The Relationship between Work Engagement, Self-Efficacy and Optimism among call centre agents

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MAGISTER COMMERCII

SUPERVISOR: Professor Fatima Abrahams

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Abstract

The costs of occupational health and well-being are increasingly being considered as sound ‘investments’ as healthy and engaged employees yield direct economic benefits to the company. The concept of Work engagement plays a vital role in this endeavour because engagement entails positive definitions of employee health and promotes the optimal functioning of employees within an organisational setting. The objective of this study was to examine the relationship between work engagement, self-efficacy and optimism amongst call centre employees in a retail organisation in the Western Cape. Over the last several years, most call centre research has predominately been focused on the aspects and causes of stress, burnout, and the deterrents of employee’s well-being. In response to the prevailing preoccupation with negative aspects, the research focused on more positive aspects of human functioning and experiences. The sample comprised of ninety three call centre employees who are employed in the customer service department in a major retail organisation in the Western Cape. Convenience sampling was utilised. The measuring instruments included the Utrecht Work Engagement Scale, The Life Orientation Test-Revised and The General Self-Efficacy Scale. Statistically significant relationships were found between work engagement, self-efficacy and optimism. It was found that call centre agents displayed average levels of work engagement and optimism however they displayed high levels of self-efficacy. It was furthermore found that a moderate percentage of the variance in work engagement can be explained by self-efficacy and optimism. The implication of the results is that interventions that focus on the personal resources (viz. efficacy beliefs, optimism, hope and resiliency) and job resources (viz. physical, social or organizational aspects of the job) will contribute to increasing levels of work engagement.
KEY WORDS: Work engagement, Vigour, Dedication, Absorption, Positive Psychology, Psychological Well-being, Optimism, and Self-Efficacy.
DECLARATION

I declare that the thesis “The Relationship between Work Engagement, Self-Efficacy and Optimism among call centre agents” is my own work, and that it has not been submitted for any degree or examination in any other university. All the resources I have used or quoted have been indicated and acknowledged by complete references.

____________________

Anees Davids
DEDICATION

To my parents Moegamat Noor and Amina Davids, I would like to sincerely thank my parents who are my greatest supporters and motivators in my life. Their love and encouragement gave me the ability to get this far. I dedicate this research to the both of them, as without their continual support and love; this research would not have been possible. To my nephew Muhammad Taufeeq Davids and two my nieces Maryam and Kauthar Salie you are too young to appreciate what I’ve accomplished but I hope when you are old enough it will serve as an inspiration to you all to reach for your dreams. To all those students who continue to struggle and strive through your studies with great difficulty at times, I want you to know with patience and perseverance it can be done, I am the testament to that. You can and will overcome whatever obstacles might come your way and in the end you will achieve your goals.
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CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

Work engagement has become one of the most vital concepts underpinning motivation, well-being and performance (Gubman, 2004, Bakker & Leiter, 2010). It focuses on optimal functioning and encapsulates how an employee experiences work, as stimulating, energetic, meaningful and as something to which they would really want to devote their time to (Bakker, 2010).

Traditionally, the concept of engagement was an expectation many organisations rarely had to question, because it was always assumed that employment implied engagement and there was often no reason for organisations to imagine that an employee would not be engaged in their work (Schumann, 2010). However, this assumption has changed. Employees are now expected to be proactive, show initiative and take responsibility for their own professional development while being committed to high quality performance standards. Driven by the growing need to maximize employee input, organisations required employees to feel energetic and dedicated – i.e., engaged in their work (Schaufeli & Bakker, 2010).

Over the last 15 years a growing body of research has placed engagement into the forefront of emerging psychological concepts with research demonstrating the utility of engagement for the individual and organisation (van Zyl, Deacon, & Rothmann, 2010; Simpson, 2009). Coinciding with the rise of positive psychology and advocating its basic tenets, the interest in engagement
arose with the shift in focus in psychology from weaknesses, malfunctioning and damage towards happiness, human strengths and optimal functioning (Rothmann, 2003; Strümpfer, 2003; Seligman & Csikszentmihalyi, 2000).

From an organisational perspective, research has identified a significant relationship between engagement and positive organisational outcomes including productivity, job satisfaction, motivation, commitment, low turnover intention, customer satisfaction and job performance (Bakker, Demerouti, & Schaufeli, 2005; Hakanen, Bakker, & Schaufeli, 2006; Harter, Schmidt, & Hayes, 2002; Schaufeli & Bakker, 2004). On the individual level, studies have also addressed the relationship between work engagement, physiological and psychological well-being. Engaged employees were found to have less self-reported headaches, stomach ailments and cardiovascular problems. Additionally optimism and self-efficacy, have also demonstrated a significant relationship to work engagement (Schaufeli & Salanova, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

The current study investigates the relationship between work engagement, optimism and self-efficacy within a call centre environment. Characteristically call centres are regarded as a high-stress environment with high levels of job control, little to no autonomy and stringent performance measures (Townsend, 2005). Substantiated by research, the factors that make call centre work stressful are under extensive investigation (Holman, 2003; Hauptfleisch & Uys, 2006; Taylor & Bain, 1999; Fisher, Milner, & Chandraprakash, 2007; Holdsworth & Cartwright, 2002; Visser & Rothmann, 2008). Research has indicated that a variety of negative consequences may materialise within call centres including: increased absenteeism, higher
turnover rates; increased recruitment and training costs; decreased quality of customer service and lower first-time call resolutions (Holman, 2003).

In a departure from the prevailing focus on the negative aspects of call centre this study investigates the positive aspects of human functioning, by identifying the levels of work engagement, self-efficacy and optimism amongst the call centre agents. Furthermore, the study analyses the relationship between work engagement, self-efficacy and optimism. The findings of the study will add knowledge that may inform organisational wellness programmes and help to identify possible areas of risk and support the promotion of employee well-being within the call centre environment.

1.2 Rational for the Study

The study was undertaken in one of South Africa’s largest non-food retailers which over the last 80 years have gained a 31% market share of the South African clothing and footwear (“C&F”) market. It has the largest base of consumer credit customers in Southern Africa, with more than four million active credit card accounts and additionally operates within Namibia, Botswana, Lesotho and Swaziland. As of 28 March 2009, 19,100 permanent employees were employed by the organisation and it’s retail sales increased by R448 million or 6.4% from R7,017 million in the third quarter 2010 to R7,465 million in the third quarter 2011. The organisation maintained tight control on credit granting procedures and credit sales accounted for 49% of total retail sales in the third quarter 2011, down from 51% achieved in the third quarter 2010. Cash sales for the
third quarter 2011 were 9.0% higher than the third quarter driven by improving merchandising and customer value proposition, while growth in credit sales was restrained at 3.8%.

Within the organisation, the credit and financial services division offers consumer credit and insurance products through the credit and financial services business. The credit and financial services division perform all aspects of the credit management processes including credit scoring, activation, customer service and collection. The bulk of these operations are conducted within the regional call centre situated in Cape Town, KZN and Johannesburg.

The study was conducted in the customer services department within the Cape Town Regional call centre, where like many other call centres, the promotion of psychological and physiological well-being in the workplace has become a critical issue facing this organisation. According to the records obtained from the occupational health practitioner, the call centre has been inundated with both physiological and psychological compliments (See Table 1).
Table 1

*Documented Cases of Physiological and Psychological complaints*

<table>
<thead>
<tr>
<th>Physiological and Psychological complaints</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselling</td>
<td>245</td>
</tr>
<tr>
<td>Chronic</td>
<td>165</td>
</tr>
<tr>
<td>Disability</td>
<td>24</td>
</tr>
<tr>
<td>Referrals</td>
<td>170</td>
</tr>
<tr>
<td>Emergencies</td>
<td>15</td>
</tr>
<tr>
<td>HIV testing</td>
<td>96</td>
</tr>
<tr>
<td>Injury on duty</td>
<td>1</td>
</tr>
<tr>
<td>Wellness assessments</td>
<td>187</td>
</tr>
<tr>
<td>Telephonic counselling</td>
<td>473</td>
</tr>
</tbody>
</table>

Counselling refers to employees who have been counselled by an occupational health practitioner and those referred to the psychologist. Approximately 240 employees out of a staff compliment of 535 were seen by the psychologist, between the periods of July 2009 to June 2010. The bulk of primary health care cases were upper respiratory infections, and early detection of high blood pressure and stress-related symptoms. The HIV positive numbers are low but also not a true reflection because many employees were not prepared to be tested.

With a high staff turnover many staff members missed their scheduled appointments; fortunately those who have tested positive are on the companies Aids program which has been very beneficial.
There have been 4 deaths within the call centre for the period August’09 – Oct’10 (V. Henkil, personal communication, January 19, 2011).

The above information could be a possible reflection of low levels of work engagement among the call centre staff. Research suggests that engagement is positively related to health, studies have found moderate negative correlations between engagement (particularly vigor) and psychosomatic health complaints (e.g. headaches, chest pain) (Schaufeli, Taris, & Van Rhenen, 2008; Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001).

The high levels of counselling were attributed to work related stress. According to the occupational health practitioner stringent performance measures, unrealistic targets and the inability to balance work and home life were identified as some of the main reason for the high levels of stress (V. Henkil, personal communication, January 19, 2011). In 2010, a study was conducted to investigate the relationship between stress, burnout, emotional labour and intention to leave within the collections department. A t-test was conducted to establish whether there were any significant differences in stress and burnout based on the gender of the respondents. The results indicated that there were significant differences in stress amongst call centre employees based on their gender. The results found that women experienced lower levels of stress compared to men (Sadien, 2010).
Job stress may also influence the organisations overall performance in the form of low production, increased production errors, increased accidents, high labour turnover, increased absenteeism and increased medical costs (Rothmann, 2005). Within South Africa, occupational accidents and diseases amount to a cost of 3.5% of the GDP, which translates to about R30 billion per annum (South African Department of Labour, 2004 cited in Sieberhagen, Rothmann, & Pienaar, 2009). A total of 122 889 employees fall victim to accidents or sickness as a direct result of their work, and almost 1% (0.72%, or 884 employees) of these are fatal. The number of man-days lost annually due to sickness is estimated at over R12 million, with further losses due to labour unrest (Workmen’s Compensation Fund, 1999 cited in Sieberhagen et al., 2009).

High levels staff turnover and absenteeism has also been one of biggest challenges facing the call centre. Research has indicated that levels of burnout predicted future absence duration, but not absence frequency. On the other hand, levels of work engagement predict future absence frequency, but not absence duration. Thus, as expected, burnout is associated with “involuntary” absenteeism and leads to longer sickness absence, whereas work engagement is associated with “voluntary” absenteeism and leads to less frequent absences (Schaufeli, Arnold, & Van Rhenen, 2009).

In South Africa, it is estimated that 6.3 days per employee per annum are lost to unapproved absences from work (Vaida, 2005 cited on Sieberhagen et al., 2009). About 4.5% of the South African workforce are absent on any given day, although the absenteeism rate is sometimes as high as 18% in some South African organisations (Vaida, 2005 cited on Sieberhagen et al., 2009).
Table 2

*Sick leave data for period July 2010, August 2010, September, 2010 and November, 2010*

<table>
<thead>
<tr>
<th>Period</th>
<th>Headcount</th>
<th>Number staff member’s on sick leave</th>
<th>Average number of days</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2010</td>
<td>129</td>
<td>50</td>
<td>1.5</td>
</tr>
<tr>
<td>August 2010</td>
<td>128</td>
<td>48</td>
<td>1.4</td>
</tr>
<tr>
<td>September 2010</td>
<td>141</td>
<td>33</td>
<td>1.6</td>
</tr>
<tr>
<td>November 2010</td>
<td>149</td>
<td>38</td>
<td>1.5</td>
</tr>
</tbody>
</table>

The above table is a summary of sick leave data of the Customers Services Department (information was obtained from the HR department). Due to discrepancies only certain months of the year was used for this study. Absenteeism is recorded on an online system, failure of managers to accurately update sick leave on the system has resulted in discrepancies. According to the companies policies, a doctors certificate is not required if an employee is absent for only 1 day. For more than 2 consecutive days employees are required to prove that their absence from work was due to illness by presenting doctors certificate.

The analysis of the data showed that the duration of the sick leave is often only 1 day, because no doctor certificate is required there were no records of the causes or severity of the illness. According to the team mangers common “one day illness” are stomach ailments, headaches, migraines and nausea (H. Hass & K. May, personal communication, November 5, 2010).
Additionally many illnesses also arise during working hours. Agents who fall sick while at work are sent home depending on the severity of their illness.

Kgomo and Swarts (2010) investigated staff retention factors affecting contact centres industry in South Africa among 16 contact centres nationwide, 85.12% of the participants expressed the intention to leave the industry. Within the current call centre between the periods of January 2010 to November 2010, there were 92 terminations. The attrition rate varied from 17.30 % to 20.51% (between the January 2010 and November 2010) with the most terminations occurring within the Collections department. Six terminations were documented for Customer Services department between the periods of January 2010 to November 2010. One reason for low turnover within Customer Services department is that all permanent position within the department where frozen, furthermore two departments within the customers services were disbanded causing the department to be overstaffed.

With the above evidence it is clear that employee contribution has become a critical business issue, because in trying to produce more output with less employee input, companies have no choice but to try to engage not only the body but the mind and soul of every employee (Ulrich, 1997).

To address this issue, the study aims to describe the general experience of work in a call centre environment, without emphasising a certain issue or stressor. The objective of this approach is to determine aspects that are not necessarily stress related or negative in their environment but to investigate potential aspects of positive experiences.
The rationale behind this approach is twofold: Firstly, most call centre research has been focused on aspects such as causes of burnout, employee stress and focus towards specific aspects in call centre settings compared to other work settings (Grandey, Dickter, & Sin, 2004; Grebner, Semmer, Faso, Gut, Kälin, & Elfering, 2003; Harris, Daniels, & Briner, 2003; Healy & Bramble, 2003; Holman, 2003 cited in Bakker, 2010). Research examining important factors that might reduce stress and strain has often been overlooked, further exemplifying the need for researchers to focus on positive aspects within call centre environment. Secondly, our knowledge on optimal functioning is still very limited (Schaufeli & Salanova, 2007). Over the last three decades, occupational health psychology and other disciplines within the field of psychology were predominately concerned with ill–health, hence the need for research and practical application that would improve the quality of working life, and promote health, safety and well-being of workers (Tetrick & Quick, 2003). By examining the relationship between work engagement and self-efficacy and optimism the study investigates positive aspects of human functioning in an attempt to better understand optimal functioning in organisation setting and to increase positive scientific knowledge.

1.3 Objectives of the Study

The purpose of the study is specifically:

1. To determine the levels of work engagement amongst call centre employees.
2. To determine the levels of optimism and self-efficacy amongst call centre employees.
3. To determine the relationship between optimism and self-efficacy and work engagement amongst call centre employees.
4. To determine whether optimism and self-efficacy will significantly explain the variance in work engagement.

