WORK-RELATED SENSE OF COHERENCE: DEMOGRAPHICAL DIFFERENCES AND ITS RELATIONSHIP WITH WORK ENGAGEMENT IN A MOTOR RETAIL ORGANISATION IN GAUTENG

by

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DECLARATION

I Sekgoma Elsie Ramasodi, student number 31769675, declare that the dissertation titled “work-related sense of coherence: demographical differences and its relationship with work engagement in a motor retail organisation in Gauteng” is my own work which is submitted in partial fulfilment of the requirements for the degree of Master in Commerce in the subject, Industrial and Organisational Psychology. All sources used are acknowledged as references.

I further declare that this dissertation has not been presented at any other institution in and outside South Africa for the same qualification.

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SUMMARY

WORK-RELATED SENSE OF COHERENCE: DEMOGRAPHICAL DIFFERENCES AND ITS RELATIONSHIP WITH WORK ENGAGEMENT IN A MOTOR RETAIL ORGANISATION IN GAUTENG

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The aim of the dissertation was to investigate the demographical differences on Work-SoC, and the relationship between work-related sense of coherence (Work-SoC) and work engagement in a motor retail organisation in Gauteng.

The Work-related sense of coherence (Work-SoC) scale, Utrecht work engagement (UWES-9) scale and a biographical questionnaire were applied in the data collection from 326 employees in a motor retail organisation in Gauteng.

The results indicated a strong relationship between Work-SoC and work engagement and that Work-SoC does predict work engagement. Except for tenure and gender, all demographical variables showed statistically significant mean differences on Work-SoC.

The study has added valuable knowledge to the existing literature as it was the first to investigate mean differences on Work-SoC for different demographical groups and also investigate the relationship between Work-SoC and work engagement in the South African environment.

KEYWORDS:

Retail motor industry; Positive psychology; Salutogenesis; Sense of coherence; Work-related sense of coherence; Work engagement; Demographical differences.
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CHAPTER 1: SCIENTIFIC ORIENTATION OF THE RESEARCH

The aim of this research was to determine the relationship between work-related sense of coherence (Work-SoC) and work engagement, if Work-SoC can predict work engagement and demographical differences of Work-SoC. The study was conducted in a retail motor organisation in Gauteng. The first chapter provided the background to, the motivation and problem statement of the research. It also outlined the aims, paradigm perspective, research design and methodology of the study. The chapters’ division of the study were provided at the end of this first chapter.

1.1 BACKGROUND TO AND MOTIVATION FOR THE RESEARCH

The 21st century world of work is fast paced, less predictable and more diverse (Harry & Coetzee, 2013) than ever before. In this rapidly changing world of work, organisations’ success and survival depends on the employees’ positive view of the changes and the drive, energy and passion they bring to the work place (Bezuidenhout & Cilliers, 2010).

Previously, exhaustive studies in Industrial and Organisational Psychology (IOP) focused mainly on the negative perspectives such as stress and burnout (Seligman & Csikszentmihalyi, 2000). The current state in research and practice is not to disregard the negative perspectives but to also explore the positive constructs. Positive psychology holds that individuals have resources at their disposal to meet the demands posed by the stimuli in the world of work (Seligman & Csikszentmihalyi, 2000). Rather than organisations focusing on the employee difficulties in dealing with the turbulence of the 21st century world of work, the focus should be on helping individuals discover their strengths (Botha & Mostert, 2014).

Studies in positive constructs such as work engagement (Korunka, Kubicek, Schaufeli, & Hoonakker, 2009), sense of coherence (SoC) (Van der Colff & Rothmann, 2009) and Work-SoC (Bauer & Jenny, 2007) are receiving increasing attention in research. This attention is attributed to the continuation of the move away from focusing on the negative side to focusing on the positive side of psychology (Lindström & Eriksson, 2005).

Work engagement is defined as a persistent, positive, fulfilling and work-related state of mind that comprises three components or dimensions, namely, vigour, dedication and absorption (Schaufeli, Salanova, Gonzáles-Romá, & Bakker, 2002). Work engagement is a work-related
mental state that reflects that the individuals have a positive energy, inspiration and an attachment to their work (Van der Colff & Rothmann, 2009). Bezuidenhout and Cilliers (2010) believe that work engagement implies energy, involvement and effectiveness that employees bring to a job.

Attention to employees’ work engagement is believed to contribute towards building effective and healthy organisations (Bezuidenhout & Cilliers, 2010). Therefore, organisations can benefit from enhancing work engagement of employees as this can result in positive outcomes such as improved work performance (Schaufeli, Bakker, & Salanova, 2006). Various other positive constructs like SoC have been shown to be antecedents to engagement or enhancing the development of work engagement (Bezuidenhout & Cilliers, 2010).

SoC is a salutogenic construct that was coined by Antonovsky as part of the movement away from pathology in psychology (Strümpfer, 1990). Antonovsky (1987, p. 19) defined SoC as “a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that stimuli deriving from one’s internal and external environment in the course of living are structured, predictable and explicable (referred to as comprehensibility), that resources are available to one to offset the demands posed by these stimuli (referred to as manageability), and that these demands are challenges worthy of investment and engagement (referred to as meaningfulness)”. SoC is considered as the ability to comprehend, to manage the whole situation or environment, with the capacity to view resources available as adequate and to be able to utilise such resources (Lindström & Eriksson, 2005).

Antonovsky (1993) posits that the departure of the SoC model highlighted the inadequacy of the pathogenic orientation which dominated all biomedical and social science disease research for a long time. Antonovsky (1993) was conscious of the fact that there are overwhelming stressors in various life spheres but that some individuals can remain healthy despite these stressors. A particular life sphere in which individuals can remain healthy despite the stressors is in the work context. Work-related sense of coherence (Work-SoC) has recently been developed as a context-specific application of the general sense of coherence construct (SoC). Like SoC, it is believed that Work-SoC can positively contribute to an individual’s health and therefore result in the reduction of negative behaviour such as absenteeism and intentions to leave the organisation (Vogt, Jenny, & Bauer, 2013).
Vogt et al. (2013, p.2) define Work-SoC as “the perceived comprehensibility, manageability and meaningfulness of an individual's current work situation”. The dimensions of Work-SoC are described where comprehensibility is considered as the extent to which a work situation is perceived as structured, consistent and clear; manageability describes the extent to which employees' perceives that sufficient resources are available to cope with the demands in the work context; and meaningfulness details the extent to which a situation at work is seen as worthy of commitment and involvement (Vogt et al., 2013). Employees' perception of comprehensibility, manageability and meaningfulness is as a result of the interaction between environmental factors in the work environment and personal characteristics (Vogt et al., 2013). Since Work-SoC seems to results from an interaction between personal and situational variables, it might be worthwhile to investigate if various demographical groups differ with regard to their Work-SoC.

Studies on the relationship and the interaction effect of demographical variables on SoC abound, but with inconclusive results on some variables. With regard to age, Antonovsky (1993) contended that SoC develops with age but stabilises after age thirty. However, Feldt, Kivimäki, Rantal, and Tolvanen (2004) did not find a relationship between age and SoC. Barnard (2013) also found age and gender to have no relationship with SoC. With regard to race and gender groups, Van der Westhuizen, De Beer, and Bekwa (2013) found differences in SoC levels between race groups but again no significant differences between gender groups. Based on these studies, gender differences therefore seem not significant in determining SoC. Education and job level were found in some studies to have a relationship with SoC. In a study conducted in a chemical factory, SoC was found to increase with education and job levels (Van Schalkwyk & Rothmann, 2008).

Vogt et al. (2013) found that the factor structure of the Work-SoC scale was invariant across gender, age, employees with higher and lower education levels and employees with or without a leadership position. Therefore, the Work-SoC scale is considered to function equally well across various demographical groups. However, no study could be found that investigated demographical differences in terms of the level of Work-SoC.
1.2 PROBLEM STATEMENT

Bauer (2009) believes that creating a salutogenic work environment which promotes and helps individuals develop their Work-SoC, can contribute positively to employee well-being and dedication to work. Evidence in the literature on the positive relationships between general SoC, as studied in the work context and work engagement abound (Rothmann, Steyn, & Mostert, 2005, Bezuidenhout & Cilliers, 2010). Van der Colff and Rothmann (2009) found that individuals with a strong SoC score higher on the work engagement scale than those with a weaker SoC.

Preliminary evidence also exists for a positive relationship between Work-SoC and work engagement (Vogt et al., 2013). Since Work-SoC is a fairly new construct, there seems to be a paucity of research on Work-SoC in a South African context. The question could be if the relationship between Work-SoC and work engagement would also hold true in a South African population. Furthermore, if one wants to develop the Work-SoC of employees, it could be important to know how Work-SoC might differ for various demographical groups.

The retail motor industry has not been immune to the changes in the world of work resulting from economic crisis, increased competition and technological changes (United Nations Industrial Development Organisation (UNIDO), 2009). The global recession has resulted in the restructuring, layoffs and limited employment opportunities in the industry which have negatively impacted on employers and employees alike (UNIDO, 2009). The study of Work-SoC in this industry can assist both the employer and the employee identify those characteristics of the work environment necessary to still find the work environment comprehensible, manageable and meaningful despite the negative events of recession.

Vogt, Jenny, Füllermann, Inauen, and Bauer (2012) found that Work-SoC reflects employees' perception of the work environment as comprehensible, manageable and meaningful. Work-SoC results can assist the organisation in identifying the need for further organisational salutogenic interventions (Vogt et al., 2012). In order to enhance Work-SoC it was important to determine if various demographical groups perceive their working environment differently. This may help the organisation to develop tailor-made interventions in addressing employees Work-SoC.
The aim of this research was therefore to determine the strength of the relationship between Work-SoC and work engagement and to investigate if there is a difference in Work-SoC for various demographical groups in a South African context within a motor retail organisation in Gauteng.

1.3 RESEARCH QUESTIONS

The following are research questions that formed part of the study:

- Is there a significant relationship between Work-SoC and work engagement in a motor retail organisation in Gauteng?
- Can Work-SoC be used to predict work engagement in a motor retail organisation in Gauteng?
- Is there a difference in means of the Work-SoC for different demographical groups?

1.4 RESEARCH OBJECTIVES

Research objectives were divided into general and specific objectives.

1.4.1 General objective

The general objective of this research was to determine the relationship between Work-SoC and work engagement, if Work-SoC can predict work engagement and to determine the difference in means of the Work-SoC for different demographical groups.

1.4.2 Specific theoretical objectives

- To conceptualise work engagement from the literature.
- To conceptualise general SoC from the literature.
- To conceptualise Work-SoC from the literature.
- To determine the relationship between Work-SoC and work engagement from a theoretical perspective.
- To determine if Work-SoC levels are likely to differ between various demographical groups from a theoretical perspective.
1.4.3 Specific empirical objectives

- To determine the operational relationship between Work-SoC and work engagement.
- To determine if Work-SoC can predict work engagement.
- To determine the differences in means on Work-SoC based on the demographical variables.

1.5 STATING THE RESEARCH VARIABLES

Three variables in the study were, Work-SoC, work engagement and demographical variables. Although the study did not intend to explain causality, the Work-SoC was considered as an independent variable and work engagement as a dependent variable when describing the relationship between variables. When comparing differences in group means, the demographical variables were considered as independent variable and Work-SoC as a dependent variable.

1.6 STATING THE HYPOTHESIS

H1: There is a significant positive relationship between Work-SoC and work engagement.
H2: Work-SoC can be used to predict work engagement.
H3: There is a difference in Work-SoC levels between different demographical groups.

1.7 PARADIGM PERSPECTIVES OF THE RESEARCH

The paradigm perspective of the research refers to the thinking and system of interrelated practices that inform researchers about the nature of their enquiry (Terre Blanche & Durrheim, 2006).

1.7.1 Disciplinary perspective

The disciplinary perspective refers to the field of study in which the research is undertaken. The disciplinary perspective for this research was Industrial and Organisational Psychology (IOP). IOP refers to “the scientific study of people within their work environment” (Muchinsky, Kriek, & Schreuder, 2009, p.2). IOP is regarded as a subfield of psychology that studies human
behaviour and psychological conditions in the work context through the development and application of scientific principles (Spector, 2012).

Within IOP, there are various sub-fields or applied disciplines (Bergh, 2014). For this research, the IOP’s sub-field relevant to the study was personnel psychology. Personnel psychology is an applied discipline that is concerned with individual differences in behaviour and job performance and on methods of measuring and predicting such performance (Cascio & Aguinis, 2011). The objective of this research was to study the behaviour of individual employees in terms of how they find their work environment as represented by their Work-SoC, their engagement with their work as defined by work engagement and demographical differences in their Work-SoC. Therefore, the research was concerned with individual differences in the work context.

1.7.2 Theoretical perspective

The paradigm within IOP whereby the variables under investigation could be seen to reside where salutogenesis and positive psychology.

