

**SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN A HIGHER
EDUCATION INSTITUTION CALL CENTRE**

by

NISHA HARRY

**Submitted in the part fulfilment of the requirements
for the degree of**

MASTERS OF COMMERCE

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF M COETZEE

JUNE 2011

DECLARATION

I, Nisha Harry, student number 07300956, declare that this dissertation of unlimited scope entitled, “**Sense of coherence, affective wellbeing and burnout in a higher education institution call centre**”, is my own work, and that all sources that I have used or from which I have quoted have been indicated and acknowledged by means of complete references.

I further declare that ethical clearance to conduct the research has been obtained from the Department of Industrial and Organisational Psychology, University of South Africa, as well as from the participating organisation.

NISHA HARRY

15 JUNE 2011

ACKNOWLEDGEMENTS

I would like to extend my gratitude and appreciation to the following people for their support during this dissertation:

My supervisor, Prof. Melinde Coetzee, thank you for your guidance, support, patience, encouragement and continuous motivation and, most of all, for having confidence in my abilities and for helping me stay focused during the most difficult period in my life.

Dr Anton Grobler and Ina Rothmann, both of whom assisted me in gaining access to the statistics used in this study.

My Chair of Department, Prof. D. J. Geldenhuys, for your support and kindness.

Andries and Jeremy, for your assistance with the statistical analyses of the data.

My late husband, Sanjay Harry, who was my pillar of strength, inspiration and support throughout all my studies. You are forever in my thoughts.

My loving children, Sumeet and Sujata Harry, thank you for being both patient and understanding and for giving me your assistance when needed.

SUMMARY

SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN A HIGHER EDUCATION INSTITUTION CALL CENTRE

by

NISHA HARRY

SUPERVISOR : Prof M Coetzee
DEPARTMENT : Industrial and Organisational Psychology
DEGREE : MCom (Industrial and Organisational Psychology)

The objective of this study was to: (1) assess the overall wellness climate profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout; and (3) determine how the participants differ regarding these variables in terms of socio-demographic contextual factors such as gender, race, age, and marital status. The South African Employee Health and Wellness Survey was used as a measuring instrument. Compared to the national norm, the results indicated a risky wellness climate reflecting a burnout propensity, lower morale (affective wellbeing) and lower resilience (sense of coherence).

Significant relations existed between the participants' sense of coherence, affective wellbeing and burnout levels. Significant differences regarding these variables were also detected between males and females and the various marital status groups regarding the participants' sense of coherence, affective wellbeing and burnout. The findings of this study contributed new knowledge that may be used to inform employee wellness programmes within a higher education call centre environment. The study concluded with recommendations for future research and practice.

KEY TERMS

Affective wellbeing; burnout; call centre; sense of coherence; wellness climate

TABLE OF CONTENTS

Declaration	i
Acknowledgements	ii
Summary	iii
Key Terms	iii
CHAPTER 1	1
SCIENTIFIC ORIENTATION TO THE RESEARCH	1
1.1 BACKGROUND AND MOTIVATION	1
1.2 PROBLEM STATEMENT	5
1.2.1 Research questions with regard to the literature review	5
1.2.2 Research questions with regard to the empirical study	6
1.3 AIMS OF THE RESEARCH	6
1.3.1 General aim	6
1.3.2 Specific aim	7
1.4 THE PARADIGM PERSPECTIVE	7
1.4.1 The intellectual climate	8
1.4.1.1 <i>The salutogenic paradigm</i>	8
1.4.1.2 <i>The positivist paradigm</i>	8
1.4.2 Metatheoretical statements	9
1.4.2.1 <i>Industrial and organisational psychology</i>	10
1.4.2.2 <i>Organisational psychology</i>	10
1.4.2.3 <i>Psychometrics</i>	10
1.4.2.4 <i>Theoretical models</i>	11
1.4.2.5 <i>Conceptual descriptions</i>	11
1.4.3 Central hypothesis	12
1.5 RESEARCH DESIGN	12
1.6 RESEARCH METHOD	13
1.7 DIVISION OF CHAPTERS	14
1.8 CHAPTER SUMMARY	14

CHAPTER 2	15
LITERATURE REVIEW: EMPLOYEE WELLNESS, SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT	15
2.1 EMPLOYEE HEALTH AND WELLNESS	15
2.1.1 Conceptualisation	15
2.1.2 Rothmann’s model of employee health and wellness	17
2.1.2.1 <i>Work-related wellbeing</i>	19
2.1.2.2 <i>Organisational climate: job demands and job resources</i>	23
2.1.2.3 <i>Personal resources: resilience (sense of coherence)</i>	24
2.1.2.4 <i>Stress-related physical health and psychological wellbeing</i>	28
2.1.2.5 <i>Organisational commitment</i>	29
2.1.3 The Job Demands-Resources model	29
2.1.3.1 <i>The energetic process</i>	31
2.1.3.2 <i>The motivational process</i>	32
2.1.4 The conservation of resources model of burnout	32
2.2 VARIABLES INFLUENCING SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN EMPLOYEE WELLNESS	37
2.2.1 Gender influences	37
2.2.2 Race	37
2.2.3 Age	37
2.2.4 Marital status	38
2.3 IMPLICATIONS FOR EMPLOYEE WELLNESS PRACTICES	38
2.4 CHAPTER SUMMARY	40
CHAPTER 3	41
*RESEARCH ARTICLE: SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN A HIGHER EDUCATION INSTITUTION CALL CENTRE	41
ABSTRACT	41
3.1 INTRODUCTION	42
3.1.1 Key focus of the study	42
3.1.2 Background to the study	42

3.1.3	Trends from the research literature	43
3.1.4	Research objectives.....	47
3.1.5	The potential value-add of the study.....	47
3.1.6	Literature review.....	48
3.1.6.1	<i>Sense of coherence</i>	48
3.1.6.2	<i>Affective wellbeing.....</i>	48
3.1.6.3	<i>Burnout</i>	49
3.1.6.4	<i>Integration of sense of coherence, affective wellbeing and burnout.....</i>	50
3.1.7	What will follow	51
3.2	RESEARCH DESIGN.....	51
3.2.1	Research approach	51
3.2.2	Research method	52
3.2.2.1	<i>Research participants.....</i>	52
3.2.2.2	<i>Measuring instrument.....</i>	52
3.2.2.3	<i>Research procedure.....</i>	53
3.2.2.4	<i>Statistical analyses.....</i>	53
3.3	RESULTS	54
3.3.1	Descriptive statistics.....	55
3.3.2	Benchmarked overall wellness climate risk profile	55
3.3.3	Correlations between sense of coherence, affective wellbeing and burnout	60
3.3.4	Inferential statistics: Multiple regression	60
3.3.5	Inferential statistics: tests for significant mean differences	61
3.3.5.1	<i>Gender.....</i>	61
3.3.5.2	<i>Race.....</i>	62
3.3.4.3	<i>Age.....</i>	63
3.3.5.4	<i>Marital status.....</i>	63
3.4	DISCUSSION	65
3.4.1	Overall wellness profile	65
3.4.2	The relationship between sense of coherence, affective wellbeing and burnout.....	67
3.4.3	Differences between socio-demographic groups	71
3.4.3.1	<i>Gender.....</i>	72

3.4.3.2	<i>Race</i>	72
3.4.3.3	<i>Age</i>	72
3.4.3.4	<i>Marital status</i>	72
3.5	CONCLUSIONS	73
3.6	LIMITATIONS	73
3.7	RECOMMENDATIONS	73
3.8	CHAPTER SUMMARY	74
 CHAPTER 4		75
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS		75
4.1	CONCLUSIONS	75
4.1.1	Conclusions in respect of the literature review	75
4.1.1.1	<i>The first aim: conceptualise employee wellness, sense of coherence, affective wellbeing and burnout based on the literature review and determine the theoretical relationship between these variables.</i>	75
4.1.1.2	<i>The second aim: to determine theoretically (based on a review of the literature) the role of gender, race, age and marital status on individuals' sense of coherence, affective wellbeing and burnout</i>	77
4.1.1.3	<i>The third aim: to determine the implications of the theoretical relationships for.....</i>	77
	<i>employee wellness practices</i>	77
4.1.2	Conclusions regarding the empirical study	77
4.1.2.1	<i>The first research aim: To determine whether the higher education call centre environment will benchmark below or above the South African norm in terms of its overall wellness climate profile.</i>	78
4.1.2.2	<i>The second research aim: to investigate empirically the nature of the relationships between sense of coherence, affective wellbeing and burnout as manifested in a sample of call centre participants in a higher education institution environment</i>	79
4.1.2.3	<i>The third aim: To empirically investigate whether differences exist between gender, race, age and marital status groups, regarding their sense of coherence, affective wellbeing and burnout</i>	83
4.1.3	Conclusions regarding the central hypothesis	84

4.1.4	Conclusions regarding the contribution of this study to the field of industrial and organisational psychology	84
4.2	LIMITATIONS OF THE STUDY	87
4.2.1	Limitations of the literature review	87
4.2.2	Limitations of the empirical review	87
4.3	RECOMMENDATIONS	88
4.3.1	Recommendations regarding employee wellness	88
4.3.1.1	<i>Sense of coherence</i>	89
4.3.1.2	<i>Affective wellbeing</i>	89
4.3.1.3	<i>Burnout</i>	90
4.3.1.4	<i>Industrial psychologists and practitioners working in the field of employee wellness</i> ...	91
4.3.2	Future research	92
4.4	INTEGRATION OF THE RESEARCH.....	93
4.5	CHAPTER SUMMARY.....	93
	REFERENCES	95

LIST OF FIGURES

<i>Figure 2.1. The South African Employee Health and Wellness Model.....</i>	<i>18</i>
<i>Figure 2.2. Work Related Wellbeing.....</i>	<i>19</i>
<i>Figure 2.3. The Job Demands-Resource Model</i>	<i>31</i>
<i>Figure 2.4. The Conservation of Resources Model of Burnout.....</i>	<i>33</i>
<i>Figure 3.1.Example of an overall low risk wellbeing profile as described by means of the SAEHW Model Measure.....</i>	<i>46</i>
<i>Figure 3.2.Participants Sten Scores on the affective wellness, burnout and sense of coherence sub-scales against the South African norm: Total sample n=102).....</i>	<i>56</i>
<i>Figure 3.3 Participants' Sten Scores on the affective wellness, burnout and sense of coherence sub-scales against the South African Norm.....</i>	<i>58</i>
<i>Figure 3.4 Participants' Sten Scores in the affective wellness, burnout and sense of coherence sub-scales against the South African Norm: High Risk cases (n=49).....</i>	<i>59</i>
<i>Figure 3.5. Participants' Sten scores in the affective wellness, burnout and sense of coherence sub-scales against the South African Norm: Supervisor cases (n=10).....</i>	<i>59</i>
<i>Figure 3.6. The Empirical Relationship between, sense of coherence and affective wellness.....</i>	<i>67</i>
<i>Figure 3.7. The Empirical Relationships between sense of coherence and burnout.....</i>	<i>68</i>
<i>Figure 3.8. Empirical Relationship between burnout and affective Wellness.....</i>	<i>69</i>
<i>Figure 4.1. Summary of Core results.....</i>	<i>82</i>

LIST OF TABLES

<i>Table 2.1 A Theoretical Comparison of the Models Discussed.....</i>	<i>35</i>
<i>Table 3.1 Descriptive Statistics: means, standard deviations and Cronbach alpha.....</i>	<i>55</i>
<i>Table 3.2 Participants' affective wellness and Burnout level compared to other South African organisations (SA Sten).....</i>	<i>57</i>
<i>Table 3.3 Participants's Sten scores on the affective wellness, Burnout and Sub-scales against the South African Norm.....</i>	<i>58</i>
<i>Table 3.4. Inter-Correlations between Sense of Coherence, Affective Wellness and Burnout..</i>	<i>60</i>
<i>Table 3.5. Multiple regression analyses: sense of Coherence, Affective Wellness and Burnout (independent variable) (n=102).....</i>	<i>61</i>

Table 3.6. <i>Mann-Whitney U-test: Significant mean differences gender</i> (=102).....	.62
Table 3.7. <i>Kruskal- Wallis Test: Significant mean difference (race)</i> (n=102).....	.62
Table 3.8. <i>Kruskal-Wallis Test: Significant mean differences (age)</i> (n=102).....	.63
Table 3.9. <i>Kruskal-Wallis Test: Significant mean differences (marital status)</i> (n=102).....	.64
Table 3.10. <i>Summary of decions regarding research proposition and research hypotheses</i>64
Table 3.11. <i>Summary overview of the source of significant differences with the biographical groups on sense of coherence, affective wellness and burnout</i>71

CHAPTER 1

SCIENTIFIC ORIENTATION TO THE RESEARCH

The context of this research is occupational stress within a South African higher education institution call-centre environment. In particular, this research explores the relationship between sense of coherence, affective wellbeing and levels of burnout in call centre employees.

Chapter 1 presents the problem statement and the research aims. It comprises a discussion of the research methodology with details regarding the empirical study, research design, participants, measuring instruments and statistical analyses. The chapter concludes with an overview of the chapters in this study.

1.1 BACKGROUND AND MOTIVATION

Holman (2005, pp. 111–112) defines a call centre as a work environment in which the main business is mediated by computer- and telephone-based technologies that enable the efficient distribution of incoming calls (allocation of outgoing calls) to available staff, and permit customer–employee interaction. The emergence of call centres in higher education institutions has bridged the gap between the institution and the client. This, in turn, has allowed the clients, such as students and other stakeholders, a stronger access link to the services offered by higher education institutions. However, high stress levels, absenteeism, emotional burnout and high staff turnover rates are all associated with call centres. Furthermore, call centres are called the “satanic mills” and the “coal mines of the 21st century” (Armistead, Kiely, Hole & Prescott, 2002).

In the service economy, specifically within call centres, a special type of employee has emerged (Visser & Rothmann, 2008); they are referred to as call centre agents (Holdsworth & Cartwright, 2003). Call centre agents perform mostly emotional labour that is a form of emotional regulation in which employees are expected to display certain emotions as part of their job and to promote organisational goals (Visser & Rothmann, 2008). The call centre agent sits in front of a computer while wearing a headset which enables communication with the caller. A call centre agent may talk to between 60 and 250 clients in one eight-hour shift (Dieckhoff, Freigang-Bauer, Shröter & Viereck, 2002).

The higher education institution call centre relevant to this study has merged with other higher education institutions and, as a result, a huge volume of clients was created who require assistance on a daily basis. Call centre agents can be contacted five days a week for eight hours a day. With an increased client base, call centre agents often spend less time interacting with clients and this may lead to limited routine communication. Call centre representatives repeat the same activities constantly, and their jobs are often compared to factory jobs based on Tayloristic principles of job design (Zapf, Isic, Bechtoldt & Blau, 2003).

The rationale behind the existence of the call centre is to provide high levels of customer satisfaction and convenience in a cost-effective manner, while at the same time making the customer feel valued (Kinnie, Hutchinson & Purcell, 2000, p. 968). In today's service economy, the delivery of services is a key task for any organisation. It is therefore vital that service-orientated organisations (such as call centres) be client orientated and that they facilitate direct client–organisation communication (Dorman & Zijlstra, 2003). A call centre may be viewed as a collection of resources linking the service provider and its customers. In other words, call centres assist institutions by enabling them to offer more comprehensive services to their clients.

Call centres may also be regarded as a reflection of the current *Zeitgeist* phenomenon – a phenomenon in terms of which call centres are regarded as being fast, precise, nice to have and “always there” for the client (Dorman & Zijlstra, 2003). However, it has happened that the benefits promised to the clients have not always materialised as expected (Dorman & Zijlstra, 2003), and it would appear that many clients tend to remember their call centre experiences with anger and frustration rather than joy and pleasure.

Call centres are a primary source of contact between client and organisation (Miciak & Desmanais, 2001) and are often regarded as the first element in the creation of a favourable client experience within an organisation; in fact, the call centre may be the only form of contact that an organisation is able to have with its clients. Accordingly, creating a favourable image and performing well are critical to any organisation (Gilmore, 2001). A study carried out by Purdue University found that 92% of clients in the United States based their opinion of a company on their experience with the call centre of the company concerned. The study also found that 63% of customers had discontinued their use of a company's products based on a negative call centre experience; that percentage rose to 100% for clients in the 18 to 25 age groups (Delorey,

Kowalchuck & Paterson, 2003).

It is essential that occupational stress not be considered as a problem pertaining to the individual only, but as a serious consideration for the organisation, and especially for the call centre environment as a whole. It is for this reason that occupational stress is accorded a high priority and as one of the most important workplace health and safety issues (Tytherleigh, 2003). In fact, occupational stress may be linked to stress outcomes such as job dissatisfaction, ill-health, high staff turnover and low productivity (Jones & Bright, 2001), especially in the call centre environment (Rothmann, 2009).

Employees' senses of coherence, affective wellbeing and burnout all have an effect on occupational stress. Sense of coherence may determine the individual's level of resiliency and can have an effect on the health and wellness of individuals. In addition, sense of coherence may affect employees' perceptions and/or coping strategies (Antonovsky, 1987). Affective wellbeing relates to work engagement (Rothmann, 2009). Employees with high work engagement are more likely to meet the demands of their customers, thereby improving customer loyalty, sales and profits. In addition, engaged employees are less likely to leave the organisation, thus reducing the costs of high staff turnover (Roberts & Davenport, 2002). Managers require engaged employees, as such employees are able to commit to quality and performance, to show initiative, to be proactive and to operate smoothly in teams. As a consequence, healthy workers performing the work need to display high emotional energy and be dedicated to and absorbed in their work (Rothmann, 2003).

Burnout has been proven to be a reality in the call centre environment and is associated with symptoms such as low energy levels, and feelings of lack of control and helplessness, as well as low levels of motivation, negative attitudes towards work, self and others, emotional exhaustion, absenteeism, staff turnover, performance deficits and substance abuse (Glass & McKnight, 1996). The impact of burnout – regarded as being the opposite of work engagement – on the quality of customer service rendered to the public should not be underestimated. The importance of identifying personality traits and job stressors which are related to burnout and engagement is, indisputably, vitally important if the standard of community service rendered by call centre representatives is to be improved. The negative impact of burnout applies not only to the individual, but also, and in particular, to government and private organisations (Janse van Rensburg, 2010).

Occupational stress has been linked to heart disease, hypertension, upper respiratory tract infections, peptic ulcers, reduced immunity, migraine, alcoholism, depression, suicidal tendencies, anxiety and other mental disorders (Lord, Gray & Pond, 1991; Muntaner, Tien, Eaton & Garrison, 1991). In organisations, these syndromes result in decreased performance and motivation, increased healthcare costs, disability payments, sick leave, absenteeism and staff turnover (Aldana, Sutton, Jacobson & Quirk, 1996; Slate, Johnson & Wells, 2000). Therefore, it is important to understand the way in which employees' conceal their own emotions in order to suit organisational norms. Jobs that involve a high degree of emotional effort, as in the case with call centres, are often associated with a number of negative psychosocial effects. The work in call centres is demanding and this is borne out by the high attrition rates in these centres (Janse van Rensburg, 2010).

There are numerous challenges that higher education institution call centre personnel are required to face. A survey conducted by Afriforte (cited in Rothmann, 2009, p. 23) revealed some of the risk profiles displayed by call centre agents. With an increased client base, the call centre representatives experience work overload and burnout, which is often associated with the high risk profiles of call centre representatives. Burnout refers to an employee's inability to perform as a result of exhaustion (mental, physical and psychological). In other words, this exhaustion results in mental distance, where the employee is unwilling to perform because of an increased intolerance of any effort (Rothmann, 2009).

"Presenteeism" (or the act of being present) is another challenge faced by call centre personnel. Presenteeism encompasses two dimensions, namely, physical ability (can do) and motivation (will do). Both these affect the productivity of employees in the work situation. There are three types of presenteeism in the workplace, each of which result from different causes: Impaired presenteeism exists when employees, despite complaints and ill health, still go to work; over-commitment presenteeism where employees put in excessive effort as an expression of commitment; and disengagement presenteeism, which refers to employees not investing energy in a focused way in their work (Rothmann, 2009).

According to Rothmann (2009), call centre employees in higher education call centre environments often experience a lack of personal resources which is indicative of a lower resilience level. Imbalances between job demands, job and personal resources are the result of a demanding work environment. Job resources refer to those physical, psychological, social or

organisational aspects of the job that may be functional in achieving work goals, reducing job demands (with the associated physiological and psychological costs) and stimulating personal growth and development. In other words, job demands refer to those physical, psychological, social or organisational aspects of a job that require sustained physical and/or psychological (cognitive and emotional) effort and are, therefore, associated with certain physiological and/or psychological costs. Job demands include pace and amount of work, quantitative/mental load, emotional load, physical demands and work-life interference (Rothmann, 2009).

1.2 PROBLEM STATEMENT

Against the preceding background, it is evident that knowledge of the relationship between an individual's sense of coherence, affective wellbeing and burnout may enhance an understanding of the way in which these psychological attributes may influence the ability of the individual to cope with occupational stressors within a call centre environment.

However, research on the relationship between these variables in a higher education call centre environment appears to be limited. Despite the fact that numerous studies have been conducted on the relationship between these three variables in the South African context, there is limited clarity on how this relationship manifests within a higher education environment. In this regard, research into the relationship dynamics between a sense of coherence, affective wellbeing and burnout, as manifested in a higher education environment, could make an important contribution to the discipline and practice of Industrial and Organisational Psychology. It is hoped that the findings of this research may be used by industrial psychologists and employee wellness practitioners in the development of employee wellness programmes for the higher education call centre environment.

In light of the problem statement and general research question, several specific research questions that are relevant to the literature review and the empirical study are posed:

1.2.1 Research questions with regard to the literature review

Research question 1: How are employee wellness, sense of coherence, affective wellbeing and burnout conceptualised in the literature?

Research question 2: What is the theoretical relationship between employee wellness, sense of coherence, affective wellbeing and burnout?

Research question 3: What are the implications of the theoretical relationship for employee wellness programmes within the higher education call centre environment?

1.2.2 Research questions with regard to the empirical study

Research question 1: Is the overall wellness climate of a sample of higher education call centre employees higher or lower than that of other national institutions when benchmarked?

Research question 2: What is the nature of the empirical relationship between call centre employees' sense of coherence, affective wellbeing and burnout as manifested in a sample of employees employed in a higher education call centre environment?

Research question 3: Do the various gender, race, age, and marital status groups differ regarding their sense of coherence, affective wellbeing and burnout?

Research question 4: What recommendations may be formulated for employee wellness practices and future research based on the results of this research?

1.3 AIMS OF THE RESEARCH

1.3.1 General aim

The general aim of this study is to: (1) assess the overall wellness climate risk profile of a sample of higher education call centre employees for national benchmarking purposes, (2) to investigate the relationship between sense of coherence, affective wellbeing and burnout as manifested in a higher education call centre environment, and (3) to determine whether individuals from different groups (gender, race, age, and marital status) differ regarding these variables.

1.3.2 Specific aims

In terms of the literature review, the specific aims of this research are to

- conceptualise employee wellness, sense of coherence, affective wellbeing and burnout from the literature and determine the theoretical relationships between these concepts.
- determine theoretically (based on a review of the literature) the role played by gender, race, age and marital status in individuals' sense of coherence, affective wellbeing and burnout.
- determine the implications of the theoretical relationship for employee wellness practices.

In terms of the empirical study, the specific aims of this research are to

- determine whether the participating higher education call centre will benchmark below or above the South African norm in terms of its overall wellness climate profile.
- empirically investigate the nature of the empirical relationship between sense of coherence, affective wellbeing and burnout, as manifested in a sample of call centre employees employed in a higher education institution call centre environment.
- empirically investigate whether differences exist between gender, race, age and marital status groups regarding their sense of coherence, affective wellbeing and burnout.
- formulate recommendations for employee wellness practices and possible future research based on the results of this research.

1.4 THE PARADIGM PERSPECTIVE

The paradigm perspective refers to a variety of meta-theoretical, theoretical and methodological beliefs coupled with assumptions underlying the theories and models that form the definitive context of a study (Mouton & Marais, 1996).

1.4.1 The intellectual climate

Thematically, the constructs of employee wellness, sense of coherence, affective wellbeing and burnout are of relevance to this research. The literature review will be based on employee wellness theories and will be presented from the perspective of the salutogenic paradigm. The empirical study will be presented from the positivist paradigm.

1.4.1.1 The salutogenic paradigm

Psychology today has over-emphasised the “pathogenic” model as opposed to a “salutogenic” model. The pathogenic model focuses on what makes people ill, while the salutogenic model focuses on why people stay healthy. The term “salutogenesis” is derived from the Greek words “*salu*”, which means “*health*”, and *genesis*, which means origin (Kossuth & Cilliers 2002). Accordingly, salutogenesis refers to the enablement of individuals, groups or organisations in terms of which their capacities, competencies, strengths and forces are emphasised in order to create a sense of coherence and perceive life as comprehensible, manageable and meaningful (Kossuth & Cilliers, 2002). Moreover, Antonovsky (1992, p. 33) defines the salutogenic paradigm as the approach that seeks to explain health rather than disease. The salutogenic approach focuses on coping rather than risk factors.

Viviers and Cilliers (1999) propose that salutogenesis refers to “optimisation” in terms of using stress to attain positive life outcomes – optimal behaviour on the part of an individual in handling stress, with a principal concept being a sense of coherence. Kossuth and Cilliers (2002) propose that there is a direct correlation between stress and a sense of coherence and levels of burnout.

1.4.1.2 The positivist paradigm

This empirical study will be presented from the perspective of the positivist paradigm. Positivism predominates in science and assumes that science quantitatively measure independent facts about a single apprehensible reality (Healy & Perry, 2000). In other words, the data and their analyses are value-free and data do not change because they are observed. Positivism is a rejection of metaphysics, it is the position that holds that the goal of knowledge is simply to

describe the phenomena that people experience and the purpose is to stick to what people can observe and measure (Krauss, 2005). According to Kolakowski (1972), the positivist paradigm can be defined as: (1) the rule of phenomenalism, which asserts that there is only experience; all abstractions be they “matter” or “spirit” have been rejected; (2) the rule of nominalism – which asserts that words, generalisations and abstractions are linguistic phenomena and do not give new insight in the world; (3) the separation of facts from values; and (4) the unity of the scientific methods. Burrell and Morgan (1979) define the positivist paradigm as an epistemology “which seeks to explain and predict what happens in the social world by searching for regularities and causal relationships between its constituent elements”.

According to the positivist epistemology, science is seen as the way to get at truth, to understand the world well enough so that it might be predicted and controlled. The world and the universe are deterministic, they operate by laws of cause and effect that are discernable if people apply the unique approach of the scientific method. The positivist paradigm is based on empiricism, the idea that observation and measurement are at the core of the scientific endeavour (Krauss, 2005).