1.4 Definitions of Important Constructs

Definition of a call centre. The call centre refers to the environment within an organisation where the telephone provides client support or a sales channel through which new business is generated and present business is retained (The Telephone comes to Life, 1995 cited in Nel & De Villiers, 2004). Dawson, 1997, additionally defined call centres as “a physical location where calls are placed or received in high volume for the purpose of sales, marketing, customer services, telemarketing, technical support or other specialised business activity” (p.1).

Call centres can also be differentiated according to whether calls are inbound or outbound.

- **Inbound** – Inbound call centres receive incoming calls from customers. Contact Centres, after sales contact centre and customer services are usually inbound call centres. Inbound call centres often handle customer queries related to product/services (Radmeyer, 1995 cited in White & Ross, 2005).

- **Outbound** – Outbound call centres require call centre agents to call the customer. Telesales, marketing, research and collections often employ outbound call centres. Outbound call centres may be used to gather information regarding customer satisfaction or consumer behaviour (research); selling product or services (telesales/marketing) or collections of outstanding debt (White & Ross, 2005).
Within the call centre in this study there is both an inbound and outbound call centre. The new accounts and customer services department handle incoming call from customers, where follow up calls relating to customer queries are handled by the outbound department.

Different shifts exist within the departments of the call centre, namely:

- Day shift – call centre employees work from 08:00 am till 16:00 pm.
- Night shift – call centre employees work from 16:00 am till 21:00 pm.

Different employment types exist within the departments of the call centre, namely:

- PPT – Permanent part-timer (this is a permanent contract which does not include incentives or commission).
- FFT – Flexible part-timer (this is a 3/6month contract position).
- P5 – Permanent day shift employee, receiving all benefits of a permanent employee which includes incentives and commission. Permanent day shift employees are scheduled to work 5 days a week.
- P6 – Permanent night shift employee, receiving all benefits of a permanent employee which includes incentives and commission. Permanent night shift employees are scheduled to work 6 days a week.

**Definition of customer services and the customer services agent.** According to Hanley (1997) cited in Grobbelaar, Roodt, & Venter (2004) customer service is the only aspect that distinguishes one organisation from another, especially organisations in the same industry. Service refers to all the activities that create a bond between organisations and their clients -
anything an organisation does that enhances the customer experience (Blem, 1995; Harris, 2000 cited in Grobbelaar et al., 2004). The Customer Services agent is the first point of contact encountered by a company’s customers when making an enquiry. Agents are representatives of the company to the customers and are often the only means of communication between the company and its customers (Richardson & Howcroft, 2006).

**Definition of work engagement.** Work engagement is defined as “a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption” (Schaufeli, Salanova, González-Roma’, & Bakker, 2002, p. 74).

**Definition of optimism.** Optimism is a generalised expectancy that the future will be good, while pessimism is the generalised expectancy that the future will be bad (Carver & Scheier, 2002).

**Definition of self-efficacy.** The term self-efficacy was popularized by Bandura (1986) to describe the individual’s belief that he/she is able to execute successfully the behaviours required by a specific situation. Years later Schwarzer and Jerusalem (1995) developed this concept further by distinguishing between task-specific self-efficacy (the perception of completing a task successfully) and general self-efficacy. The measuring instrument utilised in this study measures general self-efficacy which defined as the perception of competence over a wide spectrum of tasks and activities (Schwarzer & Jerusalem, 1995).
1.5 Overview of the Study

Chapter 2 provides an overview of the models of engagement. Self-efficacy and optimism are introduced and discussed. Furthermore, the study explores the link between work engagement, self-efficacy and optimism.

Chapter 3 provides an outline of the research design and methodology employed by the study. It further discusses the research instruments used to gather the data (questionnaires) as well as the psychometric properties of each instrument. The chapter concludes with the statistical techniques employed to test the hypotheses.

Chapter 4 analyses and interprets the results gathered from the research study.

Chapter 5 discusses the results and implications of the study, elaborating on the limitations of the study and provides recommendations for future research.
Chapter 2

REVIEW OF LITERATURE

The following chapter provides the theoretical basis for the study. Firstly, the various theories governing the concept of work engagement are discussed. Each variable being investigated in the current study namely: Self-efficacy and optimism is explored in detail. Thereafter, the chapter concludes with an overview of the call centre environment.

2.1 Introduction

Work engagement has emerged as an academic and practical discipline. Based on empirical research, endorsed by organisations for its functional implications, work engagement is a legitimate psychological concept. But despite this perceived legitimacy, the construct is comprised of an array of comparative definitions, theoretical frameworks and diverse conceptualization.

From the foremost studies examining the psychological experiences of work and how the work context has shaped the process of people presenting and absenting themselves during task performance (Khan, 1990), to the contemporary endorsement of work engagement as promoter of psychological well-being (Shimazu & Schaufeli, 2008), work engagement has evolved into a multidimensional construct (Khan, 1990).
It has been recognised as a predictor of employee behaviour and performance (Luthans & Peterson, 2002) and has also shown significant relationships between employee engagement and customer satisfaction, productivity, profits, turnover, job satisfaction and employee commitment (Harter, Schmidt, & Hayes, 2002; Sakes, 2006).

The study of engagement has been further expanded by burnout research. After years of research, theorists have identified work engagement as the positive antidote to burnout (Maslach, Schaufeli, & Leiter, 2001). Contrary to characteristics of burnout, engaged employees have a sense of energy and effective connection to work (Bakker, Schaufeli, Leiter, & Taris, 2008). In alternative view, work engagement is considered as an independent concept operationalised as a positive, fulfilling work related state of mind (Schaufeli et al., 2002) which has gained substantial scientific enquiry in the fields of positive psychology (Seligman & Csikszentmihalyi, 2000), occupational health psychology (Schaufeli & Salanvona, 2007) and the study of positive organisational behaviour (Luthans, 2002).

To gain a better understanding of the multidimensionality of work engagement the following discussion provides insight into conceptual framework of work engagement by 1) identifying the various definitions of work engagement 2) outlining the various theories and models of the concept and finally 3) describing the relationship between work engagement, positive psychology and psychological well-being.
2.2 Definitions of work engagement

A review of the current work engagement research identifies four definitions of engagement within the context of work, they are namely: Personal engagement; employee engagement; engagement/ burnout and work engagement.

**Personal engagement.** Personal engagement is defined as ‘the harnessing of organisation members selves to their work roles’ (Kahn, 1990, p 694). It is the expression of oneself physically, cognitively and emotionally during work role performance with engagement defined as being physically involved cognitively vigilant and emotionally connected (Simpson, 2009).

**Employee engagement.** Employee engagement is defined as a relationship between the engagement construct and desirable organisational outcomes namely profit, productivity, safety, customer satisfaction and retention (Buckingham & Coffman, 1999). Primarily based on the Gallup Organisation, extensive research into employee engagement Harter et al. (2002, p. 269) initially defined employee engagement as “the individual’s involvement and satisfaction as well as enthusiasm for work”. Consequently, employee engagement has produced a myriad of definitions encompassing both links between engagement constructs and customer service (Lucey, Bateman, & Hines, 2005). A review of the various definitions of employee engagement includes dimensions of energy, organisational commitment, motivation and pride (Wellins & Concelman, 2004) as well as attitudinal and behavioural accepts of employee engagement (Robinson, Perryman, & Hayday, 2004).
Burnout and engagement. The other definition of engagement is derived directly from burnout research which describes engagement as the opposite or positive antithesis of burnout, noting that burnout involves the erosion of engagement (Maslach et al., 2001).

Work engagement. In an expansion of Maslach et al. (2001) definition of engagement, Schaufeli et al. (2002, p 74) defined work engagement as “a positive, fulfilling work related state of mind characterised by vigour, dedication and absorption”. According to Schaufeli et al. (2002) definition, work engagement is as independent, distinct concept that is negatively related to burnout (Bakker et al., 2008). For the purpose of this study, work engagement is defined and operationalised according to Schaufeli et al. (2002) model of work engagement.

2.3 Models of work engagement

The following discussion examines the various models of work engagement.

2.3.1 Personal engagement

The traditional understanding of the term ‘engagement’ is rooted in role theory and in particular the work of Erving Goffam (1961) cited in de Mello e Souza Wildermuth & Pauken (2008). According to Goffam (1961) engagement is defined as “spontaneous involvement in a role” and “visible investment of attention and muscular effort” (p.94). The role studies described the various roles individuals occupy in society and suggest that individuals act out momentary attachments and detachment behaviours in role performance [Goffam (1961) cited in de Mello e Souza Wildermuth & Pauken (2008); Goffam (1961) cited in Khan (1990)]. Although based purely on a sociological perspective and bearing no conceptual fit to organisational life, it
became the starting point of Khan’s (1990) conceptualisation of psychological conditions of personal engagement and disengagement at work.

In a qualitative study, Khan investigated the psychological conditions of personal engagement and disengagement. Summer camp counsellors and employees from an architecture firm where interviewed about their moments of engagement and disengagement (Saks, 2006). Engagement was defined engagement as “the harassing of organisational member’s selves to their work roles: in engagement, people employ and express themselves physically, cognitively and emotionally during role performance” (Khan, 1990, p.64). Disengagement, on the other hand, refers to those who have withdrawn themselves from their work roles (Luthans & Peterson, 2002).

The aim of the study was twofold, first to provide a conceptual framework for personal engagement and disengagement and secondly to describe the psychological condition which influence moments of personal engagement and disengagement (Khan, 1990).

Through inductive analysis three psychological conditions emerged namely: Psychological meaningfulness, Psychological safety and Psychological availability.

### 2.3.1.1 Psychological meaningfulness

According to Kahn (1990) individuals experience psychological meaningfulness when they are feeling worthwhile, validated, useful and valuable. They feel able to give to others and to their work. The study of psychological meaningfulness is well documented, it is defined as a primary motive to seek meaning in work and the lack of meaning often leading to alienation and disengagement (Frankl, 1992 ; Aktouf, 1992 ; May 2003 cited in May, Gilson, & Harter, 2004).
Factors that often influence psychological meaningfulness are task characteristics, role characteristics and work interaction (Khan, 1990).

**Task characteristics.** Psychological meaningfulness is experienced more by employees when they are employed in tasks that are challenging, unambiguous, varied, creative and somewhat autonomous (Khan, 1990, Hackman & Oldermen, 1980 cited in Khan, 1990).

**Role characteristics.** Within an organisation, roles are ascribed identities that organisational members assume (Burton & Dimbleby, 1998; Khan, 1990). Organisational members may either like or dislike these roles, which is typically determined on the basis of how well the role fits, how they saw or want to see themselves. The second component of a role is the status, influence or power ascribed to the role, the greater the value, power or status of the role the greater the sense of meaningfulness (Khan, 1990).

**Work interaction.** Psychological meaningfulness is also experienced when task performances included rewarding interpersonal relationships with co-workers or clients. This provides the employee with sense of connection an address his/her need for relatedness (Khan, 1990; Alderfer, 1972 cited in Khan, 1990).

### 2.3.1.2 Psychological Safety

Safety refers to a sense of being able to show and employ one’s self without the fear of negative consequence to the self-image, status or career. Psychological safety is fostered in an organisational environment that promotes trust, predictability and encourages self-expression that fosters personal engagement. However situations that are perceived as threatening,
inconsistent and unclear result in personal engagement being hindered as it deemed to be too risky and unsafe (Khan, 1990; May et al., 2004).

Factors that influence psychological safety includes: interpersonal relationships, group and inter-group dynamics, management style and process and organisational norms (Khan, 1990).

**Interpersonal relationships.** Psychological safety is promoted by interpersonal relationships when they are supportive and trusting. In a study conducted by Edmondson (1996) examining psychological safety and learning in work teams, Edmondson found that the quality of relations in work units has an impact on employees shared beliefs regarding whether mistakes would be held against them i.e. psychological safety (Khan, 1990; May et al., 2004).

**Group and inter-group dynamics.** Groups generally refers to a collection of people who interact in some way and share some common goals or interests (Burton & Dimbleby, 1998). Group may either be formally defined by organisational structure or informal (Robbins, Odendaal, & Roodt, 2003). Within groups each members play particular roles that are either conscious (e.g. Manager) or unconscious (e.g. Father/Mother Figure), and it’s often the unconscious roles that allow group members to safely express various part of themselves (Khan, 1990; May et al., 2004).

**Management Style and process.** The functional approach to management defines a manager as one who plans, leads, organises and controls (Robbins et al., 2003). Managers often translate system demands and reinforce employee’s behaviours in ways that may create different degrees of supportiveness and openness. Supportive managerial environments allow employees to try and fail without fear of consequences (Louis, 1986 cited in Khan, 1990).
Organisational Norms. Norms refers to shared expectations about general behaviours of system members. It consists of simple rules and standards against which appropriateness of behaviour is to be judged. Psychological safety corresponds to role performance that are within organisational norms as employees feel safer when appropriating within the boundaries of organisational norms rather than straying outside the protective boundaries of organisational norms (Khan, 1990, Burton & Dimbleby, 1998).

2.3.1.3 Psychological Availability

Psychological availability is the physical, emotional, and psychological resources necessary for investing the self in role performance. It is to feel capable of driving physical, intellectual and emotional energies into role performance (Khan, 1990).

Factors that influence psychological availability include physical energies, emotional energies, insecurities and outside life (Khan, 1990).

Physical energies. Levels of physical energies or resources allow employees to be fully engaged during role performance. Personal engagement demands high levels of physical energy, strength and readiness as depleted levels of physical energy leads to personal disengagement (Khan, 1990).

Emotional energies. The basic premise of personal engagement is the employment and expression of the self during role performance. Role performance often requires emotional energies at certain levels to allow employees to personally engage in role performance (Khan, 1990).
**Insecurities.** Employee’s level of confidence and how secure he/she feels about their own abilities and status will determine the degree on investment of the self in role performance. Insecurities distract employees from fully expressing their selves at work by generating anxieties that hinder personal engagement (Khan, 1990).

**Outside life.** Employee’s outside lives has the potential to take them psychologically away from their role performance and also influence psychological availability. When employees are preoccupied by events in their non-work lives they are unable to fully engage in their role performance (Khan, 1990).

Building on Khan’s (1990) ethnographic work, May et al. (2004), explored the mediating effects of the three psychological conditions on work engagement. The results corresponded with Khan’s study with all three psychological conditions exhibiting a positive relationship with engagement (May et al., 2004). Job enrichment and role fit were positive predictors of meaningfulness, rewarding and supportive supervisor relations were positive predictors of safety, whereas adherence to co-workers norms and self-consciousness were negatively associated. Psychological availability related to resources and negatively related to participation in outside activities (May et al., 2004; Saks, 2006).

In a South African study, Rothmann and Rothmann (2010) investigated the factors associated with employee engagement using two models, namely the personal engagement model of Kahn (1990), and the work engagement model of Schaufeli and Bakker (2004). The results demonstrated that psychological meaningfulness and psychological availability were positively associated with employee engagement. Psychological meaningfulness and psychological availability were positively associated with work role fit, co-worker and supervisor relations,
facilitative norms and low self-consciousness. Psychological meaningfulness, emerged as the strongest predictor of employee engagement, mediated the relationship between work-role fit and employee engagement. Job resources (growth opportunities, organisational support, social support, and advancement) were positively linked with employee engagement (vigour, dedication, and absorption). Growth opportunities (such as learning opportunities, autonomy, and variety) had the strongest effect on employee engagement (Rothmann & Rothmann, 2010).

