

THE ROLE OF POSITIVE PSYCHOLOGY CONSTRUCTS IN EMPLOYEE COPING

by

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DECLARATION

I, ANNA ALETTA MARX, student number 8585377, declare that this dissertation, entitled “The role of positive psychology constructs in employee coping”, is my own work, and that all the sources that I have used or 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.

Anna Aletta Marx

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SUMMARY

THE ROLE OF POSITIVE PSYCHOLOGY CONSTRUCTS IN EMPLOYEE COPING

**by
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DEPARTMENT : Industrial and Organisational Psychology
DEGREE : MA (Industrial and Organisational Psychology)

The objectives of this study were to: (1) determine the relationship between locus of control (measured by the Locus of Control Inventory), work engagement (measured by the Utrecht Work Engagement Scale) and sense of coherence (measured by the Orientation to Life Questionnaire); (2) determine whether coping and non-coping individuals (measured by a coping scale) differ significantly regarding these variables, and (3) the strategies they employ to deal with change in their lives (determined by means of structured interviews).

A survey design, and correlational and inferential statistical procedures were used to achieve the quantitative research objectives. Qualitative content analysis was used to analyse and interpret the research data obtained from the open-ended questions on coping strategies. A convenience sample (n = 69) of individuals employed in the manufacturing sector participated in the study. The quantitative results revealed a significant relationship between the three variables and that copers and non-copers differ significantly regarding their coping. The qualitative data analysis indicated that copers and non-copers differ in terms of the coping strategies they employ to deal with change.

The study represents original research which contributes new knowledge and insights for organisational employee wellness practices aimed at helping employees cope more positively with organisational change in the South African organisational context.

KEY TERMS

positive psychology, locus of control, engagement, sense of coherence, change, copers, non-copers, coping strategies

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CHAPTER 1

SCIENTIFIC ORIENTATION TO THE RESEARCH

This dissertation focuses on the role of positive psychology constructs (locus of control, engagement and sense of coherence) in the coping and non-coping behavioural strategies of employees.

The first chapter provides the background to and motivation for the research, followed by the problem statement. The general and specific aims of the research are formulated. The research model is discussed, followed by the paradigm perspective which demarcates the boundaries of the research. The research design and methodology are outlined, indicating the procedures for execution. The outline of the chapters of this dissertation concludes the first chapter.

1.1 BACKGROUND AND MOTIVATION FOR THE RESEARCH

Drastic and fundamental changes in the world of work have occurred in a relatively short space of time. Technology has changed the manner in which the economy works. This in turn has changed the world of work (Vettori, 2007). Globalisation and the intensified economic competition it engenders are profoundly altering the way people live and relate to one another. The world of work has become unstable, with changes in global economic activity, technology and cultural practices (Deuze, 2007). In many recent accounts of work, work practice and career development, much is made of the disempowerment and anxiety caused by the constantly turbulent and uncertain nature of contemporary work (Billet, 2006).

The world of work has moved toward more fluidity, less centralisation and less certainty about assumptions and old models. McLennan (2007) posits that the new world of work should be at the centre of any organisation's strategy as it addresses the coming era of rapid change and increasing global integration. People often hear that the time they live in is challenging. Although that is true, there have no doubt been many periods in history when this was also said (Sapon-Shevin, 2010). There are people who believe that financial gain is important, but not as important as realising their hopes and dreams for the future. A high value is placed on better personal relationships. A concern identified by Deal, Peterson and Gailor-Loflin (2001) is that people have become cynical and pessimistic. The world of work has forced people to be flexible to changing environments. People will need to develop the ability to respond, focus precisely, manage stress and think strategically (Deal, Peterson & Gailor-Loflin, 2001). Weiten, Lloyd, Dunn and Hammer (2009) state that a major challenge

for workers today is balancing work, family and leisure activities. As dual-earner families become the family norm, juggling multiple roles has emerged as a challenge.

It is hard to grasp how rapidly and dramatically the worker's role has changed. There are still organisations that use the word 'subordinate' to describe workers. Even the word 'employee' has given way to 'associate' in many organisations (Thomas, 2009). The changing world of work has an influence on employees' wellness. Major hazards related to work wellness include cigarette smoking, which is still increasing worldwide. Job stress, unemployment, being overweight and type 2 diabetes are increasingly rapidly. Heart disease results primarily from today's high levels of stress. High blood cholesterol, suicide and homicide (related to alcohol, drugs and stress), accidents (alcohol use and stress) and cirrhosis of the liver (alcohol abuse) are common (Edlin & Golanty, 2010). To cope with the demands of the changing world of work, employees have to retain a global mindset and the ability to move with chameleon-like ease from one event to another (Vance & Paik, 2006).

Biswass-Diener (2011) states that the heart of change is the human capacity to notice a discrepancy between how things are and how they might be. Making progress with this requires the belief that change is possible. The conception of what makes a life good has an enormous impact on the individual's psychological of wellbeing. Since Aristotle, philosophers, religious leaders, and humans have puzzled over what it is that qualifies a good life. Positive psychology provides guidelines suggesting ways to ensure optimal happiness, or resilience or optimal psychological development, maturity and moral reasoning (Biswass-Diener, 2011). The research study therefore considers employee wellness practices in the organisational context that aims to help people deal more positively with change. The research is conducted within the paradigm of positive psychology and focuses specifically on the locus of control, work engagement and sense of coherence of coping and non-coping individuals, and the strategies they employ to deal with change in their lives (Biswass-Diener, 2011).

Positive psychology is a branch of psychology that places emphasis on the study of positive emotions, strengths, character, virtues and health. Positive psychology is the science of psychology, which has made great strides in understanding what goes wrong in individuals, families, groups and institutions, but these advances have come at the cost of understanding what is right with people. Thus, the focus of positive psychology is not just fixing what is broken, but nurturing what is best (Houdmont & Leka, 2010). Positive psychology emphasises on the increased interest in positive aspects of change, including favourable outcomes that follow in the wake of change, and to some extent focuses on the

benefits of change. The field of psychology has historically devoted too much attention to pathology, weakness and damage and how to heal suffering. Positive psychology seeks to shift the field's focus away from negative experiences to building positive qualities. Positive psychology further argues for increased wellbeing, hope, courage, perseverance, tolerance and other human strengths and virtues (Weiten, Lloyd, Dunn & Hammer, 2009).

One of the constructs positive psychologists use is the term hope (Youssef & Luthans, 2007). Human beings are goal-orientated and in order to reach goals, individuals have to generate routes to those goals. The motivational component in the hope construct is the belief that, "I can do this" and "I am not going to be stopped" (Snyder, 2002). Positive emotions should flow from the successful pursuit of goals. Similar to this is self-efficacy, which centres on people's beliefs in their ability to produce the desired effects or that they can accomplish something and be successful. Positive emotions appear to expand one's ability to think of options and build one's personal resources. For example, positive emotions such as joy and contentment produce more thought and action than negative emotions such as fear and anger (Lopez, 2008).

Locus of control, optimism, coping styles and motivational orientation influence behaviour. Internal locus of control is linked with a number of positive health outcomes, as well as motivational models (Gill & William, 2008). Locus of control is the belief one holds about control over life's events. People with an internal locus of control believe that they control what happens to them. Locus of control has been widely studied and positively associated with outcomes such as job performance and acceptance of change (Carpenter, 2011). Locus of control has important behavioural consequences. Those who have more internal locus of control tend to be psychologically healthier, cope better with personal crises, are more satisfied with their lives and have higher self-esteem (Ewen, 2003).

Engagement in work is viewed as a positive psychology construct, in that engagement is associated with increased caring about performance outcomes and contributes the meaning that individuals assign to their work (Nelson & Cooper, 2007). Work engagement is viewed as the optimal functioning of employees in organisations. It is characterised by high levels of energy and vigour, dedication and enthusiasm while working, and being pleasantly absorbed or immersed in work activities (Gilliland, Steiner & Skarlicki, 2007). Weiner and Craighead (2010) view work engagement as energetic involvement with work that builds professional efficacy. Positive emotions lead to even more positive emotions among employees. High work engagement leads to even higher work engagement. Highly engaged employees are more likely to take the initiative and this generally leads to even higher

levels of work engagement, which will be transmitted from one employee to another and increase that person's level of work engagement. Hope, resilience, optimism and efficacy are related to job performance, satisfaction and organisational commitment. It is also likely that positive emotions in the workplace, such as work engagement, are associated with higher levels of positive emotions (Burke & Cooper, 2009).

Sense of coherence is a dispositional orientation that refers to the past and present life. It can be regarded as an enduring person-and-view-of- life-related characteristic influencing appraisals of meaning ascribed to different situations (Pulkkinen, Kaprio & Rose, 2006). Using positive psychology's approach may be therapeutic for individuals in that identification of their strengths may potentially lead to the development of new, positive perspectives of their lived experiences (Chan, Cardoso & Chronister, 2009). Sense of coherence refers to a world perspective that provides meaning to the individual's experience and that leads to successful coping and resilience under stress (Chrisler & McCreary, 2010).

Positive psychology focuses on human strengths that act as buffers that are courage, optimism, hope and perseverance against mental illness. Some people go through trauma seemingly unhurt, and still others seem somehow transformed by trauma, having gained some deep growing experience from having undergone the trauma. The trauma appears to cause change. It could be very negative change, such as psychopathology, or it could be positive change in the form of transformation (Lopez, 2008). All people succeed or fail at some time. The effect on them varies according to perspective and coping strategies (Cash & Weiner, 2006). Good and bad events occur in all individuals' lives. Individuals have resources to help them cope with trauma or lack these resources, resulting failure to cope. It depends on a person's resources or coping strategies how he or she copes or fails to cope with trauma (Seaward, 2011). Positive psychology deals with the study of optimal human functioning. Positive psychology studies the best that humans have to offer in order to learn about and promote conditions where people will thrive (Ewen, 2003).

1.2 PROBLEM STATEMENT

The literature makes it clear that knowledge of individuals' locus of control, work engagement and sense of coherence provides valuable insights that may potentially be used to inform employee wellness interventions aimed at helping people deal more positively with change. However, limited research has been done on the relationship between the locus of control, work engagement and sense of coherence of coping and non-coping individuals and the strategies they employ to deal with change in their lives,

specifically in the South African multi-cultural organisational context. Moreover, previous research on these variables in the South African manufacturing context is limited. This study thus represents original research that aims to contribute new knowledge to the field of employee wellness. Manufacturing is the backbone of any industrialised nation. A country's level of manufacturing activity is directly related to its economic health. Manufacturing technologies have continually gone through revolutionary changes. To meet the challenges, manufacturing industries have to select appropriate manufacturing strategies, product designs, manufacturing processes, machinery and equipment (Rao, 2007).

Change is often a traumatic experience and employees should aspire to deeper understanding of the effect that change has on the lives of individuals (Cameron & Green, 2004). There is, however, no clear picture as to why some people cope and others do not in the same situation (Dewe, O'Driscoll & Cooper, 2010). In general, organisations are confronted with finding a reason why some employees cope during a process of change and others fail to cope during the same process. In general terms then, the following research question is posed: what is the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs) of coping and non-coping individuals, and the strategies they employ to deal with change in their lives?

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

- How are the constructs locus of control, engagement and sense of coherence (as a set of positive psychology constructs) conceptualised in the literature?
- How does the literature conceptualise coping and non-coping behaviour?
- What is the theoretical relationship between the positive psychological constructs of locus of control, engagement and sense of coherence, and coping and non-coping behaviour, and what are the implications for employee wellness interventions aimed at helping people to deal positively with change?

In terms of the empirical study, the following specific research questions are formulated:

1. What is the nature of the empirical relationship between the constructs locus of control, engagement and sense of coherence, and do coping and non-coping individuals differ

significantly regarding these variables, as manifested in a sample of respondents employed in a typical South African manufacturing organisation?

2. What are the core strategies that coping and non-coping individuals employ to deal with change in their life circumstances, and how do these strategies differ (as manifested in a sample of respondents employed in a typical South African manufacturing organisation)?
- 3) What recommendations can be formulated for change-oriented employee wellness interventions, as well as possible future research in the field of industrial and organisational psychology?

1.3 RESEARCH AIMS

Given the above research questions, the general and specific aims stated below have been formulated.

1.3.1 General aim

The general aim of this study is to determine: (1) the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs), (2) whether coping and non-coping individuals differ significantly regarding these variables, and (3) the coping strategies they employ to deal with change in their lives.

1.3.2 Specific aims

In terms of the literature study, the specific aims of this research are:

- To conceptualise locus of control, engagement and sense of coherence (as a set of positive psychology constructs).
- To conceptualise coping and non-coping behaviour.

To conceptualise the theoretical relationship between the positive psychological constructs of locus of control, engagement and sense of coherence, and coping and non-coping behaviour, and the implications for employee wellness interventions aimed at helping people to deal positively with change.

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

- 1) Determine the nature of the empirical relationship between constructs locus of control, engagement and sense of coherence and whether coping and non-coping individuals differ significantly regarding these variables, as manifested in a sample of respondents employed in a typical South African manufacturing organisation.
- 2) Identify the core strategies that coping and non-coping individuals employ to deal with change in their life circumstances, and how these strategies differ (as manifested in a sample of respondents employed in a typical South African manufacturing organisation).
- 3) Formulate recommendations for change-oriented employee wellness interventions, as well as possible future research in the field of industrial and organisational psychology.

1.4 PARADIGM PERSPECTIVE

Colman (2009) defines a paradigm as a pattern, stereotypical example, model, or general conceptual framework within which theories in a particular area of research are constructed. According to Morgan (1980) the meta-theoretical paradigm may include different schools of thought, with different ways of approaching or studying a shared reality or world view. In the context of the present study the paradigm perspective refers to the intellectual climate and variety of meta-theoretical values, beliefs and assumptions underlying the theories and models that form the definitive boundary of the present study (Babbie & Mouton, 2009).

1.4.1 The intellectual climate

The literature review will be conducted from the paradigm of positive psychology within the broader context of Industrial and Organisational Psychology, which is a branch of psychology that applies the principles of psychology to the workplace. Industrial and Organisational Psychology as an applied field of study aims to enhance the dignity and performance of human beings and the organisation they work in, by advancing the science and knowledge of human behaviour (Aamodt, 2010). The domain of Industrial and Organisational Psychology stretches further than the physical boundaries of the workplace because many factors that could influence work behaviour are not always found in the work setting. These factors include things such as family responsibilities, cultural influences, employment-related legislation and non-work events that are reflected in the working life of

most people. Industrial and Organisational Psychology is concerned about the effect of a bad day at work on home life and concentrates on the reciprocal impact of work on life and life on work (Landy & Conte, 2010). The essence of Industrial and Organisational Psychology is that it goes further than the workplace and therefore recognises and is aware of all the influences on the individual in the work and home environment.

Positive psychology addresses questions of happiness, vitality and the meaning in life. As the 21st century unfolds, a different question is being asked: "What is right about people?" This question is at the heart of positive psychology, which is a scientific and applied approach to uncovering people's strengths and promoting their positive functioning (Snyder, Lopez & Pedrotti, 2010). According to Biswass-Diener and Dean (2007) positive psychology focuses on what is going right, rather than on what is going wrong with people. Traditionally, psychology has emphasised the understanding and treatment of depression, schizophrenia and anxiety, whereas positive psychology focuses on happiness, optimism and character strengths. Positive psychologists are researchers who investigate the dynamics of healthy relationships and what leads to lasting personal fulfilment (Biswass-Diener & Dean, 2007)

As stated in the background to the present study positive psychology encompasses the study of positive emotions, full engagement in activities, virtuous personal characteristics and paths to fulfilment and meaning in life. It also investigates how relationships and institutions can support the quest for increased satisfaction and meaning (Roberts, Varki & Brodie, 2003). Positive psychology emphasises forward-thinking, which focuses on individuals' potentials, on researching things that make life worth living (Boniwell, 2006). Positive psychology is the psychology of what makes life worth living. It represents a commitment to focus on wellness, positive emotions, positive experience, character and fulfilment (Lopez, 2008). Thematically, in the context of the present study, the constructs of locus of control, work engagement and sense of coherence are studied from the perspective of positive psychology. Although these three constructs have traditionally been studied from the perspective of salutogenesis, which focuses on better health, from a positive psychology perspective, these constructs are studied in the context of the strength in human functioning. Stratton-Berkessel (2010) states that the positive psychology perspective adds to understanding and knowledge by studying what supports optimal human functioning. Positive psychology does not discount the original way of working with people and their worlds when the focus is on strengths and wholeness.

1.4.1.1 Locus of control

Ewen (2003) describes locus of control as a positive trait enabling individuals with internal locus of control to cope better with personal crises, be more satisfied with their lives and have higher self-esteem. With the growth of positive psychology, the emphasis of the construct locus of control switched to enhance wellbeing rather than to promote dysfunction (Leary & Hoyle, 2009).

1.4.1.2 Engagement

In the field of positive psychology the construct engagement is viewed as increasing positive development, bonding, support, participation, interests, happiness etc. (Gilman, Huebner & Furlong, 2009). Work engagement is seen as a positive, fulfilling, work-related state of mind that optimises functioning and human strength (Houdmont & Leka, 2010).

1.4.1.3 Sense of coherence

Pulkkinen, Kaprio and Rose (2006) describe sense of coherence as a positive personality characteristic, which includes life satisfaction, optimism, view-of-life-related characteristics and appraisal of meaning. The value of sense of coherence is that the focus is on promoting health and wellness, as well as on showing kindness and understanding toward oneself in difficult times (Chrisler & McCreary, 2010).

1.4.1.4 Coping and non-coping

Coping is a fundamental psychological process building on people's strengths and emphasises the positive. Milner and Palmer (2003) view coping as developing better skills and competencies to deal with a specific problem, seeking social support, information-seeking and reappraisal of the problem – a problem-solving strategy. Coping has its origin in the salutogenesis approach (Morgan, Davies & Ziglio, 2010). Stressful events are part of every individual's life, for example deaths, divorces, job problems, car accidents, illness and everyday hassles in general. It is through these events that individuals learn how to cope successfully or unsuccessfully (Aldwin, 2007).

Dewe, O'Driscoll and Cooper (2010) state that when viewed from the perspective of positive psychology, attention is paid to positive emotions and the coping strategies that these

emotions generate. Positive psychology regards coping strategies as considering resource accumulation, personal growth and capacity-building to broaden the individual's personal resources. That is, if someone has a positive outlook on life and difficult situations, the person will experience coping as positive. If someone has a negative outlook, then the experience will be negative and thus reflect non-coping behaviour. The positive outlook is confirmed by Snyder, Lopez and Pedrotti (2011), who believe that positive emotions can help build personal resources so that positive emotions increase in creative problem-solving, which increases coping in times of change. Therefore positive emotions, displayed in a sense of coherence and locus of control, may help generate personal resources and maintain a sense of vital energy. Positive emotions seen as the positive sequence as the upward spiral of positive emotions and coping.

1.4.2 Empirical study

The empirical study will consist firstly of a quantitative study conducted within the ambit of the positivist research paradigm (Strauss & Corbin, 1998). The quantitative study focuses on investigating the relationship dynamics between the variables locus of control, engagement and sense of coherence and whether coping and non-coping individuals differ significantly regarding these variables. This study provides quantitative measures of the constructs locus of control, engagement and sense of coherence (differentiating between coping and non-coping employees) that have 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 (Strauss & Corbin, 1998).

Secondly, the empirical study will consist of a qualitative study conducted within the ambit of the interpretivist paradigm. The qualitative study focuses on identifying and comparing the strategies that coping and non-coping employees employ to manage change in their life circumstances by means of qualitative research techniques. A qualitative study is an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting (Strauss & Corbin, 1998). In terms of the present study, interviews will be used as a qualitative technique in identifying and comparing the strategies that coping and non-coping employees employ to manage change in their life circumstances.

1.5 CENTRAL HYPHOTHESIS

The central hypothesis of this study is as follows:

There is a relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs) and coping and non-coping individuals differ significantly regarding these variables. Coping and non-coping individuals tend to differ in terms of the strategies they employ to deal with change in their lives.

1.6 RESEARCH DESIGN

According to Terre Blanche and Durheim (2002), the research design is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research. The strategic framework that links the research questions to the execution of the research is developed through a process of reflection to produce a coherent guide for action, which will provide a valid answer to the research question. The research design will be discussed through reference to the types of research conducted, followed by a discussion on validity and reliability, the unit of analysis, the research variables and methods employed to ensure that the research is conducted in a valid, reliable ethical manner.

1.6.1 Type of research

Descriptive research aims at describing situations and events, including the relationships between variables in the research domain (Babbie & Mouton, 2009). Thematically, this relates to determining the nature of the empirical relationship between the constructs locus of control, engagement and sense of coherence (as a set of positive psychological constructs) and whether coping and non-coping individuals differ significantly regarding these variables as manifested in a sample of respondents employed in a typical South African manufacturing organisation. The study further aims to investigate the core strategies that coping and non-coping individuals employ to deal with change in their life circumstances, and how these strategies differ.

1.6.2 Validity

Research designs should yield valid and believable conclusions that can be explained by factors that the researcher has taken into account (Terre Blanche & Durheim, 2002).

Research designs are blueprints, employing a set of standard technical procedures to control or eliminate threats to validity.

In this research, internal validity is ensured through:

- Models and theories chosen in a representative manner and presented in a standardised manner.
- Measuring instruments chosen in a responsible and representative way and presented in a standardised manner.

External validity is ensured by the selection of a representative sample of the total population. Design validity is ensured by the identification of plausible rival hypotheses and elimination of their impact.

1.6.3 Reliability

Reliability of measurement is a fundamental issue in social research and is a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time (Babbie & Mouton, 2009). In the literature review of the study, reliability will be ensured by making use of literature sources and theoretical views in literature that is widely accessible. In the empirical study reliability will be ensured by using measuring instruments that have proven reliability in previous research.

1.6.4 Qualitative data analysis: Strategies employed to ensure data integrity

During data-gathering and interpretation, reflexivity will be followed as a strategy to engender integrity (validity and reliability). Reflexivity entails self-awareness and critical self-reflection by the researcher on her potential biases and predispositions, as these may affect the research process and conclusions. During the proposed investigation, reflexivity will be scheduled to include formal self-critical as well as sessions with the research supervisor. Due cognisance will be taken of Glaser's (2002) warning on the potential constraints that such consultations may place on the researcher to formulate new insights

1.6.5 Unit of analysis

The unit of analysis refers to the object, phenomenon, entity, process or event one is

interested in investigating (Babbie & Mouton, 2009). In terms of individual measurement, the unit of analysis will be the individual. The researcher focuses on three positive psychology constructs (i.e. locus of control, engagement and sense of coherence) and how they apply to coping and non-coping individuals. In terms of the analysis of data, the unit of analysis will be the participating organisation and individuals participating in the research. In terms of investigating the difference between coping and non-coping individuals, the focus will be on the five highest coping employees and the five lowest non-coping employees.

1.6.6 Research variables

A variable can be defined as an image, perception or concept that is capable of measurement, thus a concept that can be measured is called a variable (Kumar, 1999). Independent variables are the causes supposed to be responsible for bringing about change(s) in a phenomenon. The study is designed to measure the relationship between three variables, namely locus of control, engagement and sense of coherence and how these relate to coping and non-coping behaviour.

1.6.7 Methods to ensure ethical research principles

The research will be conducted in an ethical manner to uphold the principles of the social science approach. Three fundamental ethical principles have been identified to guide the researcher, namely respect for participants, beneficence and justice. These principles are based on the human rights that need to be protected in research, namely the right to self-determination, to privacy, to anonymity and confidentiality, to fair treatment and to being protected from discomfort and harm (Brink, Van der Walt & Van Rensburg, 2007). The ethical guidelines and standards of the University of South Africa will form the basis on which the research will be conducted. These considerations will form part of every step of the research process to ensure that they guide the researcher and the study.

- The participants will be informed of the purpose of the study and will be requested to provide written consent to participate in the study.
- The participants will have a choice, to form part of the study or to withdraw at any time, should they feel any discomfort at any time.
- The privacy, confidentiality and anonymity of participants will be honoured.

The results from the research will be made available to the participants and the researcher will strive to maintain objectivity and integrity in the conduct of the research.

1.7 RESEARCH METHOD

Phase 1: Literature review

The literature review consists of five steps.

Step 1: Locus of control, work engagement, sense of coherence

Conceptualisation and integration of locus of control, engagement and sense of coherence (as a set of positive psychology constructs) and their role in coping and non-coping behaviour.

Step 2: Coping and non-coping behaviour

Conceptualisation of coping and non-coping behaviour with a description of a coping model. Then a differentiation will be made between copers' and non-copers' coping strategies.

Step 3: Theoretical integration

A theoretical integration will be drawn between the three positive psychology constructs, locus of control, engagement and sense of coherence, and coping and non-coping behaviour.

Step 4: Implications for change-oriented employee wellness practices

The implications for employee wellness practices aimed at helping individuals cope more positively with change will be outlined.

Step 5: Research hypothesis and propositions

Hypotheses will be formulated for the quantitative study, and propositions will be formulated for the qualitative study.

Phase 2: Empirical study

The description of the empirical study covers the population and the sample of the study, the research design, the measuring battery, the procedures and the statistical analyses. The empirical study will be presented in the form of a research article and will be presented 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 employee wellness practice and future research. Chapter 4 integrates the research study and discusses the conclusions, limitations and recommendations in more detail.

1.8 CHAPTER LAY-OUT

The chapters of this dissertation will be presented as follows:

Chapter 1 provides a scientific orientation to the research by discussing the background to and motivation for the research, the problem statement, the research questions and aims, the paradigm perspective guiding the research and the research methods.

Chapter 2 conceptualises the constructs of locus of control, work engagement, sense of coherence and coping and non-coping behaviour. The practical implications of the relationship between these constructs for change-oriented employee wellness practice will be discussed.

In Chapter 3, the research findings will be presented in the form of a scientific research article.

Chapter 4 concludes the study by providing conclusions, the limitations of the present study and recommendations for future research.

1.9 CHAPTER SUMMARY

This chapter discussed the background to the study, the identified problem statement, objectives and aims, the paradigm perspective and research design and provided the chapter layout. Chapter 2 discusses the constructs of locus of control, work engagement, sense of coherence and coping and non-coping behaviour.

CHAPTER 2

LITERATURE REVIEW: LOCUS OF CONTROL, EMPLOYEE ENGAGEMENT, SENSE OF COHERENCE, COPING AND NON-COPING BEHAVIOUR

This chapter defines and conceptualises the constructs locus of control, engagement, sense of coherence and coping and non-coping behaviour. The chapter includes an integration of existing literature and a presentation of models and approaches. The final section of the chapter reviews the practical implications of these constructs for change-oriented employee wellness practices.

2.1 LOCUS OF CONTROL

Locus of control refers to the degree to which persons expect that an outcome of their behaviour depends on their own behaviour or personal characteristics versus the degree to which persons expect that the outcome is a function of chance, luck, or fate, is under the control of powerful others or simply unpredictable (de Mooij, 2010). According to Hoeger and Hoeger (2011) a few people have either a completely external or a completely internal locus of control. They fall somewhere along a continuum. The more external one's locus of control is, the greater is the challenge to change and adhere to exercise and other healthy lifestyle behaviours. Fortunately people can develop a more internal locus of control.

2.1.1 Conceptualisation

In the context of the present study locus of control is viewed as a positive trait enabling individuals with internal locus of control to cope better with personal crises, be more satisfied with their lives and have higher self-esteem (Ewen, 2003). Rotter (1966) regarded locus of control as the way the individual perceives reinforcement and uses it as driving force for action. Locus of control consists of three dimensions, namely internal control where the individual believes that outcomes are a consequence of his/her own behaviour, external control where the individual believes that outcomes are independent of his/her own behaviour and autonomy where the individual practises internal locus of control and prefers working alone (Schaap, Buys & Olckers, 2003).

2.1.2 Theory

Locus of control is probably the most frequently cited construct in psychology and most often used in empirical studies applied to coping in individuals (Antonovsky, 1991; Rotter, 1989). Julian B. Rotter (1966) introduced the construct of locus of control for the first time in his

classical paper, “Generalized expectancies for internal versus external control of reinforcement”. Locus of control refers to beliefs about the link between behaviour and outcome. According to Ajzen (2006), there are internal and external beliefs, which are generalised expectations that reflect consistent differences between individuals, relating to the degree to which they perceive contingencies or independence between their behaviour and subsequent events. Individuals who perceive the situational outcomes as contingent upon their own actions are said to have an internal locus of control, while those who perceive situational outcomes as dependent on chance, fate or the actions of others, are said to have an external locus of control (Judge, Erez, Bone & Thoresen, 2002).

Rotter (1966) states that the effects of reinforcement, such as reward or gratification following preceding behaviour, depend in part on whether the person perceives the reward as contingent on his/her own behaviour or independent of it. When the outcome of action is perceived by an individual as resulting from some action of his/her own but not being entirely contingent upon his/her action, it is typically perceived as the result of luck, chance, fate, being under the control of powerful others, or unpredictable because of the great complexity of the forces surrounding him/her. When events are integrated in this way, individuals label them as a belief in external control. If individuals perceive that the event is contingent upon their own behaviour or their own relatively permanent characteristics, it is termed belief in internal control (Rotter, 1966).

Antonovsky (1991) evaluated Rotter's (1966) conceptualisation of locus of control, and although he emphasises the search for any systematic analysis of the structural origins of an internal locus of control, he differentiates between four categories of structural origins: (1) internality as a reflection of the objective situation, (2) internality and culture, (3) the concept of powerful others and (4) responsible versus defensive internality. These structural origins will each now be briefly described. Figure 2.1 provides a visual illustration of the various dimensions of the construct of locus of control.

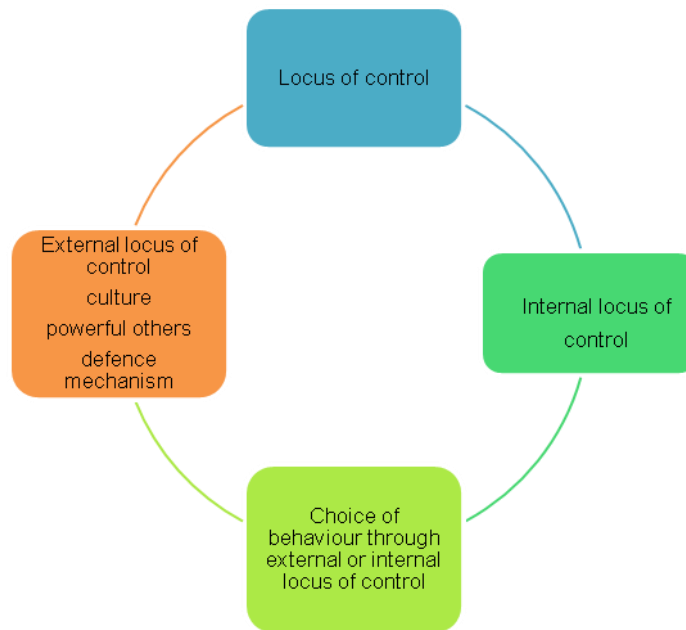


Figure 2.1: Dimensions of the locus of control construct

2.1.2.1 Internality as a reflection of the objective situation

Antonovsky (1991) posits there is a close relationship between an individual's locus of control and his/her objective situation. When an individual is overwhelmingly controlled by, for example, hostile powerful others, as in concentration camps, then, because it is truly more functional in the long run, he/she comes to have externalised beliefs. Thus one learns that such beliefs indeed facilitate survival. Blatier (2000) confirms that objective situations such as severe aversive traumatic events clearly form part of the origin of locus of control. However, he emphasises that the attribution of external or internal causality involves something more than just expectations that an individual can or cannot control events.

2.1.2.2 Internality and culture

Some cultures that could be labelled as traditional not only discourage, but even castigate internality as it is understood in Western society (Antonovsky, 1991). This is often caused by rules laid down by the culture, with the subsequent result that individuals believe that if they follow the rules, whatever their substance, things will work out well (Twenge, Zhang & Im, 2004). Based on past experience people learn one or two worldviews. The locus of control rests with the individual or with some external force. Research shows that people from low social-economic classes and women have an external locus of control. However the forces that determine locus of control from a cultural perspective may be viewed by the particular ethnic group as acceptable. For example the Chinese Americans believed that the

individual-centred American culture emphasises the uniqueness, independence and self-reliance of each individual. It places a high premium on self-reliance, individualism and status achieved through one's own efforts. In contrast, the situation-centred Chinese culture places importance on the group, on tradition, social roles and expectations, and harmony with the universe (Sue, 2006).

2.1.2.3 The concept of powerful others

This concept of powerful others refers to the extent to which people believe events are under their own control (internal locus of control) or under that of others (external locus of control) (Richards, 2009). Internal versus external control, often referred to as locus of control, refers to the degree to which persons believe that a reinforcement or an outcome of their behaviour is contingent on their own behaviour or personal characteristics versus the degree to which persons believe that reinforcement or outcome is a function of chance, luck, or fate, is under the control of powerful others, or simply unpredictable (Scrimali & Grimaldi, 2002). Although Rotter (1966) conceptualised locus of control as a one-dimensional construct, other researchers later demonstrated that the construct includes different factors, for example internality, externality and belief in powerful others. Belief in powerful others involves ideas of social control or power as distinct from other causal factors. Those who believe their outcomes are controlled by powerful others can be thought of as perceiving themselves as having a relatively low level of interpersonal power, or as power-disadvantaged. Individuals with a high belief in the role of powerful others in determining their own life outcomes are more likely to perceive people as untrustworthy and non-altruistic (Guinote & Vescio, 2010).

2.1.2.4 Responsive versus defensive internality

Responsive versus defensive internality inquires into the nature of the cognitive foundation of internal wellbeing, which is a sense of personal responsibility or a sense of self-justification (Wijbenga & van Witteloostuijn, 2007). In this sense, internality could facilitate coping with stressors because it means taking credit for good outcomes while adopting the defence of rejecting blame for unfortunate ones. It could also do so because it expresses willingness to assume responsibility, whatever the outcome. However, the absence of control over outcomes (self-blamers) could enhance externality (Bond & Bunce, 2003). There are also defensive externals, who are individuals who verbally give external reasons for past failures but who clearly act as if their behaviour will determine outcomes (Reitzel & Harju, 2000).

2.1.3 Locus of control: Coping and non-coping

Internal and external components of the construct serve as an indication of the extent to which individuals have a strong belief that they can control situations or the extent to which they view themselves as powerless (Rotter, 1966). Locus of control also serves as an indication of the individual's response, that is, his/her alertness to the environment, willingness to accept responsibility and to take steps to improve the situation (Rotter, 1966). People with an external locus of control and lower self-esteem were found to be more likely to suffer from poor psychological well-being (Travers, 2011).