The empirical study will consist of a quantitative study conducted within the ambit of the positivist research paradigm. Thematically the quantitative study focuses on investigating the relationship dynamics between the variables sense of coherence, affective wellbeing and burnout. This study provides quantitative measures of these constructs that have a concrete and tangible value through statistical science and techniques. The quantitative approach is seen as objective and relating to phenomena or conditions independent of individual thought and perceptible to all observers by relying on statistical procedures (Strauss & Corbin, 1998).

1.4.2 Metatheoretical statements

Mouton and Marais (1994) postulate that the underlying assumptions of theories, models and paradigms form the context of a specific study. The meta-theoretical concepts of relevance to the present study are discussed below.

1.4.2.1 Industrial and organisational psychology

According to Van Vuuren (2010), industrial and organisational psychology may be viewed in many ways, one of which focuses on its epistemological premises and the scientific status of these premises. The “scientist” component indicates that industrial and organisational psychology accumulates order and disseminates knowledge through research and by using rigorous scientific methodology. The epistemology of scientific knowledge in the discipline is to understand and predict and then either change or influence workplace-related human behaviour. Industrial and organisational psychology has become “a recognised science and a diversified applied field” (Bergh & Theron, 2009, p. 25). Industrial and organisational psychology is one part applied science, which means that it contributes to the general knowledge base of psychology and application. The latter involves applying this knowledge to work-related problems (Van Vuuren, 2010).

Thematically, this research will assist industrial psychologists to facilitate employee wellness practices within organisations and improve performance and productivity by accumulating and disseminating knowledge regarding the constructs of sense of coherence, affective wellbeing and burnout within a higher education call centre environment.

1.4.2.2 Organisational psychology

Robbins, Odendaal and Roodt (2003, p. 7) define organisational psychology as a field of study that investigates the impact that individuals, groups and structure have on behaviour within organisations for the purpose of applying the knowledge acquired in such study in an effort to improve the effectiveness of the organisation. Thematically, this research will provide an understanding of behaviour within a higher education call centre environment by utilising the constructs of sense of coherence, affective wellbeing and burnout.

1.4.2.3 Psychometrics

Haynes and O’Brien (2000, p. 200) define psychometrics as the science of psychological measurement and, as such, it is concerned with the evaluation of data derived from assessment instruments and the formulation of judgements based on those data. Thematically, this research will measure call centre agents’ individual characteristics and scores on sense of coherence, affective wellbeing and burnout.

1.4.2.4 *Theoretical models*

This study will present a literature review on the topic of employee wellness. The South African Health and Wellness Model (Rothmann, 2009), Antonovsky's (1987) conceptual model of sense of coherence, the job demands-resource model (JD-R) with respect to work engagement, and the conservation of resources model on burnout will be discussed.

1.4.2.5 *Conceptual descriptions*

The conceptual descriptions that are of relevance to this study are defined below:

a) Employee wellness

Employee wellness is defined as a state in which employees are energetic, motivated, healthy, productive and committed to the organisation (Rothmann & Rothmann, 2006).

b) Sense of coherence

A sense of coherence can be viewed as a global orientation, in terms of which one has a pervasive, enduring, though dynamic, feeling of confidence (Antonovsky, 1987). According to Van der Colff and Rothmann (2009), a person having a strong sense of coherence selects a particular coping strategy that seems most appropriate to deal with the stressor being confronted. As individuals progress through life they will be exposed to certain challenges and stressors, which will either result in the individuals being able to handle a situation or being overcome by the challenge presented by the situation (Antonovsky, 1979).

c) Affective wellbeing

Affective wellbeing, which is characterised by work engagement, is defined as a state which refers to employees finding psychological meaning in their work and thereby having the ability to demonstrate the behaviour of an engaged worker (Rothmann, 2009). According to Van der Colff and Rothmann (2009), some employees, regardless of high job demands and long working hours, do not develop burnout, but seem to find pleasure in hard work and dealing with job demands due to their strong sense of affective wellbeing.

d) Burnout

Burnout is defined as a persistent, negative, work-related state of mind in “normal” individuals that is primarily characterised by exhaustion and accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work (Schaufeli & Enzmann, 1998, p. 36).

1.4.3 Central hypothesis

The central hypothesis of the study is formulated as follows:

The higher education call centre environment will benchmark below the South African norm in terms of its overall wellness climate profile. There is a significant relationship between the sense of coherence, affective wellbeing and level of burnout of individuals. People from different gender, race, age and marital status groups will vary significantly regarding their sense of coherence, affective wellbeing and levels of burnout.

1.5 RESEARCH DESIGN

According to Mouton and Marais (1996), a research design refers to the plan and structure behind any given research project. The research design includes a description of the way in which a researcher intends to conduct his or her research by focusing on the end product, with the formulation of a research problem as the point of departure.

In terms of the present study, the internal validity will be maximised by using instruments which have been shown to be valid, thus ensuring a structured approach to the literature review. The aim of the literature review is to consult relevant theories and models, and to eradicate confounding variables by proposing possible rival hypotheses.

External validity will be realised both by choosing a representative sample in order to ensure the generalisability of the findings (Mouton & Marais, 1994), and by applying a measuring instrument with proven validity to different groups under different sets of circumstances, which should, in turn, result in the same observations (Mouton & Marais, 1996).

In this study both the empirical and the literature review will be descriptive in nature, the relationship between the variables will be reported upon and recommendations offered with regard to employee wellness practices. A quantitative survey design will be utilised for the empirical aspect of the study in order to collect quantitative primary data. These data will be collected using a self-administered questionnaire in order to achieve the objective as presented in the study.

The group constitutes the unit of analysis for the primary aim while the unit of analysis in respect of the secondary aim is the sub-group. In terms of the latter, the scores of the biographical subgroups within a particular organisational context will be specifically analysed. The external validity of the study will be ensured by the use of a structured approach in the literature review as well as by the systematic undertaking and presentation of the empirical study. A non-probability sample will be used and, thus, any generalising to the broader population will be limited. Both the validity and the reliability of the instrument will be established.

1.6 RESEARCH METHOD

The study consists of a literature review and an empirical study

Phase 1: Literature review

Step 1: A literature review will be conducted on the constructs of employee wellness, sense of coherence, affective wellbeing and burnout.

Step 2: A conceptual integration of the constructs, employee wellness, sense of coherence, affective wellbeing and burnout, will be carried out.

Step 3: An explanation will be presented of the practical implications of the theoretical relationship for employee wellness interventions within the higher education call centre environment.

Phase 2: Empirical study

The empirical study will be presented in the form of a research article in Chapter 3. The research article (Chapter 3) outlines the core focus of the study, the background to the study, trends from the research literature, the potential value added by the study, the research design (research approach and research method), the results, a discussion of the results, the conclusions, the limitations of the study and recommendations for practice and future research. Chapter 4 integrates the research study and discusses the conclusions, limitations and recommendations in more detail.

1.7 DIVISION OF CHAPTERS

Chapter 1: Scientific orientation to the research

Chapter 2: Literature review: employee wellness, sense of coherence, affective wellbeing and burnout

Chapter 3: Research article

Chapter 4: Conclusions, limitations and recommendations

1.8 CHAPTER SUMMARY

In this chapter the research problem was presented and formulated. This was followed by a discussion of both the general aim of the study and the specific aims. The research design and methodology were presented and the divisions of the chapters indicated.

Chapter 2 presents the literature review on employee wellness, sense of coherence, affective wellbeing and burnout.

CHAPTER 2

LITERATURE REVIEW: EMPLOYEE WELLNESS, SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT

Chapter 2 conceptualises the constructs of employee wellness, sense of coherence, affective wellbeing and burnout. Relevant models are used to explain the practical implications of the theoretical relationship between these constructs for employee wellness practices within organisations

2.1 EMPLOYEE HEALTH AND WELLNESS

This section will present the conceptualisation of employee health and wellness and will provide a discussion on Rothmann's (2009) model of employee health and wellness, as well as relevant models to explain the theoretical relationship between constructs sense of coherence, affective wellbeing and burnout.

2.1.1 Conceptualisation

In a study on health and wellness various paradigms may be relevant. These include the pathogenic paradigm (which focuses on the origins of illness), the salutogenic paradigm (which focuses on the origins of health) and the fortigenic paradigm (which focuses on the origins of strength) (Tytherleigh, 2003). Rothmann (2009, p. 25) defines employee health and wellness as a state in which employees are energetic, motivated, healthy, productive and committed to both the organisation and its goals. The field of occupational health psychology has been concerned mainly with ill health and "unwell being". Statistics have revealed that about 95% of all articles published in the *Journal of Occupational Health* deal with negative aspects of the health and wellness of workers (Schaufeli & Bakker, 2003).

In examining what actually constitutes the health of employees, it would appear that the definition of health remains as the absence of disease and does not include a focus on the presence of any positive states (Rothmann & Ekkerd, 2007). The majority of research has been based on the study and treatment of psychopathology and damage while neglecting any aspects of the human condition that may foster wellbeing and fulfilment (Seligman & Csikszentmihalyi, 2000). Reardon (1998, p. 117) defines wellness as "a composite of physical, emotional, spiritual, intellectual, occupational and social health; health promotion is the means

to achieve wellness". Clearly, wellness encompasses the fixed idea of health as an absence of illness and, in fact, it implies a proactive stance with respect to achieving optimal physical, mental and emotional wellbeing (Sieberhagen, Rothmann & Pienaar, 2009).

Ryff and Singer (1998) examined philosophical writings on wellness and conclude that a purpose in life, quality connections to others, self-regard and mastery are the key dimensions in life which are central to positive mental health. They define human wellbeing as both emotional and physical health. This definition implies that health may be regarded as the presence of positivity in mind and body, Meyers, Sweeney and Witmer (2000) define wellness as a way of life which is orientated towards optimal health and wellbeing. Accordingly, body, mind and spirit are integrated by the individual in order to live fully within the human and the natural community. If employees are to experience wellness it is essential that they be encouraged to grow as human beings through awareness campaigns and targeted education programmes.

Keyes (2002) hypothesises that complete mental health is a bipolar continuum which varies from flourishing to languishing. In terms of flourishing, an individual experiences high levels of positive emotion and also functions well both psychologically and socially. Languishing, on the other hand, refers to emptiness, stagnation and a life of despair. Keyes (2002) operationalises this continuum by means of questions on psychological, social and emotional wellbeing. Psychological wellbeing includes self-acceptance, personal growth, a purpose in life, environmental mastery, autonomy and positive relations with others, while social wellbeing refers to social acceptance, social actualisation, social contribution, social coherence and social integration. Emotional wellbeing, on the other hand, includes positive affect, negative affect, life satisfaction and happiness.

Stress generally arises when an interaction between a person and the environment is perceived as both burdensome and as exceeding the individual's coping resources (Greenhaus, Callanan & Godshalk, 2000). Stress may be defined as an adaptive response mediated by individual characteristics and/or psychological processes, that is, the consequences of an external action, situation or event that exerts special physical and/or psychological demands on an individual (Kreitner & Kinicki, 1995).

Stress may arise when an individual is confronted by an opportunity, constraint or demand; a situation may simultaneously evolve into an opportunity, a constraint or a demand. An

opportunity arises when an individual who is in a particular situation stands to gain an additional gratification of his or her desires, for example, a promotion. A constraint, on the other hand, may threaten some kind of limitation, for example, a promotion may be denied. If an individual is given a new assignment, it may represent the opportunity to develop new skills but it may also constrain an individual from spending more time with family and friends – hence, there is a demand. A situation, be it an opportunity, constraint, or demand, becomes stressful when it exceeds the individual's capacity to deal with it effectively (Kreitner & Kinicki, 1995).

As mentioned in Chapter 1, negative labels such as “satanic mills” and “coal mines of the 21st century” have been attached to call centres, with call centres being regarded as adverse workplaces that impact negatively on the behaviour and health of call centre representatives. It would appear that it is important to investigate the occupational stressors experienced by call centre agents in a higher education institution. Furthermore, it is important to investigate the influence of occupational stress on both physical and psychological ill health and to determine the relationship between sense of coherence, affective wellbeing and levels of burnout.

2.1.2 Rothmann's model of employee health and wellness

The South African Employee Health and Wellness Model (SAEHW) of Rothmann (2009) is of relevance to the present study. The emphasis in the South African Employee Health and Wellness model is on the measurement of health and wellness in call centre personnel (Rothmann, 2009). This model (shown in Fig. 2.1) is based on the assumption that employees' perceptions and experiences within their work environment may contribute to the overall wellness climate and employee wellness practices (Rothmann, 2009).

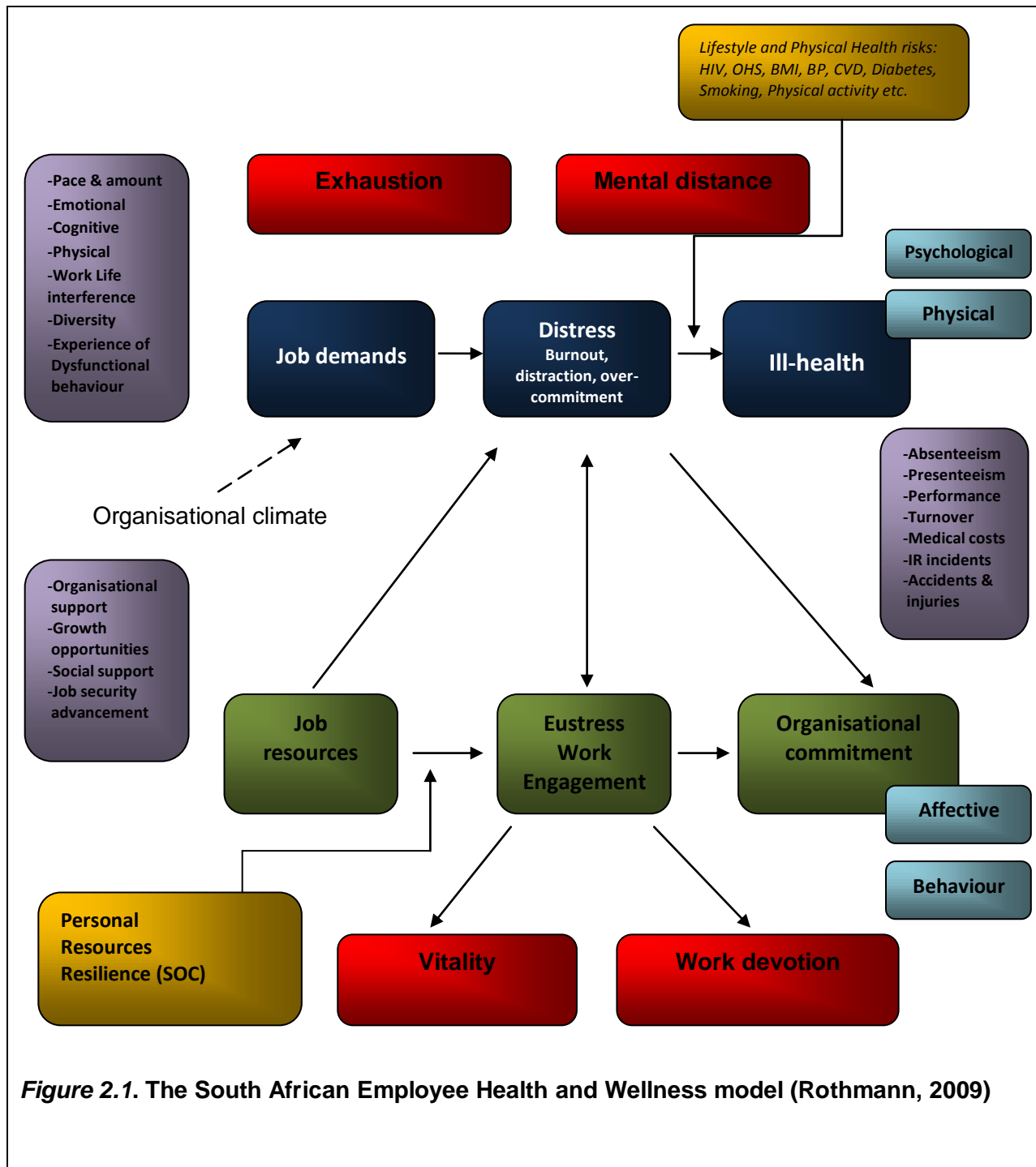


Figure 2.1. The South African Employee Health and Wellness model (Rothmann, 2009)

The core five components that form the foundation of the South African Health and Wellness model (Rothmann, 2009), as illustrated in Figure 2.1, are described below:

The first component comprises the wellness climate in relation to *work-related wellbeing*, which, in turn, relates to an individual's energy at work and the individual's identification with his or her work. The second component refers to the *organisational climate* which relates to the job

demands faced by, and the job resources available to, an individual at his/her work. The third component relates to the *personal resources* of an individual and includes a sense of coherence or resilience. The fourth component comprises both *stress-related physical health* and *psychological wellbeing* while the fifth component refers to *organisational commitment* (Rothmann, 2009).

2.1.2.1 Work-related wellbeing

As depicted in Figure 2.2, there are four types of work-related wellbeing, namely, vitality, work devotion, exhaustion and mental distance.

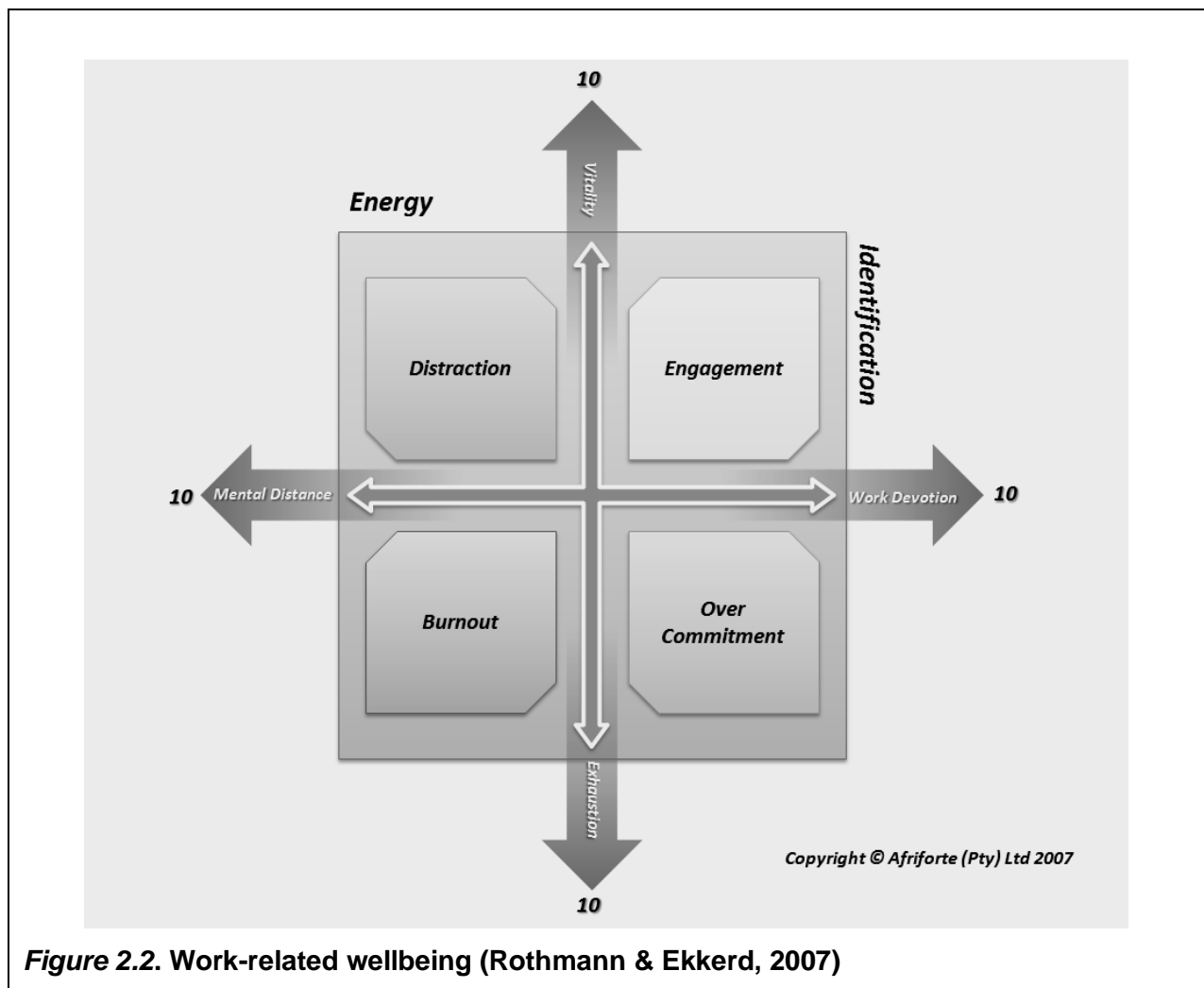


Figure 2.2. Work-related wellbeing (Rothmann & Ekkerd, 2007)

There are also two dimensions of work-related wellbeing, namely, energy at work and identification with work. The first dimension, energy at work, consists of two components, namely, exhaustion and vitality, while the second dimension, identification with work, also consists of two components, namely, mental distance and work devotion (Rothmann, 2009).

In the health and wellness model there are four aspects that are linked to work-related wellbeing, namely, affective wellbeing or engagement (positive work-related wellbeing or disengagement, i.e. a lack of positive work-related wellbeing), burnout, over-commitment, and distractions. The latter three states represent work-related distress states, while engagement represents work-related eustress. Disengagement represents a lack of eustress (Rothmann, 2009).

It is important to understand the difference between negative and positive wellbeing. There is an ongoing debate as to whether positive and negative affects represent different endpoints of a single dimension, or whether they are independent of each other. Research has proved (Diener, Suh, Lucas & Smith, 1999) that, while it is likely that positive feelings will be low when negative feelings are high, there is growing evidence that positive affect tends to function relatively independently of negative affect.

a) Affective wellbeing

According to the SAEHW model (Rothmann, 2009), work engagement characterises affective wellbeing. According to Rothmann (2009, p. 24), affective wellbeing is regarded as a state which refers to employees finding psychological meaning in their work and thereby having the ability to demonstrate the behaviour of an engaged worker.

Kahn (1990, p. 694) conceptualises engagement as the “harnessing of organisational members’ selves to the work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performance” . For Kahn (1990, p. 700), “self and role” exist in some dynamic, negotiable relation, in terms of which an individual both expends personal energies into role behaviours (self-employment) and displays the self within the role (self-expression). Such a level of engagement will fulfil the human spirit at work. Disengagement refers to an individual’s decoupling of the self and involves people withdrawing and defending themselves during role performance. Such “unemployment” of the self in one’s role is considered to be apathetic behaviour (Hochschild, 1983).

Engagement is closely related to the constructs of both job involvement and “flow” (Douglas, May, Gilson & Harter, 2004). The construct of job involvement may be defined as “the degree to

which the job situation is central to the person and his (or her) identity” (Lawler & Hall, 1970, p. 310–311). Job involvement is also referred to as a cognitive or belief state of psychological identification (Kanungo, 1982, p. 342). Jobs may be linked to one’s self image, and involve the active use of emotions and behaviours. Individuals will identify deeply with their jobs when they experience intense engagement.

The notion of flow also characterises engagement. Csikszentmihalyi (1975, p. 36) defines flow as the holistic sensation that people feel when they act with total involvement. When individuals are in a “flow” state they narrow their attention to specific stimuli (Douglas *et al.*, 2004). Such individuals do not need either external rewards or goals to motivate them, as the activity itself presents constant challenges. According to Douglas *et al.*, (2004), if an individual experiences a lack of congruence between his/her felt emotion and the emotions desired by the organisation, it may lead to potential disengagement.

Macey and Schneider (2008) propose a framework which could subsume various components of the engagement construct. The constructs for the framework would include engagement as a disposition (trait engagement), namely, an inclination to experience the world from a particular point (e.g. positive effectively characterised feelings of enthusiasm). State engagement is conceptualised as an antecedent of behavioural engagement which may be defined as a specific form of in-role or extra-role effort or behaviour.

b) Burnout

Burnout is a work-related distress state (Rothmann, 2009). Individuals may manifest burnout, which results from excessive job demands (pace and amount of work, having to remember considerable numbers of details and/or emotional demands) and lack of resources (personal or job resources such as resilience, social support, growth opportunities, advancement opportunities, and sufficient resources to carry out the required tasks). According to Rothmann (2009), low levels of burnout may imply that the employee concerned does not currently perceive his or her job as too demanding and that he or she is not distancing him- or herself from work. Serious burnout risk cases may occur when excessive exhaustion and mental distance are prevalent (Rothmann, 2009).

Research has shown that it is possible for employees in any job to develop burnout (Rothmann,

2003; Schaufeli & Enzmann, 1998). Freudenberger (1974) views burnout as a downward spiral – an unending cycle of accelerated effort and decelerating reward. Pines (1993) argue that burnout may be viewed as a mental exhaustion, characterised by both physical depletion and chronic fatigue and the development of a negative attitude towards work. Cherniss (1980) describes burnout as a process of disengagement, which occurs over time in response to job stress. Covey (1996), meanwhile, regards burnout as a process that goes beyond fatigue as a result of overwork but is, in fact, a distancing from clients that arises in response to overload. Schaufeli and Bakker (2004) define burnout as a persistent, negative, work-related state of mind in “normal” individuals.

Maslach and Leiter (2008) are of the opinion that burnout is a problem within the social environment in which people work. The assumption is that both the structure and the functioning of the workplace shape the way in which people interact and how they do their jobs. Cilliers (2001) describes various systems that could lead to burnout. In an environment where there is no recognition of the human aspect of work, the risk of burnout may be increased. Organisations may contribute to burnout through work overload, a dead-end job, excessive red tape, paperwork and poor communication. Gibson and Cook (1997) maintain that burnout relates to job involvement; a high degree of involvement is a necessary prerequisite if burnout is to develop at a later stage.

c) Over-commitment

As is evident in the SAEHW model, work-related wellbeing refers to occupational commitment, which may be defined as the psychological attachment on the part of workers to their organisation. This is considered to be an important consequence or moderator of occupational stress (Siu, 2002). It would appear that the commitment of employees to an organisation is related to work outcomes such as organisational citizenship, job satisfaction, job involvement and job performance, while it is negatively related to absenteeism and turnover (Finegan, 2000; Organ & Ryan, 1995). According to Siu (2002), organisational commitment interacts with sources of stress at work to determine its outcomes. Individuals are, thus, protected from the negative effects of stress because organisational commitment enables them to perceive direction in and attach meaning to their work. Various studies have shown that employees who experience little job satisfaction and organisational commitment are more frequently absent than those employees who experience marked job satisfaction and commitment (Cohen, 1991;

Sagie, 1998).

