0.01$ ) and absorption ( $\beta = 0.700, p < 0.01$ ) were significant at the 5% level of significance. The results indicated that the standardised coefficient of absorption had a positive impact followed by vigour, and absorption had a positive impact on emotional exhaustion whilst vigour had a negative relationship.

A stepwise multiple regression analysis revealed a variability in emotional exhaustion of 24.4%, thus highlighting a statistical significant relationship with meaningfulness, vigour and absorption as predictor variables for emotional exhaustion ( $F = 19.998, p < 0.01, R^2 = 0.244$ ). The only variables that were significant were meaningfulness ( $\beta = -0.245, p < 0.01$ ), absorption ( $\beta = 0.719, p < 0.01$ ) and vigour ( $\beta = -0.592, p < 0.01$ ). The constant ( $\beta = 35.269, p < 0.01$ ) was also significant. All coefficients were highly significant (p values less than 0.01). Meaningfulness and vigour had a negative relationship whilst absorption had a positive relationship.

The results of multiple regression analysis and stepwise regression analysis with cynicism as the dependent variable indicated that cynicism had significant correlations with vigour, dedication, manageability, comprehensibility and meaningfulness. All other constructs were negatively correlated to cynicism, and thus these variables may be possible predictors of depersonalisation.

A stepwise multiple regression analysis indicated a variability in cynicism of 23.1%. The results indicated a statistically significant relationship of comprehensibility, meaningfulness, absorption and dedication as predictor variables for cynicism ( $F = 14.266, p < 0.01, R^2 = 0.248$ ). Variables that were significant include comprehensibility ( $\beta = -0.104, p < 0.01$ ), meaningfulness ( $\beta = -0.154, p < 0.01$ ), dedication ( $\beta = -0.251, p < 0.01$ ) and absorption ( $\beta = 0.229, p < 0.01$ ). The constant ( $\beta = 16.692, p < 0.01$ ) was also significant. All coefficients were highly significant (p values less than 0.01), whilst absorption was the only one with a positive relationship. The results of the multiple regression analysis and stepwise regression analysis with personal accomplishment as the dependent variable indicated that personal accomplishment had significant negative correlations with all the dimensions of work engagement and sense of coherence and thus these variables may be possible predictors of professional efficacy.

The results showed that in the first model where all the independent variables were entered, the model predicted 47.5% of the variance in personal accomplishment ( $F = 27.680, p < 0.01, R^2 = 0.493$ ). The constant ( $\beta = 51.861, p < 0.01$ ), manageability ( $\beta = -1.733, p = 0.027$ ), vigour ( $\beta = -0.301, p < 0.01$ ), dedication ( $\beta = -0.600, p < 0.01$ ) and absorption ( $\beta = -0.301, p < 0.01$ ) were significant at the 5% level of significance.

A stepwise multiple regression analysis highlighted a variability in personal accomplishment of 47.6%. It indicated a statistical significant relationship with only four variables as predictor variables of professional efficacy ( $F = 41.272, p < 0.01, R^2 = 0.488$ ). The only variables that were significant were dedication ( $\beta = -0.631, p < 0.01$ ), vigour ( $\beta = -0.306, p < 0.01$ ), absorption ( $\beta = -0.322, p < 0.01$ ) and manageability ( $\beta = -1.999, p < 0.01$ ).

## DISCUSSION

The primary objective of this study was to determine the relationship between burnout, work engagement and SOC in nurses working at a central hospital, using a cross-sectional survey design.

The Cronbach's alpha coefficient calculations were conducted by means of statistical calculations. According to Table 2, the Cronbach score of burnout was 0.80, work engagement 0.75 and SOC 0.85 respectively, this is in line with previous research findings of Bezuidenhout and Cilliers (2010). The descriptive statistics indicated that the scales of the MBI-HSS, UWES and OLQ were sufficiently internally consistent with accepted alpha values for most of the scales implying that the survey used was reliable in the sample of nurses (Beukes & Botha, 2013).