Although not explicitly visible, the three dimensional concept of engagement bears striking similarity to Schaufeli’s model of work engagement (May et al, 2004). When comparing the items of the Utrecht Work Engagement Scale (UWES) the physical, emotional and cognitive components correspond to vigour, dedication and absorption measured by the UWES (Schaufeli & Salanova, 2007; Bakker & Demerouti, 2008).

However, most scholars are in agreement that the cornerstone of any model of engagement should include energy and identification dimensions. Work engagement is characterised by high levels of energy and a strong identification with one’s work. Therefore, both Khans’s and Schaufeli’s model are consistent with the construct of engagement (Macy & Schneider, 2008).
2.3.2 Employee engagement

Over the last 30 years, the Gallup organisation has empirically determined what it calls “employee engagement” (Luthans & Peterson, 2002; Little & Little, 2006). A model of engagement derived from the study of the characteristics of successful employees, managers and work groups, with the aim to create a work measure that could be used for comparisons (Harter, Schmidt & Hayes, 2002; Little & Little, 2006). Generating both qualitative and quantitative data, levels of employee engagement were positively related to productivity, profitability, employee retention and customer services at the business unit level (Bakker & Schaufeli, 2008).

Corroborated by research, the relationship between employee engagement and several organisational outcomes has been empirical proven. Employee turnover, customer satisfaction, loyalty, and safety resulted in the strongest relationship to employee engagement ($r = 0.30$; $r = 0.33$; $r = 0.32$, respectively). Productivity and profitability also demonstrated positive correlation ($r = 0.25$; $r = 0.17$, respectively) but at a lower magnitude to engagement (Harter et al., 2002; Simpson 2008).

In September 2003 the Gallup organisation’s Engaged Workers index found that: 29 % of workers were ‘engaged’ in their work, while 54 % were not ‘engaged’, and the remaining 17% were actively disengaged (Jamrog, 2004).

In April 2010, Gallup organisation published an article discussing the “Gallup's engagement ratio”. According to the article, Gallup's engagement ratio is a macro-level indicator of the
The proportion of engaged to actively disengaged employees. Within an average organisation, the ratio of engaged to actively disengaged employees is 5:1. In world-class organisations, the ratio of engaged to actively disengaged employees is near 8:1. Actively disengaged employees erode an organisation's bottom line while breaking the spirits of colleagues in the process. Within the U.S. workforce, Gallup estimates this cost to be more than $300 billion in lost productivity alone (Employee engagement: A leading indicator of financial performance, n.d.).

The Gallup Model differentiated between three types of employees (Crabtree, 2005):

1. Engaged employees: “an employee who works with passion and feels a profound connection to their company.”

2. Not-engaged: “employees who are essentially “checked out,” sleepwalking through their workday, putting time—but not energy or passion—into their work”

3. Actively Disengaged: “employees aren’t just unhappy at work; they are busy acting out their unhappiness”

In 2003, Harter, Schmidt and Keyes, describe four antecedent elements deemed necessary for engagement to occur in the workplace: 1) clarity of expectations and basic materials and equipment being provided, 2) feelings of contributions to the organisations 3) feeling a sense of belonging to something beyond oneself and 4) feeling as though there were opportunities to discuss progress and growth.

Employee engagement is assessed using the Gallup Workplace Audit, a 12 item measure of employee’s perception of work characteristics. The 12 item are antecedents of personal job satisfaction and other affective constructs and explains a great deal of variance in what is
defined as “overall job satisfaction.” The Gallup Workplace Audit was designed to reflect broad categories of employee survey items: those measuring attitudinal outcomes (satisfaction, loyalty, pride, customer service intent, and intent to stay with the company) and those measuring or identifying issues within a manager’s control that are antecedents to attitudinal outcomes (Harter et al., 2002).

Furthermore, researchers have noted similarities between Gallup workplaces audit and Khan’s (1990) three psychological conditions promoting engagement: meaningfulness, psychological safety and availability. Items that refer to employee’s work roles are components of meaningfulness, items referring to management style and as well items assessing interpersonal relationships and meaningfulness are components of psychological safety. Items referring to resources directly affected availability and indirectly may affected meaningfulness (Avery, Mckay, & Wilson, 2007).

The above discussion demonstrates the key strength of employee engagement i.e. establishing that employee satisfaction and engagement are related to meaningful business outcomes that has implications for both strategic and operational levels of the organisation and furthermore the research findings has made important contribution to engagement literature (Harter et al., 2002; Avery et al., 2007). However, in defiance to Gallup conceptualization of employee engagement, critics have questioned the validity of the construct and the lack of clarity of the constructs definition.

According to Little and Little (2006) the following problems are associated with the employee engagement:
1. The definitions are not clear as to whether engagement is an attitude or behaviour.

An examination of the definition of engagement reveals a failure to distinguish between attitudes (affective responses to an object and situation) and behavioural intentions and actual behaviours. For example, Robinson, Perryman and Hayday (2004) defined employee engagement as: “the individual’s involvement and satisfaction with as well as enthusiasm for work” (which is an attitude); “desire to work to make things better” (which is a behavioural intention); and “working longer hours, trying harder, accomplishing more and speaking positively about organisation” (which are behaviours).

2. The definitions are not clear as to whether engagement is a group or individual level phenomenon.

The major argument underpinning Gallup’s definition of employee engagement is the relationship between engagement and productivity, profitability, employee retention and customer services at the business unit level (Harter et al., 2002). Whether the phenomenon occurs on group level or individual is not clearly defined.

3. The definitions do not make clear the relationship between engagement and other related concepts.
Definitions of employee engagement, relationships between antecedents, and consequences of engagement as well as components of engagement have not been rigorously conceptualised. Many have questioned whether engagement is a new concept or repackaging of other similar constructs (Macey & Schneider, 2008). Existing constructs such as job satisfaction, job involvement, organisational commitment, and organisational citizenship invoke the definition of employee engagement. Subsequently many other conceptualisations of engagement suffered similar criticism i.e. work engagement, but refuted the criticism through differentiating the overlapping constructs (discuss later in the chapter).

Conversely, supporters and critics alike have acknowledged the possibility of employee engagement, like many other well established constructs, as a multi-dimensional or multi layered construct that could possibly capture aspects of employee motivation that has eluded previous research (Little & Little, 2006).
2.3.3 Burnout and engagement

The contemporary understanding of work engagement has emerged from one of the most unlikely sources, burnout (Bakker et al., 2008). Burnout, a metaphor used to describe a state of mental weariness, initial appeared in mid 1970’s in the United States in studies exploring the emotion in the workplace among people working in human services and health care (Maslach et al., 2001; Schaufeli & Bakker, 2004). Preliminary burnout studies focused on occupations within human services, but by the 1990’s burnout research was extended to occupations beyond human services and education e.g.: clerical, computer technology, military and managers (Maslach et al., 2001; Schaufeli & Salanova, 2007).

A definition of the construct varies and there is no standard definition. However, one of the most cited definition of burnout is a “syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do some kind of ‘people work’ (Maslach, Jackson and Leiter, 1986, p.1). Derived from the above definition a three dimensional construct of burnout is characterised by: Exhaustion: the draining of mental energy, one of the most obvious and most analysed dimensions of burnout; Cynicism: a negative attitude towards work, and reduced personal efficacy: the belief that one is no longer effective in fulfilling one’s job responsibilities (Langelaan; Bakker; van Doornen, & Schaufeli, 2006).

The dimensions of burnout are measured by the three versions Maslach Burnout Inventory (MBI): the MBI-HHS (Human Services Survey), MBI-ED (Educators) and MBI-GS (General Survey), (Maslach et al., 1996). The burnout dimensions are however, differently conceptualised
depending on the nature of the job. In the helping profession (including educators) the three dimensions of burnout are namely: emotional exhaustion, depersonalisation and low personal accomplishment, the MBI-HHS (Human Services Survey), MBI-ED (Educators) are predominantly used measures to assess burnout amongst helping professions. In other jobs besides the helping professions the dimensions of burnout are labelled as exhaustion, cynicism and low personal efficacy. The MBI-GS (General Survey) are generally used to assess burnout in jobs besides the helping professions (Maslach, Jackson & Leiter, 1996).

The psychometrics properties of the two versions of Maslach Burnout Inventory have repeatedly confirmed as being satisfactory both in Europe as well as in South Africa. In a study conducted by Naude and Rothman (2006), the 17 item version of the MBI-HSS yielded a alpha coefficients that varied between 0.67 (depersonalization) and 0.89 (emotional exhaustion). However, in many South African studies the factorial validity, construct equivalence and item bias of MBI-HSS were not investigated (Rothman, 2003).

Burnout is regarded as an occupational hazard, particularly in the “helping professions” and in human service organisations (Maslach et al., 2001). Burnout has been identified as being prevalent in work environments where contact with other people constitutes a significant part of the job task – making burnout a risk factor in call centres (Milner, Fisher & Lafit, 2007).

Notwithstanding the detrimental effect of burnout, the introduction of work engagement was proclaimed as a positive solution to burnout, not only expanded the concept of burnout but shifting the focus from employee malfunction to employee health and optimal functioning (Schaufeli & Salavona, 2007). In 1997, Maslach and Leiter rephrased the definition of burnout
“to the erosion of engagement with the job”. According to Maslach and Leiter (1997) engagement is characterised by the energy, involvement, and efficacy, which are the direct opposites of the three burnout dimensions. In the case of burnout, energy turns into exhaustion, involvement into cynicism, and efficacy into ineffectiveness. The Maslach Burnout Inventory therefore, assesses engagement by the opposite pattern of scores on the three dimensions of the low scores on exhaustion and cynicism, and high scores on professional efficacy (Bakker, et al. 2007). Maslach and Leiter (1997) conducted case studies of two hospital units which indicated that employees of one unit displayed typical burnout profile, high scores on exhaustion and cynicism and low scores on efficacy, where as employees in the other unit had the opposite profile of engagement, low scores on exhaustion and cynicism and high scores on efficacy.

In 2006, González –Romá, Schaufeli, Bakker and Lloret tested the proposition that the core dimensions of burnout (emotional exhaustion and cynicism) and the core dimensions of work engagement (vigour and dedication) are conceptual opposites. The aim of the study was to determine whether two sets of items exhaustion- vigour and cynicism-dedication, were scalable on two distinct underlying bipolar dimensions i.e. energy and identification respectively. The results indicated that core burnout and engagement dimensions can be seen as opposites of each other along two distinct bipolar dimensions energy and identification (González –Romá et al., 2006).
One of the notable differences in the relationship between burnout and work engagement is that work engagement model does not include lack of professional efficacy dimension. Accumulative research has suggested that exhaustion and cynicism are the core burnout constructs, where lack of professional efficacy seems to play a less prominent role. Research has also indicated that employees that score high on the exhaustion dimension tend to become cynical about their jobs, while lack of efficacy appears to develop relatively independently and in parallel. Exhaustion and cynicism are practically related to job demands such as, time pressure and role problems while inefficacy is related to job resources such as social support (Schaufeli & Salanova, 2007; Maslach et al., 2001; Lee & Ashforth, 1996). Schaufeli and Salanova (2007) further argued that absorption is characterised by being immersed and happily engrossed in one’s work and is a distinct aspect of work engagement and not considered to the opposite of professional inefficacy.
2.3.4 Work engagement

Acknowledging the conceptualisation of engagement as the positive antithesis to burnout, Schaufeli (2003) was opposed to the assumption that engagement may be assessed by the opposite profiles of the MBI scores and proposed that burnout and work engagement are two distinct concepts which should be assessed independently (Maslach & Leiter, 1997; Schaufeli & Bakker, 2001).

According to Schaufeli et al. (2002, p 74) work engagement is defined as “a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption.” It is not a temporary and specific state, but a more persistent and pervasive affective-cognitive state which is not focused on a particular object, event, individual or behaviour (Naude & Rothmann, 2006). It consequently reflects the employee’s current state of mind in the immediate present and should be distinguished from the employee’s personality trait, which is a durable deposition which reflects the employee’s typical reaction (Schaufeli & Salanova, 2007).

Work engagement consists of three constructs:

- Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and determination in the face of difficulties (Coetzer & Rothmann, 2006).
- Dedication refers to a strong involvement in one’s work, accompanied by feelings of enthusiasm and significance, and a sense of pride and inspiration (Rothmann & Joubert, 2007).
Absorption, the final construct is characterised by being fully engaged and happily engrossed in one’s work, whereby time passes quickly and one has difficulties from detaching oneself from work (Schaufeli & Salanova, 2007).

Furthermore the work engagement model proposes that work engagement provides meaningful and positive outcomes for both the individual employee and the organisation through (Schaufeli & Salanova, 2007). They are:

1. Positive job-related attitudes and strong identification with one’s work.
2. Good mental health, which includes positive emotions and a lower risk of burnout.
3. The acquisition of job resources and personal resources.
4. Good work performance and increased intrinsic motivation.

2.3.4.1 Drivers of Work engagement

Job resources as well as personal resources have a profound impact on employee well-being which includes work engagement (Bakker & Demeroiti, 2007). Empirical studies have shown that job resources significantly correlate to work engagement, particularly under conditions of high job demands. Studies have also indicated that several personal resources are also related to work engagement (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009b).

Job resources. Job resources as a driver of work engagement is a derivative of the job demand-resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to the model, each occupation has its own risk factors that are associated with
burnout; they are namely job demands and job resources. Job demands refer to psychological, physical, social, or organisational aspects of the job that require sustained physical or psychological effort or skill and are consequently linked to certain psychological costs. Job demands are not seen as negative, they may turn into job stressors when demands requires high effort and is therefore associated with high costs that elicit negative responses such as depression, anxiety or burnout. Work overload or high demands may also occur if an individual does not have the necessary skills, abilities and support to meet these demands (Xanthopoulou et al., 2007). Job resources refers to physical, social and psychological aspects of the job that help achieve work goals, protect individuals from threats and associated psychological and physiological costs and stimulate growth and development (Xanthopoulou et al., 2009b).

The premise of the model is built on the assumption that there are two underlying psychological processes that play a role in the development of burnout and work engagement. The first refers to chronic job demands (e.g. work overload or conflict) that lead to burnout. The second refers to a motivational process, which assumes that job resources has a motivational potential and leads to high levels of work engagement low cynicism, and excellent performance (Xanthopoulou et al., 2009b).