Over-commitment refers to a work-related distress state, which may imply that the individual is currently exhausted at work but, nevertheless, that the individual concerned still identifies with the work. This usually results from individuals being exposed to high job demands and either having the resources (personal and/or job resources such as resilience, social support, growth opportunities, advancement opportunities and sufficient resources to perform the work required) or lacking certain resources. Less commitment generally implies that the individual is not suffering from exhaustion at work, but that the individual is also not strongly attached to the work. Such a situation may arise as a result of low job demands and inadequate resources (Rothmann, 2009).

d) Distraction

Distraction also refers to a work-related distress state. The fact that an individual scores high in terms of distraction may imply that, although the individual currently has a high level of energy, he or she tends to distance him/herself from work. High scores may result from a lack of certain resources (personal and/or job resources such as resilience, social support, growth opportunities, advancement opportunities, and sufficient resources to perform the work required) and may also be accompanied by high job demands. On the other hand, the fact that an individual manifests reduced distraction may imply that he/she does not possess high energy, and does not distance him/herself from work (Rothmann, 2009).

2.1.2.2 Organisational climate: job demands and job resources

This section outlines job demands, job resources and growth opportunities as elements of the SAEHW model (Rothmann, 2009).

a) Job demands

Job demands refer to the physical, psychological, social or organisational aspects of a job that require sustained physical and psychological (cognitive and emotional) effort. Job demands are, thus, associated with certain physiological and psychological costs. Certain job demands include pace and amount of work, mental load, emotional load, physical demands, and work-life interference (Rothmann, 2009).

b) Job resources

Job resources refer to those physical, psychological, social or organisational aspects of the job that may be functional in attaining work goals, reducing job demands (with the associated physiological and psychological costs) and stimulating personal growth and development. Job resources constitute the most important driver in ensuring and sustaining the psychological availability and safety of employees, namely, creating an enabling and motivational climate. Job resources include supervisory relationships, role clarity, job information, communication, participation and decision making (Rothmann, 2009).

c) Growth opportunities

Growth opportunities in terms of job experiences relate to the intrinsic nature of the job and constitute a strong drive in respect of assuring that there is psychological meaning in the work performed. Growth opportunities are rooted in three sub-dimensions, namely, variety, opportunities to learn and autonomy. It is essential that growth opportunities be optimised, but not maximised, as too much variety may also contribute to higher stress levels (Rothmann, 2009).

2.1.2.3 Personal resources: resilience (sense of coherence)

In terms of the SAEHW model (Rothmann, 2009), a sense of coherence is used as an indicator of resilience. A sense of coherence is, in fact, a disposition and this implies that it would have been established earlier in life and might, therefore, not be susceptible to change. The components of a sense of coherence include comprehensibility (one perceives the stimuli from both the internal and the external environments to be ordered, structured and consistent), manageability (the extent to which an individual experiences events in life as situations that are both enduring and manageable), and meaningfulness (the extent to which individuals feel that life is making sense at an emotional level and not just at a cognitive level). Should individuals score low in terms of sense of coherence, the recommended strategy would be to change the environment so as to render the stimuli more comprehensible, manageable and meaningful. Even if the sense of coherence is indicated as stable, acute stress or continuous distress may disrupt this stability (Rothmann, 2009).

A sense of coherence is at the core of the salutogenic model (Hakanen, Bakker & Demerouti, 2005). A sense of coherence may be viewed as a global orientation that expresses the extent to which one has a pervasive and enduring, though dynamic, feeling of confidence (Antonovsky, 1987). Sense of coherence comprises the following dimensions: meaningfulness, comprehensibility and manageability (Antonovsky, 1987). Meaningfulness, refers to the degree to which an individual feels that his or her life is emotionally meaningful (Feldt, Lesken, Kinnunen & Mauno, 2000; Hittner, 2007). Comprehensibility refers the extent to which to an individual perceives the environment as understandable, ordered and consistent, as well as cognitively meaningful and predictable. Manageability refers to the degree to which an individual views the available resources as sufficient to meet both internal and external demands (Feldt *et al.*, 2000; Hittner, 2007). According to Antonovsky (1987, p. 19), individuals who possess a high sense of coherence usually manifest a dispositional orientation to life. This orientation, in turn, protects them from stress as they perceive life events as challenges (sense of meaningfulness) which occur for a reason (sense of comprehensibility). In terms of a lack of personal control, individuals may be directed by some other resource at their disposal (sense of manageability) (Hakanen *et al.*, 2005). These perceptions of meaningfulness, comprehensibility and manageability are highly interrelated. Antonovsky (1979; 1987; 1993) maintains that coping depends on a sense of coherence as a whole and, thus, it is essential that all the components of a sense of coherence be measured as a whole.

Sense of coherence is based on two concepts, namely, generalised resistance resources and generalised resource deficits (Lindstrom & Eriksson, 2009). The generalised resistance resources (GRRs) may be either internal or external. In other words, individuals have at their disposal both internal and external resources which facilitate the way in which they are able to manage their lives. These GRRs may range from the spiritual dimensions of the mind, processes and a psychological dimension. The key is that individuals are able to use the GRRs for their own good and to foster their own health. These GRRs are characterised by both underload–overload balance and by participation in the shaping of outcomes (empowering processes). In other words, GRRs they provide a person with a set of meaningful and coherent life experiences which, in turn, create a strong sense of coherence (Lindstrom & Eriksson, 2009). The capability to use GRRs is based on an individual's sense of coherence.

a) Meaningfulness

Individuals are aware of the emotional connection with demands that are made on them (Antonovsky, 1987) and this awareness is linked to the motivational element of sense of coherence (Lindstrom & Eriksson, 2009).

b) Comprehensibility

According to Antonovsky (1987), individuals make sense of the stimuli in the environment. These stimuli are derived from both the internal and the external environments. According to Bezuidenhout (2008), an individual will experience these stimuli as comprehensible and meaningful on a cognitive level (Coetzee & Rothmann, 2005; Lindstrom & Eriksson, 2009).

c) Manageability

Antonovsky (1987) refers to resources that are available to an individual to enable that individual to meet the demands posed by the environment. An individual with strong manageability will be able to cope with difficult situations, thereby creating a balance between underload and overload. Manageability specifically refers to resources and to the ability of the individual to strike a balance between the demands posed by these stimuli (Bezuidenhout, 2008).

d) Generalised resistance deficits (GRDs)

Generalised resistance deficits (GRDs) are related to the stress component of a sense of coherence. Antonovsky (1987) is of the opinion that it is possible to rank stress on a continuum. These GRDs lead to a “breakdown” in health (Antonovsky, 1987). The following three kinds of stress can be identified, namely, chronic stressors, major life events and acute daily problems. The ability to confront these stressors successfully will lead to a strengthening of individuals’ sense of coherence (Bezuidenhout, 2008).

e) The strengthening of the sense of coherence

Antonovsky maintains that a sense of coherence is developed mainly in childhood and early adulthood, although new research has indicated that the development of a sense of coherence

is, in fact, an ongoing process throughout life (Lindstrom & Eriksson, 2009). This finding is based on cognitive, behavioural and motivational factors which may be improved by raising the awareness of the population, empowering the population and promoting engagement in areas which are meaningful to the population.

Other factors that may strengthen the sense of coherence include both social support and work-related factors. In a research study conducted by Volonen, Suominen, Lahelma, Koskenvuo, Koskenvuo and Silvertoinen (2010) into the intention to retire early among Finnish men and women, it was found that both a strong occupational sense of life control, as well as a firm belief that it is possible for an individual to influence his or her own life and that each individual is responsible for him/herself, resulted in a more favourable self-image.

According to Bezuidenhout (2008), other factors that may strengthen the sense of coherence include the following:

General life experiences, which may be shaped by consistency in, for example, striking a balance between underload and overload and by participation in a socially valued decision-making process.

Consistency in respect of the sense of coherence. Bezuidenhout (2008) maintains that, if a given behaviour has the same result, the individual concerned will continue to experience consistency in his/her life.

Underload–overload balance. It is essential that an individual strikes a balance between these two loads. The striking of this balance may be referred to as a consistent history of being called upon (by one's inner self or by the world around one) to act in the manifold ways that make use of one's potential and are appropriate to the resources at one's disposal (Bezuidenhout, 2008).

Participation in decision making. It is important that individuals approve of the tasks set before them and that they are able to exercise a high degree of performance responsibility. Such behaviour will have an impact on the outcome of the experience and will strengthen their sense of coherence (Bezuidenhout, 2008).

f) Characteristics of individuals with a strong sense of coherence

Individuals with a strong sense of coherence are characterised by health and job satisfaction (Antonovsky, 1987)

Health: According to Antonovsky (1987), individuals with a high sense of coherence are assumed to occupy a more favourable position on the health ease–disease continuum than those who score low in terms of their sense of coherence (Hakanen *et al.*, 2005). According to Antonovsky's (1987) theory, which was based on his observations, the holocaust survivors with a high sense of coherence remained healthier than the other victims of the holocaust with lower levels of sense of coherence (Hakanen *et al.*, 2005; Kivimäki, Feldt, Vahtera & Nurmi, 2000.). In theory, sense of coherence is hypothesised as a salutogenetic resource which influences the aetiology of recovering from disease through effective coping. This coping includes both the avoidance of habits that may interfere directly with health (smoking, excessive drinking, unhealthy diet, sedentary lifestyle) and adaptive behaviours that may lessen the severity of illness (transactions with health professionals, seeking early treatment) (Antonovsky, 1987).

Job satisfaction: According to Bezuidenhout (2008), an individual who has a strong sense of coherence is guided by fundamental principles in terms of which the individual will seek a balance between rules and strategies and between stored and potential information. Such an individual will perceive the world as a challenge and not as a threat. Rothmann (2001) states that individuals with a high sense of coherence score will experience high job satisfaction. Such a person will make cognitive sense of the workplace and perceive the workplace as ordered, structured, consistent and bearable (Bezuidenhout, 2008). This will, in turn, result in productive performance, recognition, reward and promotion.

2.1.2.4 *Stress-related physical health and psychological wellbeing*

Rothmann (2009) differentiates between two types of ill health that may be measured by the SAEHW Model:

Physical (ill) health refers to physical symptoms of stress which may include loss of sleep, headaches and indigestion problems.

Psychological (un)wellbeing refers to psychological symptoms of stress which may include

constant tiredness, irritability and mood swings (Rothmann, 2009).

Poor health is not necessarily a direct consequence of workplace stress. An individual may be physically unwell because of susceptibility to illness or as a result of an unhealthy lifestyle. In addition, stress-related illnesses may be caused by the existence of stressors outside of the workplace such as the break-up of a relationship or a recent bereavement (Rothmann, 2009).

2.1.2.5 Organisational commitment

Two types of organisational commitment may be measured (Rothmann, 2009):

Affective commitment refers to the extent to which employees are loyal and dedicated to the organisation (the emotional component of commitment).

Behavioural/normative commitment refers to the extent to which individuals perceive the organisation as being committed to him/her and whether the employee will go the extra mile for the organisation.

The concepts of wellness and wellbeing are increasingly being viewed as highly important constructs in the South African context (Adams, Bezner & Steinhardt, 1997; Rothmann & Ekkerd, 2007). It may, thus be deduced that employee wellness is important to the employer because individuals with various risk factors tend to be higher cost employees than employees who are well and, thus, have lower cost implications while also being more productive (Rothmann & Ekkerd, 2007).

2.1.3 The Job Demands-Resources model

The Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2008) may be applied as a guiding framework to examine employees' level of engagement and the positive motivational processes involved. The JD-R model emphasises the importance of the working conditions of the employee and encompasses two independent processes: The first process is a motivational process in terms of which job resources stimulate motivation on the part of employees and, thus, foster engagement and organisational commitment. The second process is a de-energising process in terms of which job demands deplete the mental and physical resources of

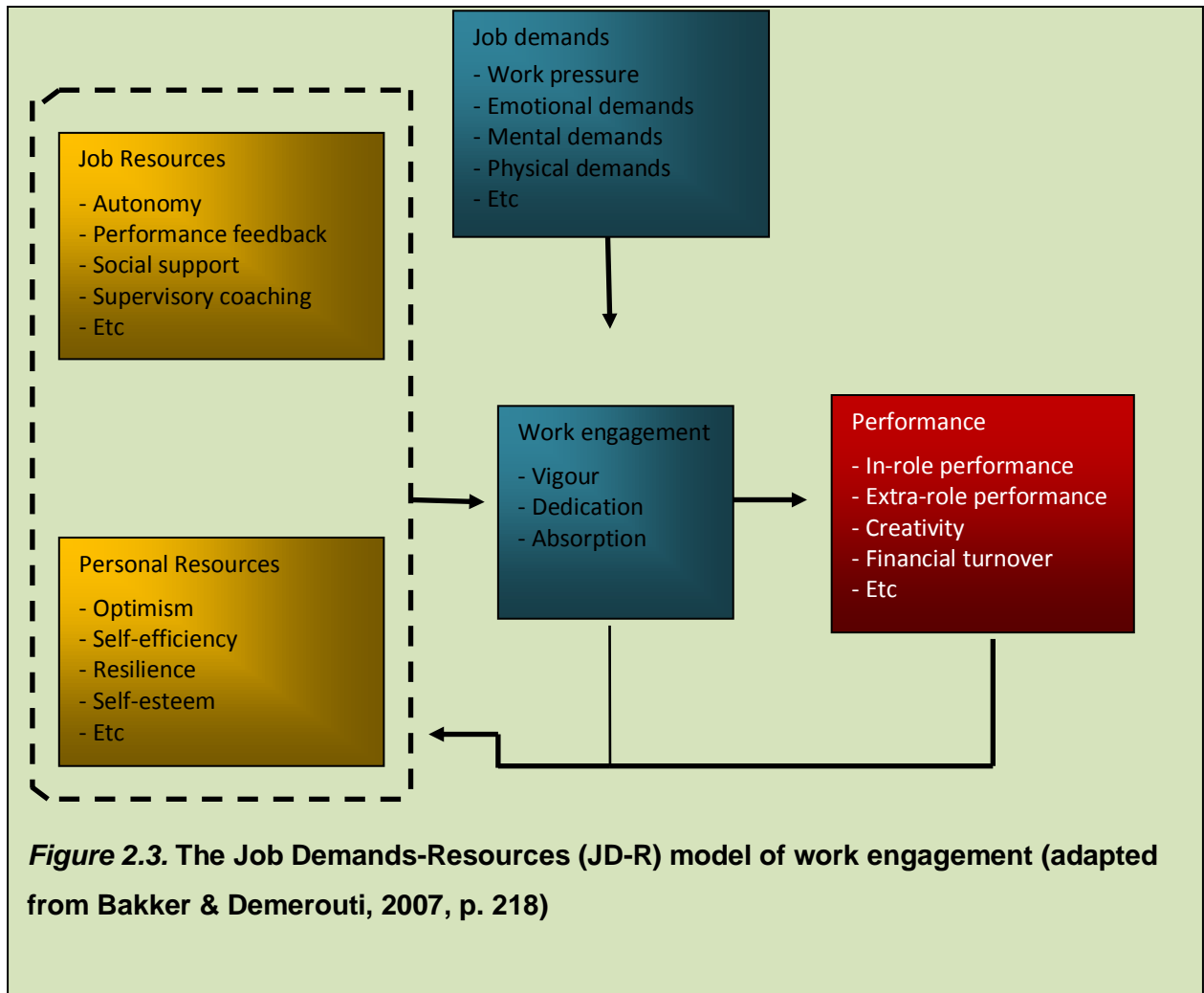
employees. This, in turn, may eventually lead to burnout (Schaufeli & Bakker, 2004).

The JD-R Model assumes that every occupation has its own risk factors which are associated with occupational stress (Bakker, Demerouti & Schaufeli, 2003; Schaufeli & Bakker, 2004). These factors may be classified into two categories, namely, job demands and job resources. Job demands refer to those physical, psychological, social or organisational aspects of a job that require sustained physical or psychological (cognitive/emotional) effort and which are, therefore, associated with physiological or psychological costs (Bakker, Demerouti & Schaufeli, 2003; Schaufeli & Bakker, 2004). The absence of job resources may evoke a cynical attitude towards work interactions.

Schaufeli and Bakker (2002; 2004) and Bakker *et al.* (2003) refer to job resources as those physical, psychological, social or organisational aspects of a job that either

- reduce job demands and the associated physiological and psychological costs or
- function to foster the attainment of work goals or
- stimulate personal growth, learning and development

As shown in figure 2.3 the JD-R model assumes that job resources and personal resources, either independently or in combination, predict an employee's engagement and, when job demands are high, employees' engagement has a positive impact on their job performance. Personal resources may be identified as a sense of coherence which is associated with coping with stress (Muller & Rothmann, 2009). In other words, personal resources are positive self-evaluations that are linked to resiliency and which refer to an individual's sense of his/her ability both to control and to impact on his/her environment successfully (Bakker & Demerouti, 2008, p. 213). Job resources and personal resources initiate a motivational process, which then results in worker engagement and quality performance. "Call centre employees who can draw upon job resources such as social support from colleagues and performance feedback feel more dedicated to their work and more committed to their organisation, and, consequently, are less inclined to leave the organisation" (Bakker, Demerouti & Schaufeli, 2003, p. 408). After successfully testing the JD-R model, Demerouti, Bakker, Nachreiner and Schaufeli (2000) are of the opinion that, if job resources are lacking, this may be associated with disengagement from the job.



The JD-R model is based on the following two assumptions: energetic process and motivational process. The energetic process is one whereby high job demands deplete the employee's mental and physical resources, leading to job burnout. The motivational process relates to job resources which stimulate the employee's motivation to foster engagement and organisational commitment (Schaufeli & Bakker, 2004).

2.1.3.1 The energetic process

The energetic process links job demands to health issues via burnout (Bezuidenhout, 2008). When an individual perceives that the job demands are too high, the following two options are

available (Hockey, 1997): 1) in order to maintain target performance the individual may resort to increased compensatory behaviour which has costs, and which will manifest both psychologically (fatigue and irritability) and physiologically (increase secretion of cortisol); and 2) a passive coping mode is adopted in terms of which levels of accuracy and speed are reduced.

2.1.3.2 The motivational process

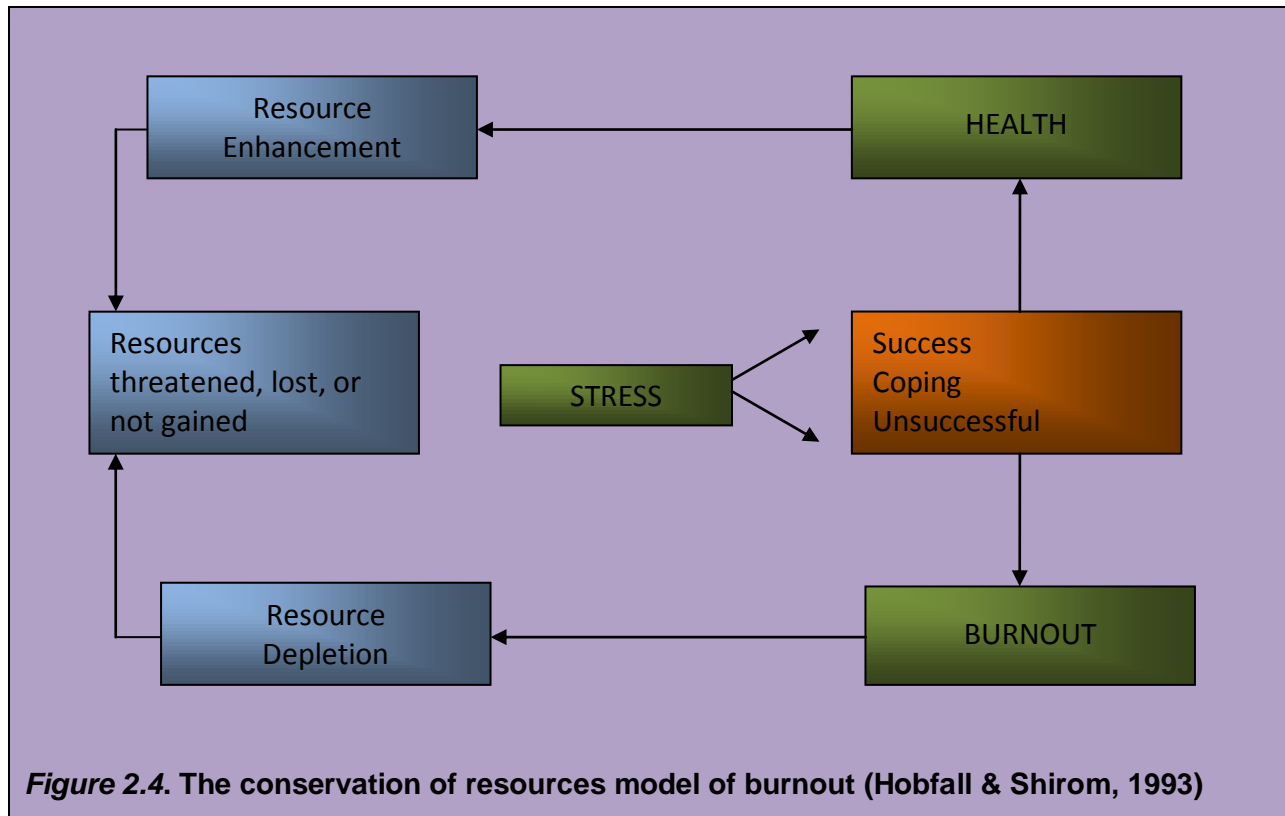
This process involves linking job resources via work engagement and organisational outcomes for example to turnover intention (Schaufeli & Bakker, 2004). Job resources may play either an intrinsic or an extrinsic motivational role (Bezuidenhout, 2008).

Job resources play an extrinsic role when the work environment offers several resources that may foster willingness on the part of employees to dedicate their efforts to the work task concerned. The outcome of such behaviour includes either the satisfaction of basic needs or the attainment of work goals, and may be regarded as positive. Hence, work engagement takes place (Schaufeli & Bakker, 2004).

Job resources that play an intrinsic motivational role relate to the growth, learning and development of the individual (Bezuidenhout, 2008). It is thus plausible to assume that engaged workers will be less likely to leave an organisation, as the organisation is providing them with valued job resources that enhance learning, growth and development (Houkes, Janssen, De Jonge & Nijhuis, 2001).

2.1.4 The conservation of resources model of burnout

The conservation of resource theory (Hobfoll & Shirom, 1993) posits that, when resources are threatened, psychological stress occurs in the subjects involved (Hobfoll & Freedy, 1993). This psychological stress may result in burnout in individuals and is the result of work resources being threatened, with additional personal resources having to be invested in order to cope with the escalating degree of stress experienced. When the coping is unsuccessful, prolonged burnout may develop. Figure 2.4 represents the “spiral of loss” in which an individual suffering from burnout is trapped as a result of the fact that the resources at work are threatened. These resources may include objects, conditions, job stability as well as personal characteristics and energies (money).



Burnout may be defined as the wearing away and wearing down of an individual's energy (Hobfall & Shirom, 1993). The self-perpetuating nature of burnout then manifests (Hobfall, 2000). When an individual experiences "spirals of gain," this leads to positive experiences, while "spirals of loss" lead to the depletion of an individual's resources, continued stress and burnout.

2.1.5 Integration of models

The call centre industry is expanding rapidly in terms of its workforce (Gans, Koole & Mandelbaum, 2003). This expansion has led to negative labels being attached to call centres, for example, "coal mine of the 21st century" (Armistead, Kiely, Hole & Prescott, 2002). Adverse conditions in the workplace have had a negative impact on both the behaviour and the health of call centres representatives. The SAEHW model (Rothmann, 2009) is applicable in that it comprises various components which are aimed at determining the work-related wellbeing of individuals. The SAEHW model may be used as a foundation for determining the health and

wellness of individuals in terms of organisational wellness, organisational climate, personal resources (resilience) and organisational commitment (Rothmann, 2006).

Organisational wellness relates to work-related wellbeing – the amount of energy an individual is prepared to invest in work and the extent to which that individual identifies with work (Sieberhagen, Rothmann & Pienaar, 2009). Organisational climate refers to those aspects in terms of job resources and job demands which may determine the work-related climate. Personal resources relate to an individual's resilience and ability to cope with stressful situations. Organisational commitment relates to practices within the organisation which are aimed at assisting those individuals who are experiencing stressful situations (Sieberhagen *et al.*, 2009).

Sense of coherence in terms of an individual's psychological functioning refers to that individual's understanding of stimuli stemming from the environment as being clear, ordered and structured (Antonovsky, 1987). Individuals who manifest a high sense of coherence will assume responsibility for both themselves and for their performance at work. They will not be afraid to make decisions for themselves within the work situation (Antonovsky, 1987).

The workplace may be viewed as a significant aspect of an individual's life that affects his/her wellbeing (Harter, Schmidt, & Hayes, 2002). According to the JD-R model (Bakker & Demerouti, 2007), job resources, such as social support from colleagues and supervisors, initiate a motivational process that leads to work engagement. Job resources become more salient and fulfil their motivational potential when employees are confronted with high job demands. Furthermore, job resources and personal resources are mutually related, while personal resources may function as independent predictors of work engagement. "Thus, employees who score high on optimism, self efficacy, resilience and self-esteem are well able to mobilise their job resources, and, generally, are more engaged in their work" (Bakker & Demerouti, 2008, p. 218).

The conservation of resource model of burnout of Hobfoll and Shirom (1993) recognises the need for a balance between individual and organisational needs, preferences and demands, as such a balance will lead to employee job satisfaction, general wellbeing, engagement, commitment and fulfilment. Individuals experience a "spiral of loss" when resources are threatened and they then undergo psychological stress that results in burnout. Specific

information on the way in which this spiral of loss occurs will enable more focused organisational development initiatives by facilitating the development of strategies suited to the challenges confronting the organisation concerned. The burnout model also provides a clearer answer to the question of whether an intervention has had the intended impact. Table 2.1 presents a theoretical integration of the models discussed.

The consensus of opinion is that there has been very little effort made in evaluating the way in which psychological dimensions are related to overall wellness (Gropp, Geldenhuys & Visser, 2007). However, Gropp (2006) reached the conclusion that two dimensions, namely, aspects of the self (interpersonal, affective or cognitive behaviour, spirituality and personal growth) and other domains of life (interpersonal, social, contextual and work), appear to be consistent in all wellness models. It is important to take a holistic approach to addressing employee wellbeing and satisfaction in the workplace because events and experiences at work may have a spillover effect outside work.