According to Table 3, burnout has a mean score of 70.26, work engagement 74.9 and SOC has a mean score of 142.4. The burnout and work engagement mean scores were comparably lower to the findings made by Bezuidenhout and Cilliers (2010). The mean SOC score for the current study was 142.4, this is in line with the findings of Strümpfer and Wissing (1998) who found a mean score of 137 over 27 studies conducted in South Africa. The mean SOC score was well above previous findings by Bezuidenhout and Cilliers (2010) who found a mean SOC score of 128.22 for female academics and Herbst (2006) who found a mean SOC score of 134.26 for working mothers.



**Research aim 1: To determine the empirical relationship between burnout, work engagement and sense of coherence of nurses working in a central hospital in KwaZulu-Natal.**

According to Table 4, the overall burnout construct related negatively and significantly to the overall work engagement construct ( $r = -0.35$ ;  $p > 0.3$ ). These findings are consistent with literature review on that burnout is negatively related with work engagement (Bezuidenhout & Cilliers, 2010). This is also in line with the findings of Kanste (2011) and Schaufeli and Bakker (2004), who found that burnout and work engagement are independent constructs which are negatively related.

According to Table 4, the overall burnout construct related negatively and significantly to the overall sense of coherence construct ( $r = -0.46$ ;  $p > 0.3$ ). These findings are consistent with literature review on that sense of coherence is negatively related with burnout (Van der Colff & Rothmann, 2009). This is also in line with the findings of Feldt (1997) and Naudé and Rothmann (2006) who found that there is a negative relationship between burnout and SOC.

According to Table 4, the overall work engagement construct was related both positively and significantly to the overall sense of coherence construct ( $r = 0.20$ ;  $p < 0.01$ ). The findings of the current study indicate a significant positive relationship between work engagement and SOC and a negative significant relationship between burnout and work engagement, and burnout and SOC which is in line with previous research (Bezuidenhout & Cilliers, 2010; Rothmann et al., 2003; Rothmann, Steyn & Mostert, 2008; Wissing, De Waal & De Beer, 1992). This means that nurses who indicated higher levels of work engagement are more likely to invest their time and efforts into their work with less likelihood of showing inappropriate attitudes or irritability towards clients (Bargagliotti, 2011; Maslach & Leiter, 1997 & Schaufeli et. al., 2002).

The Pearson correlations in this study indicated that the overall burnout construct related negatively to the overall work engagement and sense of coherence, which was also confirmed in the research by Bezuidenhout and Cilliers (2010). Cynicism was negatively related to comprehensibility, manageability and meaningfulness. Therefore, burned out nurses are likely to be less engaged with their work and view it as less comprehensible, not manageable and meaningless. The results indicated a positive relationship between work engagement and SOC.

The key interest in the current study was to investigate the relationship between nurses' burnout, work engagement and SOC. Work engagement and sense of coherence are considered to be key positive human strengths resources in buffering the negative effects of burnout (Coetzee & Cilliers, 2001; Rothmann, Jorgensen, & Hill, 2011; Strümpfer, 2003; Van der Colff & Rothmann, 2009). The current study confirms previous research findings on the relationship between burnout and SOC which found that individuals with a higher SOC experienced less burnout (Rothmann et al., 2003; Van der Colff & Rothmann, 2009).

The results also indicated that there was a negative relationship between burnout and sense of coherence. These findings corroborated previous research findings which reported inverse negative relationships between burnout and sense of coherence (Basson & Rothmann, 2002; Harry & Coetzee, 2011; Wissing et al., 1992). This corresponds to Strümpfer's (2003) notion that regardless of being exposed to stressful conditions, individuals with a strong sense of coherence are able to view their work or tasks as challenges which are structured, manageable and meaningful and worth investing effort. Nurses with a strong sense of coherence are also more likely to see their work as structured, manageable and meaningful and worth investing effort resulting in full engagement. On the other hand, nurses with a low sense of coherence are likely to see their work as stressful, meaningless, not worth investing their efforts and view clients as objects.