Salutogenesis is defined as the origins of health (Antonovsky, 1979). The salutogenic perspective focuses on human positive responses to omnipresent stressors in different spheres of life (Antonovsky, 1993). Antonovsky (1993) believes that through the continuous use of general resistance resources (GRRs), human beings can experience positive functioning despite the stressors. The salutogenic perspective holds that human beings are generally healthy, self-efficient and possess strength to cope with the omnipresent stressors (Strümpfer, 1990). The salutogenic perspective focuses on positive health in an environment where the individual finds the environment comprehensible, manageable and meaningful (Bauer, 2009).

Positive psychology aims to facilitate a change in focus of psychology from preoccupation with repairing the worst in life to building positive qualities in the society, individuals and organisations (Seligman & Csikszentmihalyi, 2000). Positive psychology is the scientific study of optimal human functioning that calls for attention to the positive aspects of human functioning and experiences, as well as integrating them with the negative aspects of human functioning and experience (Linley, Joseph, Harrington, & Wood, 2006). Stressors such as work demands in the individual’s life and environment are not seen as sources of difficulties but as aspects individuals can understand, manage, enjoy and get involved in because individuals have strengths and virtues (Seligman & Csikszentmihalyi, 2000).
The field of positive psychology is defined at three levels:

- at the subjective level it is about valued subjective experiences (well-being, contentment and satisfaction (in the past), hope and optimism (for the future) and; flow and happiness (in the present),
- at the individual level, it is about positive individual traits (the capacity for love and vocation, courage, interpersonal skill, future mindedness, spirituality, high talent and wisdom), and;
- at the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship (responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic) (Seligman & Csikszentmihalyi, 2000).

1.7.3 Empirical paradigm

The research followed the positivist approach where the scientific measuring instruments were used with the researcher being detached from the participants’ environment. The researcher followed a quantitative, hypothesis testing approach (Terre Blanche & Durrheim, 2006).

1.7.4 Applicable concepts and constructs

1.7.4.1 Work-related sense of coherence

Vogt et al. (2013, p.2) defined Work-SoC as the perceived comprehensibility, manageability and meaningfulness of an individual’s current work situation. The definition comprises of the concepts of:

- Comprehensibility which explains the extent to which a work situation is perceived as structured, consistent and clear.
- Manageability which refers to the extent to which an employee perceives that adequate resources are available to cope with the demands in the workplace.
- Meaningfulness which refers to the extent to which a situation at work is worthy of commitment and involvement (Vogt et al., 2013).
1.7.4.2 Work engagement

Schaufeli et al. (2002) defined work engagement as a persistent positive, pervasive affective-cognitive and fulfilling work related state that comprises three components:

- Vigour or energy that refers to having resilience, high levels of energy, a willingness to invest and persistence in one's work.
- Dedication or involvement which is a reflection of enjoyment, challenge, eagerness and sense of significance found by individuals in their work.
- Absorption that refers to a strong level of involvement in one's work.

Work engagement as an enduring and pervasive affective cognitive state is not focused on any particular event, object or behaviour (Bezuidenhout & Cilliers, 2010).

1.8 RESEARCH METHOD

1.8.1 Type of study

This was a non-experimental research study that described the relationship between Work-SoC and work engagement. Non-experimental research aims to describe phenomena following the epistemology of objectivity (Terre Blanche & Durrheim, 2006). In order to achieve the objectives of the research a descriptive research question was investigated. The descriptive research described the strength of the relationship between Work SoC and work engagement and the difference between Work-SoC of various demographical variables.

1.8.2 The research design

A research design is a framework for conducting a research project or a plan by which the how, who and where questions are answered with regard to the research (Zikmund, 2003). The cross-sectional survey research design was used (Zikmund, 2003). A cross-sectional design is used when data from numerous people is collected at a single point in time (Zikmund, 2003).
1.8.3 Population and sample

A population is a large overall pool from which the sample is drawn and to which the researcher wants to generalise the findings (Durrheim & Painter, 2006). The sampling frame refers to the boundary within which the sample from the particular population will be drawn (Zikmund, 2003). For this research, the sampling frame included all employees with email addresses that are employed at all Gauteng outlets of a motor retail organisation as well as those at the head office which is also in Gauteng. The researcher targeted the eight hundred employees with access to email. An availability sampling method was used. A sample of 326 participants responded to the invitation to take part.

1.8.4 Measuring instruments

1.8.4.1 Demographical information

Demographical information was collected to show the demographic composition of the participants in the motor retail organisation in Gauteng. The demographical information was also used for the comparison of the groups and included, gender, age, racial group, marital status, highest education qualification, home language and tenure.

1.8.4.2 Work-related sense of coherence scale (Work-SoC)

Work-SoC scale was developed by (Vogt et al., 2013). The instrument consists of nine items that load on the three dimensions of comprehensibility, manageability and meaningfulness. The scale has a Cronbach’s alpha coefficient of 0.83. The reliability was determined using diverse economic sectors such as manufacturing and services and covered a wide range of occupations (Vogt et al., 2013). The factorial invariance and construct validity of the Work-SoC indicated that the scale functions equally well across different employee groups and the factor structure is invariant across time (Vogt et al., 2013). The three-factor structure of Work-SoC is invariant across gender, different age groups, employees with lower and higher levels of education, as well as for employees with or without leadership positions (Vogt et al., 2013). The validity and reliability of the Work-SoC has been established by Van der Westhuizen and Ramasodi (In press).
1.8.4.3 Utrecht Work Engagement Scale (UWES-9)

The UWES is a work engagement self-report questionnaire developed by (Schaufeli et al., 2006). The UWES-9 was developed from the previous UWES-17 for the basic pragmatic reason that researchers strive to include as few items as possible for measuring a particular construct. The short version was designed and its psychometric properties were assessed in a cross national study which included samples from South Africa (SA) with various occupations (i.e. social work, management, blue-collar etc.) (Schaufeli et al., 2006). A three factor model of vigour, dedication and absorption were found with Cronbach’s alpha coefficient for the total scale across countries exceeding 0.70 (Schaufeli et al., 2006).

In all countries included in the study except France, the nine-item UWES correlated well (between 0.85 and 0.90) with the original UWES-17. The factorial and construct validity of the UWES-9 showed insignificant differences across countries although the factor coefficients differed across countries. The three dimensions of the scale correlated significantly, and rather than computing scores per dimension, the total scale score should be used as an indicator of work engagement (Schaufeli et al., 2006).

1.9 DATA ANALYSIS

The SPSS version 23 was used for the analysis of the data (Gerber & Hall, 2013). Descriptive statistics was used namely mean, median, frequencies, skewness and kurtosis to describe the variables (Zikmund, 2003). A simple correlation coefficient was calculated for the relationship between Work-SoC and work engagement. Pearson product moment correlation coefficients assisted in determining the association between two variables at a time (Zikmund, 2003). Regression analysis was also performed to determine if Work-SoC predicts work engagement (Howell, 2011).

In order to compare groups on the basis of gender, age, racial group, marital status, educational qualification, home language and tenure in the organisation, correlations, independent t-tests and analysis of variance (ANOVA) were conducted. ANOVA was used for testing differences in the means of several groups (Howell, 2011). The effect sizes for the correlation was set as per Cohen’s (1992) guideline at 0.30 medium effect and 0.50 large effect sizes when determining
the practical significance. In order to determine statistical significance, a cut-off point of 0.05 was used.

1.10 RELIABILITY AND VALIDITY OF THE STUDY

Reliability and validity of the study refers to the logical flow of the study plan which can confirm that even when another person rather than the researcher was to conduct the study, they will be able to do so (Salkind, 2006). This research project was designed in such a way that it ensures the validity and reliability of the study.

1.10.1 Validity

There are three various types of validity namely, internal validity, external validity, as well as theoretical validity (Van der Riet & Durrheim, 2006). This study aimed to generate accurate and valid findings of the relationship between Work-SoC and work engagement and differences in Work-SoC for various demographical variables (Mouton & Marais, 1996).

Measurement validity which refers to the extent to which the constructs in the research question are successfully operationalised, interpretive validity referring to the extent to which the appropriate conclusions are drawn from the data and statistical validity which addresses the use of appropriate data analysis are components of internal validity of the study (Van der Riet & Durrheim, 2006). The internal validity of the study ensures that the empirical research is credible and can be trusted (Howell, 2011).

External validity refers to the generalisability of the study results to similar contexts or to the population (Mouton & Marais, 1996). For this research, results were only generalised to the sample of employees from the organisation’s outlets in Gauteng. To generalise the results, the sample has to be representative of the population and random sampling should be used in order to achieve this (Zikmund, 2003).

Theoretical validity is ensured by making use of literature relevant to the nature, problem and aims of the study. Theoretical validity was addressed in Chapter two and three and involved detailed conceptualisations of the terms Work-SoC and work engagement to ensure clear and detailed definitions of the concepts (Mouton & Marais, 1996). Every attempt was made to review
recent literature. However, a number of classical resources were referred to because of their relevance to the concepts and to provide a historical perspective of the emergence of the concepts.

1.10.2 Reliability

Reliability was addressed in the literature review and in the empirical study. In the literature review, reliability was ensured through the use of existing theories, literature sources and models that are available to other interested academics. For the empirical study, reliability was ensured by applying data gathering techniques that warrant the anonymity of participants in the study. A link was created and participants accessed questionnaires from the link, completed and submitted the questionnaire anonymously on-line. Reliability of the existing instruments used was also established and found to be acceptable. For the Work-SoC instrument, reliability was determined using diverse economic sectors and samples and covered a wide range of occupations (Vogt et al., 2013). Validity and reliability for Work-SoC was also established by Van der Westhuizen and Ramasodi (In press). For the UWES-9 instrument, reliability was determined in a cross national study and the instrument was found to be reliable (Schaufeli et al., 2006).

1.11 ETHICAL CONSIDERATIONS AND RESEARCH PROCEDURE

It is a conventional wisdom that research be conducted in an ethical manner at all stages of the research and for the protection of welfare of research participants (Wassenaar, 2006). Adherence to the ethical requirements in research was aligned to UNISA’s research ethics guidelines (UNISA, 2013). These guidelines include but are not limited to:

- University institutional ethics approval: Approval was granted for the study by the appropriate Ethics Review Committee.
- Essentiality and relevance: Giving adequate consideration to existing literature/knowledge and the essentiality of the planned research.
- Organisational informed consent: Organisational verbal consent was granted. Subsequently, the Finance director signed a letter that was e-mailed as a formal request to the organisation by the researcher. This letter was included in the submission to the ethical committee.
Participants’ informed consent was requested on the link that had the electronic questionnaires. During verbal communication with the finance director, it was confirmed that the company policy does not allow employee contact details to be provided to the researcher. Therefore, the questionnaire link was emailed to the director’s office for distribution to employees. The letter of consent informed the participants of the following: the purpose of the study, confirmation of the confidentiality of the results, anonymity and the right not to participate, parties that will have access to the data, the length of time that data will be kept, and the participants’ rights to access the results (Foxcroft & Roodt, 2005).

Confidentiality of information: This refers to sharing of information about participants and the use of results for other purposes other than the research without the consent of the organisation and participants. The name of the organisation was not included in the research paper since this is a single organisation in the motor retail sector. This was in accordance with the organisation’s request. The demographical information did not contain or ask names of participants so that no results can be linked to a particular individual. Completed questionnaires were stored electronically in a secured encrypted link.

1.12 LIMITATIONS OF THE STUDY

The study was conducted in a single organisation within the motor retail sector with outlets that are in Gauteng. As a result, there was a limitation in terms of generalisation of the results to other organisations in the same sector and even to the organisation’s other outlets located outside Gauteng.

The organisation’s request to have the questionnaire distributed from the finance director’s office gave the researcher limited control over the time that the questionnaires were returned and limited control over the data collection process. However, there was a negotiated time between the researcher and the organisation on the completion and returning of the completed questionnaires back to the researcher. Measures used in the study were self-report measures and this may have resulted in common method biases which could have influenced the results. Therefore, the relationship between variables that was found may be different if other measures are used (Vogt et al., 2013).
1.13 CHAPTER DIVISION

Chapter 1: Scientific orientation of the research

As stated, this chapter laid the foundation of the research study. It commenced with a brief introduction and provided the background and motivation for the study and the overall research process.

Chapter 2: Literature review

The aim of this chapter was to provide a clear theoretical background by giving attention to the historical examination and definition of each variable. An integrated discussion of all variables, which included Work-SoC, work engagement and demographical variables followed with an aim of describing the relationship between the constructs based on the existing body of the literature. The literature was used to motivate the importance of the study and how the study could contribute to the existing research studies. A brief discussion of the organisation and the industry in which the organisation operates was covered.

Chapter 3: Research article

This was the operationalisation part of the research, where a detailed discussion of the research design, analysis of the results and summary of findings were covered.