Job resources comprises of both intrinsic and extrinsic motivational roles. The intrinsic motivational role refers to job resources fostering employee’s growth and development. In addition, job resources play an extrinsic motivational role, because it is instrumental in achieving work objectives (Bakker & Demeroiti, 2008).
Coetzer and Rothmann (2007) investigated the relationship between job demands, job resources and work engagement. The study revealed that job resources such as organisational support, growth opportunities, social support and advancement opportunities were related to work engagement. The results of the study are consistent with several other studies showing a strong relationship between job resources and work engagement. Schaufeli and Bakker (2004) found evidence of a positive relationship between three job resources (social support, performance feedback and coaching) and work engagement. This study was then replicated measuring additional job resources (social climate, job control and supervisory support) which all related positively to work engagement. In addition, research has suggested that job resources becomes more salient and gain more motivational potential when employees are faced with high job demands (workload, emotional and mental demands) (Bakker & Demeroiti, 2008).

Personal resources. Personal resources are positive self-evaluations that are linked to resiliency and refer to the individuals’ sense of ability to control their environment successfully. Positive self-evaluations predict goal-setting, motivation, performance, life satisfaction and other desirable outcomes (Hobfoll, Johnson, Ennis & Jackson, 2003). Furthermore job resources may activate personal resources and thus resulting in positive psychological and organisational outcomes (Demeroiti et al., 2001).

Studies have also explored the relationship between personal resources and work engagement. Bakker and Demeroiti (2008) investigated the relationship between work engagement and three personal resources namely self-esteem, self-efficacy, optimism and organisational based self-esteem. The results showed that engaged employees have a high degree of self-efficacy and a general optimistic view of life. In a South African study, Rothmann, Steyn and Mostert (2005)
examined the relationship between job stress, sense-coherence and work well-being (work engagement), the results revealed that sense of coherence correlated significantly with work engagement.

The inclusion of personal resources in the JD–R model further examined the complex interaction of individual resources with the work environment. Xanthopoulou et al. (2007) examined the role of three personal resources (self-efficacy, organisational-based self-esteem and optimism) in predicting exhaustion and work engagement. Personal resources were found to partly mediate the relationship between job resources and work engagement, suggesting that job resources foster the development of personal resources (Demerouti & Bakker, 2011).
Figure 2. The JD-R model of work engagement adapted from Bakker and Demerouti (2007), p. 218.

Figure 2 is a graphical representation of the three-way interactions between job demands, job resources, and personal resources.
2.3.4.2 Work Engagement and performance link

Work engagement has shown a strong positive link between employee well-being and job performance (Wright & Cropanzano, 2000). It is generally assumed that if employees are happy, they are energetic and more willing to invest effort in their work (Bakker & Demerouti, 2009) and thus more engaged in their work. Bakker (2009) listed at least four reasons why engaged workers perform better than non-engaged workers:

1. Engaged employees often experience positive emotions i.e. happiness, joy, and enthusiasm. These positive emotions seem to broaden people’s thought–action repertoire, implying that they constantly work on their personal resources (Fredrickson, 2001 cited in Bakker, 2009)
2. Engaged workers experience better health. This means that they can focus and dedicate all their energy resources and skills to their work.
3. Engaged employees create their own job and personal resources
4. Finally, engaged workers transfer their engagement to others in their immediate environment (Bakker & Xanthopoulou, 2009). Since in most organisations performance is the result of a collaborative effort, the engagement of one person may transfer to others and indirectly improve team performance.

Schaufeli, Trais and Bakker (2006) cited in Bakker et al. (2008) investigated the link between work engagement and performance and found that work engagement was positively related to in-role performance, whereas workholism was not. A similar study found that engaged secretaries scored higher on in-role and extra-role performance than their non-engaged counterparts (Gierveld & Bakker, 2005 cited in Bakker & Demerouti, 2007).
Furthermore, the results indicated that engaged secretaries had more influence on daily business. They were more often asked to carry out extra-role performance i.e. additional challenging tasks, including personnel pre-selection, the organisation of trade exhibitions and conventions, and website maintenance.

Bakker, Gierveld and Rijswijk (2006) cited in Bakker and Demerouti (2007) conducted a study on engagement and performance among school principals and teachers. The results showed a significant and positive relation between school principals’ work engagement scores and teacher-ratings of school principals’ performance and leadership. Structural equation modelling analyses results showed that engaged principals scored higher on in-role and extra-role performance.

2.3.4.3 Work Engagement and related concepts

With the introduction of a new psychological construct, it is often mandatory for new constructs to endure rigorous validation procedure to avoid the overlapping of conceptual frameworks and to ensure that the construct effectively capture what it’s supposed to (Campbell & Fiske, 1959; Cook & Campbell, 1979; Schwab, 1980 cited in Hallberg & Schaufeli, 2006).

Work engagement, like many other important psychological constructs underwent scrutiny that questions both the precision of the conceptualisation and validity of the concept. Work engagement has been conceptual compared to more seasoned psychological constructs such as
workaholism, job involvement and organisational commitment, placing much doubt on the conceptualisation of work engagement (Macy & Scheider, 2008).

The following discussion attempts to demonstrate the empirical distinctiveness of workaholism, job involvement, organisational commitment and work engagement.

**Job Involvement.** The definitions of job involvement are governed by two distinct schools of thought, one focuses on how the job influence the employees self-esteem (Lodahl & Kejner, 1965 cited in Hallberg & Schaufeli, 2006). The other, focuses on how the job helps to define a person’s identity (Lawler & Hall, 1970 cited in Hallberg & Schaufeli, 2006).

This “conceptual confusion” has become the impetus of Browns (1996) cited in Hallberg and Schaufeli (2006) meta analyses which concluded that a job-involved person is some who:

1. Finds their job motivating and challenging
2. Is committed to their work in general, specific task and the organisation
3. Engaged in a professional relationship with e.g. Manager and stand a better chance of feedback.

What distinguishes work engagement from job involvement is that job involvement appears to be unaffected by role perception and does not appear to be related to mental or physical ill health (Browns, 1996 cite in Hallberg & Schaufeli, 2006).
Organisational commitment. Organisational commitment refers to attitudinal, affective aspects (Allen & Meyers, 1990; Mathieu & Zajac, 1990; Meyer & Allen, 1997 cited in Hallberg & Schaufeli, 2006) which is often indicative of a type of commitment that is linked to an emotional attachment that employees form with their organisation based on shared values and interests (Meyer & Allen, 1997; Mowday, 1998 cited in Hallberg & Schaufeli, 2006). Research has empirically linked organisation commitment to employee retention and usually more dependent on job characteristics than personal factors and is associated with the absence of ill health (Hallberg & Schaufeli, 2006), therefore conceptually differentiating itself from work engagement.

Workaholism. In 1971 the phrase “workaholism” was coined to describe “. . . the compulsion or the uncontrollable need to work incessantly” (Oats, 1977p. 11 cited in Schaufeli et al., 2008). This early description was later defined as: working excessively hard and the existence of a strong, irresistible inner drive (McMillan, O’Driscoll, & Burke, 2003 cited in Schaufeli, Trais & Rhenen, 2008).

Workaholics often tend to allocate an exceptional amount of time to work and that they work beyond what is reasonably expected to meet organisational or economic requirements. Workaholics persistently and frequently think about work, even when not working, which suggests that workaholics are “obsessed” with their work. This represents both a behavioural and cognitive component of workaholism respectively (Schaufeli et al., 2008). Typically, workaholics work harder than their job prescriptions require and are driven by an inner compulsion or need and not because of external factors such as financial rewards, career perspectives, organisational culture, or poor marriage (Schaufeli et al., 2008).
In comparison, work engagement, job involvement and organisational commitment all refer to a positive attachment to work and share theoretical and reciprocal reference to each other. However, in a study investigating whether work engagement can be empirically differentiated from job involvement; and organisational commitment all three constructs was found to be conceptual different (Hallberg & Schaufeli, 2006). The same study further deduced that work engagement and organisational commitment are more closely related than work engagement and job involvement (Schaufeli & Salanova, 2007).

Work engagement constructs i.e. vigour and dedications are negatively correlated with the second defining characteristic of workaholism, compulsiveness. On the other hand, absorption correlates moderately positively with the workaholism scale that assesses excess work. Albeit a moderate correlation, the underlying motivation to be engrossed in ones work is different: engaged employees are absorbed because their work is intrinsically motivating, whereas workaholism are absorbed because of an inner drive that they cannot resist (Schaufeli & Salanova, 2007; Hallberg & Schaufeli, 2006).

Although as a relatively new concept, work engagement, is a construct with a sparse and diverse theoretical and empirically framework, with a relationship between potential antecedents and consequences of engagement as well as components of engagement that have not been rigorously conceptualised. Nevertheless this does not imply that the engagement concept lacks conceptual or practical utility but beckons for further research into conceptual refinement of the construct (Macey & Schneider, 2008).
2.3.5 Work engagement and positive psychology

In 1998’s keynote address to the American Psychological Association, Martin Seligman unveiled a new era within the field of psychology, the launching of Positive Psychology (Coetzee & Viviers, 2007). This was in response to the prevailing negative bias of the discipline of psychology that has spent the most the part the 20th century predominantly concerned with psychopathology and ill-health. As reported by Schaufeli and Salanova (2007), 94% of all articles that were published in leading academic journals during the period of 2000-2004 focused on negative issues. In a similar study Myer (2000) illustrated that the number of articles on negative states exceeds the number on positive states by a ratio of 14:1. This overwhelming preoccupation with negative aspects of psychology became the impetus for change, academics and psychologist alike called out for a reformation within the discipline of psychology to extend its focus and research to the more positive aspects of life.

Positive psychology is the scientific study of optimal human functioning. It aims to redress the imbalances of the past by focusing psychological research and practice on positive aspects of human functioning and experience (Linley, Joseph, Harrington & Wood, 2006). Within the field of industrial psychology and occupational health psychology as well as in the context of contemporary organisational setting, the health, safety and overall well-being of employees has become an important issue. In congruence with the philosophy of Positive Psychology, organisations are beginning to understand that in order to prosper and survive in an ever changing environment, organisations need healthy and motivated employees (Schaufeli & Salanova, 2007).
This statement has been echoed by many theorists and academics alike, as argued by Luthans (2002, p. 59) who called for a positive approach to organisation and management through the study and application of positively oriented human resources strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today’s workplace.

The concept of work engagement plays a vital role in this endeavour because work engagement is characterised by a positive definition of employee health and has furthermore shown that it is related to positive outcomes for both the individual and the organisation. Engagement has shown to improve employee performance, lower absenteeism, improve moral and increase organisational commitment (Schaufeli & Salanova, 2007). Work engagement is positively related to health and psychological well-being. Schaufeli and Bakker (2004) found that engaged employees suffered less from self-reported headaches, cardiovascular problems and stomach ache. Personal recourse (discussed previously) which are basically psychological well-being constructs, such as optimism, sense of coherence, affective states and life satisfaction all contributed to enhancing work engagement and are preconditions of work engagement (Bakker & Demeroiti, 2008).

A small body of research have also found vigour as being associated with individual health outcomes. Vigour may enhance the immune system’s capacity, vigour may be an effective response to challenges and the adoption of healthy lifestyle habits. Vigour was found to be negatively correlated with several inflammation biomarkers (Shirom, Toker, Berliner, Shapira, & Melamed, 2006 cited in Bakker, & Leiter, 2010).
2.4 Self-efficacy

Self-efficacy signifies an optimistic sense of personal competence that seems to be a pervasive phenomenon accounting for motivation and accomplishments in human beings (Scholz, Doña, Sud, Schwarzer, 2002). Years of research have generated a great number of studies that demonstrated the positive relationship between self-efficacy and different motivational and behavioural outcomes in clinical, educational, and organisational settings (Bandura, 1986, 1997; Stajkovic & Luthans, 1998 cited in Urban, 2006).

From an organisational perspective, self-efficacy is important for the development of a person’s social, cognitive and behavioural competencies and the development of a person’s beliefs in his or her capabilities (Gist & Mitchell, 1992 cited in Kossuth & Cilliers, 2004 b). It enhances the individual’s motivation through goal systems, where the person is using his or her skills and capabilities in interaction with the environment. In summary, self-efficacy goes beyond the traditional motivational approaches and in itself provides an extension of these approaches as research has demonstrated that a strong sense of personal efficacy is related to better health, higher achievement, and better social integration (Schwarzer, 1992; Bandura, 1997 cited in Scholz, et al., 2002; Stajkovic & Luthans, 1998 cited in Urban, 2006).

The following discussion explores the concept of self-efficacy by identifying the characteristics of self-efficacy and illustrating the relationship between self-efficacy and work engagement.
2.4.1 Definition

Self-efficacy is defined as the belief that one has the capabilities to exercise control over events that affect one's life, and to mobilise the motivational and cognitive resources and courses of action needed to meet given situation-demands (Bandura, 1997 cited in Breed, Cilliers & Visser, 2006). Developed from the broad framework of social / cognitive learning theory (Bandura, 1989; Gist & Mitchell, 1992; Kirsch 1986 cited in Kossuth & Cilliers, 2004a), self-efficacy focuses on the dynamic, triadic, reciprocal, causation relationship between cognition, behaviour and the environment (Kossuth & Cilliers, 2004b).

According to Bandura (1997) ‘Efficacy beliefs are concerned not only with the exercise of control over action but also with the self-regulation of thought processes, motivation, and affective and physiological states’ (Bandura 1997, p. 36).

According to Bergh and Theron (1999) cited in Stadler and Kotze (2006), self-efficacy determines whether the individual will pursue a specific objective and how much effort will be put into attaining the stated objective. The higher the perception of self-efficacy, the more likely the individual will be motivated to persevere in attaining the objective, even if there are obstacles impeding him/her.
2.4.2 Characteristics

According to Bandura’s (1997) unifying theory of behaviour change, the expectations of self-efficacy determines whether instrumental actions will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. Self-efficacy makes a difference in how people think, feel, and act. In terms of feelings, a low sense of self-efficacy is associated with depression, anxiety, and helplessness. Individuals with low self-efficacy and who also have low self-esteem, and they harbour pessimistic thoughts about their accomplishments and personal development. In terms of thinking, a strong sense of competence facilitates cognitive processes and performance in a variety of settings, including quality of decision-making and academic achievement (Schwarzer & Hallum, 2008).

In contrast to individual with low levels of self-efficacy, individuals with a high self-efficacy often choose to perform more challenging tasks. They set themselves higher goals and stick to them. Actions are preordained in thought, and once an action has been taken, highly self-efficacious individuals invest more effort and persist longer than those low in self-efficacy. If any setbacks occur, highly self-efficacious individuals recover more quickly and remain committed to their goals. High self-efficacy also allows people to select challenging settings and explore their environment or create new ones. Thus, it represents a belief in one’s competence in dealing with all kinds of demands. (Luszczynska, Gutie´rrez-Don¨a, & Schwarzer, 2005).
2.4.3 Drivers of self-efficacy

There are four major sources for influencing personal competence (Bandura, 1997 cited in Scholz et al., 2002):

1. **Personal accomplishment or mastery** self-efficacy beliefs can be enhanced through personal accomplishment or mastery as an individual achieves a personal accomplishment or master a task, the success is attributed internally and can be repeated.