Meijer, Sinnema, Bijstra, Mellenbergh and Wolters (2002) conducted a study examining the way in which coping styles and locus of control contribute to the prediction of psychosocial adjustment and to social support. It was found that the non-copers displayed poor adjustment, low self-esteem and high social anxiety. Gianakos (2002) conducted an investigation examining the influence of locus of control as one of the predictors of coping with work stress. Copers tend to have better physical and psychological health, as well as stronger feelings of efficacy and satisfaction. Non-copers tended to be subject to greater depression, stress, exhaustion and depersonalisation. Leung, Siu and Spector (2000) attempted to identify the sources of stress and investigated the effects of these on job satisfaction and psychological distress among 106 university teachers from four tertiary institutes in Hong Kong. The results indicated that external locus of control was associated with low job satisfaction and psychological distress.

From the above-mentioned research studies it is clear that locus of control relates to coping and non-coping. Below is an illustration of how copers and non-copers differ in their locus of control. The assumption can be made that non-copers depend on strategies that are associated with external locus of control and copers depend on strategies relating to internal locus of control. Figure 2.2 illustrates the key characteristics of non-coping and coping behaviours.

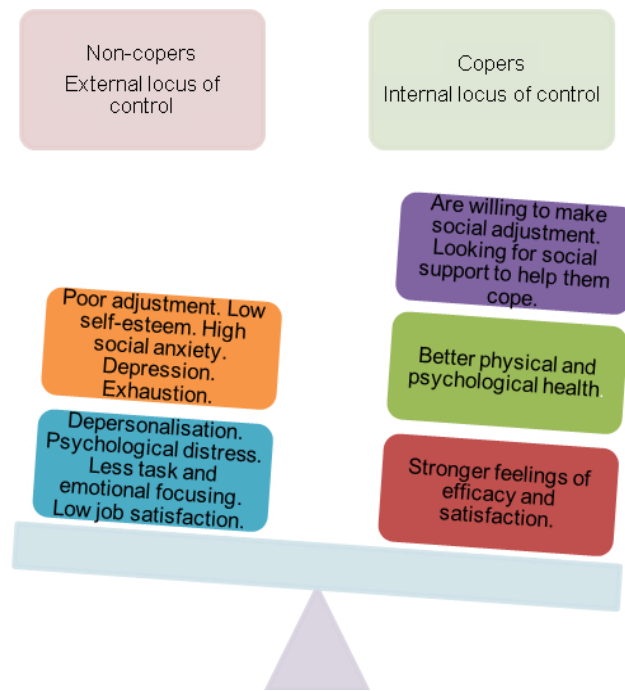


Figure 2.2: Characteristics of non-copers and copers relating to the construct locus of control

2.2 ENGAGEMENT

Today's jobs are dramatically different from those of only a generation ago and require much more initiative, creativity and judgment. Today's jobs have changed so much that employees require a different kind of motivation, namely employee engagement. Employees must feel passion for their work and derive fulfilment from it (Thomas, 2009).

2.2.1 Conceptualisation

Work engagement can be defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption (Schaufeli, Salanova, Gonz lez-Roma & Bakker, 2002). Engaged employees feel that their jobs make use of their skills and abilities, that their work is challenging and stimulating and that work provides a sense of personal accomplishment (Dibley, 2009). Vigour as a dimension of engagement is characterised by someone who demonstrates high levels of energy and mental resilience at work. There is also a determined investment in the actual work, together with high levels of persistence even when faced with difficulties. Dedication refers to high levels of involvement in the work being done and experiencing high levels of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterised by significant levels of concentration and

being happily engrossed in the work. When absorbed in one's work, time passes quickly and detachment from the work is difficult (Schaufeli, et al, 2002).

2.2.2 Theory

Engagement at work was conceptualised by Kahn (1990) as the harnessing of organisational members' selves to their work roles. In engagement people employ and express themselves physically, cognitively and emotionally during role performances. Engagement serves to fulfil the human spirit at work. Alternatively, disengagement is viewed as the decoupling of the self from the work role and involves people withdrawing and defending themselves during role performance. Engagement is most closely associated with the existing constructs of job involvement (Hallberg & Schaufeli, 2006).

Engagement is concerned with how the individual employs his/her self during the performance of his/her job. Furthermore, engagement entails the active use of emotions and behaviour, in addition to cognition. Finally, engagement may be thought of as an antecedent to job involvement in that individuals who experience deep engagement in their roles should come to identify positively with their jobs. Engagement has self-employment underpinnings, has been conceptualised and measured primarily as cognitive involvement with an activity and represents a unique peak experience of total cognitive absorption (Kahn, 1990). Research by Morris and Feldman (1996) suggests that when there is a lack of congruence between one's felt emotion and the organisationally desired emotion, individuals will experience emotional labour and potentially disengage from their work (Schutz & Zembylas, M, 2009). Finally, engagement also necessarily entails the physical energies employed by individuals to accomplish their roles.

Researchers such as Schaufeli and Bakker (2003) were not altogether satisfied with the use of the Maslach burnout inventory (MBI) as the only instrument that could measure this new construct of work engagement, which was identified on the MBI as being the opposite or antithesis of burnout. Schaufeli and Bakker (2003) decided that measuring two different constructs with one instrument was not entirely satisfactory and subsequently developed the Utrecht Work Engagement Scale (UWES). Work engagement is thus characterised by high levels of energy and strong identification with the workplace and the work done. A two-sample confirmatory factor analytic approach was conducted by Schaufeli et al. (2002) to study the factorial structure of the UWES to measure work engagement. The factor analysis confirmed the three-factor structure of engagement (vigour, dedication and absorption) with correlations of $r > 0.60$ in both samples.

Sonnentag (2003) stated that work engagement is positively associated with employees recovered from the trials and challenges of the previous working day. Adding to this is the work of Schaufeli et al. (2002), which determined that work engagement is not a momentary and specific state, but a more persistent and pervasive affective cognitive state that is not focused on any specific object, event, individual or behaviour. Connected to this is the understanding that work engagement is generally affected by personal characteristics, the workplace (Kahn, 1990) and the characteristics of the work, including job status and job demands (Mauno, Kinnunen & Ruokolainen, 2007). Naudé and Rothmann (2004) validated the UWES in a sample of medical technicians in the Gauteng Province of South Africa to determine the construct equivalence and bias for different language groups. They found that a two-factor model of work engagement, namely vigour/dedication and absorption, was identified and that the exploratory factor analysis confirmed the construct equivalence of the work engagement construct for white and black employees. Schaufeli, Bakker and Salanova (2006) added to the development of the UWES with further insights into the development of the UWES to measure work engagement. They confirmed the factorial validity of the UWES in 27 different studies, and confirmed the three-scale scores as having sound internal consistency and test-retest reliability. It was also ascertained that the test could be used to study positive organisational behaviour. Figure 2.3 illustrates the various dimensions of the construct work engagement. Each of these dimensions is discussed in the section that follows.

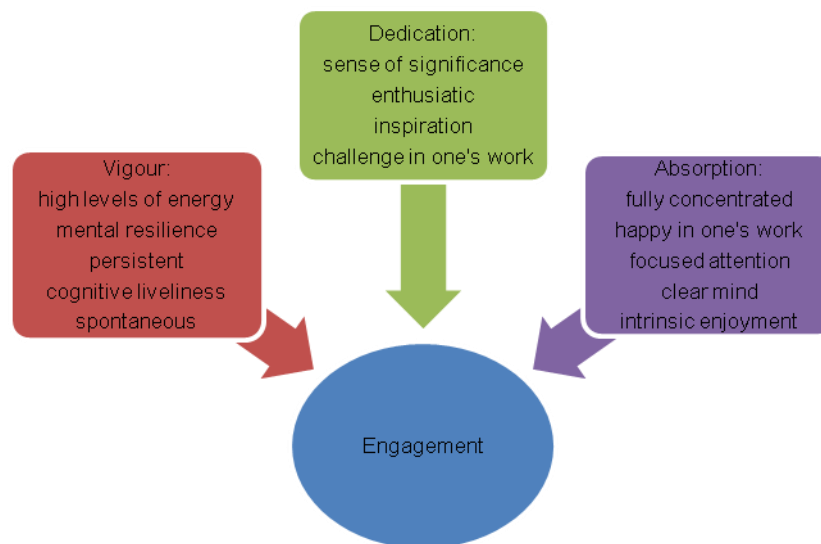


Figure 2.3: Dimensions of the construct of engagement

2.2.2.1 Vigour

Vigorous individuals are willing to invest effort in their work and persistence in the face of difficulties (Schaufeli & Bakker, 2004). Leka and Houdmont (2010) also state that vigour is characterised by high levels of energy and mental resilience while working, willingness to invest effort in one's work and persistence even in the face of difficulties. Individuals feel that they have physical strength, emotional energy and cognitive liveliness. Vigour represents an affective state that individuals attribute to their job and workplace when asked about it; they do so spontaneously and experience positive affect across situations and times (Perrewe & Ganster, 2004). Vigour is an affect experienced at work that combines elements of an emotion and a mood state. Vigour at work involves feelings of physical strength, emotional energy and cognitive liveliness resulting from an appraisal of one's energy resources (Hodgkinson & Ford, 2010). The way individuals think of urgency is similar to vigour, physical strength, emotional energy and cognitive liveliness, with the emphasis on goal attainment. Vigour cannot occur without a specific purpose or objective; in this sense it sounds much like motivation (Macey, Schneider, Barbera & Young, 2009). Engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their job (Burke, 2006). The study of Mauno, Kinnunen and Ruokolainen (2007) showed that work engagement - especially vigour - was relatively frequently experienced among the participants, and its average level did not change across the follow-up period. The objective of Storm and Rothmann's (2003) research was to validate the UWES in the South African Police Service (SAPS). Vigour, dedication and absorption showed acceptable internal consistencies. The objective of Rothmann and Joubert's (2007) study was to investigate the relationships between job demands, job resources, burnout and engagement of management staff at a platinum mine in the North West Province. The results revealed that exhaustion was predicted by workload, job insecurity and lack of resources, while cynicism was predicted by lack of organisational support and advancement opportunities. Vigour was predicted by organisational support.

2.2.2.2 Dedication

Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge in one's work (Schaufeli & Bakker, 2004). Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm and challenge (Albrecht, 2010). Work involvement is to be highly committed to work and to devote a good deal of time to it. If the driving force is feeling compelled to work because of inner pressures

and work enjoyment, one experiences work as pleasant and fulfilling (Burke, 2006). Bakker, van Emmerik and Euwema (2006) investigated the crossover of burnout and work engagement among 2 229 Royal Dutch constabulary officers working in one of 85 teams. The results of multilevel analyses confirm this crossover phenomenon by showing that team-level burnout and work engagement are related to individual team members' burnout (i.e., exhaustion, cynicism and reduced professional efficacy) and work engagement (vigour, dedication and absorption), after controlling for individual members' job demands and resources.

2.2.2.3 Absorption

A state of absorption is characterised by being fully concentrated and happily engrossed in one's work; time consequently passes quickly and one has difficulties with detaching oneself from work. Being fully absorbed in one's work is characterised by focused attention, a clear mind and body, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment (Csikszentmihalyi, 1990). Engaged workers are more creative, more productive, and more willing to go the extra mile (Bakker & Demerouti, 2008). In their study, Gudbergsson, Fossa and Dahl (2008) explore work engagement in employed tumour-free cancer survivors. The sample consisted of 446 tumour-free patients after primary treatment. All had returned to work and had a favourable prognosis. In spite of the poorer health of individuals who had returned to work after their treatment for cancer, they displayed similar work engagement as individuals without cancer. Employers had no reason to expect reduced work engagement from them.

2.2.3 Engagement: Coping and non-coping

The world of work is undoubtedly a stressful environment because organisations are exposed to advancements, competition and the world economy (Bosman, Rothmann & Buitendach, 2005). Engaged employees tend to be energetic and demonstrate a positive connection to the workplace and seem to have better coping mechanisms to deal with challenges at work. To determine possible causes, Maslach and Leiter (2008) explain that there can be a mismatch between the individual and the working environment. The mismatch can occur in the following six domains of the workplace: work overload, control, rewards, community, fairness and values. Work overload occurs when:

- 1) The job demands exceed the ability of the person to cope with the content. People have too much work and too little time to do it.

- (2) Not having control over one's work occurs when organisations have rigid policies and procedures with focused monitoring. The individual is then prevented from actually controlling what he or she does.
- (3) Rewards are perceived as insufficient for the work being done. These rewards may be external (salary and benefits) or internal (pride in doing something well).
- (4) Community breakdown occurs when there is a loss of community between the people in the organisation. Continuous and destructive conflict between people is usually the main cause.
- (5) The system is perceived as unfair because of lack of proper procedures relating to fairness, fairness becomes an issue that may lead to unhappy and unproductive people in an organisation.
- (6) Values are mismatched when personal and organisational values are diametrically opposed to each other.

When there is a mismatch between the person and the job, the likelihood that the individual will fail to cope is great. Conversely the greater the match between the person and the job, the greater the chances are of work engagement. (Bhanugopan & Fish, 2006). Figure 2.4 illustrates the key characteristics of copers and non-copers.

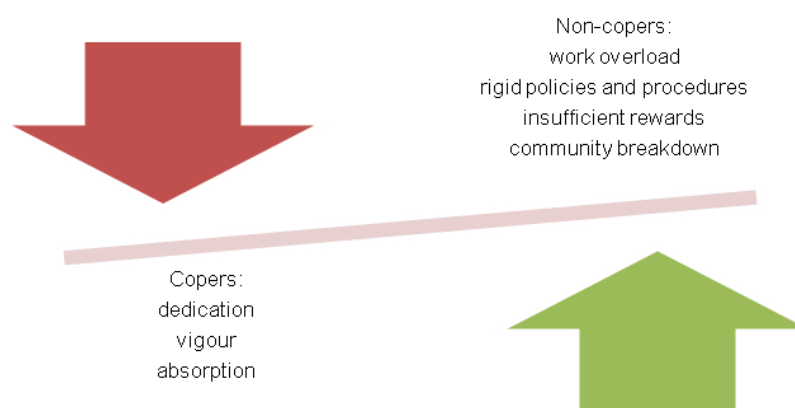


Figure 2.4: Characteristics of non-copers and copers relating to the construct of engagement.

2.3 SENSE OF COHERENCE

Sense of coherence is a construct that strengthens people's lives. In the workplace people's sense of coherence will be enhanced if they have work that is meaningful, are not overly

stressful, and if a sense of autonomy and participation is fostered (Earle, 2007). With sense of coherence someone can coping towards the stressors of life (Green & Tones, 2010).

2.3.1 Conceptualisation

The basis of a sense of coherence is that some individuals can develop a capacity to overcome enormously stressful situations in a positive manner (Edwards & Besseling, 2001). It is a general way of appraising the world, both cognitively and emotionally, which is associated with effective coping, health-enhancing behaviour and better social adjustment (Strümpfer & Mlonzi, 2001). Sense of coherence is believed to be a construct that is universally meaningful, cutting across lines of gender, social class, region and culture. It does not refer to a specific type of coping strategy, but to factors that are the basis for successful coping with stress in all cultures and times (Strümpfer, 1990).

2.3.2 Theory

Antonovsky (1979) initially identified sense of coherence in an attempt to explain successful coping with stressors. Subsequent to his initial definition in 1979, Antonovsky (1987; 1991) included some additional components, thus defining sense of coherence as a global orientation that expresses the extent to which an individual has a pervasive, enduring though dynamic feeling of confidence that: a) the stimuli deriving from the internal and external environments in the course of living are structured, predictable and explicable (comprehensibility); b) the resources are available to the individual to meet the demands posed by these stimuli (manageability), and c) these demands are challenges, worthy of investment and engagement (meaningfulness) (Antonovsky, 1987; 1991).

Sense of coherence is developed through the process of coming to understand one's life experiences, and is thus rooted in the particular historical and socio-cultural context of the individual's lifespan. It is internalised when life experiences are characterised by participation in shaping outcomes, and a balance between punishment and reward, success and failure (Natti & Ety, 2010). Sense of coherence is developed as a single dimension of the individual's personality, consisting of three components: comprehensibility, manageability and meaningfulness (Antonovsky, 1991). Figure 2.5 provides a visual outline of the various dimensions of the construct of sense of coherence.

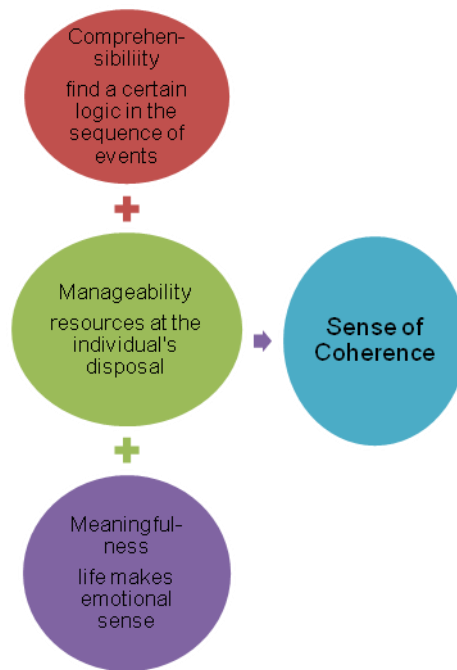


Figure 2.5: Dimensions of sense of coherence

2.3.2.1 Comprehensibility

Comprehensibility refers to the extent to which individuals perceive the stimuli that confront them as making cognitive sense. Information should be ordered, consistent, structured and clear, rather than noisy, chaotic, disordered, random, accidental and unpredictable (Antonovsky, 1984). The fact that individuals perceive events as comprehensible does not mean that they are totally predictable. What is, however, meant by comprehensibility is that the individual finds a certain logic in the sequence of events, that there is a degree of consistency from one experience to another and that in general, inexplicable events do not occur (Linley, Joseph & Loumidis, 2005).

2.3.2.2 Manageability

Manageability refers to the extent to which people perceive that there are resources at their disposal that are adequate to meet the demands posed by stimuli (Antonovsky, 1984). The resources at their disposal may refer to resources under the individual's own control or resources controlled by legitimate others, that is, friends, colleagues, or God, against the background of a history upon which one can count. When people are rated high on manageability, they have the sense that, aided by their own resources or by those of legitimate others, they will be able to cope and not grieve endlessly (Antonovsky, 1984).

2.3.2.3 Meaningfulness

When individuals say that something makes sense, in cognitive terms they mean that it is ordered and in emotional terms they mean that they care. Thus people who are rated high on meaningfulness feel that life makes sense emotionally. Meaningfulness is the emotional counterpart to comprehensibility (Antonovsky, 1984). According to Nord (2009) a person with a sense of meaningfulness is connected to his or her perception that there are important and meaningful phenomena in life. Meaningfulness is the component that motivates a person's sense of coherence. Individuals experience their work as consisting of experiences that are bearable, with which they can cope, and challenges that they can meet by availing themselves of personal resources (Schreuder & Coetzee, 2007). Signe and Solve (2005) state that meaningfulness (the motivational component) is experienced when events tend to be viewed as challenges worthy of emotional investment. Chrisler and McCreary (2010) posit that meaningfulness is the belief that life demands are worth one's investment and engagement and that sense of coherence develops over time from life experiences.

2.3.3 Coping and non-coping with sense of coherence

An individual who has a strong belief that the world makes sense (comprehensibility) is probably more likely to view himself/herself as being equal to the demands of living (manageability), compared to an individual who sees the world as a place without rhyme or reason. By the same token, a person who lacks commitment to the activities of life (meaningfulness) is not likely to be motivated to participate in shaping events, even if the situation is perceived to be manageable (Larsen & Lubkin, 2009).

Suominen, Helenius, Blomberg, Uutela and Koskenvuo (2001) aimed to determine whether sense of coherence predicted a subjective state of health. It was found that a strong sense of coherence predicted good health in women and men. Sense of coherence can be interpreted as an autonomous internal resource contributing to the favourable development of a subjective state of health. Richardson and Ratner's (2005) study objective was to test the hypothesis that Antonovsky's concept of sense of coherence moderates (that is, buffers) the health impacts of stressful life events. The result was that sense of coherence seems to buffer the impact of recent stressful life events.

Surtees, Wainwright and Khaw (2006) tested the hypothesis that sense of coherence distinguishes adaptive capacity to adverse event experience. The outcome was that those with a weak sense of coherence reported significantly slower adaptation to the adverse

effects of their experience of events than those with a strong sense of coherence. Cohen and Dekel (2000) conducted a study that examined sense of coherence and ways of coping as personality resources capable of helping divorced mothers deal with the crisis of divorce. The findings showed that although mothers from two-parent families enjoyed a higher sense of wellbeing than divorced mothers, the wellbeing of both groups was predicted by sense of coherence. They also showed that mothers with a higher sense of coherence used more effective coping strategies and derived more benefit from the strategies they used.

Sense of coherence is based on three components labelled comprehensibility, manageability and meaningfulness. The three components are interrelated and all of them are needed for successful coping. However, it should be noted that even if a strong sense of coherence moderated the adverse effects of work stress in some cases, those individuals with a strong sense of coherence and adverse work stress exposure also had an increased risk of ill health and non-coping. It can be argued that there is no such thing as resistance power against work stress; sooner or later everyone will be affected by adverse working conditions. Everyone will boil, but at different temperatures (Fritzell & Lundberg, 2007). Figure 2.6 illustrates the key characteristics of copers and non-copers.

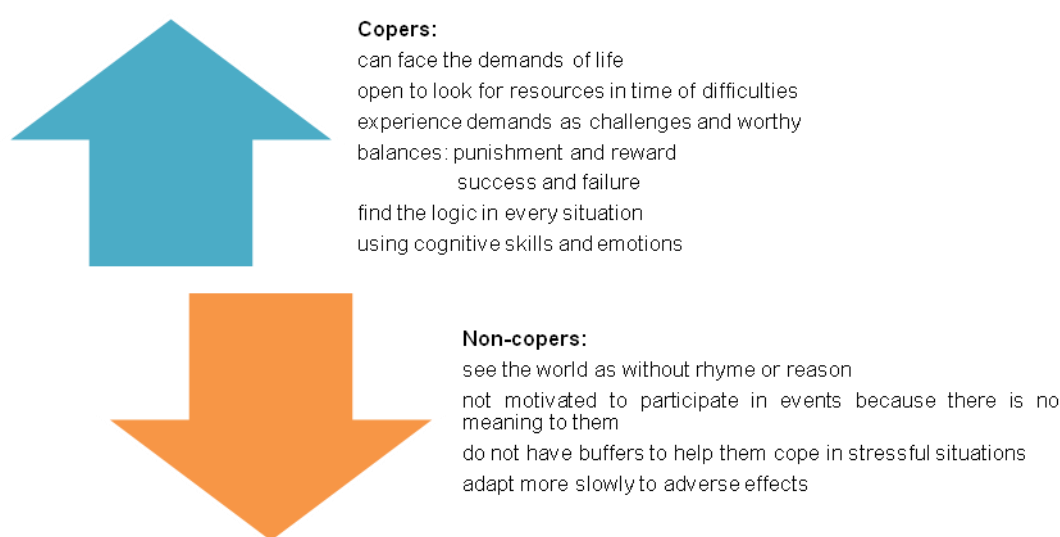


Figure 2.6: Characteristics of copers and non-copers relating to sense of coherence

2.4 INTEGRATION: LOCUS OF CONTROL, ENGAGEMENT AND SENSE OF COHERENCE

The individual who has a **sense of coherence** has a dynamic feeling of confidence that internal and external environments are predictable, that things will work out as well as can reasonably be expected. The individual shows commitment and **engagement** to life,

willingness to take on challenges and a belief in personal **control** and circumstances (Boss & Mulligan, 2003). Table 2.1 provides an outline of the theoretical integration of the constructs locus of control, engagement and sense of coherence.

Table 2.1: Theoretical integration of locus of control, engagement and sense of coherence

Construct	Locus of control (Rotter, 1966)	Engagement (Kahn,1990)	Sense of coherence (Antonovsky,1979)
Conceptualisation	The individual perceives reinforcement and use of internal or external locus of control in behaviour.	Work engagement can be defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption	It is a general way of appraising the world, both cognitively and emotionally, which is associated with effective coping, health-enhancing behaviour and better social adjustment
Core dimensions	Internal locus of control External locus of control includes culture, powerful others and defensive mechanisms	Vigour: high levels of energy, mental resilience, investment of effort in one's work, perseverance Dedication: significance, enthusiasm, inspiration, pride, challenge Absorption: fully concentrated, happily engrossed in one's work	Comprehensibility: to find a certain logic in the sequence of events Manageability: resources are adequate to meet demands Meaningfulness: something makes sense in cognitive and emotional terms
Core characteristics			
cognitive	People with internal locus of control showed more adaptive coping patterns (Parkes, 1984). Experiences in life have an influence on the cognitive process. The more life experiences the individual gains, the more it becomes external locus of control and at the same time they preserve their sense of internal control (Lachman, 2007).	Cognitive engagement is willingness to invest and exert effort in learning (Blumenfeld, Kempler & Krajcik, 2006). Showed improved speed of processing, marginally improved divergent thinking (Stine-Morrow, Parisi, Morrow, Greene & Park, 2007). Kanungo (1982) maintained that job involvement is a cognitive or belief state of psychological identification. Job involvement results from cognitive judgment about the need-satisfying abilities of the job.	A cognitive-transactional model of stress argues that the interaction between stressors in the environment and their consequences or strains are moderated by intervening psychological processes (Folkman & Lazarus, 1985). A strong sense of coherence enables one to mobilise coping resources in order to deal effectively with stress and avoid burnout (Antonovsky, 1987).

Construct	Locus of control (Rotter, 1966)	Engagement (Kahn,1990)	Sense of coherence (Antonovsky,1979)
affective	Thomas, Sorensen and Eby (2006) showed that internal locus was positively associated with favourable work outcomes, such as positive task and social experiences and greater job motivation. Chen and Wang (2007) showed that individuals with more internal locus of control were more likely to have high affective and normative commitment to change, whereas individuals with more external locus of control were more likely to have high continuance commitment to change.	Engagement refers to a more persistent and pervasive affective cognitive state (Schaufeli, Bakker & Salanova, 2006). The human spirit in this context refers to that part of the human being which seeks fulfilment through self-expression at work (May, Gilson & Harter, 2004). Engagement entails the active use of emotions and behaviour. Emotion at work should facilitate engagement in work and make connections with others at work more meaningful (Kahn, 1990; Waldron, 1994).	A person with a high sense of coherence will be more likely to define stimuli as non-stressors and to define the stress attributed to stimuli perceived as stressors as benign or irrelevant. Faced with a situation in which it is unclear what is expected (role ambiguity) a person with a strong sense of coherence may simply ask for clarification and continue, without appraising the situation as stressful at all (Levert, Lucas & Ortlepp, 2000).
conative	The conative component is the motivation for an individual to keep his/her job, which can be linked to locus of control (Vandenberghe & Huberman, 1999).	Conation is striving or having the power to strive or struggle toward a goal, which may be conscious or unconscious, descriptive of one of the three great divisions of the mind or soul, namely the will to do contrasted with terms descriptive of feeling (affective) or the power of knowing (cognitive) (Riggs & Gholar, 2009).	A strong sense of coherence is promoted by life experiences. Poor living conditions and social support, as well as continuous exposure to violence and crime, and an uncertain economy in South Africa may be playing a role in lowering the sense of coherence (Antonovsky, 1987).
interpersonal	The extent to which individuals regard themselves rather than powerful others or mere chance, as having control over what happens to them. Individuals with high interpersonal construct tend to attain higher levels of reward in areas such as physical and mental wellbeing, educational attainment and organisational achievement (Hargie, 2011).	Interpersonal exchanges can be enhanced and optimised under conditions of positive regard when there is active engagement. Interpersonal actions that are openly warm, empathetic, accepting and objectively evident in nature enhance relationships. Performance of employees has been strongly affected by interpersonal behaviour (Smither & London, 2009).	The success with which people cope with the contingencies of their interpersonal lives depends largely on how effectively people respond to the contradictions and conflicts that social life necessarily poses. The narratives that people create, discover, and apply help people maintain a sense of coherence and continuity over the course of their lives (Knapp & Daly, 2002).

Construct	Locus of control (Rotter, 1966)	Engagement (Kahn,1990)	Sense of coherence (Antonovsky,1979)
Relationship with coping	<p>Individuals with internal locus of control develop better quality relationships, which serve as a support system in times of coping (Martin, Thomas, Charles, Epitropaki & McNamara, 2005) Individuals showed flexibility, controllability, strategy situation fit and predictable behaviour in coping situations (Gan, Shang & Zhang, 2007).</p> <p>The coping styles seeking social support and confrontation were important predictors of positive social adjustment (Meijer, Sinnema, Bijstra, Mellenbergh & Wolters, 2002)</p>	<p>Value of a work goal or purpose, judged in relation to an individual's own ideals or standards (Hackman & Oldham, 1980; Van Zyl, Deacon & Rothmann, 2010; Vandenberg, Park, DeJoy, Wilson & Griffen-Blake, 2002). The presence of resources (physical, emotional and cognitive) will lead to greater availability and engagement (Ganster & Schaubroeck, 1991).</p>	<p>A strong sense of coherence enables one to mobilise coping resources in order to deal effectively with stress and avoid burnout (Antonovsky, 1987). A strong sense of coherence is a way of seeing the world that facilitates successful coping with the innumerable, complex stressors confronting people in the course of living (Antonovsky, 1991). A strong sense of coherence enables one to mobilise effective coping resources in the face of tension, predisposing one to move towards the health side of the health/disease continuum (Levert, Lucas & Ortlepp, 2000).</p>
Relationship with non-coping	<p>Perceived academic performance, self-esteem and locus of control are significantly associated with suicidality (Martin, Richardson, Bergen, Roeger & Allison, 2005).</p> <p>Twenge, Zhang and Im (2004) found that locus of control scores became substantially more external: poor school achievement, helplessness, ineffective stress management, decreased self-control and depression.</p> <p>Depression was a predictor of poor adjustment, low social self-esteem and high social anxiety. Avoidance and locus of control were not strongly associated with psychosocial adjustment (Martin, Richardson, Bergen, Roeger & Allison, 2005).</p>	<p>Emotional demands lead to depletion of emotional resources (i.e. exhaustion), frequency of emotional display, duration and intensity of such displays and variety of emotions expressed and also decrease these resources. Morris and Feldman's (1996) cognitive demands in some roles require more information-processing than individuals can handle. They become overwhelmed at the amount of information or 'balls in the air' and lack the ability to think clearly (Thompson, Chaiken & Hazlewood, 1993). Individuals show lack of commitment and are less capable of providing adequate services, especially along the dimensions of decision-making and initiating involvement (Levert, Lucas & Ortlepp, 2000).</p>	<p>Poor living conditions and social support, as well as continuous exposure to violence and crime, and an uncertain economy in South Africa may be playing a role in lowering the sense of coherence (Levert, Lucas & Ortlepp, 2000). A weak sense of coherence is likely to result in poor tension management and inability to mobilise adequate resources, culminating in health breakdown (Antonovsky, 1987).</p>

2.5 COPING AND NON-COPING

As stated in the background to and motivation for this research, change is often a traumatic experience for individuals. However, according to Bordia, Hobman, Jones, Gallois and Callan (2004), it is difficult to explain why some individuals cope and others do not in the same situation. This section provides an overview of coping and non-coping: the definition, conceptualisation and theory. It includes a description of the Transactional Model of Coping, (Glanz, Rimer & Viswanath, 2008), a differentiation between copers and non-copers, and the Quality of Life theory (Frisch, 2006) to enhance someone's skills and awareness, which can help individuals to cope. Attention is paid to different coping strategies through the three constructs locus of control, engagement and sense of coherence. The theoretical relationship between locus of control, engagement and sense of coherence is illustrated through a metaphor (Fig 2.11). The construct employee wellness is defined and conceptualised and it is indicated how it is dealt with in an organisational context.

2.5.1 Coping and non-coping

Coping is the description of the features of human adaptation. Small beginnings can have big effects; change does not happen in one dramatic moment (Frydenberg, 2008). Coping places the emphasis on what the person can do. The areas of life in which the person can participate are seen as worthwhile. The negative aspects of the person's life, such as pain that is suffered or difficulties that exist, are felt to be manageable. They are limited because satisfactory aspects of the person's life are recognised. Managing difficulties means living on satisfactory terms with one's limitations (Martz & Livneh, 2007).

Non-coping places the emphasis on what a person cannot do. Little weight is given to the areas of life in which a person can participate. The person sees himself/herself as passive, as a victim. The person's accomplishments are minimised by highlighting their shortcomings. The negative aspects of a person's life, such as pain that is suffered or difficulties that exist, are kept in the forefront of attention. They are emphasised and exaggerated and even seen to usurp all of life (Martz & Livneh, 2007).

2.5.1.1 Conceptualisation

According to humanist thinking, an event becomes stressful when it is appraised by an individual as a threat to his or her level of wellbeing (Lazarus, 1999). Judgements of a transaction that are irrelevant, positive or stressful are referred to as primary appraisals

(Karademas & Kalantzi-Azizi, 2004). Once the primary appraisals have been made, a so-called secondary appraisal follows. The secondary appraisal is an evaluation of coping resources and addresses the question, what can I do? It becomes critical when there is a primary appraisal that calls for coping resources (Ziegler, 2005).

For the purpose of this research, coping may be defined as the cognitive and behavioural efforts to master, reduce or tolerate the internal and/or external demands of the person-environment transaction that is appraised as taxing or exceeding the individual's resources (Folkman & Moskowitz, 2004). Nes and Segerstroom (2006) point out that the behavioural efforts are action- and intrapersonally oriented, while Nicholson and Pearson (2003) add that overt and covert actions reduce or eliminate psychological distress or stressful conditions. Thus the behavioural efforts (ie coping) can master, moderate, reduce, minimise or tolerate stress experienced during a period of transition.

Non-coping, on the other hand, is failed coping efforts with the subsequent occurrence of a wide range of physical and psychological disorders (Meyer, Rothmann & Pienaar, 2003). Nangamso (2008) refers to non-coping as the inability to cope effectively with stress. Monroe (2008) points out that exposure to and coping with the demands of life comprise the essence of human life. Inadequate coping with these demands can be viewed as demands that exceed the resources of the system, thus failure to cope results in a disturbance in the individual. Cutcliffe and McKenna (2005) state that non-coping is not failure to manage or succeed in satisfying demands. They argue that non-coping is not determined by the outcome of coping strategies but rather by the availability or lack of coping skills.

2.5.1.2 Theory

People do not resist change but they resist the uncertainty beyond the change. They resist the unknown. Individuals respond to change in two different ways, namely active (coping) or passive (non-coping). The active way is that when facing change, individuals attempt to take control of the situation. In the passive way individuals hope the situation will pass soon (Passmore & Woodman, 2005).