Table 2.1:

A theoretical comparison of the models discussed: views of employee wellness

	South African health and wellness model (Rothmann, 2009)	Job Demands-Resources model (Bakker & Demerouti, 2007)	Sense of coherence Antonovsky (1987)	Conservation of resource model of burnout (Hobfall & Shirom, 1993)
Construct	<i>Health and wellness</i>	<i>Work engagement</i>	<i>Sense of coherence (SOC)</i>	<i>Burnout</i>
Category/dimension differentiation	Five dimensions <ul style="list-style-type: none"> Wellness climate (work-related wellbeing) Organisational climate Personal resources Stress-related physical health and psychological wellbeing Organisational commitment 	Two dimensions <ul style="list-style-type: none"> Job demands Job resources 	Three dimensions <ul style="list-style-type: none"> Comprehension Manageability Meaningfulness 	Three dimensions <ul style="list-style-type: none"> Resource enhancement Conservation of resources Resource depletion
The relationship between categories/dimensions	Individuals' perceptions within their work environment influence their overall health and wellness	Job resources stimulate individuals' motivation to engage and commit	Individuals with a strong SOC cope better with life's stressors and this, in turn, leads to higher life satisfaction.	When individuals' work resources are threatened, a spiral of loss occurs, stress arises and individual will invest more personal resources in order to cope
How is employee wellness attained?	Through focusing on the holistic functioning of the individual.		Through job tasks and work environments that make sense to the individuals and which they find meaningful and manageable.	Spiral of gain may lead to positive experiences.
What is the theory's usefulness in terms of employee wellness practices?	Recognising the importance of employee wellness will, in turn, lead to diminished anxiety; lowered costs and increased productivity.		Identifying stress factors and minimising these factors in order to allow for optimum individual coping and functioning.	It recognises the need for a balance between individual and organisational needs, preferences and demands which will lead to employee job satisfaction, general wellbeing, engagement, commitment and fulfilment.

2.2 VARIABLES INFLUENCING SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN EMPLOYEE WELLNESS

The following variables will be discussed, namely, gender, race, age group and marital status.

2.2.1 Gender influences

Research suggests that males tend to attain slightly higher sense of coherence scores than women (Antonovsky, 1987). Antonovsky (1992) indicates that gender may account for the significant difference in the total scores. Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) found no significant differences between the sexes in terms of work engagement. On the other hand, Tytherleigh (2003) found men scored significantly higher in work engagement than women. Hobfall (2000) argues that women have less access to resources than men that could help buffer the negative results of stress and maintain wellness. According to Maslach (1982), men and women experience fairly similar levels burnout, although women tend to be more emotional than men while men tend to reveal more depersonalised and callous feelings about the people with whom they work than women (Bezuidenhout, 2008).

2.2.2 Race

Wissing and Van Eeden (2002) found that there was a significant difference between black and white individuals in relation to work-related wellbeing. In particular, significant differences exist between white and black professionals in the United States of America in terms of burnout, with white professionals experiencing a higher level of burnout than black professionals (Maslach, 1982).

2.2.3 Age

Antonovsky and Sagy (1985) maintain that a strong sense of coherence has developed by the time individuals reach the age of 30. It would appear that older people feel slightly more engaged in their work compared to younger individuals (Schaufeli & Bakker, 2003). There seems to be a clear relationship between age and burnout, with younger people tending to experience a greater degree of burnout than older workers. This may be that, as people become older, they tend to become more stable and mature (Bezuidenhout, 2008).

2.2.4 Marital status

Single individuals tend to experience higher levels of burnout than married individuals (Bezuidenhout, 2008). According to Maslach (1982), married people or providers with families experience lower levels of burnout.

2.3 IMPLICATIONS FOR EMPLOYEE WELLNESS PRACTICES

Employee wellness can be defined as a sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual, physical, psychological, social and spiritual dimensions of human existence (Rothmann & Ekkerd, 2007, p. 36). Wellness is never static; it is about balance among the various dimensions, and constantly fluctuating and living in a way that attenuates the size of those fluctuations. Individuals who perceive a state of wellness display a sense of meaning and purpose in life and expect that positive things will occur in their lives, no matter what the circumstances (Rothmann & Ekkerd, 2007).

Organisational employee wellness programmes are aimed at addressing the high level of stress among workers in some occupations, such as call centre operators, and are intended to promote wellbeing and increase production, while reducing turnover, accidents and errors, absenteeism and medical costs (Pienaar & Rothmann, 2005).

Occupational stress is an area of organisational psychology that has received considerable attention in recent years (Tytherleigh, 2003). It is associated with an increase in stress outcomes, such as job dissatisfaction, ill health, absenteeism, higher staff turnover and lower productivity (Jones & Bright, 2001).

Occupational stress should not only be seen as a problem of the individual, but also as a serious consideration for all organisations. According to Levi (1996), symptoms of stress have a significant effect on both absenteeism and productivity within organisations. During a survey conducted in 2000, employers in the United Kingdom (UK) indicated that absenteeism was costing UK business approximately ten billion pounds per annum and that stress was the second highest cause of absenteeism among employees (Levi, 1996).

Employees evaluate their work environment in terms of the severity and frequency of occurrence of specific job demands and pressure and the level of support provided by other employees (supervisors and co-workers), as well as by organisational features (policies and procedures) (Rothmann, 2009). In the Netherlands, mental health disorders comprised the largest diagnostic group for work incapacities (32%), while inspection revealed that 80% of these mental health cases were as a result of job stress and burnout (Cooper & Cartwright, 1997). The relationship between occupational stress and ill health is well documented in literature (Cooper & Cartwright, 1997; Cooper, Dewe & O'Driscoll, 2001; Winefield, Gillispie, Stough, Dua, Hapuarachichi & Boyd, 2003).

An insight into the relationship between sense of coherence, affective wellbeing and burnout may contribute to a greater understanding of the relationship between these constructs and occupational stress (Siu, 2002). It would appear that the commitment of employees to an organisation is positively related to work outcomes such as job performance, but negatively related to absenteeism and turnover (Finegan, 2000; Organ & Ryan, 1995). Individuals may, thus, be protected from the negative effects of stress because stress enables them both to see direction in their work and to attach meaning to it.

Occupational stress has a negative influence on organisational commitment. Coetzee and Rothmann (2005) report that employers perceive jobs and control as major sources of stress and, as a result, perceive the organisation as being less committed to them. They then, in turn, become less committed to the organisation. It is essential that organisations acknowledge the need to reduce occupational stress. In any work environment the quality of an individual's life and mental health may affect the productivity of the entire community (De Villiers, 2009). Employees' perceptions that the organisation cares for and supports them are related to greater job satisfaction and enhanced commitment to the organisation. Accordingly, organisations need to intervene in order to reduce the occupational stress of their workers (Sieberhagen *et al.*, 2009).

According to Cooper *et al.* (2001), employee wellness efforts to combat job-related strain have been conceptualised as primary interventions, secondary interventions and tertiary interventions. Primary interventions are based on the assumption that the most effective way in which to combat strain is to eliminate or, at least, reduce the source of strain in the work environment. Secondary interventions focus on stress management training so as to alleviate

the impact of environmental stressors on workers rather than effecting changes to working conditions. Tertiary interventions are necessary in order to deal with the physical and psychological ill health of workers (Siberhagen *et al.*, 2009).

Work is a pervasive and influential part of an individual's life. It affects the quality of an individual's life as well as his/her mental health and, thus, may affect the productivity of entire communities. The ability to promote wellbeing rather than engender strains and mental illness is of considerable benefit to employees within the community (Siberhagen *et al.*, 2009). In this regard, it appears that research into the relationship between sense of coherence, affective wellbeing and burnout, as well as the differences between biographical groups with regards to these constructs, may potentially inform employee wellness practices.

2.4 CHAPTER SUMMARY

This chapter presented the literature review relating to the study at hand. Employee wellness, sense of coherence, affective wellbeing and burnout have all been conceptualised in this chapter by summarising previous views on and definitions of the constructs. The main concepts relevant to these three constructs were also identified and briefly explained.

Chapter 3 discusses the empirical findings of the study in the form of a research article.

CHAPTER 3

***RESEARCH ARTICLE: SENSE OF COHERENCE, AFFECTIVE WELLBEING AND BURNOUT IN A HIGHER EDUCATION INSTITUTION CALL CENTRE**

ABSTRACT

Orientation: The high levels of absenteeism and turnover due to the incidence of high stress levels in the call centre environment have led to a renewed interest in measuring call centre agents' work-related wellbeing.

Purpose: The objectives of the study were to: (1) assess the overall wellness climate profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout (measured by the South African Employee Health and Wellness Survey); and (3) determine how the participants differ regarding these variables in terms of socio-demographic contextual factors such as gender, race, age, and marital status.

Motivation for the study: Occupational stress in call centres is particularly high. Very little research has been conducted on the work-related wellbeing of call centre employees in the South African higher education environment.

Research design: A quantitative survey, using primary data, was conducted on a convenience sample (N = 102) of full time call centre employees within a South African higher education institution.

Main results: Compared to the national norm, the results indicated a risky wellness climate reflecting burnout propensity, lower morale (affective wellbeing) and lower resilience (sense of coherence). Significant relations existed between the participants' sense of coherence, affective wellbeing and burnout levels. Significant differences regarding these variables were also detected between males and females and the various marital status groups.

Practical/managerial implications: When designing wellness interventions, practitioners and managers need to recognise how participants' sense of coherence and level of burnout affect their affective wellbeing and overall morale.

Contribution/value-add: These findings contribute valuable new knowledge to the field of employee wellness that can be used to improve the work-related wellbeing of employees in the South African higher education call centre environment.

Key words: affective wellbeing, burnout, call centre, sense of coherence, wellness climate

*Please note: The guidelines provided by the South African Journal of Industrial Psychology have been used as a very broad and general guideline for the framework of the research article.

3.1 INTRODUCTION

The following section aims to clarify the focus and background of the study. General trends found in the literature will be highlighted, and the objectives and potential value added by the study will be outlined.

3.1.1 Key focus of the study

Higher education call centre personnel face numerous challenges that lead to high risk profiles characterised by high levels of turnover, burnout, and impaired “presenteeism” (Rothmann, 2009). The high levels of impaired presenteeism and turnover, and low morale resulting from the incidence of high stress levels in the call centre environment have led to a renewed interest in measuring call centre agents’ work-related wellbeing. Although research has indicated that occupational stress in call centres is particularly high (Rothmann, 2009), very little research has been conducted on the work-related wellbeing of call centre employees in the South African higher education environment. The present study aims to explore the overall wellness climate profile of higher education call centre employees, and how their sense of coherence and burnout relate to their affective wellbeing.

3.1.2 Background to the study

A call centre refers to a work environment in which the main business is mediated by a computer and telephone-based technologies that enable the efficient distribution of incoming calls to available staff, and permit the customer–employee interaction to occur simultaneously with the use of display screen equipment and the instant access to information (Holman, 2005, pp. 111–112).

Call centres can be a reflection of the current *Zeitgeist* phenomena in which call centres are regarded as being fast, precise, and nice-to-have and “always there” for the client (Dorman & Zijlstra, 2003). Call centres have become a very popular method of service delivery to students and other stakeholders in higher education, mostly because of the financial benefits (Visser & Rothmann, 2008). Call centres eliminate extensive branch networks with face-to-face service. In South Africa, there are approximately 250 call centres (Briggs, 1998). Employees within such

call centres perform mainly emotional labour, in which they are expected to display certain emotions as part of their job (Visser & Rothmann, 2008).

Call centre work is often highlighted as particularly stressful and, by implication, it is regarded as being more stressful than any other comparable forms of employment (Holman, 2004). Occupational stress is associated with an increase in stress outcomes, such as job dissatisfaction, ill-health, absenteeism, higher turnover and lower productivity (Tytherleigh, 2003). Research carried out by Rothmann (2009) suggests that the level of employee wellbeing in call centres is affected by a lack of personal resources, which is indicative of the imbalances that exist between job demands and job resources, and risky employee outcomes in terms of commitment and the incidence of stress-related symptoms

The average turnover in call centres in the UK is around 49% (Malhotra & Mukherjee, 2004). Turnover can be described as an inclination to leave an organisation voluntarily, which can be viewed as a best predictor of actual turnover (Visser & Rothmann, 2008). In relation to other office-type working conditions, call centre turnover rates appear to be above average (Visser & Rothmann, 2008). Emotional exhaustion was found to be a strong predictor of turnover intentions.

3.1.3 Trends from the research literature

Call centres are generally regarded as high-stress environments that place unique demands on employees (Townsend, 2005). The merging of higher education institutions with other education institutions has created a huge volume of clients, such as students and other stakeholders, who require assistance on a daily basis. As a result of the huge volume of clients, many call centre personnel work overtime. The higher education institution call centre can be contacted five days a week. To facilitate this service, the call centre agent sits in front of a computer wearing a headset, which enables communication with the clientele. A call centre agent can talk to between 60 to 250 clientele in an eight-hour shift (Dieckhoff, Freigang-Bauer, Shroter & Viereck, 2002). With an increased cliental base, call centre agents experience work overload. Work overload is directly related to the development of emotional exhaustion and some of the common aspects of work overload is not being able to take a break in between calls, receiving calls, perceived high target levels, time pressure (inability to do all the work in the time allocated per customer and brief call cycles), and pressure to reduce wrap-up time (Visser & Rothmann, 2008).

Call centre employees of higher education institutions are constantly monitored in terms of their performance, which is viewed as a prominent call centre practice, with the strategic focus on maximising efficiency (Holman, 2004). Performance evaluation is based on monitoring of employees through technology (Holdsworth & Cartwright, 2003) and can be used as a punitive measure to increase performance (Holman, 2004). This is regarded as a job demand on its own.

Call centre representatives constantly repeat the same activities, thereby scarcely having the opportunity to put their skills into practice. Call centre work is seen as monotonous, in which employees are required to do the same work over and over again. Experiencing monotony is one of the reasons for the high turnover in call centres (Zapf *et al.*, 2003). These pressures cause stress in the workplace, which could eventually affect the work-related wellbeing of employees (Rothmann, 2009).

Presenteeism is another challenge faced by call centre personnel. Presenteeism comprises by two dimensions, namely, physical ability (can do) and motivation (will do). Both affect the productivity of employees at work. Three types of presenteeism in the workplace are evident, each resulting from different causes. Impaired presenteeism exists when employees, despite complaints and ill health, still go to work. Over-commitment presenteeism is when employees put in excessive effort as an expression of commitment. Disengagement presenteeism is when employees do not invest energy in a focused way in their work (Rothmann, 2009).

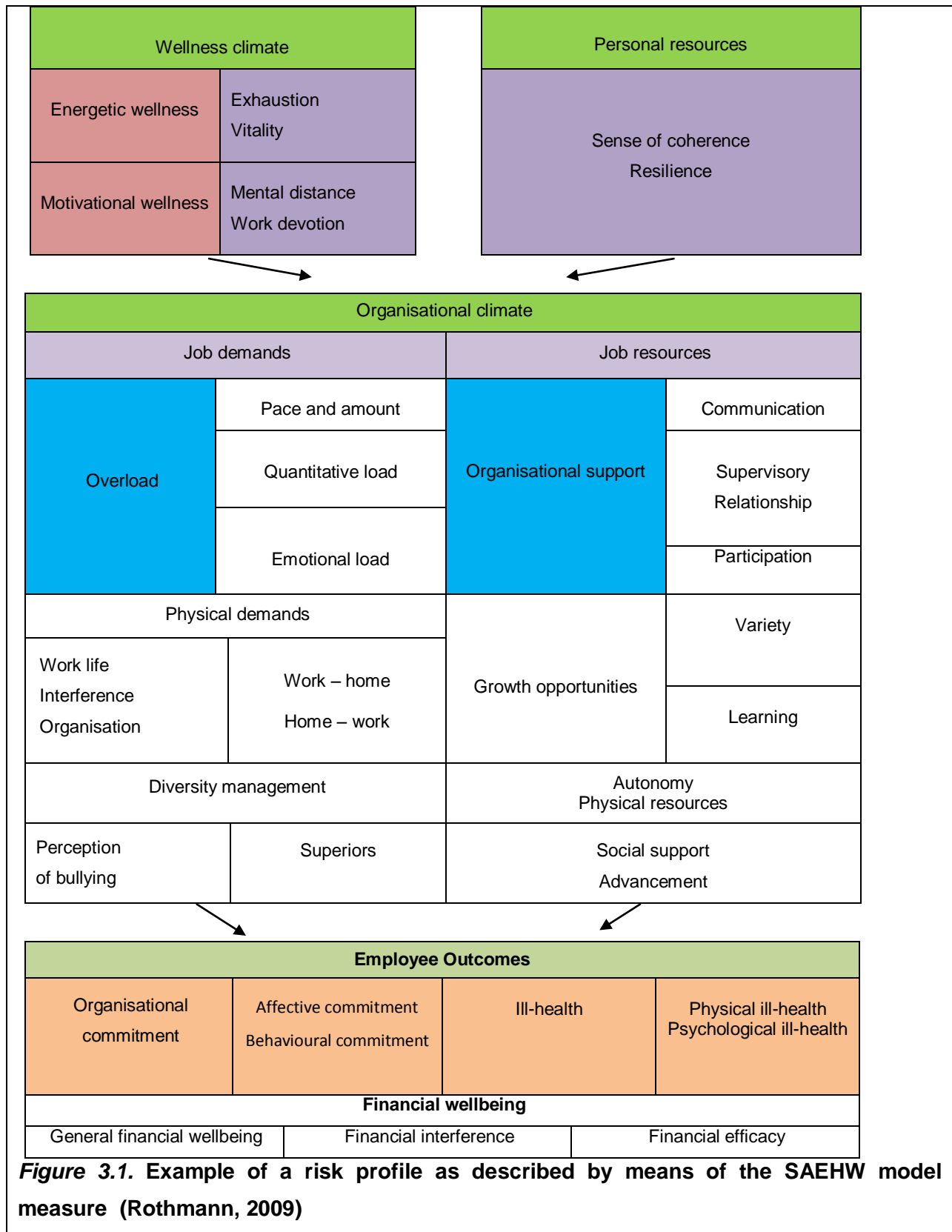
According to Rothmann (2009), call centre employees in higher education call centre environments often experience a lack of personal resources, which is indicative of lower resilience levels. Imbalance between job demands, job and personal resources is the result of a demanding work environment. Within the demanding environment of a call centre, the lack of personal resources can suggest that the work environment is unsupportive, amorphous, unappreciative, autocratic and unstimulating, which affects the psychological meaning, safety and availability of the individuals employed in a higher education call centre environment (Rothmann, 2009).

Burnout and mental distance are often associated with the high risk profiles of call centre representatives (Rothmann, 2009). Burnout results when an employee is incapable of performing owing to the fact that all energy has been drained, resulting in high exhaustion

levels, which in turn result in mental distance. Mental distance occurs when the employee is unwilling to perform because of an increased intolerance of any effect (Rothmann, 2009). This suggests that serious physical and psychological ill-health would manifest in individuals. According to studies by Viljoen and Rothmann (2009), ill-health manifests as a result of burnout. Ill-health affects call centre representatives' performance, quality of outputs, safety conscientiousness, sickness-absenteeism, presenteeism, and turnover intentions. Burnout is seen as an "individual weakness". According to research by Maslach and Leiter (1997), the work environment within which individuals find themselves, specifically the characteristics of the environment, are more related to burnout than to personal factors. Call centres have, as a result, been dubbed "satanic mills" or the "mines of the 21st century" (Deery & Kinnie, 2004; Taylor & Bain, 1998).

The South African Employee Health and Wellness (SAEHW) model (Rothmann, 2009) has been used with success in the call centre environment to measure the work-related wellbeing of employees. According to Rothman and Rothmann (2006), employee health and wellness can be defined as a state in which employees are energetic, motivated, healthy, productive and committed to the organisation and its goal. The SAEHW model explains the interaction between various factors that influences the overall work-related wellbeing of individuals. These factors comprise the following: the organisational climate (influenced by job demand factors and factors relating to job resources); personal resources (sense of coherence or resilience); the wellness climate (influenced by individuals' burnout levels and affective wellbeing); individuals' health and organisational commitment (influenced by factors such as their physical and psychological ill health, affective and behavioural commitment), individuals' perceptions of bullying, and their financial wellbeing (Rothmann, 2009).

As shown in figure 3.1, measuring individuals' performance on each of the various factors provides an overall risk profile which can be used for internal and external benchmarking purposes (Rothmann 2009). In terms of the present study, the focus is on the individuals' energy at and identification with their work as measured by their levels of burnout [exhaustion and mental distance], and affective wellbeing [vitality and work devotion]. The study also focuses on personal resources, that is, individuals' sense of coherence as a measure of their resilience in coping with stress.



Lindley and Joseph (2004) found that wellbeing goes beyond the absence of ill health and includes aspirations to learn, being reasonably independent and possessing confidence. Reardon (1998, p. 117) defines wellness as “a composite of physical, emotional, spiritual, intellectual, occupational and social health; health promotion is the means to achieve wellness”. Wellness goes beyond the fixed idea of health as an absence of illness, rather implying a proactive stance towards achieving optimal physical, mental and emotional wellbeing.

The wellbeing of employees is in the best interests of communities and organisations. The workplace is a significant part of an individual's life that affects all aspects of his or life and the wellbeing of the community. The wellbeing of employees is also in the best interests of employers, who spend substantial resources on hiring employees and trying to generate profits and maintain loyal customers (Sieberhagen *et al.*, 2009).

Work is viewed as a pervasive and influential part of the individual and the community's wellbeing. It affects the quality of an individual's life and his or her mental health, and thereby can affect the productivity of entire communities. The ability to promote wellbeing, rather than engender strains and mental illness, is of considerable benefit to employees and their satisfaction with their work and workplace, which affects citizenship at work, turnover rates and performance ratings (Harter, Schmidt & Keyes, 2003).

3.1.4 Research objectives

The objectives of the study were to: (1) assess the overall wellness climate risk profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout and (3) determine how the participants differ regarding these variables in terms of socio-demographic contextual factors such as gender, race, age, and marital status.

3.1.5 The potential value-add of the study

In the light of the paucity of research in the higher education call centre environment, the purpose of this study is to generate new knowledge for the field of employee wellness that can be used to improve the work-related wellbeing of employees in the South African higher education call centre environment.

3.1.6 Literature review

The following section provides a brief outline of the literature on the constructs of sense of coherence, affective wellbeing and burnout.

3.1.6.1 Sense of coherence

Sense of coherence is regarded as an indicator of resilience on Rothmann's (2009) SAEHW model. Sense of coherence has been defined as a relatively stable disposition (Antonovsky, 1987). It is possible that individuals with a weak sense of coherence will develop burnout, while those who have developed a strong sense of coherence will show affective wellness. Studies (e.g. Antonovsky, 1987; Rothmann, 2003) have confirmed that a person's sense of coherence is an important component of an individual's health and wellbeing. Each person's sense of coherence requires certain inherent prerequisites for coping successfully, which are represented by the concepts of comprehensibility, manageability and meaningfulness (Antonovsky, 1987).

Comprehensibility refers to the extent to which persons find or structure their world as understandable, meaningful, orderly and consistent, instead of chaotic, random and unpredictable. Manageability refers to the extent to which people experience the events of life as situations that are endurable or manageable, and can even be seen as a challenge. Meaningfulness refers to the extent to which one feels that life makes sense on an emotional and not just a cognitive level, and that life's demands are worthy of commitment. It is, essentially, seeing coping as desirable (Rothmann, 2009). In terms of the present study, sense of coherence is regarded as an overall construct that represents individuals' resilience as an aspect of their personal resources in dealing with the demands and stressors of a call centre environment (Rothmann, 2009).

3.1.6.2 Affective wellbeing

Affective wellbeing is focused on vitality and work devotion, which characterise work engagement (Rothmann, 2009). Vitality refers to individuals wanting to invest high levels of energy, vigour and resilience into their jobs, not being easily fatigued, and persisting in the face of difficulties. Work devotion occurs when individuals have a strong involvement in their work, accompanied by feelings of enthusiasm and significance, and by a sense of pride and inspiration. Individuals characterised by high levels of work devotion experience psychological

meaning and safety at work and will therefore avail efforts at a psychological and behavioural level in the work environment (Rothmann, 2009).

The focus of engagement (or affective wellbeing) as the positive antithesis of burnout promises to yield new a perspective on interventions aimed at promoting healthy perceptions, beliefs and physical wellbeing (Salovey, Rothmann, Detweiler & Steward, 2000), and in alleviating burnout (Maslach, Schaufeli & Leiter, 2001). According to Nelson and Simmons (2003), meaningful work leads to eustress, which would promote engagement or work devotion even if the situation is demanding. Eustress reflects the extent to which cognitive appraisal of the situation is seen to either benefit or enhance an individual's wellbeing. Positive work-related wellbeing involves engaging individuals in meaningful work and improving the quality of their lives, health and psychological strengths in proactive and positive ways as members of a community and as employees (Witmer & Sweeney, 1992).

3.1.6.3 *Burnout*

Burnout is viewed as a psychological syndrome in response to chronic interpersonal stressors on the job. In the context of the present study burnout is characterised by exhaustion and mental distance (Rothmann, 2009). Exhaustion is the most obvious manifestation of the complex syndrome of burnout (Maslach *et al.*, 2001). Exhaustion refers to feelings of being overextended and drained in terms of one's emotional and physical resources (Buys & Rothmann, 2010). Exhaustion occurs when the emotional demands of the work exhaust an individual's capacity to be involved with, and be responsive to, the needs of others (Maslach, *et al.*, 2001). Exhaustion leads to the inability of an individual to perform because all energy has been drained.

Mental distancing occurs when an individual is no longer willing to perform, because of an increased intolerance for any effort (Buys & Rothmann, 2010). Mental distancing is regarded as a coping strategy for dealing with stress and is characterised by a psychological withdrawal from the task. Mental distancing is generally seen as an adaptive mechanism for coping with excessive job demands and resulting feelings of exhaustion, depersonalisation and cynicism (Buys & Rothmann, 2010). However, when this mental distancing as a coping strategy becomes a habitual pattern, it becomes dysfunctional because it disrupts adequate task performance. In turn, job demands and exhaustion are further increased so that the vicious circle is closed

(Schaufeli & Bakker, 2003). Depersonalisation can be regarded as distancing oneself from people with whom one is in direct contact in the working environment. Cynicism, on the other hand, can be viewed as one's psychological withdrawal from the broader context of the job itself and not from the people with whom one is working (Buys & Rothmann, 2010).

3.1.6.4 Integration of sense of coherence, affective wellbeing and burnout

Sense of coherence, affective wellbeing and burnout have been related to occupational stress (Bezuidenhout, 2008). Employees' levels of burnout and affective wellbeing determine the overall wellness climate (Rothmann, 2009). Research by Bezuidenhout and Cilliers (2010) has shown that burnout, work engagement and sense of coherence in female academics are significantly related, and that an inverse or negative correlation exists between burnout, sense of coherence and work engagement (Hyvönem, Feldt, Salmela-Aro, Kinnunen & Máikangas, 2009). According to Feldt (1997), as an individual's sense of coherence strengthens over time it can decrease levels of burnout.

