The Impact of Resilience, Perceived Organisational Support and Employee Engagement in a Competitive Sales Environment

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

7 November 2016

ABSTRACT

Sales are regarded as the lifeblood of any industry, with sales positions often viewed as the occupation contributing the most to organisational success. A contributing factor to this success is employee engagement, which has been identified as a significant driver of sales performance. The topography of the sales landscape is dynamic and competitive and the stressful nature of the job often leads to emotional exhaustion and a high turnover rate. There is thus a likelihood of low levels of engagement in sales employees. As a personal resource, a high level of resilience is needed for sales people to be successful and thrive. Sales staff often work alone in different geographical areas and they are more likely to be successful if they feel supported by their organisation. The aim of this study was to explore and quantify the relationship between resilience, perceived organisational support and employee engagement in a competitive sales environment. A broader understanding of resilience and perceived organisational support may provide sales organisations with a lever that can be used to create an environment where sales employees can progress in their level of engagement.

Quantitative research methods were used to test the predetermined hypotheses regarding the relationship between variables. Data was collected from 125 sales representatives within a specific pharmaceutical organisation. Surveys were used to measure respondents' perceptions regarding employee engagement, resilience and organisational support within a cross-sectional timeframe. Factor analysis, multiple regression and analysis of variance were applied to determine whether a predictive relationship of significance exists among the variables. Factor validity and reliability were determined for all measurement scales.

The study provided empirical evidence of a predictive relationship between perceived organisational support and employee engagement. Sales organisations' interventions to improve employee engagement should thus focus on perceived organisational support. This study contributes towards sales literature by including positive psychology and organisational support in a model of employee engagement.

Keywords

Employee engagement, resilience, perceived organisational support, sales environment

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

1.1   Introduction

Sales are the lifeblood of any industry. Lamb, McDaniel and Hair (2009) argue that there is no job more important for organisational success than a sales job (Medhurst & Albrecht, 2016). Sales employees are often the most important channel through which companies execute their strategies and generate revenue (Morelli & Braganza, 2012). The topography of the current sales landscape is dynamic, evolving and uncertain with sales tasks usually conducted in a very competitive environment (Rajan & Srinivasan, 2015) with a stressful nature that can lead to emotional exhaustion (Bande, Fernández-Ferrín, Varela, & Jaramillo, 2015). Emotional exhaustion can be viewed as the opposite of engagement (Saks & Gruman, 2014). Employee engagement has a direct influence on salesperson performance (Albrecht & Medhurst, 2011; Franke, Rapp, & Andzulis, 2013; Rapp, Bachrach, Panagopoulos, & Ogilvie, 2014) and is associated with improved customer satisfaction, increased selling intentions and a more favourable attitude towards products and resources (Fu, 2009; Zablah et al., 2012).

According to Albrecht, Bakker, Gruman, Macey, and Saks (2015) the direct influence of employee engagement on sales performance can assist organisations to achieve a competitive advantage. Employee engagement is highly industry and organisation specific (Gupta & Sharma, 2016) and thus an understanding of the contextual drivers of employee engagement is crucial in achieving this competitive advantage. This raises questions concerning which contextual drivers of employee engagement are of significance in a sales environment.

Engagement literature highlights various job resources and personal resources (Albrecht et al., 2015) that predict employee engagement. Job and personal resources are of particular importance in sales environments characterised by increased customer expectations and complex selling solutions (Evans, Mcfarland, Dietz, & Jaramillo, 2012). Sales employees are more likely to succeed if they possess personal resources such as resilience (Friend, Johnson, Luthans, & Sohi, 2016; Verbeke, Dietz, & Verwaal, 2011) and job resources in the form of organisational support (Adamson, Dixon, & Toman, 2013). To maintain a high level

of competitiveness it is imperative that sales organisations understand the potential relationship between resilience, perceived organisational support and an engaged sales force. The aim of this study is to explore these relationships in the context of pharmaceutical sales.

1.2   Research Motivation

Organisations with high levels of employee engagement demonstrate 2.5 times higher revenue growth than those with low engagement scores (Permana et al., 2015; Werhane & Royal, 2009). Although employee engagement has been identified as a significant driver of individual sales revenue and financial performance in modern sales organisations (Bakker & Demerouti, 2014; Verbeke et al., 2011), limited research has focused on the unique context of employee engagement as a construct in professional sales (Medhurst & Albrecht, 2016). Existing sales literature on employee engagement focuses mainly on drivers such as role conflict, role ambiguity, adaptive selling behaviour (Miao & Evans, 2013), trust, psychological contract and interactional justice (Agarwal, 2014). A study focussing on various other drivers of employee engagement has the potential to make a rich contribution towards sales literature.

Futhermore, employee engagement appears to be a critical factor during volatile economic conditions. Engagement ensures that the employees invest extraordinary effort in their behaviour towards the organisation, and is a critical factor in delivering the desired business result needed during recession and growth stagnation (Gupta & Sharma, 2016). Today's business environment encompasses immense challenges. A World Bank report on the current economic outlook globally and in emerging markets such as South Africa, indicates decelerating growth and financial performance (World Bank Group, 2016). During lean economic periods potential low sales compensation can erode organisational commitment and engagement in salespeople (Amyx & Alford, 2005; Johnson et al., 2016). It would therefore be prudent to accentuate the focus on employee engagement during the current economic period of decelerating growth and financial performance.

The impact of employee engagement in a sales environment is also noteworthy due to its relationship to sales force turnover. Sales positions are subject to high turnover rate and are often challenging positions to fill (Bande et al., 2015). A high level of employee engagement

is associated with 37% lower absenteeism (Harter, Schmidt, Agrawal, & Plowman, 2013) and has the ability to reduce the negative impact of sales force turnover on the business results of sales organisations (Bande et al., 2015).

Selling is emotionally and mentally exhausting with constant strain and job-related stress (Loveland et al., 2015). Salespeople need to have a high level of resilience to cope with challenging situations and promote job satisfaction (Medhurst & Albrecht, 2011). Resilience is one of of the four positive psychological states of psychological capital (Luthans, Vogelgesang, & Lester, 2006) and has been identified as a positive contributor to employee engagement (Medhurst & Albrecht, 2011). Resilience appears to be closely linked to vigour, one of the dimensions of employee engagement (Schaufeli, Salanova, & González-Romá, 2002). Vigour denotes energy and mental resilience while working. Various studies indicate that there is a relationship between resilience and engagement (Bakker, Albrecht, & Leiter, 2011; Bande et al., 2015; King, Newman, & Luthans, 2015; Mache et al., 2014; Shin, Taylor, & Seo, 2012). This does not mean that dimensions of psychological capital such as optimism are not important. However, management researcher Jim Collins indicated that while optimism is a powerful tool for turning around a demoralised sales force, resilience is far more important for immense challenges (Coutu, 2002). Despite the importance of resilience in a sales environment, and the fact that resilience is considered pliable and open to development (King et al., 2015), limited research has focused on resilience in salespeople (Loveland et al. 2015).

If organisations want engaged and productive employees they must demonstrate that they are committed to creating a supportive environment (Shantz, Alfes, & Latham, 2014). Empirical research indicates that perceived organisational support is positively associated with employee engagement (Kurtessis et al., 2015; Mathumbu & Dodd, 2013; Shantz et al., 2014; Trinchero, Brunetto, & Borgonovi, 2013). Salespeople often spend the majority of their work life outside the boundaries of the organisation (Bande et al., 2015). It can therefore be argued that the level of engagement and ability to cope in a stressful environment required are even more dependent on organisational support, or sales employees' perception of organisational support.

Researchers have not focused on examining employee engagement, resilience and perceived organisational support in a sales environment, yet all three constructs appear to

be critical for organisational performance and the ability to thrive in a demanding work environment. To the best knowledge of the researcher no attention has been given towards examining the relationship between these constructs within a sales environment.

1.3   Research Purpose

Empirical research builds a clear business case for the importance of employee engagement (Bande et al., 2015; Gupta & Sharma, 2016; Permana et al., 2015), general low reported levels of engagement (Albrecht et al., 2015), and the high cost related to a disengaged workforce (Rayton & Yalabik, 2014). From a business perspective, sales positions are subject to a high turnover rate and are often difficult positions to fill. Yet the sales force is a critical driver of revenue, business success and gaining a competitive advantage (Morelli & Braganza, 2012). It is thus important that a sales organisation develops a greater understanding of the level of engagement as well as the drivers of engagement among the salesforce.

An improved understanding of resilience can make a complementary addition to human resource management practices in terms of training and employee development. Exploring salespeople's perceptions of organisation support can provide valuable insight into the employee-organisation relationship. Management can use this insight to create a more conducive environment to improve employee engagement and ability to cope in a stressful profession as well as to mitigate staff turnover. Studying the relationship between employee engagement, resilience and perceived organisational support is of interest to the academic fields of positive psychology, positive organisational behaviour and organisational support theory.

1.4   Research Aims and Objectives of the Study

The aim of this study is to determine the relationship between employee engagement (dependent variable) and resilience and perceived organisational support (independent variables).

The main objectives of the research are as follows:

- Objective 1: To determine the relationship between employee engagement and resilience in a sales environment.
- Objective 2: To determine the relationship between employee engagement and perceived organisational support in a sales environment.

1.5   Research Scope

The research scope falls within the boundaries of a large South African JSE listed pharmaceutical company. Quantitative data on employee engagement, resilience and perceived organisational support were gathered from sales representatives within three divisions of the organisation. Research data was based on the perceptions of respondents and their interpretation of the questions. Data was collected via self-administered questionnaires.

1.6   Structure of Research Report

The research report consists of seven chapters. Chapter one provides an overview of the motivation and purpose of the research study. The second chapter provides an understanding of the variables that were tested based on different theoretical views of the constructs. The third chapter formulates the research hypothesis. Chapter four describes the research methodology used to research the proposed hypothesis. The fifth chapter provides an in-depth analysis of the results, followed by a discussion of the results in chapter six. Finally, chapter seven provides an overview of the main findings, limitations of the research, recommendations for South African companies in the pharmaceutical industy, and recommendations for future research and managerial implications.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review provides a critical interpretation of published literature related to the research constructs. This interpretation provides the theoretical framework on which the research questions and hypothesis were formulated. This study was conducted in the context of a competitive sales environment and it is therefore important to review empirical literature relating to the sales environment. The constructs of employee engagement, resilience and perceived organisational support are then examined in terms of definitions, significance, measurement and relationships between constructs.

2.2 Sales Environment in Context

According to Lamb et al. (2009) sales jobs are of utmost importance for organisational success (Medhurst & Albrecht, 2016). Sales employees are the most important channel through which companies execute their strategies and generate revenue, and as such these jobs represent a significant investment for companies (Morelli & Braganza, 2012). This is confirmed by Jaramillo, Mulki, and Marshall (2005) who found that in a competitive sales environment salespeople are the most important source of revenue and key to organisational success and survival.

On an organisational level contemporary high-performing salespeople do more than simply executing traditional selling processes. Instead, they increasingly serve more like consultants (Albrecht & Medhurst, 2011), offering complex sales solutions to a matrix-form buying environment. The changing sales environment has forced salespeople to become knowledge brokers who offer product knowledge and insight to customers to help them solve their own business problems (Rapp et al., 2014).

On an individual level selling is emotionally and mentally demanding. Selling involves constant strain related to competing with competitors, meeting sales targets and dealing with rejection (Loveland et al., 2015). The sales environment is burdened with failure and a successful salesperson must be able to respond effectively to failure. The stressful nature

of sales positions often results in emotional exhaustion, which is also viewed as the opposite of engagement (Bande et al., 2015). Employee engagement has been identified as a significant driver of salesperson performance in modern sales organisations (Albrecht & Medhurst, 2011; Rapp et al., 2014).

In terms of human resource management, the stressful nature of sales positions means that these positions are associated with high intention to leave, are subject to a high turnover rate and are often the most challenging positions to fill. Sales force turnover is of a concern for sales organisations due to its impact on business results (Bande et al., 2015). The cost related to turnover is projected at three to four times the annual compensation of a salesperson as a result of direct costs (recruitment and training) and opportunity costs (customer loyalty towards the salesperson and vacant territory) (Johnson et al., 2016; Lewin & Sager, 2010).

From a career perspective, success in a sales role requires an investment of personal resources. Krush, Agnihotri, Trainor, and Krishnakumar (2013) argued that sales employees require a sense of individual buoyancy as a personal resource to mitigate the consequences of job demands. In addition, Friend et al. (2016) state that the ability of salespeople to recover from setbacks is crucial to success due to the high rates of adversity and failure experienced in sales positions (for example sales failure rates). However, despite these findings little research has thus far focused on assisting employees in developing the ability to 'bounce back' in order to perform well in sales.

In this competitive and results orientated milieu sales representatives are more likely to succeed when they feel supported rather than directed (Adamson et al., 2013). Sales representatives often work alone in different geographical locations and are detached from the organisation (Morelli & Braganza, 2012). Working outside the boundaries of the organisation in a complex sales environment may accentuate the need for organisational support.

This study was executed within the context of a Johannesburg Stock Exchange (JSE) listed South African pharmaceutical company. The pharmaceutical sales environment is a highly competitive and profitable business industry. In a recent article in *Forbes* magazine, the pharmaceutical generic and mainstream industry (along with the tabacco and investment

industry) were amongst the four most profitable industries for 2016, with profit margins of 30% and 26% respectively (Chen, 2015). Total pharmaceutical sales projected for 2015 in South Africa were R43.5 billion (IMS Health, 2014), which made a contribution of approximately 1% to the gross domestic product (GDP) for 2015 (National Treasury of South Africa, 2015). The total South African pharmaceutical market is expected to grow at a compounded annual growth rate of 5.8% (±1.5%) over the period 2013-2018, reaching R41.7 billion by 2018 (IMS Health, 2014). The profit margins of the pharmaceutical industry combined with the expected industry growth in South Africa provided an appropriate context in which to execute a study concerning the relationship between the level and drivers of employee engagement and organisational success.

2.3   Employee Engagement

The emergence of engagement research in the 21st century is related to the developing importance of human capital and involvement of employees in organisations (Bailey et al., 2015; Schaufeli, 2013) and the need for businesses to maximise the inputs of employees (Rothmann & Rothmann, 2010). Contemporary organisations require employees who are psychologically connected to, and willing to invest in, their work roles. They need employees who feel energetic and engaged with their work (Albrecht et al., 2015). Despite extensive research into employee engagement relatively low levels of engagement continue to be reported by organisations across the globe (Albrecht et al., 2015).

According to Gupta and Sharma (2016) key drivers of employee engagement include the sense of feeling valued, involvement in decision-making, opportunities for development, and the concern that the organisation has for employees' health and well-being. In addition, a review of 12 major studies conducted by research firms and consultancies such as Towers Perrin, Blessing White, and The Corporate Leadership Council showed that the most important drivers of engagement include trust and integrity, challenging nature of the job, career growth opportunities, pride about the company, employee development and affiliation with co-workers and managers (Gupta & Sharma, 2016).

2.3.1 Significance of Employee Engagement

Employee engagement appears to be a critical factor during volatile economic periods. Engagement ensures that the employees invest extraordinary effort in their behaviour towards the organisation and is a crucial factor in delivering the desired business results needed during recession and growth stagnation (Gupta & Sharma, 2016). The current business environment encompasses immense challenges. A World Bank report on the current economic outlook globally and in emerging markets such as South Africa indicated decelerating growth and financial performance (World Bank Group, 2016). With respect to a sales environment, research indicates that lean economic periods with potentially low sales compensation can erode organisational commitment and engagement in salespeople (Amyx & Alford, 2005; Johnson et al., 2016). Even outside of the context of lean economic periods, a study by Markey (2014) across 40 companies in 60 countries indicated that engagement levels are the lowest among sales employees who have the most interactions with customers.

Harter et al. (2013) found that a high level of employee engagement is associated with 37% lower absenteeism. Considering the high turnover in sales positions (Loveland et al., 2015) and the high cost of a disengaged workforce (Rayton & Yalabik, 2014), taking concrete steps to understand and encourage high employee engagement is of utmost importance to an organisation's success (Permana et al., 2015).

The significance of employee engagement can be reviewed in terms of benefits to both the organisation and the employee. Employee engagement is highly organisation specific (Gupta & Sharma, 2016) with organisational benefits including increased financial turnover (Rothmann & Rothmann, 2010), revenue growth (Werhane & Royal, 2009), gross profit (Towers Watson, 2015), operating profit (Towers Watson, 2012) and greater customer satisfaction and productivity (Saks & Gruman, 2014). Employee engagement also has the ability to assist organisations in achieving a competitive advantage in terms of sales performance (Albrecht et al., 2015). Benefits for the employee include self-reported indicators of greater health and well-being (Saks & Gruman, 2014), job satisfaction and lower staff turnover (Rothmann & Rothmann, 2010).