Copers have the vision that self-initiated constructive actions create opportunities for growth and improvements in their quality of life (Dewe, O'Driscoll & Cooper, 2010). Coping is seen as the process through which individuals manage the demands of the person-environment relationships that are appraised as stressful and the emotions they generate. Coping may comprise actions which aim to manage or alter the problem (problem-focused coping), or

actions or thoughts targeted at regulating emotional responses to the problem (emotion-focused coping) (McNamara, 2000).

Glanz, Rimer and Viswanath (2008) state that the transactional model (outlined in Table 2.2) is a framework for evaluating the process of coping with stressful events. When faced with a stressor, a person evaluates potential threats or harms as well as his/her ability to alter the situation and manage negative emotional regulations and to give rise to the outcomes of the coping process. The transactional model looks at the different roles that meaning plays in the stress and coping process to understand the dynamics of coping (Dewe, O'Driscoll & Cooper, 2010). Stressful experiences are constructed as a person's environmental transactions in which the impact of an external stressor or demand is mediated by the person's appraisal of the stressor and the psychological, social, and cultural resources at his or her disposal (Glanz, Rimer & Viswanath, 2008).

The transactional nature of the stress process means that there is always a fine line between appraisals and coping with the way meanings are constructed, operating at times as one or the other. The idea that people are motivated to try to make sense of stressful encounters is to make sense of coping. In the midst of stressful encounters individuals instil everyday activities with positive meanings as a means of sustaining them, giving them respite and helping to restore their resources. Coping should not merely be managing the stressful conditions, but is also about having the potential to sustain individuals during such an encounter by creating positive psychological states that help them through experience (Dewe, et al, 2010).

Changes in people over time can reveal the way perceptions of events and their physical and mental health affect each other in a two-way relationship. It is hard to separate the way one thinks from the way one feels. In the transactional model, daily hassles or the stress of daily living are strongly believed to predict outcomes more effectively than stressful life events. The transactional model seeks to progress from only focusing on one stressful life event. Rather, stress is represented as a dynamic, ongoing and changing process mediated by cognitive appraisals, which are flexible by nature (McNamara, 2000). Change brings the rich potential for individual improvement (Dewe, et al, 2010).

Table 2.2: Transactional model of coping (Glanz, et al, 2008)

Concept	Definition	Application
Primary appraisal	Evaluation of the significance of a stressor or threatening event. Stressors are physical or psychological demands to which an individual responds (Glanz, et al, 2008). Threatening events cause feelings of fear, helplessness or horror; however, the symptoms differ among individuals (Plante, 2006).	Perceptions of an event can cause distress; if an event is perceived as positive or irrelevant, little negative threat is felt. Primary appraisal is a person's judgement about the significance of an event as stressful, positive, controllable, challenging, benign or irrelevant. Appraisals of personal risk and the severity of the threat prompt efforts to cope with stressors. Primary appraisals act to minimise the significance of threats, particularly when the threat is ambiguous or uncertain (Glanz, et al, 2008).
Secondary appraisal	Evaluation of the controllability of the stressor and a person's coping resources. Secondary appraisal is an assessment of a person's coping resources and options. It focuses on features of the stressful situation and on what one can do about the situation (Glanz, et al, 2008).	Perception of one's ability to change the situation, manage one's emotional reaction and/or cope effectively can lead to successful coping (or unsuccessful non-coping) and adaptation (Glanz, et al, 2008).
Coping efforts	Actual strategies used to mediate primary and secondary appraisals. Emotional and functional effects of primary and secondary appraisals are mediated by actual coping strategies (Glanz, et al, 2008).	This model predicts that problem-focused coping strategies will be most adaptive for stressors that are changeable, whereas emotion-focused strategies are most adaptive when the stressor is unchangeable or when this strategy is used in conjunction with problem-focused coping strategies (Glanz, et al, 2008).
Emotional regulation	Emotional regulation concerns one's emotions, behaviour, thoughts and psychological responses, which serve as a set goal for own functioning in social, emotional, cognitive and physiological reactions (Cummings, Davies & Campbell, 2000).	Emotional regulation refers to the ways in which people control their own emotions, also including certain behaviours to control unpleasant emotional status (Rathus, 2008).
Meaning based on coping	Coping processes that induce positive emotion, which in turn sustains the coping process by allowing re- enactment of problem- or emotion-focused coping (Glanz, et al, 2008).	To discover what the most effective way(s) of coping is. How can one cope successfully and become more effective in respect of coping mechanisms (Gleeson, 2004)

Concept	Definition	Application
Outcomes of coping (adaptation)	Coping is a particular kind of strategy; it is what an individual does in a particular situation which may decrease (or enhance) the effects of stress (Aldwin, 2007).	Coping strategies can be categorised into problem-focused and emotion-focused coping. Several different strategies fall within the emotion-focused and problem-focused categories. For example, planning the steps to take or asking someone to help one to solve the problem is a problem-focused strategy. Seeking the company of friends or family for comfort and reassurance is an emotion-focused strategy (Brannon & Feist, 2009).
Dispositional coping styles	Generalised ways of behaving that can affect a person's emotional or functional reaction to a stressor, relatively stable across time and situations (Glanz, et al, 2008).	The individual focuses on the venting of emotions, mental disengagement, alcohol or drugs to cope with problems, waits until an appropriate opportunity to act presents itself or focuses on the distress felt (Segal, Qualls & Smyer, 2011).
Information seeking	Attention styles that are vigilant (monitoring) versus those that involve avoidance (blunting) (Glanz, et al, 2008).	It depends on which coping strategy the individual is following. The dispositional coping style will be monitoring, which will increase distress and arousal; the adaptation coping style may increase active coping (Glanz, et al, 2008).
Optimism	Tendency to have generalised positive expectancies of outcomes (Glanz, et al, 2008).	Optimists may experience fewer symptoms and/or faster recovery (Glanz, et al, 2008).

Individuals need to develop coping strategies to deal with the demands of their lives, which include life roles such as work and family roles (Kail & Cavanaugh, 2010). For example, cognitive disengagement may be an effective strategy for coping with work-related stress, but not with family-based stress. Whether they work for themselves or for an organisation, individuals face a dilemma in deciding how much they want to integrate their different roles, such as work, family, sport, social activities etc. (Powell, 2011). Haworth and Veal (2004) state that a stressful, rigid work environment that demands extended commitments can interfere with the individual's family life, whereas a flexible work environment can have the opposite effect. According to Haworth and Veal (2004), a positive attitude and experience in one area of life can influence the other areas of the individual's life.

When efforts at coping are ineffective, physiological and emotional stress is likely to be intensified and may lead to physical, social or emotional difficulties. The stress generated in one area may cause other stresses, so that multiple stressors become involved. Some coping attempts are doomed to fail and their outcomes become added stressors (Gitterman & Germain, 2008). Frisch (2006) states that the aim is to increase self-care by addressing problems in all areas of life. Self-caring can be defined as a feeling of calmness, being rested, contented, loving, alert and ready to meet the challenges of the areas of life. Table 2.3 summarises the key characteristics underlying the psychological profile of copers and Table 2.4 those of non-copers.

Table 2.3: Psychological profile of copers

Cognitive profile	Emotional profile	Conative profile	Interpersonal profile
<p>According to Spector (2002) they view themselves as being in control of the situation because of enhanced control of their coping abilities.</p> <p>They look on the bright side, turning their minds away from the problem (Frydenberg, 2008).</p>	<p>There is strong regulation of feelings, which includes emotional self-control, not feeling depressed or worried about changing circumstances.</p> <p>Emotional discomfort is relieved through affect regulation, resigned acceptance and controlled emotional discharge (Ashkanasy & Cooper, 2008).</p>	<p>The conative profile of the copers is that of information-seeking. Obtaining information enhances the predictability of a situation and serves to help individuals to avoid future difficulties by dealing with present ones, thus increasing their control (Kim, Hom & Crant, 2009).</p>	<p>Experiences good feelings about themselves. They have good insights into interpersonal situations. Realistic evaluations of the human environment. Integration in their thinking, feeling and acting (Anthony & Cohler, 1987).</p>

Table 2.4: Psychological profile of non-copers

Cognitive profile	Emotional profile	Conative profile	Interpersonal profile
Through cognitive redefinition they define change–related stressors as problems and threats (Herscovitch & Meyer, 2002). According to Polka and Litchka (2008) they view themselves as powerless and perceive the change as out of control because of negative reappraisal of their coping abilities.	Loss of emotional control leads to negatively experienced emotions: confusion, insecurity, anger and depression (Avison, Mcleod & Pescosolido, 2007).	When there is loss of emotional control, some individuals will respond with emotional rages and disputes with management and colleagues, as well as abuse of drugs and alcohol. Withdrawal behaviour, being negative, unproductivity and increased absenteeism are some of the coping strategies the individuals will use to survive (Weiten, 2007).	They did not utilised repertoire of coping behaviour. They do not relied on resignation, anticipatory and prevention coping. they do not exercised autonomy and viewed themselves as not healthy and incompetent (Gilbert, 1995).

Frisch (2006) mentions 16 areas of life that may determine an individual's overall quality of life, which he describes in his Quality of Life theory. The aim of the Quality of Life Theory is to enhance skills and awareness, which can help individuals to cope in difficult situations (Frisch, 2006). Maruish (2004) states that the 16 areas of life have an effect on a person's life satisfaction, for example with work itself, pay, relationships with co-workers and managers, the work environment and job security. When a person experiences some disequilibrium, change or hardship in one of more of the life areas, it takes coping efforts to handle the change. Maruish (2004) says that the 16 areas can be seen as a pie and that some areas will be bigger, depending on where coping has to take place.

The aim of the Quality of Life Theory is to enhance skills and awareness, which can help individuals to cope in difficult situations. Frisch's (2006) 16 areas of life that may determine an individual's overall quality of life are illustrated in figure 2.10 below:

The 16 dimensions are each briefly described as follows (Frisch, 2006)

- 1) *Health* is being physically fit, not sick and without pain or disability.

- 2) *Self-esteem* means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.
- 3) *Goals and values/spiritual life.* Goals and values are one's beliefs about what matters most in life and how one should live, both now and in the future. This includes one's goals in life, what one regards as right or wrong, and the purpose or meaning of life as one sees it. Spiritual life may or may not be an important part of one's goals and values. Spiritual life refers to spiritual or religious beliefs or practices that one pursues on one's own or as part of a like-minded spiritual community.
- 4) *Money* (or standard of living) refers to the money one earns, the things one owns (like a car or furniture) and believing that one will have the money and things that one need in the future.
- 5) *Work* means one's career or how one spends most of one's time. One may work at a job, at home taking care of one's family, or at school as a student. Work includes one's duties at work, the money one earns (if any) and the people one is working with.
- 6) *Play* (or recreation) means what one does in one's free time to relax, have fun, or improve one. This could be watching movies, visiting friends, or pursuing a hobby such as sport or gardening.
- 7) *Learning* means gaining new skills or information about things that interest one. Learning can come from reading books or taking classes on subjects like history, car repair, or using a computer.
- 8) *Creativity* is using one's imagination to come up with new and clever ways to solve everyday problems or to pursue a hobby like painting, photography or needlework. This can include decorating one's home, playing the guitar, or finding a new way to solve a problem at work.
- 9) *Helping* (social service and civic action) means helping others (not just friends or relatives) in need or helping to make one's community a better place to live. Helping can be done on one's own or in a group like a church, a neighbourhood association or a political party. Helping can include doing volunteer work at a school or giving money to a good cause.
- 10) *Love* (or love relationship) is a very close romantic relationship with another person. Love usually includes sexual feelings and feelings of being loved, cared for and understood.
- 11) *Friends* (or friendships) are people (not relatives) one knows well and cares about who have interests and opinions like oneself. Friends have fun together, talk about personal problems and help each other out.
- 12) *Children* include a measure of how one gets along with one's child (or children). Think of how one gets along as one cares for, visits, or plays with one's child (or children).

- 13) *Relatives* mean how one gets along with one's parents, grandparents, brothers, sisters, aunts, uncles, and in-laws. Think about how one gets along when one is doing things together, e.g. visiting, talking on the telephone or helping each other.
- 14) *Home* is where one lives. It is one's house or apartment and the yard around it. Think about how nice it looks, how big it is, and one's rent or house payment.
- 15) *Neighbourhood* is the area around one's home. Think about how nice it looks, the amount of crime in the area, and how well one likes one's neighbours.
- 16) *Community* is the whole city, town or rural area where one lives (not just one's neighbourhood). Community includes how nice the area looks, the amount of crime, and how well one likes the people. It also includes places to go for fun, such as parks, concerts, sport events and restaurants. One may also consider the cost of things one needs to buy, the availability of jobs, the government, schools, taxes and pollution.

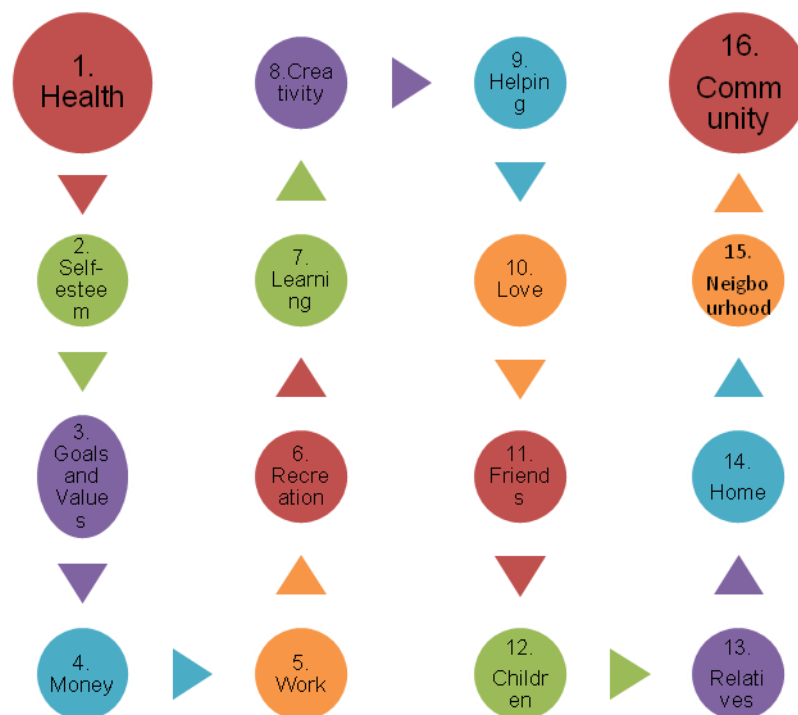


Figure 2.7: The 16 dimensions underlying the Quality of Life theory (Frisch, 2006).

2.5.1.3 Coping strategies

Gitterman and Germain (2008) state that individuals appraise a life issue as a challenge when they believe they have personal and environmental resources to deal with it. One person may experience a difficult life situation as a stressor while another may experience

the same situation as a challenge. Those differences appear to arise from personality, physical condition, environment, past experiences and availability of resources for coping.

- **Personal resources** for coping include motivation, management of feelings, problem-solving, relationship skills, a hopeful outlook, optimal levels of self-esteem, the ability to identify and use information from the environment about the stressor and how to deal with it, self-restraint and an ability to seek environmental resources and to use them effectively. Flexibility is also a personal coping resource. Like hope, it reflects recognition of the positive despite the stressor, trust in the certainty of future satisfaction and seeking and accepting help when needed (Gitterman & Germain, 2008)
- **Environmental resources** are formal service networks and institutions. Resources also include informal networks of relatives, friends, neighbours and co-workers. Such informal support networks serve as buffers against stress. The natural and physical environment may also contribute to physical and emotional wellbeing and support coping efforts (Gitterman & Germain, 2008).
- **Outward approach coping strategies** aim to deal with the stressor by reconstruing or controlling the external environment, problem-solving and seeking social support (Wong, Wong & Lonner, 2006).
- **Inward avoidance** coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, Wong & Lonner, 2006).
- Travers (2011) mentioned in terms of reaction to stress, research has highlighted particular **unhealthy behaviours**. The following were reporting to cope with stress; consuming alcohol, taking drugs and sleep difficulties. One respondent stated: "My coping mechanisms recently have been ineffective, crying, getting angry, not sleeping and not relaxing enough.
- **Social coping** involves methods such as seeking support from others (Brannon & Feist, 2010).
- **Meaning-focused** coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).
- **Proactive** coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010). Proactive coping is an effort to build up general resources that facilitates promotion toward challenging goals and personal growth. In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, Lopez & Pedrotti, 2010).
- **Productive strategies** entail social action, seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008).

- **Job-crafting** is the physical and cognitive changes individuals make in the task or relational boundaries of their work. Employees continually interact with their environments, regardless of their position in the organisation (Houdmont, 2010)
- **Self-leadership** is the degree to which an employee takes responsibility for the managerial aspects of his or her job over and above the content and production-related responsibilities. It is a process through which individuals control their own behaviour, influencing and leading themselves through the use of a specific set of behavioural and cognitive strategies (Houdmont & Leka, 2010).
- **Humour and laughter** provide a safety valve for coping. Being able to laugh in the face of adversity and suffering releases tension and provides hope (Gitterman & Germain, 2008).
- **Time management.** Diary and journal keeping help increase the awareness of the things that are important to attend to. Journaling helps one sustain oneself emotionally at work and can assist diarist in reflecting on experiences which increase observational skills (Travers, 2011).
- **Coping flexibility** is realising that different strategies work in different situations. The key to effective coping might be to know when to employ which type of strategy. Individuals who readily adjust their coping strategies to fit the realities of a given situation are likely to deal with life's problems more effectively than those who do not. Most people have a number of coping strategies in their repertoires. If one approach for dealing with a situation does not work, perhaps another one will (Burger, 2008).

All types of coping strategies may be effective in some situations. The key to successful coping is flexibility, leading to the use of an appropriate strategy for the situation (Brannon & Feist, 2010). Gitterman and Germain (2008) state that most people can cope relatively well with difficult life stressors. In some instances the situation is mastered. Many people grow as a result of coping with stressors; their self-esteem and sense of competence, relatedness and self-direction are strengthened by their triumph over adversity.

2.6 THEORETICAL INTEGRATION

The literature review of the positive psychology constructs discussed in this chapter indicates commonalities between certain aspects of the positive psychology constructs and coping. The focus of the positive psychology constructs is on successful coping (Snyder, Lopez & Pedrotti, 2010) and on how people manage stress and stay well (Daft, 2010). These constructs collectively measure generalised personality orientations (Lopez, 2008) and serve

as an indication of successful coping. What follows is an integration of the theoretical constructs discussed in this chapter.

2.6.1 Locus of control

Internal and external components of the construct serve as an indication of which individuals have a strong belief (*cognitively*) that they can control stressful situations (Daft & Marcic, 2008). It also serves as an indication of the individual's conative response, that is, his/her alertness to the environment and willingness to accept responsibility and to take steps to improve the situation (deMooij, 2010). Mastering events (*affective*) that is overwhelming to the individual, for example job loss (Martz & Livneh, 2007), and is also relevant in this context. Individuals with a high degree of perceived control (i.e. an internal locus of control) believe that the consequences of their actions are mainly caused by their own actions and tend to use active or problem-focused coping strategies. Individuals with internal locus of control experience fewer frustrated emotions and attempt fewer aggressive acts (Perrewe & Ganster, 2005).

2.6.2 Engagement

Task engagement binds together energy, concentration and motivation: it includes energetic arousal, task investment, success motivation and concentration (*cognitive*) (Gruszka, Matthews & Szymura, 2010). *Affective* coping with work engagement includes positive emotions such as joy and pride, job satisfaction, optimism, faster recovery of physiological stress. Moreover, it is conceivable that when a goal is attained, employees can switch off their minds better after work, compared to situations when goal attainment is difficult or many obstacles have to be removed (Antoniou, Cooper, Chrousos, Spielberger & Eysenck, 2009). *Conative* engagement is having an achievement orientation, establishing a life vision, setting goals and regulating one's behaviour. Conative processes are used in directing, energising, persevering and intrinsic motivation. Individuals are happiest when they are striving for something larger than themselves, especially when using personal strengths to do so, seeking to be creative and innovate, focusing attention, engaging in positive self-talk, displaying the ability to manage emotions, initiating tasks, and engaging in daily self-renewal, as well as monitoring thoughts, emotions and behaviour (Huitt & Cain, 2005). *Interpersonal* coping occurs when an individual has some degree of control over the situation and when the person with whom he/she is in conflict is amenable to constructive resolution of the conflict (Dewe, O' Driscoll & Cooper, 2010).

2.6.3 Sense of coherence

Two of the components of the sense of coherence construct, i.e. comprehensibility and manageability, provide a clear indication of the extent to which individuals will (*cognitively*) comprehend anxiety-provoking situations (such as organisational change) and view them as manageable (Kiefer & Muller, 2003). *Affective* coping through sense of coherence increases the ability to deal with stressors, which develops through repeated exposure to a variety of stressors (Arnetz & Ekman, 2006). Manageability also indicates to what extent an individual will select appropriate resources in order to manage the situation actively (*conatively*). The stronger the individual's sense of coherence, the better he/she will cope in stressful situations, such as during change (Kearney & Richardson, 2006). *Interpersonal coping* is to remain socially connected, maintaining hope, being able to restructure the meaning of the stressor and framing it in a positive light (Stein-Parbury, 2009).

2.6.4 The theoretical relationship between locus of control, engagement and sense of coherence and coping and non coping behaviour.

The three positive psychology constructs, locus of control, engagement and sense of coherence, can be illustrated by using the metaphor of driving a motor car. This metaphor is illustrated in Figure 2.8.

Cognitive *locus of control* is to have control over stressful situations. If one does not have control over one's car or the road it can cause an accident.

Cognitive *locus of control* is to have control over stressful situations. If one does not have control over one's car

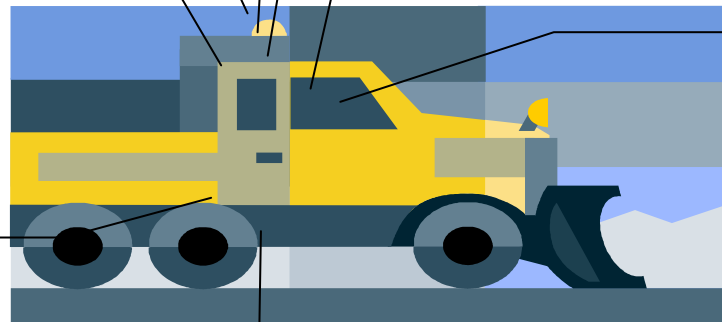
Conative *locus of control* is alertness to the environment, willingness to accept responsibility and steps to improve the situation. If one is stuck in traffic one must consciously remain calm or if possible find alternative routes; one must take responsibility for staying calm and not losing one's temper or getting irritated. After all, one knows it will not last forever.

Affective locus of control is mastering the overwhelming situation. If one is totally lost and cannot find the place where one is going, one can stop and ask for directions or make use of one's GPS until one finds the place. In the end one will feel one has mastered the situation.

Interpersonal *locus of control* is to have control over oneself. If one's car has broken down or has a flat tire, or one is stuck in traffic, it is necessary to control oneself, to be calm and at peace.

Cognitive *engagement* is to be energetic, concentrating and motivated. Although an individual's car has broken down and he/she is late for a very important appointment, he/she is keen to arrive at the appointment despite being late. The person concentrates on the road not to lose focus and the very important appointment motivates him/her to go on.

Conative *engagement* is to be achievement-orientated, to have a vision, goals and be innovative. One is stuck in a snow storm but wants to see beautiful waterfalls. One can see in one's mind how beautiful it is (vision) and when one arrives there one will take a lot of photos (goals) and send these to different publishers for publication (innovative).



Affective *locus of control* is mastering the overwhelming situation. If one is totally lost and cannot find the place where one is going, one can stop and ask for directions or make use of one's GPS until one finds the place. In the end one will feel one has mastered the situation.

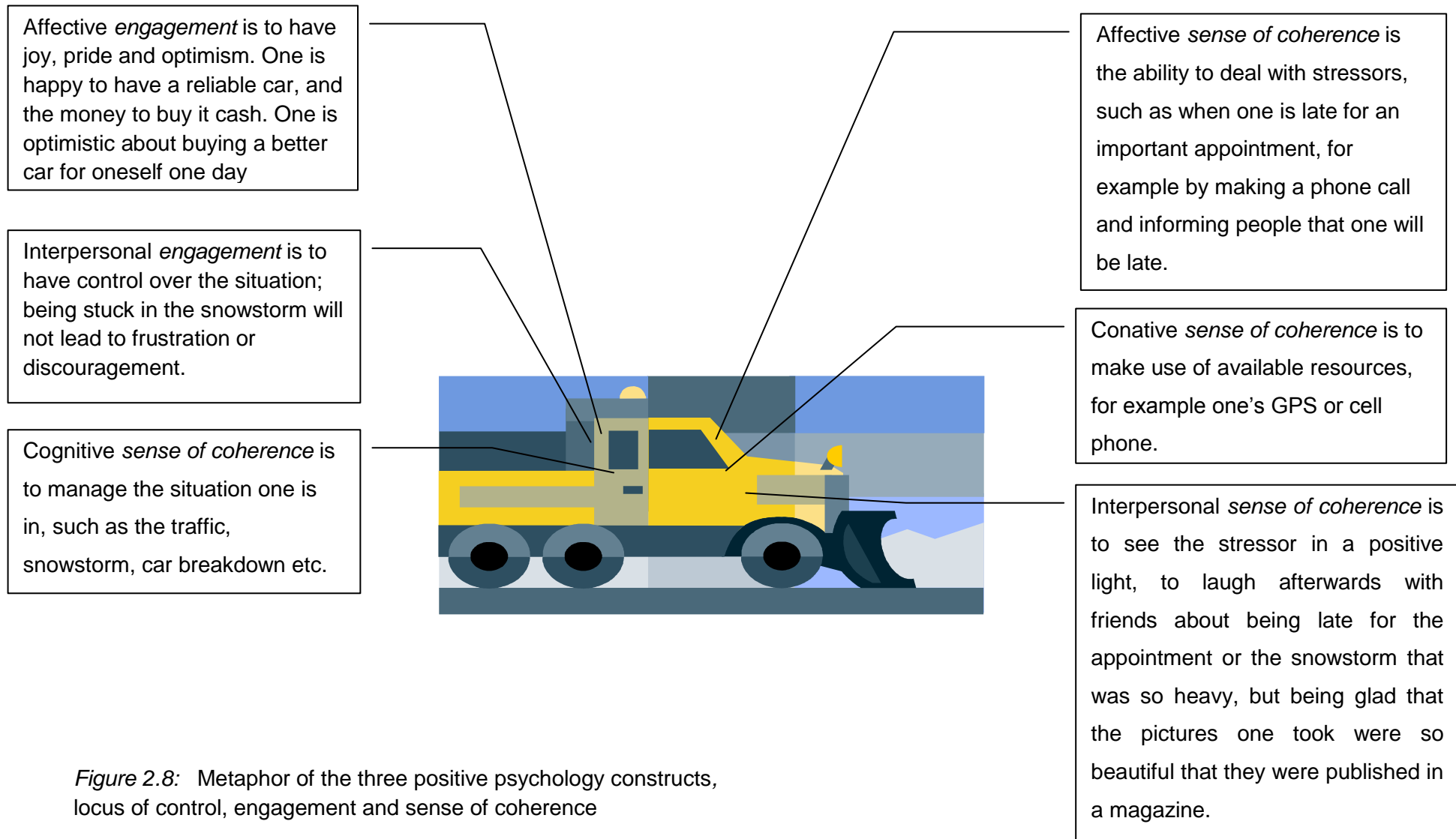


Figure 2.8: Metaphor of the three positive psychology constructs, locus of control, engagement and sense of coherence

2.7 IMPLICATIONS FOR CHANGE-ORIENTED EMPLOYEE WELLNESS INTERVENTIONS

Individuals live in a world full of change. Mastering change management is a key skill and living with change is a key survival skill. Management and change are synonymous. It is impossible to undertake a journey - for in many respects that is what change is - without first addressing the purpose of the trip and the route one wishes to travel. Managing change is about handling the complexities of travel. It is about evaluating, planning and implementing operational, tactical and strategic journeys (Paton & McCalman, 2008). Anderson and Anderson (2010) confirm that change is the nature of life. Nothing ever remains the same. Growth and decay are as fundamental to human existence as the need for water and air. Change is the vehicle to everything better, the essence of improvement, innovation, growth, expansion and evolution. Change must become someone's friend, something in which someone is both confident and competent. When seen this way, new possibilities occur, new heights become reachable, greater outcomes are possible.

2.7.1 Employee wellness

Wellness is health-promoting care that addresses people's bodies, minds, emotions, spirits, communities, and work by making healthful lifestyle choices that keep people well in all these areas (Hill, 2011). Workplace wellness is employer initiated, health promoting care that addresses employee's bodies minds, emotions, spirits, communities, and work through promoting healthful lifestyle choices and providing programmes, initiatives and incentives that encourage employees to keep well in all these areas. Effective workplace wellness programmes also take into account the wellness of employee's families and dependents. The workplace wellness programmes exist to encourage and assist employees to make those decisions and to stick with them (Bradly, 2007).

Wellness and assistance programmes are the establishment of a health clinic, to provide health services, information and advice on the most prevalent ailments and diseases. Ensuring physical health means that employees are encouraged to become and remain fit (Bendix, 2010). Most human resource practitioners know that employees with hypertension, those who maybe overweight, those who do not get enough exercise, those who smoke, or those who may have substance abuse problems put their companies at significant financial risk, not to mention the risk to their own personal health. Companies share information with groups of employees at wellness meetings as a form of wellness intervention. Health risk appraisals are another form of wellness intervention. It is an instrument which allows an employee to answer a series of

lifestyle questions and have their health risk measured and plotted in light of their answers to the lifestyle questions. Knowing the culture of the organisation various methods can be recommended to communicate wellness information in an effective manner (Richard, Emener & Hutchison, 2009).

Health and productivity came to the forefront around 1997. Researchers at Harvard Medical School, in collaboration with researchers, the Group Health Center for Health Studies, the Health Partners Research Foundation, American Airlines and the WHO (21), validated a self-administered instrument that employees complete and that measures the effect of 10 medical conditions on work performance. These conditions are cancer, irritable bowel syndrome, migraine, neurasthenia (fatigue), sleep problems, allergy, arthritis, depression, general anxiety disorder and panic attacks. In 2003 employee health management providers started reporting that employer interest in programmes and services was on the rise. The situation has been monitored for several years and there is reason to believe that a paradigm shift may be taking place. This shift is reflected in growing sophistication, acceptance, and success in employee health management programming and service (Pronk, 2009).

In the past two decades, organisations have become increasingly aware of the relationship between employee wellness and productivity. Individual wellbeing or wellness comprises the various life, non-work satisfactions enjoyed by individuals, work, job-related satisfactions and general health (Cummings & Worley, 2009). Employer wellness aims to improve and maintain the health of employees. Wellness focuses on promoting better health habits among employees. Wellness concentrates on the whole health and wellbeing of the individual employee (Panszczyk, Kennedy & Turan, 2004). It is often said that the greatest asset of any organisation is the people. Although something of this slogan is still absolutely true of today's workplace, many employers do not act as if their people were important to them, and do not take positive steps to care for their health or promote their wellbeing. This failure represents a lost opportunity, as staff members who feel fit and healthy will be empowered to produce high quality of work, cope well with pressure, and work in partnership with the organisation to achieve its goal (MacDonald, 2005).

Employee engagement and involvement in work, commitment and satisfaction with work have been tied to retention, productivity, profits and sustainability. Engaged workers are willing to perform at levels beyond their stated job requirements, are more customer-focused, and produce higher quality and long-term financial results from the organisation. Therefore organisations seek to maximise employee engagement and have to identify specific actions that can lead to engagement (Mathis & Jackson, 2010). Employers observe that a healthy employee

is more productive, less likely to be absent from work and less likely to make sickness- or injury-related insurance claims (Covell, Walker, Siciliano & Hess, 2007). Employers who want to get the most out of their workers should seriously consider the potentially negative consequences of allowing, encouraging or condoning workaholic habits in their employees. Whatever the motive behind long working hours, the employee who regularly works these hours is unlikely to be as productive as someone who has a reasonable balance between working life and personal life (MacDonald, 2005).

The workplace of the 21st century is an increasingly demanding, complex and stressful environment in which humans spend approximately two-thirds of their lives. Global competition is fiercer than it has ever been and the pressures for performance and productivity have increased exponentially. Trends in global security have influenced a more holistic and inter-connected perception of strategic service integration. The emphasis is on lifelong learning, empowerment of employees, better information throughout the company, better balance between work, family and leisure, greater work force diversity, equal pay and career prospects, profit-sharing and share ownership schemes, concern for employability as well as job security (Attridge, Patricia, Herlihy & Maiden, 2005).

When there is a strain on an organisation because of stress-related factors, the overall effectiveness of the organisation is influenced. Stress on a more constant level can result in the inability of employees to cope with it. Performance is then affected, along with the profitability of the organisation. Since stress management has become a prevailing topic within the workplace, educational institutions should increasingly consider developing strategies that mimic corporate wellness programmes designed to aid in the reduction of stress for employees. Wellness programmes generally incorporate common health promotion activities including weight management, nutrition, and exercise and smoking cessation programmes (White, 2008).

2.7.2 Employee wellness in organisational context

The overall effectiveness of an organisation has been linked to the health and wellbeing of its employees. It is important for employers to note the health and wellbeing of their employees when planning health and wellness programmes within their organisations because the programmes have been shown to reduce worker absenteeism and improve the overall productivity of the organisation (White, 2008). There has been enormous growth in the number of organisations providing programmes to increase individual stress resilience and promote health and wellbeing in the workplace. These have taken a variety of forms, including the provision of on-site fitness facilities, health screening, dietary control, cardiovascular fitness

programmes, relaxation classes, stress and health education or psychological counselling. The employee observes the organisation as a caring employer, willing to invest in employee's health and wellbeing, and this creates a feel-good factor (Zeidner & Endler, 1996). With a view to improving individual performance and providing increased benefits to their employees, many organisations are developing corporate fitness and wellness programmes (Stranks, 2005). Organisations can help employees cope with the burnout they already experience. Employee assistance programmes provide counselling services that focus on the prevention and remediation of occupational stress experienced by employees. These programmes can have a positive effect on employee wellbeing and are perceived by employees as a desirable workplace resource. Employers are also offering on- or off-site wellness centres to allow employees to get rid of stress (Greenhaus, Callanan & Godshalk, 2010).

Organisations by their nature are dynamic. Therefore tension exists within companies in response to internal and external influences. Many employees are not prepared to work in these shifting conditions. Because markets and conditions fluctuate, change is a constant companion of employees in organisations. How each company deals with change internally has an influence on the wellbeing of employees. Employees are looking for a workplace where they are challenged, respected, recognised and knows exactly where the employee is going and what he/she needs to do to contribute. These types of responses are like food that nourishes the body to ensure the wellbeing of the employee in the workplace (Silberman, 2005).