Studies by Bezuidenhout and Cilliers (2010) indicate negative correlations between burnout and engagement. According to Schaufeli and Bakker (2002; 2004), burnout and engagement should be measured independently as separate but related constructs. According to Antonovsky (1987), a person with a strong sense of coherence can select a particular coping strategy that seems most appropriate to deal with the stressors being confronted. Subsequently, the availability of a wide repertoire of coping strategies, and flexibility in choice at any given time, are crucial (Van der Colff & Rothmann, 2009). The stronger the sense of coherence a person has, the better his/her ability to employ cognitive, affective and instrumental strategies that are likely to improve coping and, subsequently, wellbeing.

Apart from a study conducted by Rothmann (2009), no South African studies reporting on the relationship between the sense of coherence, affective wellbeing and burnout of call centre employees within a higher education institution context were found. The objective of this study was therefore to bridge this gap in the existing literature in order to make recommendations for employee wellness practices in the higher education call centre environment.

Considering the unique characteristics of the higher education call centre environment, the following proposition is stated:

The higher education call centre environment will benchmark below the South African norm in terms of its overall wellness climate profile.

In light of the preceding literature review, the following hypotheses will be empirically tested.

H1: There is a significant relationship between individuals' sense of coherence, affective wellbeing and levels of burnout.

H2: Individuals' sense of coherence and burnout significantly influence their affective wellbeing.

H3: Individuals from differing gender, race, age, and marital status groups will differ significantly in their levels of sense of coherence, affective wellbeing and burnout.

3.1.7 What will follow

What will follow is an explanation of the research design, outlining the research approach and method applied. Thereafter, the results will be stated followed by a discussion of the results by highlighting significant findings and the interpretation of these findings in the light of previous research. Conclusions will be presented and discussed and limitations identified and recommendations for future research will be put forward.

3.2 RESEARCH DESIGN

The review of the relevant literature presented in Chapter 2 and briefly outlined in the preceding introduction constitutes the foundation for the research design and the methodology presented in this section. Research design refers to the planning and structure of any given research project (Mouton & Marais, 1994).

3.2.1 Research approach

The present study is exploratory in nature. A quantitative survey approach was appropriate for this study, as it aided the accomplishment of the aims of the study in allowing for the conversion of concepts into operational definitions in order to obtain numerical results, which are reported in statistical language (Fouché & De Vos, 2005). Moreover, the approach utilised allowed for the conceptualisation of constructs in accordance with specific measuring instruments, and the

utilisation of such instruments in the measurement of the constructs in a controlled and systematic manner (Mouton & Marais, 1994). The approach was also chosen as it adds to the reliability of the study, as a quantitative design follows a fixed procedure and can therefore be replicated.

3.2.2 Research method

Research methodology explains how the research data were collected and generated; this helps with the reliability and validity of results. This section will discuss the research method followed in this study in terms of the research participants, measuring instrument, research procedure and statistical analyses.

3.2.2.1 Research participants

The total population of ($N = 138$) consisted of permanently employed staff members of the call centre of a South African higher education institution. A total of 102 useable questionnaires were returned, yielding a high response rate of 74%. The sample ($n = 102$) constituted 15% whites and 85% blacks (75% Africans, 6% coloureds, 4% Indians). The sample was further represented by 73% females and 27% males. In terms of age, the participants were predominantly in their early life/career stage with 12% being in the exploration phase of their careers (25 years and younger), 76% in the establishment phase of their careers (26–44 years), and 12% in the maintenance phase of their careers (45 years and older). In terms of marital status, 4% were divorced, 37% were married, 58% were single, and 1% was widowed. Ten percent of the sample ($n = 10$) held the position of supervisor, and the staff levels constituted 6% College Coordinators, 2% Contact Centre Analysts, 76% Contact Centre Consultants, and 6% Quality Assurance and In-house Trainers.

3.2.2.2 Measuring instrument

The South African Employee Health and Wellness Survey (SAEHWS) (Rothmann, 2009) was used for the purposes of the present study. The SAEHWS contains 22 sub-scales. Only the sub-scales relating to sense of coherence (consisting of a one factor scale – 13 items), affective wellbeing (consisting of two sub-scales measuring vitality and work devotion – 10 items), and burnout (consisting of two sub-scales measuring exhaustion and mental distance – 9 items)

were used to achieve the objectives of the present study. Responses on each component are scored by using a ten-point scale, ranging from low (1) to high (10). For the purpose of benchmarking the overall wellness climate against other South African institutions, respondents' scores are provided in a sten (standardised ten) format, with an average of 5.50 and standard deviation of 2 (Rothmann, 2009).

Respondents' scores on the sub-scales are interpreted as follows: 1–3 (= below average), 4–7 (= average), and 8–10 (= high). Studies by Rothmann (2009) showed that the factor structures of the SAEHWS are equivalent for different ethnic groups and organisations. In terms of reliability, the internal consistency (Cronbach's alpha coefficients) of the five sub-scales used for the purposes of the present study was highly acceptable and as follows: sense of coherence (0.77); affective wellbeing (vitality = 0.83; work devotion = 0.87); and burnout (exhaustion = 0.86; mental distance = 0.74). Exploratory and confirmatory factor analyses by Rothmann (2009) confirmed the construct validity of the SAEHWS.

3.2.2.3 Research procedure

Ethical clearance and permission to conduct the study was obtained from the management and Research Ethics Committee of the higher education institution that participated in the study. Participation was voluntary and employees were requested to complete the questionnaire online. This procedure ensured that employees participated of their own free will, and allowed for the questionnaire to be completed in their own time and in private. The purpose of the research was explained and the participants were assured of confidentiality and anonymity, and of the voluntary nature of participation. Informed consent was obtained from the participants. Participants completed a consent form which indicated that the completion and return of the questionnaire implied that the participants were granting permission for their questionnaire to be used for research purposes. The questionnaires were scored electronically.

3.2.2.4 Statistical analyses

The Statistical Program for Social Sciences (SPSS, 2008) was used to analyse the data. Descriptive statistics, correlational and inferential statistics were calculated. Cronbach's Alpha coefficients were used to assess the internal consistency of the measuring instrument. The sten scores (Rothmann, 2009) were used to benchmark the overall wellness climate profile of the call

centre with national samples. Pearson product-moment correlations were calculated to assess the direction and strength of the relationships between the variables. In order to counter the probability of a type 1 error, the significance value was set at the 95% confidence interval level ($p \leq 0.05$). For the purposes of this study, r values larger than 0.30 (medium effect) (Cohen, 1992) were regarded as practically significant.

Standard multiple regression analyses were conducted to identify whether the sense of coherence and burnout variables significantly explain or predict the portion of the total variance in the scores of the dependent variable (the affective wellbeing variable). The value of the adjusted R^2 was used to interpret the results. The F-test was used to test whether there was a significant regression between the independent and the dependent variables. For the purposes of this study, R^2 values larger than 0.13 (medium effect) were regarded as practically significant (Cohen, 1992).

Based on the tests for normality (Kolmogorov-Smirnov and Shapiro-Wilk tests), which were interpreted at a $p \leq 0.01$ significance level, it was decided to continue with non-parametric statistics (Fields, 2005). The Mann-Whitney U test was used to test for significant mean differences between the male and female participants, while the Kruskal-Wallis test was performed to test for significant mean differences between the various race, age and marital status groups ($p \leq 0.05$).

3.3 RESULTS

This section presents the descriptive statistics which analyse the means, standard deviation and Cronbach's alphas of the South African Employee Health and Wellness Survey (Rothmann, 2009). The following section includes an overview of the latter descriptive statistics for each scale utilised.

The method of reliability measures how consistently the items within a dimension measure the same characteristics. Internal consistencies reliability values can range from 0 to 1.00. Dimensions that have internal consistency reliabilities of 0.70 or greater are regarded as highly reliable (Edwards, Thomas, Rosenfeld & Booth Kewley, 1997).

3.3.1 Descriptive statistics

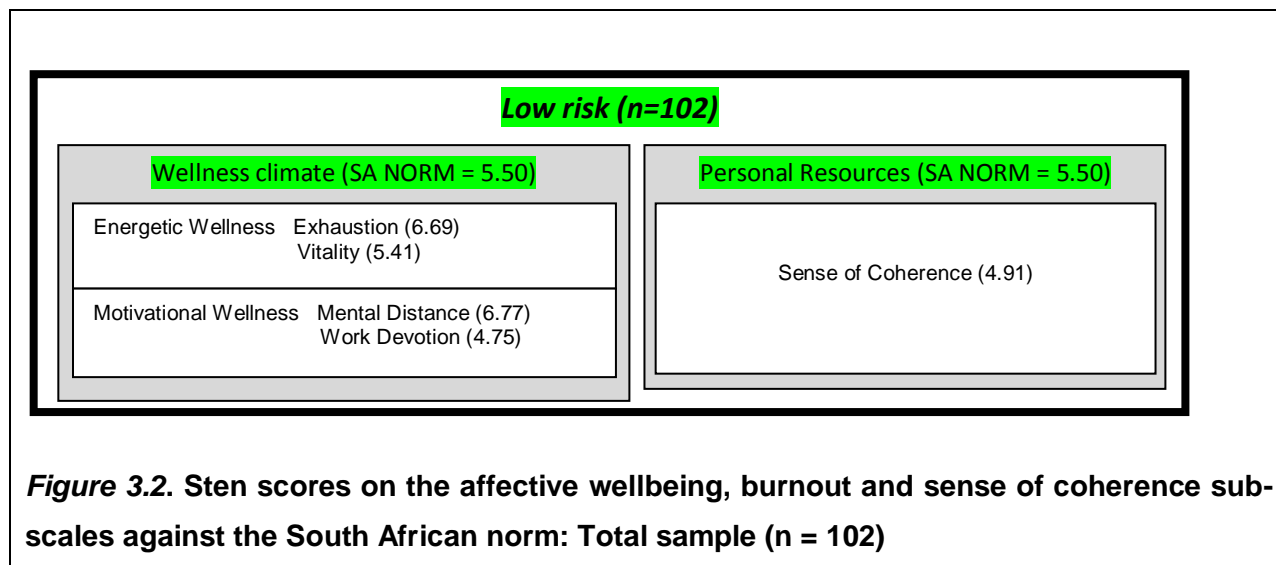
The means, standard deviations and Cronbach's alpha coefficients of each of the three sub-scales of relevance to the present study are presented in Table 3.1. The table shows that the participants obtained average mean scores, with burnout being the highest ($M = 6.52$; $SD = 2.17$). A participant's score on affective wellbeing results from the combination of his or her scores on vitality and work devotion. In terms of burnout, a participant's score results from the combination of his or her scores on exhaustion and mental distance (Rothmann, 2009). For the purpose of determining the participants' overall wellness risk profile, the participants' scores on the exhaustion and vitality sub-scales represent their energetic wellness, while their scores on the sub-scales mental distance and work devotion represent their motivational wellness (Rothmann, 2009).

Table 3.1:
Means, standard deviations and Cronbach's alpha coefficients

	Mean	SD	Cronbach's Alpha coefficient
Sense of coherence	4.86	2.79	0.77
Affective wellbeing	4.79	2.58	0.89
Burnout	6.52	2.17	0.90

3.3.2 Benchmarked overall wellness climate risk profile

Figure 3.2 provides the overall wellness climate risk profile of the call centre. Overall, the participants' levels of vitality (5.41), work devotion (4.75) and sense of coherence (resilience) (4.91) are lower than the South African norm (5.50). The participants level of vitality and work devotion represent their affective wellbeing (Rothmann, 2009).



Overall, the wellness climate (Table 3.2) and sense of coherence (resilience) levels (Table 3.3) evident for the higher education call centre sample seems to be inferior to most industries and occupational groups in the external benchmark, but somewhat better compared to a call centre sample in the financial and banking industry. The participants' levels of exhaustion, mental distance, vitality and work devotion were also benchmarked against the profiles of other South African organisations (Rothmann, 2009). As shown in Table 3.2, the higher education call centre participants scored relatively lower on vitality (5.41) and work devotion (4.75) (affective wellbeing) than most industries and occupational groups in the external benchmark, but somewhat better than a call centre sample in the financial and banking industry. The higher education call centre participants scored relatively higher on exhaustion (6.69) and mental distance (6.77) (burnout) than most industries and occupational groups in the external benchmark, but somewhat lower than the call centre sample in the financial and banking industry and a sample of call centre operators .

Table 3.2

Participants' affective wellbeing and burnout levels compared to other South African organisations (SA Sten) (Rothmann, 2009)

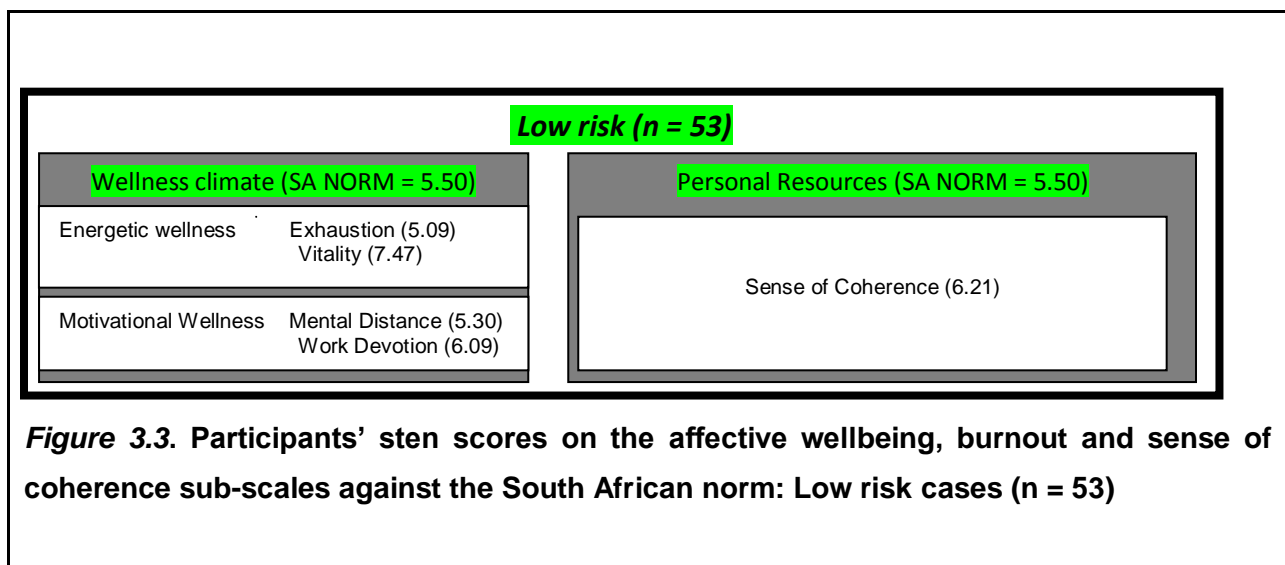
	Exhaustion	Mental Distance	Vitality	Work Devotion
	BURNOUT		AFFECTIVE WELLBEING	
Higher education institution n = 102	6.69	6.77	5.41	4.75
Call centres in the fin & bank industry	7.09	6.98	4.72	3.78
A sample of call centre operators	6.86	6.91	5.58	5.63
Financial industry	5.71	4.86	6.70	6.04
Government department	6.49	6.04	6.23	5.89
Insurance industry	6.61	6.38	5.15	4.60
Manufacturing industry	5.90	5.69	6.49	5.81
Engineers	5.34	4.95	6.09	5.62
Primary school educators	5.68	5.68	6.10	6.83
Secondary school educators	7.02	6.82	5.27	5.40
Educators (universities)	6.29	5.56	5.56	5.64
Support staff – universities	5.74	5.36	5.11	5.27
Correctional officers	5.44	6.15	4.88	5.70
Police officers	5.06	5.56	5.82	5.67
Staff members – univ. of technology	5.90	5.78	4.80	5.18
Train drivers	4.02	4.38	7.48	7.96
Professional nurses	5.72	5.44	5.56	5.64
Production supervisors	6.42	5.94	6.36	6.28
Emergency health technicians	6.85	8.06	4.95	5.54
Pharmacists	5.79	6.03	4.82	4.30
Non-professional counsellors	4.10	4.48	6.81	6.17

Table 3.3

Participants' sense of coherence (resilience) levels compared to other South African occupational groups (SA Sten)

	Academics (HEIs)	Engineers	Manufacturing	Education (Schools)	Correctional Officers	Gov Dept	Insurance Industry	Financial Industry	Call Centres in the Fin & Bank Industry	Higher education institution N=102
Sense of coherence (Resilience)	6.66	8.17	5.75	-	-	5.48	7.09	7.07	4.38	4.91

From the total sample ($n = 102$), 49 (48%) participants were identified as high risk cases. The high-risk group was identified by means of their wellness outcomes, that is, exhaustion and mental distance (burnout), and vitality and work devotion (affective wellbeing). The 49 risk cases were removed from the database to generate a risk profile for the low risk cases in order to portray the experiences of the participants without the distortion of the high risk cases. The scores of the participants were standardised and the two risk groups' profiles were compared with the South African norm (Rothmann, 2009). A comparison of the low risk cases ($n = 53$) and risk profiles of the high risk cases ($n = 49$) and is portrayed in figure 3.3 and figure 3.4. The risk profile of the ten supervisors is provided in figure 3.5.



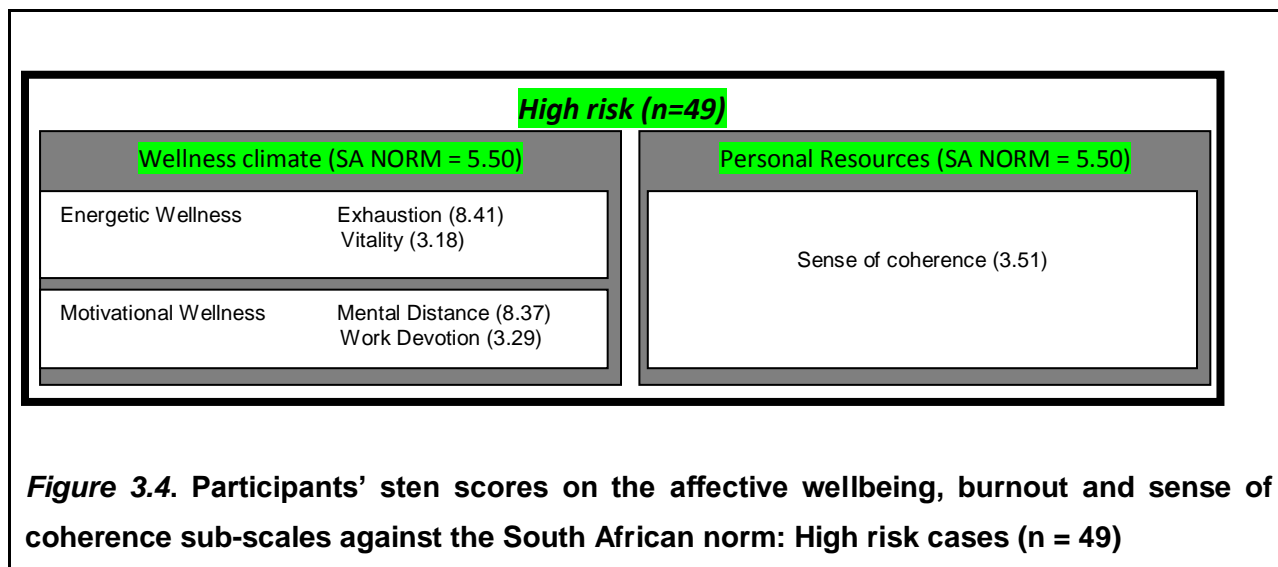


Figure 3.3 shows that the exhaustion (5.09) and mental distance (5.30) levels of the low risk cases are below the South African norm (5.50), while their vitality (7.47) and work devotion levels (6.09), and their sense of coherence (resilience) (6.21) are higher than the South African norm (6.50). In terms of the high risk cases (shown in fig. 3.4), the exhaustion (8.41) and mental distance (8.37) of the high risk cases are higher than the South African norm (5.50). While their vitality (3.18) and work devotion levels (3.29) and their sense of coherence (resilience) (3.51) are lower than the South African norm (Rothmann, 2009).

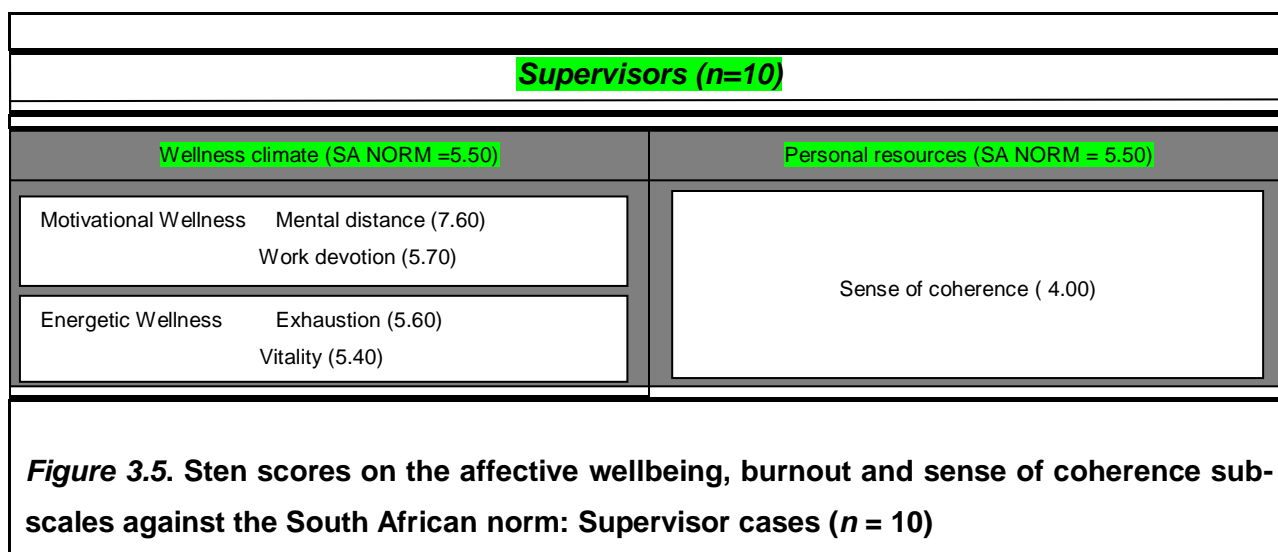


Figure 3.5 shows that the supervisors scored lower than the South African norm (5.50) on vitality (5.40) and sense of coherence (4.00) and higher on exhaustion (5.60), mental distance

(7.60) and work devotion (5.70). Based on these results, the proposition (*the higher education call centre environment will benchmark below the South African norm in terms of its overall wellness climate profile*) is herewith accepted.

3.3.3 Correlations between sense of coherence, affective wellbeing and burnout

Table 3.4 shows that the sense of coherence variable relates significantly and positively with the affective wellbeing variable ($r = 0.44$; $p \leq 0.01$; medium practical effect) and negatively with the burnout variable ($r = -0.51$; $p \leq 0.01$; large practical effect).

Table 3.4

Inter-correlations between sense of coherence, affective wellbeing and burnout (n = 102)

Variables	Sense of coherence	Affective wellbeing	Burnout
Sense of coherence	1	0.44**	-0.51**
		++	++
Affective wellbeing	0.44**	1	-0.67**
	++		+++
Burnout	-0.51**	-0.67**	1
	+++	+++	

** $p \leq 0.01$ (2-tailed) ++ $r = \geq 0.30 \leq 0.49$ – medium practical effect +++ $r \geq 0.50$ – large practical effect

Based on the above results, H1 (*there is a significant relationship between individuals' sense of coherence, affective wellbeing and levels of burnout*) is accepted.

3.3.4 Inferential statistics: Multiple regression

Table 3.5 shows that only the burnout variable in the regression model explained a significant large ($R^2 = 45\%$) practical effect in terms of the percentage of variance in the affective wellbeing variable. The sense of coherence variable had no significant effect on the affective wellbeing variable.

Table 3.5

Multiple regression analyses: Sense of coherence and burnout (independent variables) on affective wellbeing (dependent variable) (n = 102)

Variables	Unstandardised coefficient		Standardised coefficient	t	P	F	Adjusted R square	R
	B	SE	B					
	Constant	8.79	0.95					
Sense of coherence	0.13	0.08	0.14	1.62	0.11	(2;98)	+++	
Burnout	-0.71	0.10	-0.60	-6.92	0.00			

*** $p \leq 0.001$ +++ $R^2 \geq 0.26$ (large practical effect size)

Based on the above results, H2 (*individuals' sense of coherence and burnout significantly influence their affective wellbeing*) is only partially accepted.

3.3.5 Inferential statistics: tests for significant mean differences

3.3.5.1 Gender

Table 3.6 shows that the male and female participants differed significantly only in terms of their affective wellbeing and burnout levels. The males obtained significantly higher scores than the female participants on the affective wellbeing variable ($M = 5.67$ versus $M = 4.47$). The female participants scored significantly higher than the male participants on the burnout variable ($M = 6.81$ versus $M = 5.74$).

Table 3.6

Mann-Whitney U test: significant mean differences (gender) (n =102)

T-test	Sense of coherence	Affective wellbeing	Burnout
Mann-Whitney test	9.10	7.40	7.30
Wilcoxon W	3.90	3.52	1.11
Z	-0.7	-0.2	-0.2
Asymp Sig (2-tailed)	0.49	0.05*	0.04*
Mean (SD)			
Male	5.15 (2.77)	5.67 (2.77)	5.74 (2.26)
Female	4.76 (2.80)	4.47 (2.44)	6.81 (2.07)

* $p \leq 0.05$

3.3.5.2 Race

Table 3.7 shows that the various racial groups did not differ significantly regarding their sense of coherence, affective wellbeing and burnout levels.

Table 3.7

Kruskal-Wallis test: Significant mean differences (race) (n =102)

T-test	Sense of coherence	Affective wellbeing	Burnout
Chi-square	0.45	4.44	2.55
Df	2	2	2
Asymp Sig (2-tailed)	0.80	0.11	0.28

3.3.4.3 Age

Table 3.8 shows that the various age groups did not differ significantly regarding their sense of coherence, affective wellbeing and burnout levels.