In a cross-industry analysis (Werhane & Royal, 2009) of more than 400 companies across the globe, organisations with the highest employee engagement scores demonstrated 2.5 times higher revenue growth than those with the lowest scores (Permana et al., 2015). In addition, a study by Towers Watson (2015) indicated that companies with high levels of employee engagement outperform companies with low levels of engagement in terms of one-year earnings, gross profit and total assets. Similar studies showed that companies with a high level of engagement have an operating profit margin of 14.3% compared to 9.9% for those with a low level of engagement (Towers Watson, 2012).

In the South African context empirical research on employee engagement has focused mainly on white-collar workers (Brand-Labuschagne, Mostert, Rothmann, & Rothmann, 2012). Research typically investigates the relationship between engagement and different theoretical constructs such as commitment (Simons & Buitendach, 2013), organisational citizenship behaviour (Mathumbu & Dodd, 2013), work-based identity (Braine & Roodt, 2011) and job stress (Coetzee & Villiers, 2010). A report by Aon Hewitt Consulting found that the average level of engagement in sub-Saharan Africa is low (33%) and similar to the global average of 28% (Aon Hewitt, 2015). A 2009 South African Human Resource Practice Study indicated an average level of engagement of 21% (Martins & Nienaber, 2014), which appears to be closer to the global average reported by Aon Hewitt (2015). To date research focusing on pharmaceutical sales representatives in South Africa has investigated coping strategies, personality traits and burnout (Storm & Rothmann, 2003) with no studies investigating employee engagement as an organisational behavioural outcome.

2.3.2 Theories and Models of Employee Engagement

2.3.2.1   Personal Role Engagement

The first theoretical foundation of engagement stems from the work of Kahn (1990), who viewed personal role engagement as the individual's emotional, cognitive and physical expression of their authentic self at work. To be fully engaged individuals must display their full selves within their work role (Bailey et al., 2015). Building on the work of Khan (1990), Rich, Levine, and Crawford (2010) stated that individuals who are engaged invest their head, heart and hands in their performance. Towers Watson Consultancy developed a similar model based on dimensions of thinking, feeling and acting (Towers Watson, 2012). This

three-dimensional model of employee engagement is displayed in Figure 1 and aims to answer the question: "Am I rationally and emotionally connected and motivated to invest discretionary effort?"

Figure 1: Model of engagement (Towers Watson, 2012)

2.3.2.2   Work Task of Job Engagement

The second theoretical view of engagement is an activated positive state of mind directed towards work tasks. This view is founded on the concept of engagement and burnout being the opposite of each other. Burnout can be viewed as the erosion of work engagement where energy turns into exhaustion, involvement into cynicism, and dedication into ineffectiveness (Coetzee & Villiers, 2010). This theoretical view defines engagement as "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption towards work activities" (Schaufeli et al., 2002, pg. 71). Vigour refers to a high level of energy, mental resilience and willingness to invest effort in one's work, even in the face of difficulty. Dedication involves being strongly involved in one's work with a sense of pride and enthusiasm. Absorption involves being completely concentrated on and happily engrossed in one's work, whereby time passes quickly and it is difficult to detach from work (Bailey et al., 2015; Schaufeli & Bakker, 2003).

This concept of engagement has been challenged by Schaufeli and Bakker (2004), who are argued that no perfect negative correlation exists between engagement and burnout. Walter, Bedeian, and O'Boyle (2012) supported this challenge and concluded in a meta-analysis that the correlation between burnout and engagement is high, but there are doubts about a direct negative correlation.

2.3.2.3　　Job Demands-Resource Model

The job demands-resources (JD-R) model (Schaufeli & Bakker, 2004) based on burnout literature (Saks & Gruman, 2014) is the most widely used theoretical model describing employee engagement as a psychological state (Albrecht et al., 2015). According to this theory burnout develops due to high job demands and a lack of job resources, which lead to disengagement from work. Job demands leading to disengagement include time pressure, work overload, job ambiguity, role insecurity, and role conflict (Albrecht et al., 2015). Job resources are the physical, psychosocial, social, or organisational features of a job that help to achieve work goals, reduce job demands and contribute to employee well-being. Figure 2 provides a schematic representation of the JD-R model as originally conceptualised by Schaufeli and Bakker (2004).

Figure 2: JD-R model (Schaufeli & Baker, 2004)
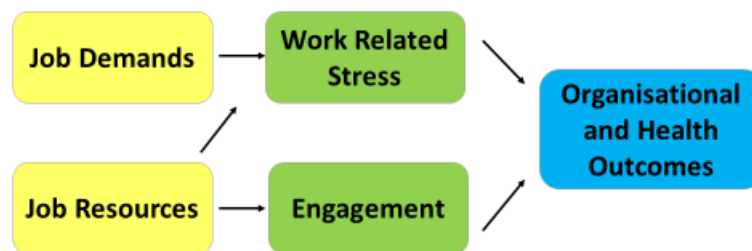
In an expanded version of the JD-R model, personal resources such as resilience, self-efficacy and optimism are activated by job resources and believed to be related to engagement (Saks & Gruman, 2014). Schaufeli and Taris (2014) define personal resources as the psychological characteristics of the self that are associated with resiliency and the ability to control and impact one's environment successfully. Similar to job resources, personal resources are functional in accomplishing work goals, and they stimulate personal growth and development. Personal resources are believed to be pliable, open to change and predictive of engagement. Personal resources also have the ability to mediate the relationship between job resources and engagement (Saks & Gruman, 2014).

According to Schaufeli and Taris (2014) the JD-R model is flexible and can be tailored to a variety of work settings. When applied in a sales context job demands are aspects of the job

that require sustained physical and/or psychological effort, for example to achieve sales targets, while job resources are related to supervisor feedback and coaching (Miao & Evans, 2013). The model has also been utilised to examine the determinants of salesperson new product selling outcomes (Zablah et al., 2012)

However, this model has shortcomings which have to be considered when applied to a work setting. For example, job demands and resources are not extended to include both positive and negative characteristics of work, or vulnerabilities such as pessimism. An additional weakness is that a multitude of demands, resources, and outcomes can also be viewed as strength (Schaufeli & Taris, 2014).

2.3.3 Measuring Employee Engagement

Most existing empirical research on employee engagement makes use of either the Utrecht Work Engagement Scale (UWES) (Gupta & Sharma, 2016; Schaufeli & Bakker, 2003) or the Job Engagement Scale (JES) (Gupta & Sharma, 2016; Rich & Lepine, 2010). The JES is grounded in theories of self-expression at work and is based on Kahn's (1990) definition of engagement, which includes physical, cognitive and affective dimensions (Gupta & Sharma, 2016). The UWES is grounded in burnout literature (Gupta & Sharma, 2016; Maslach & Leiter, 1997) and defines engagement as a positive, work-related state of mind with a strong sense of vigour towards, dedication to, and absorption in work activities.

According to Saks and Gruman (2014) the dimensions of the UWES are inconsistent with Kahn's (1990) original assertion that engagement is an indication of bringing one's true self to the performance of one's role (Saks & Gruman, 2014). These authors argue that bringing one's true self to the performance of one's role involves a much deeper and more authentic level of engagement than just devoting energy and dedication to the performance of work activities. However, a systematic review involving 214 studies found the Utrecht Work Engagement Scale to be the most widely adopted measure of engagement (Schaufeli & Bakker, 2003).

A study by Medhurst and Albrecht (2016) interpreted engagement among salespeople as an aroused psychological state of focus and energy, aimed at addressing the situational and task related opportunities and demands encountered in sales positions. According to these

authors salesperson engagement shares similar characteristics to the existing conceptualisation of engagement in terms of vigour, dedication and absorption (Schaufeli et al., 2002). The stressful nature of sales positions with consequential emotional exhaustion and burnout (Bande et al., 2015) also aligns more closely with the UWES, which is grounded in burnout literature (Maslach & Leiter, 1997).

2.4   Resilience

The current business environment is unpredictable and complex with employees constantly exposed to situations such as mergers, acquisitions, lay-offs, and rapidly advancing technology that might outpace them (Chen, Westman, & Hobfoll, 2015). In addition, organisations have to deal with differential needs of clients and employees, and changing government policies and regulations (King et al. 2015). The growing performance expectations of the current business environment cannot be met with average performance. Organisations thus require employees who are resilient and can succeed in chaos and grow in the face of difficulty, uncertainty and constant change (Kotzé & Nel, 2013).

Given the importance of resilience for the functioning of organisations, teams and individuals, there has been growing interest in understanding the concept of resilience within the broader field of organisational science (Britt, Shen, Sinclair, Grossman, & Klieger, 2016). Research also indicates that people with a low level of resilience are more emotional unstable when faced with difficulty (Bande et al., 2015; Bonanno, Papa, & O'Neill, 2001), less flexible to change, and more resistant to new experiences (Bande et al., 2015).

Psychological resilience is defined as the ability to recover from negative, stressful or traumatic events in a positive way (Tugade & Fredrickson, 2004). When applied to the workplace resilience is defined as the "positive psychological capacity to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility" (Kotzé & Nel, 2013, p. 1; Luthans, 2002). According to the literature a key component of resilience is whether an individual demonstrates simultaneous growth and positive change following a stressful event. Although some definitions require positive change, most simply require successful adaptation to adversity (Britt et al., 2016). In a competitive sales environment adaptation unaccompanied by growth or positive change will

not enable a sales force to successfully meet sales targets or deal with rejection and competitors.

2.4.1 Significance of Resilience

Recent applications of resilience in occupational literature focus on occupations associated with a high risk for experiencing acute stress and trauma, such as police officers and firefighters (Freedman, 2004; Peres et al., 2011; Vanhove et al., 2015). The importance of resilience in the context of these occupations is relatively clear. However, Vanhove et al. (2015) argued that resilience may also be of significance in an employment context where stress can accumulate over time due to influences such as work overload, work relationships, lack of control, resources, communication, emotional and physical exhaustion and work-life conflict. Johnson et al. (2005) identified teachers, ambulance workers, customer and social services workers, services workers, call centre staff and prison officers as examples of jobs where a lack of resources, emotional and physical exhaustion and accumulated stress can have a negative effect on employee well-being and organisational functioning (Vanhove et al., 2015).

Although no reference is made to sales employees, the nature of sales positions suggests that the sales environment can also be viewed as an employment context where resilience is significant. According to Krush et al. (2013) resilience enables the salesperson to sustain a constructive response in the face of adversity by focusing on the positive side of adversity while simultaneously inhibiting negative responses. In addition, Medhurst and Albrecht (2011) argued that resilience positively influences sales performance through vigour and the investment of high levels of energy when faced with challenging situations.

In the South African context Simons & Buitendach (2013) found a practical and statistically significant relationship between total employment engagement scores and resilience amongst call centre employees. The call centre environment is comparable to a competitive sales environment with respect to the negative effect of emotional exhaustion on employee well-being (Johnson et al., 2005). There appear to be no published studies in South Africa investigating the relationship between employee engagement and resilience in a sales environment.

2.4.2 Theories and Models of Resilience

2.4.2.1 Positive Psychology

According to Bardoel, Pettit, De Cieri, and McMillan (2014) one of the theoretical approaches to resilience applied in the workplace is based on positive psychology and positive organisational behaviour. Luthans (2002) defined positive organisational behaviour as the study and application of positive psychological capacities that can be measured, developed, and effectively managed for performance improvement in a work environment (Meyers, van Woerkom, & Bakker, 2012). In positive psychology resilience is conceptualised as a response where an individual adapts positively to exposure to a subjectively significant threat, risk or difficulty, without losing the ability to function normally (Bonanno, 2004; Bardoel et al;, 2014).

While there are many different types of positive psychological factors, psychological capital is widely recognised as a valuable resource that can be leveraged for competitive advantage on an individual level (Friend et al., 2016). According to Meyers et al. (2012) psychological capacities such as resilience, hope, self-efficacy and optimism can contribute towards positive individual and organisational outcomes (Youssef & Luthans, 2007).

Although there is an abundance of sales literature concerning how to minimise negative psychological influences such as role stress and burnout, investigations of the potential impact of positive psychological factors are largely absent from sales research (Friend et al., 2016). According to Mills, Fleck, & Kozikowski (2013), the principles of positive psychology have the potential to contribute towards positive outcomes in organisations, but are often ignored in favour of principles focused directly on the bottom line.

Employee engagement is a positive organisational outcome associated with resilience (King et al., 2015; Mache et al., 2014; Shin et al., 2012). Bande et al. (2015) argued that resilience can lead to a subjective assessment of well-being that includes engagement. However, this prediction includes all the dimensions of self-efficacy, optimism, hope and resilience. This raises questions regarding whether this prediction can be made by taking into account only the dimension of resilience. Luthans, Vogelgesang, & Lester (2006) provided a possible

explanation by arguing that resilient people may take a more pragmatic approach to dealing with stress than those will a high level of optimism or hope.

On an operational level resilience as a personal resource is considered pliable and open to development (Krush et al., 2013). Youssef and Luthans (2007) argued that as a dimension of psychological capital, resilience can be developed through intervention strategies (Linnenluecke, 2015).

2.4.2.2   Conservation of Resources Theory

An additional theoretical approach to resilience is the conservation of resource theory (Bardoel et al., 2014). Conservation of resources theory was developed by Hobfoll (1989), who incorporated different stress theories into a general theory of psychological stress, based on the assumption that an individual will strive to retain, protect and build resources during adverse conditions (Hobfoll, 2011). Figure 3 provides an explanation of the theoretical concept.

Figure 3: Conservation of Resources Theory (Bardoel et al., 2014)

In this context resources can be instrumental, social and psychological. As a psychological resource, resilience allows an individual to protect the self against adverse conditions, and/or develop resilience as a form of coping with future adverse conditions (Bardoel et al., 2014). It is probable that the benefit of resilience as a psychological resource cannot be explained by conservation of resources without taking into consideration the additional categories of instrumental (for example, money or sales commission) and social resources (for example, family or organisational support).

A strength of conservation of resources theory lies in understanding the motivation that follows the experience of strain that builds resources. People invest in building resources in order to protect against resource loss, to recover from losses, and to gain resources. A common criticism of the theory is that anything good can be considered a resource (Barboel et al., 2014; Gorgievski, Halbesleben, & Bakker, 2011). An additional criticism from Beehr, Bowling, and Bennett (2010) is that not all resources have positive outcomes (Barboel et al., 2014).

2.4.2.3 Job-Demands/Resources Theory

King et al. (2015) suggested that job demands-resources theory can be used to explain how resilience assists employees in dealing with work-related demands. According to this model, job demands initiate a health impairment process while job resources initiate a motivational process. In addition, the model specifies how demands and resources interact and predict important organisational outcomes such as commitment, burnout and engagement (Bakker & Demerouti, 2014).

Demerouti and Bakker (2011) provided a practical description of resilience based on job-demands/resources theory. The main assumption is that every job has its own risk factors associated with job-related stress. Job demands are not necessarily negative but can turn into job stressors when demands require excessive resources or effort from which the employee fails to recover adequately. Job-demands/resources theory cannot be used to explain resilience as a job resource unless the characteristics and influence of job demands are also taken into consideration.

2.4.3 Measuring Resilience

The challenges of developing an operational definition of resilience have led to different approaches to measuring the construct (Windle et al., 2011). There is currently no gold standard in terms of measuring resilience. Most existing measures of resilience have concentrated on examining resources/protective factors that might facilitate a resilient outcome. In contrast, the Brief Resilience Scale (BRS) is designed to measure resilience as an outcome measure defined as the ability to recover from stress. The BRS is the only measure that assesses resilience based on its original and most basic meaning as relating

to the ability to bounce back from stress (Smith, Tooley, Christopher, & Kay, 2010). In the South African context the BRS was used in a small mixed method study by Edwards, Edwards, and Highley (2015), with no references made to internal consistency scales using Cronbach alpha. Additional measurement scales used in the local context include the Resilience Scale (Koen, van Eeden, & Wissing, 2011) and the Adult Resilience Indicator (Kotzé & Nel, 2013).

A criticism from Jowkar, Friborg, and Hjemdal (2010) is that most resilience measurement scales ignore the family and social aspects of resilience. An additional concern is that most of the resilience measurement instruments have been developed and utilised in the Western world, with major concerns regarding their validity in non-western population (Abiola & Udofia, 2011; Dageid & Gronlie, 2015). Recent empirical research has demonstrated BRS' reliability and validity in emerging countries such as Malaysia (Amat, Subhan, Jaafar, Mahmud, & Johari, 2014) and China (Lai & Yue, 2014).