2.7.3 Change-oriented employee wellness interventions: Locus of control

External locus of control has been identified as problematic among individuals across a number of dimensions, related directly to both substance abuse and to more general adjustment. Individuals undergoing cognitive substance abuse treatment programmes were compared with a waiting-list control group for changes in locus of control. Both global locus of control, as measured by the Rotter Internal-External Scale (RIE) (Rotter, 1966) and vocational locus of control, as measured by the Spector Work Locus of Control Scale (WLCS) (Spector, 1992) were examined. Treatment groups displayed significantly more internal locus or control across the two dimensions. Results show the benefits of more internal locus of control related to aspects of personal and vocational adjustment, interpersonal violence as well as reductions in depression and substance abuse and relapse (Hunter, 1994).

- Cormier, Nurius and Osborn (2009) suggest meditation, relaxation methods and cognitive restructuring as an important psychological skill. They are of the opinion that consistent

regular use of these strategies is a very important component of effective change management.

- Empowering individuals to make decisions and to have control over their lives is essential. It will help individuals develop the capacity to change their situations, to believe that they can influence their life situations (Lubkin & Larsen, 2006).
- Hesson (2010) states that individuals should shift their perspective. Understanding how the individual's mind interprets and perceives incoming information could help one understand how he/she will approach the situation. If the individual could be given a different perspective he/she could approach the situation in a different way.
- Self-monitoring by observing and recording one's own behaviour is necessary. The purpose is to monitor, analyse and identify patterns in one's activity. One could make use of notebooks, journals or diaries to record patterns of behaviour, seeking a benchmark to compare one's original behaviour at the start of trying to change with later behaviour (Thygerson, 2005).
- Rewards can be used to eradicate old behaviour patterns after individuals have been helped to see the reasons for the proposed change (Swansburg & Swansburg, 2002).
- Groups can be used as agents of change where the informal group solves specific problems, promotes and supports change (Swansburg & Swansburg, 2002).

2.7.4 Change-oriented employee wellness interventions: Work engagement

Personal resources play an important role in engagement. Personal resources mediate the relationship between job resources and work engagement. These are described as aspects of the self that are generally linked to resilience (Houdmont & Leka, 2010). 'Personal' in 'personal resources' refers to the idea that individual characteristics can function as a means of dealing with the outside world. Resources include being useful in coping with situations, leading to the creation of a more favourable situation or goal attainment. Personal resources can have both affective and cognitive components, such as self-esteem and positive beliefs about intrinsic self-worth, accompanied by positive affect. Personal resources come into play in the following situation: when confronted with adversity or ambiguous events, underlying traits influence the presence of lower-order cognitive/affective states. In a stressful situation, these states function as personal resources, affecting a person's vulnerability to the impact of the stressors. These states influence the perception of the situation and, in turn, how a person will manage the situation (strategies) (Rossi, Quick & Perrewé, 2009).

Optimism, hope, resilience, self-efficacy and meaning-making form part of personal resources (Luthans, Vogelgesang & Lester, 2006). Optimism has been shown to predict performance, effective coping with life stressors and successful management of stressors, work productivity and work-related optimism. Hope is the ability to plan for desired goals despite obstacles. Resilience adaptation under stress concerns the capacity to remain positive in the face of negative events, positive relationships, assertiveness, self-worth, a sense of humour and decision-making abilities, which have been identified as protective factors in the resilience process. Resilience can be built using cognitive coaching interventions (Edwards, 2010) Self-efficacy influences thought patterns, emotions and actions and as such it is a motivational construct. In the work setting significant correlations have been found between self-efficacy and work performance. Meaning-making implies that what happens at work and the ability to link these broader values and life goals combine in a form of meaning-making that can help employees deal with ongoing change (Houdmont & Leka, 2010). Employee involvement, increased participation, giving authority to make work-related decisions and access to relevant information can lead to quicker, more responsive decisions, continuous performance improvements and greater employee flexibility, commitment and satisfaction (Cummings & Worley, 2009).

The business workplace has popularised the concept of humour as a strategic tool for employees. The impact of stress on personal health has led to humour being incorporated in the workplace. The high cost of burnout- and stress-related illness accounts for a significant percentage of sick days worldwide. In business, managers are learning the advantages of using humour. Happier and healthier employees perform better. Humour improves employee's creativity, communication and wellness, while reducing burnout. Many organisations provide workplace training services on "How to introduce humour in our work environments". The message is that a good laugh shared by employees does not necessarily take much time from a workday. The payoff is that it can improve the environment and employees' performance and leave both employer and employee feeling rejuvenated (Miller, 2010).

2.7.5 Change-oriented employee wellness interventions: Sense of coherence

Increasing awareness and extending the physical and psychological resources of employees enable them to minimise the damaging effects of stress and to manage stress more effectively. Methods include relaxation, bio-feedback, breathing, mindfulness, affirmations, thought-stopping and cognitive restructuring (Robbins, Judge, Odendaal & Roodt, 2009).

Cognitive restructuring is a process that enables employees to modify their painful beliefs, values and interpretations of situations without imposing their value system and interpretation. As employees engage in the process of cognitive restructuring of life situations, they acquire new and adaptive ways of thinking, feeling and coping. They become increasingly able to take action to improve their present existence (Robbins, Judge, Odendaal & Roodt, 2009).

Organisational wellness programmes focus on the employee's total physical and mental condition. Workshops to help people quit smoking, control alcohol use, lose weight and eat better are some of the examples. A study involving exercisers in South African health clubs found that regular exercise contributed to significant improvements in the wellbeing components of mood, *sense of coherence*, fortitude, stress and coping (Robbins, Judge, Odendaal & Roodt, 2009).

2.7.6 Change-oriented employee wellness: Coping and non-coping

The important aspect for the individual during the coping period is that there are stages in the process of change. The stages of change are preparation, action and maintenance. Each stage of change represents a period of time as well as a set of tasks needed to proceed to the next phase in helping the individual cope (Dossey, Keegan & Guzzetta, 2005). Personal wellness profiles can be implemented to individualise interventions. Assessments of stress and coping can be included in the profiles (Acs, Lyles & Stanton, 2007). Some employees who suffer from stress at work may be reluctant to come forward and admit that they are not coping with the demands of the work. Some employees may even be unwilling or unable to recognise that they are suffering from stress or that the level of stress they experience could damage their health. It is the responsibility of every manager who observes the symptoms to encourage employees to speak openly about how they feel and about the causes of their stress and to seek solutions to cope with the problem (MacDonald, 2005).

2.8 RESEARCH HYPOTHESES AND PROPOSITIONS

A research hypothesis (H^1) is a statement reflecting the substantial hypothesis. It is always expressed in terms of population parameters, but its specific form varies from test to test (Leon-Guerrero & Frankfort-Nachmias, 2011). Propositions rest upon the definition and the notion of combining concepts in an explanatory and predictive manner. A proposition can be better than the elements that comprise it (concepts and definitions). The status of the concepts must be so clearly defined that it is apparent which is caused and which is casual (Denzin, 2009).

2.8.1 Research hypotheses: Quantitative study

The literature review informed the hypotheses for the quantitative study, which are as follows.

H01: There is no significant relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

H1: There is a significant relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

2.8.2 Propositions: Qualitative study

In terms of the qualitative data analyses, the following propositions are made:

Proposition 1: Coping and non-coping individuals attach various meanings to their coping and non-coping experiences, which manifest as core themes underlying their coping strategies.

Proposition 2: Coping and non-coping individuals differ with regard to their coping strategies.

2.9 CHAPTER SUMMARY

Chapter 2 aimed to conceptualise the concepts of locus of control, work engagement, sense of coherence, coping and non-coping behaviour by means of an examination of the existing literature and research on these concepts. An integrated model was presented to explain the theoretical linkage between these concepts. The theoretical implications for change-oriented employee wellness interventions were discussed. The specific aims of the literature review were achieved in this chapter.

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

CHAPTER 3 *RESEARCH ARTICLE

THE ROLE OF POSITIVE PSYCHOLOGY CONSTRUCTS IN EMPLOYEE COPING

ABSTRACT

Orientation: Individuals differ regarding their ability to cope with the effects of change and employee wellness programmes focus increasingly on understanding the behavioural dynamics of copers and non-copers.

Research purpose: The objectives of this study were to determine: (1) the relationship between locus of control (measured by the Locus of Control Inventory), work engagement (measured by the Utrecht Work Engagement Scale) and sense of coherence (measured by the Orientation to Life Questionnaire), and (2) whether coping and non-coping individuals (measured by a coping scale) differ significantly regarding these variables, and (3) the coping strategies they employ to deal with change in their lives (determined by means of structured interviews).

Motivation for study: Limited research has been conducted in the South African context on how the constructs of locus of control, work engagement and sense of coherence (as a set of positive psychology constructs) relate to the coping and coping strategies of coping and non-coping individuals.

Research design, approach, or method: A survey design and correlational and inferential statistical procedures were used to achieve the quantitative research objectives. Qualitative content analysis was used to analyse and interpret the research data obtained from the open-ended questions on coping strategies. A convenience sample (n = 69) of individuals employed in the manufacturing sector participated in the study.

Main findings: The quantitative results revealed significant a relationship between the three variables and that copers and non-copers differ significantly regarding their coping. The qualitative data analysis indicated that copers and non-copers differ in terms of the coping strategies they employ to deal with change.

Practical implications: Managers and employee wellness practitioners should take cognisance of the coping behaviour of copers and non-copers in the design of interventions for helping employees to deal effectively with change.

Contribution/value add:

The study represents original research, which contributes new knowledge and insights for organisational employee wellness practices aimed at helping employees cope more positively with organisational change in the South African organisational context.

Key terms: positive psychology, locus of control, engagement, sense of coherence, change, copers , non-copers, coping strategies.

*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 changing world of work has a profound influence on employees' wellness. Drastic and fundamental changes in the world of work have occurred in a relatively short space of time. Technology has changed the manner in which the economy works. This in turn has changed the world of work (Billet, 2006). Globalisation and the intensified economic competition it engenders are profoundly altering the way people live and relate to one another. The world of work has become unstable, with changes in global economic activity, technology and cultural practices (Billet, 2006). In many recent accounts of work, work practice and career development, much is made of the disempowerment and anxiety caused by the constantly turbulent and uncertain nature of contemporary work (Billet, 2006). People will need to develop the ability to respond proactively to change, and manage stress caused by an uncertain, turbulent business environment (Deal, Peterson & Gailor-Loflin, 2001). In the past two decades organisations have become increasingly aware of the relationship between employee wellness and productivity. Job stress, employee turnover, diminished productivity, medical, legal and insurance expenses and workers' compensation payments cost businesses a lot of money annually (Burke, Clarke & Cooper, 2010).

3.1.1 Key focus of the study

Organisations are increasingly faced by the challenge of helping their employees adjust to change efforts aimed at sustaining the company's competitiveness and survival in a turbulent

business environment (Griffin, 2011). The effect of change varies from individual to individual. Some individuals seem to have inherent coping skills, which help them to deal with the demands of change, while others lack those skills (O'Grady & Malloch, 2007). In the field of psychology the positive is as likely to be used as the negative in assessing people, helping them to lead a more satisfying life (Snyder, Lopez & Pedrotti, 2010). This implies that people fall somewhere between two theoretical poles of total positivity and total negativity, or to put it in the context of the present research, between the positive, successful copier and the negative, unsuccessful non-copier (Peterson & Seligman, 2004). In the context of the present study, coping is viewed as an ongoing dynamic process that changes in response to the changing demands of a stressful encounter or event. Coping is conceptualised as a purposeful response directed at resolving the stressful relationship between the self and the environment or at palliating negative emotions that arise as a result of stress. Coping is a goal-directed process in which the individual orients thoughts and behaviour towards the goals of resolving the source of stress and managing emotional reactions to stress (Lerner, Jacobs & Wertlieb, 2003).

The role of locus of control, work engagement and sense of coherence (as a set of positive psychology constructs) in employee coping is largely unknown in the South African organisational context. Limited research has been conducted in the South African context on how individuals' locus of control, work engagement and sense of coherence relate to their coping strategies, especially to those of coping and non-coping individuals. The study therefore sought to contribute new knowledge and insights for organisational employee wellness practices aimed at helping employees cope more positively with organisational change.

3.1.2 Background to the study

Change is often a traumatic experience and employees should aspire to deeper understanding of the effect that change has on the lives of individuals (Cameron & Green, 2004). In general, organisations are confronted with finding a reason why some employees cope during a process of change and others fail to cope during the same process. A number of researchers in the field of the positive psychology paradigm started to focus on positive psychology constructs such as locus of control (Schepers, 1999) engagement (Schaufeli & Bakker, 2004) and sense of coherence (Antonovsky, 1987) to help those who already function reasonably well to use their strengths and heighten their awareness to develop positive constructs.

These three constructs have traditionally been studied from the perspective of salutogenesis (Strümpfer, 2005) which focuses on better health; from a positive psychology perspective

(Coetzee & Viviers, 2007), the constructs locus of control, engagement and sense of coherence are studied in the context of the strength in human functioning. Stratton–Berkessel (2010) states that the positive psychology perspective adds to understanding and knowledge through a study of what supports optimal human functioning. Positive psychology does not discount the original way of working with people and their worlds when the focus is on strengths and wholeness. Knowledge of individuals' locus of control, work engagement and sense of coherence provides valuable insights that may potentially be used to inform employee wellness interventions aimed at helping people deal more positively with change.

However, although a wide range of research has been done on the relationship between the constructs locus of control, work engagement and sense of coherence, there seems to be paucity regarding how these three constructs relate to the coping and non-coping behaviour of employees, especially in the South African workplace context. There is also little research on whether copers and non-copers differ regarding the strategies they employ to deal with change in their lives, specifically in the South African multi-cultural organisational context. Moreover, previous research on these variables in the South African manufacturing context is limited. This study thus represents original research that aims to contribute new knowledge to the field of employee wellness.

3.1.3 Trends from the research literature

Locus of control relates to an internal state that explains why some people actively, willingly and resiliently try to deal with difficult circumstances while others succumb to a range of negative emotions (Sheppard & Grohn, 2004). Individuals with an internal locus of control (coping) are more likely to take personal responsibility for their wellbeing. They are more likely to adopt a healthier lifestyle. Individuals with an external locus of control (non-coping) are likely to demonstrate a passive and reactive response to being unwell. They are unlikely to take responsibility for initiating strategies to promote or enhance recovery and have lost control owing to enforced alterations and adjustments that may have to be made to their life (Harrison & Hart, 2006).

Engaged employees are highly self-efficacious. Engaged workers have the tendency to believe that they will generally experience good outcomes in life (optimistic) and believe they can satisfy their needs by participating in roles within the organisation (Burke & Cooper, 2009). Dewe, O'Driscoll and Cooper (2010) state that research revealed that trolley car drivers who used forcing behaviour or conflict avoidance experienced higher burnout as a result of experiencing conflict with their customers, again confirming the ineffectiveness of either

avoidance or dominance approaches to conflict management. Macey, Schneider, Barbera and Young (2009) state that burnout (non-coping) happens when individuals do not possess the resources necessary to handle the demands of the job. The most salient resources are those that permit individuals to exercise some job control over their work environment, or otherwise provide support, whether from co-workers or the employee's manager.

Sense of coherence is an integrated perception of one's life as being comprehensible, manageable and meaningful. An individual's sense of coherence may either alleviate or aggravate his orientation towards a stressor. In general people with a strong sense of coherence manage the stresses of life better and experience better wellbeing than people with a weak sense of coherence. In particular, a South African study with local government employees showed that a strong sense of coherence moderated the effect of job stress on the exhaustion component of job burnout. Results further showed that individuals with a weak sense of coherence experienced lower professional efficacy (Robbins, 2009). Self-efficacy refers to an individual's belief in his or her capability to organise and execute a course of action needed to meet the demands of a situation. Individuals with high self-efficacy are more likely to believe that they can meet job demands despite the presence of stressors. In a sample of South African social workers, results indicated that individuals with a high level of self-efficacy reported high levels of personal accomplishment in their job. Individuals with low self-efficacy are likely to experience incidents of stress and depression, as well as health problems such as high blood pressure (Robbins, Judge, Odendaal & Roodt, 2009).

3.1.4 Research objectives

The empirical study consisted firstly of a quantitative study conducted within the ambit of the positivist research paradigm (Strauss & Corbin, 1998). The quantitative study focused on investigating the relationship dynamics between the variables locus of control, engagement and sense of coherence and whether coping and non-coping individuals differ significantly regarding these variables. Secondly, the empirical study consisted of a qualitative study conducted within the ambit of the interpretivist paradigm. The qualitative study focused on identifying and comparing the strategies that coping and non-coping employees employ to manage change in their life circumstances by means of qualitative research techniques. A qualitative study is an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting (Strauss & Corbin, 1998). In terms of the present study, interviews were used as a qualitative technique in identifying and comparing the strategies that coping and non-coping employees employ to manage change in their life circumstances.

3.1.5 Potential value-add of the study

The study represents original research which contributes new knowledge and insights for organisational employee wellness practices aimed at helping employees cope more positively with organisational change in the South African organisational context.

3.1.6 Literature review

The concepts of locus of control, work engagement, sense of coherence, coping and non-coping behaviour are briefly discussed, followed by an examination of relevant literature. An integrated model explains the theoretical linkage between these concepts and the theoretical implications for change-oriented employee wellness interventions are discussed.

3.1.6.1 Locus of control

Locus of control is probably the most frequently cited construct in psychology and most often used in empirical studies applied to coping in individuals (Antonovsky, 1991; Rotter, 1989). Ewen (2003) describes locus of control as a positive trait enabling individuals with internal locus of control to cope better with personal crises, be more satisfied with their lives and have higher self-esteem. With the growth of positive psychology, the emphasis of the construct locus of control switched to enhancing wellbeing rather than promoting dysfunction (Leary & Hoyle, 2009).

Antonovsky (1991) states that there is a close relationship between an individual's locus of control and his/her external reality. When an individual is overwhelmingly controlled by, for example, hostile powerful others, as in concentration camps, then, because it is truly more functional in the long run, he/she comes to have externalised beliefs. Thus one learns that such beliefs indeed facilitate survival. Internality could facilitate coping with stressors because it means taking credit for good outcomes while adopting the defence of rejecting blame for unfortunate ones. It could also do so because it expresses willingness to assume responsibility, whatever the outcome. Internal and external components of the locus of control construct serve as an indication of the extent to which individuals have a strong belief that they can control situations or the extent to which they view themselves as powerless (Rotter, 1966).

3.1.6.2 Engagement

Work engagement can be defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption (Schaufeli, Salanova, Gonzalez-Rama & Bakker, 2002). Vigour as a dimension of engagement is characterised by someone who demonstrates high levels of energy and mental resilience at work. Dedication refers to high levels of involvement in the work being done and experiencing high levels of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterised by significant levels of concentration and being happily engrossed in the work. In this dimension, time passes quickly and detachment from the work is difficult (Schaufeli, Salanova, Gonzalez-Rama & Bakker, 2002).

3.1.6.3 Sense of coherence

Antonovsky (1979) initially identified sense of coherence in an attempt to explain successful coping with stressors. Sense of coherence is developed through the process of coming to understand one's life experiences, and is thus rooted in the particular historical and socio-cultural context of the individual's lifespan. Sense of coherence is internalised when life experiences are characterised by participation in shaping outcomes and a balance between punishment and reward, success and failure (Natti & Ety, 2010). Sense of coherence develops as a single dimension of the individual's personality, consisting of three components: comprehensibility, manageability and meaningfulness (Antonovsky, 1991).

Comprehensibility refers to the extent to which individuals perceive the stimuli that confront them as making cognitive sense. Information should be ordered, consistent, structured and clear, rather than noisy, chaotic, disordered, random, accidental and unpredictable (Antonovsky, 1984).

Manageability refers to the extent to which people perceive that there are resources at their disposal that are adequate to meet the demands posed by stimuli (Antonovsky, 1984). The resources at their disposal may refer to resources under the individual's own control or resources controlled by legitimate others, that is, friends, colleagues, or God, against the background of a history upon which one can count.

When individuals say that something makes sense, in cognitive terms they mean that it is ordered and in emotional terms they mean that they care. Thus people who are rated high on meaningfulness feel that life makes sense emotionally. Meaningfulness is the emotional counterpart to comprehensibility (Antonovsky, 1984). An individual who has a strong belief that the world makes sense (comprehensibility) is probably more likely to view himself/herself as being equal to the demands of living (manageability), compared to an individual who sees the world as a place without rhyme or reason. By the same token, a person who lacks commitment

to the activities of life (meaningfulness) is not likely to be motivated to participate in shaping events, even if the situation is perceived to be manageable (Larsen & Lubkin, 2009).

The three components of sense of coherence are interrelated and all of them are needed for successful coping. However, it should be noted that even if a strong sense of coherence moderated the adverse effects of work stress in some cases, those individuals with a strong sense of coherence and adverse work stress exposure were also at increased risk of ill health and non-coping. It can be argued that there is no such thing as resistance power against work stress; sooner or later everyone will be affected by adverse working conditions. Everyone will boil, but at different temperatures (Fritzell & Lundberg, 2007).

3.1.6.4 Coping and non-coping

For the purpose of this research, coping may be defined as the cognitive and behavioural efforts to master, reduce or tolerate the internal and/or external demands of the person-environment transaction that is appraised as taxing or exceeding the individual's resources (Folkman & Moskowitz, 2004). Nes and Segerstroom (2006) point out that the behavioural efforts are action- and intrapersonally oriented, while Nicholson and Pearson (2003) add that overt and covert actions reduce or eliminate psychological distress or stressful conditions. Thus the behavioural efforts (i.e. coping) can master, moderate, reduce, minimise or tolerate stress experienced during a period of transition.

Non-coping, on the other hand, is failed coping efforts with the subsequent occurrence of a wide range of physical and psychological disorders (Meyer, Rothmann & Pienaar, 2003). Nangamso (2008) refers to non-coping as the inability to cope effectively with stress. Monroe (2008) points out that exposure to and coping with the demands of life comprise the essence of human life. Inadequate coping with these demands can be viewed as demands that exceed the resources of the system, thus failure to cope results in a disturbance in the individual. Cutcliffe and McKenna (2005) state that non-coping is not failure to manage or succeed in satisfying demands. They argue that non-coping is not determined by the outcome of coping strategies, but rather by the availability or lack of coping skills.

Copers have the vision that self-initiated constructive actions create opportunities for growth and improvement in their quality of life (Dewe, O'Driscoll & Cooper, 2010). Coping is seen as the process through which individuals manage the demands of the person-environment relationships that are appraised as stressful and the emotions they generate. Coping may comprise actions which aim to manage or alter the problem (problem-focused coping), or

actions or thoughts targeted at regulating emotional responses to the problem (emotion-focused coping) (McNamara, 2000). Changes in people over time can reveal the way perceptions of events and their physical and mental health affect each other in a two-way relationship. It is hard to separate the way one thinks from the way one feels.

3.1.6.5 Coping strategies

Individuals need to develop coping strategies to deal with the demands of their lives, which include life roles such as work and family roles (Kail & Cavanaugh, 2010). For example, cognitive disengagement may be an effective strategy for coping with work-related stress, but not with family-based stress. Whether they work for themselves or for an organisation, individuals face a dilemma in deciding how much they want to integrate their different roles, such as work, family, sport, social activities etc. (Powell, 2011). When efforts at coping are ineffective, physiological and emotional stress are likely to be intensified and may lead to physical, social or emotional difficulties. The stress generated in one area may cause other stresses, so that multiple stressors become involved. Some coping attempts are doomed to fail and their outcomes become added stressors (Gitterman & Germain, 2008). Frisch (2006) states that the aim is to increase self-care by addressing problems in all areas of life. Self-caring can be defined as a feeling of calmness, being rested, contented, loving, alert and ready to meet the challenges of the areas of life.

Gitterman and Germain (2008) state that individuals appraise a life issue as a challenge when they believe they have personal and environmental resources to deal with it. One person may experience a difficult life situation as a stressor while another may experience the same situation as a challenge. Those differences appear to arise from personality, physical condition, environment, past experiences and availability of resources for coping.

- Personal resources for coping include motivation, management of feelings, problem-solving, relationship skills, a hopeful outlook, optimal levels of self-esteem, the ability to identify and use information from the environment about the stressor and how to deal with it, self-restraint and an ability to seek environmental resources and to use them effectively. Flexibility is also a personal coping resource. Like hope, it reflects recognition of the positive despite the stressor, trust in the certainty of future satisfaction and seeking and accepting help when needed (Gitterman & Germain, 2008).
- Environmental resources are formal service networks and institutions. Resources also include informal networks of relatives, friends, neighbours and co-workers. Such informal

support networks serve as buffers against stress. The natural and physical environment may also contribute to physical and emotional wellbeing and support coping efforts (Gitterman & Germain, 2008).

- Outward approach coping strategies aim to deal with the stressor by reconstruing or controlling the external environment, problem-solving and seeking social support (Wong, *et al.*, 2006).
- Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, *et al.*, 2006).
- Social coping involves methods such as seeking support from others (Brannon & Feist, 2010).
- Meaning-focused coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).
- Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010). Proactive coping is an effort to build up general resources that facilitates promotion toward challenging goals and personal growth. In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, *et al.*, 2010).
- Productive strategies entail social action, seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008).
- Job-crafting is the physical and cognitive changes individuals make in the task or relational boundaries of their work. Employees continually interact with their environments, regardless of their position in the organisation (Houdmont, 2010)
- Self-leadership is the degree to which an employee takes responsibility for the managerial aspects of his or her job over and above the content and production-related responsibilities. It is a process through which individuals control their own behaviour, influencing and leading themselves through the use of a specific set of behavioural and cognitive strategies (Houdmont, 2010).
- Humour and laughter provide a safety valve for coping. Being able to laugh in the face of adversity and suffering releases tension and provides hope (Gitterman & Germain, 2008).
- Time management. Diary and journal keeping helps increase awareness of the things that are important to attend to. Journalling helps one sustain oneself emotionally at work and can assist the diarist in reflecting on experiences, which increases observational skills (Travers, 2011).
- Coping flexibility is realising that different strategies work in different situations. The key to effective coping might be to know when to employ which type of strategy. Individuals who

readily adjust their coping strategies to fit the realities of a given situation are likely to deal with life's problems more effectively than those who do not. Most people have a number of coping strategies in their repertoires. If one approach for dealing with a situation does not work, perhaps another one will (Burger, 2008).

All types of coping strategies may be effective in some situations. The key to successful coping is flexibility, leading to the use of an appropriate strategy for the situation (Brannon & Feist, 2010). Gitterman and Germain (2008) state that most people can cope relatively well with difficult life stressors. In some instances the situation is mastered. Many people grow as a result of coping with stressors; their self-esteem and sense of competence, relatedness and self-direction are strengthened by their triumph over adversity.

Individuals need to develop coping strategies to deal with the demands of their lives, which include life roles such as work and family roles (Kail & Cavanaugh, 2010). When efforts at coping are ineffective, physiological and emotional stress is likely to be intensified and may lead to physical, social or emotional difficulties. The stress generated in one area may cause other stresses, so that multiple stressors become involved. Frisch (2006) mentions 16 areas of life that may determine an individual's overall quality of life, which he describes in his Quality of Life theory. The aim of the Quality of Life Theory is to enhance skills and awareness, which can help individuals to cope in difficult situations (Frisch, 2006). Maruish (2004) states that the 16 areas of life have an effect on a person's life satisfaction, for example with work itself, pay, relationships with co-workers and managers, the work environment and job security. When a person experiences some disequilibrium, change or hardship in one of more of the life areas, it takes coping efforts to handle the change. Maruish (2004) says that the 16 areas can be seen as a pie and that some areas will be bigger, depending on where coping has to take place. The aim of the Quality of Life Theory is to enhance skills and awareness, which can help individuals to cope in difficult situations. Frisch's (2006) 16 areas of life that may determine an individual's overall quality of life are illustrated in figure 3.1 below:

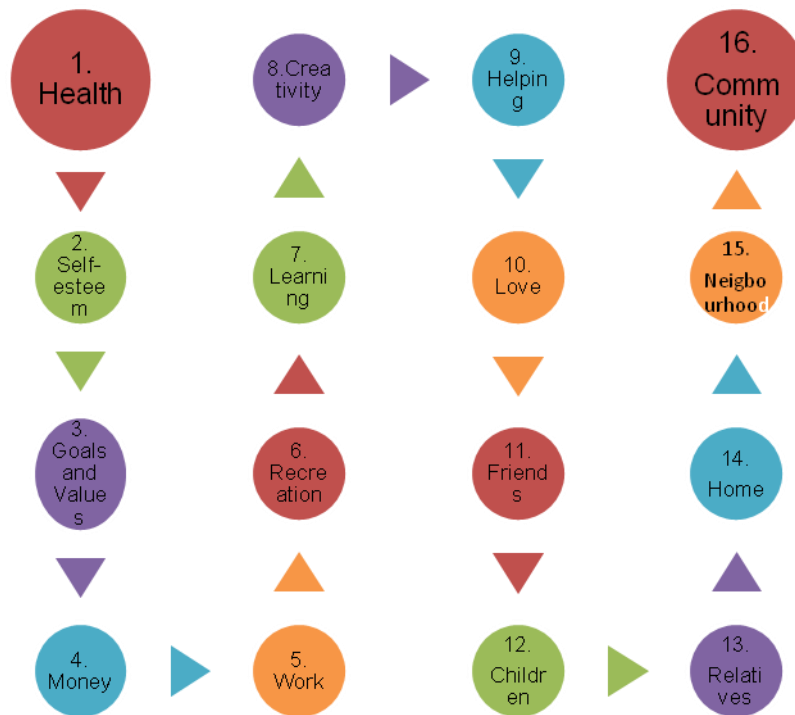


Figure 3.1: The 16 dimensions underlying the Quality of Life theory (Frisch, 2006).

The aim of the Quality of Life Theory is to enhance skills and awareness, which can help individuals to cope in difficult situations. Frisch (2006) mentions 16 areas of life that may determine an individual's overall quality of life, which he describes in his Quality of Life theory. These 16 dimensions were used as a framework to categorise the coping strategy themes that derived from the qualitative study.

3.1.6.6 Characteristics and coping strategies of copers and non-copers

Copers are able to maintain a positive outlook and view their problems as challenges. The coping strategy of a fighting spirit enables individuals to cope with life stresses, protecting them against fears and anxieties. They do not become overwhelmed by distress, seek information and support and engage in open communication about their situations (Cooper, 2006). Copers trust in positive dyadic coping and communicate their strain and stress to one another. They talk openly and communicate in a positive, respectful and fair way. They have trust in other people, such as their friends, as an important source of support while facing critical life events. They experience high satisfaction in their relationships and with life in general (Buchwald, *et al.*, 2008).

Non-copers use denial as a coping strategy. Denial has been viewed as a negative method of coping. It has been felt that in order to accept their situation realistically, people should be

prepared to discuss sensitive issues concerning their problems. Not everyone wants to acknowledge his or her problems openly and should be given the right to decide on disclosing these (Cooper, 2006). Non-copers prefer aggressive antisocial and indirect coping strategies while facing critical events. They experience a higher level of anxiety and anger. They are more dissatisfied with life. They do not use many positive dyadic coping strategies. They are not very good at communicating their own stress and strain. They are antisocial, reserved and detrimental in an effort to cope successfully with demands caused by stress (Buchwald, *et al.*, 2008).

Table 3.1 and Table 3.2 summarise the key characteristics of copers and non-copers.

Table 3.1: Profile of Copers

Copers			
Cognitive	Emotional	Conative	Interpersonal
According to Spector (2002) they view themselves as being in control of the situation because of enhanced control of their coping abilities. They look on the bright side, turning their minds away from the problem (Frydenberg, 2008).	There is strong regulation of feelings, which includes emotional self-control, not feeling depressed or worried about changing circumstances. Emotional discomfort is relieved through affect regulation, resigned acceptance and controlled emotional discharge (Ashkanasy & Cooper, 2008).	The conative profile of the copers is that of information-seeking. Obtaining information enhances the predictability of a situation and serves to help individuals to avoid future difficulties by dealing with present ones, thus increasing their control (Kim, et al, 2009).	Experience good feelings about themselves. They have good insight into interpersonal situations. Realistic evaluations of the human environment. Integration in their thinking, feeling and acting (Anthony & Cohler, 1987).

Table 3.2: Profile of Non-Copers

Non-copers			
Cognitive	Emotional	Conative	Interpersonal
Through cognitive redefinition they define change-related stressors as problems and threats (Herscovitch & Meyer, 2002). According to Polka and Litchka (2008) they view themselves as powerless and perceive the change as out of control because of negative reappraisal of their coping abilities	Loss of emotional control leads to negatively experienced emotions: confusion, insecurity, anger and depression (Avison, et al, 2007).	When there is loss of emotional control, some individuals will respond with emotional rages and disputes with management and colleagues, as well as abuse of drugs and alcohol. Withdrawal behaviour, being). negative, unproductivity and increased absenteeism are some of the coping strategies the individuals will use to survive (Weiten, 2007	They do not utilise repertoire of coping behaviour. They do not rely on resignation, anticipatory and prevention coping. They do not exercise autonomy and view themselves as not healthy and incompetent (Gilbert, 1995).

3.1.6.7 Relationship between locus of control, engagement, sense of coherence, and coping and non-coping

Van der Cloff and Rothmann (2009) conducted a study to assess the relationship between occupational stress, sense of coherence, coping, burnout and work engagement among registered nurses in South Africa. The results show that the experience of depletion of emotional resources and feelings of depersonalisation in registered nurses were associated with stress due to job demands and lack of organisational support, focus on and ventilation of emotions as a coping strategy, and a weak sense of coherence. Work engagement was predicted by a strong sense of coherence and coping strategies.

Rothmann et al. (2005) found that sense of coherence played an important role in job stress. Employees with a strong sense of coherence were found to experience less burnout and more work engagement. Employees who have a strong sense of coherence probably perceive that they are able to cope with job stress, which makes it possible to experience work engagement.

Employees with a strong sense of coherence experience less burnout and more work engagement, presumably because stimuli from the environment are perceived as making cognitive sense (comprehensible), as being under control of both the employee and legitimate others (manageable), and as being motivationally relevant and significant (meaningfulness). Employees who have a weak sense of coherence probably find it difficult to structure their world to be understandable, orderly and consistent. They tend to experience life events as unmanageable and perceive that they lack the resources to meet the demands, and they might feel that life does not make sense. It is understandable that they would perceive situations as stressful.