Table 3.8

Kruskal-Wallis test: Significant mean differences (age) (n =102)

T-test	Sense of coherence	Affective wellbeing	Burnout
Chi-square	0.40	2.53	0.98
Df	2	2	2
Asymp Sig (2-tailed)	0.82	0.28	0.61

3.3.5.4 Marital status

Table 3.9 shows that the various marital status groups differed significantly regarding their sense of coherence and affective wellbeing levels. The widowed participants obtained significantly higher scores than the divorced, single and married participants on the sense of coherence and affective wellbeing variables. The divorced participants obtained significantly lower scores on sense of coherence, while the single participants obtained significantly lower scores on affective wellbeing than the other marital status groups.

Table 3.9**Kruskal-Wallis test: Significant mean differences (marital status) (n =102)**

T-test	Sense of coherence	Affective wellbeing	Burnout
Chi-square	6.2	5.95	3.4
Df	2	2	2
Asymp Sig (2-tailed)	0.05*	0.05*	0.18
	Mean (SD)	Mean (SD)	Mean (SD)
Single	4.32 (2.49)	4.39 (2.42)	6.76 (2.01)
Married	5.76 (3.12)	5.54 (2.63)	6.03 (2.35)
Widowed	8.00 (0.00)	8.00 (0.00)	4.00 (0.00)
Divorced	3.75 (0.96)	4.79 (2.57)	8.25 (1.26)

Based on the above results, H3 (*individuals from differing gender, race, age, and marital status groups will differ significantly in their levels of sense of coherence, affective wellbeing and burnout*) is only partially accepted.

Table 3.10**Summary of decision regarding the research proposition and research hypotheses**

Proposition		Decision
Proposition stated: the higher education call centre environment will benchmark below the South African norm in terms of its overall wellness climate profile		Accepted
Hypotheses		Decision
H1	There is a significant relationship between individuals' sense of coherence, affective wellbeing and levels of burnout.	Accepted
H2	Individuals' sense of coherence and burnout significantly influence their affective wellbeing	Partially accepted
H3	Individual's from differing gender, race, age, and marital status groups will differ significantly in their levels of sense of coherence, affective wellbeing and burnout	Partially accepted

3.4 DISCUSSION

The objectives of the study were to: (1) assess the overall wellness climate profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout; and (3) determine how the participants differ regarding these variables in terms of socio-demographic contextual factors such as gender, race, age, and marital status. In interpreting the results, the following characteristics of the sample were kept in mind: The sample of participants was predominantly black, single and married females in their early career stage. Considering that a 74% response rate was achieved, the results may be generalised as being representative of the total population of call centre employees in the higher education institution that participated in the study.

3.4.1 Overall wellness profile

Overall, the results indicated high burnout levels for the sample of call centre participants. The wellness risk profile also indicated high levels of exhaustion and mental distance. The findings are in line with those of Maslach, Schaufeli and Leiter (2001), who found burnout to be the response to overload, particularly in the exhaustion dimension. Mental distance is best predicted by emotional demands (Buys & Rothmann, 2010). Research also regards burnout as a predictor of employee wellbeing. When people are exhausted they no longer give themselves on a psychological level (Schaufeli & Enzman, 1998). As confirmed by studies (Bezuidenhout, 2008; Buys & Rothmann, 2010; Maslach & Leiter, 1997), when people feel exhausted, they feel over-extended, both emotionally and physically.

The benchmark results showed that the higher education call centre employees scored relatively lower on vitality and work devotion (affective wellbeing) and higher on exhaustion and mental distance (burnout) than the other South African institutions. There is an ongoing debate whether positive and negative affect represent different ends of a single dimension, With regards to work-related wellbeing, positive and negative work-related wellbeing share approximately 25% variance (Rothmann, 2009); that is, exhaustion and vitality are not opposite and likewise for mental distance and work devotion.

The high scores on exhaustion and mental distance suggest that the call centre employees may be experiencing high exhaustion at work and distance themselves from their work. This usually

results from high job demands such a high pace and amount of work, having to remember much detail and emotional demands (Rothmann, 2009). According to Demerouti, Bakker, Nachreiner and Schaufeli (2000), burnout can develop when certain job demands are high and certain job resources are limited. Previous studies have confirmed this by showing that high job demands exhaust employees' mental and physical resources and therefore leads to depletion of energy (which is a state of exhaustion) and to health problems (Bakker, Demerouti, De Boer & Schaufeli, 2003; Demerouti & Schaufeli, 2003).

The lower scores on vitality and work devotion suggest that the participants may not be currently experiencing high levels of energy at work and that the participants may not feel strongly attached to their work. Low levels of affective wellbeing usually imply a lack of resources (personal or job resources), such as resilience (sense of coherence), social support, growth opportunities and resources for the job done. This could also lead to low organisational commitment and is regarded as a serious disengagement risk (Rothmann, 2009).

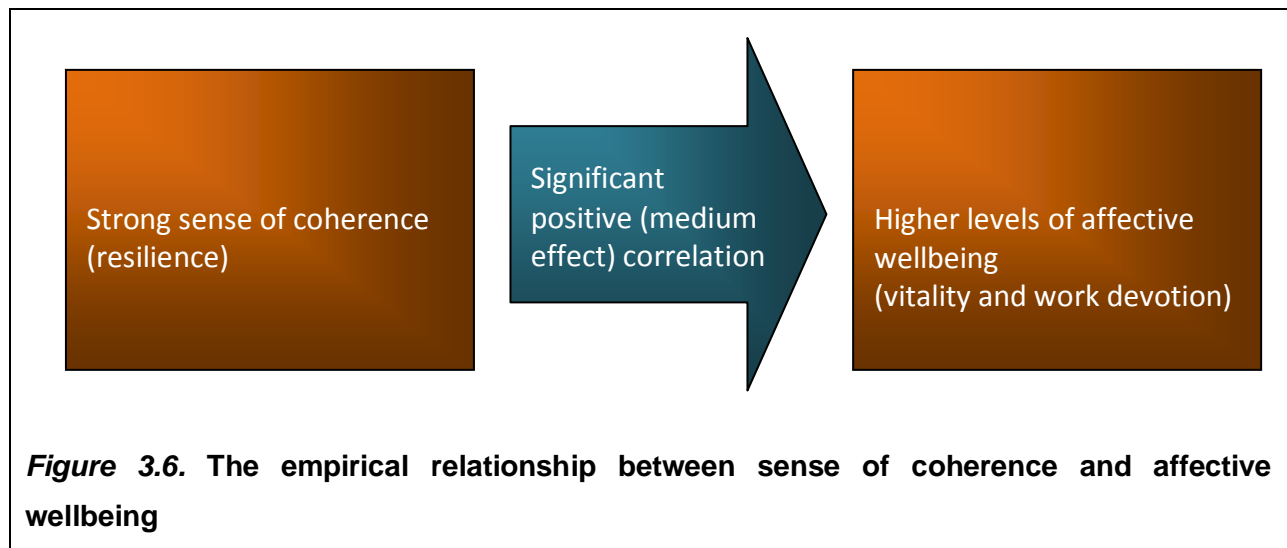
In this study, the results indicate that the wellness climate and resilience levels evident for the higher education call centre participants seem to be inferior compared to most industries and occupational groups. Sense of coherence has a direct effect on work-related wellbeing and work-related health: it affects employees' perceptions and coping strategies (Rothmann, 2009). Sense of coherence combined with job stressors is related to exhaustion and mental distance (Buys & Rothmann, 2010; Schaufeli & Enzman, 1998). The findings of the present study confirm the result of Basson and Rothmann (2002), and Wissing, De Waal and De Beer (1992) which showed sense of coherence and job demands to be strongly related to exhaustion (Rothmann, Jackson & Kruger, 2003).

According to Hobfall (2001), burnout results when individuals fail to acquire sufficient resources. Two interpretations are possible for the observed relation between a weak sense of coherence and higher burnout levels of the participants. Firstly, individuals with better and more resources are less vulnerable to resource loss and more inclined to gain better resources. Conversely, those with fewer resources are more vulnerable to resource loss and are less able to gain resources. Sense of coherence is regarded as a broad-based resource, while burnout could be the result of a lack of resources. Secondly, in line with research conducted by Rothmann, Jackson and Kruger (2003), it is possible that participants' sense of coherence was weakened because of their high levels of burnout.

The higher education call centre employees' overall affective wellbeing compared lower to most occupational groups in the external benchmark, but superior compared to the call centre sample in the financial and banking industry. The overall risk for disengagement seems to be much higher in the higher education call centre, reflecting a burnout propensity and lower morale (affective wellbeing). The supervisors in the higher education call centre have higher risk of disengagement and are at a higher risk of burnout. Overall, the results indicate a high risk wellness climate for the higher education call centre.

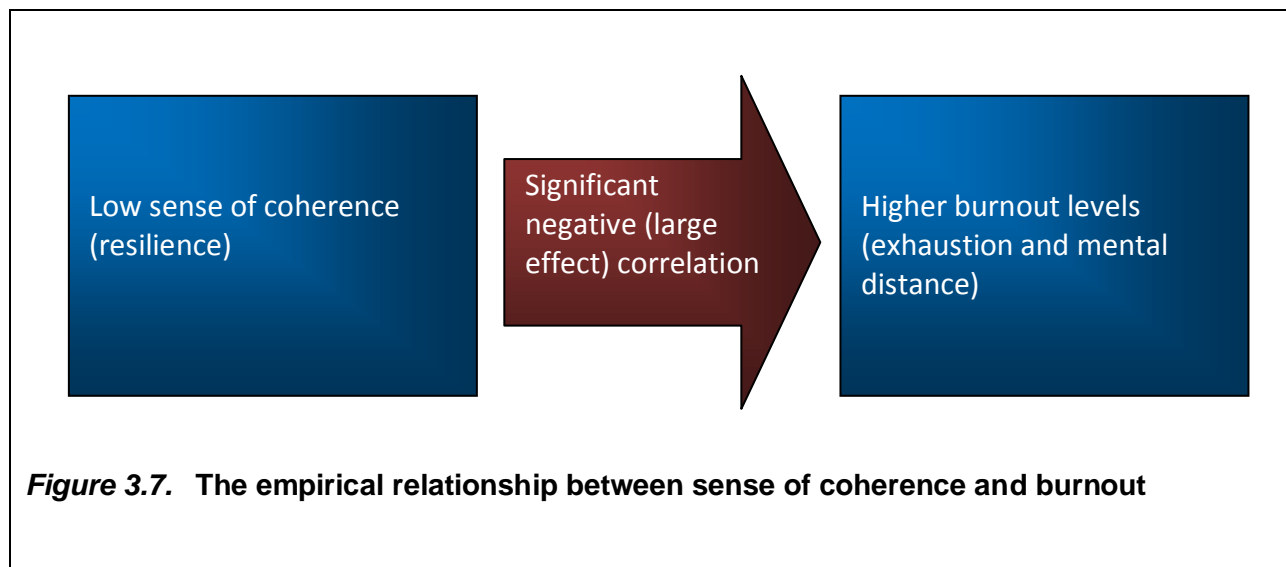
3.4.2 The relationship between sense of coherence, affective wellbeing and burnout

The findings of the present study are in line with previous studies which showed a significant positive relationship between engagement (affective wellbeing) and sense of coherence, and a significant negative relationship between sense of coherence, affective wellbeing and burnout (Bezuidenhout & Cilliers, 2010; Rothmann, et al, 2003; Rothmann, Steyn & Mostert, 2005; Wissing et al, 1992). The results further show that the participants' burnout levels significantly predicted their affective wellbeing. Figures 3.6, 3.7 and 3.8 provide an overview of the key results reported regarding the relationship between the employee wellness variables sense of coherence, affective wellbeing and burnout.

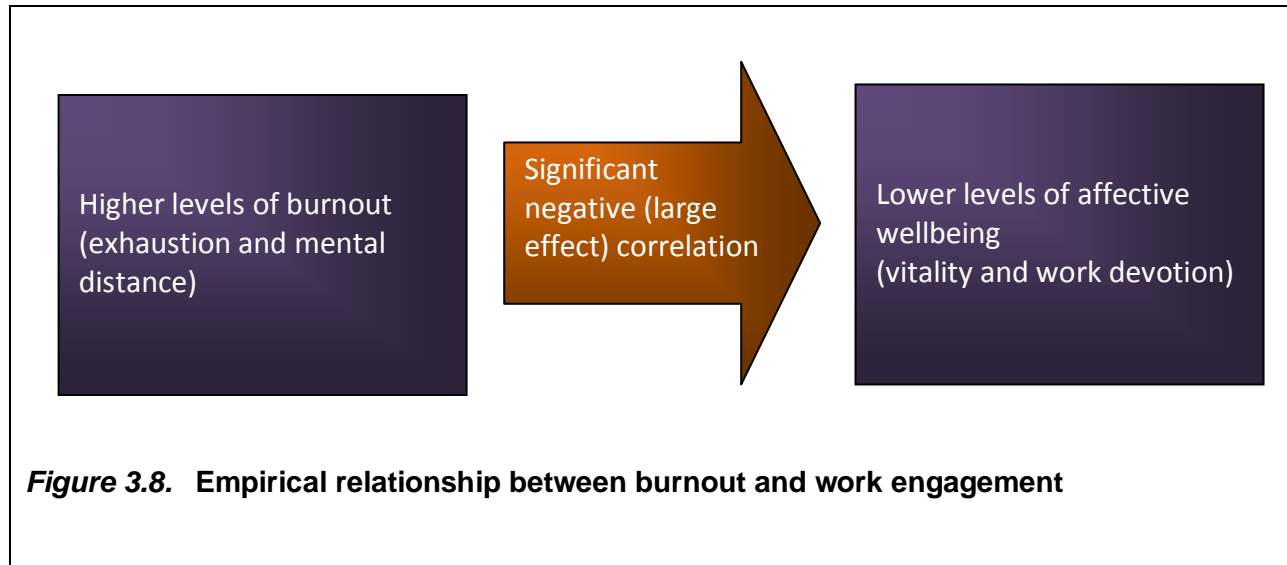


The significant positive relationship observed between sense of coherence and affective wellbeing in figure 3.6 suggests that the call centre participants may be able to understand behaviourally the demands of the job and be able to manage it. In other words, high resilience

levels (as represented by the participants' sense of coherence) result in higher levels of affective wellbeing and vice versa. Studies by Bezuidenhout and Cilliers (2010) confirm that a strong sense of coherence does indeed act as a buffer against the development of the pathogenic state of burnout, while a strong sense of coherence moderates the effects of job stressors on exhaustion (Rothmann, *et al.*, 2005). Call centre employees with a strong sense of coherence seem thus more likely to experience work engagement or affective wellbeing. This implies feelings of energy, resilience, persistence, enthusiasm and inspiration as indicated by studies by Bezuidenhout and Cilliers (2010).



As depicted in figure 3.7, the results showed that participants with a weak sense of coherence (low resilience) as a personal resource had significant higher burnout levels. Various researchers (Basson & Rothmann, 2002; Wissing, *et al.*, 1992) have also reported significant negative correlations between burnout and sense of coherence. Notwithstanding this inverse relationship between sense of coherence and burnout, research has shown that it is possible that sense of coherence, as a “meaning-providing variable” (Strúmpfer, 2003), may assist in warding off burnout, in recovering from it, and, probably, in strengthening engagement inclinations. Individuals with a strong sense of coherence could also experience burnout but will, in the long term, probably even benefit from it. They are likely to use temporary conditions of anguish as an opportunity for growth, for reorganising their life and work circumstances with newly discovered skills on self and life (Rothmann, *et al.*, 2003).



As illustrated in figure 3.8, the participants with higher levels of burnout had also significantly lower levels of affective wellbeing. They demonstrated significantly lower levels of vitality and felt less devoted to their work as a result of exhaustion and mental distancing. Exhaustion reflects indifference or a distant attitude towards work. Exhausted individuals view work negatively, unsympathetically or are detached from various aspects of their work (Bezuidenhout & Cilliers, 2010). It is noteworthy that the negative relationship between burnout and affective wellbeing is not absolute. Burnout and work engagement (affective wellbeing) are negatively correlated but are not the exact opposites of each other (Bezuidenhout & Cilliers, 2010; Schaufeli & Bakker, 2003). It is, thus, theoretically possible for a call centre employee to feel burnt out, but still to experience the vitality and work devotion that characterises affective wellness and still to become engrossed in other aspects of their job. This may be because affective wellbeing is seen as a form of mental resilience and the willingness to invest effort in one's work, even in the face of difficulty (Rothmann, 2009). Resilience is thus an important aspect in the manifestation of affective wellbeing, as also indicated by the strong, positive relationship between sense of coherence (resilience) and affective wellbeing. Feldt (1997) explains in this regard that people with a strong sense of coherence are likely to welcome challenges and to feel confident that they can handle them well. A strong sense of coherence could provide protection against burnout because a sense of coherence starts to develop at an early stage in life outside the work environment, and burnout only occurs after an individual has been employed for some length of time (Strümpfer, 2003).

The results showed that the call centre participants experienced high levels of exhaustion and mental distance and low levels of vitality and work devotion. The Job Demands-Resource (JD-R) model posits that job demands are associated with exhaustion, whereas job resources are associated with disengagement. Both high job demands and an absence of job resources are contributors to burnout (Bezuidenhout & Cilliers, 2010). According to the JD-R model of Demerouti, *et al.*, (2001), job demands (e.g. physical demands, time pressure and shift work) are associated with exhaustion, whereas a lack of job resources (e.g. feedback, participation in decision-making and supervisory support) is associated with disengagement. The JD-R model assumes two processes, namely an energetic process of wearing out in which high job demands exhaust the employee's energy, and a motivational process in which a lack of resources precludes dealing effectively with job demands and fosters mental withdrawal. Studies in South Africa (Pretorius, 1994; Storm & Rothmann, 2003) confirm that burnout is related to job demands. The risk profile presented in this study reveals that of a total of 102 participants, 49 (48%) were identified as high risk cases, and that the exhaustion and mental distance of the higher risk cases are higher than the South African norm.

The work of Ryan and Deci (2000) shows that social-contextual events will affect engagement. Ryan and Deci (2000) found that optimal challenges, feedback and freedom from demeaning evaluations facilitate intrinsic motivation (which seems to be related to work engagement affective wellbeing). Positive feedback enhances engagement, whereas negative feedback diminishes engagement (Rothmann, 2003). Rothmann (2009) reported that call centre employees often experience the work environment as unsupportive, amorphous, unappreciative, autocratic and non-stimulating, which, in turn, affects the psychological meaningfulness of work, and the safety and availability of these individuals. Rothmann (2009) also reports that the availability of the personal resources needed to deal with the demanding environment of a call centre is often inadequate and therefore amplifies employees' experiences of stressors and demands.

The call centre employee therefore generally experiences effects of distress (negative state), a state where individuals are not fully engaged in their work. Some effects are subsidiary task failure, strategic adjustment and compensatory costs and fatigue after-effects (Rothmann, 2009). If individuals neglect subsidiary activities, poor service delivery and interpersonal effectiveness are the results. Consequently, this could mean that individuals react slower and are prone to error and injury. Individuals have to shift to simpler strategies and use less working

memory as individuals can be prone to be forgetful (Rothmann, 2009). Individuals would want to work faster but with less accurate response. Research also suggests that individuals are less creative and fall back on fixed procedures (“auto mode”) and this can reduce individuals’ problem-solving abilities (Rothmann, 2009).

3.4.3 Differences between socio-demographic groups

Overall the results indicated significant differences between only a number of the biographical and wellness variables. Table 3.11 provides a summary of the key results.

Table 3.11

Summary overview of the source of significant differences within the biographical groups on sense of coherence, affective wellbeing and burnout

Biographical group	Sense coherence	Affective wellbeing	Burnout
	Significant differences	Significant differences	Significant differences
Gender			
Females	None	* low	*high
Males	None	* high	*low
Race			
	None	None	None
Age group			
	None	None	None
Marital status			
Single	* low	* low	* None
Married	* low	* low	* None
Widowed	* high	* high	* None
Divorced	* low	*low	* None

*p ≤ 0.05 (two tailed)

The present study explored broad trends regarding the differences between various gender, race, age and marital status groups in terms of the wellness variables (sense of coherence, affective wellbeing and burnout).

3.4.3.1 Gender

The respondents consisted of more females than males. The male participants had significantly higher levels of vitality and work devotion (affective wellbeing), and significantly lower burnout levels than their female counterparts. Hobfall (2000) argues that women may have less access to resources that could buffer the negative effects of stress and maintain wellness, although females tend to experience greater levels of burnout than men. According to Maslach (1982), and also confirmed by the studies of Bezuidenhout (2008), men and women experience burnout at fairly similar levels, but women tend to be more emotional than men and men tend to reveal more depersonalised and callous feelings about the people they work with. Research conducted by Blix, Cruise, Mitchell and Blix (1994) revealed that women tend to have higher burnout levels as they move up the ranks in organisations.

3.4.3.2 Race

In this study there was no significant difference between race and the variables relevant in this study. Previous research by Bezuidenhout (2008) revealed no significant differences between different population groups. This is interesting, as research conducted by Maslach (1982) in the United States of America revealed that black professionals are much less likely to suffer from burnout because of a more supportive family and friendship network.

3.4.3.3 Age

Overall, there were no significant differences between age groups in terms of the relevant variables. Individuals' sense of coherence develops by the time individuals are at the age of 30 (Antonovsky & Sagy, 1985). There thus seems to be a clear relationship between age and burnout, with younger people tending to experience greater burnout than older people.

3.4.3.4 Marital status

The divorced participants obtained significantly lower scores on sense of coherence, while single participants obtained significantly lower scores on affective wellbeing. The married and widowed participants had a stronger sense of coherence (resilience) and higher levels of affective wellbeing than those who were divorced or single. According to Maslach (1982),

married people or providers with families experience lower burnout levels. Moreover, being in a permanent relationship moderates the effects of stress-inducing factors experienced in the work life.

3.5 CONCLUSIONS

The findings of the present study have derived new insights which have added to the existing information on employee wellness. A comprehensive overview of the conclusions formulated for the study is provided in Chapter 4.

Overall, it can be concluded that the call centre of the higher education institution benchmarked below the South African norm, indicating it to be a high risk environment for inducing stress and high levels of burnout in call centre employees. Higher levels of burnout in this environment may lead to a lowered sense of coherence, indicating that the high levels of burnout in the higher education call centre environment negatively influence employees' wellbeing. Furthermore, the results showed that differences seem to exist between gender and marital status groups in terms of the variables of relevance to this study. Employee wellness practices should recognise the unique needs of males and females especially divorced and married participants therefore aim to lower call centre employees' burnout levels and increase their sense of coherence.

3.6 LIMITATIONS

Since the present study has been limited to a relatively small sample of participants all employed in the call centre of a South African higher education institution, the findings cannot be generalised to other industry contexts. Furthermore, given the exploratory nature of the research design, this study can yield no statements about causation. Associations between the variables have therefore been interpreted rather than established. These findings thus need to be replicated with broader samples across call centres from various industry, occupational, race, gender, age, and marital groups before final conclusions can be drawn about the relationship between individuals' sense of coherence, affective wellbeing and burnout. A comprehensive overview of all of the limitations identified is provided in Chapter 4.

3.7 RECOMMENDATIONS

Only the core recommendations will be focused on in this section, as the recommendations will

be elaborated on in more detail in Chapter 4. The findings of the study confirm the existence of significant relationships between individuals' sense of coherence and their affective wellbeing and burnout levels. The findings provide a useful framework for the design of employee wellness interventions specifically aimed at improving the overall wellness of higher education call centre agents. It is recommended that future research studies include all the variables that constitute Rothmann's (2009) SAEHW model to enable a more holistic framework for the design of employee wellness interventions in the higher education call centre environment.

3.8 CHAPTER SUMMARY

This chapter reported on the findings of the empirical research on employee wellness (sense of coherence, affective wellbeing and burnout). The findings have been integrated to reflect key observations regarding the relationship between the variables of relevance to the present study.

Chapter 4 discusses the conclusions and limitations of the study and makes recommendations for practice and future research.

CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Chapter 4 focuses on the conclusions drawn from this research study. In addition, the chapter highlights the limitations of both the literature review and the empirical results of the study and presents recommendations for the practical application of the findings and also for future research studies.

4.1 CONCLUSIONS

The following section focuses on the formulation of conclusions based on both the literature and the empirical study.

4.1.1 Conclusions in respect of the literature review

The general aim of this study was, firstly, to critically review employee wellness and the nature of the theoretical relationship between sense of coherence, affective wellbeing and burnout. Secondly, the aim of the study was to determine whether individuals from different gender, races, age and marital status groups differ in terms of the variables relevant to this study. The third aim was to determine the implications of the theoretical relationship for employee wellness practices. The general aims of the study were accomplished by both addressing and realising the specific aims.

4.1.1.1 The first aim: conceptualise employee wellness, sense of coherence, affective wellbeing and burnout based on the literature review and determine the theoretical relationship between these variables.

This first aim was realised in Chapter 2. In particular, the following conclusions may be drawn:

From the literature review it may be concluded that, despite the research which has been conducted into employee wellness, sense of coherence, affective wellbeing and burnout, a further refinement of the conceptualisation of these concepts is required.

For the purposes of this study, the approach to sense of coherence was based on Antonovsky's (1993) and Rothmann's (2009) view of the construct. From the literature review it may be

concluded that, in view of the comprehensive overview of the literature on this construct, a single common term still needs to be conceptualised and operationalised, as an individual's sense of coherence may either alleviate or aggravate his or her reactions to a stressor (Antonovsky, 1987). However, despite the fact that sense of coherence is defined as a relatively stable dispositional orientation, it is possible that occupational stress may impact on the sense of coherence of employees. Accordingly, a strong sense of coherence may help employees to understand stressors and to perceive them as both manageable and meaningful. In other words, a sense of coherence may moderate the effects of occupational stress with a sense of coherence, resulting in individuals' being able to handle a situation or being able to overcome a challenge if exposed to certain occupational stressors. It may, thus, be concluded that high levels of sense of coherence may assist individuals to manage stress and that these high levels of sense of coherence will promote affective wellbeing.

A work situation which is characterised by chronic, overwhelming demands that contribute to burnout is likely to erode an individual's sense of accomplishment or effectiveness and this, in turn, will influence the individual's job satisfaction (Maslach & Leiter, 2008). It would appear that burnout is the result of work overload and social conflict (Maslach & Leiter, 1997). Schaufeli and Enzmann (1998) are of the opinion that job stressors are the main contributors to employees' experiences of burnout. However, an individual's sense of coherence may either alleviate or aggravate his or her reactions to a stressor (Antonovsky, 1987). Individuals with a high sense of coherence may be able to moderate the effects of occupational stress and to perceive them as both manageable and meaningful and this, in turn, may encourage affective wellbeing.

It may, thus, be concluded that the relationship between sense of coherence, affective wellbeing and burnout is important to consider in organisational employee wellness programmes in order to help employees cope with occupational stress. A high sense of coherence may assist an individual to cope with occupational stress and this, in turn, may promote affective wellbeing.