2.5 Perceived Organisational Support

According to organisational support theory employees develop beliefs regarding the extent to which the organisation cares about their well-being and appreciates their contribution to achieving business goals. This sense of feeling valued and appreciated is the key driver of positive organisational outcomes such as engagement. The components of feeling valued are highly organisation specific and are also specific for different employee groups within an organisation (Gupta & Sharma, 2016). Under the umbrella of organisational support theory fairness, human resource practices and supervisor support are important antecedents of perceived organisational support (Baran, Shanock, & Miller, 2012; Kurtessis et al., 2015). Kurtessis et al. (2015) argued that perceived organisational support satisfies socio-emotional needs and this results in self-enhancement and greater identification and commitment to the organisation.

2.5.1 Significance of Perceived Organisational Support

Various studies have indicated that perceived organisational support is related to behavioural outcomes for both employees and organisations (Caesens, Marique, Hanin, &

Stinglhamber, 2016). Beneficial organisational behavioural outcomes include organisational commitment (Baran et al., 2012; Connelly, Gallagher, & Gilley, 2007) organisational citizenship behaviour (Baran et al., 2012; Coyle-Shapiro, & Morrow, 2006), performance (Webster & Adams, 2010) and job satisfaction (Kurtessis et al., 2015). Beneficial employee behavioural outcomes related to perceived organisational support include increased trust in the organisation, job satisfaction, positive psychological well-being and increased in-role performance. Unfavourable behavioural outcomes include job stress, burnout and withdrawal behaviour (Kurtessis et al., 2015).

Burnout and emotional exhaustion appear to be highly correlated with perceived organisational support (Kurtessis et al., 2015). Although the negative correlation between burnout and engagement is not perfect (Schaufeli & Bakker, 2004) this correlation has important practical implications in a stressful work environment where employees are subjected to emotional exhaustion. This importance is accentuated in a sales environment where the sales force work alone in different geographical locations and are detached from the organisation (Morelli & Braganza, 2012). When salespeople experience a subdued perception of organisational support they may also experience diminished job involvement and identification with the organisation (Dinç, 2015), which can ultimately lead to less dedication and absorption. Dedication and absorption are critical dimensions of employee engagement based on the theoretical foundation of engagement as a positive, work-related state of mind (Schaufeli & Bakker, 2004).

In early studies based on social-exchange theory Saks (2006) found that perceived organisational support predicted levels of engagement. According to social-exchange theory, employees with high perceived organisational support will engage in greater job-related efforts (Kurtessis et al., 2015), a finding which is aligned with the theoretical view of engagement described above.

In a more recent study examining the antecedents of engaged nurses in Italy, perceived organisational support was positively associated with level of engagement in nurses (Trinchero et al., 2013). In a South African based study of nurses Mathumbu and Dodd (2013) found a moderate, positive relationship between perceived organisational support and engagement. Previous research by Rothmann and Rothmann (2010) indicated that organisational support is a strong predictor of employee engagement in various South

African industries. Although many studies have focused on perceived organisational support, very few studies have focused specifically on perceived organisational support in salespeople (Deconinck, DeConinck, & Lockwood, 2015).

2.5.2 Theories and Models of Perceived Organisational Support

Organisational support theory has attracted considerable attention due to its potential ability to explain the employee–employer relationship. According to organisational support theory perceived organisational support depends on employees' attribution of organisations' intent behind favourable or unfavourable treatment. Under the umbrella of organisational support theory fairness, human resource practices and supervisor support are important antecedents of perceived organisational support (Kurtessis et al., 2015).

The perception of organisational support can be viewed from an organisational or employee perspective. Tavares, van Knippenberg, and van Dick (2015) argued that the perception of organisational support can be viewed by the organisation as a social currency offered with the aim of increasing the quality of the employer-employee relationship. This relationship is discretionary in nature, which means that employees can determine the extent to which they engage in extra-role efforts to benefit the organisation and its employees. From the viewpoint of the employee, this relationship is reciprocal in nature as the employee feels obligated to support their employer with the expectation that increased performance will be noticed and compensated. According to social-exchange theory, employees with high perceived organisational support will engage in greater job-related efforts (Kurtessis et al., 2015).

2.5.2.2   Self-Enhancement

Organisational support theory also accentuates self-enhancement in the process of perceived organisational support. Self-enhancement is the result of the fulfilment of socio-emotional needs such as esteem, emotional support and affiliation, which ultimately lead to identification with the organisation and the perception of organisational support (Kurtessis et al., 2015). According to DeConinck and DeConinck (2015) salespeople who identify favourably with their organisation are more psychologically connected to their organisation and have higher intention to stay. Although there is no indication in empirical research of a

relationship between self-enhancement, identification with the organisation and employee engagement, it is possible to argue that the fulfilment of socio-emotional needs and identification with the organisation may result in heightened dedication and a sense of pride (Schaufeli & Bakker, 2004).

2.5.3 Measuring Perceived Organisational Support

The original 36-item Perceived Organisational Support (POS) scale developed by Eisenberger et al. (1986) has gained considerable interest due to the benefit of understanding the employee-employer relationship. The scale measures employees' perceptions regarding the extent to which employers value the contribution of employees and care about their well-being.   Shorter versions of the scale are now available. Correlations among factor scores of POS scale scores suggest that both the eight-item and 16-item version are just as effective as the original 36-item version, but are more efficient (Worley, Fuqua, & Hellman, 2009).

In the South African context, the eight-item POS scale has been used in a study of nurses and had acceptable levels of reliability and validity (Mathumbu & Dodd, 2013). A six-item version of the POS scale was used in a multi-industry, multi-generational and multicultural study with a high level of reliability (Smit, Stanz, & Bussin, 2015).

2.6   Demographic Variables

Research literature contains mixed findings in relation to the relationship between demographic variables such as gender, age and tenure and the constructs of employee engagement, resilience and perceived organisational support. The most significant relationship appears to be with employee engagement. A recent study by Markey (2014) indicated that employee engagement declines with employee tenure. Xu and Thomas (2011) disagreed with this finding and indicated that increased tenure does not necessarily lead to lower employee engagement. Trahant (2009) found that employee engagement is high when an employee initially enters into the organisation, but declines after the first year and for up to five years after being employed. However, older (by age) employees tend to be more engaged. In terms of age and engagement, a South African HR Practice Study found

that 11% of employees above the age of 30 were disengaged, with a higher level of disengagement (31%) reported for those under the age of 30 (Martins & Nienaber, 2014).

In a study by Wang, Cooke, and Huang (2014) age was associated with the level of resilience of bank employees, with younger employees displaying a higher level of resilience than older employees. In contrast, a study investigating resilience in operating room nurses indicated no statistically significant relationship between age, tenure and resilience (Gillespie, Chaboyer, & Wallis, 2007). Existing empirical research does not support a relationship between demographic variables such as age, gender and tenure and perceived organisational support (Rhoades & Eisenberger, 2002; Scott, 2014).

2.7   Conclusion

The aim of this research was to determine the predictive relationship between employee engagement, resilience and perceived organisational support in a sales environment. Empirical research points towards a significant relationship between employee engagement, resilience and perceived organisational support. An increased understanding of these relationships may enable organisations to create and manage an engaged workforce. Figure 4 provides an overview of the conceptual theoretical model that underpins this study.

Figure 4: Conceptual Model
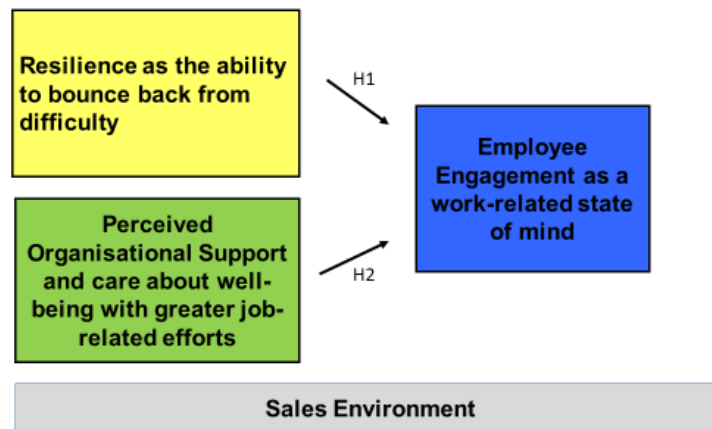
CHAPTER 3: RESEARCH HYPOTHESES

3.1 Introduction

The premise of this research is that employee engagement is a desirable organisational behaviour outcome in a competitive sales environment. Although there is limited empirical evidence concerning which factors predict employee engagement in a sales environment, this research aimed to explore resilience and perceived organisational support as possible predictors. The research does not infer that employee engagement as an outcome is entirely explained by the assumed predictive power of the independent variables. For the purpose of this research, two hypotheses will be studied under the constructs employee engagement, resilience and perceived organisational support.

Maslach and Leiter's (1997) theory of engagement was selected based on the characteristics that the definition shares with engagement among salespeople. Engagement was defined as an aroused psychological state of energy and focus aimed at addressing the situational and task related demands in a sales environment (Medhurst & Albrecht, 2016). This definition of employee engagement is closely related to the definition of resilience, where resilience is seen as the positive, psychological capacity to bounce back from difficulty (Luthans, 2002; Youssef & Luthans, 2007). As a type of positive, psychological capital resilience has the ability to positively influence sales performance through vigour and the investment of high levels of energy when faced with challenging situations. Burnout and emotional exhaustion as results of the stressful nature of sales positions, appear to be highly correlated with perceived organisational support (Kurtessis et al., 2015).

3.2 Research Hypotheses

Based on the theoretical support described in the previous chapter, the hypotheses that were formulated are presented in Figure 5.

Figure 5: Research Hypothesis
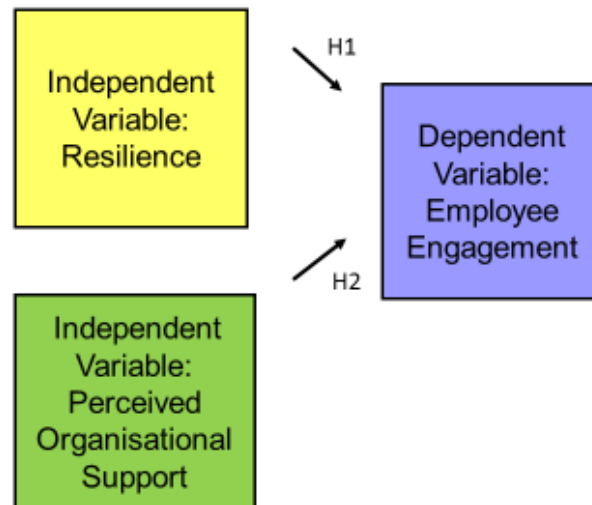
Hypothesis 1: Resilience

Research question one: Can it be predicted with reasonable accuracy that a relationship exists between resilience and employee engagement in a sales environment?

- **Null hypothesis one (H_01):** No significant relationship exists between resilience and employee engagement in a sales environment.

- **Alternate hypothesis one (H_11):** A significant relationship exists between resilience and employee engagement in a sales environment.

Hypothesis 2: Perceived organisational support

Research question two: Can it be predicted with reasonable accuracy that a relationship exists between perceived organisational support and employee engagement in a sales environment?

- **Null hypothesis two (H_02):** No significant relationship exists between perceived organisational support and employee engagement in a sales environment.

- **Alternate hypothesis two (H_12):** A significant relationship exists between perceived organisational support and employee engagement in a sales environment.

The proposed hypotheses were tested with a statistical model in order to estimate the relationship between variables.

3.3   Conclusion

Two hypotheses have been identified to analyse the relationship between employee engagement and the respective constructs. The methodology employed to reach a conclusion regarding the hypotheses will be discussed in the next chapter.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Research Design

The principle hypothesis of this research required an explanation of the relationship between the three main constructs of employee engagement, resilience and perceived organisational support. A research paradigm of positivism was adopted as positivism assumes that an objective world exists and that scientific methods can be utilised to predict and explain relations among variables. A criticism of a positivistic method is that meaning is removed from contexts in the pursuit of quantifying results (Swanson & Holton, 2005). A deductive research approach was embraced by deriving the hypotheses in Chapter Three from the theoretical foundation outlined previously (Swanson & Holton, 2005). Quantitative research methods were then used to test the predetermined hypotheses regarding the relationship between variables without necessarily inferring causality (Swanson & Holton, 2005; Zikmund et al., 2010). The benefit of quantitative research is that the method can be applied to large samples to produce results that can be generalised to a large sample beyond the context of the study.

As the research aimed to determine the extent to which respondents hold a specific perception on statements related to the three constructs, surveys were employed using standardised questionnaires with scales. Survey research is the dominant empirical design used in sales research (Franke et al., 2013). Surveys also allowed for data collection from a large number of respondents in a cost-effective manner as the majority of the respondent were scattered across South Africa (Saunders & Lewis, 2012). A cross-sectional time frame was employed (Swanson & Holton, 2005), as it was only possible to collect primary data and obtain a snapshot of the research problem at a specific point in time.

4.2 Population

The population or universe for the purpose of this study was defined as all employees in all organisations. The sample was identified as sales representatives from a JSE listed pharmaceutical company. This sample choice was supported by the fact that this study was

contextualised in a competitive sales environment. A large organisation provided the scale and diversity of responses needed for statistical analysis.

4.3   Sampling Method and Size

The study made use of a convenience sampling technique. Convenience sampling as a type of non-probability sampling provided the advantage of being relatively convenient and economical to construct (Swanson & Holton, 2005). A disadvantage of this type of sampling is the inability to project results beyond the specific sample used in the study. In the first sampling step a company typical of the target population was chosen. The sample frame consisted of 220 employees. Although each division of the organisation could be viewed as a separate company, the fact that only one company was included limited the generalisability of the results. Sample size planning and power analysis were employed to have an appropriate probability of rejecting the null hypothesis when it was in fact false (Maxwell, Kelley, & Rausch, 2008).

To avoid sampling error by targeting only a subset of the population of sales representatives (Phillips, Phillips, & Aaron, 2013) all employees working in direct sales were invited to participate in the study. To mitigate sampling error, surveys were distributed in an electronic format via Typeform™ to gather data on a national level. Non-response error occurs when people selected for the survey do not respond (Phillips et al., 2013). Since making multiple contacts with the target population is the best way to improve response rates email reminders were sent to all potential participants via regional sales managers to encourage participation in the study.

Different applications of multiple regression usually require different minimum sample sizes (Knofczynski & Mundfrom, 2007; Tabachnick, Fidell, & Osterlind, 2001). When using multiple regression for prediction purposes the minimum recommended sample size is related to the number of predicted variables and the squared multiple correlation coefficient. As the squared multiple correlation coefficient decreases, the sample size increases (Knofczynski & Mundfrom, 2007). Using the Monte Carlo simulation the authors provided guidelines and tables to determine the minimum sample size when using multiple regression or prediction (Knofczynski & Mundfrom, 2007). From this method it was inferred for the

purpose of this study the minimum sample size needed for two predictor variables was 90 cases.

4.4 Unit of Analysis

The units of analysis can be defined as the people or objects whose characteristics researchers will observe, describe, and explain (Babbie, 2005). The unit of analysis in this study was employees who expressed their perceptions of employee engagement, resilience and perceived organisational support.

4.5 Data Collection and Cleaning Process

Prior to distributing the measurement instruments to the entire sample, they were pre-tested with selected sales representatives from a division not participating in the study. The three constructs were assessed using established survey instruments well described in literature. Surveys were distributed in both paper-based and electronic form. Each participant was asked whether they agreed or disagreed with brief statements pertaining to the constructs of employee engagement, resilience and perceived organisational support. During a debriefing session each participant was asked for their feedback in person. All respondents were able to read items quickly, comprehend their intent, and select an answer without difficulty. The average time to complete the paper-based surveys was approximately ten minutes, while it took an average of six minutes to complete the electronic survey.

Informed consent was obtained from respondents willing to participate in the survey. Paper-based surveys were distributed during the July national company training week for the Prescription Division. Sales representatives were asked to place completed surveys in sealed containers labelled "Sales Representative Survey" located in each training room. Electronic surveys were distributed by company email to the Consumer and OTC Divisions with a window period of three weeks to complete surveys.

Various techniques were used to increase the response rate (Phillips et al., 2013). Prior to distributing the surveys, advance communication was sent to clearly state the purpose of the research. An emotional appeal was added by personalising the emails used to send electronic surveys. Weekly email reminders were also sent in an effort to increase the

response rate.