Van Jaarsveld (2009) found that active coping correlates positively with all three components of sense of coherence, namely comprehensibility, manageability and meaningfulness. Seeking social support correlates positively with manageability and meaningfulness. Professional efficacy correlates positively with all three components of sense of coherence; coping and sense of coherence are significantly related. In a study done by Oosthuizen and Mostert (2010) they found the following strategies to define values which refer to being open and honest with family regarding commitments and priorities in their work: Relaxation and recreation strategies were mentioned by some of the participants in their study. Religion serves to inspire them and motivate themselves. Social support emerged as a strategy that entails various activities, including getting guidance from coaches and mentors, getting feedback from significant others and having a supportive social structure in terms of family members as well as work colleagues. Support from family members seemed to be an important strategy. A fascinating strategy is managing the work–home interface purely by being positive, having a positive personality and mindset and being open to challenges and change. Some of the participants mentioned that they train their subordinates to assume some of their own or some of the team’s responsibilities. Participants also mentioned coaching as a development tool for their subordinates, which is used to enable them to save time and change goals and priorities in terms of work–home interaction. Participants also mentioned that they try to set an example to their subordinates in terms of living a healthy, balanced life. Table 3.3 below illustrates the relationship between locus of control, engagement, sense of coherence and coping and non-coping:

Table 3.3: The relationship between locus of control, engagement, sense of coherence and coping and non-coping

	Locus of control	Work engagement	Sense of coherence
Core characteristics	Internal Locus of control	Vigour	Comprehensibility
Cognitive	People with internal locus of control showed more adaptive coping patterns (Parkes, 1984).	Encompasses energy, resilience and perseverance and can continue working for very long periods of time (Albrecht, 2010).	The extent to which one perceives stimuli from the internal and external environment as information that is ordered, structured and consistent. The stimuli are perceived as comprehensible and make sense on a cognitive level (Schreuder & Coetzee, 2007).
Affective	Thomas, Sorensen and Eby (2006) showed that internal locus of control was positively associated with favourable work outcomes, such as positive task and social experiences and greater job motivation. Chen and Wang (2007) showed that individuals with more internal locus of control were more likely to have high affective and normative commitment to change.	A positive affective state increases people's resources and should be associated with increased dynamic performance and work engagement (Albrecht, 2010).	Mynhardt, Baron, Branscombe and Byrne (2009) state that a factor which might influence the link between job satisfaction and performance is affective cognitive consistence of job attitudes. When this is taken into account, the link between job satisfaction and performance is appreciably high.
Conative	Individuals tend to follow beliefs, values, emotions and intentions to learn, generally commit and self-manage the learning process to attain goals, monitor or assess learning progress, and use reflection to improve future learning opportunities (Brandon, 2008).	Showed improved speed of processing, marginally improved divergent thinking (Stine-Morrow, Parisi, Morrow, Greene & Park, 2007)	A strong sense of coherence is promoted by life experiences. Poor living conditions and social support, as well as continuous exposure to violence and crime, and an uncertain economy in South Africa may be playing a role in lowering the sense of coherence (Antonovsky, 1987).

	Locus of control	Work engagement	Sense of coherence
Core characteristics	Internal Locus of control	Vigour	Comprehensibility
Interpersonal	Individuals believe that the consequences of their actions are mainly controlled by their own actions (Perrewe & Gansier, 2005).	Engaged workers will strive to interact as much as possible, creating a need for frequent interpersonal exchange between workers (Albrecht, 2010).	Individuals choose activities they deem worthy of their time and effort. The activities that people regard as most meaningful are interpersonal projects involving the goal of connection, such as community projects that are engaged in for the sake of others (Calhoun & Tedeschi, 2006).
Coping	Would be likely to engage in healthy behaviours because they would like to see themselves as able to determine healthy outcome through their own efforts (Sheppard & Grohn, 2004). Individuals with internal locus of control develop better quality relationships, which serve as a support system in times of coping (Martin, Thomas, Charles, Epitropaki & McNamara, 2005) Individuals show flexibility, controllability, strategy situation fit and predictable behaviour in coping situations (Gan, Shang & Zhang, 2007).	Individuals are persistent, positive-affective-motivational state of fulfilment. Energy, involvement and efficacy (Berger, Shuster, Von Roenn, 2007).	High sense of coherence enables the employees to see comprehensibility, manageability and meaningfulness even in difficult work situations. If an employee is able to perceive his/her work as comprehensible, manageable and meaningful, he/she is also very likely to be able to cope with it (Docherty, Forslin & Shani, 2002).
Non-coping	The stronger an individual's perception of control, the less likely he or she is to appraise a specific situation as harmful or threatening. Internal locus of control was related positively to suppression or avoidance and negatively to direct coping (Perrewe & Ganster, 2007).	Individuals are constantly being fully absorbed at work and this may not be beneficial for long-term engagement (Albrecht, 2010).	An individual who demonstrates a low sense of coherence would fail in transforming his/her potential resources into reality and, thus, would be not able to cope with life stressors (Switzky, 2003).

	Locus of control	Work engagement	Sense of coherence
	External Locus of control	Dedication	Manageability
Cognitive	Experiences in life have an influence on the cognitive process. The more life experience the individual gains, the more it becomes external locus of control and at the same time they preserve their sense of internal control (Lachman, 2007).	Encompasses a sense of pride and enthusiasm. They find their work full of meaning, purpose and inspiring (Albrecht, 2010).	Cognitive efforts of individuals to manage specific demands that are appraised as taxing the resources of a person (Boss & Mulligan, 2003).
Affective	Chen and Wang (2007) showed that individuals with more external locus of control were more likely to have high continuance commitment to change.	The human spirit in this context refers to that part of the human being which seeks fulfilment through self-expression at work (May, Gilson & Harter, 2004).	The level of comprehension about the stressor, the willingness to confront the stressor, and the resources to manage it can be measured as the sense of coherence (Artinian, West & Conger, 2011).
Conative	Individuals are authoritative with deference to experts and traditions (Lartey, 2003)	Cognitive engagement is willingness to invest and exert effort in learning (Blumenfeld, Kempner & Krajcik, 2006).	Individuals feel that they are influencing that which is happening around them and do not perceive themselves as victims of circumstances. A person's sense of meaningfulness is connected to his or her perception that there are important and meaningful phenomena in life. Meaningfulness is the component that motivates a person's sense of coherence (Nord, 2009).
Interpersonal	Individuals believe that outcomes of their behaviours are primarily determined by outside forces, such as luck or timing. They are more likely to respond to organisational frustration with counterproductive behaviour such as aggression, sabotage, withdrawal, hostility and complaining (Perrewe & Ganster, 2005).	Individuals experience work as a source of independence and a means of fostering personal growth, self-respect, satisfaction and self-fulfilment (Tayeb, 2005).	People need a reason to guide their lives, to provide direction in day-to-day tasks, and to fortify their strength in life's darker moments. A meaningful purpose in life provides such a compass throughout life. These purposive goals, when they are based on concern for others, often result in better health, increased cooperative behaviour and a sense of contentment even in the face of adversity (Flannery, 2000).

	Locus of control	Work engagement	Sense of coherence
	External Locus of control	Dedication	Manageability
Coping	Less likely to engage in healthy behaviour rather than regarding health outcome as more liable to be result of fate (Sheppard & Grohn, 2004).	Employees are inherently in a positive motivational state that will always produce adaptive consequences. Focus on the positive consequences of job engagement for psychological health and performance (Nelson & Cooper, 2007).	Individuals tend to be more self-efficient, hardy and resourceful. They are further characterised by an enduring tendency to see one's life as being more or less ordered, predictable, manageable and meaningful. Manageability is high when persons believe that they have adequate resources available to manage demands (Jamison, 2001).
Non-coping	Experience more non-adaptive coping styles, higher helplessness and lower self-esteem (Martz & Livneh, 2007).	The employee does not have access to necessary resources or the aptitudes necessary for effective performance (Nelson & Cooper, 2007).	Sense of coherence is postulated to be an important factor in the quality of life of individuals. A weak sense of coherence could be favourable concerning non-coping with stressors (Lee, 2005).
		Absorption	Meaningfulness
Cognitive		To perform the job is so absorbing that they forget about everything else. They have what they need to do their work, have opportunities to feel an impact and fulfilment in their work (Gililand, Steiner & Skarlicki, 2007).	Individuals with a strong sense of coherence should be able to make cognitive sense of the workplace, perceiving its stimulation as clear, ordered, structured, and consistent (Schreuder & Coetzee, 2007).
Affective		An affective state reflecting high energy and built-up resources; he or she experiences more work engagement (Albrecht, 2010).	Perceiving work as consisting of experiences that are bearable, with challenges that can be met by availing oneself of personal resources or resources under the control of legitimate others (Van Jaarsveld, 2009).
Conative		Conation is striving or having the power to strive or struggle toward a goal, which may be conscious or unconscious, descriptive of one of the three great divisions of the mind or soul, namely the will to do contrasted with terms descriptive of feeling (affective) or the power of knowing (cognitive) (Riggs & Gholar, 2009)	The importance for the individual of being involved in the process of shaping not only his or her destiny, but also his or her daily experience (Van Jaarsveld, 2009).

	Locus of control	Work engagement	Sense of coherence
	External Locus of control	Dedication	Manageability
Interpersonal		Employees who are fully focused with interpersonal energy and ability to facilitate goal-directed behaviours (Albrecht, 2010).	The more one perceives the valuation of one's work as meeting one's criteria of equity, the more one is likely to feel that 'this is mine' (Van Jaarsveld, 2009).
Coping		Employees have the motivation to perform well because of an inherently positive motivational state (Nelson & Cooper, 2007).	The individual is confident that things will work out, that what seems to be a problem will turn out not to be much of a problem and be reasonably soluble, that the dissonance is only apparent (Van Jaarsveld, 2009)
Non-coping		They have an uncontrollable need to work incessantly. They think persistently and frequently about work, even when not working. They work harder than their job descriptions require and they put much more effort into their jobs than is required. In doing so they neglect their life outside their job (Schaufeli, Taris & van Rhenen, 2008).	The individual is not capable of cognitively and emotionally ordering his or her perception of the stressor and avoids confronting it (Van Jaarsveld, 2009).

3.1.6.8 *Research hypotheses and propositions*

(i) Research hypotheses: Quantitative study

The literature review informed the hypotheses for the quantitative study, which are as follows:

H01: There is no significant relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

H1: There is a significant relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

(ii) Propositions: Qualitative study

In terms of the qualitative data analyses, the following proposition is made:

Proposition 1: Coping and non-coping individuals attach various meanings to their coping and non-coping experiences, which manifest as core themes underlying their coping strategies.

3.2 RESEARCH DESIGN

3.2.1 Research approach

The present study is exploratory in nature. A quantitative and qualitative approach, collecting primary data, was followed. The quantitative study focuses on investigating the relationship dynamics between the variables locus of control, engagement and sense of coherence and whether coping and non-coping individuals differ significantly regarding these variables. The qualitative study is conducted within the ambit of the interpretivist paradigm. The qualitative study focuses on identifying and comparing the strategies that coping and non-coping employees employ to manage change in their life circumstances by means of qualitative research techniques.

3.2.2 Research method: Quantitative study

3.2.2.1 Research participants

The participants comprised a convenience sample of 69 (n=69) permanently working adults from a manufacturing organisation. The profile of the sample is described according to the following biographical variables: race, marital status, employment status, gender and age.

In terms of racial composition the sample consisted of 4.35% Africans and 95.65% whites. The participants' comprised 55.1% males and 44.9% females. The participants were predominantly in the age category 26 – 40 years (55%), with 42% of the sample between 41 and 55 years and 3% of the sample 56 years and older. In terms of the participants' work departments, they comprised 43.5% general workers, 17.4% Human Resource, 14.5% finance, operations 11.6%, IT programmers 7.2% and the CEO, MD, Financial Manager and the PA 4% of the sample respectively. The sample comprised predominantly married (81%) participants. The biographical characteristics of the study population are summarised in Table 3.4.

Table 3.4: Characteristics of the participants

Item	Category	Frequency	%
Race	Black	3	4.35%
	White	66	95.65%
Gender	Male	38	55.1%
	Female	31	44.9%
Age	26 – 40 years	38	55.1%
	41 – 55 years	29	42 %
	56 years and older	2	2.9%
Marital Status	Single	11	15.9%
	Married	56	81.2%
	Separated/Divorced	2	2.9%
Work department	CEO	1	1.4%
	MD	1	1.4%
	Financial Manager	1	1.4%
	Finance Other	10	14.5%

General worker	30	43.5%
HR	12	17.4%
IT Programmers	5	7.2%
Operations	8	11.6%
PA	1	1.4%

3.2.2.2 *Measuring instruments*

The Locus of Control Inventory (LCI) (Schepers, 1999), Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2002), and the Orientation to Life Questionnaire (OLQ) (Antonovsky, 1987) were applied as measures to determine the relationship between the variables locus of control, engagement and sense of coherence, and whether copers and non-copers differed significantly regarding these variables.

The *LCI* is a self-rated, multi-factorial measure that contains three subscales (autonomy, external control and internal control) consisting of a total of 88 items. Responses are measured on a seven-point Likert-type scale. A factor analysis by Schepers, Gropp and Geldenhuys (2006) confirmed the construct validity of the scale. In terms of reliability, Schepers et al (2006) reported highly acceptable Cronbach Alpha coefficients: autonomy (0.88); external control (0.87) and internal control (0.82).

The UWES is a self-rated, multi-factorial measure that contains three subscales (vigour, dedication, absorption) consisting of a total of 33 items. Responses are measured on a six-point Likert-type scale. A two-sample confirmatory factor analysis confirmed the three-factor structure of engagement (vigour, dedication and absorption) with correlations of $r > 0.60$ in both samples (Schaufeli et al., 2002). Naudé and Rothmann (2004) validated the UWES in a sample of medical technicians in the Gauteng Province of South Africa to determine the construct equivalence and bias for different language groups. They found that a two-factor model of work engagement, namely vigour/dedication and absorption, was identified and that the exploratory factor analysis confirmed the construct equivalence of the work engagement construct for white and black employees. Schaufeli, Bakker and Salanova (2006) confirmed the factorial validity of the UWES in 27 different studies, and confirmed the three-scale scores as having sound internal consistency and test-retest reliability. It was also ascertained that the test could be used to study positive organisational behaviour.

The OLQ (Antonovsky, 1987) is a self-rated, multi-factorial measure that contains three subscales (comprehension, manageability, meaningfulness) consisting of a total of 29 items. Responses are measured on a seven-point Likert-type scale. The OLQ seems to be a reliable, valid and cross-culturally applicable instrument measuring how people manage stressful situations and stay well (Eriksson & Lindstorm, 2005). The questionnaire has been extensively studied in multiple settings, with diverse populations and different languages. It yielded a high level of significant Cronbach's ranges from 0.70 to 0.95 across a large sample of studies. Results of the OLQ show that individuals with higher sense of coherence (SOC) scores are likely to report less stress.

A coping scale was also designed based on the items of the LOC, UWES and OLQ that related best to the definition of coping as conceptualised by the research literature (Lazarus & Folkman, 1984; Lerner, Jacobs & Wertlieb, 2003). The coping scale (Table 3.11) served as a tool for identifying and ranking the five respondents who scored the highest on the coping scale items (labelled as copers) and the five respondents who scored the lowest on the coping scale items (labelled as non-copers). This approach assisted the researcher in identifying the respondents for the qualitative study. The overall Cronbach Alpha coefficient obtained for the coping scale (35 items) was 0.85 (high). In terms of ensuring content validity, care was taken to ensure that the items constituted the domain of content for the coping construct. Because the sample was relatively small ($n = 69$) and inadequate for factor analyses, Exploratory Factor Analyses could not be conducted.

3.2.2.3 Research procedure

The management of the organisation was approached to give permission for employees to participate in the research study. In terms of ethics, clearance to conduct the research was obtained from the Department of Industrial and Organisational Psychology at the University of South Africa and the participating organisation. Participants were assured of confidentiality and anonymity and it was reinforced that participation was voluntary. A cover letter explained the purpose, procedure, potential benefits, confidentiality, anonymity, participation and withdrawal. Thereafter, a written consent form was completed by all participants. Participants were requested to complete the questionnaires in a session allocated for this purpose and they returned the completed questionnaires to the researcher who coordinated the session upon completion. Participants desiring feedback provided their contact information and received feedback on the results of the study. Completed questionnaires were kept secure.

3.2.2.4 *Statistical analysis*

The Statistical Program for Social Sciences (SPSS, 2005) was used to analyse the data for the quantitative analysis. Descriptive statistics, correlational and inferential statistics were calculated. Cronbach's Alpha coefficients were used to assess the internal consistency reliability of the measuring instruments. Based on the tests for normality (Kolmogorov-Smirnov and Shapiro-Wilk tests), which were interpreted at a $p > 0.01$ significance level, parametric statistics were used (Fields, 2005).

Pearson product-moment correlations were determined to assess the direction and strength of the relationship between the LOC, UWES and OLQ variables. In order to counter the probability of a type I error, it was decided to set the significance value at a 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.

The relationship between the LOC, UWES and OLQ variables was further analysed by performing multiple regression analyses. Since a number of independent variables had to be considered, the value of the adjusted R^2 was used to interpret the results. R^2 values larger than 0.13 (medium effect) (Cohen, 1992) were regarded as practically significant.

An independent samples T-test was used to assess whether males and females differed significantly regarding the LOC, UWES and OLQ variables, and whether copers and non-copers differed significantly regarding their mean scores on the coping scale.

3.2.3 **Research method: Qualitative study**

3.2.3.1 *Research strategy*

A qualitative research design was used to identify the core themes underlying the strategies of the respondents identified in the quantitative study as copers ($n = 5$) and non-copers ($n = 5$).

3.2.3.2 *Research setting*

The research setting consisted of a labour broker organisation located in Johannesburg which offers permanent and temporary employment services for the manufacturing organisation that participated in the study. The research focused on the employees who were permanently employed by the manufacturing organisation. Since the beginning of 2010 the labour broker market in South Africa has dealt with many uncertainties. This implies that the employment of the permanent workers at the manufacturing organisation is constantly at risk, as they may be retrenched at any moment. This was the ideal research setting to conduct research on coping because of the constant uncertainty that the respondents have to face.

3.2.3.3 *Entrée and establishing researcher role*

Meetings with management of the organisation were held before the research commenced to discuss the aim of the research and to obtain written permission for the research. In an attempt to begin the research process as unobtrusively as possible and to ensure that the researcher was not regarded as a threatening intruder (De Vos *et al.*, 2005) an employee was identified within the organisation to introduce the participants to the researcher and to arrange suitable interview dates and times.

During qualitative research the researcher acts as the research tool, encouraging the participants to discuss their perspectives, experiences, feelings and thoughts openly; consequently the researcher has a direct impact on the quality of research collected (Ritchie & Lewis, 2005). In the light of this the researcher responsible for conducting the interviews attended qualitative training with an emphasis on interview skills and communication techniques. Interview training has a major effect on the quality of data collected and is especially necessary where in-depth and detailed data are required (Lewis – Beck & Bryman, 2004).

In an effort to control for interviewer distortion, it was critical for the researcher to be constantly aware of her personal views and potential bias and how such subjectivity might influence the objectivity and neutrality of the research findings (Terre Blanche *et al.*, 2006). Reflexivity in the form of critical self-examination took place during the interview process, when the researcher took time to reflect on interview performance and influence after each interview. To assist with this, a co-researcher was used to discuss any concerns the researcher might have. The co-researcher assisted with the development of the interview schedule, provided support during data collection and reviewed the quality of the information

gathered. The use of a tape recorder was also explained and permission to use it was requested from the participants before the interviews commenced.

To ensure transparency, the researcher firstly discussed the research plan with management in the introductory meeting. They agreed verbally and the researcher had to put the agreement in writing. The researcher began by firstly giving a brief description of the research project in writing for the attention and approval of the board, secondly explaining the modes of access used for giving entrée to different work departments, and thirdly describing the role of the researcher in terms of the response of the participants to the presence of the researcher in their office. The researcher was in a privileged position because the organisation was eager for the research to be done. It was the first time ever that research was to be conducted and the board and participants were committed to being part of the research. It was very important for the researcher to obtain informed consent. In seeking this, the researcher asked the respondents to give their consent to participating in the research. This approach helped to ensure transparency and reassured them about what would happen to the data that they contribute.

During interviews it is important to note the interaction between the researcher and participants within a particular context or setting (Terre Blanche, Durrheim & Painter, 2006). With the importance of the setting in mind, a private interview room situated at the manufacturing organisation was used. Care was taken to ensure that the interview room was comfortable, temperate and quiet, located at a sufficient distance from other employees to ensure privacy. To reduce potential disturbance, a 'Do not disturb' sign was posted on the door. Since the validity and success of the research outcomes depend on the participants being at ease with the research process (Hesse-Biber & Leavy, 2004), the researcher conducting the interviews introduced herself in a warm, friendly manner, detailing the context of the interview and emphasising its purpose.

3.2.3.4 Sampling

A non-probability purposive sample of 10 respondents identified as copers ($n = 5$) and non-copers ($n = 5$) by means of the quantitative study was selected for the purpose of the qualitative study. The criteria for selecting the five coping and the five non-coping respondents were based on the respondents who obtained the lowest mean scores on the coping scale and the copers who obtained the highest mean scores on the coping scale. The 10 respondents gave their written consent after being informed about the purpose and

procedures of the research, were willing to be interviewed by the researcher and were prepared to have their interviews tape-recorded.

3.2.3.5 Collecting the qualitative data

Data were collected by means of semi-structured individual interviews. The term 'semi-structured interview' refers to a method of data collection where a single interviewer is guided by a flexible interview schedule and makes use of active listening and probing to allow for in-depth detail and understanding (Forrester, 2010). Based on the interpretive approach, a semi-structured interview allows the researcher to gather data and study the phenomenon from the perspective of the participant, probing further when unanticipated topics come up (Neuman, 2003).

Interviews were conducted using an interview schedule, which was developed and evaluated prior to the interviews. All participants were asked five standard questions:

1. Think about any life-changing event in your life. How did it affect your work life, your finances, your health and your family life?
2. Think about the 16 dimensions of the Quality of Life (Frisch, 2006); 1) health, 2) self-esteem, 3) goals and values, 4) money, 5) work, 6) recreation, 7) learning, 8) creativity, 9) helping, 10) love, 11) friends, 12) children, 13) relatives, 14) home, 15) neighbourhood and 16) community. Which of the 16 dimensions were affected by the life-changing event? In what way was it affected?
3. How do you think you handled this life-changing event that occurred?
4. Elaborate on your answer in number 3.
5. In general, how do you think you handle difficult, life-changing situations? Well or badly? Give a reason for your answer.

The researcher also used communication techniques such as minimal verbal response, paraphrasing, reflection, clarifying and summarising to encourage participant elaboration on feelings, thoughts, experiences and perspectives (Neuman, 2003). In addition to the verbal information obtained during the interviews, the researcher took observation notes (also referred to as field notes) immediately after each interview. These notes were categorised as methodological or personal notes (Hesse-Biber & Leavy, 2004). Methodological notes referred to possible influences on the research process, such as environment, comfort and interruptions (Bester, 2010). Personal notes reflected the researcher's own experiences, for example her emotional and physiological state, as well as her experience of the participants

(Bester, 2010). These observation notes therefore provided a written account of what the researcher saw, heard, experienced and thought during the interview and could consequently contribute more depth and detail to the research findings.

3.2.3.6 Recording of data

With the permission of the respondents, the interviews were tape-recorded and transcribed verbatim. In addition, detailed observation notes were recorded after each interview. In order to ensure confidentiality, the corresponding observation notes, transcriptions and tapes were labelled using numerical coding according to the interview plan known only to the researcher. For example, interview one was coded as interview 1 coper and interview six as interview 6 non-coper. The observation notes, along with the transcriptions and tapes, were safely stored to ensure that data could not be used to expose or exploit participants (Burns & Grove, 1997). Creswell (2003) also emphasises the protection of data as an important research issue, since data should be protected from loss, destruction and unauthorised access. Although participants had given written consent, they were assured that they could withdraw from the research at any time, should they wish to. Throughout this process the participants' right to privacy, anonymity, fair treatment and protection, and their right to be shielded from discomfort and harm were upheld and appropriately respected (Neuman, 2003).

3.2.3.7 Data analysis

During the data analysis process the verbatim transcripts were analysed by means of content analysis. Content analysis refers to a systematic technique that gathers and compresses large bodies of text into specific and identifiable content categories (Hesse-Biber & Leavy, 2004). This method of qualitative analysis was appropriate for the research in question since it focuses on and gives attention to content and contextual meaning of the text, assisting the researcher in making replicable and valid inferences (Hsieh & Shannon, 2005).

At first the researcher read through the interviews thoroughly several times. Thereafter she divided the participants' responses into meaningful units, appearing as sentences or paragraphs. All the meaningful units were then separated into categories, which were identified as major themes. Following careful analysis of the major themes identified, the researcher was able to recognise, explore and summarise the major themes into smaller and comparable sub-themes.

3.2.3.8 *Strategies employed to ensure quality data*

Quality data provide a detailed description of the researcher's experience and immersion into the research and represent the authentic perspectives and context of the research participants (Neuman, 2003). The principles of credibility (checking the truth value of the findings), transferability (ensuring consistency of the findings) and conformability (ensuring neutrality or freedom from bias) were upheld in the research to ensure quality data (Appleton, 1995; De Vos *et al.*, 2005; Guba, 1981). The following two measures were taken to enhance the quality of the data:

- (1) Each stage of the research was clearly and carefully described, explaining what was done and why, to ensure that the exact process was maintained and neutrality upheld throughout all the interviews.
- (2) Comprehensive observation notes were collected after each interview for additional detail, depth and quality of data. This was done following a presentation of research findings to the organisation by means of a feedback session to management.

3.2.3.9 *Reporting*

In the findings to follow, a qualitative report style is used in which each of the major themes that emerged from the data is described separately. Respondents' experiences of each of the major themes are presented and discussed. The respondents' verbatim responses are also given to illustrate the responses of the participants as well as for more complex themes, which may require some further explanation. Minor modifications involving the omission of words were made to some of the interview excerpts without affecting meaning, in order to achieve a more compact statement and assist with reader understanding (De Vos *et al.*, 2005). The identified major themes were categorised by using the locus of control, engagement and sense of coherence construct definitions and their links with cognitive, affective, conative and interpersonal behavioural elements as a broad framework. The identified sub-themes were categorised by using the 16 dimensions of the Quality of Life model (Frisch, 2006) as a framework.

3.3 RESULTS

3.3.1 Quantitative study

3.3.1.1 Descriptive statistics

Table 3.5: *Descriptive statistics: means, standard deviations and internal consistency reliability Cronbach's Alpha coefficients (N = 69).*

	Mean	Std. Deviation	Cronbach's Alpha
LCI	398.00	38.86	0.84
Autonomy	170.25	20.00	0.80
External Control	68.19	20.23	0.82
Internal Control	159.57	18.66	0.83
UWES	97.10	9.21	0.78
Vigour	34.74	3.50	0.56
Dedication	33.71	14.47	0.63
Absorption	31.93	4.45	0.60
OLQ	145.32	15.67	0.83
Comprehension	48.26	6.45	0.64
Manageability	50.38	7.06	0.66
Meaningfulness	46.59	6.11	0.77

As summarised in Table 3.5, the overall mean scores for the LCI variables are $M = 398.00$ ($SD = 38.86$), UWES ($M = 97.10$; $SD = 9.21$) and OLQ ($M = 145.32$; $SD = 15.67$) respectively. The participants obtained the highest scores on the LCI internal control variable ($M = 159.57$ $SD = 18.66$) and the lowest mean score on the UWES absorption variable ($M = 31.93$; $SD = 4.45$).

3.3.1.2 Inter-correlations between LCI, UWES and OLQ

Table 3.6 shows that the LCI external control variable has a statistically significant inverse (negative) relationship with the UWES dedication ($r = -0.38$; $p \leq 0.001$; medium practical effect), and OLQ comprehension ($r = -0.25$; $p \leq 0.05$; small practical effect), manageability ($r = -0.25$; $p \leq 0.05$; small practical effect), and OLQ meaningfulness ($r = -0.25$; $p \leq 0.05$; small practical effect).

= -0.43; $p \leq 0.00$; medium practical effect), and meaningfulness ($r = -0.27$; $p \leq 0.02$; small practical effect) variables.

Table 3.6 further shows that the UWES vigour variable has a significant and positive relationship with the OLQ meaningfulness ($r = 0.37$; $p \leq 0.001$; medium practical effect) variable.

Table 3.6: *Inter-correlations between LCI, UWES AND OLQ*

		Vigour		UWES		OLQ	
		Dedication		Absorption		Manage- ability	
						Meaning- fulness	
LCI							
Autonomy	Pearson Correlation	0.72	-0.09	-0.03	0.06	0.12	0.24
	Sig. (2 tailed)	0.55	0.45	0.80	0.60	0.31	0.04*
External Control	Pearson Correlation	-0.03	0.38++	0.21	-0.25+	-0.43++	-0.27+
	Sig. (2 tailed)	0.79	0.001***	0.07	0.03*	0.000***	0.02*
Internal Control	Pearson Correlation	0.05	0.00	0.97	-0.01	-0.01	0.19
	Sig. (2 tailed)	0.63	0.94	0.42	0.92	0.93	0.10
UWES							
Vigour	Pearson Correlation				0.16	0.22	0.37++
	Sig. (2 tailed)				0.18	0.06	0.001***
Dedication	Pearson Correlation				0.13	-0.08	0.08
	Sig. (2 tailed)				0.25	0.49	0.48
Absorption	Pearson Correlation				-0.08	0.12	0.15
	Sig. (2 tailed)				0.50	0.29	0.21

***p≤0.001 **p≤0.01 *p≤0.05 (two-tailed)

+++ r≥0.50 (large practical effect size) ++ r≥0.30≤0.49 (medium practical effect size) + r≤0.29 (small practical effect size)

3.3.1.3 Inferential statistics: tests for significant mean differences

Table 3.7 shows that males and females scored significantly differently only in terms of the OLQ comprehension variable ($p \leq 0.001$). Table 3.11 shows that males ($M = 50.11$; $SD = 5.67$) scored significantly higher than the female ($M = 46.00$; $SD = 6.72$) participants.

Table 3.7: *Significant differences between gender groups: Independent t-test results*

Scale	Levene's Test for equality of variances		T-test for equality of means		
	F	Sig.	t	df	Sig. (2 –tailed)
LCI					
Autonomy	3.59	0.06	1.43	67	0.16
External					
Control	0.11	0.74	-1.08	67	0.28
Internal					
Control	1.43	0.24	1.31	67	0.19
UWES					
Vigour	0.14	0.70	1.10	67	0.27
Dedication	0.40	0.53	0.70	67	0.49
Absorption	0.49	0.49	-0.28	67	0.78
OLQ					
Compre- hension	2.06	0.16	2.75	67	0.01**
Manage- ability	0.11	0.74	1.09	67	0.28
Meaning- fulness	1.87	0.18	0.57	67	0.57

** $p \leq 0.01$; * $p \leq 0.05$

Table 3.8: Descriptive statistics: males and females

OLQ Scale	Gender	N	Mean	SD
Comprehension	Male	38	50.11	5.67
	Female	31	46.00	6.72

3.3.1.4 Inferential statistics: multiple regressions

Table 3.9 shows that the multiple regression analyses yielded only two significant regression models. In terms of total sense of coherence (OLQ), the regression model explained 22% ($R^2 = 0.22$, $p \leq 0.001$; medium practical effect) of the variance in the dependent variable (OLQ). In terms of external control (LCI), the regression model explained 30% ($R^2 = 0.30$, $p \leq 0.001$; large practical effect) of the variance in the dependent variable (LCI).

LCI external control ($\beta = -0.46$; $p = 0.00$) and UWES vigour ($\beta = 0.24$; $p = 0.05$) contributed significantly to the variance in the OLQ total sense of coherence variable. The LCI external control variable contributed negatively, while the UWES vigour variable contributed positively to explaining the variance.

UWES dedication ($\beta = 0.34$; $p = 0.003$) contributed positively, while the OLQ manageability variable ($\beta = -0.98$; $p = 0.04$) contributed negatively in explaining the variance in the LCI external control variable.

Table 3.9: Significant multiple regression analyses: Locus of control (LCI), work engagement (UWES) and sense of coherence (OLQ) (N = 69)

Variable	Un-standardised coefficient		Standardised coefficient	t	p	F	Adjusted R ²	R
<i>Total sense of coherence</i> (Constant)	b	SE b	β					
	105.19	23.93		4.40	0.00	4.22 ***	0.22++ ***	0.54 ***
Autonomy (LCI)	0.08	0.11	0.10	0.69	0.49			
External control (LCI)	-0.35	0.09	-0.46	-3.78	0.00			
Internal control (LCI)	0.01	0.12	0.01	0.09	0.93			
Vigour (UWES)	1.08	0.53	0.24	2.02	0.05			
Dedication (UWES)	0.20	0.13	0.18	1.53	0.13			
Absorption (UWES)	0.18	0.43	0.05	0.43	0.67			
<i>External control (LCI)</i> (Constant)	b	SE b	β					
	110.41	26.40		4.18	0.00	5.94 ***	0.30+++ ***	0.60 ***
Vigour (UWES)	-0.36	0.70	-0.06	-0.52	0.61			
Dedication (UWES)	0.47	0.15	0.34	3.07	0.003			
Absorption (UWES)	0.92	0.53	0.20	1.75	0.09			
Comprehension (OLQ)	-0.45	0.36	-0.14	-1.24	0.22			
Manageability (OLQ)	-0.98	0.47	-0.34	-2.07	0.04			
Meaningfulness (OLQ)	-0.09	0.53	-0.03	-0.17	0.86			

***p≤0.001 **p≤0.01 *p≤0.05 + R²≤0.12 (small practical effect size) ++ R²≥0.13≤0.25 (medium practical effect size)
+ ++ R²≥0.26 (large practical effect size)

3.3.1.5 *Constructing the coping scale*

Constructing the coping scale comprised four steps, shown in figure 3.2

The **first step** was to review definitions of coping as conceptualised in the research literature. Two definitions of coping were used.

The first one is the most widely cited definition of Lazarus and Folkman (1984), which is derived from their adult model of stress, cognitive appraisal and coping. Lazarus and Folkman (1984, p.141) define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person.”

The second description of coping is from Lerner, Jacobs and Wertlieb (2003), who view coping as an ongoing dynamic process that changes in response to the changing demands of a stressful encounter or event.

In the context of the present research, coping is conceptualised as a purposeful response directed at resolving the stressful relationship between the self and the environment or at palliating negative emotions that arise as a result of stress. Coping is a goal-directed process in which the individual orients thoughts and behaviour towards the goals of resolving the source of stress and managing emotional reactions to stress.