Chapter 4: Conclusions, limitations and recommendations

Conclusion to the overall research, limitations of the research and recommendations to the organisation and further research were discussed in this section.
CHAPTER 2: LITERATURE REVIEW

The purpose of this chapter was to conceptualise work engagement, sense of coherence (SoC) and work-related sense of coherence (Work-SoC). The theoretical relationship between Work-SoC and demographical variables was discussed and the chapter concluded with the theoretical presentation of the relationship between Work-SoC and work engagement, as well as a summary of the chapter.

2.1 WORK ENGAGEMENT

2.1.1 The origin of work engagement

Engagement at work is a concept that was first defined by Kahn in 1990 (Khan, 1990). Kahn (1990) conducted a qualitative study to conceptualise personal engagement in work roles and to identify the psychological conditions and antecedents of personal engagement. It was as a result of this qualitative study conducted by Kahn (1990) that the construct of work engagement emerged. Kahn (1990) considered engagement as a psychological state where people employ and express themselves physically, cognitively, emotionally and mentally during role performances. When organisational members are engaged they harness themselves to their work role (Kahn, 1990).

The emergence of the concept of engagement at work gained momentum because of changes like the movement from a stable organisational environment to continuous change, individual work to teamwork and physical demands to mental and emotional demands (Schaufeli, 2013). With an increasing interest in employee well-being, researchers supplemented and extended the concept of burnout by its positive opposite work engagement (Maslach, Schaufeli, & Leiter, 2001).

Maslach and Leiter (1997) advocated the approach of seeing work engagement and burnout along a continuum. Based on their approach, Maslach and Leiter (1997) believed that engagement is characterised by the three dimensions which are; energy, involvement and efficacy, the direct opposite of burnout. Maslach and Leiter (1997, p.24) argued that “when individuals experience feelings of burnout energy turns into exhaustion, involvement turns into cynicism and efficacy turns into ineffectiveness”. Maslach and Leiter (1997) view engagement
and burnout as opposite poles of a continuum and can therefore be measured with the same instrument.

While Schaufeli partly agreed with Maslach and Leiter, Schaufeli had a different perspective of how work engagement should be studied and operationalised (Rothmann, 2003). Schaufeli et al. (2002) believed that work engagement should not only be seen just as the positive antipode of burnout but as a positive outcome of work and a construct in own right. In considering work engagement in its own right and building on the work of Kahn, Schaufeli et al. (2002) coined a broad and currently widely used definition of work engagement.

2.1.2 The definition and dimensions of work engagement

Work engagement is not a momentary or specific state but a persistent and pervasive, affective-cognitive state that is not focused on any particular object, event, individual or behaviour (Schaufeli et al., 2006). Therefore, work engagement is defined as “a positive, fulfilling work-related state of mind that is characterised by vigour, dedication and absorption”, which are the dimensions of work engagement (Schaufeli et al., 2002, p.74). Coetzee and Roythorne-Jacobs (2011) describe work engagement as feeling enthusiastic, proud, inspired, challenged and being happily immersed in one’s work. When employees are highly involved with, committed to, enthusiastic and passionate about their work, they are said to be engaged (Attridge, 2009).

Vigour, as one of the dimensions of work engagement, refers to “high levels of energy and mental resilience while working, the willingness to exert effort in one’s work and persist in the face of difficulties” (Schaufeli et al. 2002, p.74). Employees do not display vigour because the work is not demanding but vigour is evident when employees remain resilient and persist in the presence of the job demands (Bell & Barkhuizen, 2011). Rothmann (2003) believes that vigour is when an employee is not easily fatigued and it is also the activation dimension of well-being. Schaufeli et al. (2006) considered vigour as the opposite of exhaustion where exhaustion is the feeling of depleted physical and emotional resources that prompts employees to distance themselves emotionally and cognitively from work.

Vigorous employees are those employees who utilise both personal and organisational resources available to establish and maintain resilience (Schaufeli et al., 2006). Resilience is a positive response towards excessive demands, a pattern of psychological activity which
consists of a motive to be strong in the presence of excessive demands, a goal-directed behaviour of coping and bouncing back after being stretched (Coetzee & Roythorne-Jacobs, 2011). Vigour enables an employee to bounce back with energy and be persistent amidst the high demands of work.

Dedication refers to “being strongly involved in one’s work and experiencing a sense of significance, enthusiasm, inspiration, pride and challenge” (Schaufeli et al., 2002, p.74). It refers to the positive identification with work, which reflects a strong involvement in one’s job (Korunka et al., 2009). Dedication is characterised by enjoyment, challenge, eagerness and a sense of significance found by individuals in their work (Bell & Barkhuizen, 2011).

Dedication is considered to be the opposite of cynicism (Korunka et al., 2009). Cynicism is when an employee reflects an indifferent or distant attitude towards work in general (Korunka et al., 2009). Employees that are dedicated to their work find their work worth engaging in because the work is meaningful, hence an identification concept of well-being (Van der Colff & Rothmann, 2009). When employees have the required energy and are strongly connected to their work, they are expected to get fully involved when they work, which is being absorbed (Schaufeli et al., 2006).

Absorption is characterised by statements such as “I get carried away when I am working, I am immersed in my work and I feel happy when I am working intensely” (Schaufeli et al., 2006, p.708). Absorption refers to the state of being totally immersed in one’s work, whereby time passes quickly and one is unable to detach oneself from work (Korunka et al., 2009). When employees are absorbed in their work, they are fully concentrating and are happily engrossed in their work (Bakker & Demerouti, 2008). Absorption was found to be the only distinct aspect of work engagement that is not opposite of any of the burnout constructs (Schaufeli & Salanova, 2007).

Absorbed employees are not addicted to their work but rather also enjoy other things outside work which contradicts them from workaholics (Bakker & Demerouti, 2008). Workaholics work hard because of a strong and irresistible inner drive (Bakker & Demerouti, 2008). Absorbed employees are doing their work for the fun of it and not as an obligation to work hard as in the case of workaholics. Therefore, it is important to not confuse absorption with being a workaholic which could be seen as a negative concept (Bakker & Demerouti, 2008).
Schaufeli and Salanova (2007) believe that being fully absorbed in one’s work comes closer to the concept of flow. Flow is a concept coined by Csikszentmihalyi (1975, p.4) as “the holistic sensation that people feel when they act with total involvement”. Flow is considered as a state characterised by a sense of complete control, focused attention, clear mind, mind and body agreement, distortion of time, pleasure and intrinsic enjoyment (Schaufeli & Salanova, 2007). Flow requires a balance between the challenges inherent in a task and the skills necessary to meet the challenges (Demerouti, Bakker, Sonnentag, & Fullagar, 2012).

Although absorption represents the dimension that flow and work engagement have in common, flow is more momentary and specific to a particular task whereas absorption in work engagement is a persistent and pervasive affective-cognitive state (Demerouti et al., 2012).

**2.1.3 Benefits of work engagement**

Schaufeli and Salanova (2007) basic tenet is that organisations want to prosper and survive in a continuously changing environment, need not only healthy employees but also engaged employees. Rothmann and Rothmann (2010) believe that the needs of business to optimise employees’ inputs have contributed to the interest in engagement. As a result of changes in the work context such as changes in the global environment and competition, organisations expect their employees to be proactive, take initiative, collaborate in the team, be committed and be engaged in what they do (Schaufeli, 2013).

Research has shown that work engagement can predict positive organisational outcomes such as productivity, commitment and client satisfaction (Bakker & Demerouti, 2008). Work engagement levels also assist the organisation to assess individual outcomes relevant to the organisation such as job performance and absence from work (Schaufeli, 2013). Bothma and Roodt (2012) believe that work engagement benefits the organisation as it may result in lower turnover intentions, job performance and satisfaction as well as organisational commitment.

Geldenhuys, Laba, and Venter (2014) found that engaged employees display self-determined behaviour to intentionally experience commitment in their work environment. Positive organisational commitment is important to the organisation because it constitutes the bond between the employee and the organisation (Martin & Roodt, 2008). Organisational commitment can be described as employee’s feeling of obligation to remain with the organisation.
In their study on University of the Free State staff, Van den Berg, Manias, and Burger (2008) found that employees engaged in their work holds the same values and norms as those of the organisation.

Work engagement was also found to have a crossover or emotional contagion among team members in an organisation (Bakker & Demerouti, 2008). Emotional contagion is the transfer of positive (or negative) experiences from one person to the other (Westman, 2001). Bakker and Demerouti (2008) believe that colleagues can perform better when they influence each other with their work engagement. In the study on the relationship between work engagement and employee performance, Bakker, Demerouti, and Verbeke (2004) found that engaged employees perform well and are willing to go the extra mile in their work.

Therefore, it is important that organisations pay attention to their employees' engagement since engaged employees are less likely to leave the organisation. Engaged employees also strive to display behaviour favourable to the organisation (i.e. creativity and entrepreneurial behaviours), thus lead to the organisation’s successful performance (Geldenhuys et al., 2014; Jackson, Rothmann, & Van de Vijver, 2006).

Work engagement also holds benefits for the individual employees. In a study conducted among Dutch employees it was found that engaged employees have high levels of energy and self-efficacy. Therefore, employees are able to exercise influence over events that affect their lives and perform well (Schaufeli et al., 2006). In their study conducted in SA among retail industry employees, Jacobs, Renard, and Snelgar (2014) found that when employees are engaged in their work they experience positive emotional energy that is rewarding and energising. Jacobs et al. (2014) also concurred with Schaufeli and Salanova (2004) that work engaged employees tend to experience job characteristics such as autonomy, growth opportunities, learning opportunities and social support.

Engaged workers are able to generate positive feedback loops for themselves. They are committed to performing on a high-quality level which usually generates positive feedback from supervisors (e.g. promotion, salary increase and praise) and from customers (e.g. satisfaction and appreciation) (Schaufeli & Salanova, 2007). Jacobs et al. (2014) also reported that work engagement promotes self-management and encourage self-evaluation of employees' behaviour so that employees can initiate behaviour change where necessary.
Research has shown that engaged employees experience good health and tend to report less psychosomatic complaints than their less engaged counterparts (Bakker & Demerouti, 2008). Van den Berg et al. (2008) believe that employees engaged in their work do get fatigued. However, fatigue is intrinsically linked to an overall sense of satisfaction and they may also become burnt out but are able to disentangle themselves from the situation. It can be deduced that work engagement does promote good health and employee well-being.

2.1.4 Factors related to work engagement

Work engagement has been found to relate to job demands, job resources and personal resources (Schaufeli & Bakker, 2003). Job resources are considered as those aspects of the job that are functional in achieving the work goals, reduce demands and stimulate personal growth and development (e.g. performance feedback, job control and social support from colleagues and supervisor) (Schaufeli & Bakker, 2003).

Job demands are factors such as workload, role conflict and red tape which are characteristics of the job that require sustained physical or mental effort (Schaufeli, 2013). While personal resources are aspects of self, such as sense of coherence (SoC) and work-related sense of coherence (Work-SoC) that are associated with resiliency and the ability to control and impact one’s environment successfully (Bezuidenhout & Cilliers, 2010, Vogt et al., 2012, Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

Demerouti, Bakker, Nachreiner, and Schaufeli (2001) first published the Job Demands-Resources model in an attempt to understand the antecedents (e.g. work engagement) of burnout. The JD-R model was developed as an open, heuristic model where various demands and resources can be loaded on to the original model (Demerouti et al., 2001). The early and revised versions of the JD-R model only considered characteristics of the work environment and not personal resources as well (Schaufeli & Taris, 2013). Since most psychological approaches believe that human behaviour results from an interaction between personal and environmental factors, it was recommended that personal resources be integrated into the JD-R model (Schaufeli & Taris, 2013).
In the JD-R model, personal resources were found to be mediators, moderators, third variables, antecedents of job demands and job resources or as any combination of variables (Schaufeli & Taris, 2013). Bakker and Demerouti (2007) found that personal resources significantly mediate the relationship between job resources and work engagement. Therefore, personal resources were found to contribute significantly in explaining the essential psychological mechanisms of the motivation process of the JD-R model. Personal resources are important because they are positive self-evaluations of individuals believe that the environment can be controlled and managed and therefore tend to predict motivation, performance, job and life satisfaction as well as work engagement (Bakker & Demerouti, 2008).

As antecedents, personal resources were found to be core determinants of employees' adaptation in the work context. Employees holding high personal resources are confident of their abilities to manage their environment and even create more aspects of their environment that facilitate goal attainment (Xanthopoulou et al., 2007). Demerouti and Bakker (2011) believe that employees with low personal resources tend to be particularly at risk of burnout. Personal resources, such as sense of coherence and Work-SoC have been found to play a buffering role in the interaction between job demands and job resources (Tremblay & Messervey, 2011). Sense of coherence as such a personal resource will be discussed next.