Sales literature indicates that response rates to sales surveys have declined over time and as salespeople face increased time pressures the trend is likely to continue (Carter, Dixon, & Moncrief, 2008). Franke et al. (2013) encouraged the use of shortened scales in sales research that contribute to valid and reliable measurement, while trying to limit demands on the time resource of a salesperson. Therefore, the shortest measurement scales available for all constructs were chosen and scrutinised for scale reliability and construct validity.

4.6   Data Coding

After a process of data cleaning numerical symbols were assigned to permit the transfer of data from questionnaires to the statistical software. A codebook was collated to identify each variable in the study by code name, description and position in the data matrix. The codebook for this study can be viewed in Appendix C. The demographic variables of gender, ethnicity and division were coded as nominal-scale categorical data. Likert scales were used to record responses to the UWES, BRS and POS scale and coded as interval data with numerical properties associated with the quantitative random variables of employee engagement, resilience and perceived organisational support (Wegner, 2012).

4.7   Measuring Instruments

All instruments measuring the dependent and independent variable used a Likert scale to obtain data with ordinal characteristics. The use of non-parametric tests are appropriate with ordinal data (Black, 2010). However, non-parametric tests are less powerful than parametric tests and usually require a larger sample size to have the same statistical power. It is possible to use parametric tests with Likert scale ordinal data, provided the sample size is adequate and the data is normally distributed (or nearly normal) (Sullivan & Artino, 2013; Zikmund et al., 2010). This study obtained a sample size of 125, compared to the required sample size of 90 (Knofczynski & Mundfrom, 2007), and so one of the requirements for using parametric tests with ordinal data was met. The requirement of normally distributed data is addressed in the next chapter. It is also worth noting that Norman (2010) found that

parametric tests such as correlation and regression analysis could be used with Likert data without doubts regarding statistical power (Murray, 2013).

Likert-type scales are the most commonly used scales in survey items and the coefficient alpha reliability of Likert scales has been shown to increase with scales using five points. Literature recommends the use of a five-point or seven-point Likert scale (Swanson & Holton, 2005). Based on this notion all items in the survey were measured, as suggested by the developers, on either a five-point or seven-point Likert scale.

The survey questionnaire consisted of a section with control variables asking demographic questions related to gender, age, race, tenure and the division in which the respondent works. The survey questionnaire also included a section containing items from the three measurement scales related to the constructs in question. Taking into consideration the time constraints and absence of a permanent workspace for sales representatives, the shortest versions of the questionnaires were used, as long as these had proven reliability and validity in scientific literature. Cronbach alpha as a measure of internal consistency is sensitive to the number of items in a scale, with shorter scales often presenting with low Cronbach alpha values (Pallant, 2005). It is therefore critical to consider the length of the chosen scales when analysing alpha values.

The level of scoring and the items in the measurement instruments are presented in Appendix C.

4.7.1 Utrecht Work Engagement Scale

The UWES, a self-report nine-item questionnaire was selected based on employee engagement being defined as a positive, fulfilling work-related state of mind that is characterised by the dimensions of vigour, dedication, and absorption (Schaufeli et al., 2006). The UWES was scored by determining the mean of the nine items on a seven-point Likert scale, varying from 1 = never to 7 = every day. The total score for the UWES rather than separate subscale scores was used due to lack of discriminant validity for the subscales (Balducci & Fraccaroli, 2010; de Bruin & Henn, 2013). The total score for the UWES was found to have an acceptable reliability coefficient in previous South African research with scores ranging from 0.79 (Mathumbu & Dodd, 2013) to 0.95 (Simons & Buitendach, 2013).

4.7.2 Brief Resilience Scale

The six-item Brief Resilience Scale (BRS) was used to measure resilience as a single construct and the first independent variable (Smith et al., 2008). The BRS was chosen based on its ability to measure resilience in its most basic form (to bounce back from stress, difficulty or set-backs). The scale has proven reliability and validity in both western and emerging countries (Amat et al., 2014; Lai & Yue, 2014; Rodríguez-Rey, Alonso-Tapia, Jesús, & Hernansaiz-Garrido, 2015). Reported Cronbach alpha scores for reliability range from 0.84-0.91 (Smith et al., 2008) to 0.93 (Amat et al., 2014). Scores of 0.76 and 0.72 (Lai & Yue, 2014) and 0.83 (Rodríguez-Rey et al., 2015) have also been reported. In the South African context the BRS was used in a small mixed method study by Edwards et al. (2015) with no report the Cronbach alpha. The BRS was scored on a five-point Likert scale varying from 1 = strongly disagree to 5 = strongly agree. Items one, three and five were positively worded, while items two, four and six were negatively worded. The BRS was scored by reverse coding items two, four and six, and finding the mean of the six items (Smith et al., 2008).

4.7.3 Perceived Organisational Support Scale

The shorter version of the Perceived Organisational Support (POS) scale (Eisenberger, 1986) was used to measure perceived organisation support as the second independent variable. Both the six-item and eight-item version have been used in South Africa with acceptable levels of reliability and validity with Cronbach alpha values ranging from 0.71 (Mathumbu & Dodd, 2013) to 0.89 (Smit et al., 2015). The POS scale was scored by finding the mean of the eight items on a seven-point Likert scale, varying from 1 = strongly disagree to 7 = strongly agree. Items one, two to five and eight were positively worded, while item six and seven were negatively worded. The POS scale was also scored by reverse coding items six and seven (Eisenberger, 1986).

4.8 Data Analysis

Coded data was analysed with the IBM SPSS (Version 22) statistical software tool.

The first step in the data analysis was to identify and remove outliers. Outliers were identified using Mahalanobis distances and the critical chi-square value. In order to determine the critical chi-square value, the degrees of freedom were determined by the number of items in the questionnaire (Pallant, 2005). A total of 10 cases were identified as outliers and subsequently removed.

The second step in the data analysis procedure was to investigate the validity and the reliability of the constructs as measured by the three different scales. Principal component analyses with a varimax rotation (if necessary) were used to explore the factor structure of the various scales used within this study. First, the Kaiser-Meyer-Olkin (KMO) index and Bartlett's test of sphericity were inspected to determine whether factor analysis was a feasible option. The KMO index measure of sampling adequacy with an index ranging from 0 to 1, with 0.6 suggested as the minimum value for a good factor analysis (Pallant, 2005), was used. Bartlett's test of sphericity was calculated to assess the appropriateness of the data for factor analysis. Bartlett's test of sphericity should be significant ($p<.05$) for the factor analysis to be considered appropriate (Pallant, 2005). Next, the eigenvalues, scree plots and parallel analyses were examined to determine the number of factors to extract. According to Kaiser's criterion or the eigenvalue rule, eigenvalues measure the amount of variation in the total sample accounted for by each component. Principal components with eigenvalues greater than 1.0 accounted for more variance than any of the original variables (Zikmund et al., 2010). Next parallel analysis was employed to support the factor retaining decision from the scree plot. Parallel analysis compares the size of the eigenvalues with those obtained from a randomly generated data set of the same size. Eigenvalues exceeding the corresponding values from the random data set should be retained (Pallant, 2005).

A specific extraction and rotation strategy had to be applied to determine if a multi-factor solution would fit better than a one-factor solution. Principal component analysis was used to extract maximum variance from the data set and reduce a large number of variables into a smaller number of component (Yong & Pearce, 2013). A varimax rotation strategy was used to minimise the number of variables with high loadings on each factor and make small loadings even smaller. Varimax rotation is recommended when a dataset is explored with no pre-existing evidence that the factors are correlated (Yong & Pearce, 2013).

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Cronbach alpha was used to determine reliability and internal consistency with a coefficient alpha between 0.70 and 0.80 considered to be reflective of good reliability (Zikmund et al., 2010). The corrected item-total correlation was used as another measure of reliability by correlating the individual item score to the sum of all scores. In a reliable scale all items should correlate with the total, therefore the corrected item-total correlation coefficients were calculated. The corrected item-total correlation is the correlations between each item and the total score from the questionnaire (Field, 2013). A correlation of zero indicates no relationship, while a correlation of 1.0 indicates a perfect positive correlation, and a value of –1.0 indicates a perfect negative correlation. A scale is reliable if all its items correlate with the scale's total score; a correlation coefficient greater than 0.3 shows adequate item-total correlation (Field, 2013).

Descriptive statistics were calculated to describe the mean, median, standard deviation, skewness, and kurtosis of the various constructs. According to Bulmer (2012) a distribution is (1) highly skewed when the skewness value is >1, (2) moderately skewed when values ranging between 0.5 and 1.0, and (3) fairly symmetrical when values range between 0 and 0.5. Bulmer (2012) described a normal distribution as having a kurtosis of three, whereas anything less than three is described as platykurtic and anything more than three represents a leptokurtic distribution.

Next, multiple regression was used to predict the continuous dependent variable from independent variables. Multiple regression analyses require that certain assumptions are met with regard to the data before the analyses are conducted. These assumptions were examined as follows:

- Sample size: As suggested earlier, the minimum sample size when using multiple regression for prediction is 90 cases (Knofczynski & Mundfrom, 2007). For the current study data was collected from 125 participants, which is sufficient for statistical analysis.
- Outliers: Multiple regression is sensitive to very high or very low scores of outliers (Pallant, 2005). As mentioned previously, outliers were identified using Mahalonbis' Distance and the critical chi-square statistic. The identified outliers were removed.
- Normally distributed errors: All residuals had to be random normally distributed

variables with a mean of zero (Field, 2013). The normal distribution of the residuals was determined by examining the histograms and normal P-P plots.

- Linearity and homoscedasticity: The relationship between the dependent and independent variable had to be linear. With homoscedasticity, the variance of the errors (residuals) had to remain the same for different predicted scores (Pallant, 2005). The standardized residuals were plotted against the standardised predicted values of the dependent variable, and the standardised residual were plotted against the standardized predicted values of the dependent variable. These plots were inspected in order to determine the linearity and homoscedasticity/heteroscedasticity of the residuals.

- Multicollinearity: In a study with more than one independent variable there should be no perfect linear relationship between the two independent variables (Field, 2013). When the dependent variables are highly correlated this is referred to as multicollinearity. The collinearity diagnostics of Tolerance and the Variance inflation factor (VIF) were examined with a Tolerance value of less than 10, and the VIF close to one indicating the absence of a concern for multicollinearity (Field, 2013).

Finally, multiple regression was used to predict the continuous dependent variable from the independent variables. The predictive power and the relative contribution of the independent variables were tested with hierarchical multiple regression by entering the variables in a predetermined order. An advantage of hierarchical regression is that the computed change in r^2 made it possible to test whether a significant amount of additional variance was accounted for by the variables entered in each step (Pallant, 2005). From the literature review it was evident that demographic variables are mainly associated with employee engagement. Therefore, demographic variables were controlled for and forced into the first step to determine whether the independent variables were still able to explain the remaining variance of the dependent variable (Pallant, 2005). Resilience was added as an independent variable into the second step and perceived organisational support into the third step.

The regression coefficients or beta were determined to express the strength of the relationship between each of the independent variables and the dependent variable. The coefficient of determination, referred to as r^2, indicated the degree of variance in the dependent variable caused by one or more of the independent variables. A two-way analysis

of variance (ANOVA) was used to examine the effect of the independent variables on the dependent variable (Wegner, 2012).

When assessing hypotheses, there is always the possibility that erroneous deductions are made from the statistical analyses (Pallant, 2005). Pallant (2005) described two different errors that should be avoided: Type 1 error (rejecting the null hypothesis when it is true), and Type 2 error (failing to reject the null hypothesis when it is false). According to Trochim (2006), there are four mechanisms that could impact the deductions reached within the current study: (1) sample size, (2) effect size, (3) alpha level, and (4) power. The effect size (ES) can be described as the strength of the independent variable's influence (Pallant, 2005). When using multiple regression, Cohen's f^2 method of effect size (Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012) is used where $f^2 = R^2/1-R^2$. The effect size convention for Cohen's f^2 is that small ≥ 0.02, medium is ≥ 0.15, and large is ≥ 0.35 (Cohen, 1992). The alpha level represents the maximum risk of perpetrating a Type 1 error and should be equal to 0.05 (Cohen, 1992). This level was applied in the current study. According to Cohen (1992), because the current study has two independent variables a minimum sample size of 67 was required to prevent the researcher from mistakenly rejecting the null hypothesis. Lastly, a significant test's statistical power is the long-term probability, given the population ES, α, and N, of rejecting H_0, which refers to a Type 2 error and the value of power should be ≥ 0.80 (Cohen, 1992).

4.9   Limitations of the Study

Several limitations of the research were identified and must be acknowledged. The following limitations were identified:

- Conducting research in a single organisation may have caused the results to be skewed by cultural and legacy aspects of the organisation. Results should therefore be compared to samples from different organisations with caution.

- The outcome from non-probability convenience sampling cannot be generalised to a larger population of sales representatives. A disadvantage of non-probability sampling is that there is no guarantee that all eligible members of a population have an equal chance of being included in the sample and this may have resulted in

sampling bias (Swanson & Holton, 2005). However, a significant geographical area of South Africa was covered and this provided the required sample size for statistical analysis.

- Making use of a cross-sectional research design for data collection. This design gave no indication of a sequence of events (Levin, 2006) such as restructuring or organisational change. Given that the study was only a snapshot the context may have provided different results if another timeframe had been selected. However, cross-sectional studies point to relationships between constructs that may exist and are therefore useful in generating hypotheses for research (Levin, 2006).

- Gathering data on sensitive topics such as "the ability to bounce back from set-backs", "feeling inspired about my job" or "whether the organisation will take advantage of me", could have led to social desirability (Conway & Lance, 2010). This was mitigated by adopting a self-completion mode with no pressure of having to respond to an interviewer.

- A lack of prior research related to the constructs in the context of sales limited the comparison and differentiation that could be established to strengthen the theoretical and managerial application of the study. Nonetheless, the results from this study could serve as a point of departure for future research complementing South African sales literature.

- A further limitation was the lack of validation of the Brief Resilience Scale in the South African context. This limitation was overcome by performing exploratory factor analysis to improve validity, and Cronbach alpha testing and corrected item-total correlation to improve the reliability of all the measurement scales.

- Research findings were grounded in theory and it is probable that the proposed hypotheses of the relationships between employee engagement, resilience and perceived organisational support may have represented only part of the truth.

- Finally, a possible limitation could have been the objectivity and influence of the researcher. As an active sales employee in the organisation, the researcher

maintained a sense of objectivity and attempted to influence the research process as little as possible.

4.10   Conclusion

This chapter provided a detailed description of the methodology that was followed in the research. Quantitative research methods were used to test the predetermined hypotheses regarding the relationship between variables, after which surveys were employed to measure respondents' perceptions regarding employee engagement, resilience and organisational support within a cross-sectional timeframe. Factor analysis, multiple regression and analysis of variance were applied to determine whether a predictive relationship of significance exists among the variables. Factor validity and reliability were determined for all measurement scales.

The following chapter gives a detailed account of the analysis procedure and associated results.

CHAPTER 5: RESULTS

5.1 Introduction

This chapter complements the outline of the research methodology presented in the previous chapter by describing the results of the quantitative survey. The purpose of this study was to assess the hypothesised relationships between employee engagement, resilience and perceived organisational support. The results for each research question are presented separately.

5.2 Sample Description

During the data collection period a total of 220 surveys were distributed and 125 responses were obtained. The response rate from divisions combined was therefore 56.8%.

The mode (most frequent occurring value) was used to describe gender as nominal-scaled categorical data. In Figure 6 below females accounted for 69% of the sample while males represented 31%.