The **second step** was to connect themes to the coping definitions and connect the coping themes with the three variables locus of control (LCI), engagement (UWES) and sense of coherence (OLQ). In terms of ensuring content validity, care was taken to ensure that the items constituted the domain of content for the coping construct. Table 3.10 gives an overview of the themes and the variables and how they relate to the chosen definitions of coping. The **third step** was to relate the themes to the sub-scales and items of the LCI, UWES and OLQ, as shown in Table 3.10

Table 3.10: Coping definition themes connected with the variables

Definition of coping	Themes from the definition of coping	Connected coping themes with variables
<p>Lazarus and Folkman (1984, p.141) define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person.”</p> <p>Coping is viewed as ongoing dynamic process that changes in response to the changing demands of a stressful encounter or event.</p> <p>Coping is conceptualised as a purposeful response directed at resolving the stressful relationship between the self and the environment or at palliating negative emotions that arise as a result of stress.</p> <p>Coping is a goal-directed process in which the individual orients thoughts and behaviour towards the goals of resolving the source of stress and managing emotional reactions to stress (Lerner, Jacobs & Wertlieb, 2003).</p>	<p>External</p> <p>Internal</p> <p>Social support</p> <p>Information seeking</p> <p>meaningfulness</p> <p>hardiness</p> <p>resilience</p> <p>responsibility</p> <p>self-efficacy</p> <p>control work</p> <p>responsibility</p> <p>bright side</p> <p>control work</p> <p>information seeking</p> <p>resilience</p>	<p>LCI</p> <p>LCI</p> <p>LCI</p> <p>LCI</p> <p>OLQ</p> <p>LCI</p> <p>UWES</p> <p>UWES</p> <p>UWES</p> <p>UWES</p> <p>LCI</p> <p>LCI</p> <p>UWES</p> <p>LCI</p> <p>UWES</p>

The **fourth step** was to test the reliability of the overall coping scale for the purpose of using it to identify the five respondents who obtained the highest mean scores on the coping scale (labelled “copers”) and the five respondents who obtained the lowest mean scores on the coping scale (labelled “non-copers”). Although Exploratory Factor Analyses were considered, the sample size ($n = 69$) was regarded as inadequate. As shown in Table 3.11, the internal consistency reliability coefficients (Cronbach’s Alpha) obtained for the overall coping scale was 0.85 (high). The copers were those who scored above the median of the coping scale, and the non-copers were those who scored below the median. Cohen’s d shows that the mean score differences between the two groups were of very large practical effect ($d = 2.90$).

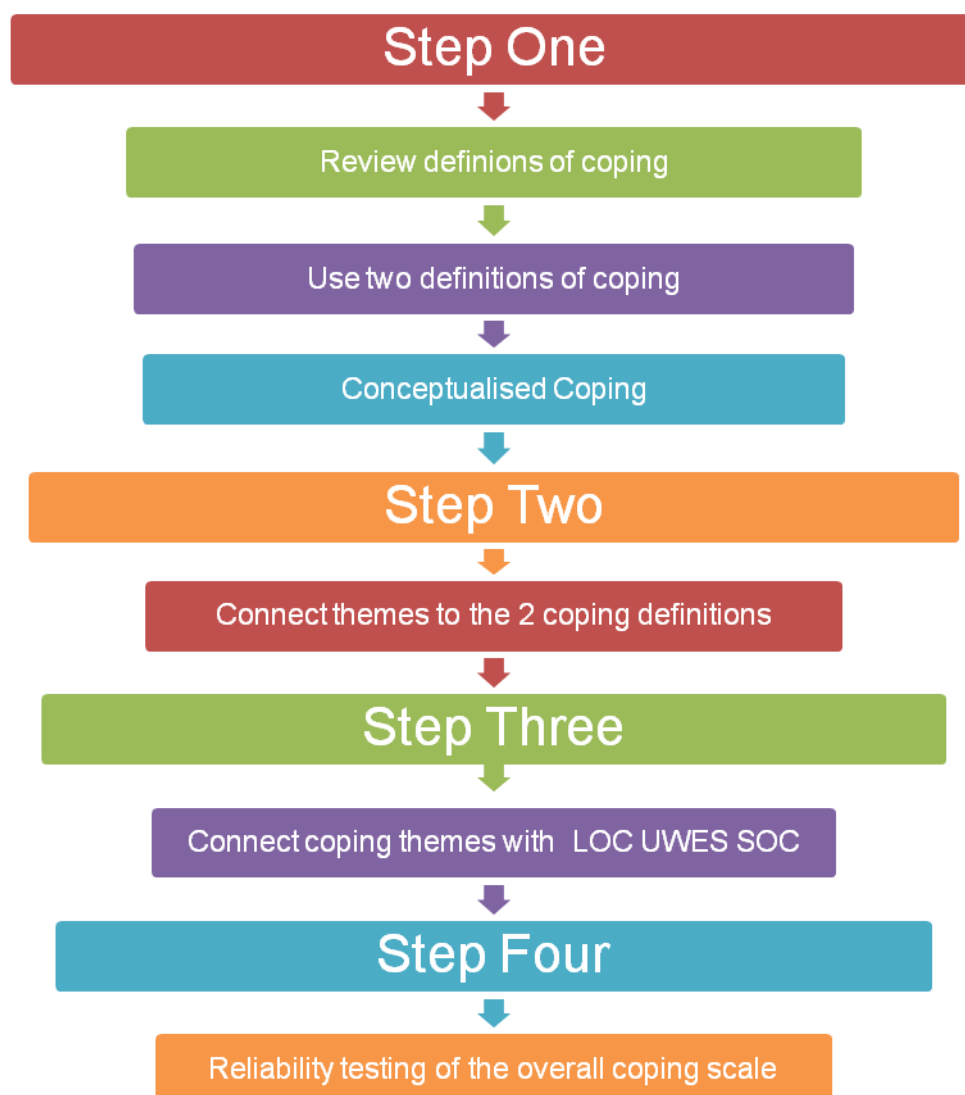


Figure 3.2 Steps of constructing the coping scale

Table 3.11: *Coping scale: Cronbach's Alpha internal consistency coefficients and mean score differences between copers and non-copers (n= 69)*

Coping scale	Cronbach's Alpha coefficient	Group 1 (Above median)			Group 2 (Below median)			Pooled n	Pooled SD	Cohen d
Number of items = 35	0.85	Copers			Non-copers			69	12.83	2.90
		n	M	SD	n	M	SD			
		35	205.83	15.78	34	168.56	8.83			

An independent samples T-test was then conducted to assess whether respondents who scored above and below the median differed in practically significant ways, before selecting the five copers and five non-copers for the qualitative study. Table 3.12 shows that those respondents who obtained a mean score above the median scored practically significantly higher ($M = 205.83$; $SD = 15.78$; $d = 2.90$, very large practical effect) than those who obtained mean scores below the median.

Table 3 .12: *T-test for significant mean differences on the coping scale: copers and non-copers*

	Levene's test for quality of variance		t-test for equality of means						
	F	Sig	t	df	Sig. (2 tailed)	Mean difference	SE	95% confidence interval of the difference	
								Lower	Upper
Coping scale	20.76	0.00	-12.06	67	0.00	-37.27	3.09	-43.44	-31.10
Equal variances assumed									
Equal variances not assumed			-12.15	53.69	0.00	-37.27	3.07	-43.42	-31.12

The results confirmed the hypothesis (H1) that coping and non-coping individuals differ significantly regarding the LCI, UWES and OLQ variables.

Table 3.13 illustrates the coping items selected for coping scale – criteria for selecting copers and non-copers are illustrated. In the first column the scale number of item frequencies of one of the three questionnaires LOC, UWES, OLQ are describe. The second column consists out the scale variables with specific questions which are related to the scale variables. The third column consists out of the coping definition themes. The questions are related to the three questionnaires. The last column consists out of the coping themes of number of item frequencies.

Table 3.13: Coping items selected for coping scale – criteria for selecting copers and non-copers

Scale Number of item frequencies	Scale variables	Coping definition themes	Coping themes Number of item frequencies
LOC: Autonomy: 7	LOC: Autonomy LC3 How readily would you tackle a problem? LC16 How often do you decide on matters yourself? LC22 To what extent do you like taking decisions? LC44 How often do you achieve what you set out to do? LC46 How sure are you that you can solve most of your problems? LC62 How well can you predict whether you will perform well or not? LC74 How often do you take the initiative in finding solutions?	Internal locus of control LC31 How important is it for you to receive feedback? LC32 To what extent does one earn one's rewards? LC33 How readily do you accept responsibility for mistakes? LC37 To what extent does the achievement of your personal goals. LC40 How readily do you accept responsibility for your behaviour? LC42 To what extent do you receive the respect you received. LC48 To what extent can failure in life be attributed. LC49 How much does success depend on hard work? LC54 To what extent do you take personal responsibility? LC55 To what extent is the outcome of events determined? LC60 To what extent does achievement depend upon utilising. LC61 To what extent were your achievements deserved and not? LC63 To what extent are promotions earned through hard work? LC69 To what extent do you prefer to plan and coordinate your own work? LC75 How sure are you that your past achievements. LC76 How strongly do you believe that a lack of perseverance.	

Scale Number of item frequencies	Scale variables	Coping definition themes	Coping themes Number of item frequencies
		LC85 How sure are you that you can overcome most. LC86 How sure are you that you can meet any challenge? LC87 How strongly do you believe that success in life.	Internal locus of control: 19
LOC: External Control: 5	LOC: External Control LC34 To what extent does Lady Luck play a role in your life? LC35 How strongly do you believe in fate? LC43 To what extent does negative experiences in your past. LC52 To what extent did your parents negatively influence your. LC65 How strongly does belonging to a clique help one?	Hardiness LC3 How readily would you tackle a problem? LC37 To what extent does the achievement of your personal goals. LC44 How often do you achieve what you set out to do? LC46 How sure are you that you can solve most of your problems? LC62 How well can you predict whether you will perform well or not? LC85 How sure are you that you can overcome most. LC86 How sure are you that you can meet any challenge?	Hardiness: 7
LOC: Internal Control: 19	LOC: Internal Control LC31 How important is it for you to receive feedback? LC32 To what extent does one earn one's rewards? LC33 How readily do you accept responsibility for mistakes? LC37 To what extent does the achievement of your personal goals. LC40 How readily do you accept responsibility for your behaviour? LC42 To what extent is the respect you	Social support LC52 To what extent did your parents negatively influence your. LC65 How strongly does belonging to a clique help one? LC72 To what extent do you depend on the support of.	Social support: 3

	<p>received.</p> <p>LC48 To what extent can failure in life be attributed.</p> <p>LC49 How much does success depend on hard work?</p>		
	<p>LC54 To what extent do you take personal responsibility?</p> <p>LC55 To what extent is the outcome of events determined?</p> <p>LC60 To what extent does achievement depend upon utilising.</p> <p>LC61 To what extent were your achievements deserved or not?</p> <p>LC63 To what extent are promotions earned through hard work?</p> <p>LC69 To what extent do you prefer to plan and coordinate your own work?</p> <p>LC75 How sure are you that your past achievements.</p> <p>LC76 How strongly do you believe that a lack of perseverance.</p> <p>LC85 How sure are you that you can overcome most.</p> <p>LC86 How sure are you that you can meet any challenge?</p> <p>LC87 How strongly do you believe that success in life.</p>		
		<p>Bright side</p> <p>LC34 To what extent does Lady Luck play a role in your life?</p> <p>LC35 How strongly do you believe in fate?</p>	<p>Bright side: 3</p>

		LC48 To what extent can failure in life be attributed.	
		Information seeking LC43 To what extent does negative experiences in your past. LC74 How often do you take the initiative in finding?	Information seeking: 2
		Responsibility LC8 How readily do you accept responsibility?	Responsibility: 6
Scale Number of item frequencies	Scale variables	Coping definition themes	Coping themes Number of item frequencies
		LC16 How often do you decide on matters yourself? LC22 To what extent do you like taking decisions? LC27 To what extent do you take responsibility? LC33 How readily do you accept responsibility for mistakes? LC40 How readily do you accept responsibility for you? LC54 To what extent do you take personal responsibility?	
UWES : Vigour : 2	UWES: Vigour WR30 I am resilient mentally in my job. WR33 I always persevere at work even.	Resilience WR30 I am resilient mentally in my job. WR33 I always persevere at work even.	Resilience: 2
UWES: Dedication:4	UWES: Dedication WR4 I find my work full of meaning. WR14 My job inspires me. WR20 I am proud of the work that I do. WR26 To me my work is challenging.	Control work WR4 I find my work full of meaning. WR6 Time flies when I am working. WR14 My job inspires me. WR20 I am proud of the work that I do. WR26 To me my work is challenging.	Control work: 5
UWES: Absorption:	UWES: Absorption	Self-efficacy	Self-efficacy: 6

	WR6 Time flies when I am working.	WR9 I can effectively solve problems. WR13 I feel I am making an effective. WR19 In my opinion I am good at my job. WR21 I feel exhilarated when I accomplish something. WR23 I have accomplished many worthwhile things. WR31 At my work I feel confident that.	
		Responsibility WR9 I can effectively solve problems.	Responsibility: 1
OLQ: Meaningfulness: 8	OLQ: Meaningfulness SOC4 Do you have the feeling that you don't really care? SOC7 Life is ... SOC8 Until now your life has had SOC11 Most of the things you do in the future will probably be ... SOC14 When you think about your life you very often SOC16 Doing the things you do every day is ... SOC22 You anticipate that your personal life in the future will be ... SOC28 How often do you have the feeling that there.	Meaningfulness SOC4 Do you have the feeling that you don't really care? SOC7 Life is ... SOC8 Until now your life has had SOC11 Most of the things you do in the future will probably be ... SOC14 When you think about your life you very often SOC16 Doing the things you do every day is ... SOC22 You anticipate that your personal life in the future will be ... SOC28 How often do you have the feeling that there.	Meaningfulness: 8

Based on these results, it was decided to go ahead in terms of ranking the mean scores of the respondents in order to identify the five respondents who obtained the highest mean scores and the five respondents who obtained the lowest mean scores on the coping scale.

Table 3.14 shows the results of the ranking. The respondents were listed accordingly their scores obtain from the LOC, UWES and OLQ. The five highest scores indicate the five copers. The five lowest scores indicate the non-copers.

Table 3.14: Ranking of the five highest copers and five lowest non-copers

Copers	Total of Coping score	Non- copers	Total coping score
Coper 1	232	Non-coper 1	146
Coper 2	231	Non-coper 2	150
Coper 3	231	Non-coper 3	150
Coper 4	227	Non-coper 4	155
Coper 5	225	Non-coper 5	159

Table 3.15 give an illustration of the characteristics of the copers and the non-copers.

Table 3.15: Characteristics of the Copers and the Non-copers

Copers	Male/Female	Married/Single/Divorce	Age	Position
Coper 1	Female	Single	43	Finance other
Coper 2	Male	Married	48	General worker
Coper 3	Female	Single	52	Human resource
Coper 4	Female	Married	39	General worker
Coper 5	Male	Divorced	59	Human resource
Non-copers	Male/Female	Married/Single/Divorced	Age	Position
Non-coper 1	Male	Married	30	General worker
Non-coper 2	Male	Married	27	Operations
Non-coper 3	Female	Married	34	Human resource
Non-coper 4	Male	Married	42	IT
Non-coper 5	Female	Married	30	Finance other

These ten respondents were approached to participate in the qualitative study. What follows are the findings of the data obtained from the interviews and the qualitative data analyses.

3.3.2 Findings: Qualitative study

3.3.2.1 Interview findings between copers and non-copers

The interview findings in terms of the copers and non-copers are described in table 3.16.

Table 3.16: Interview findings: copers's coping strategies

Copers				
First order	Second order	Tertiary Order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Cognitive	People with internal locus of control showed more adaptive coping patterns (Parkes, 1984).	<p>(10) Love (or love relationship) is a very close romantic relationship with another person.</p> <p>(15) Neighbourhood is the area around one's home. Think about how nice it looks, the amount of crime in the area, and how well one likes one's neighbours.</p> <p>(16) Community is the whole city, town or rural area where one lives.</p>	<p>Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010).</p> <p>Coping flexibility is realising that different strategies work in different situations (Burger, 2008).</p> <p>Time management. Diary- and journal-keeping helps increase awareness of the things that are important to attend to. Journalling helps one sustain oneself emotionally at work and can assist the diarist in reflecting on experiences which increase observational skills (Travers, 2011).</p>	<p>Coper 1 "My journal writing is like a life saver in difficult times". Time management.</p> <p>Coper 2 "I did go through a divorce (10) Love (Experiences in life) after my husband had cheated on me. I also decided to move to another town. (15) Neighbourhood I 'figure' (adaptive coping patterns) it for myself out that I had no choice as to go through it". (Proactive coping)</p> <p>Coper 4 "I take it step by step". Coping flexibility</p> <p>Coper 3 "There is a lot before me who made it, so I figure it out that if they can made it through hardships then I can also". Coping flexibility</p> <p>Coper 5 "I am part of the suburb where I live patrol system. It helps me to know that I am needed at a place." (16) Community</p>

Copers				
First order	Second order	Tertiary Order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Affective	Thomas, et al, (2006) showed that internal locus was positively associated with favourable work outcomes, such as positive task and social experiences and greater job motivation.	(5) Work means one's career or how one spends most of one's time. One may work at a job.	Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010) Meaning-focused coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010)	Coper 1 "Although I knew the company go through a difficult time and there is the possibility that I can lose my job, I was eager (affective) to go to work (5) Work and it inspires me to work harder ten spite of the circumstances". Positive task Proactive coping Coper 4 "The sun will shine again". Meaning- focused Coper 5 "Hardship cannot continue forever. Somewhere it had to stop. That gives me hope". Meaning – focused
Conative	Individuals tend to follow beliefs, values, emotions and intentions to learn, generally commit and self-manage the learning process to attain goals, monitor or assess learning progress, and use reflection to improve future learning opportunities (Brandon, 2008).	(5) Work means one's career or how one spends most of one's time. (12) Children include a measure of how one gets along with one's child (or children). Think of how one gets along as one cares for, visits, or plays with one's child (or children).	Self-leadership It is a process through which individuals control their own behaviour, influencing and leading themselves through the use of a specific set of behavioural and cognitive strategies (Houdmont & Leka 2010).	Coper 1 "My children is my stress relievers. When I am at home I take time to play with them. It helps me to 'forget' about my problems". (12) Children Coper 2 "When my work was finished I look where I can assist (learning) my fellow employees". Coper 5 "I occupied myself with positive things at work" (5) Work Self-leadership

Copers				
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Interpersonal	Individuals believe that the consequences of their actions are mainly controlled by their own actions (Perrewe & Gansier, 2005).	(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.	Personal resources for coping include the ability to identify and use information from the environment about the stressor and how to deal with it.	Coper 1 "I have a lot of self talk. (their action) I told myself if I could lose my work, (consequences) it is not because of me, but because of the circumstances" (uncertainty in economic market for labour brokers). Coper 4 "I learn that I have a lot of strengths I discover when it goes hard". self-esteem personal resources
Coping	Individuals with internal locus of control develop better quality relationships , which serve as a support system in times of coping (Martin, et al, 2005)	(11) Friends (or friendships) are people (not relatives) one knows well and cares about who have interests and opinions like oneself. Friends have fun together, talk about personal problems and help each other out. (8) Creativity is using one's imagination to come up with new and clever ways to solve everyday problems. (2)	Outward approach coping strategies aim to deal with the stressor by reconstruing or controlling the external environment, problem-solving and seeking social support (Wong, et al, 2006).	Coper 3 "I do things that help me to feel positive about myself, life in general and my work. For example; reading (humour), socialising outside the work environment, doing a creative hobby, sport (golf), 4x4 off-road". (5) Work means Humour (6) Play Social coping Coper 4 "My family and friends encourage me a lot". Relationships social support (11) Friends Coper 1 "Reading the Bible, going to church helps me through the difficult time". Environmental resources (3) Spiritual life.

Copers				
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
		<p>(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.</p> <p>(3) Spiritual life. Spiritual life refers to spiritual or religious beliefs or practices that one pursues on one's own or as part of a like-minded spiritual community.</p> <p>(5) Work means one's career or how one spends most of one's time.</p> <p>(6) Play (or recreation) means what one does in one's free time to relax, have fun, or improve oneself.</p>	<p>Environmental resources are formal service networks and institutions. Resources also include informal networks of relatives, friends, neighbours and co-workers. Such informal support networks serve as buffers against stress. The natural and physical environment may also contribute to physical and emotional wellbeing and support coping efforts (Gitterman & Germain, 2008).</p> <p>Social coping involves methods such as seeking support from others (Brannon & Feist, 2010).</p> <p>Humour and laughter provide a safety valve for coping (Gitterman & Germain, 2008).</p>	<p>Coper 2 "It helps me to have a hobby in the sense that gives me fuel to carry on". (8) Creativity</p> <p>Coper 5 "I constantly remind myself of my strengths". (2) Self-esteem</p>

Copers				
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Non-coping	Twenge et al, (2004) found that locus of control scores became substantially more external: poor school achievement, helplessness , ineffective stress management, decreased self-control and depression .	<p>(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.</p> <p>(3) Goals and values the purpose or meaning of life as one sees it.</p> <p>(8) Creativity is using one's imagination to come up with new and clever ways to solve everyday problems or to pursue a hobby such as painting, photography or needlework.</p> <p>(9) Helping (social service and civic action) means helping others</p>	<p>In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, et al, 2010).</p> <p>Personal resources for coping include a hopeful outlook.</p> <p>Meaning-focused coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).</p>	<p>Coper 1 "When I feeling down I quickly think of something I can do to feel better". Personal resources (2) Self-esteem (8) Creativity</p> <p>Coper 3 "I do not allow myself to go in self pity (proactive coping). I will, on my way back from work, give some money for the people who standing at the robots or will give my sandwiches which I had not time to eat for them". (3)Goals and values (9) Helping</p> <p>Coper 5 "I told myself that the difficult time will ended it is not for the eternity". Meaning-focused</p>

Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Cognitive	Employees must feel passion for their work and derive fulfilment from it (Thomas, 2009).	(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.	In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, et al, 2010).	Coper 1 "I enjoy to be at work". fulfilment (5) Work Coper 3 "I made it nice for myself at work". (5) Work Coper 4 "I keep myself update of the newest trends in my job". fulfilment (5) Work (7) Learning proactive coping, Job-crafting
		(7) Learning means gaining new skills or information about things that interest one. Learning can come from reading books or taking classes on subjects such as history, car repair, or using a computer.	Job-crafting is the physical and cognitive changes individuals make in the task (Houdmont, 2010) Personal resources for coping include motivation, problem-solving. Flexibility is also a personal coping resource. (Gitterman & Germain, 2008)	Coper 5 "If I do not know something or struggle to get it done I persevere until I can do it, not just do it but perfectly do it". passion (5) Work Personal resources
Affective	An affective state reflecting high energy and built-up resources, he or she experiences more work engagement (Albrecht, 2010)	(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems. (7) Learning means gaining new skills or information about things that interest one. Learning	Coping flexibility is realising that different strategies work in different situations. (Houdmont, 2010). Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010).	Coper 1 "I am aware that I am not good in all the things my job entails". (2) Self-esteem, Coping flexibility Coper 2 "I do not use it as an excuse and will keep trying (energy) until my supervisor or my manager is satisfied". proactive coping Coper 4 "I use it as a learning experience and it motivates (build-up) me to work harder to succeed in every aspect of my work". (7) Learning proactive coping

		can come from reading books or taking classes on subjects like history, car repair, or using a computer.		
Conative	Is the willingness to invest and exert effort in learning (Blumenfeld et al, 2006).	<p>(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.</p> <p>(7) Learning means gaining new skills or information about things that interest one.</p>	<p>Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010).</p> <p>Personal resources for coping include motivation, problem-solving. Flexibility is also a personal coping resource. (Gitterman & Germain, 2008)</p> <p>Job-crafting is the physical and cognitive changes individuals make in the task (Houdmont, 2010)</p>	<p>Coper 4 "I continuously (willingness) think about new things to improve my work". (5) Work (7) Learning Proactive coping</p> <p>Coper 5 "It is very satisfying for me when I accomplished a difficult task". (5) Work (7) Learning Personal resources</p>
Interpersonal	Employees who are fully focused with an interpersonal energy and can facilitate goal-directed behaviours (Albrecht, 2010).	<p>(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.</p> <p>(9) Helping (social service and civic action) means helping others</p>	<p>Environmental resources also include informal networks of relatives, friends, neighbours and co-workers. (Gitterman & Germain, 2008).</p> <p>Job-crafting is the physical and cognitive changes individuals make in the task (Houdmont, 2010)</p>	<p>Coper 2 "I enjoy my work". (5) Work</p> <p>Coper 3 "I enjoy the people I work with". (5) Work Environmental resources</p> <p>Coper 5 "I am on the lookout (fully focused) when one of my colleagues feeling down or going through a hard time to especially encourages and motivates them or just to be there and listen". (goal-directed) (9) Helping Job-crafting Self-leadership Job-crafting Coping flexibility</p>

Copers				
Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
			<p>Self-leadership It is a process through which individuals control their own behaviour, influencing and leading themselves through the use of a specific set of behavioural and cognitive strategies (Houdmont, 2010).</p> <p>Coping flexibility is realising that different strategies work in different situations. (Houdmont, 2010).</p>	
Coping	Individuals are persistent, positive-affective-motivational state of fulfilment. (Berger, , 2007)	<p>(3) Goals and values the purpose or meaning of life as one sees it.</p> <p>(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.</p>	<p>Self-leadership It is a process through which individuals control their own behaviour, influencing and leading themselves through the use of a specific set of behavioural and cognitive strategies (Houdmont, 2010).</p> <p>Coping flexibility is realising that different strategies work in different situations.</p>	<p>Coper 1 "I set high goals for myself". (persistent, positive-affective-motivational) (3) Goals and values Job-crafting proactive coping</p> <p>Coper 3 "I strive towards to do my best every day". (persistent, positive-affective-motivational) (3) Goals and values Productive strategies proactive coping</p> <p>Coper 4 "I have an open door communication towards my superiors which help in the process to accomplish my goals and dreams". (5) Work Environmental resources</p>

Copers				
Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
			<p>(Houdmont, 2010). <i>Job-crafting</i> is the physical and cognitive changes individuals make in the task (Houdmont, 2010)</p> <p><i>Productive strategies</i> entail social action, seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008).</p> <p><i>Environmental resources</i> also include informal networks of relatives, friends, neighbours and co-workers. (Gitterman & Germain, 2008).</p> <p>In <i>proactive coping</i> individuals have a vision through which they perceive opportunities as challenges (Snyder, et al, 2010).</p>	

Copers				
Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Non -coping	Individuals are constantly being fully absorbed at work and this may not be beneficial for long-term engagement (Albrecht,	<p>(3) Goals and values This includes one's goals in life, what one regards as right or wrong, and the purpose or meaning of life as one sees it.</p> <p>(3) Spiritual life. Spiritual life refers to spiritual or religious beliefs or practices that one pursues on one's own or as part of a like-minded spiritual community.</p> <p>(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.</p> <p>(6) Play (or recreation) means what one does in one's free time to relax, have fun, or improve oneself.</p> <p>(13) Relatives mean to help each other.</p>	<p>Personal resources for coping include motivation, problem-solving. Flexibility is also a personal coping resource. (Gitterman & Germain, 2008)</p> <p>In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, Lopez & Pedrotti, 2010).</p> <p>Social coping involves methods such as seeking support from others (Brannon & Feist, 2010).</p>	<p>Coper 1 "I learn to switch myself off (not fully absorbed) when I close my office door at the end of the day". (5) Work Personal resources</p> <p>Coper 2 "I make sure that I do something nice for example, I enjoy cooking, helping the children with their homework, attending church activities, listen to my favourite music on my way to home, buying something nice for the kids for the lunch boxes etc". (6)Play 12) Children (3) Spiritual life.</p> <p>Coper 3 "When I had a really bad day I do a balance check and when it was my fault to quickly as possible adjust it and if it was not my mistake I do not make big thing of it. I let it go". (3) Goals and values proactive coping</p> <p>Coper 5 "I do not know how I would manage to go through hard times without the support and encouragement of my family". (13) Relatives Social coping</p>

Copers				
Sense of Coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Cognitive	Cognitive efforts of individuals to manage specific demands that are appraised as taxing the resources of a person (Boss & Mulligan, 2003).	<p>(3) Goals and values This includes one's goals in life, what one regards as right or wrong, and the purpose or meaning of life as one sees it.</p> <p>(5) Work includes one's duties at work, the money one earns (if any) and the people one is working with.</p> <p>(8) Creativity is using one's imagination to come up with new and clever ways to solve everyday problems or to pursue a hobby such as painting, photography or needlework.</p> <p>(9) Helping (social service and civic action) means helping others.</p>	<p>Personal resources for coping include problem-solving.</p> <p>Meaning-focused coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).</p> <p>In proactive coping individuals have a vision through which they perceive opportunities as challenges (Snyder, et al, 2010).</p> <p>Outward approach coping strategies aim to deal with the stressor by problem-solving (Wong, et al, 2006).</p> <p>Coping flexibility is realising that different strategies work in different situations.</p>	<p>Coper 2 "To have a balance check works for me". (8) Creativity Personal resources</p> <p>Coper 4 "All of us going through hardships no one can by pass it". Meaning-focused</p> <p>Coper 5 "I write then in my positive column all my blessings and the negative column the trouble I going through". (3) Goals and values proactive coping</p> <p>Coper 1 "I focus on the moment". Personal resources Outward approach</p> <p>Coper 3 "If I am at work I focus on my work and try to 'forget' about all the trouble". (5) Work Personal resources</p> <p>Coper 4 "When my trouble is over I try to motivate and encourage others who going through the same hardship as me". Resources (9) Helping Coping flexibility</p>

Copers				
Sense of Coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Affective	The level of comprehension about the stressor, the willingness to confront the stressor, and the resources to manage it can be measured as the sense of coherence (Artinian, West & Conger, 2011).	<p>(8) Creativity is using one's imagination to come up with new and clever ways to solve everyday problems or to pursue a hobby such as painting, photography or needlework.</p> <p>(7) Learning means gaining new skills.</p>	<p>Proactive coping involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010).</p> <p>Personal resources for coping include a hopeful outlook and the ability to identify and use information about the stressor and how to deal with it.</p>	<p>Coper 2 "If I going through difficulties I think about methods, plans how I can go through it and to learn from it". Confront (8) Creativity Proactive coping</p> <p>Coper 3 "If I grow afterwards I know I am on the right track". (7) Learning Personal resources</p>
Conative	Individuals feel that they are influencing that which is happening around them and do not perceive themselves as victims of circumstances.	<p>(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.</p> <p>(11) Friends have fun together, talk about personal problems and help each other out.</p>	<p>Meaning-focused coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).</p>	<p>Coper 1 "With every life experience I going through I became wiser". Influencing 2) Self-esteem Meaning-focused</p> <p>Coper 5 "I have a 'data bank' to reach to when life gets hard like my friends, hobby, reading etc". not victims 11) Friends 6) Play (or recreation)</p>

Copers				
Sense of Coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
		(6) <i>Play (or recreation)</i> means what one does in one's free time to relax, have fun, or improve one. This could be watching movies, visiting friends, or pursuing a hobby such as sport or gardening.		
Interpersonal	People need a <i>reason</i> to guide their lives, to provide direction in day-to-day tasks, and to fortify their strength in life's darker moments. (Flannery, 2000).	(2) <i>Self-esteem</i> means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.	<i>Personal resources</i> for coping include problem-solving, a hopeful outlook (Gitterman & Germain, 2008).	Coper 2 "Life going on, it does not stand still and wait for someone (me) to be ready". <i>reason</i> Coper 3 "When hardships come I am ready because I learn from the previous ones what to do to get me through it". <i>Reason 2) Self-esteem Personal resources</i>
Coping	Individuals tend to be more self-sufficient, hardy and resourceful. When persons believe that they have adequate <i>resources</i> available to manage demands (Jamison, 2001).			