2.2 SENSE OF COHERENCE

2.2.1 The origin of sense of coherence

SoC is a concept that was first coined by Antonovsky (1979) as a result of the urge to understand why some people remain healthy and others not, despite the omnipresent stressors in life (Strümpfer, 2003). SoC originates from mental health research that Antonovsky (1979) began as a movement away from focusing on the pathogenic to the salutogenic orientation in the study of health (Antonovsky, 1993). A salutogenic orientation is concerned with exploring the origin of health and is described as a deep personal way of being, acting, thinking and feeling that things will be in order and manageable despite life events (Billings & Hashem, 2010).
The focus of Antonovsky’s research on SoC was to discover factors that keep people healthy especially those in difficult circumstances rather than to investigate the reasons for ill health (Antonovsky, 1993). Antonovsky (1979) believes that SoC develops over the life of the individual and tends to become stable and enduring in adulthood. However, it is important not to interpret this as SoC being immutable since SoC is dynamic and can continue to be modified through the entire life. Strümpfer (1990) stated that Antonovsky’s focus was on the relationship between SoC and health in various contexts.

2.2.2 The definition and dimensions of sense of coherence

SoC relates to resources, mechanisms and interactions involved in the adaptive capacity of human beings as they respond to the stressors that exist concurrently with them (Griffiths, Ryan & Foster, 2011). Antonovsky (1993) believed that people are able to remain in control of their external and internal environment because of their recognition and use of resources such as wealth, ego, strengths, cultural stability and social support. Antonovsky (1993) referred to these resources as generalised resistance resources (GRR’s) which are considered as protective factors that individuals have to deal with challenges of life. Continuous use of GRR’s is important in the development of one’s SoC (Billings & Hashem, 2010).

SoC is not a specific coping strategy and is not related to one particular life experience or environment. Instead, it can be seen as a global orientation that cuts across various factors such as gender, culture and the environment (Antonovsky, 1993). Therefore, SoC is defined as “a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that stimuli deriving from one’s internal and external environment in the course of living are structured, predictable and explicable (referred to as comprehensibility), that resources are available to one to offset the demands posed by these stimuli (referred to as manageability) and that these demands are challenges worthy of investment and engagement (referred to as meaningfulness)” (Antonovsky (1987, p. 19).

The extent to which individuals perceive the factors in the external and internal environments that confront them as understandable and predictable to some extent, is referred to as comprehensibility (Billings & Hashem, 2010). Individuals scoring high on comprehensibility believe that the stimuli encountered in the future will be predictable, ordered and clear (Lindström & Eriksson, 2005). Olsson, Hansson, Lundblad, and Cedarblad (2006) considers
comprehensibility as the SoC dimension that describes whether or not inner and outer stimuli make sense in terms of being coherent, cohesive, structured and clear. Comprehensibility is considered as the cognitive dimension of SoC as it describes the perception individuals have of the environmental stimuli they are confronted with (Lindström & Eriksson, 2005). Bezuidenhout and Cilliers (2010) summed up comprehensibility as the manner in which the individual makes cognitive sense of stimuli in the environment.

Manageability explains the extent to which a person perceives that resources are available and take action to utilise the resources in order to meet the demands posed by the stimuli derived from the environment (Lindström & Eriksson, 2005). The individual believes that the stimuli are under the control of both the individual and legitimate others such as friends, a spouse, professionals or spiritual figures (Strümpfer, 2003). Manageability is that life experience where the individual is able to cope with the demands of the environment (Bezuidenhout & Cilliers, 2010) because resources are adequate to meet the demands (Billings & Hashem, 2010).

Rothmann et al. (2005) consider manageability as the extent to which people experience events in life as situations that are endurable and can be seen as new challenges. Manageability is considered as the instrumental or behavioural aspect of SoC (Lindström & Eriksson, 2005). Manageability explains the individual’s perception and action to meet the demands through the use of resources available to them (Bezuidenhout & Cilliers, 2010).

When the individual believes that life demands make sense emotionally, are worth investing energy in and are worthy of commitment and engagement rather than seen as burdens, then the individual is said to experience meaningfulness (Lindström & Eriksson, 2005). Meaningfulness is basically seeing coping as desirable since the individual feels that life makes sense at both the emotional and cognitive levels (Rothmann et al., 2005).

Rothmann et al. (2005) believe that meaningfulness is experienced when stimuli are found to be motivationally relevant and meaningful. Therefore, meaningfulness is considered as the motivational dimension of SoC (Lindström & Eriksson, 2005). The individual is able to identify emotionally and commit effort in handling the demands posed by the environment when these demands are meaningful (Bezuidenhout & Cilliers, 2010).
The dimensions of comprehensibility, manageability and meaningfulness reveal the extent of the individual's ability to cope, the individual's cognitive and emotional strengths and positive perceptions and responses to the environmental stimuli.

### 2.2.3 Benefits of sense of coherence

SoC has health benefits to the individual since it is a global life orientation that promotes health (Antonovsky, 1993). As a health promoting resource it can define means by which an individual's resilience may be improved and can help individuals to feel physically and mentally healthy despite the omnipresent demands (Billings & Hashem, 2010). In the work context, employees that are healthy are able to deal with job demands of the work environment because they experience the stimuli as comprehensible, manageable and meaningful (Feldt et al., 2004). Vogt (2014) suggests that a strong SoC result in employees that proactively create a resourceful working environment that has a positive effect on their health and well-being.

SoC is a positive human strength or resiliency resource that can buffer the negative effects of adverse and traumatic situations relating to the work environment (Harry & Coetzee, 2013). Sairenchi, Huruyama, Ishikawa, Wada, Kimura and Muto (2011) believe that SoC as an autonomous personal resource is capable of contributing directly to subjective-wellbeing. Subjective-wellbeing refers to the satisfaction with life as determined cognitively by individuals using their personal evaluation or criteria (Wissing et al., 2010). Harry and Coetzee (2013) believe that SoC implies stress-coping abilities of the individual in relation to stress recognition. A strong SoC was found to help employees understand stressors and to regard them as manageable and meaningful (Bezuidenhout & Cilliers, 2010).
2.2.4 Factors related to sense of coherence

SoC has been found to relate to various demographical variables such as gender, age, tenure, educational background and marital status, but some of the findings are not consistent.

In the studies of SoC and gender, Bezuidenhout and Cilliers (2010) found that female employees score lower on the manageability dimension of SoC. Manageability refers to the individual perceiving that resources are available to meet the demands. Therefore, female academics may perceive that there are no adequate resources to meet the demands in their environment (Bezuidenhout & Cilliers, 2010).

In the study of depression among Japanese workers, gender was found to account for a significant difference in SoC with males displaying higher levels of SoC than their female counterparts (Sairenchi et al., 2011). Other studies such as the study by Lindström and Eriksson (2005) found that females score lower than males on SoC but the difference was not significant. Barnard (2013) however, did not find a statistically significant difference between male and females with regard to their SoC.

With regard to age, Feldt et al. (2004) did not find a connection between SoC and age. Feldt et al.'s (2004) results did not support the dynamic nature of SoC in adulthood but the sample used had not experienced major changes in adult life. Antonovsky (1979) argued that major changes in life are important in explaining the dynamic nature of SoC in adulthood. Harry and Coetzee (2013) believe that older people tend to have a stronger SoC than their younger counterparts as a result of total personality development of the individual.

Lindström and Eriksson (2005) found SoC to be increasing with age over the whole life span and found it to be stable in adulthood for people who initially had a strong SoC compared to those with an initial weak SoC. Barnard (2013) found age to have no significant prediction effect on SoC. Although Barnard’s (2013) study did not test for the age hypothesis of SoC stability, the findings did not substantiate other studies that showed a general upward SoC trend with age.

With regard to racial groups, Barnard (2013) found a strong interaction between SoC and racial groups. The Chi-squared Automatic Interaction Detection (CHAID) analysis in Barnard’s (2013)
study indicated that Whites and Mixed race employees (in a higher income category) had a greater risk of having a lower SoC score than their Black and Indian counterparts. Contrary to this, Gropp, Geldenhuys, and Visser (2007) found that Whites score higher on SoC than their Black counterparts where Whites scored higher on the SoC dimensions of comprehensibility and meaningfulness than Blacks.

Van der Westhuizen et al. (2013) found a significant difference in SoC levels among racial groups. Coloureds were found to score significantly higher than the Black and Indian race groups on SoC, but not significantly different from the White race group. The White race group scored significantly higher than the Indian, but not significantly higher than the Black race group (Van der Westhuizen et al., 2013).

In an Italian study, high levels of education were also associated with strong SoC (Billings & Hashem, 2010). Van der Westhuizen et al. (2013) found no significant relationship between SoC and academic achievement. Grayson (2007) also found no relationship between SoC and educational level. Contrary to these findings, Van Schalkwyk and Rothmann (2008) found a significant difference in SoC levels for qualification and education levels where the mean SoC was found to increase for qualification levels.

With regard to marital status, various studies found marital status to have a positive relationship with the level of SoC (Barnard 2013). Sharing a double income and being married were found to act as possible GRR's for strengthening SoC while single and divorced people tended to have a lower SoC if they are also in a lower income level (Barnard, 2013). This is substantiating earlier findings by Volanen, Lahelma, Silventoinen, and Suominen (2004) which also found that marital status does have a significant relationship with SoC and people who are married tend to have higher SoC levels than their single counterparts. Barnard (2013) concurred with Volanen et al. (2004) that there is still a need for further studies that investigate the interaction between SoC and demographical variables in various contexts.

One of the specific contexts that Antonovsky (1979) applied the general orientation SoC was in the work context where work experiences that strengthened SoC were investigated. Strümpfer (1990) believes that SoC also impact significantly on how work is approached and performed and therefore it is important to study work-related SoC as a resource that defines the individuals approach to their work. Work-SoC is domain specific, that is, it focuses on SoC not as a
generalised orientation to life but to work life only. The aim of this study was therefore, to study the work-related sense of coherence as a fairly new domain-specific construct.

2.3 WORK-RELATED SENSE OF COHERENCE

2.3.1 The origin of work-related sense of coherence

Antonovsky (1993) postulated that SoC is a global and non-context specific orientation that is not embedded in a particular culture, which means it can function differently in different contexts. However, Bauer and Jenny (2007) highlighted that given the relative stability of global SoC, it is conceptually captivating to translate the three dimensions of global SoC to the work domain. Therefore, Bauer and Jenny (2007) coined the construct of Work-SoC to refer to the work specific sense of coherence.

Work-SoC is considered as the representation of organisational structures and processes on the individual level. Work-SoC is also believed to serve as an indicator of the overall quality of an employee’s working life (Bauer & Jenny, 2007). Work-SoC was conceptualised as a transactional concept as it focuses on the interplay between experiences collected by an individual as an employee in his/her lifetime and the current perceptions of the characteristics of the employee’s present workplace.

2.3.2 The definition and dimensions of work-related sense of coherence

Work-SoC is defined as “the perceived comprehensibility, manageability and meaningfulness of an individual’s current work situation” (Vogt et al., 2013, p. 2). The perception of comprehensibility, manageability and meaningfulness of the work situation is influenced by the individual characteristics (personality, behaviour and experiences) and the work characteristics which comprise of job demands (e.g. structures and processes) and job resources (e.g. colleague and supervisor support) (Vogt et al., 2013). The dimensions of Work-SoC are in line with the general SoC dimensions of comprehensibility, manageability and meaningfulness.

Comprehensibility, as a Work-SoC dimension, describes the extent to which an employee perceives the work situation to be structured, consistent and clear (Vogt et al., 2012). The stimuli deriving from the work environment are perceived as understandable and predictable;
therefore the work environment facilitates a coping and adaption process (Griffiths et al., 2011). As a result, the employee’s perception of the work situation makes cognitive sense (Cilliers & Ngokha, 2006).

Cilliers and Ngokha (2006) believe that comprehension in the work environment helps employees to perceive the stimuli in a positive light and can allow the person to be flexible when the work situation changes. Feldt et al. (2004) purported that comprehensibility in the work context is still influenced by consistency in life experiences and in particular, consistency during the first years of employment. When the work situation is comprehensible the employee will want to find ways to manage it.

Manageability, as a Work-SoC dimension, describes the degree to which an employee perceives that the available resources are adequate to cope with the demands or stimuli deriving from the work place environment (Vogt et al., 2013). When the employee perceives that the resources as provided in the work are adequate, then the employee with a high Work-SoC is likely to apply the resources to mitigate the demands in a way that promotes health and coping (Feldt et al., 2004). Manageability implies that the employee is able to cope with work demands through the application of resources (Bezuidenhout & Cilliers, 2010). Employees scoring high on the Work-SoC manageability dimension are expected to find the work situation as comprising of new challenges and also manageable.

The meaningfulness dimension describes the extent to which a situation at work is perceived as worthy of commitment and involvement (Vogt et al., 2013). Meaningfulness is described by words such as a rewarding and significant work situation (Vogt et al., 2013). When the employee finds the work situation meaningful, the employee will be motivated to commit to the situation which reflects a positive response to the stimuli or situation (Olsson et al., 2006). The employee is able to emotionally identify with the work situation and commit efforts to handling the situation when meaningfulness is experienced (Cilliers & Ngokha, 2006).