2. **Vicarious experience.** When a “model person” who is similar to the individual successfully masters a difficult situation; social comparison processes can enhance self-efficacy beliefs.

3. **Symbolic experience** through verbal persuasion by others (e. g., a teacher reassures a student that she will certainly pass the exam due to her academic competence). A form of positive reinforcement

4. The last source of influence is **emotional arousal**, that is, the person experiences anxiety in a threatening situation and thus feels incapable of mastering the situation. These four informational sources vary in strength and importance.

Additionally self-efficacy can be developed through training and modelling (Gist & Mitchell, 1992 cited in Urban 2006). Efficacy judgments are task specific and regulate behaviour by determining task choices, effort and persistence. Self-efficacy also facilitates learning and task performance particularly early in the learning process (Stevens & Gist, 1997 cited in Urban 2006). Self-efficacy can also change as result of learning, experience and feedback (Gist & Mitchell, 1992 cited in Urban 2006).
2.4.4 Self-efficacy and stress appraisals

Self-efficacy also determines an individual appraisal of stress. People with strong self-efficacy recognize that they are able to overcome obstacles and focus on opportunities, and, therefore they perceive stressful situations as more challenging than those who harbour self-doubts about their ability to overcome difficulties (Jerusalem & Schwarzer, 1992, Bandura, 1997 cited in Luszczynska et al., 2005).

2.4.5 Self-efficacy and well-being

Research has indicated that self-efficacy is related to positive and negative emotions. One of the sources of self-efficacy is emotional arousal, that is, one may experience a low level of negative emotions in a threatening situation and, as a result, may feel capable of mastering the situation (Bandura, 1997). Self-efficacy leads to effective problem solving, followed by increase of positive emotions. A low sense of self-efficacy is associated with negative emotions and helplessness. Persons who are burdened with a belief of self-inefficacy suffer distress and negative emotions, such as anxiety and depression (Bandura, 1997; Schwarzer, 1992).

In a study examining the relationship between general self-efficacy (GSE) and positive affect measures (the PANAS and Quality of Life questionnaires), strong efficacy beliefs were related to higher life satisfaction. GSE was negatively related to results obtained with inventories that assess anxiety, depression, anger, and negative affects (Luszczynska et al., 2005).
2.4.6 Self-efficacy and related concepts

Taken from face value self-efficacy appears similar other constructs, such as self-esteem, self-concept and locus of control. However there are essential distinctions between self-efficacy and in the following four aspects:

1. Self-efficacy implies an internal attribution (I am the cause of the action)
2. It is prospective, referring to future behaviours
3. It is an operative construct, which means that this cognition is quite proximal to the critical behaviour, thus being a good predictor of actual behaviour.
4. Self-efficacy beliefs emphasize an assessment capability (can I do this?) as opposed to a concern with outcome expectations (if I do this, what will happen?) (Stajkovic & Luthans, 1998, Schwarzer, & Hallum, 2008).

2.4.7 Generalised self-efficacy

According to Scholz, et al, 2002, self-efficacy is commonly understood as being domain-specific. Meaning, an individual can have more or less firm self-beliefs in different domains or particular situations of functioning. However, over the last several years self-efficacy has broaden its research to include a more trait-like generality of self-efficacy which has been termed general self-efficacy (GSE). It is defined as one’s beliefs in one’s overall competence to affect necessary performances across a wide variety of achievement situations (Chen, Gully & Eden, 2001, p. 63 cited in Urban, 2006).
General self-efficacy (GSE) aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations (Schwarzer, 1992). This implies that self-efficacy can be employed as a predictor of broad outcomes, such as quality of life, well-being, or overall adaptation and health and accordingly a correspondingly broad measure of general self-efficacy should justifiably be used (Schwarzer, & Hallum, 2008).

Nevertheless it is not an issue of whether efficacy beliefs can be generalized but rather the processes through which generality occurs and how this can be measured (Bandura, 1997). Research has also further suggested that specific self-efficacy (SSE) is a motivational state and GSE is a motivational trait.

Although both constructs share similar antecedents, (i.e., direct experience, vicarious experience, verbal persuasion, and psychological states) general self-efficacy transpires over one's lifespan as is the summation of accumulative successes and failures across different task domains.

One important outcome of GSE is SSE, with GSE positively influencing SSE across tasks and situations. The tendency to feel efficacious across tasks has a spillover effect on specific situations as reflected by positive relationship between GSE and SSE for variety of tasks (Urban, 2006).
2.4.8 The relationship between self-efficacy and work engagement

Empirical results had indicated that work engagement is positively related with self-efficacy (Salanova, Llorens, & Schaufeli, 2001 cited in Schaufeli & Salanova, 2007). It seems that self-efficacy does not only precede engagement but follows engagement which create an upward spiral in which self-efficacy fuels engagement which in turn increases efficacy beliefs (Llorens, Schaufeli, Bakker, & Salanova in press; Salanova, Bresó, & Schaufeli 2005; Salanova, Grau, Cifre, & Llorens, 2000 cited in Schaufeli & Salanova, 2007).

Furthermore the role of self-efficacy (as a personal resource) is noted not only as a driver of work engagement but as an antecedent of work engagement. Personal resources are linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis, & Jackson, 2003 cited in Schaufeli & Salanova, 2007). Xanthopoulou et al. (2007) examined the role of personal resources (including self-efficacy, optimism) in predicting work engagement. The results indicated that employees with high levels of work engagement are highly self-efficacious; they believe they are able to meet the demands they face in various situations.

These findings were replicated in a longitudinal study conducted by Xanthopoulou, Bakker, Demerouti, and Schaufeli (2008) cited in Baker et al. (2008) with the results indicating that self-efficacy among other personal resources explain variances in work engagement over time and over and above impact job resources and previous levels of engagement.
In addition to the above mentioned studies, Llorens, Schaufeli, Bakker and Salanova, (2007) investigated the reciprocal relationship between self-efficacy and work engagement. The premise of research was based on the so called ‘gain spirals’ as described by Hobfoll and Shirom (2000) Conservation of Resources (COR) theory.

According to the COR theory, job resources may potentially be motivating in their own right through the creation, maintenance and accumulation of resources (Hobfoll & Shirom, 2000). Resources are defined as ‘‘those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions or energies’’ (Hobfoll, 1989, p. 516 cited Llorens, et al., 2007). The COR-theory further postulates that ‘‘people strive to retain, protect, and build resources and what is threatening to them is the potential or actual loss of these valued resources’’ (Hobfoll, 1989, p. 516 cited Llorens, et al., 2007). COR theory distinguishes between two types of spirals: resources that may diminish as a result of so-called ‘‘loss spirals’’ and that resources may increase as a result of ‘‘gain spirals’’ (Hobfoll, 2001). The ‘‘loss spirals’’ implies that people who lack resources are susceptible to losing even more resources, the ‘‘gain spirals’’ refers to gaining resources increasing the resource pool, which subsequently leads to the acquiring of additional resources. Resource loss decreases motivation, and may eventually lead to burnout (Demerouti, Bakker, & Bulters, 2004; Hobfoll & Freedy, 1993 cited in Llorens, et al., 2007), whereas resource gain increases motivation and well-being (Hobfoll, 2001; Houkes, Janssen, de Jonge, & Nijhuis, 2001 in cited Llorens, et al., 2007).
The study by Llorens, et al. (2007) contributed to the validation of “gain spirals” as hypothesized by COR theory (Hobfoll, 1989, 2001). In a longitudinal design, Llorens, et al. (2007) investigated the causal relationships between two potentially important resources in the use of Information & Communication Technology (i.e. time control and method control), efficacy beliefs and engagement. More specifically, two questions were addressed: (1) do personal resources mediate the relationship between task resources and work engagement? (2) does engagement increase personal and task resources? The results indicated that task resources, efficacy beliefs and engagement have reciprocal relationships over time. The results also indicated that efficacy, plays a role as a mediator between task resources and engagement. It emphasised the importance of providing good resources that enhance efficacy and engagement, which, in turn, also increase efficacy beliefs, thus closing the spiral by leading to the perception of greater task resources (Llorens, et al., 2007). Although efficacy and engagement are traditionally seen as an outcome, this study shows that both can be considered as causes and consequences in the gain spiral as well.

In conclusion, research has provided empirical evidence that supports the hypothesis that work engagement is positively related to self-efficacy. Furthermore, and as a personal recourse, self-efficacy does not only driver engagement among individuals but plays a reciprocal role.
2.5 Optimism

Optimism has generally been viewed as a tendency to believe, expect or hope that things will turn out well (Dossey, 2006). Over the last few decades research has shown that optimism can be a highly beneficial psychological characteristic linked to good mood, perseverance, achievement and has a direct impact on burnout, ill health (Rothmann, Barkhuizan, & Tytherleigh, 2008; Rothmann & Essen, 2007) and improve physical health and longevity (Rasmussen, Scheier, & Greenhouse, 2009).

The following discussion outlines conceptualisation of the construct, highlighting the main approaches governing the construct. It illustrates the link between optimism and subjective well-being, stress and coping and concludes with research on the relationship between work engagement and optimism.

2.5.1 Little optimism Vs Big optimism

According to Peterson (2000) optimism can be characterised into two types: Little optimism and Big Optimism.

Big optimism refers to a generalised expectation about positive outcomes. It is a generalised perspective that maintains a world view that can aptly be describe as “glass as half full” perspective, where as the big pessimist view their world from the “glass as half empty” perspective (Van Schalkwyk, 2004). However what differentiates big optimism from little optimism is the positive or negative expectations of big optimists and pessimists are not limited to a specific behaviour or setting. This type of optimism is considered a trait personality
characteristic and has been operationalised as dispositional optimism (Scheier & Carver, 1985 cited in Van Schalkwyk, 2004).

Conversely, little optimism is refers to specific expectations about positive outcomes (Peterson, 2000). It is a state-like tendency to view specific situations optimistically, little optimism may be the product of an idiosyncratic learning history. Little optimism may be considered a type of daily optimism that influences specific situations occurring in a day (Peterson, 2000).

From the above discussion we shall further explore the conceptualisation of optimism construct by examining the two main approaches: Seligman and Peterson’s Learned Optimism Model of Explanatory Styles (Peterson & Seligman, 1984; Seligman, 1991); Scheier and Carver's Dispositional Optimism model (Scheier & Carver, 1985).

2.5.2 Seligman and Peterson’s Learned Optimism Model of Explanatory Styles

The concept of optimistic explanatory style is derived from the attribution to the reformulated learned helplessness theory proposed by Martin Seligman in 1975 (Abramson, Seligman, & Teasdale, 1978 cited in Carlson & Kacmar, 1994). The original Learned Helplessness Theory proposed that following an experience with an uncontrollable aversive events, people and animals becomes helpless and passive and unresponsive (Peterson & Park, 2004). According to Seligman, 1975, people may act helpless because they have learned to be helpless, it’s presumed that they have “learned” that there is no contingency between actions and outcomes (Maier & Seligman, 1976 cited in Peterson, 2000). The theory was formulated by research done on animals, however when the theoretical components where extended to humans it failed to
account for individual difference. To better understand the human accepts, the theory was reformulated to include an attributional framework which was labelled Explanatory Style (Carlson & Kacmar, 1994).

The explanatory style is the habitual way in which individuals tend to explain setbacks or failures. According Peterson and Seligman (1985) the explanatory style was included in the model to further understand why individuals have different reactions to the same event. The explanatory style is composed of three dimensions: internality, the degree to which one perceives oneself personal responsible for the event; stability, the degree to which one perceives the event to be present throughout time; globality, the degree to which one perceives the cause across conditions. An individual is regarded as having an optimistic explanatory style when he/she attributions of negative events are external (low internality), unstable (low stability) and, specific (low globality) (Tomakowsky, Lumley, Markowitz, & Frank, 2001). Thus, individuals who habitually see all causes of bad events as internal, stable and global are more susceptible to helplessness when experiencing bad events (Carlson & Kacmar, 1994).

Explanatory style is typically measured with a self-report questionnaire called the Attributional Style Questionnaire (ASQ) (Peterson & Steen, 2002). A method for coding attributions of interviews or transcripts (the Content analysis of Verbal Explanations technique, CAVE) has also utilized as a measurement of an individual’s explanatory style Tomakowsky, et.al., 2001). The Cave method allows for written and spoken material to be scored through researchers identifying explanations for bad events, extract them, and present them to judges, who rate along the scale of the Attributional Style Questionnaire (Peterson, 2000).
Research on explanatory style has primarily been focused around investigating relationship between an explanatory style and ill health, depression and failure (Peterson & Steen, 2002; Peterson & Vaidya, 2001). Research results have indicated that individuals who more optimistic experience better health, fewer illnesses, better immune functioning and longevity (Kamen-Siegel, Rodin, Seligman, & Dwyer 1991; Peterson & Bossio, 1992).

In the work context, a report highlighting the benefits of applying learned optimism to increase sales productivity, Schulman (1999) found that optimistic sales people sold 35% more insurance than pessimistic sales people and that optimism did only increase sales but increased motivation and achievement across various domains.

2.5.3 Scheier and Carver's Dispositional Optimism model

In conjunction with learned optimism model of explanatory Styles, the second most prominent model of optimism is Scheier and Carver (1985) dispositional optimism model. According to dispositional optimism model, optimism is defined as a global expectation that good things will be plentiful in the future and that bad things will be scarce (Scheier & Carver, 1985). It refers to an individual’s expectations of positive outcomes across situations and domains (Elbert, 2002). The model further provides clear distinctions between the optimists and pessimists by characterising the optimists as people who generally have a favourable outlook on life and the future, where conversely the pessimist are individuals who generally have a more negative outlook on life and expect things to go badly (Scheier & Carver, 1985).
Underpinning the dispositional optimism model is the expectancy value theory. The theory that assumes that behaviour is organised around the pursuit of goals and in contrast to the attributional model of optimism, the dispositional optimism places emphasis not only on the pursuit of goals but on the significance of the goal and sense of confidence the individual has to attain their goals (Carver, Scheier, & Segerstrom, 2010).

In brief there are two core conceptual elements of the expectancy theory:

1. Goals refer to states or actions that people view as either desirable or undesirable. People try to fit their behaviours to what they see as desirable, and they try to keep away from what they see as undesirable. The more important a goal is to someone, the greater is its value within the person’s motivation. Without having a goal that matters, people have no reason to act (Carver & Scheier, 2002).

2. The second core conceptual element is expectancy — a sense of confidence or doubt about the attainability of the goal value. If the person lacks confidence, there will be no action. When people are confident about an eventual outcome, effort will continue even in the face of adversity (Rothmann & Essenko, 2007).

In this study, optimism is conceptualised according the dispositional optimism model which proposed that optimism is a generalised expectancy that the future will be good, while pessimism is the generalised expectancy that the future will be bad (Carver & Scheier, 2002). Both optimism and pessimism influence people’s subjective experiences when confronting problems and they influence the actions people engage in to try to deal with these problems. When optimists confront adversity, they expect positive outcomes resulting in a mix of feelings
that is relatively positive. On the other hand, pessimists expect negative outcomes (which should yield a greater tendency to negative feelings) (Carver & Scheier, 2002).