Based on the literature review it may also be concluded that individuals who manifest a low sense of coherence feel less engaged in their work and they experience burnout. Accordingly, the conclusion is drawn that sense of coherence, affective wellbeing and burnout appear to be related, either directly or indirectly.

4.1.1.2 The second aim: to determine theoretically (based on a review of the literature) the role of gender, race, age and marital status on individuals' sense of coherence, affective wellbeing and burnout

This second aim was realised in Chapter 2. From the literature review it was concluded that biographical variables may be regarded as precursors to a sense of coherence, affective wellness and burnout. In other words, research has revealed inconsistent findings in terms of gender, race, age and marital status in relation to sense of coherence, work engagement (affective wellbeing) and burnout.

4.1.1.3 The third aim: to determine the implications of the theoretical relationships for employee wellness practices

The third aim was also realised in Chapter 2. Based on the literature review it may be concluded that a high sense of coherence and affective wellbeing both enable personal growth development and generate positive feelings. Such a relationship would, clearly, be of importance in employee wellness practices. The relationship between sense of coherence and affective wellbeing suggests growth areas which could have an impact on the performance ability of employees, which, in turn, would affect organisational performance (Rothmann, 2003).

Increased organisational support (which may include employee wellness practices) is likely to result in an increase in both organisational and employee wellness. It may, therefore, be concluded that, in order to achieve a healthy workforce, organisations should institute employee wellness practices in order both to improve and to enhance employee values, job satisfaction and commitment.

4.1.2 Conclusions regarding the empirical study

There were four main aims relating to the empirical study undertaken in this research:

To determine whether the higher education call centre environment will benchmark below or above the South African norm in terms of its overall wellness climate profile.

To empirically investigate the nature of the empirical relationship between sense of coherence, affective wellbeing and burnout, as manifested in a sample of call centre participants in a higher education institution environment

To empirically investigate whether differences exist between gender, race, age and marital status groups regarding their sense of coherence, affective wellbeing and burnout

To formulate recommendations for employee wellness practices and possible future research based on the findings of this research

Based on the findings, the proposition stated – the higher education call centre environment will benchmark below the South African norm in terms of its overall wellness climate profile – is accepted. Hypothesis H1, a statistically significant relationship exists between individuals' sense of coherence, affective wellbeing and burnout is also accepted. However, hypothesis H2, individuals' sense of coherence and burnout significantly influence their affective wellbeing is only partially accepted. Likewise, H3, significant differences between the individuals from different gender, race, age and marital status groups in terms of these individuals' sense of coherence, affective wellbeing and burnout, is partially accepted.

The following conclusion was drawn regarding the first research aim:

4.1.2.1 The first research aim: To determine whether the higher education call centre environment will benchmark below or above the South African norm in terms of its overall wellness climate profile.

Overall, the conclusion is made that a higher education call centre is a high-stress environment, and even more stressful than other work environments in the South African context. This conclusion is based on the following research findings:

The benchmark of higher education call centre employees scored relatively lower on affective wellbeing, which is indicated by the low scores on vitality and work devotion.

The call centre employees are experiencing low levels of energy at work. This suggests that the call centre employees may be experiencing high exhaustion at work and distancing themselves

from work.

Supervisors in the higher education call centre scored lower than the South African norm on vitality and sense of coherence and higher on exhaustion and mental distance.

The higher education call centre wellness climate and resilience level seem inferior compared to most industries.

The higher education institution call centre compared lower to most occupational groups but superior to the call centres sample in the financial and banking industry.

The overall affective wellness of call centre employee within the higher education institution compared relatively low to most occupational groups in the external benchmark. This is indicated by the high levels of exhaustion and mental distance.

Based on the results, it can also be concluded that the higher education call centre environment may require employee wellness practices that address the call centre agents' burnout levels specifically, which may influence their affective wellbeing and sense of coherence. This conclusion is based on the results achieved from the second research aim.

4.1.2.2 The second research aim: to investigate empirically the nature of the relationships between sense of coherence, affective wellbeing and burnout as manifested in a sample of call centre participants in a higher education institution environment

The following three conclusions were reached in this regard:

- a) Conclusion 1: *The higher education call centre employees with a strong sense of coherence tend to have higher levels of affective wellbeing.*

A strong sense of coherence suggests that the call centre employees are able to apply their personal resources in enhancing their resilience to cope with stressors in the call centre environment.

Having a strong sense of coherence suggests that the call centre employees have the personal

resources and resilience to moderate the effects of exhaustion.

The call centre employee with a strong sense of coherence may be more likely to experience affective wellbeing, which suggests feelings of resilience, energy, persistence and inspiration.

b) Conclusion 2: *Higher levels of burnout in the higher education call centre environment may lead to a lowered sense of coherence.*

The call centre employees seem to be experiencing high levels of exhaustion and mental distance, which appear to have lowered their resilience and ability to cope with stressors in the call centre environment.

c) Conclusion 3: *Higher levels of burnout in the higher education call centre environment negatively influence employee's affective wellbeing.*

The call centre employees who experience high levels of burnout appear to distance themselves from work, which may have led to a decline in work devotion in terms of the call centre.

In summary, as depicted in figure 4.1, based on the findings the following can be concluded:

Higher education call centre employees appear to have a higher wellness risk profile probably stemming from high burnout levels, and lower resilience (personal resources to cope or sense of coherence) than those at other South African institutions.

The overall wellness climate of a higher education call centre appears to be influenced negatively by high burnout levels.

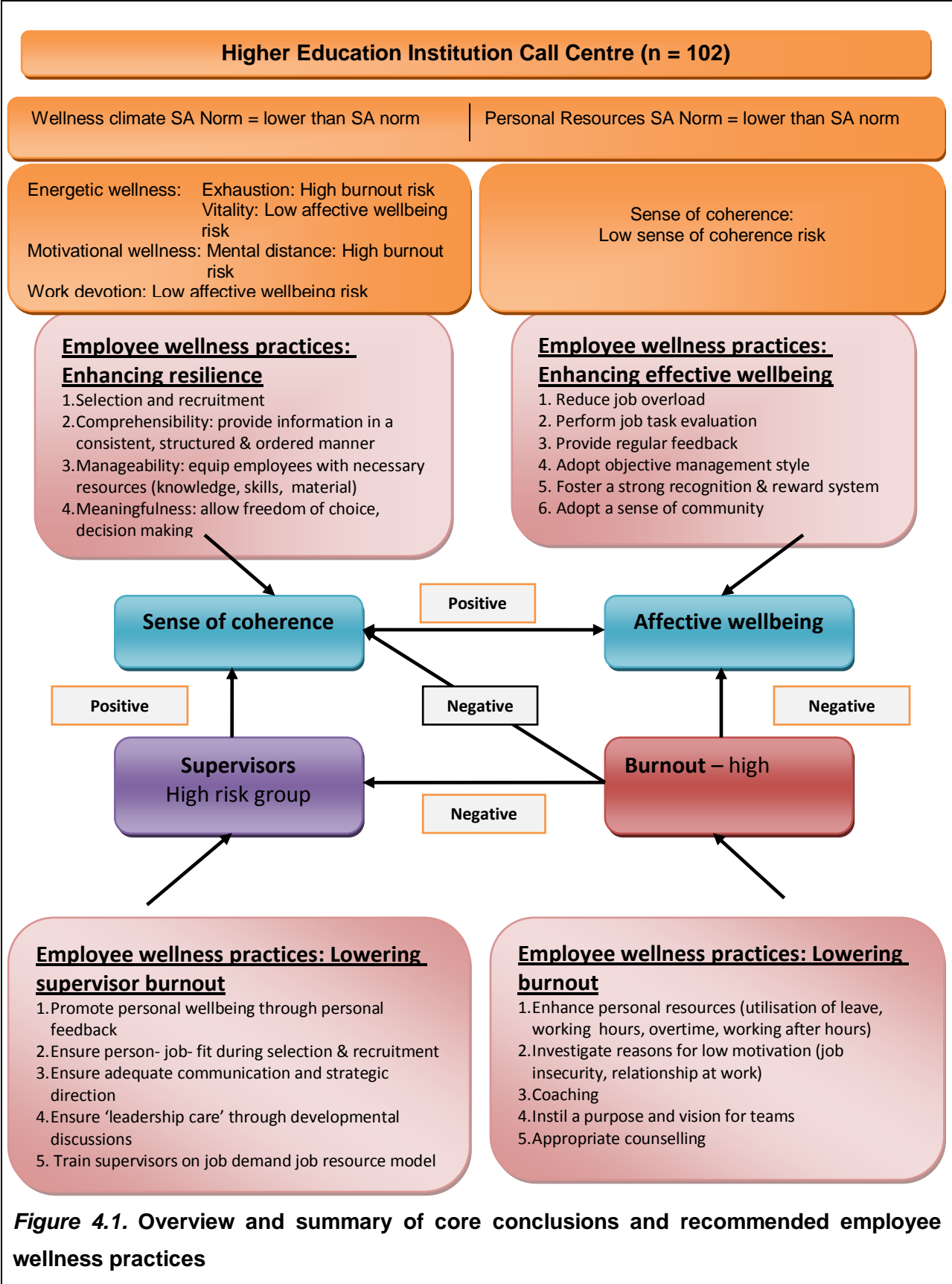
The supervisors are regarded as a high risk group and have a higher risk of disengagement and are at a risk of burnout.

Having a sense of coherence seems to act as a buffer against the development of a pathogenic state of burnout.

A strong sense of coherence seems to result in the call centre employees being more likely to experience affective wellbeing.

The call centre employees' burnout levels significantly lowered their affective wellbeing, resulting in them distancing themselves from work. A strong sense of coherence seems to counteract burnout and in turn helps to increase employees' affective wellbeing (work engagement).

Employee wellness practices should focus on lowering the call centre employees' burnout levels and increasing their sense of coherence, which may help to increase their affective wellbeing.



4.1.2.3 *The third aim: To empirically investigate whether differences exist between gender, race, age and marital status groups, regarding their sense of coherence, affective wellbeing and burnout*

The following conclusions were drawn:

a) *Male and female participants tend to differ significantly regarding their level of affective wellbeing and burnout.*

It would seem that females tend to experience greater levels of burnout than males. In this study the female participants tended to display a positive level of affective wellbeing (work engagement).

b) *Race tends to have no significant effect on sense of coherence, affective wellbeing and burnout.*

Overall, there were no significant differences found between race groups in terms of the variables relevant to this study.

c) *Age tends to have no significant effect on sense of coherence, affective wellbeing and burnout.*

Overall, there were no significant differences found between age groups in terms of the variables relevant in this study.

d) *Marital status has a significant effect on sense of coherence, affective wellbeing and burnout.*

Divorced participants obtained a significantly lower score on sense of coherence, while single participants obtained significantly lower scores on affective wellbeing than any other marital status group.

Married participants seem to experience greater resilience and overall affective wellbeing and lower levels of burnout compared to the single individuals.

Widowed participants seem to experience greater resilience and overall affective wellbeing and lower levels of burnout compared to the divorced, single and married individuals.

4.1.3 Conclusions regarding the central hypothesis

In respect of the central hypothesis it may be concluded that the higher education call centre institution benchmarked below the South African norm in terms of its overall wellness climate profile and that a significant relationship exists between sense of coherence, affective wellbeing and burnout in individuals. Furthermore, differences in respect of gender, race, age and marital status also influenced the participants' sense of coherence, affective wellbeing and burnout. The empirical study yielded statistically significant evidence in support of the central hypothesis.

4.1.4 Conclusions regarding the contribution of this study to the field of industrial and organisational psychology

Both the findings from the literature review and the empirical results have contributed definite new knowledge in the following manner to the field of both Industrial and Organisational Psychology and, in particular, to employee wellness practices.

The literature review provided considerable insight into the employee wellness of individuals which is, in turn, related to their ability to cope. In particular, the relationship between sense of coherence, affective wellbeing and burnout provided valuable new knowledge which may be used to develop employee wellness practices for the higher education call centre environment.

The conclusions drawn from the literature review indicate that practitioners should consider theoretical models of sense of coherence, affective wellbeing and burnout when working within the field of employee wellness and the theoretical relationship between these variables and differences between males, females and marital status needs to be considered.

The results of the empirical study provided new insight regarding the relationship between sense of coherence, affective wellbeing and burnout also indicated the higher education institution to be a high risk environment. Therefore, organisations should focus on enhancing call centre employees' sense of coherence and affective wellbeing, which would lower the levels

of burnout. Accordingly, appropriate counselling and coaching would assist call centre employees to reduce burnout in their work.

It is advisable that organisations increase the call centre agent's sense of coherence by implementing employee wellness practices which include providing information in a consistent, ordered and structured manner, thus assisting call centre employees to comprehend call centre work, as well as equipping call centre employees with the necessary resources, such as knowledge, skills and material, so that employees are able to manage their workload. It is also advisable to allow freedom of choice in decision making in the work they do, which would result in employees gaining a sense of meaningfulness, which could result in having a positive effect on their wellbeing and experiencing a greater sense of wellbeing (Rothmann, 2009).

It is incumbent on organisations to apply the relevant legislation and management standards which ensure health and wellness within organisations. This is particularly relevant if the aim of an organisation is to maintain a work environment that is safe and without risk to the health of employees – accidents and illness account for more than 4% of the cost to the global economy of the gross domestic product annually (Sieberhagen, Rothmann & Pienaar, 2009).

In line with the assumptions of the pathogenic paradigm, the traditional focus of research and practices regarding employee health and wellness has been on illness. However, this focus should now shift to the origins of health and strength. In other words, the focus of employee health and wellness should not only be on those factors in the workplace that affect employees negatively (e.g. stress and strain), but also on ways in which to promote the positive aspects of employee health and wellness (e.g. good supervisory relationships, collegial support, growth opportunities and adequate job resources) (Sieberhagen, Rothmann & Pienaar, 2009).

Considering the high stress risk profile of the supervisor participants, employee wellness interventions could assist supervisors to cope with call centre work and this would relate positively on their wellbeing (Rothmann, 2009). Supervisory relationships include “leadership care” which, in turn, implies developmental discussions. Supervisory relationships may entail coaching programmes designed to enhance the psychological meaning of supervisors and empower individuals on an emotional level to deal in a positive way with people issues in their-day-to-day operations (Rothmann, 2009). Developmental discussions should include what an

incumbent enjoys about his/her work and what constitutes a “great day” at work, which will enlighten management in terms of the support needed in the call centre environment (Rothmann, 2009).

Collegial support includes the implementation of teamwork, with support and appreciation being shown for management and colleagues. Growth opportunities include implementing job enrichment programmes whilst ensuring that employees fit their jobs, thus enhancing the psychological meaning of the jobs concerned. Adequate job resources include the maintenance of a balance in terms of the workload (especially pace and amount of work and emotional load). In addition, it is essential that equity and human capability be promoted (Rothmann, 2009).

The results suggest that, although most participants in the higher education call centre are engaged in their work, there seems to be a propensity to burnout. This may manifest in impaired presenteeism (despite complaints and ill health employees still go to work), over-commitment presenteeism (high motivation in terms of which employees put in excessive effort as a way of coping with job insecurity), and disengagement presenteeism (low motivation in terms of which employees do not invest energy in a focused manner in their work) (Rothmann, 2009).

Individuals should understand the effects of exhaustion and the lack of effort-recovery on their health, wellness, and quality of life (work and personal). Accordingly, they should be empowered to manage exhaustion on a personal level whilst, on an organisational level, effort should be invested in promoting balance in terms of workload and expected outputs, targets and deadlines (Rothmann, 2009).

The findings of this research have added to the existing information on employee wellness. In addition, new insights have been provided regarding call centre employees’ wellness experiences in the higher education call centre environment. Employee wellness interventions for improving the overall wellness climate have also been proposed.

The study has highlighted the fact that differences between biographical groups do play a role in terms of employees’ sense of coherence, affective wellbeing and burnout. This finding is obviously of particular relevance within the multicultural South African context.

4.2 LIMITATIONS OF THE STUDY

Several limitations in terms of both the literature review and the empirical study have been identified. The limitations of this study will be discussed in the following section.

4.2.1 Limitations of the literature review

Despite the fact that a broad research base does exist in respect of sense of coherence, affective wellbeing (work engagement) and burnout, there have been few studies conducted that have focused specifically on the relationships between the constructs in the higher education call centre environment.

In this study, the literature review was limited to the SAEHW model (Rothmann, 2009). In light of the scientific confines of this study, other models and paradigmatic perspectives were not considered.

4.2.2 Limitations of the empirical study

The results of the study represent a small sample in a particular organisation only. Accordingly, caution should be exercised when generalising the findings to the general population and other occupational groups. The sample represented the call centre environment of a higher education institution only. Other call centre studies may have added insightful data.

The fact that limited research has been conducted on sense of coherence, affective wellbeing and burnout among South African higher education call centre personnel made it difficult to refer to previous studies. This study relied on self-reporting measures only and it is recommended that objective indicators of personal behaviour, such as absenteeism, productivity and performance, be included in the future.

Despite the aforementioned limitations, the results of this study did contribute to both the empirical analysis of the relationship between sense of coherence, affective wellbeing and burnout, as well as the analysis of differences between the biographical groups. The benchmarking analyses also provided valuable new insights in terms of the risk profile of the higher education call centre environment, which call for formalised employee wellness programmes. Accordingly, the findings of this study may well be used to inform the formulation

of employee wellness practices for the higher education call centre environment.

4.3 RECOMMENDATIONS

Based on the findings, conclusions and limitations of this study, the following recommendations for both industrial and organisational psychology and further research are offered.

4.3.1 Recommendations regarding employee wellness

The general aim of the study was to assess the overall wellness climate risk profile for higher education institution call centre employees for national benchmarking purposes and to determine the relationship between sense of coherence, affective wellbeing and burnout. In addition, the study aimed to determine whether sense of coherence, affective wellbeing and burnout differ significantly in terms of biographical data (gender, race, age and marital status groups). Differences were observed between gender and affective wellbeing and burnout, and between marital status and sense of coherence, burnout and affective wellbeing.

It is important to design employee wellness interventions that will both strengthen the sense of coherence of call centre employees and lower their levels of burnout. Such interventions would assist individuals to handle daily stress. According to Rothmann (2003), three levels of intervention strategies should be considered, namely, primary, secondary and tertiary level interventions. Primary interventions would include organisational development interventions in general to influence culture and values to contribute to healthier work places. Psycho-educational programmes should be developed and presented to combat burnout and to promote affective wellbeing. Reducing job demands which play a central role in the process that might lead to burnout is warranted. Such strategies include job redesign, flexible work schedules and goal setting to increase job resources through participative management, increased social support and team building (Rothmann, 2009).

Secondary level interventions would include strategies such as stress-management programmes that use cognitive-behavioural approaches (Schaufeli & Enzmann, 1998) which are effective in reducing burnout. Tertiary level interventions are targeted at the individual, as there is well-documented evidence to prove that counselling is effective in improving the psychological wellbeing of employees (Rothmann, 2003).

The following interventions are proposed in order to address the sense of coherence, affective wellbeing and levels of burnout needs of individuals:

4.3.1.1 Sense of coherence

Despite the fact that sense of coherence was defined as a stable disposition, job stress may impact on employees' sense of coherence (Antonovsky, 1987).

It is incumbent on organisations to deal with a low sense of coherence in the following ways:

Comprehensibility. Provide information in a consistent, structured, ordered and understandable format.

Manageability. Equip employees with the necessary knowledge, skills, material, instruments and other resources and ensure that there is a balance in the load of tasks to be handled.

Meaningfulness. Allow a degree of independence and freedom of choice in the employees' performance of their tasks, promote participation in decision making, and allow employees the freedom to disagree with their supervisors and to discuss what needs to be done with their supervisors (Rothmann, 2009).

4.3.1.2 Affective wellbeing

Affective wellbeing, which characterises work engagement, can be enhanced by reducing job overload. In terms of job overload, it is essential that organisations assess staff–workload ratios by performing job and task evaluations, and that they ensure realistic and fair performance management by setting realistic goals and performance indicators. Regular performance feedback discussions should be encouraged to enable goals to be reviewed and constructive feedback given. If emotional overload becomes evident it will become necessary to train employees in conflict management and the management of difficult clients (Rothmann, 2009).

Personal resources may be optimised by nurturing feelings of choice and control on the part of

employees. This may be realised by enhancing and increasing flexibility and autonomy – manage outputs by applying an objective management style (Rothmann, 2009).

It is also recommended that organisations foster a strong recognition and reward system. A reward system is necessary in order to deal with “good fit”, in terms of which the job incumbent is enabled to implement an action plan to increase compensation, enhance acknowledgement and be promoted (Bezuidenhout, 2008)

A sense of community may be fostered by creating strategies that may be implemented in order to impose a good fit, and which will promote conflict resolution as a result of improved communication and unity.

4.3.1.3 Burnout

In terms of individuals who manifest diminished energetic wellness (high exhaustion and/or low vitality), it is recommended that personal resources be enhanced. This may include an assessment of leave utilisation, working hours and overtime hours, as well as working after hours at home in order to ensure that these all be managed efficiently so as to allow for adequate effort-recovery periods. Organisations could assist by monitoring exhaustion levels on a regular basis and by presenting awareness programmes pertaining to the importance of effort-recovery for wellness, and health and work outcomes, as well as for both active and passive recovery. An understanding of stress management and balance in life will assist employees in coping with stress and job demands (Rothmann, 2009).

In terms of individuals who display decreased motivational wellness (high mental distance and/or low work devotion), it is recommended that organisations investigate the reasons for low motivation, job insecurity, relationships at work, reciprocity perceptions and diversity difficulties, ensure a purpose and vision for the team as well as implement programmes aimed at creating a motivational climate in the workplace through policies and procedures and the training of supervisors in participative leadership (several environments are under-led and over-managed). Individuals with low motivational wellness could receive coaching while the wellness levels could be monitored in a proactive way (Rothmann, 2009).

In view of the fact that high levels of exhaustion may lead to ill health, organisations should

determine the availability of appropriate counselling services, as well as be willing to utilise such services (internal and/or externally). In addition, it is essential that consideration be given to either counselling or recovery leave for individuals who are manifesting high levels of exhaustion and/or burnout (Rothmann, 2009).

4.3.1.4 Industrial psychologists and practitioners working in the field of employee wellness

Health and wellness have become extremely important issues within organisations, especially in view of the fact that low production, high production errors and accidents, high labour turnover, increased absenteeism and high medical costs may all be considered as symptomatic of workplace stress (Sieberhagen *et al.*, 2009). Statistics confirm that, at any given time, one quarter of South Africa's workforce is affected by problems that contribute to a deterioration in their performance at work, with South Africa's workforce productivity being ranked 31st out of 45 countries (Noemdoe, 2002). In addition, in 1996, the cost of injuries at work in South Africa amounted to R4.7 billion a year (Noemdoe, 2002).

Stress is regarded as a serious occupational risk in South Africa. The ten most frequent claims accepted by medical schemes relate to the treatment of stress-related illnesses (high blood pressure, high cholesterol, asthma, ischaemic heart disease and gastro-oesophageal reflux). Furthermore, 75% of all visits to primary healthcare facilities are stress-related (Sieberhagen *et al.*, 2009). Rothmann (2005) analysed the occupational stressors pertaining to 14 different occupations in South Africa and concluded that stress levels are particularly high in respect of workers in certain occupations, especially in the health sector, correctional officers and call centre operators (Sieberhagen *et al.*, 2009).

Some organisations have implemented programmes designed to improve safety. These initiatives or interventions include educational, organisational and environmental activities which are aimed at bringing about lifestyle and behavioural changes in respect of employees and their families (De Villiers, 2009). These programmes have assisted individuals to make changes in their personal lives, for example, healthy eating and exercising, and, thus, to improving their lifestyles. This has had the added advantage for organisations of reducing absenteeism and turnover (De Villiers, 2009).

Participants who tend to experience specific stressors related to psychological detachment from

the organisation are at risk of turnover (Rothmann, 2009). The fact that employees feel disempowered, isolated and unable to influence their situation at work affects the psychological meaning, safety and availability of these employees (low morale). It is, thus, essential that organisations provide leadership and line manager support, guidance and direction, as well as the job information necessary to execute tasks and assist clients. It is also recommended that organisations create team spirit among colleagues by taking into account aspects such as ergonomics (Rothmann, 2009).

Increasing numbers of females are entering the work environment with most females taking on a multiplicity of roles. This, in turn, brings about added stress and, hence, the importance of offering assistance in terms of work–life balance programmes, including stress management programmes and programmes about the importance of balance in life. It is essential that individuals should understand the effect of exhaustion and lack of effort-recovery on their health, wellness and quality of life (work and personal), and that they be empowered to manage their exhaustion levels at a personal level whilst, at an organisational level, effort should be invested in promoting balance in terms of workload and expected outputs, targets and deadlines (Rothmann, 2009).

4.3.2 Future research

In light of the conclusions and limitations of this study discussed the following recommendations for future research are offered:

There is a continued need for further research into the relationship between sense of coherence, affective wellbeing and burnout within the South African higher education call centre context. In addition, it is recommended that future studies address the limitations inherent in this study. This study was limited to a small sample of predominantly black, single, female employees and, thus, it is recommended that further studies be undertaken by selecting a larger sample representing various age, gender, race and occupational groups.

Despite the fact that this study examined the relationship between sense of coherence, affective wellbeing and burnout, and also the ability to cope with stress, this relationship between the constructs does require further research in terms of qualitative methods, such as interviews, in order to provide a greater depth to the understanding of the constructs.

4.4 INTEGRATION OF THE RESEARCH

This study investigated the overall wellness climate, and the relationship between sense of coherence, affective wellbeing and burnout. The results suggest that a relationship does, indeed, exist between these variables and that this relationship may provide insight into employee wellness practices.

Research is an important factor in respect of health and wellness, as it not only assists human resource practitioners and managers, as well as employee wellness practitioners, by asking the relevant questions necessary for maintaining employees' health and wellness. Research in South Africa has proved that the symptomatic experience of workplace stress affects health and wellness in the following ways – organisations experience the effects of these symptoms in the form of unapproved absences from work (Vaida, 2005): low productivity, and high labour turnover rates. Clearly the concepts of both health and wellness and coping with stressful situations must be accorded equal importance with those studies involving leadership, motivation and attitude (De Villiers, 2009).

In conclusion, the findings of the study revealed new insights into the way in which employee wellness relates to the ability of individuals in the higher education call centre environment to cope as expressed by their sense of coherence. The knowledge gained in terms of the relationship between sense of coherence, affective wellbeing and burnout may well have practical implications for employee wellness practices. It is trusted that this research will inform organisational practices aimed at enhancing the health and wellness of employees in the higher education call centre environment.