The results indicate that some research participants experienced high levels of burnout. It could be that nurses are experiencing an erosion of engagement with their work because the work which was once important, meaningful and challenging is becoming unpleasant, unfulfilling and meaningless resulting in emotional exhaustion and distancing themselves from patients and fellow workers (Maslach & Leiter, 1997). There is research (Leiter & Maslach, 2009; Van der Colff & Rothmann, 2009) that shows that nurses experience numerous stressors such as staff shortage, excessive administrative duties, lack of fairness, inadequate salaries, insufficient personnel to handle workload and excessive demands from patients which are likely to result in burnout. According to Hobfoll (2000), burnout and low engagement are symptoms of failure to acquire resources or lack of resources. Moreover, employees with a weak SOC are likely to view their experiences as unstructured and not manageable, and also believe that the resources are not adequate thus resulting in their failure to make use of the available resources (Antonovsky, 1987; Strümpfer, 2003).

## **Research aim 2: To determine whether work engagement and sense of coherence predict burnout**

The correlation analysis matrix indicated that burnout had significant correlations with work engagement and sense of coherence. According to Table 5, Linear multiple regression analysis conducted to assess whether or not work engagement and sense of coherence can statistically significantly predict burnout of nurses, predicted 27.7% of the variance in burnout.

The participants who had lower levels of work engagement and SOC showed higher scores on burnout implying that lower level of work engagement and SOC can be regarded as predictors of burnout. According to Rothmann, Jackson and Kruger (2003), a weak SOC combined with stress because of job demands and lack of resources is associated with all components of burnout. On the other hand, higher scores in work engagement and sense of coherence may be used to predict individuals' ability to cope with stressful work conditions since those who scored higher in these two variables had lower burnout levels (Hanson, 2000; Rothmann & Storm, 2003, Strümpfer, 2003; Van der Colff & Rothmann, 2009).

Overall, the results indicated that there were significant levels of burnout, work engagement and sense of coherence in some research participants. Nurses who had high levels of SOC were found to be more likely to experience work engagement and low levels of burnout (Van der Colff & Rothmann, 2009). It can be presumed therefore that sense of coherence is likely to act as a buffer or a coping resource against stressors in the workplace (Van der Colff & Rothmann, 2009). The findings of the current study are in line with those of Naudé and Rothmann (2006) who found that emergency workers with a stronger sense of coherence experienced less burnout and were more engaged.

## **Conclusion: Implications for human resource management practices**

The literature shows that there is a link between the lack of resources and burnout (Bakker & Demerouti, 2008; Bakker et al., 2008; Maslach et al., 2001) and thus it is recommended that there should be better access to resources and promotion of wellness in the workplace.

Job demands, resources, organisational support should be managed by the organisation to try and combat burnout in the workplace. Good organisational climate and low job insecurity have been found to be related to strong SOC and occupational wellbeing (Feldt et al., 2000).

The promotion of work engagement and sense of coherence (coping) strategies can be used as interventions to help nurses cope with the stressors they face in their work environment (Bargagliotti, 2011; Rothmann, Jorgensen, & Hill, 2011; Van der Colff & Rothmann, 2009). The organisation may need to consider addressing issues such as staff shortages, weak sense of coherence and inadequate salaries as these are some known precursors of burnout in the workplace (Maslach et al., 2001).

### **Limitations of the study**

The study was limited to nurses working at a central hospital in KwaZulu-Natal and predominantly female participants. As indicated earlier, the sample consisted of 92% women and only 8% of men. Furthermore, the relatively small sample size (178 respondents) suggests limitations on how the results can be generalised to the general population of nurses in South Africa.

Another limitation of the current study includes the cross-sectional survey design which makes it difficult to prove causal relationships.

In spite of these limitations, the results of this study can be useful in the analysis of the relationship between burnout, work engagement and SOC of employees in the workplace.