Work-SoC is considered as an interactional concept that is more dynamic and sensitive to changes than general SoC (Vogt et al., 2013). Vogt et al. (2013) stated that it is important to always check for the three factor structure (dimensions) of the general SoC when studying Work-SoC because Work-SoC is a construct derived from the general SoC.
2.3.3 Benefits of work-related sense of coherence

The benefits of Work-SoC are two-fold: in that it benefits both the organisation and the employee. Organisations can benefit from providing job and other organisational resources that can promote comprehensibility, manageability and meaningfulness (Work-SoC) of employees (Bauer, 2009). Employees with high levels of Work-SoC can be expected to find their work situation understandable, rewarding and manageable and worthy to commit to, which may lead to healthy, productive and motivated employees (Feldt, 2004; Vogt et al., 2012).

High levels of Work-SoC can create better performance for the organisation (i.e. profitability and customer satisfaction), less work withdrawals, less absenteeism and less turnover intentions (Bauer, 2009). With high levels of Work-SoC, the organisation can also expect high levels of work engagement since employees will have the disposition to experience the work characteristics in a positive interpretive manner (Van Der Colff & Rothmann, 2009).

Employees with a strong Work-SoC see the work situation as worthy to commit to and are flexible during the changes in the organisation and their work (Bauer, 2009). A strong Work-SoC can result in employees’ positive appraisal of themselves, increased participation in decision making and the ability to positively apply the resources available in the work context (Bauer, 2009). Work-SoC can also reflect the level of work demands that the individual is faced with and whether the resources available can assist the individual to cope with the demands (Bauer, 2009). Zweber (2014) found that as the comprehensibility dimension of Work-SoC increases as a mediating variable between health climate and mental health of employees, mental health also increases. Zweber (2014) study confirms the importance of Work-SoC for an employee’s ability to cope with the work environment demands.
2.4 THE THEORETICAL RELATIONSHIP BETWEEN WORK-RELATED SENSE OF COHERENCE AND DEMOGRAPHICAL VARIABLES

As stated in Chapter 1 of this research, Work-SoC is a fairly new construct referring to the investigation of SoC in the work context. In the same manner as SoC, Work-SoC was found to have a three-factor structure (Antonovsky, 1993, Vogt et al., 2013). Vogt et al., (2013) found that the three-factor structure of Work-SoC is invariant across gender, different age groups and employees with lower and higher levels of education. Vogt et al. (2013) confirmed the Work-SoC instrument’s factor structure and that the instrument work in the same way for the specified demographical groups, with an acceptable reliability coefficient above the >0.70 guideline (Nunally & Bernstein, 1994).

There have been various studies done on the relationship between SoC and demographical variables, some of which have been covered in the discussion above. However, there seems to be a paucity of research where the context specific SoC construct (Work-SoC) is studied in relation to demographical variables. Vogt et al., (2013) emphasised the importance of demographical variables when conceptualising Work-SoC. Based on the limited studies on the relationship between Work-SoC and demographical variables, the need to add to the existing knowledge exists.

2.5 THE THEORETICAL RELATIONSHIP BETWEEN WORK-RELATED SENSE OF COHERENCE AND WORK ENGAGEMENT

Vogt et al. (2013) found that there is a strong and positive relationship between Work-SoC and work engagement with $r = 0.49$. The findings by Vogt (2014) corroborate with the previous findings by Vogt et al. (2013) that there is a significant positive relationship between Work-SoC and work engagement.

As a personal resource, Work-SoC was found to have a significant role in the positive motivational pathway leading from job resources to work engagement (Vogt, 2014). Vogt et al. (2013) reported a strong mediation effect for Work-SoC in the relationship between job resources and work engagement. Work-SoC also reduce the effect size in the pathway that leads from job demands to exhaustion but its effect in this pathway is less stronger than in the pathway from job resources to work engagement (Vogt et al., 2013).
Work-SoC is conceptualised as a health resource and its strong positive mediation effect in the pathway that leads from job resources to work engagement is consistent with the concept of SoC as a health resource (Antonovsky, 1979, Bauer & Jenny, 2007, Vogt et al., 2013). Van der Colff and Rothmann (2009) found that a strong SoC predicts higher levels of personal accomplishment and work engagement. Therefore, the Work-SoC findings are in line with other research studies on SoC and work engagement.

2.6 SUMMARY OF THE CHAPTER

The conceptualisation of work engagement, SoC and Work-SoC was covered in this chapter. The theoretical relationship between Work-SoC and demographical variables was explored based on previous research findings. This chapter was concluded by exploring literature on the theoretical relationship between Work-SoC and work engagement. Therefore, the specific theoretical objectives of this research have been covered in this chapter and have been achieved. These theoretical objectives were to conceptualise work engagement from the literature, to conceptualise SoC from the literature, to conceptualise Work-SoC from the literature, to determine the theoretical relationship between Work-SoC and demographical variables, and to determine the theoretical relationship between Work-SoC and work engagement.
CHAPTER 3: RESEARCH ARTICLE

Orientation: Work-related sense of coherence (Work-SoC) is a personal resource that can enhance work engagement among different demographical groups.

Research purpose: The study investigated the relationship between Work-SoC and work engagement and whether Work-SoC can predict work engagement. The study also investigated differences in means for various demographical groups on Work-SoC.

Motivation for the study: The constructs of Work-SoC, and its relationship with work engagement or demographical differences has not previously been investigated in a South African environment.

Research design, approach and method: A cross-sectional quantitative survey design was used. The Utrecht Work Engagement Scale and Work-related Sense of Coherence Scale were administered to a non-probability available sample of 326 employees in a motor retail organisation in Gauteng.

Main findings: The results showed a strong relationship between Work-SoC and work engagement and that Work-SoC does predict work engagement. Except for tenure and gender, all demographical variables showed statistically significant mean differences on Work-SoC.

Practical/managerial implications: High levels of Work-SoC can enhance work engagement and promote a salutogenic work environment.

Contribution/value-add: This research was the first to investigate mean differences on Work-SoC for different demographical groups and to investigate the relationship between Work-SoC and work engagement in the South African environment. The findings added new knowledge to the existing literature on these constructs.

Keywords: Retail motor industry; Positive psychology; Salutogenesis; Sense of coherence; Work-related sense of coherence; Work engagement; and Demographical differences.
INTRODUCTION

In the rapidly changing world of work, organisations’ success and survival depends on their employees’ positive view of the changes, as well as their energy and passion that they bring to the work place (Bezuidenhout & Cilliers, 2010). Consequently, there has been a shift in focus in Industrial and Organisational Psychology (IOP) from emphasis on employees’ difficulties in dealing with negative aspects such as stress. The current focus is now on helping employees discover their strengths and resources available to deal with the negative aspects (Botha & Mostert, 2014; Korunka, Kubicek, Schaufeli, & Hoonaker, 2009; Seligman & Csikszentmihalyi, 2000).

Schaufeli (2013) believes that changes such as focusing on physical demands to mental and emotional demands and from employee satisfaction to employee motivation are important if the organisation wants to thrive as a result of engaged employees. In both research and practice positive constructs such as work engagement (Schaufeli & Bakker, 2003), sense of coherence (SoC) (Van der Colff & Rothmann, 2009) and work-related sense of coherence (Work-SoC) (Bauer & Jenny, 2007) are receiving increasing attention. Work-SoC is a context-specific application of sense of coherence and relates to an employee’s perception of the comprehensibility, manageability and meaningfulness of their current work scenario.

The retail motor industry has not been immune to the changes in the world of work. The global recession has resulted in layoffs, restructuring and limited employment opportunities which have negatively affected both the employer and the employees (United Nations Industrial Development Organisation, (UNIDO), 2009). The study of Work-SoC in this industry can assist both the employer and the employee in creating a work environment that is comprehensible, manageable and meaningful. Bauer (2009) believes that creating such a salutogenic work environment, which promotes and help individuals develop their Work-SoC, can contribute positively to employee well-being and dedication to work.

Evidence in the literature on the positive relationship between general SoC as studied in the work context and work engagement abound (Bezuidenhout & Cilliers, 2010; Rothmann, Steyn, & Mostert, 2005). Van der Colff and Rothmann (2009) found that individuals with a strong SoC score higher on the work engagement scale than those with a weaker SoC. Preliminary
evidence also exists for a positive relationship between Work-SoC and work engagement (Vogt, Jenny & Bauer, 2013).

Since Work-SoC is a fairly new construct, there seems to be a paucity of research on Work-SoC in a South African context. The question could therefore be if the relationship between Work-SoC and work engagement would also hold true in a South African population. Furthermore, if one wants to develop the Work-SoC of employees, it could be important to know how Work-SoC might differ for various demographical groups. The aim of this research was therefore to determine if Work-SoC can predict work engagement and to investigate if there is a difference in Work-SoC for various demographical groups in a South African context.

WORK ENGAGEMENT

Engagement at work is a construct that emerged as a result of research conducted by Kahn (1990) that investigated the psychological presence of people in their work role during particular moments. Kahn (1990) considered engagement at work as a psychological state where people employ and express themselves physically, cognitively and emotionally during role performances.

As the construct of work engagement gained momentum in research and in practice as a result of increasing interest in employee well-being, Maslach and Leiter (1997) extended the concept of burnout by considering work engagement as its direct opposite. Work engagement was then described as the positive opposite of burnout along a continuum and as a result, the two constructs can be measured with the same instrument (Maslach & Leiter, 1997).

Schaufeli, Salanova, González-Romá, and Bakker (2002) had a different perspective on how to view work engagement and argued that work engagement is beyond just the positive opposite of burnout but also a positive outcome of work and a construct in its own right. Schaufeli et al. (2002, p.74) coined a broad and currently widely used definition of work engagement as “a positive, fulfilling work-related state of mind that is characterised by vigour, dedication and absorption”. Work engagement is thus an omnipresent affective-cognitive state that can be experienced differently at different points in time.
Vigour refers to the elevated energy levels and mental resilience while working, the willingness to devote effort in one’s work and to persist despite difficulties (Schaufeli et al., 2002). Vigour is a state where employees are not easily fatigued and experience the activation dimension of well-being (Rothmann, 2003). Dedication, as second dimension of work engagement refers to being strongly involved in one’s work and experiencing a sense of meaning, fervour, challenge and pleasure (Schaufeli et al., 2002). Dedication is characterised by the joy, challenge and keenness found by individuals in their work (Bell & Barkhuizen, 2011). Absorption refers to the state of being completely engrossed in one’s work, whereby time passes quickly and one is unable to detach oneself from work (Korunka et al., 2009). Absorption is characterised by full concentration, being carried away and being immersed in one’s work (Bakker & Demerouti, 2008).

Schaufeli and Bakker (2003) believe that employees are able to be vigorous, dedicated and absorbed because they have and are able to utilise job and personal resources at their disposal. Job resources are considered as those aspects of the job that are functional (e.g. performance feedback and social support) in achieving the work goals and stimulate personal growth and development (Schaufeli & Bakker, 2003).

Personal resources are aspects of self, such as sense of coherence (SoC) and work-related sense of coherence (Work-SoC) that are associated with resiliency and the ability to control and influence one’s environment successfully (Bezuidenhout & Cilliers, 2010; Vogt et al., 2013; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

**SENSE OF COHERENCE**

Antonovsky (1987, p.19) defined SoC as “a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that stimuli deriving from one’s internal and external environment in the course of living are structured, predictable and explicable (referred to as comprehensibility), that resources are available to one to offset the demands posed by these stimuli (referred to as manageability) and that these demands are challenges worthy of investment and engagement (referred to as meaningfulness)”.
Comprehensibility is considered as the cognitive dimension of SoC as it describes the perception individuals have of the environmental stimuli they are confronted with (Lindström & Eriksson, 2005). Manageability, as the second dimension of SoC focuses on the individual’s ability to cope with the demands in the environment by taking action to utilise available resources (Bezuidenhout & Cilliers, 2010; Lindström & Eriksson, 2005). Manageability is characterised by the perception of resources, action to utilise those resources and taking control of the stimuli through the available resources. Meaningfulness as a third dimension of SoC refers to individuals’ ability to make emotional sense of the environmental stimuli and believing that the stimuli are worth investing in, and worthy of commitment and engagement (Lindström & Eriksson, 2005).

SoC is not a specific coping strategy and is not related to one particular life experience or environment. Instead, it is considered as an enduring but dynamic global orientation that cuts across factors such as gender, culture and various environments (Antonovsky, 1993). However, Bauer and Jenny (2007) argued that when SoC is studied in the work context, the dynamic nature rather than the stability of SoC holds. Therefore, Bauer and Jenny (2007) believe that with the rapid changing world of work, a work specific application of SoC is more relevant. Hence they coined the construct of work-related sense of coherence.