Figure 6: Gender Distribution
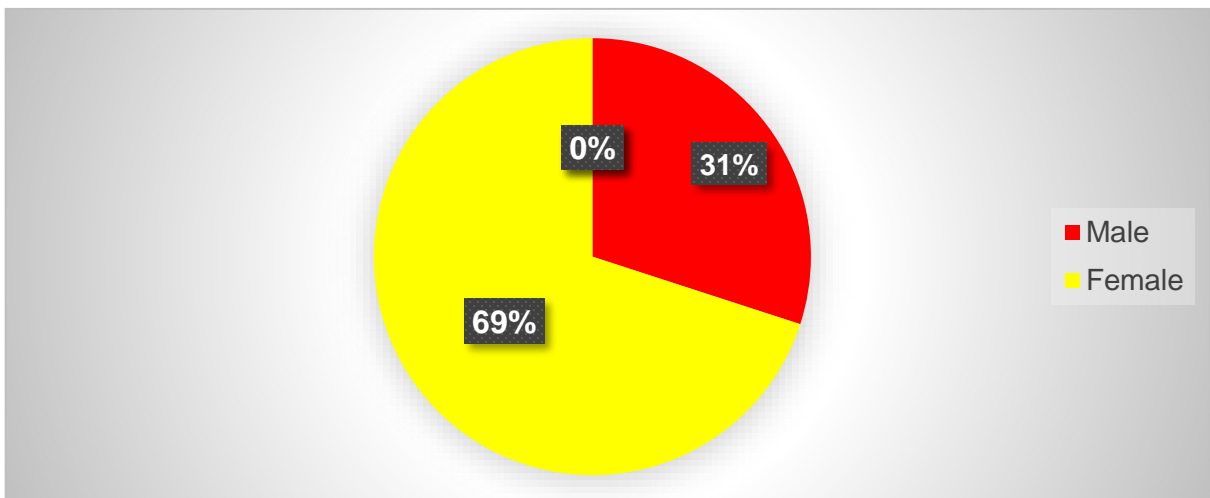
The next demographic variable was the age of respondents. Figure 7 below displays the frequencies and percentages associated with age. The majority of the respondents (37%) were between the ages of 31 and 40, followed by the age group 21 to 30 years (33%)

indicating a workforce where almost 70% of the sales force are younger than, or equal to, 40 years of age.

Figure 7: Age Distribution
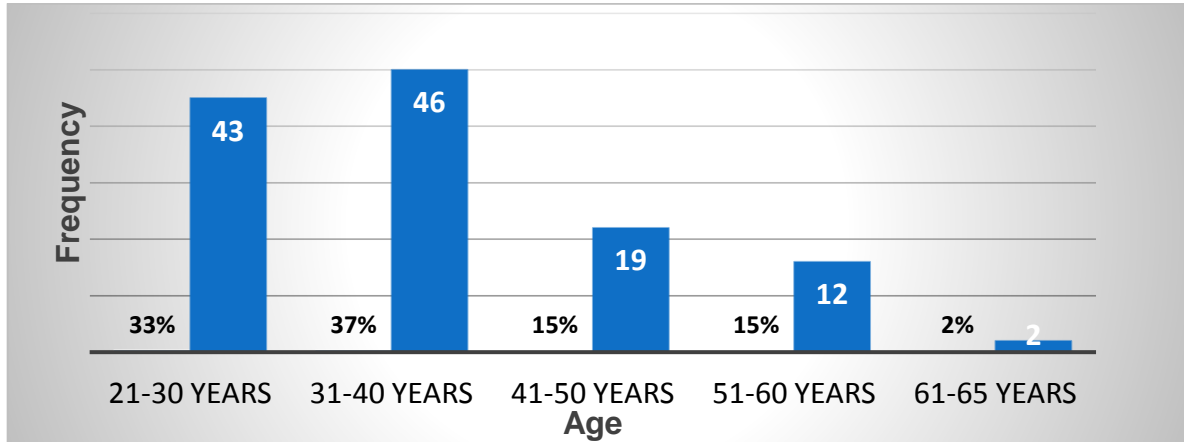
Figure 8 indicates that the majority of the respondents were White (45%), followed by Indian (24%) and Black (17%), with the minority from the Coloured population (14%).

Figure 8: Race Distribution
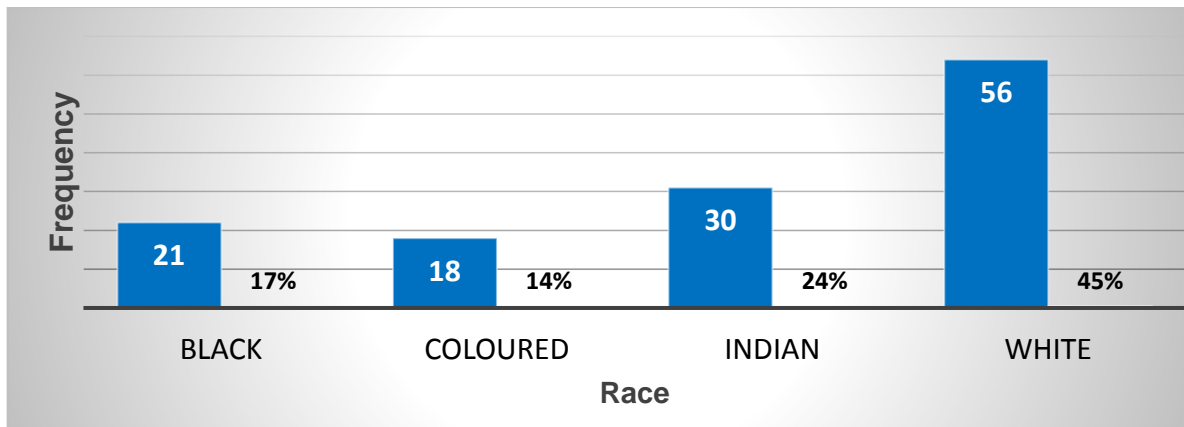
Table 1 reports the frequencies and percentages associated with length of service. The maximum length of service was 33 years while the minimum length of service was zero years (an indication of tenure under one year). The mean, median and mode are 6.25 years, four years and one year respectively. Of the sample, 10.4% had worked at the company for

six months or less, and 14.8% had worked at the company for one year or less. This means that approximately 25% of the sample had worked for the company for less than a year.

Table 1: Length of Service Distribution

Length of service	
N	125
Mean	6.25
Median	4
Mode	1
Minimum	0
Maximum	33

Figure 9 below displays the percentage related to the contribution by division. The majority of the respondents came from the Prescription (67%), followed by OTC (26%) and Consumer (7%) divisions. According to the sample frame the Prescription division hosts most of the sales representatives in the company.

Figure 9: Division Distribution
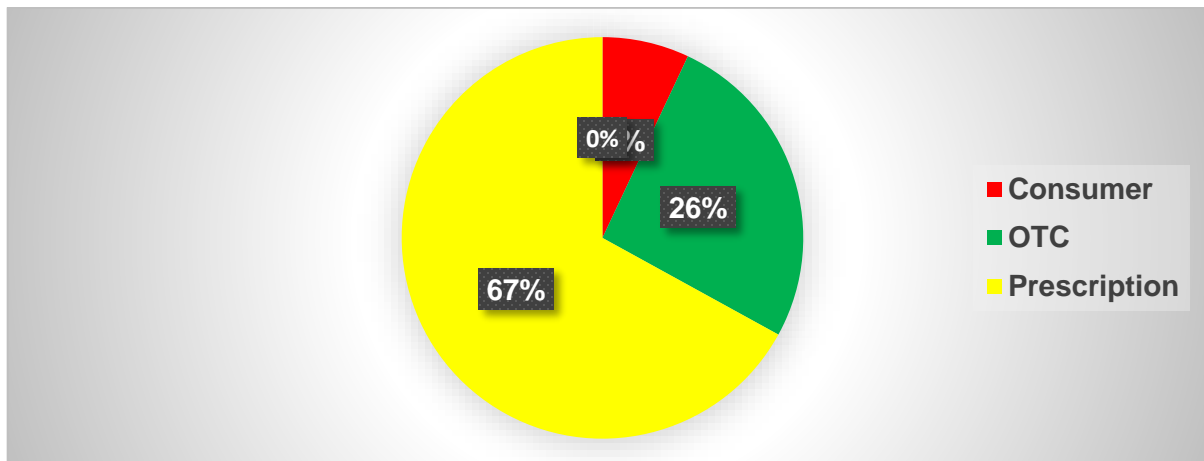
5.3 Employee Engagement

Employee engagement was assessed by asking respondents to indicate their perceptions relating to nine statements on a seven-point Likert scale.

5.3.1 Validity and Reliability of the Employee Engagement Scale

Factor analysis was used to determine the construct validity of the employee engagement scale. The technique also attempted to produce a smaller number of linear combinations of the original variables in a way that explains most of the variability in the correlations between variables. In the first step the scales were tested for sampling adequacy and appropriateness of the data for factor analysis.

Table 2 shows that the KMO index measure for sampling adequacy yielded a value of 0.919, which is higher than the minimum accepted level of 0.6. This index value indicates that the data met the sampling adequacy criterion for factor analysis. The Bartlett's test of sphericity was statistically significant (p=.000) therefore factor analysis was appropriate.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin		0.919
Bartlett's Test of Sphericity	Approx. Chi-Square	806.013
	df	36
	Sig.	0.000

Table 3 depicts the principle component analysis indicating the total variance explained by the different components. Component one accounted for 64.88% of the total variance with an eigenvalue above 1.0. This means that the common variance shared by nine variables can be accounted for by one factor labelled employee engagement.

Table 3: Total Variance Explained Employee Engagement

Component	Initial Eigenvalues Employee Engagement		
	Total	% of Variance	Cumulative %
1	5.839	64.877	64.877
2	0.850	9.440	74.317
3	0.545	6.055	80.372
4	0.442	4.915	85.287
5	0.352	3.914	89.202
6	0.340	3.777	92.979
7	0.280	3.110	96.088
8	0.198	2.205	98.293
9	0.154	1.707	100.000

The scree plot (see Figure 10) was inspected to find the point where the shape of the results curve changes direction and becomes horizontal. Only one factor was identified above the point of inflection. Parallel analysis of the data also indicated that only one factor should be extracted.

Figure 10: Scree Plot of Eigenvalues for All Employee Engagement Factors
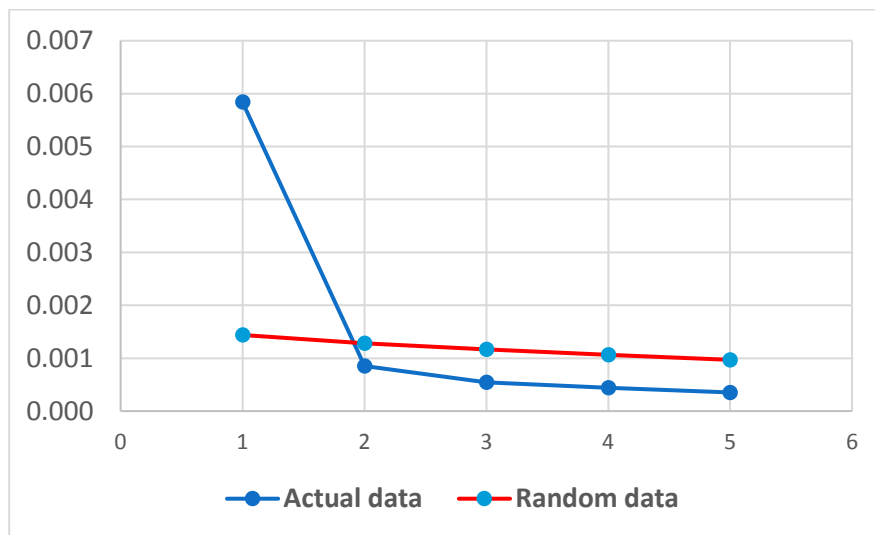
Given the data from the eigenvalues, scree plot and parallel analysis, only one factor was extracted using principal component analysis. No rotation was employed since only one factor was extracted.

Table 4 below displays the loadings of each of the items on the one component with factor loadings ranging from 0.70 to 0.88. A factor loading of 0.40 is acceptable and can be included in the scale and therefore all nine items will be included in the scale.

Table 4: Component Matrix Employee Engagement

Item	Statement	Component 1
EE1	At my work I feel bursting with energy.	0.785
EE2	At my work I feel strong and vigorous.	0.876
EE3	I am enthusiastic about my job.	0.868
EE4	My job inspires me.	0.846
EE5	When I get up in the morning I feel like going to work.	0.846
EE6	I feel happy when I work intensely.	0.722
EE7	I am proud of the work that I do.	0.783
EE8	I am immersed in my work.	0.803
EE9	I get carried away when I am working.	0.702

Total Employee Engagement
a. 1 components extracted.

The reliability and internal consistency of a scale need to be determined before a test can be used for research purposes. In Table 5 below an analysis of the alpha for individual items indicates that the removal of items would not have considerably improved the reliability of the scale, therefore all items were included. Item-total correlation was used as an additional measure of reliability by correlating the individual item score to the sum of all scores. The item-total correlation coefficients were calculated using the Corrected Item-Total Correlation. All correlation coefficients are greater than 0.3, indicating adequate item-total correlation.

Table 5: Employee Engagement Item-Total Statistics

Item	Statement	Cronbach's Alpha if Item Deleted	Corrected Item-total Correlation
EE1	At my work I feel bursting with energy.	0.925	0.723
EE2	At my work I feel strong and vigorous.	0.918	0.831
EE3	I am enthusiastic about my job.	0.919	0.821
EE4	My job inspires me.	0.920	0.794
EE5	When I get up in the morning I feel like going to work.	0.920	0.792
EE6	I feel happy when I work intensely.	0.928	0.657
EE7	I am proud of the work that I do.	0.925	0.722
EE8	I am immersed in my work.	0.923	0.747
EE9	I get carried away when I am working.	0.930	0.632

With an alpha of 0.93 (displayed in Table 6 below) the scale was considered to be reliable with a high degree of consistency between multiple measurements of the scale.

Table 6: Cronbach Alpha for Dependent Variable Employee Engagement

Reliability Employee Engagement	
No of Items	9
Cronbach's Alpha	0.93

5.3.2 Descriptive Statistics of the Construct Employee Engagement

Based on the factor analysis results, employee engagement as measured by the UWES was treated as a total factor item. The descriptive statistics for employee engagement are displayed in Table 7 below. The mean score for employee engagement's was 5.77, which indicates a high level of employee engagement. This coded value represents a position between the statements "often" and "very often". A standard deviation dispersion of 0.87 indicates that the individual responses did not deviate much from the main score; the responses were therefore not polarized. With regard to the normality of the data - the data was moderately negative skewed (indicating the mean is generally less than the median) and platykurtic (indicating a thinner peak and tails) as per Bulmer's (2012) guidelines.

Table 7: Descriptive Statistics Employee Engagement

Employee Engagement	
N	125
Mean	5.77
Median	5.89
Std Dev	0.87
Skewness	-0.87
Kurtosis	0.37

5.4 Resilience

Resilience was assessed by asking respondents to indicate their perceptions regarding six statements on a five-point Likert scale.

5.4.1 Validity and Reliability of the Resilience Scale

Factor analysis was used to determine the construct validity of the resilience scale. The technique also attempted to produce a smaller number of linear combinations of the original variables in a way that explains most of the variability in the correlations between variables. In the first step the scale was tested for sampling adequacy and appropriateness of the data for factor analysis.

Table 8 shows that the KMO index measure of sampling adequacy yielded a value of 0.68, which is slightly higher than the minimum accepted level of 0.6. In addition, the Bartlett's test of sphericity was statistically significant (p=.000). Therefore the data fulfilled the criteria for sampling adequacy for factor analysis.

Table 8: KMO and Bartlett's Test for Resilience

Kaiser-Meyer-Olkin		0.68
Bartlett's Test of Sphericity	Approx. Chi-Square	190.584
	df	15
	Sig.	0.000

The principle component analysis results are presented in Table 9. The total variance explained by the different components indicated that two components had eigenvalues above 1.0, accounting for 63% of the total variance.

Table 9: Total Variance Explained Resilience

Component	Initial Eigenvalues Resilience		
	Total	% of Variance	Cumulative %
1	2.586	43.107	43.107
2	1.203	20.046	63.152
3	.820	13.672	76.824
4	.605	10.088	86.912
5	.534	8.893	95.805
6	.252	4.195	100.000

After inspecting the scree plot (see Figure 11) for the point where the shape of the curve changes direction and becomes horizontal; only one factor was identified above the point of inflection. However, parallel analysis of the data indicated that two factors could be extracted.

Figure 11: Scree Plot of Eigenvalues for AI Resilience Factors
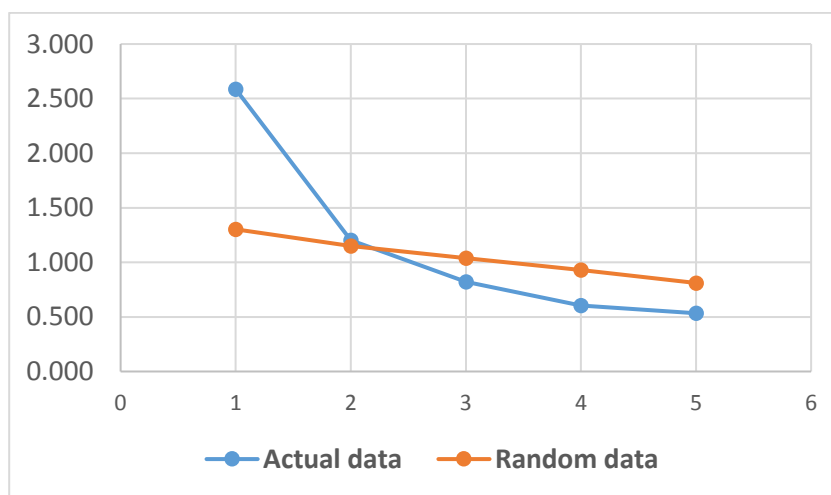
Given the results from the eigenvalues, scree plot and parallel analysis, one-factor and two-factor solutions were investigated using principal component analysis. Based on both theoretical and statistical considerations, the one-factor solution seemed to fit the data best. No rotation was employed since only one factor was extracted.