2.5.3.1 Optimism and subjective well-being

Within the medical field a good deal of research has been conducted on the relationship between optimism and distress among a diverse group of people facing difficulty or adversity. In a longitudinal study Fitzgerald, Tennen, Affleck, and Pransky (1993) investigated optimism amongst coronary artery bypass surgery patients. The patients were assessed a month before surgery and eight months afterwards. The results indicated that optimists had less distress beforehand and more life satisfaction after surgery. Optimism about life appeared to lead to a specific optimism about the surgery, and from there to satisfaction with life (Fitzgerald et al., 1993).

In a similar study by Scheier, Matthews, Owens, Magovern, Lefebvre and Abbott, (1989) found that the optimists retained higher quality of life even up to five years after the surgery. In the field of oncology, a series studies were conducted on breast cancer patients. Each patient was interviewed at the diagnosis stage, the day before surgery, a few days after surgery, and then 3, 6, and 12 months later. Optimism predicted less distress over time, controlling for effects of medical variables and earlier distress. Thus, optimism predicted resilience against distress during the full year (Carver, Pozo, Harris, Noriega, Scheier, & Robinson, 1993).
2.5.3.2 Optimism, stress, and coping

Relationships between optimism and coping strategies have also been explored. In the workplace the optimists use more problem-focused coping self-control and directed problem solving. Pessimists use more emotion-focused coping, including escapism such as sleeping, eating, and drinking, using social support, and also avoiding people (Strutton & Lumpkin, 1992). According to Szalma (2009) optimism is also associated with low levels of stress and greater active and problem solving coping while pessimist are more emotional focused and avoidant coping.

In a South African study, Rothmann, et al. (2008) sampled 334 support staff members in higher education institution in the North West Province of South Africa. The aim of the study was to examine the relationship between job characteristics, burnout, optimism, and ill health. The Maslach Burnout Inventory–General Survey, a Health questionnaire, the Job Characteristics Inventory, and the Life Orientation Test–Revised were administered. The results of the study showed that job demands (overload) and a lack of job resources contributed to burnout. Burnout, in turn, mediated the effects of job demands and a lack of job resources on ill health. Dispositional optimism had a direct effect on exhaustion and cynicism. However, dispositional optimism did not interact with job demands or job resources in affecting exhaustion and cynicism.

In a similar study Rothmann and Essenko (2007) used The Maslach Burnout Inventory – General Survey, The Life Orientation Test – Revised, Job Demands-Resources Scale and the Health subscale of the ASSET to assess the relationship between burnout, optimism, job resources, job demands and health. A good fit was found for a model in which burnout
(exhaustion and cynicism) mediated the relationship between perceived high job demands and low availability of job resources, and ill health. Dispositional optimism had direct effects on burnout and ill health.

2.5.3.3 Optimism and work engagement

As discussed earlier in the chapter, research has established that engaged workers possess high levels of personal resources, including optimism, self-efficacy, self-esteem, resilience, and an active coping style (Luthans, Norman, Avolio, & Avey, 2008; Xanthopoulou et al., 2009a; Xanthopoulou et al., 2009b).

Pienaar and Sieberhagen (2005) yielded corresponding results. With a sample size of 196 student leaders at a South African university, Pienaar and Sieberhagen (2005) investigated the relationship between burnout and engagement on the one hand and work stress, optimism and individual and organisational commitment on the other. The results indicated that the dependent variable dedication and vigour were both best described by the student leader’s levels of optimism.


2.6 Call centre

The following discussion provides a brief overview of the call centre industry and more specifically highlighting of the characteristic of the call centre under investigation.

2.6.1 Definition and Background

A review of the call centre research yields two definitions of call centres: A call centre may be defined as “a work environment in which the main business is mediated by computer and telephone based technologies that enable the efficient distribution of incoming calls (or allocation of outgoing calls) to available staff, and permit customer-employee interaction to occur simultaneously with use of display screen equipment and the instant access to, and inputting of information” (Holman, 2003, p. 76). The second, more technical definitions defines a call centre as “a dedicated operation in which computer utilising employees receive inbound or make outbound telephone calls, with those calls processed and controlled either by a automatic call distribution or predictive dialler” (Taylor & Bain, 1999, p.102).

In a fast pace modern world our contemporary understanding of customer services hinges on two words Call Centres. Call centres have become as much a part of our lives today as ATMs, self-service supermarkets, and internet shopping – all of them are “new age” service delivery systems that the customer-at-large has had to accept and live with (Mahesh & Kasturi, 2006). With the increase in customer demands and needs, competition is rife amongst organisation that are all rallying to provide the highest standard of customer service delivery (Nel & De Villiers, 2004).
The advent of call centres began in the USA in the 1980s and was adopted in Australia and the UK a few years later (Incomes Data Services, 1997; Arkin, 1997; Datamonitor, 1996 cited in Brown & Maxwell, 2002). Since then there has since been a rapid growth in the variety of call centre industries and services across the world.

In a 2006 article, Mahesh, & Kasturi, reported that the number of call centre jobs in North America – 2.9 million agents employed at 55,000 facilities. At the time about 12 per cent of all call centre agents serving North America, and off shoring to foreign markets will account for 7 per cent of the total number of positions. The number of centre’s in Europe, the Middle East and Africa grew by 17 per cent in 2000, while employment grew 10 per cent in Australian call centers in 2002. Over the last couple of years, India and Philippines are competing for a majority share of Business process outsourcing (BPO) sector. Business process outsourcing (BPO) is a division of outsourcing industry that involves the contracting of the operations and responsibilities of specific business functions to a third-party service provider. BPO is typically categorized into back office outsourcing - which includes internal business functions such as human resources or finance and accounting, and front office outsourcing - which includes customer-related services such as contact center services. BPO that is contracted outside a company's country is called offshore outsourcing. BPO that is contracted to a company's neighboring country is called near shore outsourcing (Kakabadse & Kakabadse, 2002).

In 2008 the Philippines was regarded as the second largest BPO industry in the world, next to India. Industry figures place revenues generated from the BPO sector in 2008 at $6.8 billion for the Philippines, and $11 billion for India. The $9.5-billion Philippines O&O (offshoring & outsourcing) industry grew at a compounded 27.6% in the period 2009 - 2010 (Christian & Balana, 2010; “Philippines to overtake India”, 2010).
Within Africa, South Africa has become a major contender with the call centre industry. There are approximately 80 000 employees in the contact centre industry in South Africa (Hart, Chaiang & Tupoche, 2009). In 2007, Benner, Leiws, and Omar (2007) investigating 64 companies with call centre industries in South Africa. According to their study South Africa’s call centre industry is serving a domestic market (91%) and primarily in-bound customer service calls, rather than outbound sales calls. Of the call centres in the survey, 51% are located in Gauteng province and another 38% in the Western Cape. A full 81% are operated as in-house call centres, and the average size was 77 call centre agents. The call centres operate across many different industries, with telecommunication, insurance, banking and financial services industries being the most prominent (Benner et al., 2007).

In 2008, it was reported that employment in call centre’s within South Africa’s has grown by 20% with nearly 6000 jobs created in 2007. The growth spurt was largely due to “off shoring” with 15% of call industry working exclusively on foreign accounts (“The call centre in grows”, 2008). Gauteng still retains the biggest slice in the call industry with 71.6 % of local call centre followed by 20.5 % in the Western Cape and 6 % in Kwazulu Natal (Masando, 2008). Amazon.com one world’s largest online retailers recently announced that it will be opening a contact centre in Cape Town. It has been estimated that 1 000 new jobs will be created thus boosting the economy of the Western Cape (Speckman, 2010).
2.6.2 General characteristics of a call centre

The general characteristics of a call centre delineated by the following criteria (Healy and Bramble, 2003 cited in Hauptfleisch and Uys, 2006):

**Inbound vs Outbound.** Employees are in direct contact with clients (Inbound), initiating calls (outbound) or performing a combination of these roles. Inbound call centers handle customer services. Customer services call centre (or contact centers) generally solve problems, handle queries or answering question about services or products (White & Roos, 2005). Outbound call centers deals with the selling of products or services and collection on delinquent accounts (White & Roos, 2005). This research focused specifically on customer services call centre with both an inbound and outbound operation.

**Information systems technology.** A Call centre combines both telecommunication and information system technology to allow employees to interface with customers on the phone while simultaneously entering information into specialised computer programmes.

**Workflow and control.** Workflow is distributed through a sophisticated computer programmes via automatic call distribution (ACD) or predictive dialing system while simultaneously monitoring employee performance through real time statistical displays.

Call centres can further be characterised according to their functionality. According to Brown and Maxwell call centres can be categorised into four broad types:

1. Customer Services/ Sales
2. Single/Bi-directional calls
3. Industry of operation (e.g. consumer products, financial services, tourism/transport, remote shopping, telecoms, entertainment).

4. Services provided: telephone banking, insurance cover, claims, complaints, accounts and billing, purchase orders, after sales support in repairs and servicing.

2.6.3 Characteristics of the call centre under investigation

The research is undertaken in one of South Africa’s largest retail Groups. The Customer Service department forms part of the credit and financial services of the company where Consumer credit and insurance products are offered. All aspects of the credit management are processed in-house, including credit scoring, activation, servicing and collection, and they also provide our credit management services to third parties. In the fiscal year 2009, the credit and financial services business excluding On the Cards Investments Limited generated R565 million of net profit before tax (Edcon Financial report, 2009).

There are three regional credit offices (RCO), office in the Western Cape, Gauteng and KZN. The Western Cape RCO consists of a customer services and collection department, with new accounts department housed under customer services department.
2.6.3.1 New Accounts Department

The new accounts department deals with the activations of new accounts. There are three ways of opening an account:

1. Customers apply for accounts via online application.
2. In store application, where customers complete an application within a store and the application are faxed to the call centre for processing.
3. Telephonic application, accounts are open telephonically (also known as express credit).

The new accounts call centre agents are responsible for processing a customer application from start to finish. The agent captures the customers information on the system, confirm information and also inform the customer whether they are successful (approved) or unsuccessful (declined).

Figure 3 is the new accounts productivity report for January 2011-February 2011. During January 2011, 16 526 applications were processed by the new accounts department and in February 2011 16 575 applications were processed. Out of 33 101 applications, 24 474 applications were declined.
<table>
<thead>
<tr>
<th>JANUARY_2011</th>
<th>Express Credit</th>
<th>Express Credit</th>
<th>Faxed</th>
<th>Faxed</th>
<th>Total Processed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved</td>
<td>Declined</td>
<td>Approved</td>
<td>Declined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,102</td>
<td>2,967</td>
<td>2,217</td>
<td>9,240</td>
<td>16,526</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEBRUARY_2011</th>
<th>Express Credit</th>
<th>Express Credit</th>
<th>Faxed</th>
<th>Faxed</th>
<th>Total Processed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved</td>
<td>Declined</td>
<td>Approved</td>
<td>Declined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,972</td>
<td>2,748</td>
<td>2,336</td>
<td>9,519</td>
<td>16,575</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 3. Productivity Report New Accounts January 2011 to February 2011*

### 2.6.3.2 Customer Services Department

The customer services department assists customers with different types of queries. A customer will contact the call centre and the agent will then assist the customer. Customers may telephone the call centre directly or they may go to any one of the stores within the group and ask for assistance from the store staff member who can call the call centre for the customer. Customer queries are usually account problems; balance enquiries, a request for a detailed statement, instalment queries, or even an update of personal information.
2.6.4 Call centre research

Over the last several years, much of the call centre research has been devoted to the impact that call centre work may have on employee well-being (Hauptfleisch & Uys, 2006). Research has shown that many different factors inherent to call centre work and its environments have been linked to the development of burnout, physiological and psychological maladjustments. Job characteristics that are unique to call centres have also been cited as contributors of burnout. Call centres tend to be designed more along the lines of a service factory rather than a customer service/customer-interfacing unit (Mahesh & Kasturi, 2006). Call agents have low influence on work-related resources such as job control, not only over work pace (i.e., decision possibilities over time frame of task conduct such as time point, succession, and duration of actions), but also with regard to planning and organizing one’s own work (Deery, Iverson, & Walsh, 2002; Isic et al., 1999; Metz, Rothe, & Degener, cited in Grebner et al., 2003).

Call centre job characteristics if often described as routine work with low task variety, low task complexity and consequential low utilisation of qualification i.e. knowledge, skills, and abilities (Grebner et al., 2003). Hollman (2002) examined the relationship between call centre practices – e.g. job design and monitoring and employee well-being. Results demonstrated that the factors most highly associated with well-being were high control over work methods and procedures, a low level of monitoring and a supportive team leader. Visser and Rothman (2009) examined the relationship between daily hassles and burnout. A six-factor model of daily hassles consisting of daily demands, continuous change, co-worker hassles, de-motivating work environment, transportation hassles and personal concerns was used for study. Exhaustion was best predicted
by four categories of daily hassles, namely daily demands, continuous change, a de-motivating work environment, and transportation hassles.

A large percentage of call centres research has predominantly focused on Burnout within call centres (Cordes & Dougherty, 1993; Deery et al., 2002; Maslach et al., 2001; Schaufeli & Bakker, 2004; cited Visser & Rothman, 2009). Rothmann and Visser (2008) investigated the relationship between six characteristics of call centre work environments, burnout, affective commitment and turnover intentions amongst 146 call centre employees. The study found that, work overload, lack of career opportunities, skill variety and emotional labour were the most important predictors of burnout. Burnout had a direct effect on turnover intentions where as affective commitment partially mediated the relationship between burnout and turnover intention. Research further indicated that different aspects of performance monitoring in call centres and may lead to burnout amongst call centre operators. Milner et al. (2007) found that perceived intensity of performance monitoring emerged as a significant predictor of all the burnout components. Similar findings are found within South African call centres with call centre agents displaying high degree of burnout which has lead to an increase in absenteeism, high turnover rates and increase cardiovascular disease amongst the workforce (Hauptfleisch & Uys, 2006).

Bakker et al. (2003) examined the predictive validity of the job demands – resources (JD –R) model for self-reported absenteeism and turnover intentions among 477 employees. Results showed that job demands (i.e., work pressure, computer problems, emotional demands, and changes in tasks) were the most important predictors of health problems, which, in turn, were
related to sickness absence (duration and long-term absence). Job resources (i.e., social support, supervisory coaching, performance feedback and time control) were the only predictors of involvement, which, was related to turnover intentions. Additionally, job resources had a weak negative relationship with health problems, and health problems positively influenced turnover intentions.