### **Recommendations for future research**

The current study was limited to nurses working at a central hospital in KwaZulu-Natal and predominantly female participants it is therefore recommended that a larger sample size be used in future studies to enhance external validity. The current study used a cross-sectional survey design which makes it difficult to prove causal relationships, therefore future research can focus on the causal relationships between burnout, work engagement and sense of coherence of health care workers. As indicated in Tables 2 to 4, there were values of the dimensions (e.g. absorption) which

were relatively different from what has been found in literature, therefore, a replication study is recommended for future research.

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## **CHAPTER 4: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

### **4.1 INTRODUCTION**

In this chapter the focus is on the conclusions reached with regard to the literature review and the empirical study. The limitations and recommendations of the literature review and empirical results of the study will also be discussed, and the chapter concludes with recommendations for practical application and future research.

### **4.2 CONCLUSIONS**

#### **4.2.1 Conclusions regarding the literature review**

The specific research aims relating to the literature review were to conceptualise burnout, work engagement and sense of coherence in terms of the literature and to determine the theoretical relationship between these variables.

#### **Research aim 1: To conceptualise burnout**

Burnout was conceptualised according to Schaufeli and Enzmann (1998) according to whom burnout is a persistent, negative work-related state of mind which is characterised by exhaustion, sense of reduced effectiveness, decreased motivation and dysfunctional attitudes and behaviour towards work and fellow employees or people with whom an individual interacts with. Burned-out employees lack motivation, experience wearing out and loss of energy, respond negatively towards others and clients, and experience loss of interest in the work they once loved. The literature shows that burnout is influenced by lack of resources, work overload and mismatches in organisations.

#### **Research aim 2: To conceptualise work engagement**

Work engagement was conceptualised according to Schaufeli et al. (2002) who indicated that work engagement is a positive, fulfilling, work-related state of mind which is characterised by vigour,



dedication and absorption. Work engagement is not a fixed state as these positive fulfilling experiences fluctuate (Bakker & Bal, 2010; Macey & Schneider, 2008). Work engagement is influenced by availability of resources as it flourishes where both job and personal resources are readily available (Bakker & Demerouti, 2008; Bakker & Schaufeli, 2004). Engaged employees are enthusiastic, feel inspired, have pride, view their work as a challenge, show great levels of energy, willingness to invest effort and are fully concentrated and deeply engrossed with their work to an extent that time passes without noticing. Work engagement is thus influenced by the availability of resources as it thrives where both job and personal resources are available.

### **Research aim 3: To conceptualise sense of coherence**

Sense of coherence was conceptualised in this study according to Antonovsky (1987) who posited that SOC is a global construct which enables individuals to view their world as comprehensible, manageable and meaningful. Employees with a strong sense of coherence perceive the stimuli from both the internal and external world as structured and predictable, perceiving resources as available to meet challenges at hand and view these challenges as worth investing energy in. On the other hand, employees with a weak sense of coherence view their world as in chaos, in inexplicable disorder, chaotic, and where life events are viewed as unfortunate things and challenges are considered unwelcome burdens (Antonovsky, 1987).

### **Research aim 4: To explain the theoretical relationship between burnout, work engagement and sense of coherence**

From the literature review, it was concluded that SOC acts as a buffer and helps alleviate the consequences of burnout. Sense of coherence can be used to predict burnout as individuals with a weak sense of coherence are associated with higher levels of burnout experiences than those with a stronger sense of coherence.

There is therefore a positive relationship between work engagement and sense of coherence, and a negative relationship between burnout and work engagement and SOC (Feldt, Kinnunen, & Mauno, 2000; Rothmann et al., 2003; Schaufeli & Bakker, 2004).