Table 10 below displays the loadings of each of the items on the one component with factor loadings ranging from 0.43 to 0.81. A factor loading of 0.40 is acceptable and can be included in the scale and therefore all six items could be included in the scale.

Table 10: Component Matrix Resilience

Item	Statement	Component 1
R1	I tend to bounce back quickly after hard times.	0.520
R2	I have a hard time making it through stressful events.	0.650
R3	It does not take me long to recover from a stressful event.	0.675
R4	It is hard for me to snap back when something bad happens.	0.774
R5	I usually come through difficulty times with little trouble.	0.434
R6	I tend to take a long time to get over set-backs in my life.	0.807

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

The initial Cronbach alpha for the Resilience Scale was 0.73. However, it was determined that item R5 ("I usually come through difficulty times with little trouble") lowered the scale's reliability and removing this item resulted in a slightly higher Cronbach alpha (see Table 11). In addition, the corrected item-total correlation also indicated that item R5 generated a low correlation coefficient (<0.3) and should therefore be deleted. Based on these results, as well as on its relative low factor loading (0.434), item R5 was removed from further analyses.

Table 11: Resilience Item-Total Statistics

Item	Statement	Cronbach's Alpha if Item Deleted	Corrected Item-total Correlation
R1	I tend to bounce back quickly after hard times.	0.355	0.716
R2	I have a hard time making it through stressful events.	0.448	0.692
R3	It does not take me long to recover from a stressful event.	0.522	0.672
R4	It is hard for me to snap back when something bad happens.	0.570	0.653
R5	I usually come through difficulty times with little trouble.	0.286	0.740
R6	I tend to take a long time to get over set-backs in my life.	0.598	0.643

With an alpha of 0.72 (displayed in Table12 below) the scale was considered to be reliable with a high degree of consistency between multiple measurements of the scale.

Table 12: Cronbach Alpha for Independent Variable Resilience

Reliability Resilience	
No of Items	6
Cronbach's Alpha	0.72
No of Items	5
Cronbach's Alpha	0.74

5.4.2 Descriptive Statistics of the Construct Resilience

Resilience as measured by the BRS was treated as a total factor item. In Table 13 below the mean score for resilience is 3.7, indicating a high perceived level of resilience. This coded value represents the statement "agree". A standard deviation dispersion of 0.63 indicates that the individual responses deviated slightly from the main score. In terms of normality the data was fairly symmetrical and platykurtic (indicating a thinner peak and tails) as per Bulmer's (2012) guidelines.

Table 13: Descriptive Statistics Resilience

Resilience	
N	125
Mean	3.70
Median	3.80
Std Dev	0.63
Skewness	-0.25
Kurtosis	0.21

5.5 Perceived Organisational Support

Perceived organisational support was assessed by asking respondents to indicate their perception regarding eight statements on a seven-point Likert scale.

5.5.1 Validity and Reliability of the Perceived Organisation Support Scale

Factor analysis was used to determine the construct validity of the perceived organisational support scale. The technique also attempted to produce a smaller number of linear combinations of the original variables in a way that explains most of the variability in the correlations between variables. In the first step the scales were tested for sampling adequacy and appropriateness of the data for factor analysis.

Table 14 shows that the KMO index measure for sampling adequacy yielded a value of 0.885, which is higher than the minimum accepted level of 0.6. This index value indicates that the study fulfilled the sampling adequacy criterion for factor analysis. The Bartlett's test of sphericity was statistically significant (p=.000) therefore factor analysis was appropriate.

Table 14: KMO and Bartlett's Test for Perceived Organisational Support

Kaiser-Meyer-Olkin		0.885
Bartlett's Test of Sphericity	**Approx. Chi-Square**	599.172
	Df	28
	Sig.	0.000

Table 15 presents the principle component analysis indicating the total variance explained by the different components. With eigenvalues above 1.0 component one accounted for 59.89% of the total variance, while component two accounted for 13.07% of the total variance of the construct. The cumulative percentage of variance that can be explained by the first two components is 72.96%, which means that approximately 73% of the common variance shared by eight variables can be accounted for by the two factors. According to the Kaiser's rule only components with eigenvalues above 1.0 should be considered meaningful.

Table 15: Total Variance Explained for Perceived Organisational Support

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	4.792	59.894	59.894
2	1.045	13.067	72.961
3	0.556	6.952	79.913
4	0.526	6.575	86.488
5	0.369	4.610	91.098
6	.279	3.486	94.585
7	.248	3.097	97.681
8	.185	2.319	100.000

The scree plot (see Figure 12) was inspected to find the point where the shape of the curve changes direction and becomes horizontal. Two factors were identified above the point of inflection. Parallel analysis of the data suggested that only one factor should be extracted.

Figure 12: Scree Plot for Eigenvalues for All Perceived Organisational Support Factors
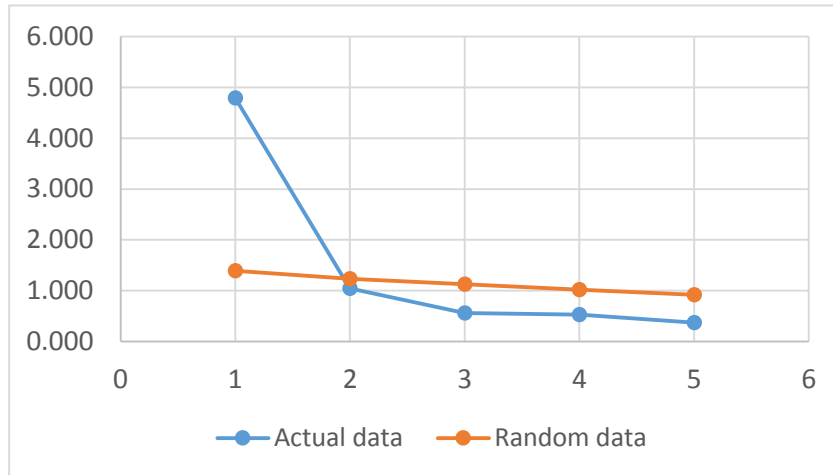
Given the results from the eigenvalues, scree plot and parallel analysis, one-factor and two-factor solutions were investigated using principal component analysis. Despite the eigenvalues and scree plot results, a two-factor solution did not yield satisfactory results in that only two items loaded sufficiently on the second factor. For a factor to be considered meaningful, it should be loaded on by at least three items (Tabachnick et al., 2001). Therefore, a one-factor solution was extracted and consequently no rotation was needed.

Table 16 below displays the loadings of each of the items on the one component with factor loadings ranging from 0.54 to 0.90. A factor loading of 0.40 is considered acceptable and the item can be included in the scale, therefore all eight items were included in the scale.

Table 16: Component Matrix for Perceived Organisational Support

Item	Statement	Component 1
POS1	The organisation strongly considers my goals and values.	0.792
POS2	Help is available from the organisation when I have a problem.	0.869
POS3	The organisation really cares about my wellbeing.	0.898
POS4	The organisation would forgive an honest mistake on my part.	0.821
POS5	The organisation is willing to help me when I need a special favour.	0.814
POS6	If given the opportunity, the organisation would take advantage of me.	0.543
POS7	The organisation shows very little concern for me.	0.679
POS8	The organisation cares about my opinions.	0.715

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

Table 17 below presents an analysis of the alpha for individual items and indicates that the removal of items would not have improved the reliability of the scale considerably, therefore all items were included. Item-total correlation was used as an additional measure of reliability by correlating the individual item score to the sum of all scores. The item-total correlation coefficients were calculated using the Corrected Item-Total Correlation. All correlation coefficients were greater than 0.3 indicating adequate item-total correlation.

Table 17: Cronbach's Alpha Perceived Organisational Support Individual Items

Item	Statement	Cronbach's Alpha if Item Deleted	Corrected Item-total Correlation
POS1	The organisation strongly considers my goals and values.	0.880	0.700
POS2	Help is available from the organisation when I have a problem.	0.871	0.803
POS3	The organisation really cares about my wellbeing.	0.868	0.832
POS4	The organisation would forgive an honest mistake on my part.	0.879	0.730
POS5	The organisation is willing to help me when I need a special favour.	0.880	0.722
POS6	If given the opportunity, the organisation would take advantage of me.	0.902	0.476
POS7	The organisation shows very little concern for me.	0.891	0.610
POS8	The organisation cares about my opinions.	0.889	0.614

Cronbach alpha was used to determine internal consistency with a coefficient alpha between 0.70 and 0.80 seen as indicative of good reliability. With an alpha of 0.90 (displayed in Table 18 below) the scale was considered to be reliable with a high degree of consistency between multiple measurements of the scale.

Table 18: Cronbach Alpha for Independent Variable Perceived Organisational Support

Reliability of Perceived Organisational Support	
No of Items	8
Cronbach's Alpha	0.90

5.5.1 Descriptive Statistics Perceived Organisational Support

Perceived organisational support as measured by the POS scale was treated as a total factor item. In Table 19 below the mean score was 4.87, which indicates a response close to "slightly agree". A standard deviation dispersion of 1.31 indicates that there was a large amount of variation in the individual responses. In terms of normality the data was moderately negative skewed (indicating the mean is generally less than the median) and platykurtic (indicating a thinner peak and tails) as per Bulmer's (2012) guidelines.

Table 19: Descriptive Statistics Perceived Organisational Support

Perceived Organisational Support	
N	125
Mean	4.87
Median	5.00
Std Dev	1.31
Skewness	-.692
Kurtosis	0.041

5.6 Multiple Regression

Before the commencement of the multiple regression analyses, assumptions for regression analyses were assessed. All assumptions were met. Next, multiple regression analyses were conducted by entering the control variables (gender, age, length of service) in Block 1,

resilience (R) in Block 2, and perceived organisational support (POS) in Block 3. The results for the multiple regression analyses are displayed in Table 20 and Table 21.

Table 20: Model Summary of Employee Engagement[a]

Model	F Change	R	R Square	Adjusted R Square	Cohen's f^2
1	1.632	0.197[b]	0.039	0.015	0.04
2	1.502	0.225[c]	0.051	0.019	0.05
3	27.2	0.477[d]	0.227	0.195	0.29
a. Dependent Variable: TotalEE b. Predictors: (Constant), Tenure, Gender, Age c. Predictors: (Constant), Tenure, Gender, Age, TotalR d. Predictors: (Constant), Tenure, Gender, Age, TotalR, TotalPOS					

Table 21: Coefficients of Employee Engagement[a]

Model		Standardized Coefficients	Unstandardized Coefficients	t	Sig.
		Beta			
1	(Constant)	6.258		18.213	0
	Gender	-0.315	-0.169	-1.865	0.065
	Age	0.076	0.093	0.781	0.437
	Length of Service	-0.019	-0.177	-1.467	0.145
2	(Constant)	5.696		9.953	0
	Gender	-0.31	-0.166	-1.837	0.069
	Age	0.071	0.087	0.734	0.464
	Length of Service	-0.018	-0.165	-1.367	0.174
	TotalR	0.15	0.109	1.226	0.223
3	(Constant)	4		6.535	0
	Gender	-0.129	-0.069	-0.821	0.413
	Age	0.084	0.102	0.951	0.344
	Length of Service	-0.007	-0.064	-0.577	0.565
	TotalR	0.114	0.083	1.031	0.305
	TotalPOS	0.293	0.442	5.215	0
a. Dependent Variable: TotalEE b. Predictors: (Constant), Tenure, Gender, Age c. Predictors: (Constant), Tenure, Gender, Age, TotalR d. Predictors: (Constant), Tenure, Gender, Age, TotalR, TotalPOS					

Hypothesis 1:

Research question one: Can it be predicted with reasonable accuracy that a relationship exists between resilience and employee engagement?

The first null hypothesis was "no significant relationship exists between resilience and employee engagement in a sales environment (H_01)". The alternate hypothesis was "a significant relationship exists between resilience and employee engagement in a sales environment (H_11)".

The results in Table 20 indicate that the demographic variables (gender, age, length of Service) predicted approximately 4% of the variance in employee engagement. Resilience predicted just more than 5% of the variance in employee engagement. However, neither the demographic variables $(F = 1.63, p > 0.05)$ nor resilience $(F = 1.50, p > 0.05)$ were statistically significant predictors of employee engagement. The statistical analysis therefore failed to reject the null hypothesis due to inadequate evidence available to suggest that the null hypothesis is false at the 95% confidence level.

Hypothesis 2:

Research question two: Can it be predicted with reasonable accuracy that a relationship exists between perceived organisational support and employee engagement?

The second null hypothesis was "no significant relationship exists between perceived organisational support and employee engagement in a sales environment (H_02)". The second alternate hypothesis was "a significant relationship exists between perceived organisational support and employee engagement in a sales environment (H_12)".

The results in Table 20 indicate that perceived organisational support predicted approximately 23% of the variance in employee engagement $(F = 27.20, p < 0.05)$. The regression coefficient of perceived organisational support was statistically significant (Beta = 0.44, $p < 0.05$). The null hypothesis was therefore rejected and the alternative hypothesis accepted at the 95% confidence level.

Finally, it was confirmed that Type 1 and Type 2 errors were avoided since: (1) the sample size was adequate for the current analyses, (2) Cohen's f^2 was 0.29, indicating a moderate ES, (3) the alpha level required a sample size of 67 and the current sample size exceeded that by 58, and (4) the statistical power of the current analyses were greater than the required 0.80 at 0.99.

5.7   Conclusion

Data analysis based on the two research questions generated results indicative of acceptable levels of reliability, internal consistency and construct validity. Once all the assumptions for multiple regression were met the results demonstrated support for the rejection of hypothesis one, which attempted to explore the relationship between resilience and employee engagement. Hypothesis two, which endeavoured to explore the relationship between perceived organisational support and employee engagement, was accepted. In Chapter 6 the results from the research process are discussed in more detail in relation to existing literature.

CHAPTER 6: DISCUSSION OF RESULTS

6.1   Introduction

In this chapter the research findings are discussed in detail and compared to the literature reviewed in Chapter 2. This study aimed to determine the nature of the relationship between the predictors of resilience and perceived organisational support (independent variables) and the dependent variable of employee engagement. An overview of the demographic variables and the constructs is provided below. This is followed by a discussion of the results in relation to the research questions.

To reiterate, the central objectives of the study were:

- To predict with reasonable accuracy that a relationship exists between resilience and employee engagement.
- To predict with reasonable accuracy that a relationship exists between perceived organisational support and employee engagement.

6.2.   Overview of Demographic Variables

A total of 125 usable responses were collected from a sample of 220 pharmaceutical sales representatives. This is a response rate of approximately 57%, which was deemed adequate for statistical analysis. A minimum of 90 responses for the statistical analysis of two independent predictors was required. It can therefore be concluded with confidence that the sample size was appropriate for scientific analysis and generalisation of results.

This study investigated the demographic variables of age, gender and length of service as it was hypothesised that they may be related to the outcome variable of employee engagement. Demographic variables were thus regarded as control variables and formed part of Block 1 in the regression analysis. Demographic variables predicted approximately 4% of the variance in the outcome and were not statistically significant predictors of employee engagement. For the purpose of this study gender, age and length of service were

analysed as a unit. The results can therefore not be directly compared to studies treating demographic variables as separate units. Nonetheless, the present study does offer insights consistent with findings from previous research concerning demographic variables and employee engagement.

In this study the majority of respondents were aged between 31 and 40 years of age (37%), followed by individuals aged between 21 and 30 years (33%) of age. This indicates that almost 70% of the sales force is younger than or equal to 40 years of age. A study by Schaufeli and Bakker (2003) reported a weak positive correlation between age and engagement with older employees feeling more engaged. This finding is mirrored by the South African HR Practice Study, which found that 11% of employees above the age of 30 are disengaged, while 31% of employees under the age of 30 are disengaged (Martins & Nienaber, 2014). Given that older employees appear to be more engaged it is possible that the young sample in this study had overall low levels of engagement. However, this does not appear to have been the case as the sample reported an overall mean score of 5.77 for engagement and this score is indicative of a high level of engagement.