Schaufeli et al. (2009) conducted a longitudinal survey among 201 call centre managers. The study investigated Job Demands-Resources (JD-R) model. The results of structural equation modeling analyses revealed that an increases in job demands (i.e., overload, emotional demands, and work-home interference) and a decreases in job resources (i.e., social support, autonomy, opportunities to learn, and feedback) predicted burnout. The results further suggested a positive gain spiral existed as initial work engagement was predicted by an increase in job resources, which, in its turn, further increases work engagement. Burnout (positively) and engagement (negatively) predicted registered sickness duration (“involuntary” absence) and frequency (“involuntary” absence), respectively.
2.7 Summary of the chapter

The chapter introduced the concept of work engagement and provided a holistic overview of the various models of the engagement. There are three distinct models of work engagement: Personal engagement; Employee engagement; Burnout/Engagement and Work Engagement. The current study has conceptualized and operationalised engagement according to the work engagement model and it is evident from the literature that work engagement has a major impact on an employee’s physiological and psychological well-being.

Dependent variables self-efficacy and optimism have also been discussed. The study has highlighted the various theories governing the constructs and established the link between work engagement and self-efficacy and optimism. The chapter concluded with a discussion of the call centre environment and the characteristics of call centre under investigation.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The following chapter discusses the research design undertaken, the population sample, measuring instruments and procedure for data gathering as well as the statistical techniques employed in the study.

3.2 Research Design

A quantitative research design was used for the study. Within social science quantitative research design is used to predict, describe and explain quantities, degrees and relationships from a defined sample. By collecting numerical data researchers are able describe specific details of a situation, social environment or a relationship (Collins, du Plooy, Grobbelaar, Puttergill, Terre Balmche, van Eeden, van Rensberg & Eigston, 2000). Statistical procedures are used to analysis the data, once all relevant variables have been measured and scored and the output of statistical analyses enables the researchers to make inferences about the characteristics of the population based on the data from a sample (Blanche & Durrheim, 2008).

The study collected numerical data via a personally administered questionnaire. The respondents were asked to rate their responses on various quantifiable rating scales, the data
was then statistical analysed, inferential statics was used to test hypotheses and descriptive statics was used to describe characteristics of the sampled population.

The research was descriptive in nature. Descriptive objectives describe the characteristics of a phenomenon, or a relation between a number of variables, as accurately as possible (du Plooy, 2002). The main objective was to describe the relationship between the dependent and independent variables. The independent variable under investigation is work engagement while the dependent variables are: self-efficacy and optimism.

A cross-sectional time dimension was used. Cross sectional research is used when all the information on a specific topic is collected at the same time and no identical research will be done after a specific period of time (Babbie & Mouton, 2007).

3.3 Hypotheses

Based on the objectives, the following hypotheses have been formulated:

**HYPOTHESES 1:** Call centre agents display high levels of work engagement

**HYPOTHESES 2:** Call centre agents display high levels of self-efficacy

**HYPOTHESES 3:** Call centre agents display low levels of optimism

**HYPOTHESES 4:** There is a statistically significant relationship between self-efficacy, optimism and work engagement amongst call centre employees.
**HYPOTHESES 5:** Self-efficacy and optimism will statistically significantly explain the variance in work engagement.

### 3.4 Sample

A non-probability sampling method was used. The non-probability sampling is a sampling procedure where the population may or may not be accurately represented (Collins et al., 2000). Therefore every unit in the population does not have an equal or probable chance of being selected as part of the sample (du Plooy, 2002).

The type of non-probability sampling method that was used was convenience sampling method. A convenience sampling is drawn from a unit of analysis that are conveniently available (du Plooy, 2002).

The non-probability sampling method will be employed by the current study because:

- Participants will be selected on the basis of availability. Availability of the call centre agent will depend on their schedule, permanent part timers work Mondays to Sundays with one to two days off a week.
- Additionally, due to time constraints, the feasibility and the academic purpose of the study, the non-probability sampling methods were chosen by the researcher as the most appropriate method.

Call centre agents can be distinguished in terms of: permanent employees and permanent part timers (PPT) and fixed part timers (FPT).
Permanent employees work 5 days a week, while permanent part timers (PPTS) work Mondays to Sundays, with one day off in the week and one Saturday off in a month. PPTs working hours vary between 108 hrs -150 hours a month. Fixed Part Timers are employed for a period 6/9 months with possible of permanent position depending on their performance.

In total call centre agents are 122. A sample size of 97 will be chosen for the current study, based on Krejcie and Morgan 1970, cited in Sekeran (2003) sample size for given population size table, an appropriate sample for a population size of 122 is 97. The study obtained a 96% response rate, out of the 97 sampled two respondents refused to participate in the study and two questionnaires were returned unusable bring the sample to 93.

3.5 Population

A Population can be defined as the entire group of persons or sets of objects and events the researcher wants to study, a population contains all the variables of interest to the research (Collins et al., 2000). The population of the current study consisted of 137 staff members within a call centre Customer department based in Cape Town.
3.6 Procedure

The questionnaire was handed out on Tuesday 12 October 2010. Prior to handing out the questionnaire, all the team managers were briefed about the research process and each team manager was requested to issue an invite to their respective teams. On the 12 October 2010, all the call centre agents were gathered in the conference room and questionnaires were distributed. The research questionnaires and the procedure were explained to the employees by the researcher, who was also present at the sessions to address any questions that may arise. The call centre agent completed their questionnaire in the conference room and on completion; all questionnaires were returned to the researcher.

The participants were informed that their participation was voluntary and that all information will be kept confidential. The respondents were also informed that their anonymity will be protected as no personal information that could identify participants was needed to be written on the questionnaire.

3.7 Measuring Instruments

A Biographical questionnaire was used. The front cover of the Questionnaire booklet contained the following information:

- Consent form
- Information of the aim/purpose of the study
- Instructions on how to complete each Questionnaire (with an illustrated example)
The Questionnaire booklets consisted of the following:

1. Biographical Questionnaire consisting be six personal/demographic variables:
   - Current position, Department, Age, Sex, Race, Tenure, Shift (day/night), Education level,
   - Employment type: Permanent employees/ Permanent part timers/

2. The Utrecht Work Engagement Scale

3. Life Orientation Test -Revised (LOT–R)

4. The General Self-Efficacy Scale (GSE)

3.8 The Utrecht Work Engagement Scale (UWES)

3.8.1 Nature and composition

The Utrecht work engagement scale was used to measure levels of engagement of the participants. There are two popular versions UWES-9 items (short version) or the UWES-17 items, the study used UWES-17. Each item measured on a seven-point frequency scale ranging from 0 (never) to 7 (everyday). There are three constituting aspects of work engagement: vigor, dedication, and absorption.

Vigor is assessed by the following six items that refer to high levels of energy and resilience, the willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties.

1. *At my work, I feel bursting with energy*

2. *At my job, I feel strong and vigorous*

3. *When I get up in the morning, I feel like going to work*
4. I can continue working for very long periods at a time

5. At my job, I am very resilient, mentally

6. At my work I always persevere, even when things do not go well

A score high on vigor is usually indicative of an individual with energy, zest and stamina when working, whereas those who score low on vigor have less energy, zest and stamina as far as their work is concerned (Schaulfeli & Bakker, 2003).

Dedication is assessed by five items. The five items are used to assess feelings of enthusiasm, being proud about one’s job, and feeling inspired and challenged by it (Schaulfeli & Bakker, 2003).

1. I find the work that I do full of meaning and purpose
2. I am enthusiastic about my job
3. My job inspires me
4. I am proud of the work that I do
5. To me, my job is challenging

Those who score high on dedication strongly identify with their work because it is experienced as meaningful, inspiring, and challenging. A low score refers to individuals who do not identify with their work, they feel neither enthusiastic nor proud about their work (Schaulfeli & Bakker, 2003).

Absorption is measured by six items. Absorption refers to being happily immersed in one’s work and having difficulties detaching oneself from it so that time passes quickly and one forgets everything else that is around.
1. *Time flies when I'm working*

2. *When I am working, I forget everything else around me*

3. *I feel happy when I am working intensely*

4. *I am immersed in my work*

5. *I get carried away when I’m working*

6. *It is difficult to detach myself from my job*

Individuals that receive high scores on absorption dimension are usually happily engrossed in their work, they feel immersed by their work and have difficulties detaching from it. As a consequence, everything else around is forgotten and time seems to fly. A low score on absorption is indicative of individuals that do not feel engrossed or immersed in their work, they do neither have difficulties detaching from it, nor do they forget everything around them, including time.

Engaged employees are characterised by high levels of vigour and dedication as well as by elevated levels of absorption (Rothmann et al., 2005).
3.8.2 Psychometric Properties

3.8.2.1 Validity

A number of validity studies have been carried out with the UWES, notable studies that include the relationship between work engagement, burnout and workaholism. With regard to the relationship between work engagement and burnout, the three aspects of burnout – as measured with the MBI – are negatively related with the three aspects of work engagement (Salanova, Schaufeli, Llorens, Pieró & Grau, 2000; Demerouti et al., 2001; Schaufeli et al., 2002a; Schaufeli, Martínez, Marques-Pinto, Salanova & Bakker, 2002b; Montgomery et al., 2003 cited in Schaufeli & Bakker, 2003).

In a South African study, Mosert, Pienaar, Gauche and Jackson (2007) investigated the construct validity and construct equivalence of the Maslach Burnout Inventory-Student Survey (MBI-SS) and the Utrecht Work Engagement Scale-Student (UWESS). The results confirmed a two factor structure (as opposed to a one-factor structure) for each instrument. The burnout and engagement scales were moderately negatively related to each other, with stronger relationships between exhaustion and vigour and between cynicism and dedication.

An additional South African study was also conducted. Coetzers and Rothmann, (2007) evaluated the psychometric properties of two measures of affective well-being, namely MBI and UWES. Structural equation modelling confirmed a three-factor model of burnout, consisting of
Exhaustion, Cynicism and Professional Efficacy and a three-factor model of work engagement consisting of Vigour, Dedication and Absorption. Acceptable construct equivalence of the three-factor model of burnout and work engagement for different language groups was confirmed. A second-order factor analysis of the scales resulted in two factors, namely burnout and work engagement.

Schaufeli et al. (2008) examined the construct validity of work engagement and workaholism. The results showed that engagement and workaholism are hardly related to each other with the exception of absorption that correlates moderately positive with the workaholism aspect ‘working excessively’. Vigor and dedication are negatively correlated with the second defining characteristic of workaholism, namely ”strong inner drive” (Schaufeli et al, 2008).

Additionally confirmatory factor analyses show that the hypothesized three-factor structure of the UWES is superior to the one-factor model and fits well to the data of various samples from the Netherlands, Spain and Portugal (Salanova, Schaufeli, Llorens, Pieró & Grau, 2000; Schaufeli et al., 2002a; Schaufeli, Martínez, Marques-Pinto, Salanova & Bakker, 2002b; Schaufeli, Taris & Vamn cited in Schaufeli and Bakker ,2003). In the same year, in a South African study, exploratory factor analysis was used to assess the factorial structure of the UWES. The result indicated that the three-factor model represented the data quite well. Exploratory factor analysis with target rotations showed equivalence of the three factors for different race groups. No evidence was found for uniform or non-uniform bias of the items of the UWES for different race groups (Storm & Rothmann, 2003).
In 2009, another validation study was conducted. Seppälä, Mauno, Feldt, Hakanen, Kinnunen, Tolvanen and Schaufeli (2009) investigated the factor structure and factorial group and time invariance of the 17-item and 9-item versions of the UWES. Additionally, the study explored the rank-order stability of work engagement. The data were drawn from five different studies (N = 9,404), including a three-year longitudinal study (n = 2,555), utilizing five divergent occupational samples. Confirmatory factor analysis supported the hypothesized correlated three-factor structure—vigor, dedication, absorption—of both UWES scales. However, while the structure of the UWES-17 did not remain the same across the samples and time, the structure of the UWES-9 remained relatively unchanged.

3.8.2.2 Reliability

According to the UWES Test manual the internal consistency of the three scales of the UWES is good. In all cases values of Cronbach’s α are equal to or exceed the critical value of .70 (Nunnaly & Bernstein, 1984 cited in Schaufeli & Bakker, 2003).

Storm and Rothmann (2003) investigated the psychometric properties of UWES. Internal consistencies were computed for the three engagement scales, which revealed that all three subscales are sufficiently internally consistent according to the guidelines of Nunnally and Bernstein (1994) cited in Storm and Rothmann (2003). The alpha coefficient of 0.92 for the one-factor model was considerably higher. The Cronbach alpha coefficients of the scales are considered to be acceptable compared to the guideline of < 0.70 (Nunnally & Bernstein, 1994). Furthermore, the inter-item correlations are considered acceptable compared to the guideline of
0.15 < r < 0.50 (Clark & Watson, 1995). It appears that the scales have acceptable levels of internal consistency (Storm & Rothmann, 2003).

### 3.9 Life Orientation Test Revised (LOT–R)

#### 3.9.1 Nature and Composition

The Life Orientation Test–Revised (LOT–R) was developed by Scheier, Carver, and Bridges (1994) as a measure dispositional to optimism. It used to assess generalised outcome expectancies about the general expectations regarding the favourability of future outcomes (e.g., “I’m always optimistic about my future”). The Life Orientation Test–Revised is an adaption of original Life Orientation Test (Scheier & Carver, 1985), the original hypothesised as a two-factor structure of optimism (i.e. optimism and pessimism) was questioned, further analysis demonstrated a one factor structure, indicating that the LOT–R is measuring a continuum of high, average and low optimism/pessimism (Scheier, et al., 1994).

The Life Orientation Test – Revised (LOT-R), is a 10-item measure of which six items contribute to the optimism score and four items are fillers (Rothman, et al., 2008). Respondents are asked to rate the extent of their agreement to these items across a 5-point Likert-type scale ranging from 5 (strongly agree) to 1 (strongly disagree) (Bosman & Buitendach, 2005). An individual with a high score on the scale exhibits optimism and is indicative of an optimistic individual who has positive emotions about the future, the opposite is true of an individual with a
low score, which are indicative of pessimism. Individuals with this type of orientation may tend to be more negative and they do not respond appropriately to stress (Scheier, et al., 1994).

3.9.2 Psychometric Properties

3.9.2.1 Validity and Reliability

The LOT–R was found to have adequate internal consistency ($\alpha = 0.78$) and good convergent and discriminant validity (Scheier et al., 1994). Based on a sample of 204 college students, Harju and Bolen (1998) obtained a Cronbach alpha coefficient of 0.75.

A study investigating the criterion validity of the Life Orientation Test-Revised, in 121 opiate-dependent patients seeking methadone treatment, the LOT-R demonstrated strong criterion validity; the LOT-R was significantly negatively correlated with hopelessness ($r = -.65, p < .001$) and depression ($r = -.60, p < .001$) (Hirsch, Britto, & Conner, 2009).

3.10 The General Self-Efficacy Scale (GSE)

3.10.1 Nature and Composition

The General Self-Efficacy Scale (GSE) was created to assess a general sense of perceived self-efficacy. It measures a broad and stable sense of personal competence, allowing an individual to deal with a variety of difficult circumstances (Roothmann, Kirsten & Wissing, 2003). It is usually
self-administered and consists of 10 items with the same response format. Items include, ‘‘Thanks to my resourcefulness, I can handle unforeseen situations.’’ Scoring is done by adding the responses made to the 10 items. Possible responses were 1-not at all true, 2-hardly true, 3-moderately true, and 4-exactly true, yielding a total score between 10 and 40 (Luszczynska, Gutie´rrez-Don˜a & Schwarzer, 2005).