#### **4.2.2 Conclusions regarding the empirical study**

The specific aims of the study are highlighted below:

- To determine the nature of the empirical relationship between burnout, work engagement and sense of coherence in nurses working in a central hospital in KwaZulu-Natal
- To determine whether work engagement and sense of coherence predict burnout in a statistically significant way
- To draw conclusions, highlight limitations and make recommendations for future research and the organisation with regard to employee wellness policy

*4.2.2.1 Research aim 1: To determine the empirical relationship between burnout, work engagement and sense of coherence of nurses working in a central hospital in KwaZulu-Natal*

The specific research aim to determine whether there is a statistical relationship between burnout, work engagement and SOC in nurses at a central hospital in KwaZulu-Natal.

The Cronbach's alpha coefficient calculations conducted on scales of the MBI-HSS, UWES and OLQ were sufficiently internally consistent with accepted alpha values for most of the scales implying that the survey used was reliable in the sample of nurses (Beukes & Botha, 2013).

Based on the findings of the current study, it was concluded that the participants' work engagement and sense of coherence related negatively to their burnout. Participants who had higher scores on work engagement and sense of coherence indicated low burnout experiences while those who scored lower on the same constructs indicated higher levels of burnout. Based on these findings, it can be said that work engagement and sense of coherence can predict employee burnout.

*4.2.2.2 Research aim 2: To determine whether work engagement and sense of coherence predict burnout*

The Pearson correlations in this study indicated that the overall burnout construct related negatively to the overall work engagement and sense of coherence, which was also confirmed in the research by Bezuidenhout and Cilliers (2010). Therefore, burned out nurses are likely to be less engaged with their work and view it as less comprehensible, not manageable and meaningless.

The findings concerning the relationship between burnout, work engagement and SOC of nursing staff can help organisations develop effective wellness strategies in the workplace which may result in improved productivity and performance. The findings of the current study indicated a positive relative relationship between work engagement and SOC and a negative relationship between burnout, work engagement and SOC. The promotion of work engagement and sense of coherence may thus help alleviate the consequences of burnout. More research needs to be conducted on the relationship between burnout, work engagement and SOC in nursing staff in the South Africa context.

#### **4.2.3 Conclusions regarding the central hypothesis**

Concerning the central hypothesis of this study, it can be concluded that there is a significant relationship between burnout, work engagement and SOC.

#### **4.2.4 Conclusions regarding contributions to the field of industrial and organisational psychology**

The findings of the current study contribute to the field of industrial and organisational psychology by shedding more light on the relationship between burnout, work engagement and SOC. The findings will inform practitioners in the world of work of the dynamics between these constructs and help them design more effective employee wellness strategies. The findings show that human resources practitioners need to consider the relationship between burnout, work engagement and SOC.

The study indicated that individuals with higher levels of sense of coherence and work engagement experience low levels of burnout, and those who had lower scores on sense of coherence and work engagement experienced higher burnout levels. It can thus be concluded that there is a negative relationship between burnout, work engagement and sense of coherence. In light of these findings, organisations should try and develop organisational work environments which promote sense of coherence and work engagement thereby boosting employee wellness.

The use of psychological instruments plays a pivotal role in industrial and organisational psychology practice. In the current study, the reliability and validity of the research instruments were examined and found to be acceptable.

### **4.3 LIMITATIONS**

The study was limited to the nurses working at a central hospital in KwaZulu-Natal who were mostly female with few male participants. Another limitation of the current study includes the use of a cross-sectional survey design which makes it difficult to prove causal relationships. In spite of these limitations, the results of this study can be useful in the analysis of the relationship between burnout, work engagement and SOC of employees in the workplace.

### **4.4 RECOMMENDATIONS**

The current study used a cross sectional survey design which makes it difficult to prove causal relationships. It is thus recommended that causal research design be conducted in order to establish causal relationships between burnout, work engagement and SOC. Future research should also focus on the mediating role played by burnout, work engagement and sense of coherence in the nursing work environment.

### **4.5 CHAPTER SUMMARY**

This chapter presented the conclusions, examined the limitations and made recommendations for future studies.

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