With respect to length of service, results indicated that approximately 25% of the sales force had been employed by the organisation for one year or less. Trahant (2009) observed that employee engagement is high when employees first enter an organisation and declines after the first year for up to five years after being employed. In contrast, Xu and Thomas (2011) found that increased tenure does not lead to lower employee engagement. No analysis was conducted to gain comparable insights on length of service and employee engagement.

6.3 Overview of the Constructs

6.3.1 Employee Engagement

Employee engagement was assessed using the nine-item Utrecht Work Engagement Scale (UWES). An analysis of the employee engagement construct was provided in Section 5.3 in Chapter 5. Factor analysis was used to determine the construct validity of the scale. High factor loadings were observed in all nine items and therefore all items were included in the

scale. A one-factor solution also seemed to best fit the data. The Cronbach alpha coefficient for this scale was 0.93 indicating reliability with a high internal consistency (Zikmund et al., 2010) suggesting that the correct construct was measured. This level of reliability is within close range of a South African study of nurses that reported an alpha coefficient of 0.79 (Mathumbu & Dodd, 2013), and much lower than a South African study of call centre employees that reported an alpha of 0.95 (Simons & Buitendach, 2013).

Maslach and Leiter's (1997) theory of engagement was used as it shares many characteristics with engagement among salespeople, which is interpreted as an aroused psychological state of energy and focus aimed at addressing situational and task related demands in a sales environment (Medhurst & Albrecht, 2016). The mean score for employee engagement was 5.77, which indicates a high level of engagement. It was therefore concluded that this sample of sales representatives experienced a positive work related state of mind with a strong sense of vigour towards, dedication to, and absorption in work activities (Gupta & Sharma, 2016; Maslach & Leiter, 1997).

This level of engagement is within close range of the levels of engagement reported in previous South African engagement studies, with a mean score of 4.24 reported in a study of nurses (Mathumbu & Dodd, 2013), and a mean score of 4.54 reported in a sample of call center employees (Simons & Buitendach, 2013). This comparison is unsurprising as sales employees experience similar levels of emotional exhaustion and burnout (Loveland et al., 2015) to call center staff (Johnson et al., 2005; Simons & Buitendach, 2013) and the nursing profession (Bargagliotti, 2012; Mathumbu & Dodd, 2013).

Research indicates that employee engagement has a direct influence on a salesperson's performance (Albrecht & Medhurst, 2011; Franke et al., 2013; Rapp et al., 2014). According to Albrecht et al. (2015) the relationship between employee engagement and sales performance can serve as a competitive advantage in an already highly competitive business environment. Although some authors suggest that lean economic periods with potential low sales compensation can erode organisational commitment and engagement in salespeople (Amyx & Alford, 2005; Johnson et al., 2016) this may not be the case in a pharmaceutical sales environment. In a recent article in Forbes magazine, the pharmaceutical generic and mainstream industry were classified as two of the four most profitable industries for 2016 with profit margins of 30% and 26% respectively (Chen, 2015).

With regard to the normality of employee engagement data, the data was moderately negatively skewed and platykurtic. Negatively skewed data indicates a moderately low frequency of low employee engagement scores. This skewed data may be due to response bias. A less positive response to scale items such as "my job inspires me" or "I am enthusiastic about my job" may be unflattering to the respondent. This has the potential to produce biased responses and contribute to high engagement scores. A platykurtic distribution means that the results are distributed over a wide range.

6.3.2 Resilience

Resilience as the first independent variable was assessed using the Brief Resilience Scale (BRS). An analysis of the resilience construct was presented in Section 5.4 in Chapter 5. Factor analysis confirmed that the scale had adequate construct validity. The factor and principle component analysis of the BRS in this study are consistent with previous studies in emerging countries (Amat et al., 2014; Lai & Yue, 2014). This addressed the concern of validity when using an instrument developed in the Western world for a non-western population (Abiola & Udofia, 2011; Dageid & Gronlie, 2015).

The Cronbach alpha for this scale was 0.74 indicating reliability with an acceptable level of internal consistency (Zikmund et al., 2010), suggesting that the correct construct was measured. This level of reliability is consistent with alpha scores of 0.76 and 0.72 reported in a Chinese study (Lai & Yue, 2014), and lower than scores ranging from 0.84 to 0.91 (Smith et al., 2008) in an American sample, 0.93 in a Malaysian study (Amat et al., 2014), and 0.83 (Rodríguez-Rey et al., 2015) in a Spanish study.

The mean score for resilience was 3.7, indicating a high perceived level of resilience. It can thus be concluded that this sample has the positive, psychological capacity to bounce back from difficulty without losing the ability to function normally (Bardoel et al., 2014; Bonanno, 2004). It is logical to assume that a high level of resilience will help the individuals in this sample succeed in sales (Friend et al., 2016; Verbeke et al., 2011), as they possess the personal buoyancy to mitigate the job demands in a sales environment (Krush et al., 2013).

There are no comparable South African studies reporting mean resilience scores based on the BRS. However, the results can be compared to a South African study of nurses (Koen et al., 2011) where the emotional exhaustion and job demands experienced in the nursing profession are comparable to experiences in a competitive sales environment. In this particular study resilience was also assessed based on the principles of positive psychology and was defined as the ability to adapt to difficult circumstances. This study found moderate to high resilience scores for approximately 90% of the nursing sample (N=312).

In terms of normality the data was fairly symmetrical and platykurtic. A fairly symmetrical distribution means that the two halves of the histogram are a mirror image of each other. So approximately the same number of respondents selected options both above and below 3.7 (the mean). A platykurtic distribution means that most points on the scale (for example "agree" and "strongly agree") were used, with resilience scores distributed over a wide range.

6.3.3 Perceived Organisational Support

The second independent variable, perceived organisational support, was assessed using the POS scale. An analysis of the perceived organisational support construct was presented in Section 5.5 of Chapter 5. Factor analysis confirmed adequate construct validity of the scale, while an alpha coefficient of 0.90 confirmed reliability with a high degree of internal consistency. These results are consistent with previous South African research indicating an acceptable level of reliability and validity for this scale with Cronbach alpha values ranging from 0.71 (Mathumbu & Dodd, 2013) to 0.89 (Smit et al., 2015).

Perceived organisational support as measured with the POS scale was conceptualised based on social exchange theory with the assumption that employees who perceive that organisations care about their well-being will engage in greater job-related efforts (Kurtessis et al., 2015). The mean score for perceived organisational support was 4.87, which indicate that the average response was close to "slightly agree", thus endorsing a moderate level of perceived organisational support. It can therefore be concluded that this sample slightly agrees with the statements in the POS, indicating the extent to which they believe that employers value their contribution towards business goals and care about their well-being (DeConinck & DeConinck, 2015). The results of this study are consistent with a study of

South African nurses (Mathumbu & Dodd, 2013) where respondents reported a moderate level of perceived organisational support (mean equal to 4.64) and a study of Italian nurses with a reported mean of 4.17 (Trinchero et al., 2013). This appears to be the first South African based study focusing on perceived organisational support in a sales environment.

In terms of theories of organisational support human resource practices and supervisor support are important antecedents of perceived organisational support (Baran et al., 2012; Kurtessis et al., 2015) and are thus significant in a sales environment. Sales targets are usually linked with monetary incentives to enhance individual or team sales performance. Sales literature indicates that setting fair and realistic sales targets is extremely difficult (Morelli & Braganza, 2012). Salespeople in the pharmaceutical industry (the chosen context for this study) have a high proportion of variable pay (ranging from 15% to 25%) included in their remuneration package (Morelli & Braganza, 2012). It can be argued that unrealistic sales targets, the inability to achieve these unrealistic targets, and the subsequent loss of monetary incentives in the form of variable pay might be viewed by sales representatives as unfair.

Failure to achieve sales targets can lead to managerial and human resource actions in the form of warnings and dismissal (Morelli & Braganza, 2012). If failure to achieve targets is addressed in a harsh or disrespectful way, this action can be perceived as hostile human resource practices and result in subsequent diminished perceived organisational support. Furthermore, sales employees who perceive that their sales manager is considerate of their goals, values and well-being report higher levels of perceived organisational support (DeConinck & DeConinck, 2015).

With regard to the normality of the perceived organisational support data was moderately negatively skewed and platykurtic. Negatively skewed data indicates a moderately low frequency of low perceived organisational support scores. As discussed previously this skewed data may be due to response bias. A less positive response to scale items such as "the organisation shows very little concern for me", or "if given the opportunity, the organisation will take advantage of me" may be unflattering to the respondent. This has the potential to produce biased responses, resulting in high perceived organisational support scores. A platykurtic distribution means that results are distributed over a wide range.

6.4   Research Question 1

Is there a relationship between a high level of employment engagement and resilience?

The first null hypothesis was "no significant relationship exists between resilience and employee engagement in a sales environment ($H_0$1)". The alternate hypothesis was "a significant relationship exists between resilience and employee engagement in a sales environment ($H_1$1)".

6.4.1 Interpretation of Results

Although resilience explained almost 5% of the variance in employee engagement the construct was not a statistically significant predictor of the employee engagement. The statistical analysis therefore failed to reject the null hypothesis due to inadequate evidence suggesting that the null hypothesis is false at the 95% confidence level. It can therefore be concluded that in this sample resilience did not predict employee engagement in a sales environment.

The results of this analysis contradict prior academic research indicating that employee engagement is a positive organisational outcome associated with resilience (King et al., 2015; Mache et al., 2014; Shin et al., 2012). In the South African context Simons and Buitendach (2013) observed a practical and statistically significant relationship between total employment engagement scores and resilience amongst call centre employees. As mentioned previously, the call centre environment is similar to the sales environment in terms of emotional exhaustion and burnout.

Findings from Bakker et al. (2011) also suggest that resilience is an important predictor of work engagement. However, this prediction included additional dimensions of self-efficacy, optimism, hope and resilience. It is likely that the predictive power of resilience for engagement could be stronger if it were defined and quantified in conjunction with all the dimensions of psychological capital.

It is plausible that the relationship between resilience and employee engagement is more complex than what can be explained by a simple prediction model. Resilience may be a moderating variable between an independent variable and the outcome variable employee engagement. For example, the possibility of the moderating effects of personal resources in the relationship between job resources and work engagement has been recognised in existing empirical research (Mäkikangas, Feldt, Kinnunen, & Mauno, 2013; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). It is also possible that resilience as a personal resource may act as a mediating variable between an independent variable and the outcome variable of employee engagement (Bakker & Demerouti, 2008; Chen et al., 2015). Using the job-resources/demands model Cooke, Cooper, Bartram, Wang, and Mei (2016) found that employee resilience mediates the relationship between high-performance work systems and employee engagement within the context of Chinese banking.

In a sales context resilience may act as a moderating variable between employee engagement and a different organisational outcome. Medhurst and Albrecht (2011) found that resilience influences a salesperson's performance through engagement and the investment of high levels of energy when faced with challenging situations. In addition, although resilience did not predict employee engagement in a sales environment, this may be different in other populations.

6.5   Research Question 2
Is there a relationship between a high level of employment engagement and perceived organisational support?

The second null hypothesis was "no significant relationship exists between perceived organisational support and employee engagement in a sales environment (H_02)". The second alternate hypothesis was "a significant relationship exists between perceived organisational support and employee engagement in a sales environment (H_12)".

6.5.1 Interpretation of Results

Perceived organisational support not only predicted approximately 23% of the variance in employee engagement ($F = 27.20$, $p < 0.05$), but the regression coefficient also proved to be statistically significant (Beta = 0.44, $p < 0.05$). The null hypothesis is therefore rejected

and the alternative hypothesis accepted and true at the 95% confidence level. It is concluded that in this sample perceived organisational support predicts employee engagement in a sales environment.

This outcome is consistent with the results of earlier studies based on similar theory (Saks, 2006). According to social-exchange theory employees with high perceived organisational support will engage in greater job-related efforts (Kurtessis et al., 2015). In more recent international and South African studies, positive organisational support was positively associated with a high level of engagement (Mathumbu & Dodd, 2013; Trinchero et al., 2013).

It is also plausible that the relationship between the two constructs can be defined beyond prediction. Shantz et al. (2014) suggested that perceived organisational support moderates the relationship between work engagement and behavioural outcomes such as turnover intentions and deviant behaviours. In a study of nurses affective commitment mediated the relationship between perceived organisational support and work engagement (Gupta, Agarwal, & Khatri, 2016).

While formulating the hypothesis it was not assumed that employee engagement as an outcome would be entirely explained by the predictive power of the independent variable. Perceived organisational support predicted nearly a quarter (23%) of the outcome, which means that the majority, or almost three quarters, of the predictive power of engagement is still explained by different independent variables. It is also important to take into account that different predictors or drivers of employee engagement are interrelated and do not function separately. Examples of predictors of engagement reported in sales literature include role conflict, role ambiguity, activity and capability control, and adaptive selling behaviour (Miao & Evans, 2013), trust, psychological contract, and interactional justice (Agarwal, 2014).

6.6 Conclusion

The results from this study support the hypothesis that perceived organisational support predicts employee engagement in a competitive sales environment. The study also found that resilience is not a statistically significant predictor of employee engagement, despite the

fact that research suggests that such a significant relationship exist. These provide valuable learnings and opportunities for further investigation.

This study synthesised a conceptual theoretical model exploring the predictive relationship between resilience and perceived organisational support and the outcome of employee engagement. Figure 13 depicts a summation of the explored relationships between the various constructs.

Figure 13: Summary of Findings
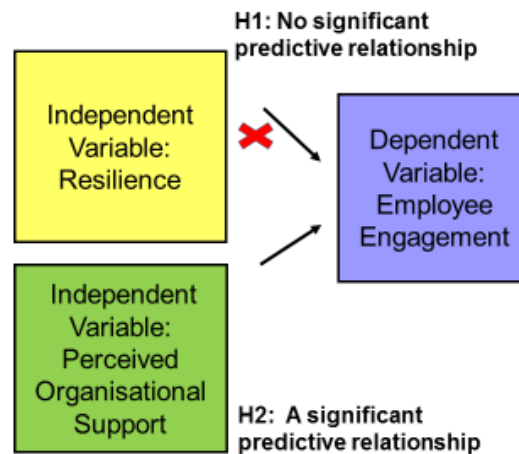
The theoretical contribution, implications for management, limitations of the study and recommendations for future research are discussed in the final chapter of this report.

CHAPTER 7: CONCLUSION

7.1 Introduction

The empirical and practical value of this research can be viewed in two ways. Firstly, the individual role of each construct provided insight into the sales context, which appears limited in business literature. Secondly, the relationship between the constructs offered a different lens through which the drivers of employee engagement in sales can be viewed.

An overview of the salient findings will be discussed, while the management implication will focus specifically on sales managers and human resource partners. Factors that may limit the quality of the evidence presented are discussed. The chapter also provides recommendations for future research endeavors.

7.2 Major Finding

This research attempted to determine whether resilience and perceived organisational support are significant predictors of employee engagement. It should be acknowledged that the preliminary model presented in this study might not account for the true complexity of the relationship between each of the included variables. Nonetheless, studying the relationship between the constructs is of interest to the academic fields of positive organisational behaviour, positive psychology and organisational support theory.

The study was designed to contribute to the literature in three ways. Firstly, employee engagement was positioned as a positive, organisational behavioural outcome in the context of competitive sales. Maslach and Leiter's (1997) theory of engagement was selected based on the characteristics of vigour, dedication and absorption shared with the definition of engagement among salespeople (Medhurst & Albrecht, 2016). The stressful nature of sales positions and consequential emotional exhaustion and burnout (Bande et al., 2015) were aligned with the UWES as a measurement tool of engagement grounded in burnout literature (Maslach & Leiter, 1997).

Secondly, research relating to the potential impact of positive psychological factors such as resilience is largely absent from sales research (Friend et al., 2016) and this study proposed a predictive relationship between resilience and employee engagement as a positive organisational outcome. Support for this hypothesis was deduced from positive psychology and positive organisational behaviour literature, with resilience viewed as the positive, psychological capacity to bounce back from difficulty (Luthans, 2002). Although this proposed relationship was not statistically significant, the results took the first step towards conceptualising resilience as a positive psychological factor associated with employee engagement in the context of competitive sales. Positive psychology has the potential to reframe the challenging nature of sales positions into a more progressive and desirable occupational domain.

Thirdly, perceived organisational support was identified as the second predictor of employee engagement. Consistent with organisational support theory it was hypothesised that perceived organisational support would be a statistically significant predictor of employee engagement. Support for this hypothesis was inferred from social exchange theory with the assumption that sales employees who perceive that the organisation cares about their well-being and appreciates their contribution towards business goals will engage in greater job-related efforts (Kurtessis et al., 2015). Perception of organisational support as a form of social currency has important implications for improving employees' well-being and favourable orientation toward the organisation.