Copers				
Sense of Coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
		<p>(1) <i>Health</i> is being physically fit.</p> <p>(2) <i>Self-esteem</i> means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.</p> <p>(6) <i>Play (or recreation)</i> means what one does in one's free time to relax, have fun, or improve oneself.</p> <p>(14) <i>Home</i> is where one lives. Think about how nice it looks.</p>	<p><i>Meaning-focused</i> coping is a way of coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).</p> <p><i>Productive strategies</i> entail social action, seeking spiritual support, <i>physical recreation</i> and seeking professional help (Frydenberg, 2008).</p> <p><i>Proactive coping</i> involves anticipating a problem and taking steps to handle the stressor (Brannon & Feist, 2010).</p> <p><i>Environmental resources</i> include informal networks of relatives, friends, neighbours and co-workers.</p>	<p>Coper 1 "I enjoy to clean my home during weekends". (14) <i>Home</i></p> <p>Coper 2 "In the hard times it is to consciously focus on things that drive you through, example coffee at lunch at a coffee shop" <i>resources</i>. 6) <i>Play (or recreation)</i> <i>Meaning-focused</i></p> <p>Coper 3 "I avoid negative people who want to rely on me. I look with purpose to people who can bear me up". <i>resources</i> 2) <i>Self-esteem</i> <i>Proactive coping</i> <i>Environmental resources</i></p> <p>Coper 5 "I push myself to exercise. I do not know it is if something happens in your brain, you just feeling better". <i>resources</i> 1) <i>Health</i> <i>Productive strategies</i></p>

Copers				
Sense of Coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life (Frisch's 2006)	Coping strategies	Responses from the Copers
Non-coping	A <i>weak</i> sense of coherence could be favourable concerning non-coping with stressors (Lee, 2005).	<p>(3) <i>Goals and values</i>. This includes one's goals in life, what one regards as right or wrong, and the purpose or meaning of life as one sees it.</p> <p>(4) <i>Money</i> (or standard of living) refers to the money one earns, the things one owns.</p> <p>(8) <i>Creativity</i> is using one's imagination to come up with new and clever ways to solve everyday problems.</p> <p>(16) <i>Community</i> is the whole city, town or rural area where one lives (not just one's neighbourhood).</p>	<p>In <i>proactive coping</i> individuals have a vision through which they perceive opportunities as challenges (Snyder, et al, 2010).</p> <p><i>Outward approach</i> coping strategies aim to deal with the stressor by reconstruing or controlling the external environment, problem-solving and seeking social support (Wong, et al, 2006).</p>	<p>Coper 1 "I do not look at the news, it is not that I am ignorant. I know I will come through it. It is simply to adjust to the situation. I remember the high petrol price in 2008. Me and my family simply adjust and cut certain things out to survive and we did". <i>Not weak 3) Goals and values Proactive coping</i></p> <p>Coper 2 "I am part of our community crime patrol service. It give me a sense of that I am needed." (16) <i>Community</i></p> <p>Coper 4 "We are like a ship on the sea and it is to re-adjust your route and before you see you will enter the harbour". <i>Not weak 8) Creativity Outward approach</i></p> <p>Coper 5 "I am doing a part-time work. It helps with the extra money and a sense of security if something happens with my main work". (6) <i>Money</i></p>

Table 3.17: Interview findings: non-coper's coping strategies

Non-copers				
First order	Second order	Tertiary order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the copers
Cognitive	The stronger an individual's perception of control, the less likely he or she is to appraise a specific situation as harmful or threatening . (Perrewe & Ganster, 2007).	2) Self-esteem (does not) see one's strengths and weaknesses, successes and failures and ability to handle problems. 3) Goals and values The purpose or meaning of life as one sees it.	No meaning-focused coping (does not see the way) coping in which the individual concentrates on deriving meaning from the stressful experience (Brannon & Feist, 2010).	Non-coper 1 "It will never stop. The next one is already waiting. It will never get better it only worsen". Harmful threatening. 3) No goals and values No meaning-focused Non-coper 3 "It feels as if it only happens to me" threatening 2) No self-esteem No meaning-focused Non-coper 4 "Why? me....again? They said it happens in threes!" threatening 2) No self-esteem No meaning-focused
Affective	Thomas, et al, (2006) showed that internal locus was positively associated with favourable work outcomes, such as (no) positive task and social experiences and greater job motivation.	(8) Creativity is using one's imagination to come up with new and clever ways to (not) solve everyday problems.	Personal resources for coping (no) hopeful outlook.	Non-coper 2 "I working extra hard but they always picking on me to do something, attending boring meetings. They waste my time". (no) positive task (8) No creativity No personal resources

Non-copers				
First order	Second order	Tertiary order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the copers
Conative	Individuals tend to follow beliefs, values, emotions and intentions to learn, generally <i>(no) commit</i> and <i>(no) self-manage</i> the learning process to <i>(no) attain goals</i> , monitor or assess learning progress, and use reflection to improve future learning opportunities (Brandon, 2008).	<i>(2) Self-esteem</i> means <i>(no)</i> ability to handle problems.	<i>Inward avoidance coping</i> consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006).	Non-coper 5 "I do not care, really, if they want to retrench me they must do it". <i>(no) commit (no) self-manage (no) attain goals (2) No self-esteem Inward avoidance coping</i>
Interpersonal	Individuals believe that the consequences of their actions are mainly <i>(not) controlled</i> by <i>(not)</i> their <i>own actions</i> (Perrewe & Gansier, 2005).	<i>(4) Money</i> (or standard of living) refers to the money one will <i>(not)</i> have, the money and things that one needs in the future.	<i>Personal resources</i> for coping include <i>(no)</i> problem-solving, the <i>(no)</i> ability to identify and use information from the environment about the stressor and <i>(do not)</i> how to deal with it.	Non-coper 1 "I feel I do not have power over my circumstances, the wobbling economy, toll roads they building in Gauteng. We just get less and less money". <i>(not) controlled (not) own actions (4) No money no personal resources</i> Non-coper 4 "There is no use to work anymore, if it is not the tax, then it is the school fees, and so it goes on". <i>(not) controlled (not) own actions (4) No money no personal resources</i>

Non-copers				
First order	Second order	Tertiary order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
Coping	Individuals <i>(do not)</i> show <i>flexibility, controllability, strategy</i> situation fit and predictable behaviour in coping situations (Gan, et al, 2007).	<i>(5) Work</i> means one's career or how one spends most of one's time. <i>(8) Creativity</i> is using one's imagination to come up with <i>(no)</i> new and clever ways to solve everyday problems.	<i>Meaning-focused</i> coping is a way of coping in which the individual concentrates on deriving <i>(no)</i> meaning from the stressful experience (Brannon & Feist, 2010). <i>Job-crafting</i> is the physical and cognitive changes individuals make in the task or relational boundaries of their work. Employees continually <i>(do not)</i> interact with their environments, regardless of their position in the organisation (Houdmont, 2010).	Non-coper 3 "I have no purpose to come to work". <i>(do not)</i> show <i>flexibility, controllability, strategy (5) Work No meaning-focused</i> Non-coper 4 "The little things I enjoy in my work didn't make up for all the other troubles I have to gone through". <i>(do not)</i> show <i>flexibility, controllability, strategy (5) Work (8) No creativity No job-crafting</i>
Non-coping	Experience more non-adaptive coping styles, <i>higher helplessness and lower self-esteem</i> (Martz & Livneh, 2007).	<i>(2) Self-esteem (lack of)</i> opinion of oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.	<i>Personal resources</i> for coping include <i>(no)</i> motivation, management of feelings, problem-solving, a hopeful outlook, optimal levels of self-esteem, the ability to identify and use information from the environment about the stressor and how to deal with it.	Non-coper 2 "It feels if I can run away and never came back". <i>higher helplessness and lower self-esteem (2) No self-esteem (8) No creativity No personal resources No environmental resources</i> Non-coper 4 "I wish I can work from home where I am alone and no one is disturbing me". <i>(5) Work (8) No creativity No personal resources No environmental resources</i>

Non-copers				
First order	Second order	Tertiary order		
Locus of Control	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
		<p>(5) <i>Work</i> means one's career or how one spends most of one's time.</p> <p>(8) <i>Creativity</i> is (not) using one's imagination to come up with new and clever ways to solve everyday problems.</p>	<p><i>Environmental resources</i> include informal networks of relatives, friends, neighbours and co-workers. Such (none) informal support networks serve as buffers against stress.</p>	<p>Non-coper 5 "I wish I can get another job maybe then it will go better".</p> <p>(5) <i>Work</i> (8) <i>No creativity</i> <i>No personal resources</i> <i>No environmental resources</i></p>
Engagement				
Cognitive	Encompasses energy, resilience and perseverance and can (not) continue <i>working for very long periods of time</i> (Albrecht, 2010).	(5) <i>Work</i> means one's career or how one spends most of one's time.	<p><i>Personal resources</i> for coping include (not) motivation, management of feelings, problem-solving, a hopeful outlook, the ability to identify and use information from the environment about the stressor and how to deal with it.</p> <p><i>Environmental resources</i> are formal service networks and institutions. Resources also include (no) informal networks of relatives, friends, neighbours and co-workers.</p>	<p>Non-coper 1 "I only do what I must do at work. I do not spend one minute longer at work if I cannot help it". (not) <i>working very long periods of time</i> (5) <i>Work</i> <i>Personal resources</i></p> <p>Non-coper 3 "I do not stress when there is a traffic jam then I do not have to be so long at the office".</p> <p>(not) <i>working very long periods of time</i> (5) <i>Work</i> <i>No environmental resources</i></p>

Non-copers				
First order	Second order	Tertiary order		
Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
Affective	The human spirit in this context refers to that part of the human being which seeks (no) fulfilment through self-expression at work (May, et al, 2004).	(3) Goals and values include one's goals in life, what one regards as right or wrong, and the purpose or meaning of life as one sees it.	Environmental resources Resources also include (no) co-workers.	Non-coper 1 "If I am in a bad mood people must stay away from me". (no) fulfilment (3) Goals and values Non-coper 2 "I do not need my colleague's encouragement I can look after myself. It is everyone for him/her". (no) fulfilment No environmental resources
Conative	Cognitive engagement is willingness to invest and exert (no) effort in learning (Blumenfeld, et al, 2006).	(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006).	Non-coper 4 "When I struggle I wish someone can take over". (no) effort in learning (2) No self-esteem Inward avoidance coping Non-coper 5 "If I do not know what to do I ignore it, it will sort itself out". (no) effort in learning (2) No self-esteem Inward avoidance coping
Interpersonal	Engaged workers will strive to (no) interact as much as possible, creating a need for frequent interpersonal exchanges between workers (Albrecht, 2010).	(3) Goals and values are one's beliefs, what one regards as right or wrong, and the purpose or meaning of life as one sees it. (5) Work means one's career or how one spends most of one's time.	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006). Coping flexibility is realising that (no) different strategies work in different situations. The key to effective coping might be to know when to employ which type of strategy.	Non-coper 2 "If I had a bad day at work it drains my energy then I get nothing done". (5) Work No coping flexibility Non-coper 4 "I will do the work I don't like at the last moment". (5) Work No coping flexibility Non-coper 5 "I do not asked for help, if it is very serious I go to my manager and then only asked for a day off. I do not want the people at work have to know about my troubles". (no) interact (3) Goals and values Inward avoidance coping

Non-copers				
First order	Second order	Tertiary order		First order
Engagement	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
Coping	Individuals are <i>(not)</i> persistent, positive-affective-motivational state of fulfilment. Energy, involvement and efficacy (Berger, et al, 2007).	<p><i>(1) Health</i> is being physically fit, not sick and without pain or disability.</p> <p><i>(5) Work</i> means one's career or how one spends most of one's time.</p> <p><i>(8) Creativity</i> is <i>(not)</i> using one's imagination to come up with new and clever ways to solve everyday problems</p>	<p><i>Proactive coping</i> involves anticipating a problem and <i>(no)</i> taking steps to handle the stressor (Brannon & Feist, 2010).</p> <p><i>Productive strategies</i> entail social action, <i>(no)</i> seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008).</p> <p>Travers (2011) mentioned in terms of reaction to stress, research has highlighted particular unhealthy behaviours; <i>ineffective coping</i>.</p>	<p>Non-coper 1 "I hate Mondays and I cannot wait for Fridays to just be out of the office". <i>(5) Work No productive strategies</i></p> <p>Non-coper 2 "A day can be very long at work". <i>(5) Work</i></p> <p>Non-coper 3 "I take all my sick leave to escape from the difficulties". <i>(1) Health No proactive coping No productive strategies</i></p> <p>Non-coper 4 "I struggle with migraine". <i>(1) Health ineffective coping</i></p> <p>Non-coper 5 "I sleep my weekends over". <i>(8) No creativity</i></p>
Non -coping	Individuals are constantly being <i>(not) fully absorbed</i> at work and this may not be beneficial for long-term engagement (Albrecht, 2010).	<p><i>(8) Creativity</i> is <i>(not)</i> using one's imagination to come up with new and clever ways to solve everyday problems.</p> <p><i>(14) Home</i> is where one lives.</p>	<p><i>Personal resources</i> for coping include, <i>(no)</i> management of feelings and problem-solving.</p> <p><i>Productive strategies</i> entail <i>(no)</i> social action, seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008).</p>	<p>Non-coper 4 "I will think most of the day about the worries I have and will most off the day talk about it." <i>(not) fully absorbed (8) No creativity No personal resources</i></p> <p>Non-coper 5 "I cannot wait for my yearly holiday. I sleep the most of the time. If there is time left I will make repairs in and out the house". <i>(not) fully absorbed (14) Home No productive strategies</i></p>

Non-copers				
First order	Second order	Tertiary order		First order
Sense coherence of	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
Cognitive	The extent to which one perceives stimuli from the internal and external environment as information that is ordered, structured and consistent. The stimuli are perceived as comprehensible and make (not) sense on a cognitive level (Schreuder & Coetzee, 2007).	(3) Goals and values and the purpose or meaning of life as one sees it. (6) Play (or recreation) means what one does in one's free time to (no) relax, have fun, or improve oneself. This could be watching movies, visiting friends or pursuing a hobby such as sport or gardening.	Personal resources for coping include motivation, management of feelings, problem-solving, relationship skills, a hopeful outlook, optimal levels of self-esteem, the ability to identify and use information from the environment about the stressor and how to deal with it, self-restraint and an ability to seek environmental resources and to use them effectively. Flexibility is also a personal coping resource. Like hope, it reflects recognition of the positive despite the stressor, trust in the certainty of future satisfaction and seeking and accepting help when needed (Gitterman & Germain, 2008)	Non-coper 3 "Life is very hard". (not) sense (3) No goals and values No personal resources Non-coper 5 "There is nothing that gives me excitement. I struggle every morning through traffic, I struggle with my teenagers, it feels if my husband is never satisfied and at work the managers is on your case". (not) sense (3) No goals and values (6) No play (or recreation) No personal resources
Affective	The level of comprehension about the stressor, (no) the willingness to confront the stressor, and the resources to manage it can be measured as the sense of coherence	(1) Health is being physically fit, not sick and without pain or disability.	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006).	Non-coper 1 "When I appraise a stressful situation I want to run away". (no) willingness (2) No self-esteem Non-coper 2 "I cannot sleep at night and experience nightmares when facing difficulties". (1) (struggle) Health Inward avoidance unhealthy behaviours

	(Artinian, et al, 2011).			
Non-copers				
First order	Second order	Tertiary order		First order
Sense of coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
		(2) <i>Self-esteem</i> means liking and respecting oneself in light of one's (no) strengths and weaknesses, successes and failures and ability to handle problems.	Travers (2011) mentioned in terms of reaction to stress, research has highlighted particular <i>unhealthy behaviours</i> . The following were reported to cope with stress: <i>not sleeping</i> and not relaxing enough.	
Conative	A strong sense of coherence is promoted by life experiences. Poor living conditions and social support, as well as continuous exposure to violence and crime, and an <i>uncertain economy in South Africa</i> may be playing a role in lowering the sense of coherence (Antonovsky, 1987).	(4) <i>Money</i> (or standard of living) refers to the money one earns, the things one owns (like a car or furniture) and believing that one will have the money and things that one needs in the future.	<i>Proactive coping</i> involves anticipating a problem and taking (no) steps to handle the stressor (Brannon & Feist, 2010). <i>Productive strategies</i> entail social action, (no) seeking spiritual support, physical recreation and seeking professional help (Frydenberg, 2008). <i>Personal resources</i> for coping include (not) a hopeful outlook, the ability to identify and use information from the environment about the stressor and how to deal with it.	Non-coper 3 "It does not matter what you read like newspapers, internet it is negative". <i>uncertain economy in South Africa No proactive coping</i> Non-coper 4 "People at work are negative. If you drive in the traffic all the people are in a hurry and have long faces". <i>uncertain economy in South Africa No personal resources</i> Non-coper 5 "I cannot budget because next month something else have a higher price like the electricity, water, petrol, toll roads, clothes, cigarettes". <i>uncertain economy in South Africa (6) (struggle) Money No productive strategies</i>

Non-copers				
First order	Second order	Tertiary order		First order
Sense of coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
Interpersonal	People need a reason to guide their lives to fortify their strength in life's darker moments. A meaningful purpose in life provides such a compass throughout life. These purposive goals, when they are based on concern for others, often result in better health, increased cooperative behaviour and a sense of contentment even in the face of adversity (Flannery, 2000).	(1) Health is being physically fit, not sick and without pain or disability.	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006). Travers (2011) mentioned in terms of reaction to stress, research has highlighted particular unhealthy behaviours . The following were reported to cope with stress: not sleeping and not relaxing enough.	Non-coper 2 "I go to the doctor when it gets too hard and asked for anti-depressants". (Not) better; increased ; sense of contentment Influence on (1) Health Inward avoidance unhealthy behaviours Non-coper 4 "I get migraine when I stress". (Not) better; increased ; sense of contentment Influence on (1) Health Inward avoidance unhealthy behaviours Non-coper 5 "I get easily irritated when I am stressed and yell on everybody". (Not) better; increased ; sense of contentment Influence on (1) Health Inward avoidance unhealthy behaviours
Coping	High sense of coherence enables the employees to see (no) comprehensibility, manageability and	(2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006).	Non-coper 2 "I cannot wait to be at home and go to bed as early as possible". (no) comprehensibility, manageability and meaningfulness even in difficult work situation. (2) No self-esteem (14) Home Inward avoidance unhealthy behaviours

	meaningfulness even in difficult work situations.	problems. (14) Home is where one lives.		
Non-copers				
First order	Second order	Tertiary order		First order
Sense of coherence	Themes (Based on Table 3.3)	The 16 dimensions of the Quality of Life model (Frisch's 2006)	Coping strategies	Responses from the non-copers
	If an employee is able to perceive his/her work as comprehensible, manageable and meaningful, he/she is also very likely to be able to cope with it (Docherty, et al, 2002).		Travers (2011) mentioned in terms of reaction to stress, research has highlighted particular unhealthy behaviours.	Non-coper 5 "I do not want to talk or see anybody especially at weekends. I locked the door at Friday and most of the time opens it on Mondays". (no) comprehensibility, manageability and meaningfulness even in difficult work situation. (2) No self-esteem (14) Home Inward avoidance unhealthy behaviours
Non-coping	An individual who demonstrates a low sense of coherence would fail in transforming his/her potential resources into reality and, thus, would be not able to cope with life stressors (Switzky, 2003).	(5) Work means one's career or how one spends most of one's time. (2) Self-esteem means liking and respecting oneself in light of one's strengths and weaknesses, successes and failures and ability to handle problems.	Inward avoidance coping consists of strategies that are used to avoid dealing with the stressor by disengaging from the self (Wong, et al, 2006).	Non-coper 3 "I do not want to get bothered when I am busy working". fail in transforming (5) Work (2) No self-esteem Inward avoidance Non-coper 4 "I do not want to hear other's difficulties, I have my own to cope with". fail in transforming (2) No self-esteem Inward avoidance

3.3.2.2 Coping strategies of copers

The aim of the Quality of Life Theory (Frisch, 2006) is to enhance skills and awareness, which can help individuals to cope in difficult situations in 16 different areas of one's life. The responses of the five copers indicate that their coping strategies relate positively to the 16 life areas outlined by the Quality of Life model (Frisch, 2006).

Figure 3.3 shows the life areas most often present in the copers' coping strategy profile. These include: (1) work, (2) goals and values; (3) self-esteem. The life areas that were represented least included: health, money, love, relatives, home, neighbourhood and community.

The work dimension is followed by the goals and values/spiritual and self-esteem dimension and after that the creativity dimension. The lowest score dimensions are for health, money, love, relatives, home, neighbourhood and community.

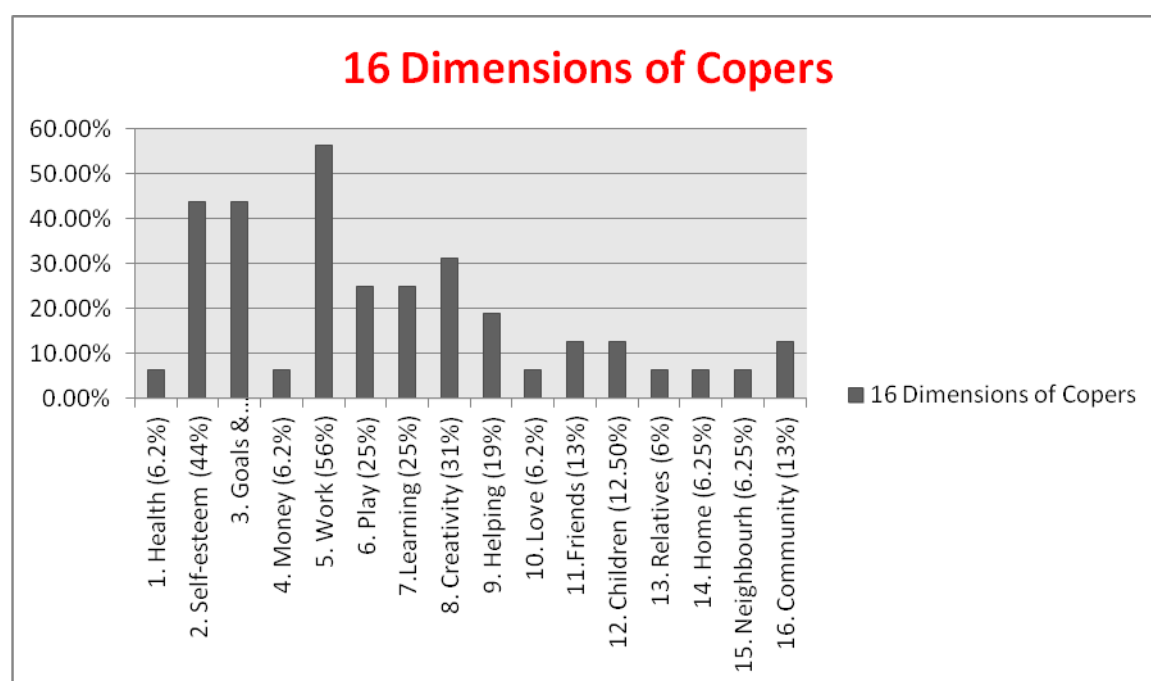


Figure 3.3: The dominant coping life areas of the copers (n = 5)

3.3.2.3 Coping strategies of non-copers

The responses of the non-copers indicated themes that relate mostly to strategies that suggest negative responses to change and challenges. Although the Quality of Life model (Frisch, 2006) suggests positive, constructive ways of coping in the 16 life areas, the

responses of the non-copers suggest that they mostly deal with challenges in these areas in a negative way. The dimensions or life areas that appear in the non-copers' profile are those with which they struggle to cope. Figure 3.4 shows that the dimensions that appear most often in the non-coper's profile is the following: (1) work dimension, (2) self-esteem and (3) creativity. The following dimensions do not appear in the non-coper's profile: learning, helping, love, friends, children, relatives, neighbour and community.

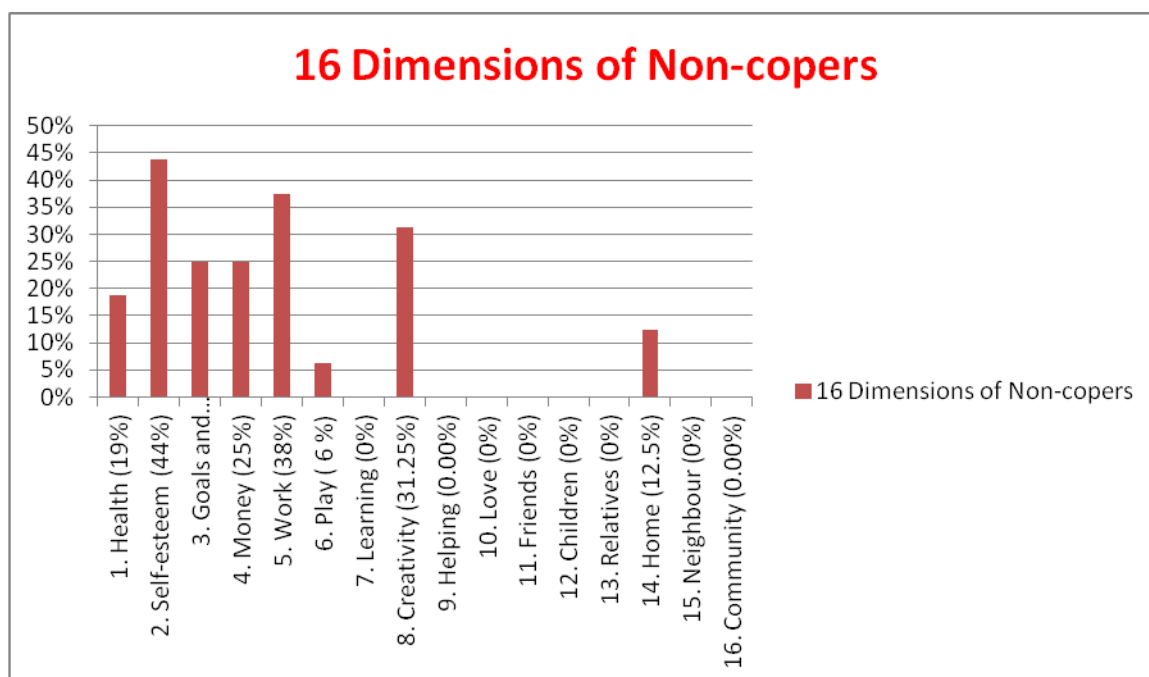


Figure 3.4: The dominant coping life areas of the non-copers (n = 5)

3.3.2.4 Comparison between copers' and non-copers' coping life areas

Table 3.17 shows a comparison between the copers' and non-copers' *coping life areas*. The five copers use their personal resources, which fit into the 16 life dimensions in a constructive, positive way to help them cope through difficulties. The five non-copers do not use personal resources constructively to help them cope through difficulties. In fact, the dimensions which appear in their profile are the dimensions where the problem areas appear to be. The non-copers' 16 life area dimensions are an indication of where there problem areas lie, for example the worst problem dimension is self-esteem (43.75%). The dimension with the second highest incidence is work (37.5%) and the third is creativity (31, 25%).

Table 3.18: Comparison between copers' and non-copers' 16 life area dimensions

Copers			Non-copers
1. Health	6.25%	18.75%	1.Health
2.Self-esteem	43.75%	43.75%	2. Self-esteem
3.Goals & Values/Spiritual	43.75%	25%	3.Goals & Values/Spiritual
4.Money	6.25%	12.5%	4.Money
5.Work	56.25%	37.5%	5.Work
6.Play or recreation	25%	6.25%	6.Play or recreation
7.Learning	25%	0%	7.Learning
8.Creativity	31.25%	31.25%	8.Creativity
9.Helping	18.75%	0%	9.Helping
10.Love	6.25%	0%	10.Love
11.Friends	12.5%	0%	11.Friends
12.Children	12.5.%	0%	12.Children
13.Relatives	6.25%	0%	13.Relatives
14.Home	6.25%	12.5%	14.Home
15.Neighbourhood	6.25%	0%	15.Neighbourhood
16.Community	12.5%	0%	16.Community

3.3.2.5 Coping strategies of copers

The coping strategies of the five copers consist of proactive coping as the strategy used most often, secondly personal resources and thirdly flexibility, environmental resources and job-crafting. The strategies used less often are time management, humour and outward approach. Figure 3.5 shows the coping strategies of the five copers.

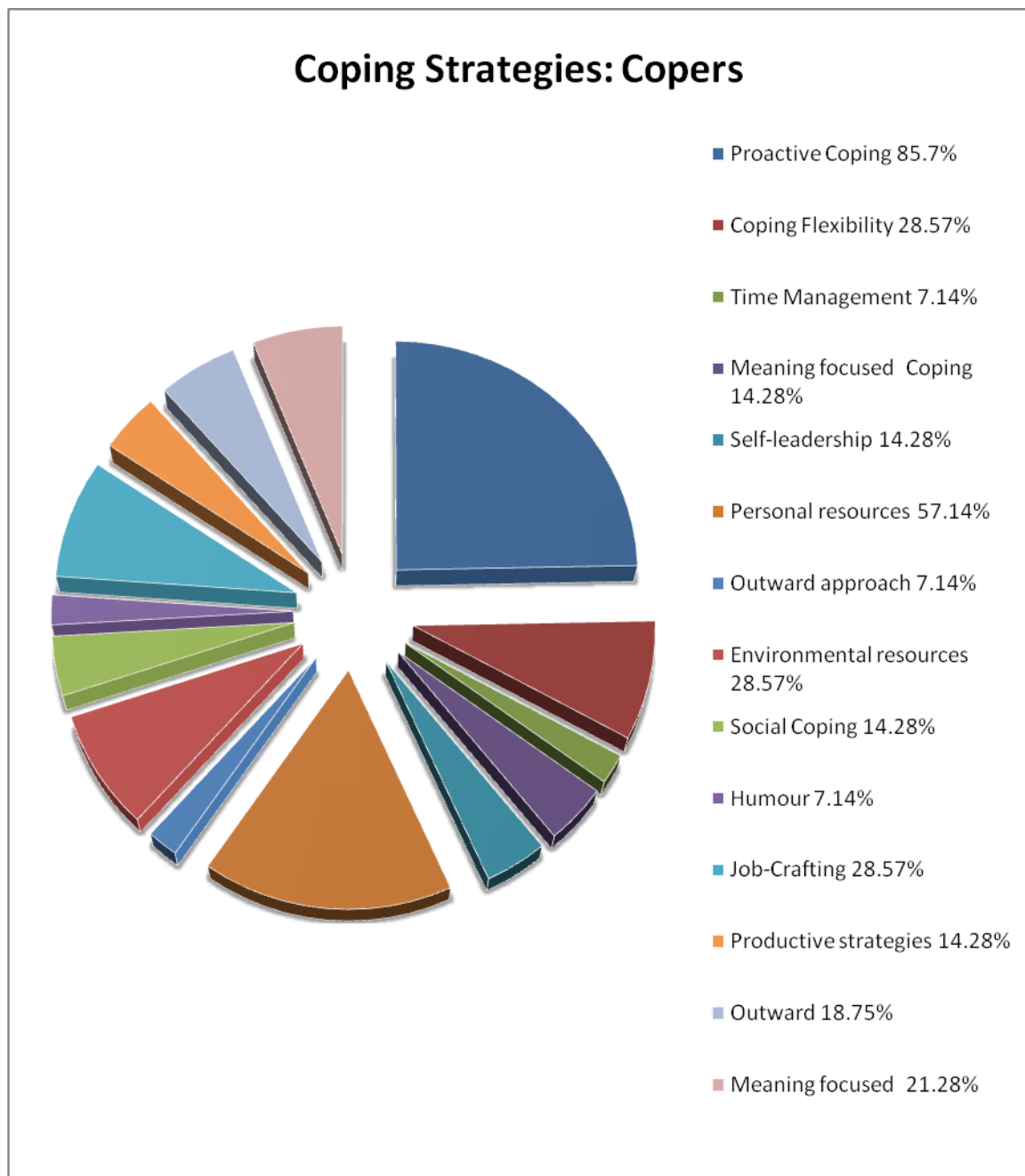


Figure 3.5: Coping strategies of copers (n = 5)

3.3.2.6 Non-coping strategies of non-copers

The non-coping strategies of the five non-copers entail that they most frequently use no personal resources and an inward avoidance coping strategy. They appear to use ineffective coping strategies most frequently and fail to use environmental resources. The strategies found least often are no coping flexibility and no job crafting. Figure 3.6 shows the coping strategies of non-copers.

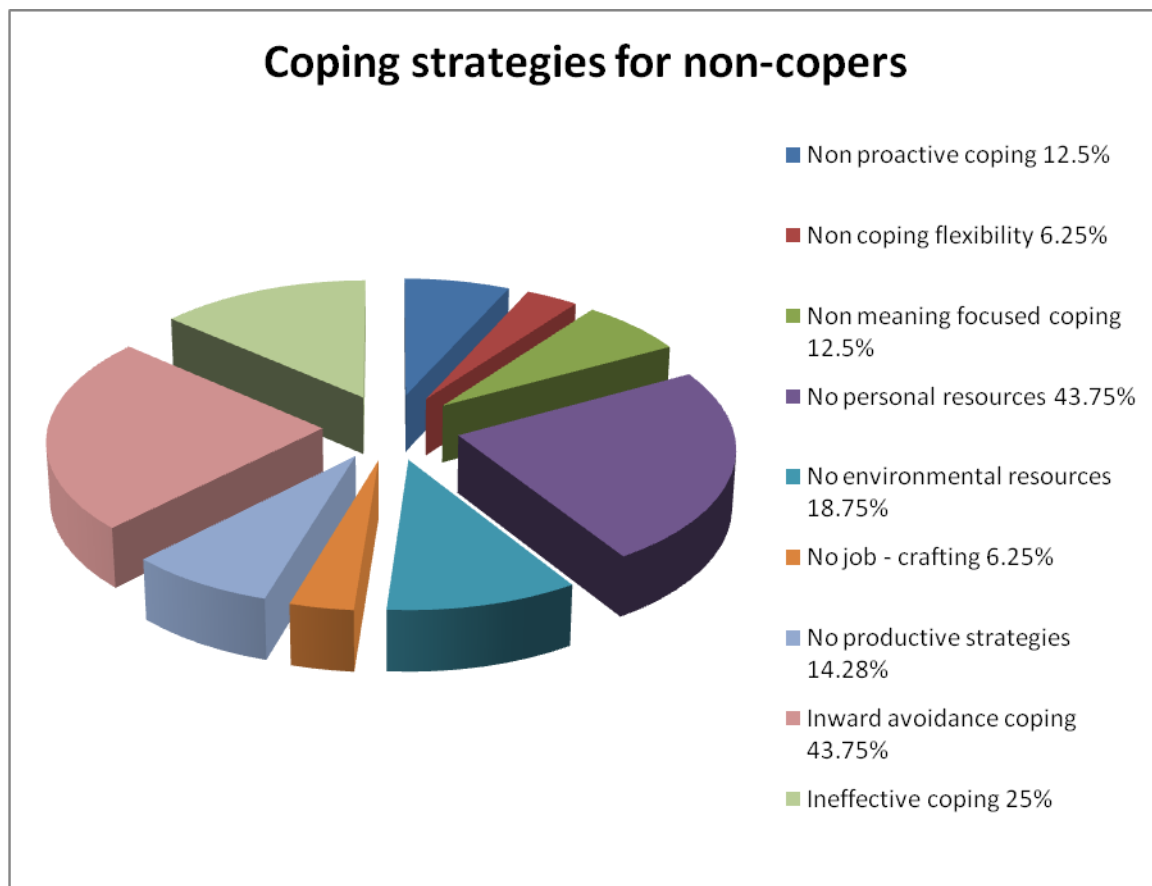


Figure 3.6: Coping strategies of non-copers (n = 5)

3.3.2.7 Comparison between copers' and non-copers' coping strategies

Table 3.18 shows a comparison between the copers' and non-copers' coping strategies. The five copers use their coping resources in a constructive, positive way to help them cope with difficulties. The non-copers do not use resources to help them cope with difficulties.

Table 3.19: Comparison between copers' and non-copers' coping strategies

Copers			Non-copers
Proactive coping	85.7%	12.5%	No proactive coping
Coping flexibility	28.57%	6.25%	No coping flexibility
Time management	7.14%	0%	
Meaning-focused coping	14.28%	12.5%	No meaning-focused coping
Self-leadership	14.28%	0%	
Personal resources	57.14%	43.75%	No personal resources
Outward approach	7.14%	0%	
Environmental resources	28.57%	18.75%	No environmental resources
Social coping	14.28%	0%	
Humour	7.14%	0%	
Job-crafting	28.57%	6.25%	No job-crafting
Productive strategies	14.28%	18.75%	No productive strategies
Outward coping strategies	14.28%	0%	
Meaning-focused	21.42%	0%	
	0%	43.75%	Inward avoidance coping
	0%	25%	Ineffective coping

3.4 DISCUSSION

The general aim of this study was to determine: (1) the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs), (2) whether coping and non-coping individuals differ significantly regarding these variables, and (3) the coping strategies they employ to deal with change in their lives.

3.4.1 Quantitative study

3.4.1.1 The biographical profile of the sample

The sample was mostly represented by whites and individuals in the early adulthood phase of their lives (26-40 years). Most participants were married. Gender was distributed fairly evenly. Most participants were in the general work category.

3.4.1.2 The relationship between locus of control, engagement and sense of coherence

The statistical results indicated external locus of control to be a significant predictor of the participants' sense of coherence. Participants with a high external locus of control also had a significantly lower sense of coherence (comprehension, manageability and meaningfulness). Locus of control serves as an indication of the individual's response, that is, his/her alertness to the environment, willingness to accept responsibility and to take steps to improve the situation (Rotter, 1966). People with an external locus of control and lower self-esteem were found to be more likely to suffer from poor psychological well-being (Travers, 2011). Meijer, Sinnema, Bijstra, Mellenbergh and Wolters (2002) conducted a study examining the way in which coping styles and locus of control contribute to the prediction of psychosocial adjustment and to social support. Richardson and Ratner's (2005) study objective was to test the hypothesis that Antonovsky's concept of sense of coherence moderates (that is, buffers) the health impacts of stressful life events. The result was that sense of coherence seems to buffer the impact of recent stressful life events. Individuals with a lower sense of coherence look for external locus such as fate, luck etc. to happen in their lives in order to help them through difficult times.