**WORK-RELATED SENSE OF COHERENCE**

Work-SoC is defined as “the perceived comprehensibility, manageability and meaningfulness of an individual’s current work situation” (Vogt et al., 2013, p.2). The dimensions of work-SoC are in line with the general SoC dimensions of comprehensibility, manageability and meaningfulness. Although the current work situation is studied, the situation is expected to have been influenced by experiences in the context of work over time (Bauer & Jenny, 2007). The manner in which an employee finds the work situation comprehensible, manageable and meaningful is influenced by the individual’s characteristics such as personality and experiences, the work characteristics such as structures and processes and job resources such as colleagues and supervisor support (Vogt et al., 2013).

Comprehensibility, as a Work-SoC dimension describes the extent to which an employee finds the work environment making cognitive sense (Cilliers & Ngokha, 2006). Feldt, Kivimäki, Rantal, and Tolvanen (2004) purported that comprehensibility in the work context can be influenced by
consistency in work experiences and in particular, consistency during the first years of employment. When the work situation is comprehensible, it is expected that an employee is more likely to make an effort to manage the work situation (Vogt et al., 2013).

Manageability describes the degree to which an employee perceives that the available resources are adequate to cope with the demands or stimuli deriving from the work environment (Vogt et al., 2013). When an employee perceives that the resources in the work place are adequate, the employee is likely to apply the resources to mitigate the work demands in a way that promotes health and coping (Feldt et al., 2004; Bezuidenhout & Cilliers, 2010).

The meaningfulness dimension focuses on the extent to which a situation at work is perceived as worthy of commitment and involvement (Vogt et al., 2013). When an employee finds the work situation meaningful, an employee is expected to be motivated to commit to the situation which is a positive response to the stimuli (Olsson, Hansson, Lundblad, and Cederblad, 2006). When meaningfulness is experienced, an employee is able to emotionally identify with the stimuli deriving from the work environment and commit effort to handling such stimuli (Cilliers & Ngokha, 2006).

Work-SoC holds benefits for both the organisation and the employee. Organisations can create a salutogenic environment by providing job and other organisational resources that can promote the comprehensibility, manageability and meaningfulness (Work-SoC) of their employees (Bauer, 2009). A strong Work-SoC can result in employees’ positive appraisal of themselves in relation to the work environment stimuli (comprehensibility) and the ability to positively apply the resources available in the work context (manageability), as well as an increased participation in decision making and strategy formulation (meaningfulness) (Bauer, 2009).

Work-SoC tends to reflect the level of work demands that the individual is faced with and whether the resources available are adequate for the individual to cope and remain resilient despite the work demands (Bauer, 2009).
Employees with high levels of Work-SoC can be expected to find their work situation understandable, rewarding and manageable and worthy to commit to, which may lead to healthy, productive and motivated employees (Bauer & Jenny, 2007). Thus, organisations may experience better performance (i.e. profitability and customer satisfaction), less work withdrawals, less absenteeism and less turnover intentions (Bauer, 2009) and a high level of work engagement (Vogt et al., 2013).

**WORK-RELATED SENSE OF COHERENCE AND WORK ENGAGEMENT**

Vogt et al. (2013) found that there is a strong positive relationship between Work-SoC and work engagement with $r=0.49$. As a personal resource, Work-SoC was found to have a significant role in the positive motivational pathway leading from job resources to work engagement (Vogt, 2014). These findings on the relationship between Work-SoC and work engagement and its strong mediating effect between job resources and work engagement are in line with other research studies on general SoC and work engagement (Bezuidenhout & Cilliers, 2010; Rothmann et al., 2005; Van der Colff & Rothmann, 2009).

Based on the above discussion, the following hypotheses were formulated:

**Hypothesis 1:** There is a significant positive relationship between Work-SoC and work engagement in the sample group of employees in the retail motor organisation in Gauteng.

**Hypothesis 2:** Work-SoC can be used to predict work engagement in the sample group of employees in the retail motor organisation in Gauteng.

**WORK-RELATED SENSE OF COHERENCE AND DEMOGRAPHICAL DIFFERENCES**

To enhance Work-SoC it is important to determine if various demographical groups perceive their working environment differently. This may help the organisation to develop tailor-made interventions in addressing employees’ Work-SoC. As a derived construct from SoC, Work-SoC is also expected to be influenced by various demographical variables (Vogt et al., 2013). However, there seems to be a paucity of research where the context specific SoC construct (Work-SoC) is studied in relation to demographical variables. SoC has been found to relate to various demographical variables but findings seem to be inconsistent.
With regard to SoC and gender, Sairenchi, Haruyama, and Ishikawa (2011) found that male scores on SoC are statistically significantly higher than female scores. However, Barnard’s (2013) findings concurred with Lindström and Eriksson’s (2005) where no statistically significant difference between males and females with regard to their SoC was found. With regard to SoC and age, Feldt et al. (2004) did not find a connection between SoC and age. Barnard (2013) also found age to have no prediction effect on SoC. On contrary, Lindstrom and Eriksson (2005) found SoC to be increasing with age over time. Antonovsky (1979) argued that SoC increases with age however, tend to stabilise after age thirty.

Racial groups were found to explain differences in SoC. In this regard, Barnard (2013) found Whites and Mixed race employees (in a higher income category) having a greater risk of having a lower SoC score than their Black and Indian counterparts. Van der Westhuizen, De Beer, and Bekwa (2013) found Coloured employees scores on SoC that were significantly higher than Black and Indian racial groups but not significantly different from White racial group.

With regard to education and tenure, Billings and Hashem (2010) found high levels of education associated with a strong SoC. On contrary, Van der Westhuizen et al. (2013) found no significant relationship between SoC and academic achievement. Studies on SoC and marital status were consistent; with those employees being married scoring significantly higher than their single counterparts (Barnard, 2013; Volanen, Lahelma, Silventoinen, & Suominen, 2004). There was no mean difference found on tenure (Van Schalkwyk & Rothmann, 2008). Therefore, employees with different years of service do not differ on their levels of SoC.

Taking the discussion of SoC and demographical variables into account, the following hypothesis regarding Work-SoC and demographical variables was formulated:

**Hypothesis 3:** There is a difference in means on Work-SoC for different demographical groups in the sample group of employees in the retail motor organisation in Gauteng.
RESEARCH DESIGN

Research approach

The research was quantitative and descriptive in nature. A cross-sectional survey design in which data is collected at one-point in time was used to achieve the objectives of the research (Zikmund, 2003).

Research method

Research participants

The population included all employees with e-mail addresses in a retail motor organisation in Gauteng, South Africa (SA). The total population was 800 employees, who were all targeted for the study. The sampling strategy can thus be described as convenience sampling. A sample of 326 respondents completed the questionnaires. A biographical questionnaire was administered to obtain information concerning the characteristics of the participants and to use the data to compare means. Table 1 provides the descriptive statistics for the participants.

TABLE 1

Characteristics of participants in the sample (N=326)

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Percentage</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>52.1</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>47.9</td>
<td>156</td>
</tr>
<tr>
<td>Racial group</td>
<td>Black</td>
<td>38.3</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>35.6</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>11.3</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>14.1</td>
<td>46</td>
</tr>
<tr>
<td>Item</td>
<td>Category</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>27.9</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>42</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>Living with a partner</td>
<td>15</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>5.8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Separated/Divorced</td>
<td>9.2</td>
<td>30</td>
</tr>
<tr>
<td>Qualification</td>
<td>Senior certificates</td>
<td>20.2</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>18.7</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s degree</td>
<td>14.7</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Honours degree</td>
<td>18.7</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Masters and Doctorate</td>
<td>16.3</td>
<td>53</td>
</tr>
</tbody>
</table>

The sample group consisted of males (52.1%) and females (47.9%). The racial group’s distribution included Black (38.3%), White (35.6%), Coloured (14.3%), Indian (11.3%), as well as other racial groups (0.6%). Most of the participants were married (42.0%), while the other participants were single (27.9%), living with a life partner (15%), separated/divorced (9.2%) and widowed (5.8%). Qualifications included Senior certificate (20.2%), Diploma (18.7%), Honours degree (18.7%), Master’s and Doctorate degrees (16.3%), as well as a Bachelor’s degree (14.7%).

The language distribution was English (39.9%) and Afrikaans (24.5%). The other nine official languages were grouped into Nguni and African because there were a small number of participants per language. African languages were (19.3%) which comprised of Sepedi, Sesotho, Tsonga, Tswana and Venda. Nguni languages were (11.3%) which comprised of Ndebele, Xhosa, Zulu and Swati. Participants were required to provide their age and the ages ranged between 20 and 65. Participants were also required to state their tenure in the organisation and the tenure ranged between 6 months to 35 years.
Measuring instruments

Work-related sense of coherence scale

The Work-related sense of coherence (Work-SoC) scale was developed by Vogt, Jenny & Bauer (2013). The instrument consists of the three dimensions of Work-SoC, namely comprehensibility, manageability and meaningfulness. The Work-SoC instrument is a self-reporting questionnaire made up of nine items which participants have to answer. The items are set up using seven-point Likert scale, which are all formulated in the negative (Vogt et al., 2013). Therefore, the items had to be reverse scored.

The scale has a Cronbach’s alpha coefficient of 0.83 and the reliability was determined using diverse economic sectors and covered a wide range of occupations (Vogt et al., 2013). The factorial invariance and construct validity of the Work-SoC indicated that the scale functions equally well across different groups and the factor structure is invariant across time (Vogt et al., 2013). No study has so far been conducted with a South African sample to determine the reliability and the validity of the scale in a South African context. Therefore, Van der Westhuizen and Ramasodi (In press) established validity and reliability of Work-SoC in South African context.

Utrecht Work Engagement Scale (UWES-9)

The UWES is a work engagement self-report questionnaire developed by Schaufeli, Bakker, and Salanova (2006). The UWES-9 is a short version of UWES-17 and its psychometric properties were assessed in a cross national study which included samples from South-Africa. In all countries included in the study, except France, the nine item UWES correlated well, (between 0.85 and 0.90) with the original UWES-17 (Schaufeli et al., 2006). A three factor model of vigour, dedication and absorption were found with the total scale. The factorial and construct validity of the UWES-9 showed insignificant differences across countries. Schaufeli et al. (2006) recommended that the total scale score should be used as an indicator of work engagement because of the significant correlation between the three dimensions.


Research procedure

Permission from the organisation to conduct the research was granted by the Finance director. Ethical clearance was granted by the university overseeing the research. An electronic link to a web-based survey and consent form were distributed via e-mail. The consent form provided information on the intent and background of the survey. The consent form also reassured participants of anonymity and confidentiality of the responses, as well as the voluntary nature of the research. Participants were also informed that they can have access to the results on request. Since the organisation gave permission to conduct the survey in electronic format, only participants with access to e-mail received the survey.

STATISTICAL ANALYSIS

Statistical analysis was done with the use of SPSS version 23 (Gerber & Hall, 2013). Descriptive statistics (means, standard deviation, frequencies, skewness and kurtosis) were used to describe the variables, to determine the distribution of the data and the degrees to which the variables existed in the sample (Zikmund, 2003). To assess the reliability of the measuring instruments, Cronbach’s alpha coefficients were calculated.

Pearson’s correlation coefficient was used to determine the correlation between the variables with the statistical significance set at 95% confidence interval (p≤0.05). Practical significant cut-off points were from \( r=30 \) medium effect and \( r=50 \) large effect (Cohen, 1992). A linear regression was also conducted to determine the degree to which Work-SoC can predict the level of work engagement for the sample group in the motor retail organisation in Gauteng. Correlation, independent t-test and ANOVA were calculated for the comparison of groups on the basis of gender, age, racial group, marital status, highest education qualification, home language and tenure. The Games-Howell procedure was used to conduct the post-hoc analyses.
RESULTS

Descriptive statistics and the relationship between Work-SoC and work engagement

The descriptive statistics, alpha coefficients and Pearson correlation of the measuring instruments used for the target group are reported in Table 2. While the regression analysis where Work-SoC predicts work engagement is presented in Table 3.