7.3   Implications for Management

The results of this research have the following implications for managers in general:

Employee engagement: Employee engagement is a continuous process in need of integration across all facets of the employer-employee relationship and employee lifecycle (Albrecht et al., 2015). Direct supervisors and sales managers should treat employee engagement as a priority and actively take responsibility for driving the process. Although there are many stakeholders involved in creating a culture of engagement, line managers and direct supervisors ought to be the ultimate owners of engagement (Aon Hewitt, 2015)

Resilience: Resilience is pliable and open to development (Krush et al., 2013) and resilience should thus be viewed as a set of skills that can be developed as part of strategic human resource management. Resilience-buildings programs have proven to be effective in the workplace with a positive effect on health, well-being and performance (Robertson, Cooper, Sarkar, Curran, & Cooper, 2015; Vanhove et al., 2015).

Perceived organisational support: Perception of organisational support as a form of social currency should be leveraged to improve employees' well-being and the creation of a favourable orientation toward the organisation. With supervisor support being identified as an antecedent of perceived organisational support (Morelli & Braganza, 2012), sales managers should maintain a reflective outlook on the quality and level of their supervision and support towards sales staff. A high level of supervisor support has the ability to reduce burnout and ultimately staff turnover (DeConinck & DeConinck, 2015). With fairness being one of the antecedents of perceived organisational support (Morelli & Braganza, 2012), managers responsible for the allocation of sales territories and structuring of sales targets and performance packages play an important role in making decisions that are perceived by sales staff as fair. human resource practices is the third antecedent of perceived organisational support (Morelli & Braganza, 2012). A study by Zampetakis (2014) indicated that human resource management practices such as training, performance appraisal and compensation systems play an important role in creating supportive environments for sales employees.

7.4 Recommendations to South African Companies in the Pharmaceutical Industry

The competitive nature of the pharmaceutical sales environment is bound to intensify with an increased focus on industry profit margins, and gaining and protecting market share. Demand for pharmaceuticals in South Africa is likely to rise in the future, reflecting demographic and epidemiological trends as well as government commitments to improved healthcare. Yet, the South African pharmaceutical industry will become more constrained (IMS Health, 2014). Firstly, pressure on drug prices will increase in the future. Secondly, the regulation of drug prices, combined with the impact of inflation and exchange rate fluctuations on manufacturers, will squeeze pharmaceutical industry margins. Thirdly,

medical aid funders are pursuing additional cost-containment measures and stepping up efforts to curb spending on prescribed drugs as their finances come under growing pressure (IMS Health, 2014). As a result, management will increasingly scrutinise sales performance as a driver of revenue.

Based on the above observations, the following recommendations are proposed to managers in the South African pharmaceutical business industry:

- Acknowledge and leverage employee engagement as a significant driver of sales performance (Verbeke et al., 2011) and competitive advantage (Albrecht et al., 2015) in an increasingly constrained business environment.

- Recognise and leverage perceive organisational support as a predictive driver of sales employee engagement. Considering the fact that salespeople in the pharmaceutical industry typically have a high proportion of variable pay or commission included in their remuneration package (Morelli & Braganza, 2012), it is critical to design these financial incentives in a manner that is perceived as fair, with fairness being an antecedent of perceived organisational support.

- In the context of a new South African democracy and diverse society a perception of organisational support can be leveraged to foster reconciliation and enhance employer-employee relationships. With supervisory support, fairness and human resource practices being antecedents of perceived organisational support (Kurtessis et al., 2015), an effort can be made to embrace cultural and racial diversity in terms of sales coaching and support, performance, relationship and talent management.

7.5   Limitations of the Research

The limitations of this study are mainly linked to shortcomings related to impact and generalisation. Firstly, the sample in this study was derived from a single pharmaceutical organisation with sales roles predominantly focused on doctor detailing and business-to-business selling. The results may consequently not be generalisable to sales employees working in different industries. Secondly, with pharmaceutical sales representatives working

in a knowledge-intensive and science-based economy the results may not be generalisable to sales employees working in other environments (for example, telesales or retail sales). Thirdly, a cross-sectional research design provided only a snapshot of the specific timeframe used. A different timeframe containing dynamics such as restructuring or organisational change may have provided different results.

7.6   Recommendations for Future Research

After review of the results, available sales literature and contribution to theory, the following areas for future research are recommended:

- **Employee engagement:** To validate and generalise the results of this study future resarch should replicate the predictive relationship between perceived organisatonal support and employee engagement in different sales organisations across different industries. Conceptualising sales employee engagement based on the job demands-resources model will provide additional insight concerning the specific consequences and role of job demands in the development of engagement. This research did not focus on sales performance as an outcome of employee engagement. An interesting area of research could be to explore how perceived organisational support mediates the relationship between employee engagement and sales performance. Employee engagement has not been studied extensively in the South African pharmaceutical context. Future studies focusing on sales employees will make a valuable contribution to creating a body of empirical research within modern sales environments.

- **Resilience:** Research measuring resilience as a single construct in a different context using the BRS could make a valuable contribution to demonstrating the reliability and validity of the scale in the South African context as an emerging country. No predictive relationship was found between resilience and employee engagement. However, the relationship between resilience and employee engagement should be explored beyond prediction. If resilience is conceptualised based on job demands-resources theory, the moderating effect of resilience as a

personal resource in the relationship between job resources and employee engagement (Mäkikangas et al., 2013; Xanthopoulou et al., 2007) can be explored.

- **Perceived organisational support:** The positive association between employee engagement efforts and staff retention (Bande et al. 2015) is well documented. Taking into consideration concerns related to high sales force turnover (Johnson et al., 2016), future research can explore the moderating effect of perceived organisational support and employee engagement on intention of sales staff to leave the organisation.

7.7 Conclusion

Employee engagement remains a burning issue across academic, corporate and consulting domains. In the dynamic and competitive topography of sales, employee engagement has immense opportunities to impact business success. Resilience has the potential to reframe the challenging nature of sales positions into a more progressive and desirable occupational domain, while perceived organisational support can be used by organisations as a social currency to increase employee engagement and ultimately sales performance. The results of this study provided insights that will encourage conversations and future research in a domain that is critical for organisational success and survival.

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APPENDIX A: Informed Consent and Questionnaire

Dear colleague

I would like to invite you to participate in a survey that will take a maximum of 10 minutes of your time. As it is difficult to obtain enough responses I will be very grateful for your participation.

This survey is part of an academic research report that I am doing with the Gordon Institute of Business Science. The survey is intended to obtain your perception on resilience, perceived organisational support and employee engagement. Permission to distribute the surveys were obtained from all divisional authorities.

Your participation is voluntary and you can withdraw at any time without penalty. No names are required so your answers are completely anonymous. Data will be used and represented on an aggregated level to ensure anonymity. In addition data will be kept strictly confidential.

By completing the survey you are confirming that you are doing so voluntary. If you have any questions or concerns, please contact me or my research supervisor as per the contact details below.

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Employee Questionnaire

Section A: Demographics

In this section you are asked to provide general background information.

Gender

- ☐ Male
- ☐ Female

Age

Please indicate your age from your last birthday, in number of years:_____years

In the South African context I am classified as:

- ☐ Black
- ☐ Coloured
- ☐ Indian
- ☐ White

Length of service at current employer

Please indicate your length of service in number of years: _____years

Division

Please indicate in which division you are currently employed:

- ☐ Consumer
- ☐ OTC
- ☐ Prescription

Section B: Employee Engagement

Please indicate how you feel about each statement.

Please respond to each item by circling the number in each row	Never	Almost never (a few times a year or less)	Rarely (once a month or less)	Sometimes (a few time a month)	Often (once a week)	Very often (a few times a week)	Always (everyday)
1 At my work, I feel bursting with energy.	1	2	3	4	5	6	7
2 At my job, I feel strong and vigorous.	1	2	3	4	5	6	7
3 I am enthusiastic about my job.	1	2	3	4	5	6	7
4 My job inspires me.	1	2	3	4	5	6	7
5 When I get up in the morning I feel like going to work.	1	2	3	4	5	6	7
6 I feel happy when I am working intensely.	1	2	3	4	5	6	7
7 I am proud of the work that I do.	1	2	3	4	5	6	7
8 I am immersed in my work.	1	2	3	4	5	6	7
9 I get carried away when I am working	1	2	3	4	5	6	7

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Section C: Resilience

Please indicate how you feel about each statement.

Please respond to each item by circling the number in each row	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1 I tend to bounce back quickly after hard times.	1	2	3	4	5
2 I have a hard time making it through stressful events.	1	2	3	4	5
3 It does not take me long to recover from a stressful event.	1	2	3	4	5
4 It is hard for me to snap back when something bad happens.	1	2	3	4	5
5 I usually come through difficult times with little trouble.	1	2	3	4	5
6 I tend to take a long time to get over set-backs in my life.	1	2	3	4	5

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The Brief Resilience

Scale : Assessing the Ability to Bounce Back, *15*, 194–200.

Section D   : Perceived Organisational Support

Please indicate how you feel about each statement.

Please respond to each item by circling the number in each row		Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree
1	The organization strongly considers my goals and values.	1	2	3	4	5	6	7
2	Help is available from the organization when I have a problem.	1	2	3	4	5	6	7
3	The organization really cares about my wellbeing.	1	2	3	4	5	6	7
4	The organization would forgive an honest mistake on my part.	1	2	3	4	5	6	7
5	The organization is willing to help me when I need a special favor.	1	2	3	4	5	6	7
6	If given the opportunity, the organization would take advantage of me.	1	2	3	4	5	6	7
7	The organization shows very little concern for me.	1	2	3	4	5	6	7
8	The organization cares about my opinions.	1	2	3	4	5	6	7

Eisenberger, R. (1986). 22_Perceived_Organisational_Support.pdf. *Journal of Applied Psychology*, *71*(3), 500–507.

Electronic Questionnaire

APPENDIX B: Consistency Matrix

Title: The relationship between employee engagement, resilience and perceived organisational support in a competitive sales environment.

HYPOTHESIS	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
H1: There is a positive relationship between resilience and a high level of employee engagement.	Mache et al 2014 Bande a, Fernández-Ferrín, Varela & F Jaramillo (2015) Bakker, Albrecht & Leiter (2011) King, Newman & Luthans (2015); Shin, Taylor & Seo (2012) Medhurst & Albrect (2011) Simons & Buitendach (2013)	Surveys (UWES; Brief Resilient Coping Scale) Quantitative; surveys Review Incubator Theoretical model Surveys (UWES, Psycap, Org commitment)	Descriptive statistics, correlation, regression Descriptive statistics, correlation, structural equation modelling Content analysis Content analysis Content analysis Descriptive statistics, correlation, regression
H2: There is a positive relationship between perceived organisational support and a high level of employee engagement.	Kurtessis et al. (2015) Saks (2006) Trinchero, Brunetto, & Borgonovi (2013) Shantz, Alfes & Latham (2014) Mathumbu & Dodd, 2013 Rothmann & Rothmann Jnr. (2010)	Meta-analysis of Perceived Organisational Support theory Quantitative; surveys Quantitative; surveys Quantitative; surveys Quantitative; surveys	Random-effects meta-analytic procedures; corrected mean correlations, reliability coefficient, artefact analysis Descriptive statistics, inter-correlation, paired t-test Correlation, regression, MANOVA, factor analysis Descriptive statistics, inter-scale correlation Descriptive, inferential statistics Descriptive statistics, regression, prediction

APPENDIX C: Codebook

LABEL	ITEMS	CODING	REVERSE QUESTIONS
	Demographic Variables		
Gender	My gender is:	Male=1; Female=2	
Age	My age from my last birthday in years is:		
Race	In the South African context I am classified as:	Black=1; Coloured=2; Indian=3; White=4	
Tenure	Length of service in years with current employer:		
Division	I am currently employed the following division:	Consumer=1; OTC=2; Prescription=3	
	EMPLOYEE ENGAGEMENT		
EE1	At my work I feel bursting with energy.	Never=1; Almost Never=2; Rarely=3; Sometimes=4; Often=5; Very Often=6; Always=7	None
EE2	At my work I feel strong and vigorous.		None
EE3	I am enthusiastic about my job.		None
EE4	My job inspires me.		None
EE5	When I get up in the morning I feel like going to work.		None
EE6	I feel happy when I work intensely.		None
EE7	I am proud of the work that I do.		None
EE8	I am immersed in my work.		None
EE9	I get carried away when I am working.		None
TotalEE	Total Employee Engagement		
	RESILIENCE		
R 1	I tend to bounce back quickly after hard times.	Strongly Disagree=1; Disagree=2; Neutral=3; Agree=4; Strongly Agree=5 Resilience_recode R2 Resilience_recode R4 Resilience_recode R6	None
R 2	I have a hard time making it through stressful events.		Reverse Question
R 3	It does not take me long to recover from a stressful event.		None
R 4	It is hard for me to snap back when something bad happens.		Reverse Question
R 5	I usually come through difficulty times with little trouble.		None
R 6	I tend to take a long time to get over set-backs in my life.		Reverse Question
TotalR	Total Resilience		
	PERCEIVED ORGANISATIONAL		
POS1	The organisation strongly considers my goals and values.	Strongly Disagree=1; Moderately Disagree=2; Slightly Disagree=3; Neutral=4; Slightly Agree=5; Moderately Agree=6; Strongly Agree=7 POS6_reversecoded POS7_reversecoded	None
POS2	Help is available from the organisation when I have a problem.		None
POS3	The organisation really cares about my wellbeing.		None
POS4	The organisation would forgive an honest mistake on my part.		None
POS5	The organisation is willing to help me when I need a special favour.		None
POS6	If given the opportunity, the organisation would take advantage of me.		Reverse Question
POS7	The organisation shows very little concern for me.		Reverse Question
POS8	The organisation cares about my opinions.		None
TotalPOS	Total Perceived Organisational Support		

APPENDIX D: Output of Analysis

Histogram
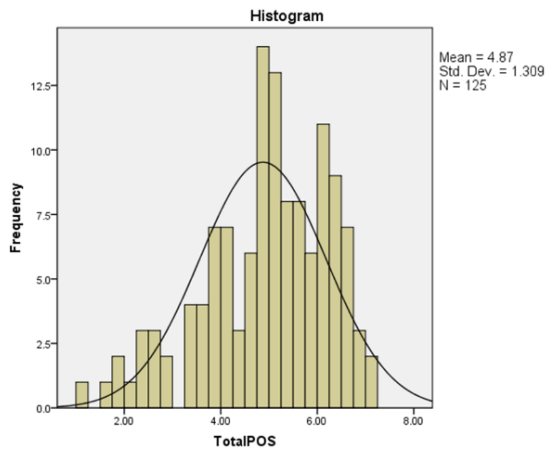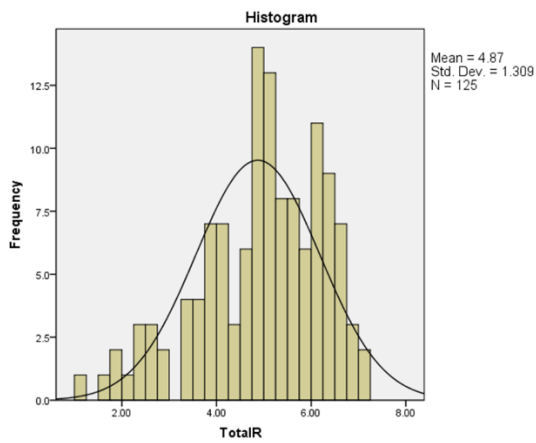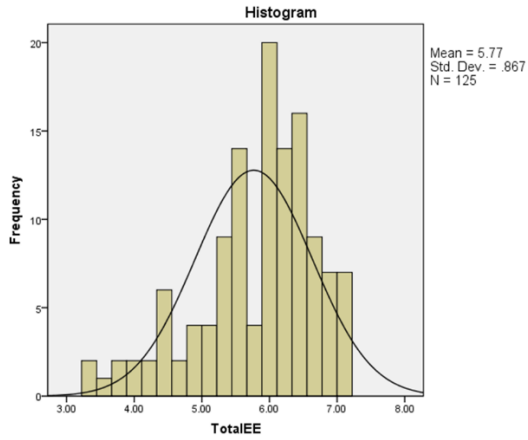
APPENDIX E: Ethical Clearance Approval

Dear Anel Meintjes

Protocol Number: **Temp2016-00853**

Title: **The relationship between employee engagement, resilience and perceived organisational support in a sales environment.**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards

Adele Bekker