The results further showed that a sense of dedication (engagement) significantly predicts the participants' external locus of control. Participants with a high external locus of control had higher levels of dedication. Individuals high on dedication have a sense of pride and enthusiasm. They find their work full of meaning, purpose and inspiring (Albrecht, 2010). The human spirit in this context (high dedication) refers to that part of the human being which seeks fulfilment through self-expression at work (May, Gilson & Harter, 2004). Individuals (high external control) believe that the outcome of their behaviour is primarily determined by outside forces, such as luck or timing (Perrewe & Ganster, 2005). If an individual is very dedicated in his/her work the assumption could be that he/she will get recognition. Individuals with high external control depend on external issues such as recognition, therefore dedication predicts external locus of control.

Participants who had high levels of vigour also had higher levels of meaningfulness. Individuals with high vigour levels are persistent and display a positive-affective-motivational state of fulfilment. Energy, involvement and efficacy are also present (Berger, Shuster, Von Roenn, 2007). Individuals with high levels of meaningfulness are confident that things will work out, that what seems to be a problem will turn out not to be much of a problem and be reasonably soluble, that the dissonance is only apparent (Van Jaarsveld, 2009).

The results further showed that males and females differed significantly only regarding their comprehensibility. Comprehensibility refers to the extent to which individuals perceive the stimuli that confront them as making cognitive sense. Information should be ordered, consistent, structured and clear, rather than noisy, chaotic, disordered, random, accidental and unpredictable (Antonovsky, 1984). Fritzell and Lundberg (2007) found in their study that an expected predictive effect of a weak sense of coherence on psychological distress was found for women. No predictive association was observed between a weak sense of coherence and psychological distress in men. Chrisler and McCreary (2010) found that sense of coherence develops over time from life experiences and depends on the characteristics of the individual that promote health and wellness. Little empirical research is available on this topic thus far, but women and men do not appear to be distinctly different in their sense of coherence. Rena, Moshe and Abraham (1996) found that sense of coherence is a personality factor that explains individual differences in coping. It could be that the male participants in the study perceive the stimuli that confront them as making more cognitive sense. The men further prefer that the information should be ordered, consistent, structured and clear, rather than noisy, chaotic, disordered, random, accidental and unpredictable, which the women participants in the study seem to find acceptable.

3.4.1.3 Identifying copers and non-copers

The two coping definitions used in this study were firstly that of Lazarus and Folkman (1984, p.141) who define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of a person.” The second was the description of coping from Lerner, Jacobs and Wertlieb (2003), who view coping as an ongoing dynamic process that changes in response to the changing demands of a stressful encounter or event. The coping scale that was compiled from the items that mostly represented the above-mentioned definitions of coping was used to identify the copers and non-copers for the purpose of this research. The results showed that the copers and non-copers differed significantly regarding their approach to coping.

Copers have the vision that self-initiated constructive actions create opportunities for growth and improvement in their quality of life (Dewe, et. al, 2010). Coping is seen as the process through which individuals manage the demands of the person-environment relationships that are appraised as stressful and the emotions they generate (McNamara, 2000). Non-coping, on the other hand, is failed coping efforts with the subsequent occurrence of a wide range of

physical and psychological disorders (Meyer, Rothmann & Pienaar, 2003). Nangamso (2008) refers to non-coping as the inability to cope effectively with stress.

3.4.2 Qualitative study

The qualitative study revealed that while the five copers mostly relate to coping strategies that imply an internal locus of control, the five non-copers mostly relate to coping strategies that imply an external locus of control.

Table 3.20: Qualitative themes on locus of control and sense of coherence of copers and non-copers

Qualitative themes		
Copers		Non-copers
Locus of Control	Coper 1 “Although I knew the company go through a difficult time and there is the possibility that I can lose my job, I was eager to go to work and it inspires me (internal locus & autonomy) to work harder ten spite of the circumstances”.	Non-coper 2 “I working extra hard but they always picking on me (external control) to do something, attending boring meetings. They (external control) waste my time”.
Sense of Coherence	Coper 2 “If I going through difficulties I think about methods, plans (looking for resources) how I can go through it and to learn from it ” (sense of coherence).	Non-coper 1 “When I appraise a stressful situation I want to run away ” (sense of coherence).

The findings of the qualitative study also revealed that the copers associated with coping strategies that indicate a strong sense of vigour -a positive affective state that increases people’s resources and should be associated with increased dynamic performance and work engagement (Albrecht, 2010) and sense of coherence - (meaningfulness: the more one perceives the valuation of one’s work as meeting one’s criteria of equity, the more one is likely to feel that ‘this is mine’ (Van Jaarsveld, 2009). The more an individual enjoys his/her

work the more meaning he/she will get out of his/her work; that is, a strong sense of vigour will have a high meaningfulness.

Non-copers seem to associate with coping strategies that suggest lower vigour - Individuals are constantly being fully absorbed at work and this may not be beneficial for long-term engagement (Albrecht, 2010) and sense of coherence - meaningfulness: a person who lacks commitment to the activities of life (meaningfulness) is not likely to be motivated to participate in shaping events, even if the situation is perceived to be manageable (Larsen & Lubkin, 2009).

The quantitative study also indicated that the participants' sense of vigour was significantly and positively related to their sense of meaningfulness.

Table 3.21: Qualitative themes on vigour and sense of coherence of copers and non-copers

Qualitative themes		
	Copers	Non-copers
Vigour (UWES)	Coper 4 "I continuously think about new things to improve (vigour) my work".	Non-coper 5 "If I do not know what to do I ignore (vigour) it, it will sort itself out".
Sense of Coherence Meaningfulness	Coper 1 "With every life experience (sense of coherence) I going through I became wiser". (meaningfulness)	Non-coper 4 "People at work are negative (sense of coherence) . If you drive in the traffic all the people are in a hurry and have long faces". (low meaningfulness)

Table 3.21 shows that the coping strategy themes of the copers seem to relate positively to an internal locus of control -people with internal locus of control showed more adaptive coping patterns (Parkes, 1984) and dedication. The human spirit in this context refers to that part of the human being which seeks fulfilment through self-expression at work (May, Gilson & Harter, 2004).

The non-copers seem to relate more negatively to their circumstances, with lower internal locus of control (individuals (will not) show flexibility, controllability, strategy situation fit and

predictable behaviour in coping situations (Gan et al, 2007) and dedication (Individuals experience (not) work as a source of independence and a means of fostering personal growth, self-respect, satisfaction and self-fulfilment (Tayeb, 2005).

It is interesting to observe that the quantitative study revealed that an external locus of control is negatively and significantly related to dedication. The qualitative findings suggest in this regard that an internal locus of control may be associated with dedication.

Table 3.22: Qualitative themes on external control and dedication of copers and non-copers

Qualitative themes		
Copers		Non-copers
Internal locus of Control (LOC)	Coper 3 “There is a lot before me who made it, so I figure it out that if they can made it through hardships then I can also”. (internal locus of control- optimism)	Non-coper 3 “I have no purpose to come to work” (low internal locus of control- pessimism)
Dedication (UWES)	Coper 4 “I continuously (dedication) think about new things to improve my work”.	Non-coper 1 “I only do what I must do at work. I do not spend one minute (dedication) longer at work if I cannot help it”.

Table 3.22 shows that the copers associated more with coping strategies that suggest an internal locus of control - people with internal locus of control showed more adaptive coping patterns (Parkes, 1984) and a sense of manageability - individuals tend to be more self-sufficient, hardy and resourceful. They are further characterised by an enduring tendency to see one’s life as being more or less ordered, predictable, manageable and meaningful (Jamison, 2001).

Non-copers seem to associate with coping strategies that relate more to an external locus of control (individuals believe that the outcome of their behaviour is primarily determined by outside forces, such as luck or timing. They are more likely to respond to organisational frustration with counterproductive behaviour such as aggression, sabotage, withdrawal, hostility and complaining (Perrewe & Ganster, 2005) and a lower sense of manageability. (The level of comprehension about the stressor, the willingness to confront the stressor, and

the resources to manage it can be measured as the sense of coherence (Artinian, West & Conger, 2011.)

The quantitative study also indicated that an external locus of control was significantly and negatively related to lower levels of manageability.

Table 3.23: Qualitative themes on external control and manageability of copers and non-copers

Qualitative themes		
Copers		Non-copers
External Control (LOC)	Coper 5 “I am part of the suburb where I live patrol system (external control). It helps me to know that I am needed at a place .”	Non-coper 1 “It will never stop. The next one (external control) is already waiting. It will never get better it only worsen”.
Manage Ability (SOC)	Coper 2 “If I going through difficulties I think about methods, plans (manageability) how I can go through it and to learn from it”.	Non-coper 5 “There is nothing that gives me excitement. I struggle (manageability) every morning through traffic, I struggle with my teenagers, it feels if my husband is never satisfied and at work the managers is on your case”.

In terms of life area themes and the coping strategies used in the 16 life domains outlined by the Quality of Life model of Frisch (2006), the qualitative findings revealed differences between the core coping strategy themes of the copers and non-copers. The five copers seem to deal positively and constructively with life challenges and change in all 16 life areas, while the non-copers deal with challenges in the various life areas mostly in a negative way. The life areas that appear to be the most challenging for the copers were work, goals and values and self-esteem. The strategies that they employ, relating positively to an internal locus of control, are personal resources, proactive coping and self-leadership. On the other hand, the non-copers mostly seem to struggle with challenges in the following life areas: self-esteem, work and creativity. The strategies that the non-copers mostly seem to employ, relating to an external locus of control, are environmental resources and outward approach coping. The findings are in agreement with the view of Gitterman and Germain (2008) that individuals appraise a life issue as a challenge when they believe they have personal and

environmental resources to deal with it. One person may experience a difficult life situation as a stressor while another may experience the same situation as a challenge. Those differences appear to arise from personality, physical condition, environment, past experiences and availability of resources for coping. The key to successful coping is flexibility, leading to the use of an appropriate strategy for the situation (Brannon & Feist, 2010). Gitterman and Germain (2008) state that most people can cope relatively well with difficult life stressors. In some instances the situation is mastered. Many people grow as a result of coping with stressors; their self-esteem and sense of competence, relatedness and self-direction are strengthened by their triumph over adversity.

3.4.3 Conclusions

Overall, the conclusion can be made that the participants' sense of coherence is significantly influenced by their external locus of control and vigour. The participants' external locus of control is significantly influenced by their sense of dedication and manageability. The qualitative study revealed that the coping strategies of the copers and non-copers differ and that their coping strategies seem to be positively related with their locus of control, engagement and sense of coherence in the various life areas in which they experience challenges associated with change. Chapter 4 will elaborate in more detail on these conclusions.

3.4.4 Limitations

Some of the limitations include the small sample size, which limits the generalisability of the results. In addition, the LCI evoked the general reaction from respondents that the completion of the instrument was time-consuming. Some of the individuals struggled to complete the questionnaires in English because it is their second language. Some of the individuals struggled with the meaning of the words in the questions.

3.4.5 Recommendations

The results and findings of the study need to be considered in the design of employee wellness practices aimed at helping employees cope with change or life challenges. The findings of the study confirmed that positive psychology constructs have an influence on employee coping. Considering the small sample, this study needs to be replicated in other industries with broader samples representing all race groups, various occupational and age groups. Longitudinal studies are also recommended to assess whether people's locus of

control, engagement and sense of coherence shift over the life span and whether people adjust their coping strategies as they mature and gain experience over time. There is a need for more research on coping strategies. Further studies would be helpful for employee wellbeing, as it would assist human resources, managers and supervisors to identify the coping strategies employees use and to facilitate interventions in this regard. Chapter 4 elaborates in more detail on the recommendations.

3.5 CHAPTER SUMMARY

Chapter 3 presented the empirical study, consisting of a research article, which included the following aspects: the background of the study, trends from research literature, research objectives and potential value add of the study. A literature review was done on the three positive psychology constructs, coping and non-coping strategies, characteristics and coping strategies of copers and non-copers. The research design, results and findings, and lastly the discussion concluded the chapter.

Chapter 4 presents the conclusions, limitations and recommendations in more detail.

CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter focuses on the conclusions of the study, discusses its limitations and makes recommendations for employee practices and further research.

4.1 Conclusions

The following conclusions were drawn regarding the literature review and the empirical investigation.

4.1.1 Conclusions regarding the literature review

The general aim of this study was to determine the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs) of coping and non-coping individuals, and the strategies they employ to deal with change in their lives. The general aim was achieved by addressing and achieving the specific aims of the research.

Conclusions were drawn about each of the specific objectives regarding the relationship between locus of control, work engagement and sense of coherence of coping and non-coping individuals.

4.1.1.1 The first objective: To conceptualise locus of control, engagement and sense of coherence (as a set of positive psychology constructs).

The first objective, namely to conceptualise locus of control, engagement and sense of coherence, was achieved in chapter 2 (literature review).

The literature review elaborated on locus of control, engagement and sense of coherence as positive psychology constructs.

The following conclusions are made:

- (1) Locus of control is viewed as a positive trait enabling individuals with internal locus of control to cope better with personal crises, be more satisfied with their lives and have higher self-esteem (Ewen, 2003). Rotter (1966) regards locus of control as the way the individual perceives reinforcement and uses it as a driving force for action. Locus of

control consists of three dimensions, namely internal control, where the individual believes that outcomes are a consequence of his/her own behaviour, external control, where the individual believes that outcomes are independent of his/her own behaviour and autonomy, where the individual practises internal locus of control and prefers working alone (Schaap et al., 2003).

- (2) Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication and absorption (Schaufeli et al., 2002). Engaged employees feel that their jobs make use of their skills and abilities, that their work is challenging and stimulating and that work provides a sense of personal accomplishment (Dibley, 2009). Vigour as a dimension of engagement is characterised by someone who demonstrates high levels of energy and mental resilience at work. There is also a determined investment in the actual work, together with high levels of persistence, even when faced with difficulties. Dedication refers to high levels of involvement in the work being done and experiencing high levels of significance, enthusiasm, inspiration, pride and challenge. Absorption is characterised by significant levels of concentration and being happily engrossed in the work. When one is absorbed in one's work, time passes quickly and detachment from the work is difficult (Schaufeli et al., 2002).
- (3) The basis of a sense of coherence is that some individuals can develop a capacity to overcome enormously stressful situations in a positive manner (Edwards & Besseling, 2001). It is a general way of appraising the world, both cognitively and emotionally, which is associated with effective coping, health-enhancing behaviour and better social adjustment (Strümpfer & Mlonzi, 2001). Sense of coherence is believed to be a construct that is universally meaningful, cutting across lines of gender, social class, region and culture. It does not refer to a specific type of coping strategy, but to factors that are the basis for successful coping with stress in all cultures and times (Strümpfer, 1990).

4.1.1.2 The second objective: Conceptualise coping and non-coping behaviour.

The second objective, namely to conceptualise coping and non-coping behaviour, was achieved in chapter 2 (literature review).

The literature review elaborated on coping and non-coping behaviour.

The following conclusions are made:

- (1) According to humanist thinking, an event becomes stressful when it is appraised by an individual as a threat to his or her level of wellbeing (Lazarus, 1999). Judgements of a transaction that are irrelevant, positive or stressful are referred to as primary appraisals (Karademas & Kalantzi-Azizi, 2004). Once the primary appraisals have been made, a so-called secondary appraisal follows. The secondary appraisal is an evaluation of coping resources and addresses the question, what can I do? It becomes critical when there is a primary appraisal that calls for coping resources (Ziegler, 2005). Coping may be defined as the cognitive and behavioural efforts to master, reduce or tolerate the internal and/or external demands of the person-environment transaction that is appraised as taxing or exceeding the individual's resources (Folkman & Moskowitz, 2004). Nes and Segerstroom (2006) point out that the behavioural efforts are action- and intrapersonally oriented, while Nicholson and Pearson (2003) add that overt and covert actions reduce or eliminate psychological distress or stressful conditions. Thus behavioural efforts (i.e. coping) can master, moderate, reduce, minimise or tolerate stress experienced during a period of transition.
- (2) Non-coping, on the other hand, is failed coping efforts with the subsequent occurrence of a wide range of physical and psychological disorders (Meyer et al., 2003). Nangamso (2008) refers to non-coping as the inability to cope effectively with stress. Monroe (2008) points out that exposure to and coping with the demands of life comprise the essence of human life. Inadequate coping with these demands can be viewed as demands that exceed the resources of the system, thus failure to cope results in a disturbance in the individual. Cutcliffe and McKenna (2005) state that non-coping is not failure to manage or succeed in satisfying demands. They argue that non-coping is not determined by the outcome of coping strategies but rather by the availability or lack of coping skills.

4.1.1.3 *The third objective: To conceptualise the theoretical relationship between the positive psychological constructs of locus of control, engagement and sense of coherence, and coping and non-coping behaviour, and the implications for employee wellness interventions aimed at helping people to deal positively with change.*

The third objective, namely to conceptualise the theoretical relationship between the positive psychological constructs of locus of control, engagement and sense of coherence, and coping and non-coping behaviour, and the implications for employee wellness interventions aimed at helping people to deal positively with change, was achieved in chapter 2 (literature review).

The literature review elaborated on the relationship between the positive psychological constructs of locus of control, engagement and sense of coherence, and coping and non-coping behaviour, and the implications for employee wellness interventions.

The following conclusions are made:

- (1) The focus of the positive psychology constructs is on successful coping (Snyder et al., 2010) and on how people manage stress and stay well (Daft, 2010). These constructs collectively measure generalised personality orientations (Lopez, 2008) and serve as an indication of successful coping.
- (2) Individuals with a high degree of perceived control (i.e. an internal locus of control) believe that the consequences of their actions are mainly caused by their own actions and tend to use active or problem-focused coping strategies. Individuals with internal locus of control experience fewer frustrated emotions and attempt fewer aggressive acts (Perrewe & Ganster, 2005). Internal and external components of the construct serve as an indication of which individuals have a strong belief (*cognitively*) that they can control stressful situations (Daft & Marcic, 2008), mastering events (*affective*) that are overwhelming to the individual, for example job loss (Martz & Livneh, 2007).
- (3) Task engagement binds together energy, concentration and motivation: it includes energetic arousal, task investment, success motivation and concentration (*cognitive*) (Gruszka et al., 2010). *Affective* coping with work engagement includes positive emotions such as joy and pride, job satisfaction, optimism and faster recovery from physiological stress (Antoniou et al., 2009). *Conative* engagement is having an

achievement orientation, establishing a life vision, setting goals and regulating one's behaviour (Huitt & Cain, 2005). *Interpersonal* coping occurs when an individual has some degree of control over the situation and when the person with whom he/she is in conflict is amenable to constructive resolution of the conflict (Dewe et al., 2010).

- (4) Two of the components of the sense of coherence construct, i.e. comprehensibility and manageability, provide a clear indication of the extent to which individuals will (*cognitively*) comprehend anxiety-provoking situations (such as organisational change) and view them as manageable (Kiefer & Muller, 2003). *Affective* coping through sense of coherence increases the ability to deal with stressors, which develops through repeated exposure to a variety of stressors (Arnetz & Ekman, 2006). Manageability also indicates to what extent an individual will select appropriate resources in order to manage the situation actively (*conatively*). The stronger the individual's sense of coherence, the better he/she will cope in stressful situations, such as during change (Kearney & Richardson, 2006). *Interpersonal coping* is to remain socially connected, maintaining hope, being able to restructure the meaning of the stressor and framing it in a positive light (Stein-Parbury, 2009).
- (5) Personal wellness profiles can be implemented to individualise interventions. Assessments of stress and coping can be included in the profiles (Acs et al., 2007). Some employees who suffer from stress at work may be reluctant to come forward and admit that they are not coping with the demands of the work. Some employees may even be unwilling or unable to recognise that they are suffering from stress or that the level of stress they experience could damage their health. It is the responsibility of every manager who observes the symptoms to encourage employees to speak openly about how they feel and about the causes of their stress and to seek solutions to cope with the problem (MacDonald, 2005).

4.1.2 Conclusions regarding the empirical study

The study was designed to perform two major tasks, namely:

- (1) Determine the nature of the empirical relationship between the constructs locus of control, engagement and sense of coherence in coping and non-coping individuals, as manifested in a sample of respondents employed in a typical South African manufacturing organisation.

- (2) Identify the core strategies that coping and non-coping individuals employ to deal with change in their life circumstances, and how these strategies differ (as manifested in a sample of respondents employed in a typical South African manufacturing organisation).

Based on the findings, hypothesis H01 was rejected in terms of the relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

H1 was accepted: that there is a significant relationship between coping and non-coping individuals' locus of control, work engagement and sense of coherence.

Proposition 1 was accepted: coping and non-coping individuals attach various meanings to their coping and non-coping experiences, which manifest as core themes underlying their coping strategies.

Proposition 2 was accepted: coping and non-coping individuals differ with regard to their coping strategies.

Findings for each of the research objectives, hypotheses and propositions will be presented as empirical study conclusions:

4.1.2.1 The first objective: Determine the nature of the empirical relationship between the constructs locus of control, engagement and sense of coherence in coping and non-coping individuals, as manifested in a sample of respondents employed in a typical South African manufacturing organisation.

The following conclusions were reached in this regard:

- An external locus of control results in significantly lower levels of vigour and comprehension and manageability (sense of coherence) and higher levels of dedication.
- High levels of vigour (engagement) lead to significantly higher levels of perceived meaningfulness (sense of coherence).

4.1.2.2 The second objective: Identify the core strategies that coping and non-coping individuals employ to deal with change in their life circumstances, and how these strategies differ (as manifested in a sample of respondents employed in a typical South African manufacturing organisation).

1. Copers tend to use the following coping strategies when dealing with life challenges or change meaning-focused coping, personal resources, environmental resources, productive strategies, outward approach coping strategies, proactive coping, job-crafting and self-leadership. These coping strategies seem to be associated with an internal locus of control and sense of autonomy.
2. Non-copers tend to use the following coping strategies when dealing with life challenges or change: inward avoidance coping and denial. These coping strategies seem to be associated with an external locus of control.
3. There is a difference in the coping strategies that copers and non-copers apply in the various life areas that pose coping challenges to them. Copers use effective coping strategies (associated with an internal locus of control) and non-copers use ineffective coping strategies (associated with an external locus of control).

The findings of the literature survey and the empirical results contributed to the field of Industrial and Organisational Psychology, and in particular to positive psychology constructs in employee coping. The literature indicates and emphasises locus of control, engagement and sense of coherence as positive psychology constructs. In particular, the literature review provided insight into the differences between copers' and non-copers' behaviour and coping strategies.

The empirical findings contributed new knowledge in terms of the difference in copers' and non-copers' coping strategies. This insight may help to add a broader perspective that employees differ in their coping strategies. Furthermore, the findings may be used to help facilitate greater self-insight among participants to gain deeper understanding of their coping strategies, as well as the influence of positive psychology constructs in the type of coping strategies. This can empower participants to take accountability for their coping strategies and wellbeing in dealing with life challenges and change.

The conclusions of the research tend to indicate that industrial psychologists and human resource practitioners should be aware of positive psychology constructs that have an

influence on the behaviour of employees, and the coping strategies employees apply at times of coping.

Industrial psychologists and practitioners in human resources and training and development should use the benefits of positive psychology constructs for employees, to educate employees regarding positive psychology constructs so that these become part of the person. They should focus on effective coping strategies in employee wellbeing interventions.

4.1.3 Conclusions regarding the central hypothesis

The empirical study provided statistically significant evidence to support the central hypothesis regarding the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs) of coping and non-coping individuals, and it is therefore accepted.

Furthermore, the hypothesis that coping and non-coping individuals tend to differ in terms of the strategies they employ to deal with change in their lives is also accepted.

4.2 Limitations

The limitations in respect of the literature study and empirical investigation are outlined below.

4.2.1 Limitations of the literature review

With regard to the literature review, the following limitations were encountered:

The exploratory research was limited to the role of positive psychology constructs (i.e. locus of control, engagement and sense of coherence) in employee coping and non-coping, based on the following:

1. On the one hand, only three constructs were considered in the study, which therefore cannot give a holistic indication of factors or variables that may potentially influence coping strategies.

2. On the other hand, focusing on the three constructs prevents focusing on only one construct and its components.
3. There was only positive paradigms within the study which focused on the sub-field of the discipline of Industrial and Organisational Psychology.

4.2.2 Limitations of the empirical study

1. The findings of this study may be limited to the ability to generalise and recommended practical interventions will only apply to the sample and cannot be generalised.
2. A non-probability sample was used, which reduced the sample size and also minimised the generalisation of the findings.

4.3 Recommendations

Based on the findings, conclusions and limitations of this study, recommendations for Industrial and Organisational Psychology and further research in the field are outlined below:

4.3.1 Recommendations regarding positive psychology constructs and employee coping

The main aim was to identify the relationship between locus of control, work engagement and sense of coherence (as a set of positive psychological constructs) of coping and non-coping individuals, and the strategies they employ to deal with change in their lives. Based on the research findings and relationships found, the following can be recommended:

- Quantitative research should focus on only one positive psychology construct, for example locus of control, and do extensive research on the subcomponents of the constructs. In terms of locus of control it will be autonomy, internal locus of control and external locus of control, and its correlation with coping and non-coping
- Longitudinal studies should be conducted. It will be of great value if all employees can complete the three questionnaires (LCI, UWES and OLQ) and the coping scale, and repeatedly complete it every 18 to 24 months in order to determine the employees' coping score. Interventions can be planned for non-copers.

- The LCI, UWES and OLQ measurement of an employee can serve as a tool in determining wellness interventions as part of a personal professional development plan.
- When an employee has a high vigour score, it is important to channel his/her energy in a positive, productive and constructive way that adds value to the organisation.
- Employees with a high sense of coherence can be drawn into the circle of the non-copers in order to help uplift those with a low score.
- Employees with external locus of control do have a valuable function to add value to the organisation.
- If an employee has a high score for external control, it is important for his/her manager to give the right recognition, otherwise it will have an influence on the employee's dedication and manageability.
- Locus of control, engagement and sense of coherence can play a valuable role in an employee's life. It is important that the employee receive training on these constructs and interventions to improve their coping strategies and responses to change and life challenges.
- The 16 dimensions are of great value in that they give an indication of how a person is connected, positive or negative. If the connection is negative, it can be helpful for the industrial psychologist during therapy to determine the reason for the negative connection.
- The coping strategies of copers and non-copers differ. Non-copers can, through interventions, learn how to cope effectively. Gitterman and Germain (2008) state that most people can cope relatively well with difficult life stressors. In some instances the situation is mastered. Many people grow as a result of coping with stressors; their self-esteem and sense of competence, relatedness and self-direction are strengthened by their triumph over adversity.
- Qualitative research should focus specifically on coping strategies and to what extent the coping strategies depend on their positive psychology construct (s).

- Industrial psychologists should facilitate the influence of positive psychology constructs on coping strategies.
- Industrial psychologists should consider the fact that employees' wellbeing depends on their coping and coping strategies.
- Industrial psychologists should develop employee wellbeing interventions that can be used to aid employees with developing their coping strategies. This would help them to develop self-insight on effective and ineffective coping strategies.
- Industrial psychologists should use the LCI (Schepers, 1999), the UWES (Schaufeli & Bakker, 2002) and OLQ (Antonovsky, 1987) in conjunction with the coping scale to assist individuals developing an awareness of the role of these positive psychology constructs in their coping.
- Industrial psychologists should have knowledge of effective and ineffective coping strategies.
- In order to create a healthier working environment, managers need to emphasise employee wellbeing interventions.
- Organisations should consider focusing on providing employees with effective coping strategies that enable them to cope effectively at times of change.
- The role of the industrial psychologist is that of a facilitator. To fill this role as facilitator successfully, one should gain a holistic view of the influence of the positive psychology constructs on coping. This will enable the facilitator to facilitate interventions of coping strategies to individuals.
- The findings show that the coping strategies of copers and non-copers differ. This leads to greater awareness and stimulates facilitation in interventions of effective coping strategies.

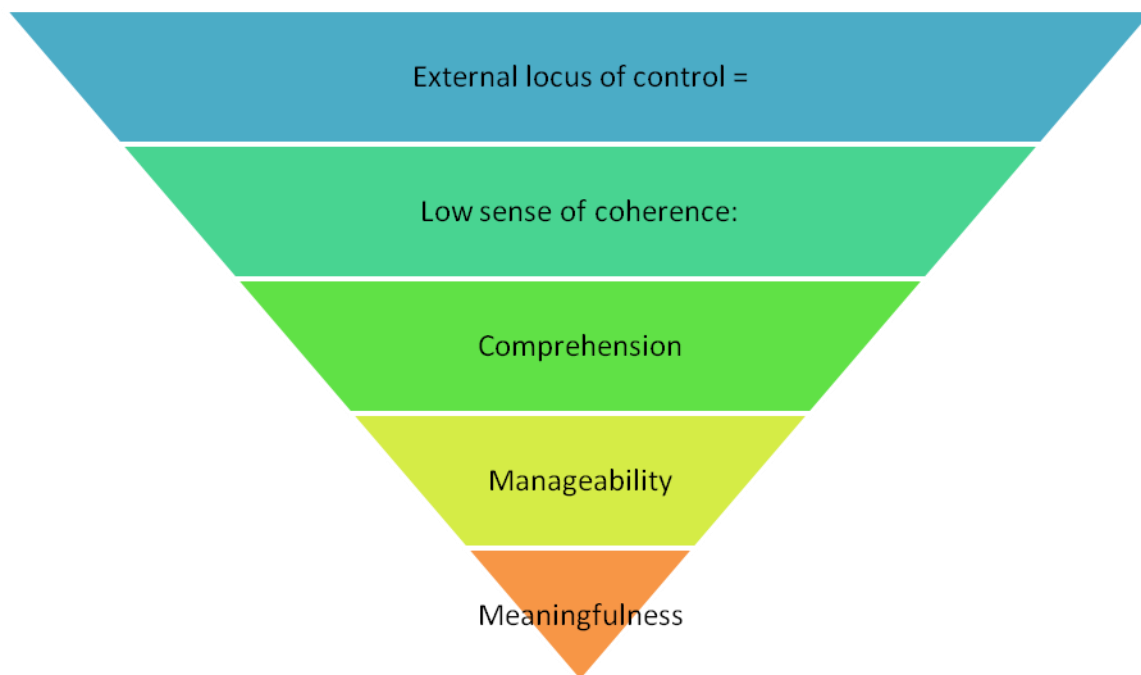


Figure 4.1: External locus of control = low sense of coherence

- Those with external locus of control believe that their destinies are beyond their own control and determined by fate, chance, or powerful others (externally controlled). Individuals with an external locus of control are more likely to experience symptoms of job dissatisfaction and ill-health (sense of coherence) (Robbins, 2009). Slobounov (2008) found that if an individual is externally controlled it may influence a positive state of mind. In fact, there is significant correlation between a high degree of tension/anxiety, anger/hostility, and a totally negative mood state.
- The psychological dimensions affecting health, according to Antonovsky (1987), include sense of coherence: a) comprehensibility or the extent to which a person can make sense of internal or external stimuli, b) manageability or the extent to which one perceives that resources are available and c) meaningfulness or the perception that life is meaningful and worth living despite its hardships. Stress is only likely to have a strong effect on susceptibility to illness among individuals who score low on internal locus of control and a sense of coherence and who have a low level of perceived social support. Interventions could include increasing a sense of personal control, supporting positive relationship and developing a management plan jointly with the employee and the industrial psychologist. This could empower and support the employee in developing a sense of control (Wilson & Drazdek, 2004).

4.3.2 Recommendations for further research

Based on the conclusions and limitations, recommendations for further research in the field of Industrial and Organisational Psychology are outlined below.

To enhance external validity, future research efforts should focus on obtaining a larger representative sample of a demographically representative sample of all race and age groups. This study was limited by the choice of sampling methodology and the small sample size.

There is a need for more research on the components of positive psychology constructs, for example locus of control, particularly autonomy and internal and external locus of control, specifically in the context of South Africa. Further studies would be useful for positive psychology facilitators, since in-depth knowledge of these constructs would enable industrial psychologists and human resource personnel to provide guidance to individuals regarding their coping strategies and to facilitate employee wellbeing interventions that result in effective coping strategies.

The study only provides limited insight into three positive psychology constructs that are significantly associated with coping. Further research is required into the relationship between broader spectrums of positive psychology constructs and/or focus on one construct and the relationship with coping and coping strategies. Industrial and organisational psychologists and researchers should replicate this study with larger samples to gain more insight regarding copers' and non-copers' coping strategies to aid with employee wellness interventions.

4.4 INTEGRATION OF RESEARCH

The dissertation focused on the role of positive psychology constructs in employee coping. It can be concluded that positive psychology constructs play a role in employee coping and the important aspect of the coping period is that there are stages in the process of change. Each stage of change represents a period of time, as well as a set of tasks needed to proceed to the next phase in helping the individual cope. Longitudinal studies are therefore required to deepen one's understanding of the role of positive psychology constructs in employee coping.

The literature review indicated that there is a relationship between positive psychology constructs and coping. The contemporary world of work has shown that much is made of the disempowerment and anxiety caused by constant turbulence and uncertainties. People will need to develop the ability to respond, focus precisely, manage stress and think strategically. A major challenge for workers today is balancing work, family and leisure activities. As dual-earner families become the family norm, juggling multiple roles has emerged as a challenge.

Cultivating an understanding of coping strategies allows individuals to understand what the impact of these on their wellbeing is, which has an influence on their work and work environment. The exploration of coping and coping strategies ensures that individuals have different coping strategies, which may be effective or ineffective, but will influence their wellbeing. It is important for organisations to understand that individuals have different coping strategies, which will influence employee wellbeing. Such insight is beneficial to organisations because it can add value to employee wellbeing interventions.

The empirical study explored the relationship between positive psychology constructs and coping. The empirical study provided statistically significant evidence that supports the central hypothesis that a relationship does exist between positive psychology constructs and coping.

In conclusion it is trusted that the findings of this study provided insight into the relationship between positive psychology constructs and coping and that industrial psychologists might be able to use these insights effectively to enhance coping in the workplace. Recommendations have been made for further research, and this study should be seen as a step in making a positive contribution to the field of Industrial and Organisational Psychology in the South African context.

4.5 CHAPTER SUMMARY

This chapter discussed the conclusions with regard to the study, in terms of both theoretical and empirical objectives. Possible limitations of the study were discussed with reference to both the theoretical and the empirical study of the research. Recommendations for future research to explore the relationship between positive psychology constructs and coping were discussed. Finally, an integration of the research was presented, emphasising the extent to which the study's results provided support for the relationship between positive psychology constructs and coping.

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