TABLE 2
Descriptive statistics, alpha coefficients and Pearson correlations of the measuring instruments

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Std.</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Comprehensibility</td>
<td>19.85</td>
<td>4.97</td>
<td>0.87</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Manageability</td>
<td>10.26</td>
<td>2.48</td>
<td>0.78</td>
<td>0.74**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Meaningfulness</td>
<td>16.77</td>
<td>3.80</td>
<td>0.89</td>
<td>0.74** 0.79**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Work-related sense of coherence</td>
<td>46.88</td>
<td>10.32</td>
<td>0.93</td>
<td>0.93** 0.89** 0.92**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Vigour</td>
<td>11.44</td>
<td>4.19</td>
<td>0.92</td>
<td>0.52** 0.60** 0.63** 0.62**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Dedication</td>
<td>12.94</td>
<td>4.21</td>
<td>0.91</td>
<td>0.49* 0.56** 0.65** 0.61** 0.85**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7. Absorption</td>
<td>11.15</td>
<td>4.25</td>
<td>0.88</td>
<td>0.57** 0.49* 0.52** 0.58** 0.77** 0.76**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>8. Work engagement</td>
<td>35.53</td>
<td>11.75</td>
<td>0.95</td>
<td>0.57** 0.59** 0.64** 0.65** 0.94** 0.94** 0.91**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

All correlations were statistically significant at the 0.01 level (2-tailed)
+Correlation is of practical significance, medium effect ($r =>0.3$)
++Correlation is of practical significance, large effect ($r =>0.5$)

Table 2 indicates that the Cronbach’s alpha coefficients of the scales and sub-scales were considered acceptable and exceeded the guideline of >0.70 (Nunally & Bernstein, 1994). Table 2 also shows that there is a strong positive relationship between comprehensibility, manageability, meaningfulness and Work-SoC on the one hand and vigour, dedication, absorption and the work engagement construct on the other hand.

All correlations displayed a practical significance of large effect except for between dedication and comprehensibility, as well as absorption and manageability which is of medium effect. Based on the strong correlations between the sub-dimensions of Work-SoC and the sub-
dimensions of work engagement respectively, only the total scores were used in subsequent analyses.

A regression analysis was computed to determine whether Work-SoC can predict work engagement as presented in Table 3.

**TABLE 3**

*Regression analysis with work-related sense of coherence as independent variable and work engagement as dependent variable*

<table>
<thead>
<tr>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficient</th>
<th>T</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td>0.349</td>
<td>0.727</td>
<td>237.760</td>
<td>0.651</td>
<td>0.423</td>
<td>0.421</td>
</tr>
<tr>
<td>Work-SoC</td>
<td></td>
<td>15.419</td>
<td>0.00*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05

Table 3 indicates that Work-SoC predicts 42.1% of the variance in work engagement (*F*=237.760, *p*<0.05, Δ*R²*=0.421).
Work-related sense of coherence and demographical differences

The second primary objective of the study was to determine mean differences on Work-SoC for various demographical groups. The relationship between Work-SoC, age and tenure are presented in Table 4.

**TABLE 4**
*The relationship between work-related sense of coherence, age and tenure*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Work-SoC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Age</td>
<td>0.34**</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Tenure</td>
<td>0.29*</td>
<td>0.73+++</td>
</tr>
</tbody>
</table>

*Correlation is statistically significant at 0.01 levels (2-tailed).

+Correlation is of practical significance, medium effect ($r => 0.3$)

++Correlation is of practical significance, large effect ($r => 0.5$)

Table 4 shows that only age has a positive relationship (a practical significance of medium effect) with Work-SoC. Tenure only correlated statistically significantly with Work-SoC. Age had a positive relationship (a practical significance of large effect) with tenure.

Table 5 is a presentation of mean differences between male and female gender groups on Work-SoC.
TABLE 5
*T-test: independent comparison of the mean difference scores of the gender groups on work-related sense of coherence*

<table>
<thead>
<tr>
<th>GENDER</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>170</td>
<td>46.85</td>
<td>10.13</td>
<td>0.78</td>
</tr>
<tr>
<td>Female</td>
<td>156</td>
<td>46.94</td>
<td>10.56</td>
<td>0.85</td>
</tr>
</tbody>
</table>

Levene’s Test for Equality of Variances  
t-test for Equality of Means

<table>
<thead>
<tr>
<th>F-ratio</th>
<th>P(F)</th>
<th>t-value</th>
<th>DF</th>
<th>p(t)</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>0.732</td>
<td>0.393</td>
<td>-0.078</td>
<td>324</td>
<td>0.938</td>
</tr>
</tbody>
</table>

The results in Table 5 indicate that there is no statistically significant difference in respect of the mean difference scores of gender and Work-SoC.

Tables 6 to 9 are a presentation of the analysis of variance, with Work-SoC being a dependent variable and the demographical variables of qualification, marital status, racial and language groups as independent variables.
Table 6 reports that there is a statistically significant difference in respect of the mean difference scores of the educational qualification levels of the sample. Post-hoc analysis revealed that employees with a Senior certificate and Diploma scored significantly lower on Work-SoC in comparison to employees with a Bachelors, Honours, Masters and Doctorate degrees. Employees with a Bachelor’s degree also scored significantly higher in their Work-SoC in comparison to those with a Senior certificate and Diploma, but significantly lower than employees with Honours, Master’s and Doctorate degrees.
Table 7 shows a statistically significant difference in respect of the mean difference scores of the racial groups. Post-hoc analyses revealed that Coloured employees scored significantly lower on their Work-SoC in comparison to the Work-SoC of the White racial group. There were no other significant differences between racial groups.
### TABLE 8

**Anova: comparison of the mean difference scores for the marital status groups**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>91</td>
<td>42.19</td>
<td>10.80</td>
</tr>
<tr>
<td>Married</td>
<td>137</td>
<td>49.39</td>
<td>9.67</td>
</tr>
<tr>
<td>Living with a life partner</td>
<td>49</td>
<td>48.65</td>
<td>8.31</td>
</tr>
<tr>
<td>Widowed</td>
<td>19</td>
<td>48.73</td>
<td>9.08</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>30</td>
<td>45.70</td>
<td>10.97</td>
</tr>
<tr>
<td>Total</td>
<td>326</td>
<td>46.89</td>
<td>10.32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>DF</th>
<th>Sum of Square</th>
<th>Mean sum of squares</th>
<th>F- ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>4</td>
<td>3126.618</td>
<td>781.654</td>
<td>7.968</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>321</td>
<td>31491.07</td>
<td>98.104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>325</td>
<td>34618.025</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8 shows that there is a statistically significant difference in respect of the mean difference scores for the marital status groups of the sample. Post-hoc analyses revealed that employees who are single scored significantly lower on their Work-SoC when compared to employees who are married or living with a life partner. No other significant differences between any of the other marital status groups could be found.
Table 9 shows that there is a statistically significant difference in respect of the mean difference scores of language groups. Post-hoc analyses revealed that employees within the African language group score significantly lower on their Work-SoC in comparison to employees in the English language group. There are no other significant differences for all other language groups.

DISCUSSION

The primary aim of this research was to determine the relationship between Work-SoC and work engagement, if Work-SoC can predict work engagement and to determine the difference in means of the Work-SoC for different demographical groups.

The instruments used were found to be reliable when compared to the guideline of $\alpha > 0.70$ (Nunally & Bernstein, 1994). The UWES had a Cronbach’s alpha coefficient of 0.95 and its dimensions yielded the following reliability scores; vigour (0.92), dedication (0.91) and absorption (0.88) (Van der Westhuizen & Ramasodi, In press). This was consistent with the findings by Bell and Barkhuizen (2011) who reported Cronbach’s alpha coefficients ranging between 0.78 and 0.92. Rothmann, Steyn, and Mostert (2005) reported a total UWES Cronbach’s alpha coefficient of 0.93.
The Cronbach’s alpha coefficient for the Work-SoC questionnaire was 0.93, and the dimensions Cronbach’s alpha coefficients were comprehensibility (0.87), manageability (0.78) and meaningfulness (0.89) respectively (Van der Westhuizen & Ramasodi, In press). Vogt et al. (2013) reported a total Work-SoC Cronbach’s alpha coefficient of 0.83. Zweber (2014) reported Cronbach’s alpha coefficient for the dimensions of Work-SoC as follows; comprehensibility (0.74), manageability (0.53) and meaningfulness (0.82). Vogt et al. (2013) recommended that the internal consistency of the Work-SoC questionnaire should be in line with other findings where SoC was studied in the work context. The findings in this study suggested that the Work-SoC questionnaire is also reliable for a South African sample.

The results displayed that a positive correlation between Work-SoC and work engagement exists. This corroborates the finding of Vogt et al. (2013) who also found a strong positive relationship between Work-SoC and work engagement. In their study, Work-SoC was found to have a significantly stronger mediating effect in the process that leads from job resources to work engagement than in the process leading from job demands to burnout (Vogt et al., 2013). Vogt (2014) study further confirmed the strong positive mediating effect of Work-SoC between job resources and work engagement. The findings of the current study were also in line with previous findings on the relationship between general SoC and work engagement (Bezuidenhout & Cilliers, 2011; Van der Colff, & Rothmann, 2009).

Hypothesis 1, which aimed to prove that a significant positive relationship exists between Work-SoC and work engagement can thus be confirmed.

The results further showed that a strong Work-SoC contributes to a high level of work engagement in this sample with Work-SoC predicting 42.1% of the work engagement of employees (Vogt et al., 2013). When employees perceive that resources at their disposal are adequate to meet the demands posed by stimuli in the work context they are able to engage in their work (Bezuidenhout & Cilliers, 2010). Work-SoC leads to a positive perception of job resources and therefore positively influences the relationship between job resources and work engagement.

Bakker and Demerouti (2008) believe that personal resources such as Work-SoC facilitates work engagement and allow employees that are engaged to effectively adapt to the changing environment. This means when employees find the work environment comprehensible,
manageable and meaningful they are more likely to experience higher levels work engagement as well (Vogt et al., 2013). Therefore, Work-SoC is believed to serve as an indicator of an individual’s perception of the health promoting quality of the work situation which then influences their level of work engagement (Vogt et al., 2013).

Hypothesis 2, which aimed to prove Work-SoC can predict work engagement, can thus be confirmed.

The demographical mean differences were computed for age and tenure, gender, level of qualification, racial, marital status and language groups. Age showed a practical significant relationship with Work-SoC (of moderate effect) while tenure was statistically significant but not practically significantly related to Work-SoC.

When comparing the results of age and Work-SoC to the results on age and SoC, there are studies that concur with the current results while others contradict the current findings. Feldt et al. (2004) found no relationship between SoC and age and Barnard (2013) found age to have no significant prediction effect on SoC. However, Lindström and Eriksson (2005) found SoC to be increasing with age over time.

The results on tenure and Work-SoC are interesting because as argued by Bauer and Jenny (2007) Work-SoC is influenced by major changes in the work life. Therefore, the relationship between tenure and Work-SoC is expected to be practically significant. In this study, this was not found to hold. These findings are however in line with that of Van Schalkwyk and Rothmann (2008) which found no difference between SoC levels of different tenure groups.

The Work-SoC scores were found to be invariant for male and female gender groups. Van der Westhuizen et al. (2013) also found no statistical difference for gender groups on SoC. Barnard (2013) also found there was no statistical significant difference on SoC for gender groups. It can be concluded that gender did not explain differences in Work-SoC for the current sample.

Results from the ANOVA on qualification groups revealed that employees with lower qualifications (Senior certificate, Diploma and Bachelor’s degree) score significantly lower on their Work-SoC in comparison to the Work-SoC of employees with higher qualifications (Honours, Master’s and Doctorate degrees). Billings and Hashem (2010) reported a practically
significant difference on qualifications, where SoC showed an increase as qualification increases. Van Schalkwyk and Rothmann (2008) also found a practically significant difference with regard to SoC and qualification level where SoC again increased with qualification levels. The findings of the current study seem to have shown that as with general SoC, Work-SoC seems to increase as qualification levels of employees increase.

With regard to racial groups, post-hoc analysis showed that the Work-SoC of Coloured employees is significantly lower than for the White racial group. This contradicted the previous findings of the relationship between general SoC and racial groups. Van der Westhuizen et al. (2013) found no significant difference between Coloured and White population groups on SoC. Barnard’s (2013) study also indicated that White and Mixed race employees (in a higher income category) had a higher risk of having a lower SoC than their Black and Indian counterparts. Gropp, Geldenhuys, and Visser (2007) found a significantly higher SoC for White respondents in comparison to Black respondents. It thus seems that the relationship between Work-SoC and racial groups warrant further research.

The current study findings revealed that single employees tend to display lower levels of Work-SoC in comparison with employees who are married or living with a life partner. Various other studies also found marital status to have a positive relationship with general SoC. Barnard (2013) found that sharing a double income and being married act as possible GRRs for strengthening SoC. Singles tended to have a lower SoC especially when they were also in a lower income level (Barnard, 2013). Volanen et al. (2004) found a significantly higher SoC for married people than for single people. It thus seems that having social support at home may be related to one’s Work-SoC.

In the current study, employees with English as their home language displayed a significantly higher Work-SoC than those with an African language as a home language. Van Schalkwyk and Rothmann (2008) also found a lower SoC for African-speaking than for Afrikaans and English speaking racial groups. Grayson’s (2007) study with students in an international university again found a significantly higher SoC for students with English as their home language than those speaking other languages.