4.5 CHAPTER SUMMARY

By focusing on both the literature review and the empirical study, this chapter discussed the conclusions drawn from this study as well as the possible limitations of the study. Recommendations were offered in respect of employee wellness practices as well as recommendations for future research. Finally, the study was integrated by highlighting the fact

that the results supported the existence of a relationship between sense of coherence, affective wellbeing and burnout.

REFERENCES

Adams, T.B., Bezner, J.R. & Steinhardt, M. (1997). The conceptualisation and measurement of perceived wellness: integrating balance across and within dimensions. *American Journal of Health Promotion*, 12 (3), 380-388.

Antonovsky, A. (1979). *Health, stress and coping*. San Francisco, CA: Jossey-Bass.

Antonovsky, A. (1987). *Unravelling the mystery of health: How people manage stress and stay well*. San Francisco, CA: Jossey-Bass.

Antonovsky, A. (1987). Health promoting factors at work: The sense of coherence. In R. Kalimo, M. Eltatawi, & C. L. Cooper (Eds.), *Psychological factors at work and their effects on health* (pp. 153–167). Geneva: World Health Organization.

Antonovsky, A. (1992). Can attitudes contribute to health? *Advances: The Journal of Mind-Body-Health*, 8(4), 33–39.

Antonovsky, A. (1993). The structure and properties of the Sense of Coherence Scale. *Social Science and Medicine*, 36, 725–733.

Antonovsky, H., & Sagy, S. (1985). The development of a sense of coherence and its impact on response on stress situations. *The Journal of Social Psychology*, 126, 213–255.

Aldana, S.G., Sutton, L.D., Jacobson, B.H., & Quirk, M.G. (1996). Relationships between leisure time physical activity and perceived stress. *Perception and Motor Skills*, 82(1), 315–321.

Armistead, C., Kiely, J., Hole, L., & Prescott, J. (2002). An exploration of managerial issues in call centers. *Managing Service Quality*, 12(4), 246–256.

Bakker, A. B., & Demerouti, E. (2007). The Job-Demands Resource Model: State of the art. *Journal of Management Psychology*, 22(3), 309–328.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223.

Bakker., A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the job-demands-resources model. *European Journal of Work and Organisational Psychology*, 12, 393–417.

Bakker. A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the job demands-resource model. *European Journal of Work and Organizational Psychology*, 12(4), 393–417.

Basson, M. J., & Rothmann, S. (2002). Sense of coherence, coping and burnout of pharmacists. *South African Journal of Economic and Management Sciences*, 5(1), 35–62.

Beehr, T. A., Bowling, N. A., & Bennett, M. M. (2010). Occupational stress and failures of social support: When helping hurts. *Journal of Occupational Health Psychology*, 15(1), 45–59.

Beehr, T. A., & Franz, T. M. (1987). The current debate about the meaning of job stress. In J. In Vancevich & D. Gangster (Eds), *Job stress: From theory to suggestions* (pp. 5–18). New York: Hawthorne Press.

Bergh, Z. C., & Theron, A. L. (2009). *Psychology in the work context* (4th ed.). Cape Town: Oxford University Press.

Bezuidenhout, A. (2008). Burnout, work engagement and sense of coherence in female academics at two tertiary institutions in South Africa. (Unpublished doctoral dissertation). University of South Africa, Pretoria, South Africa.

Bezuidenhout, A., & Cilliers, F. V. N. (2010). Burnout, work engagement and sense of coherence in female academics in higher-education institutions in South Africa. *South African Journal of Industrial Psychology*, 36(1), Art.#872.10 pages. DOI: 10.4102/sajip.v36i1.872.

Blix, A. G., Cruise, G. J., Mitchell, B. M., & Blix, C. G. (1994). Occupational stress among university teachers. *Educational Research*, 36, 157–169.

Briggs, A. (1998). *The 1998 South African call centre benchmarking report*. Cape Town. The Merchants Group.

Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis*. London: Heinemann.

Buys, C., & Rothmann, S. (2010). Burnout and engagement of reformed church ministers. *South African Journal of Industrial Psychology*, 36(1), Art.# 825.11pages.DOI: 10.4102/sajip.v36i1L.825.

Cartwright, S., & Cooper, C. L. (2009). *The Oxford handbook of organizational well being*. Oxford: Oxford University Press.

Cherniss, C. (1980). *Professional burnout in the human service organisations*. New York: Praeger.

Cilliers, F. (2001). The role of sense of coherence in group relations training. *Journal of Industrial Psychology*, 27(3), 13–18.

Coetzee, S., & Cilliers, F. (2001). Psychofortology: Explaining coping behaviour in organizations. *Industrial Organizational Psychologist*, 38(4), 62–68.

Coetzee, S. C., & Rothmann, S. (2005). Occupational stress, organizational commitment and ill health employees at a higher education institution in South Africa. *South African Journal of Industrial Psychology*, 31(1), 47–54.

Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. *Journal of Occupational Psychology*, 64, 253–268.

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin*, 112(1), 153–159.

Cooper, C. L., & Cartwright, S. (1997). An interventions strategy for workplace stress. *Journal of*

Psychometric Research, 43(1), 7–16.

Cooper, C. L., Dewe, P. J., & Driscoll, M. P. (2001). *Organisational stress: A review and critique of theory, research, and applications*. Thousand Oaks, CA: Sage.

Covey, S. (1996). *First things first*. New York: Free Press.

Cox, T. (1978). *Stress*. London: Macmillan.

Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco, CA: Jossey-Bass.

Deery, S., & Kinnie, N. (2004). Introduction: The nature and management of call centre work. In S. Deery & N. Kinnie (Eds.), *Call centres and human resource management: A cross-national perspective* (pp. 1–21). New York: Palgrave Macmillan.

DeLorey, D. S., Kowalchuk, J. M., & Paterson, D. H. (2003). The effect of age on VO₂ kinetics and the adaptation of muscle deoxygenation at exercise onset. *Med SciSports Exerc*, 35(5), 4-5.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli., W. B. (2000). The model of burnout and life satisfaction amongst nurses. *Journal of Advanced Nursing*, 32, 454–464.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli., W. B. (2001). The Job-Demands Resource model of burnout. *Journal of Applied Psychology*, 86, 499–512.

De Villiers, M. D. (2009). The relationship between employee wellness and career anchors. (Unpublished Masters Dissertation). University of South Africa. Pretoria, South Africa.

Dewe, P. J. (1992). The appraisal process: Exploring the role of meaning, importance, control and coping in work stress. *Anxiety, Stress and Coping*, 5, 95–109.

Dieckhoff, K., Freigang-Bauer, I., Schröter, W., & Viereck, K. (2002). Call report 1. Branchenbild call center [Job-sector overview call center]. Hamburg: Verwaltungs-Berufsgenossenschaft.

Dormann, C., & Zijlstra, F. R. (2003). Call centres: High on technology-high on emotions.

European Journal of Work and Organizational Psychology, 12(4), 305–310.

Douglas, R., May, D.R., Gilson, R. L., & Harter, L. M. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational Psychology*, 77, 11–37.

Edwards, J. E., Thomas, M. D., Rosenfeld, P., & Booth-Kewley, S. (1997). *How to conduct organisational surveys*. Thousand Oaks, CA: Sage.

Eriksson, M. (2007). *Unravelling the mystery of salutogenesis: The evidence base of salutogenic research as measured by Antonovsky's sense of coherence scale* (2nd ed.). Research report 1. Abo Akedermi University Vasa Turku.

Feldt, T. (1997). The role of sense of coherence in wellbeing at work: Analysis of main and moderator effects. *Work and Stress* 11, 134–147.

Feldt, T., Lesken, E., Kinnunen, U., & Mauno, S. (2000). Longitudinal factor analysis models in the assessment of stability of the sense of coherence. *Personality and Individual Difference*, 28, 239–257.

Fields, A. (2005). *Discovering statistics using SPSS*. London: Sage.

Finegan, J. E. (2000). The impact of person and organisational values on organizational commitment. *Journal of Occupational and Organisational Psychology*, 73, 149.

Fouche, C. B., & De Vos, A.S. (2005). Quantitative research designs. In A. S. De Vos, H. Strydom, C. B. Fouche & A. C. Delpont (Eds.), *Research at grass roots for the social sciences and human service professionals* (2nd ed., pp. 127–136). Pretoria: Van Schaik.

Frenkel, S. J., Tam, M., Korczynski, M., & Shire, K. (1998). Beyond bureaucracy? Work organisation in call centres. *The International Journal of Human Resources Management*, 9(6), 957–979.

Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues*, 30, 159–165.

Gaines, J., & Jermier, J. M. (1983). Emotional exhaustion in a high stress organisation. *Academy of Management Journal*, 26(4), 567–586.

Gans, N., Koole, G., & Mandelbaum, A. (2003). Telephone call centres: tutorial, review and research prospects. Retrieved September 2010, from <http://74.125.155.132/scholar/q=cache:3x9n6Amk9REJ:scholar>. Google.com

Greenhaus, J.P., Callanan, GA. & Godschalk, VM. (2000). *Career Management* (3rd ed.). Orland, FL: Dryden Press.

Gibson, I. M., & Cook, M. J. (1997). Do health questionnaires which do not consider sex differences miss important information? *Psychological Report*, 81, 163–171.

Gilmore, A. (2001). Call centre management: Is service quality a priority? *Managing Service Quality*, 1(3), 153–159.

Glass, D. C. & McKnight, J. D. (1996). Perceived control depressive symptomatology and professional burnout: A review of the evidence. *Psychology and Health*, 11, 23–48.

Gropp, L. (2006). An Exploratory Factor Analysis on the measurement of Psychological Wellness. (Unpublished Masters Dissertation). University of South Africa. Pretoria, South Africa

Gropp, L., Geldenhuys, D., & Visser, D. (2007). Psychological wellness constructs: Relationship and group differences. *South African Journal of Industrial Psychology*, 33(3), 24–34.

Gulle, G., Tredoux, C., & Foster, D. (1998). Inherent and organisational stress in the SAPS: An empirical survey in the Western Cape. *South African Journal of Psychology*, 28, 129–134.

Hakanen, J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sickness*, 113, 479–487.

Harter J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between

employee satisfaction, employee engagement and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268–279.

Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. *Flourishing Positive Psychology and Life Well-Lived*, 36, 29–33.

Haynes, S. N., & O'Brien, W. H. (2000). *Principles and practices of behavioural assessment*. New York: Kluwer Academic/ Plenum.

Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, 3(3), 118–126

Hittner, J. B. (2007). Factorial invariance of the 13-item sense of coherence scale across gender. *Journal of Health Psychology*, 12(2), 273–280.

Hobfall, S. E. (2000). Social and psychological resources and adaptation. *Review of General Psychological*, 6, 307–324.

Hobfall, S. E. (2001). The influence of culture, community and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337–369

Hobfall, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 113–129). Washington D.C.: Taylor & Francis.

Hobfall, S. E., & Shirom, A. (1993). Stress and workload in the workplace: Conservation of resources. In R. T. Golembieski (Ed.), *Handbook of organizational behavior* (pp. 41–60). New York: Dekker.

Hochschild, A. (1983). *The managed heart*. Berkeley: University of California Press.

Hockey, G. J. (1997). Compensatory control in the regulation of human performance under stress and high workload: A cognitive energetic framework. *Biological Psychology*, 45, 73–93.

Holdsworth, L., & Cartwright, S. (2003). Empowerment, stress and satisfaction: An exploratory study of a call centre. *Leadership and Organisation Development Journal*, 24(3), 131–140.

Holman, D. (2004). Employee wellbeing in call centres. In S. Deery, & N. Kinnie (Eds), *Call Centres and human resource management: A cross-national perspective* (pp. 223–245). New York: Palgrave Macmillan.

Holman, D. J. (2005). Call centres. In D. J. Holman, T. D. Wall, C. W. Clegg, P. Sparrow, & A. Howard (Eds.), *The essentials of the new work place: A guide to the human impact of modern working practices* (pp. 111–131) Chichester, UK: Wiley.

Holman, D. J. (2008). Call centres. In D. J. Holman, T. D. Wall, C. W. Clegg, P. Sparrow & A. Howard (Eds), *The new workplace: A guide to the human impact of modern working practices* (pp. 115–134). Chichester: Wiley.

Houkes, I., Janssen, P. P. M., De Jonge, J., & Nijhuis, F. J. N. (2001). Specific relationships between work characteristics and intrinsic motivation, burnout and turnover intention: A multi-sample analysis. *European Journal of work and Organisational Psychology*, 10, 1–23.

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672.

Hyvönen, K., Feldt, T., Salmela-Aro, K., Kinnunen, U., & Mäikangas, A. (2009). Young managers' drive to thrive: A personal work goal approach to burnout and work engagement. *Journal of Vocational Behaviour*, 75(2), 183–196.

Iaffaldano, M. A., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. *Psychology Bulletin*, 97, 251–273.

Ivancivich, J.M., Konopaske, R., & Matteson, M.T. (2005). *Organisational behaviour and*

management. Boston: McGraw-Hill.

Janse van Rensburg, Y-E. (2010). Engagement in call centres: Exploring eliciting Factors. (Unpublished Masters Dissertation). University of Stellenbosch, Stellenbosch, South Africa.

Johnson, G. A. (1992). Sense of coherence, perceived health and the performance of health promoting behaviour. (Unpublished doctoral dissertation). Boston, Boston College.

Jones, F., & Bright, J. (2001). *Stress: Myth, theory and research*. London: Pearson Educational.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724.

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, 67, 341–349.

Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behaviour*, 43, 207–222.

Keyes, C. L. M., & Magyar-Moe, J. L. (2003). The measurement and utility of adult subjective well-being. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology and measurement* (pp. 411–425). Oxford, UK: Oxford University Press.

Kinnie, N., Hutchinson, S., & Purcell, J. (2000). Fun and surveillance: The paradox of high commitment management in call centers. *The International Journal of Human Resource Management*, 11(5), 967–985.

Kivimäki, M., Feldt, T., Vahtera, J., & Nurmi, J. (2000). Sense of coherence and health: Evidence from two cross-lagged longitudinal samples. *Social Sciences and Medicine*, 50, 583–597.

Knights, D., & McCabe, D. (1998). What happens when the phone goes wild? Staff stress and spaces for escape in a BPR telephone banking call regime. *Journal of Management Studies*,

35(2), 163–194.

Kolakowski, L. (1972). *Positivist science*. Harmondsworth, England: Penguin Books.

Kossuth, S. P., & Cilliers, F. (2002). The relationship between leadership dimensions, cultural beliefs and salutogenic functioning. *South African Journal of Labour Relations*, 26(1), 65–95.

Krauss, S. E. (2005). Research paradigms and meaning making: A primer, *The Qualitative Report*, 10(4), 758–770. Retrieved 10 April, 2011, from <http://www.nova.edu/sss/QR/QR10-4/krauss.pdf>

Kreitner, R., & Kinicki, A. (1998). *Organisational behaviour* (4th ed.). USA: Irwin/McGraw-Hill.

Lawler, E. E., III, & Hall, D. T. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology*, 54, 305–312.

Lazarus, R. S. (1991). *Psychological stress and the coping process*. New York: McGraw-Hill.

Levi, L. (1996). Spice of life or kiss of death? In C. I. Cooper (Ed.), *Handbook of stress medicine and health* (pp. 1–10). Boca Raton, FL: CRC Press.

Lincoln, J., & Kalleberg, A. (1990). *Culture, control and commitment: A study of work organisation and work attitudes in the United States and Japan*. New York: Cambridge University Press.

Lindley, O. A., & Joseph, S. (2004). *Positive psychology in practice*. Hoboken, NJ: Wiley.

Lindström, B., & Eriksson, M. (2009). The salutogenic approach to the making of HiAP/healthy public policy: illustrated by a case study. *Global Health Promotion*, 16(1), 17–28, March.

Lord, V. B., Gray, D. O., & Pond, S. B. (1991). The police stress inventory: Does it measure stress? *Journal of Criminal Justice*, 19, 139–149.

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and*

Organisational Psychology, 1, 3–30.

Malhotra, N., & Mukherjee, A. (2004). The relative influence of organizational commitment and job satisfaction on service quality of customer-contact employees in banking call centres. *Journal of Service Marketing*, 18(3), 162–174.

Maslach, C. (1982). *Burnout: The cost of caring*. Engelwood Cliffs, NJ: Prentice-Hall.

Maslach, C., & Jackson, S. E. (1982). Burnout in health professions: A social psychological analysis. In G. Sanders & J. Suls (Eds), *Social psychology of health and illness*. Hillsdale, NJ: Erlbaum.

Maslach, C., & Jackson, S. E. (1986). *Maslach burnout inventory: Manual research edition*. Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Jackson S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Mountain View, CA: CPP.

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco: Jossey-Bass.

Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498–512.

Maslach, C., Schaufeli, W.B., & Leiter, M. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.

Meyers, J. E., Sweeney, T. J., & Wittmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counselling Development*, 78, 251–266.

Miciak, A., & Desmanais, M. (2001), "Benchmarking service quality performance at business-to-consumer call centers". *Journal of Business and Industry Marketing*, 16(5), 340–453.

Morgan, G. (1980). Paradigms, metaphors and puzzle solving in organisation theory. *Administrative Science Quarterly*, 25(4), 605–622.

Mouton, J. (1997). *Social research*. Hatfield, Pretoria: Van Schaik, Pentrose.

Mouton, J., & Marias, H. C. (1994). *Basic concepts in the methodology of the social sciences*. Pretoria: HSRC.

Mouton, J., & Marais, H. C. (1996). *Basic concepts in the methodology of the social sciences*. Pretoria: HSRC.

Muller, Y., & Rothmann, S. (2009). Sense of coherence and employees' perceptions of helping and restraining factors in an organisation. *South African Journal of Industrial Psychology*, 35(1), 1–10.

Muntaner, C., Tien, A., Eaton, W. W., & Garrison, R. (1991). Occupational characteristics and the occurrence of psychotic disorders. *Social Psychiatry and Psychiatric Epidemiology*, 26, 273–280.

Naudé, J. L. P., & Rothmann, S. (2006). Work-related wellbeing emergency workers in South Africa. *South African Journal of Psychology*, 36, 63–81

Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 97–119). Washington, DC: American Psychological Association.

Noemdoe, G. (2002). Helping the healthy stay healthy. *People Dynamics*, 20(5), 31.

Organ, D., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organisational citizenship behaviour. *Personnel psychology*, 48, 775–802.

Pienaar, J., & Rothmann, S. (2005). Suicide ideation in the South African Police Service. *South*

Pines, A. (1993). Burnout: An existential perspective. In W. B. Schaufeli, C. Maslach & T. Marek (Eds), *Professional burnout: Recent developments in theory and research* (pp. 33–51). Washington, DC: Taylor and Francis.

Pretorius, T. B. (1994). Using the Maslach Burnout Inventory to assess educators' burnout at a university in South Africa. *Psychological Reports*, 75, 771–777.

Reardon, J. (1998). The history and impact of workplace wellness. *Nursing Economics*, 16(3), 117–121.

Robbins, S. P., Odendaal, A., & Roodt G. (2003). *Organisational behaviour: Global and South African perspective*. Cape Town: Pearson Education.

Roberts, D. R., & Davenport, T. O. (2002). Job engagement: Why it's important and how to improve it. *Employment Relations Today*, 29(3), 21–28.

Rothmann, S. (2001). Sense of coherence, locus of control, self-efficacy and job satisfaction. *Journal of Economic and Management Sciences*, 5, 41–65.

Rothmann, S. (2002, March). *Burnout research in South Africa*. Paper presented at the 1st South African Conference on Burnout, Potchefstroom, South Africa.

Rothmann, S. (2003). Burnout and engagement: A South African perspective. *South African Journal of Industrial Psychology*, 29(4), 16–25.

Rothmann, S. (2006, September). *Presenteeism: The new absenteeism: How to transform presenteeism into engagement and manage it in your organization*. Paper presented at Organizational Health Care Conference, Johannesburg, South Africa.

Rothmann, S. (2009). *The 2009 South African call centre benchmarking report in a higher education call centre*. Potchefstroom: Afriforte.

Rothmann, S., & Ekkerd, J. (2007). The validation of the perceived wellness survey in the South African Police Service. *South African Journal of Industrial Psychology*, 33 (3), 35-42.

Rothmann, S., Jackson, L. T. B., & Kruger, M. M. (2003). Burnout and job stress in a local government: The moderating effect of sense of coherence. *South African Journal of Industrial Psychology*, 29(4), 52–60.

Rothmann, S., & Rothmann, J. C. (2006). *The South African Employee Health and Wellness Survey: User Manual*. Potchefstroom: Afriforte.

Rothmann, S., Steyn, L. J., & Mostert, K. (2005). Job stress, sense of coherence and work wellness in a electricity supply organisation. *South African Journal of Business Management*, 36(1), 1–9.

Rothmann, S., & Van Rensburg, P. (2002). Psychological strengths, coping and suicide ideation in the South African Police Services in North West Province. *South African Journal of Industrial Psychology*, 28(3), 29–49.

Ryan, R. M., & Deci, E. L., (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and wellbeing. *American Psychologists*, 55, 68–78.

Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychology Inquiry*, 9, 3–44.

Ryff, C. D., & Singer, B. (2000). Interpersonal flourishing: A positive health agenda for the new millennium. *Personality and Social Psychology Review*, 4(1), 30–44.

Sagie, A. (1998). Employee absenteeism, organizational commitment, and job satisfaction: Another look. *Journal of Vocational Behaviour*, 52, 156–171.

Salovey, P., Rothman, A. J., Detweiler, A. J., & Steward, W. T. (2000). Emotional states and physical health. *American Psychology*, 55(1), 110–121.

Schaufeli, W. B., & Bakker, A. B. (2002). *Job demands, job resources and their relationship with burnout and engagement: A multi sample study on the COBE-model*. Utrecht University: Psychology and Health.

Schaufeli, W., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale preliminary manual* [Electronic Version 1, November 2003]. Occupational Health Psychology Unit, Utrecht University.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, jobs resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behaviour*, 25, 293–315.

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement and sickness absenteeism. *Journal of Organizational Behaviour*, 30(7), 893–917.

Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A confirmative and analytical approach. *Journal of Happiness studies*, 3, 71–92.

Schultz, D. P., & Schultz, S. E. (1986). *Psychology and industry today: An introduction to industrial and Organisational Psychology*. New York: Macmillan.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14.

Sieberhagen, C., Rothmann, S., & Pienaar, J. (2009). Employee health and wellness in South Africa: The role of legislation and management standards. *South African Journal of Human Resource Management*, 7(1), Art. #144,9 pages. DOI:10.4102/sajhrm.v7i1.144.

Siu, O. L. (2002). Occupational stressors and wellbeing among Chinese employee: The role of

organizational commitment. *Applied Psychology: An International Review*, 51, 527–544.

Slate, R. N., Johnson, W. W., & Wells, T. L. (2000). Probation officer stress: Is there an organizational solution? *Federal Probation*, 64, 56–59.

Statistical Package for the Social Sciences (SPSS). (2008). *Statistical Programs for Social Sciences (SPSS): Version 17.0*. SPSS Inc.

Storm, K., & Rothman, S. (2003, June). A psychometric analysis of the Maslach Burnout Inventory in the South African Police Service. Paper presented at the 6th Annual Conference of the Society of Industrial and Organisational Psychology of South Africa, Johannesburg.

Strauss, A. L., & Corbin, J. L. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Strúmpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology*, 33, 69–79.

Sulsky, L., & Smith, C. (2005). *Work stress*. Canada: Thomson Wadsworth.

Taylor, P., & Bain, P. (1998, 30 March–1 April). *An assembly line in the head*. Sixteenth International Labour Process Conference. UMIST, Manchester.

Townsend, K. (2005). 'Why do we bother?' Recruitment and training in a call centre. [Online] Retrieved on 19 January 2006 from <http://www.k-townsend-airaanz.econ.usyd.edu.au>.

Tytherleigh, M. Y. (2003). What employers may learn from English HEIs: A fortigenic approach to occupational stress. *South African Journal of Industrial Psychology*, 29(4), 101–106.

Vaida, G. (2005, n.d.). Sick leave costs SA millions. *Sunday Times*.

Van der Colff, J. J., & Rothman, S. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *South African Journal of Industrial Psychology*, 35(1), Art.#423, 10 pages. DOI: 10.4102/sajip.v35i1L.423.

Van Vuuren, L. J. (2010). Industrial psychology: Goodness of fit? Fit for goodness? *South African Journal of Industrial Psychology*, 36(2). Art.#939, 16 pages. DOI:10.4102/sajip.v36i2.939

Violanti, J. M., & Aron, F. (1994). Ranking police stressors. *Psychological Reports*, 75, 824–826.

Viljoen, J. P. & Rothmann, S. (2009). Occupational stress, ill health and organisational commitment of employees at a university of technology. *South African Journal of Industrial Psychology*, 35(1), Art. #730, 11 pages. DOI: 10.4102/sajip.v35i1.730

Visser, W., & Rothmann, S. (2008). Exploring antecedent and consequences of burnout in a call centre. *South African Journal of Industrial Psychology*, 34(2), 79-87.

Viviers, A. M., & Cilliers, F. (1999). The relationship between salutogenesis and work orientation. *Journal of Industrial Psychology*, 25(1), 27–32.

Volonen, S. M., Suomien, S., Lahelma, E., Koskenvuo, K., Kosvenuo, M., & Silventoimen, K. (2010). Sense of coherence and intentions to retire among Finnish women and men. *BMC Public Health*, 10, 22. Retrieved on 16 October 2010 from <http://www.biomedicalcentral.com/1471-2458/10/22>.

Winefield, A. H., Gillespie, N. A., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational stress in Australian university staff: Results from a national survey. *International Journal of Stress Management*, 10, 51–63.

Wissing, M. P., De Waal, M., & De Beer, I. (1992). *Sense of coherence and stress symptomatology*. Paper presented at the 25th International congress of Psychology, Brussels, Belgium.

Wissing, M. P., & Van Eeden, C. (2002). Empirical classification of the nature of psychological wellbeing. *South African Journal of Psychology*, 32, 32–44.

Witmer, J. M., & Sweeney, T. J. (1992). A holistic model for wellness and prevention over the life span. *Journal of Counseling & Development*, November/December, 71, 22–35.

World Health Organization (2002). *Constitution of the World Health Organization*. Retrieved 30 September, 2010, from <http://whqlibdoc.who.int/hist/official-records/contitution.pdf>.

Zapf, P. F., Isic, A., Bechtoldt, M., & Blau, P. (2003). What is typical for call centre job? Job characteristics and service interactions in different call centre. *European Journal of Work and Organizational Psychology*, 12(4), 311–340.

Zapf, D., Vogt, C., Seifert, C., Mertini, H., & Isic, A. (1999). Emotion work as a source of stress: The concept and development of an instrument. *European Journal of Work and Organizational Psychology*, 8(3), 371–400.