The findings partially supported the third hypothesis because there was no statistical significant difference on Work-SoC for tenure and gender groups.
The practical implication of the findings is as follows: Work-SoC plays a major role in the level of employee work engagement. The positive relationship reflects that it is important for employees to have adequate resources that strengthen their Work-SoC to be able to experience and commit to a work environment. When employees consistently find the work situation clear and understandable, they will apply the resources available and begin to view coping as desirable. It is important to recognise that employees may differ in their strength of Work-SoC, depending on various demographical variables.

**LIMITATIONS AND RECOMMENDATIONS**

The empirical limitations of the study included the use of a small availability sample in Gauteng, which made it difficult to generalise the findings to other provinces in which the organisation operates. The cross-sectional design does not provide an indication of causality. The use of self-report measures could impact the common variance of the constructs. There is limited research on Work-SoC to which the findings on Work-SoC can be compared. Comparing the Work-SoC results to the results of the application of SoC in the work context, may not be a reliable indicator even though Bauer and Jenny (2007) recommended that the comparison can be made. There is no study on Work-SoC in the South African context to which the current findings on Work-Soc could have been compared.

Recommendations for employers include providing job and organisational resources that can promote comprehensibility, manageability and meaningfulness (Work-SoC) of employees (Bauer, 2009). Employers can create a salutogenic work environment by creating structure and implementing work processes in a clear, understandable and consistent manner. This can ensure that employees are aware of and encouraged to use the adequate resources such as management and social support, wellness opportunities and feedback that are available in the organisation. Work-Soc can be optimised by providing opportunities for personal and educational growth and encouraging participation in strategic planning and decision making (Bauer & Jenny, 2007).

Employers should take demographical differences into account to identify those employees with strong and weak Work-SoC so that support initiatives to promote Work-SoC are focused mainly on those who require intervention. However, demographical groups with strong Work-SoC can also be encouraged to contribute to the development and creation of a salutogenic environment by being supportive to other groups with a weaker Work-SoC (Bauer, 2009).
Future research recommendations include: the use of a longitudinal study and a larger sample size, as well as the application of the JD-R model in studying Work-SoC as one of the personal resources. Demerouti and Bakker (2011) believe that there is a need to add other personal resources in the JD-R model. So far Work-SoC has not been included as a personal resource in the JD-R model in a South African study. A longitudinal study with a larger sample on the relationship between personal resources and work engagement will also shed light on the development of Work-SoC and causality of the relationship between Work-SoC and work engagement.
REFERENCES


CHAPTER 4: CONCLUSIONS, LIMITATIONS ND RECOMMENDATIONS

Chapter 4 was the conclusion of the research and provided an integrated interpretation of the research results. The chapter also provided discussions on limitations of the study, recommendations for the organisation and for future research.

4.1 CONCLUSION

The aim of the dissertation was to investigate the relationship between work-related sense of coherence (Work-SoC), work engagement and demographical differences on Work-SoC in a motor retail organisation in Gauteng.

4.1.1 Theoretical conclusions

The specific literature aims were to conceptualise each of the constructs, namely the work-related sense of coherence (Work-SoC) and work engagement, to investigate the relationship between the constructs, as well as the demographical mean differences of various groups on work-related sense of coherence. A literature review was done in order to achieve these aims. The research strategy was to focus primarily on the original literature to define the constructs and to review their origin, paradigmatic orientation and characteristics.

The seminal work was integrated with the contemporary literature to establish how the constructs manifest among the employees in the retail motor organisation in Gauteng. A theoretical relationship between the Work-SoC and work engagement was investigated. A theoretical investigation also included demographical differences on sense of coherence in the work context. The investigation on sense of coherence (SoC) in the work context was necessary since the Work-SoC is a derived construct and its results should coincide with the findings on the study of SoC in the work context. There is also a paucity of research on Work-SoC with regard to biographical differences.

Work-SoC is defined as “the perceived comprehensibility, manageability and meaningfulness of an individual’s current work situation (Vogt et al, 2013, p. 2). Comprehensibility refers to the employee’s perception of the work situation as making cognitive sense (Cilliers & Ngokha, 2006). Manageability describes the degree to which an employee perceives that the available resources are adequate to cope with the stimuli deriving from the work environment (Vogt et al.,
Manageability is the behavioural aspect of Work-SoC (Lindström & Eriksson, 2005). Meaningfulness refers to the individual’s ability to make emotional sense of the stimuli deriving from the work environment and is the motivational dimension of Work-SoC (Lindström & Eriksson, 2005).

Work engagement is defined as “a persistent positive, pervasive affective-cognitive and fulfilling work related state that comprises of the components of vigour or energy which refers to having resilience, high levels of energy, a willingness to invest and persistence in one’s work, dedication or involvement which reflects enjoyment, challenge, eagerness and sense of significance found by individuals in their work and absorption which refers to a strong level of involvement in one’s work” (Schaufeli et al., 2002). Work engagement is persistent and it is not focused on any particular event, object or behaviour (Bezuidenhout & Cilliers, 2010).

The literature revealed a strong support for the positive relationship between SoC and work engagement (Bezuidenhout & Cilliers, 2010). A strong SoC was found to be a predictor of high levels of work engagement (Van der Colff & Rothmann, 2009). Vogt et al. (2013) also found a strong positive relationship between the Work-SoC and work engagement. Work-SoC showed a significant mediating effect on the positive motivational pathway leading from job resources to work engagement (Vogt, 2014; Vogt et al., 2013). Therefore, findings in the literature on the relationship between SoC and work engagement and on SoC as a predictor of work engagement coincide with the findings on the relationship between Work-SoC and work engagement.

With regard to mean differences on SoC for various demographical groups, there seems to be inconsistency in the findings. Gender mean differences were reported in some studies (Bezuidenhout & Cilliers, 2010; Sairenchi et al., 2011). Contrasting results of no significant difference for gender groups on SoC in other studies were found (Barnard, 2013; Lindström & Eriksson, 2005). Research findings on age also contradicted each other. Lindström and Eriksson (2005) found SoC to increase with age and stabilise in adulthood for people who initially had a strong SoC. Studies by Barnard (2013) and Feldt et al. (2004) found no connection between SoC and age and did not substantiate other studies on the general upward SoC trend with age.
With regard to the racial groups, statistically significant differences were reported (Barnard, 2013; Gropp et al., 2007; Van der Westhuizen et al., 2013). Studies on SoC and education reported contradicting findings. High levels of education were associated with a strong SoC (Billings & Hashem, 2010; Van Schalkwyk & Rothmann, 2008). Other studies reported no significant difference in the relationship between education and SoC (Grayson, 2007; Van der Westhuizen et al., 2013). With regard to tenure, Bauer and Jenny (2007) believe that Work-SoC is influenced by significant changes in the work life. Therefore, it could be expected that tenure may explain mean differences. However, Van Schalkwyk and Rothmann (2008) found no differences between groups on SoC for tenure.

Consistent findings with regard to language groups were found. People with English as their home language were found to score higher on SoC than other home languages (i.e. African) (Grayson, 2007; Van Schalkwyk & Rothmann, 2008). Consistent findings also abound on mean differences on SoC for marital status. Employees who are single tend to score lower on SoC than those who are married (Barnard, 2013; Volanen et al., 2004).

4.1.2 Empirical conclusions

The specific aims of the empirical study were to determine the relationship between Work-SoC and work engagement, the degree to which Work-SoC predicts work engagement and the mean differences for various demographical groups on Work-SoC.

A practically significant positive correlation was found between Work-SoC and work engagement. Work-SoC was also found to predict work engagement. The findings are in line with the research by Vogt et al. (2013) on Work-SoC and work engagement in the validation study of the Work-SoC instrument. The findings concur with the findings of several studies (Bakker & Demerouti, 2008; Bezuidenhout & Cilliers, 2010; Van der Colff & Rothmann, 2009) on the relationship between SoC and work engagement. As suggested by Bauer and Jenny (2007), the Work-SoC research results are expected to corroborate with the study findings on SoC.

The hypothesis on mean differences for various demographical groups was partially supported because some demographical variables showed no statistically significant mean differences. Tenure and gender did not reflect significant differences on Work-SoC. The findings on tenure were in line with that of Van Schalkwyk and Rothmann (2008) which also did not find any
differences on SoC levels for different tenure groups. Findings on gender also corroborated with the studies on SoC by Barnard (2013) and Van der Westhuizen at al. (2013) which found no differences on SoC for gender groups.

Age showed a practical significant relationship with Work-SoC. The findings substantiated the research findings by Lindström and Eriksson (2005) that SoC tend to increase with age. A statistically significant difference was found for qualification groups where employees with higher qualifications scoring higher on Work-SoC. Billing and Hashem (2010) and Van Schalkwyk and Rothmann (2008) also found statistically significant differences on qualification where SoC increased with the level of education.

With regard to population groups a statistically significant difference was reflected between Coloured and White racial groups. This finding on the difference between Coloured and White racial groups were not supported by any of the previous studies regarding racial group differences for SoC (Barnard, 2013; Gropp et al., 2007; Van der Westhuizen et al., 2013).

A significant difference was revealed on marital status, with single employees scoring significantly lower than those married or living with a partner. The findings concurred with the studies by Barnard (2013) and Volanen et al. (2004) in which it was found that single employees score significantly lower than those who are married. Being married seems to act as a possible GRR (Barnard, 2013). A statistically significant difference was found between English and African language groups with the English language group showing a significantly higher Work-SoC. Van Schalkwyk and Rothmann (2008) also reported similar results where the SoC for the African-speaking group showed a significantly lower SoC than the English language group. Therefore, findings on the following demographical variables were consistent with some of the previous research studies; tenure, gender, qualifications, marital status and language.
4.2 LIMITATIONS OF THE STUDY

There are a limited number of research studies on the construct of Work-SoC in the literature. There is a paucity of research on the relationship between Work-SoC and work engagement and on the demographical differences on Work-SoC. No previous research could be found where the relationship between Work-SoC and work engagement and the demographical differences on Work-SoC were studied in a South African context.

The use of a cross-sectional research design does not allow an explanation of causality between the variables. The obtained sample was also too small to enable generalisation of the research findings to other similar organisations and even other outlets of the same organisation.

The use of self-report measures may lead to method variance. The population groups were not evenly represented with White and Black groups being the dominant groups as compared to Indian and Coloureds.

There are no norms that can be used to compare the Work-SoC mean scores. Therefore, the demographical findings were only compared to the previous general SoC findings. No studies were found in South Africa on the relationship between Work-SoC and its predictability of work engagement to which the findings can be compared. Results were compared to the study conducted abroad which confirmed that there is a relationship and that the Work-SoC does predict work engagement (Vogt et al., 2013).

4.3 RECOMMENDATIONS

Based on these findings, it seems that the organisation may benefit from focusing on creating a salutogenic work environment. A salutogenic work environment is that work environment in which employees find their work situation comprehensible, manageable and meaningful (Vogt et al., 2013). A work environment that promotes Work-SoC can be achieved by providing job and organisational resources in a clear, ordered and understandable manner, ensuring that employees are aware and encouraged to utilise available resources such as management and social support, and feedback, and assist employees to find meaning through engaging with them in strategic planning and decision making processes (Bauer & Jenny, 2007).
Focusing on fostering Work-SoC may increase the organisation’s likelihood of experiencing employees who are engaged in their work (Vogt et al., 2013). When employees are engaged in their work, they will find the stimuli deriving from the work environment worthy of commitment (Bauer, 2009). Employees experiencing work engagement bring high levels of energy, mental resilience, enthusiasm, a sense of significance and are fully concentrated and happily engrossed in their work (Bakker & Demerouti, 2008; Schaufeli, 2013). Work engagement was found to influence positive organisational outcomes such as job performance and organisational commitment (Geldenhuys et al., 2014).

The organisation should focus on both employees that display a strong, as well as a weak Work-SoC. Demographical groups with a strong Work-SoC can be encouraged to promote the creation of a salutogenic work environment by providing social support to those groups with a weaker Work-SoC. Since Work-SoC has been found to have a significant positive relationship with work engagement, the organisation may experience positive emotional contagion among team members when employees support each other (Bakker & Demerouti, 2008; Vogt et al., 2013). Antonovsky (1987) asserted that the environment can influence the strength of a person’s SoC. Therefore, a work environment that is health promoting can have a positive influence on the Work-SoC of employees (Vogt et al., 2013).

Future research on the relationship between Work-SoC and work engagement and demographical differences on Work-SoC can use a longitudinal study with a larger sample size. The Job-Demand-Resources model (JD-R) can be used in studying Work-SoC as a personal resource. Demerouti and Bakker (2011) believe that there is a need to add other personal resources to the JD-R model and so far Work-SoC has only been included in a limited number of studies (Vogt et al., 2013). A longitudinal study with a larger sample on the relationship between personal resources and work engagement will also shed light on the development of Work-SoC and causality of the relationship between Work-SoC and work engagement.

4.4 CHAPTER SUMMARY

A brief summary of the conclusions from the literature review and empirical study were presented in Chapter 4. The research limitations were reported and recommendations were made based on the findings.
REFERENCES