3.10.2 Psychometric Properties

3.10.2.1 Validity

In a large-scale study, Schwarzer and Jerusalem (1999) sampled 3514 high-school students and 302 teachers provided evidence for validity of the GSE scale. The results indicated that for the group of students, general self-efficacy correlated .49 with optimism and .45 with the perception of challenge in stressful situations. For the teachers, high correlations were obtained with proactive coping (.55), self-regulation (.58), and procrastination (−.56). Moreover, there was a substantial relationship to all three dimensions of teacher burnout (emotional exhaustion −.47, depersonalization −.44, and lack of accomplishment −.75).

In an equally ambitious study, Scholz, Doña, Sud, and Schwarzer (2002) examined the psychometric properties of the GSE with a sample of 19,120 participants among 25 countries. Based on the findings, the research concluded that the General Self-Efficacy scale is unidimensional and meets the criteria required for multicultural assessment procedures.
Rothmann and Van Rensburg (2001) investigated the Suicide Ideation in the South African Police Services and indicated a reliability coefficient of 0.80 for the GSE. A confirmatory factor analysis indicated that the scale was one-dimensional in all of the samples.

**3.10.2.2 Reliability**

Schröder, Schwarzer and Konertz (1998) investigated the re-test-reliability of the GSE, 246 cardiac surgery patients in Germany filled out the questionnaire before surgery and again half a year later, a retest-reliability of \( r = .67 \) was obtained. Among 140 teachers in Germany, a stability coefficient of \( r = .75 \) was found after one year. Over the same time period, 2846 students, also in Germany, filled out the scale twice, whereby a retest reliability of \( r = .55 \) was found (Schwarzer & Jerusalem, 1999). Furthermore, according to Scholz, Doña, Sud and Schwarzer (2002) the internal consistency for the total sample (\( N = 19,120 \) respondents) across 25 countries was \( \alpha = .86 \). The highest coefficient was found for the Japanese, with \( \alpha = .91 \), and the lowest for the Indians, \( \alpha = .75 \).

Similarly Rothman, Kirsten and Wissing (2003) investigated whether men and women differ with regard to aspects of psychological well-being study. The General Self-Efficacy scale was used as a measure of “Self aspects” of psychological well-being and a alpha coefficient of 0.83 was obtained, compared to alpha coefficients ranging from 0.78 to 0.91 reported for this instrument across 14 different cultures (Schwarzer, 1998).
3.11 Procedures used for data analyse

Statistical analyses involved both descriptive and inferential statistics which includes Pearson Product-Moment Correlation coefficient, and multiple regression analysis. The statistical programme used for the analyses and presentation of data in this research is the Statistical Package for the Social Sciences (SPSS) version 19.

3.12 Conclusion

In this chapter the research methodology was discussed in terms of the research design with respect to the method and sampling approach used. Additionally, the nature, composition and psychometric properties of each of the measuring instruments were discussed. The measuring instruments used: (namely, Biographical Questionnaire, The Utrecht Work Engagement Scale (UWES), Life Orientation Test Revised (LOT–R) and The General Self-Efficacy Scale (GSE). The chapter concludes with the statistical techniques used: namely, the Pearson Product-Moment Correlation Coefficient, Multiple Regression Analysis to test the hypotheses. In the next chapter the results are presented and interpreted with the use of the SPSS (Statistical Package for the Social Sciences) computer programme.
CHAPTER 4

PRESENTATION OF RESULTS

4.1 Introduction

In the previous section, the research methodology and design utilised during the current study were outlined. The information provided and discussed in the previous chapters will serve as a background against which the contents of this chapter will be presented and interpreted and is based on the empirical analyses conducted to test the hypotheses. The statistical programme used for the analyses and presentation of data in this research is the Statistical Package for the Social Sciences (SPSS) version 19.

The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the four measuring instruments employed, are summarised by means of calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained.

This is followed by presentation of the inferential statistics based on examination of each hypothesis formulated for the research. The upper level of statistical significance for null hypothesis testing was set at 5%.

All statistical test results were computed at the 2-tailed level of significance in accordance with the non-directional hypotheses presented (Sekaran & Bougie, 2010).
4.2 Biographical Information

This section outlines the descriptive statistics calculated as obtained by the variables included in the biographical questionnaire. The demographic variables that receive attention are:

- Department,
- Gender,
- Age,
- Group,
- Educational qualification,
- Marital status,
- Tenure, and
- Employment contract

Descriptive statistics in the form of frequencies and percentages are subsequently graphically presented for each of the above-mentioned variables.
4.2.2 Biographical Characteristics

Figure 3. Department of the respondents

Figure 4. Gender of respondents
Figure 5. Age distribution of respondents

Figure 6. Race of respondents
Figure 7. Educational levels of respondents
Figure 8. Marital status of respondents

Figure 9. Tenure of respondents
Figure 10. Employment contract of respondents
4.3 Descriptive Statistics

The descriptive statistics calculated for the sample are provided in the sections that follow. That is, the data pertaining to the variables included in the study, as collected by the three measuring instruments employed, are summarised by means of graphic representation and the calculation of descriptive measures. In this manner, the properties of the observed data clearly emerge and an overall picture thereof is obtained.

4.3.1 Measures of central tendency and dispersion

This section outlines the descriptive statistics calculated on the basis of the variables included in the questionnaire. The measures of central tendency and dispersion for the dimensions of work engagement are shown in Table 4.

Table 4

*Means, Standard deviation, for the dimensions of employee engagement*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>93</td>
<td>19.28</td>
<td>6.94</td>
</tr>
<tr>
<td>Dedication</td>
<td>93</td>
<td>16.80</td>
<td>7.27</td>
</tr>
<tr>
<td>Absorption</td>
<td>93</td>
<td>21.76</td>
<td>9.20</td>
</tr>
</tbody>
</table>
Figure 11. Dimension of Work Engagement
Table 5

*Means, Standard deviation, for Self-efficacy*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>93</td>
<td>33.41</td>
<td>5.15</td>
</tr>
</tbody>
</table>

Table 5 provides the descriptive statistics for the self-efficacy scale. The mean value for Self-efficacy (Mean=33.41, s.d = 5.15).

Table 6

*Means, Standard deviation, for Optimism*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>93</td>
<td>16.15</td>
<td>4.23</td>
</tr>
</tbody>
</table>

Table 6 provides the descriptive statistics for the optimism. The mean value for optimism (Mean=16.1508, s.d = 4.23).
Table 7

*Means, Standard deviation, for Work engagement*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std.dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work engagement</td>
<td>93</td>
<td>3.69</td>
<td>1.92</td>
</tr>
</tbody>
</table>

Table 7 provides the descriptive statistics for the work engagement scale. The mean value for work engagement (Mean=3.69, s.d = 1.92).
4.4 Reliability analysis

Table 8

*Cronbach’s Coefficient Alpha for the dimensions of the UWES questionnaire*

<table>
<thead>
<tr>
<th>No. of cases</th>
<th>Alpha</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigour</td>
<td>93</td>
<td>0.824</td>
</tr>
<tr>
<td>Dedication</td>
<td>93</td>
<td>0.881</td>
</tr>
<tr>
<td>Absorption</td>
<td>93</td>
<td>0.913</td>
</tr>
<tr>
<td>Total work engagement</td>
<td>93</td>
<td>0.951</td>
</tr>
</tbody>
</table>

Table 9

*Cronbach’s Coefficient Alpha for Optimism*

<table>
<thead>
<tr>
<th>No. of cases</th>
<th>Alpha</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>93</td>
<td>0.824</td>
</tr>
</tbody>
</table>

Table 10

*Cronbach’s Coefficient Alpha for Self-efficacy*

<table>
<thead>
<tr>
<th>No. of cases</th>
<th>Alpha</th>
<th>No. of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self efficacy</td>
<td>93</td>
<td>0.894</td>
</tr>
</tbody>
</table>
Cronbach coefficient alpha was computed for the UWES, Self-efficacy and Optimism Scales. The UWES’s reliability was determined to be 0.951 based on the sample of 93 employees who participated in the current research. Its sub-dimensions were also all shown to be reliable with Cronbach’s coefficient alpha exceeding the minimum acceptable level of 0.7 on all the dimensions. In addition, the Optimism and Self-efficacy scales also revealed acceptable reliability statistics. Sekaran (2003) argues that coefficients above 0.7 can be considered to be good indicators of the reliability of an instrument.

Pearson’s product moment correlation coefficient was computed to determine the relationship between optimism, self-efficacy and work engagement.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Optimism</th>
<th>Self-efficacy</th>
<th>Work engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.593**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Work engagement</td>
<td>0.412**</td>
<td>0.317*</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. * p < 0.05  ** p < 0.01

Table 11 indicates that there is a statistically significant and direct correlation between optimism and self-efficacy (r=.593, p<0.01). Similarly, there is a statistically significant positive relationship between optimism and work engagement (r=.412, p<0.01). There is a statistically significant and direct relationship between self-efficacy and work engagement (r=.317, p<0.05).
4.5 Inferential Statistics

Table 12

*Stepwise regression for work engagement, self-efficacy and optimism*

<table>
<thead>
<tr>
<th>Multiple Regression</th>
<th>0.360</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R squared (R^2)</td>
<td>0.130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R squared (Adjusted R^2)</td>
<td>0.120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard error</td>
<td>22.228</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>F = 13.552</td>
<td>Significant F = 0.00**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables in the equation</th>
<th>B</th>
<th>Std Error for B</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>1.961</td>
<td>.533</td>
<td>3.612</td>
<td>0.001**</td>
</tr>
<tr>
<td>Self efficacy</td>
<td>0.40</td>
<td>.741</td>
<td>3.681</td>
<td>0.00**</td>
</tr>
</tbody>
</table>

The results shown in Table 12 suggest a moderate percentage of the variation in work engagement explained by the optimism and self-efficacy variables entered in the equation (R^2 = 13.0% ; R^2 (adjusted) = 12.0%). Thus 13% of the variance in work engagement can be explained by the self-efficacy and optimism.

The F-ratio of 13.552 (p = 0.00) indicates the regression of these dimensions expressed through the adjusted squared multiple (R^2 (adj.) = 12%) is statistically significant. This variable account
for 13% of the variance in work engagement and suggests that other unexplored variables could potentially influence the results.

### 4.6 Conclusion

This chapter has provided an overview of the most salient findings which emerged from the empirical analysis. The hypotheses which were generated and emanated from engagement with the literature in this area were tested and have been reported on. The next section presents a discussion of the findings obtained and compares findings obtained with other research conducted in this field. It endeavours to elucidate the relationship between work engagement, self-efficacy and optimism and relates the current findings to those of previous researchers.
CHAPTER 5

DISCUSSION AND IMPLICATIONS

5.1 Introduction

The following chapter discuss the results obtain from statistical analysis. To contextualise the results reference were be made to studies conducted on call centre and other service professions. Thereafter, the limitations of the study will be discussed with the possibilities for future research recommendations. Conclusions are then drawn based on the obtained results and recommendations for the organisation are put forth.

5.2 Discussion of hypothesis 1, levels of work engagement

Call centre agents display high levels of work engagement.

In order to interpret the level of work engagement among the call centre agents mean score of the UWES was used. The results was then compared to norm scores of the UWES-17 (as depicted in Table 13), which indicated that the call centre agents display average levels of work engagement. However when comparing differences in mean levels of engagement between various occupational groups are as depicted in Table 14 the results indicate that call centre agents have low levels of work engagement. The mean value 3.69 comparable to the mean value of military police office, farmers and managers exhibit the highest scores an all dimensions and blue-collar workers and physicians show the lowest scores.

Therefore the Hypothesis 1 was rejected
Table 13 displays the norm scores for UWES 17 item measure. There are five categories: ‘very low’, ‘low’, ‘average’, ‘high’, and ‘very high’ (Schaufeli & Bakker, 2003).

**Table 13**

Norm scores for the UWES-17 (N = 2,313)

<table>
<thead>
<tr>
<th></th>
<th>Vigor</th>
<th>Dedication</th>
<th>Absorption</th>
<th>Total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>≤ 2.17</td>
<td>≤ 1.60</td>
<td>≤ 1.60</td>
<td>≤ 1.93</td>
</tr>
<tr>
<td>Low</td>
<td>2.18 – 3.20</td>
<td>1.61 – 3.00</td>
<td>1.61 – 2.75</td>
<td>1.94 – 3.06</td>
</tr>
<tr>
<td>Average</td>
<td>3.21 – 4.80</td>
<td>3.01 – 4.90</td>
<td>2.76 – 4.40</td>
<td>3.07 – 4.66</td>
</tr>
<tr>
<td>High</td>
<td>4.81 – 5.60</td>
<td>4.91 – 5.79</td>
<td>4.41 – 5.35</td>
<td>4.67 – 5.53</td>
</tr>
<tr>
<td>Very high</td>
<td>≥ 5.61</td>
<td>≥ 5.80</td>
<td>≥ 5.36</td>
<td>≥ 5.54</td>
</tr>
<tr>
<td>M</td>
<td>3.99</td>
<td>3.81</td>
<td>3.56</td>
<td>3.82</td>
</tr>
<tr>
<td>SD</td>
<td>1.08</td>
<td>1.31</td>
<td>1.10</td>
<td>1.10</td>
</tr>
</tbody>
</table>

*Note.* Table 13 was adapted from UWES test manual Schaufeli & Bakker, 2003, p.40).
Table 14

Total-score for occupational group

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highest scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers</td>
<td>875</td>
<td>4.24</td>
<td>1.04</td>
</tr>
<tr>
<td>Managers</td>
<td>632</td>
<td>4.22</td>
<td>1.00</td>
</tr>
<tr>
<td>White collar workers (profit)</td>
<td>1,826</td>
<td>3.97</td>
<td>1.12</td>
</tr>
<tr>
<td><strong>Lowest scores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military police officers</td>
<td>3,193</td>
<td>3.69</td>
<td>1.12</td>
</tr>
<tr>
<td>Blue collar workers</td>
<td>376</td>
<td>3.63</td>
<td>1.24</td>
</tr>
<tr>
<td>Physicians</td>
<td>655</td>
<td>3.10</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>Total group</strong></td>
<td>9,679</td>
<td>3.82</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Note. Table 13 was adapted from UWES test manual Schaufeli & Bakker, 2003,p.13).

These finding are subsequently inconsistent with previous research on work engagement within call centres. In a South African study, van Rensburg (2010) investigated levels of work engagement among call centre representatives. With a sample of 217 call centre representatives representing seven call centers in South Africa, van Rensburg hypothesised that a low level of employee engagement exists amongst call centre representatives. However, the hypothesis was unsupported as the results indicate that call centre representatives display high levels of work engagement.
It is important to note that when dealing with possible causes and consequences of engagement, only a few causal inferences can be made because the majority of studies are cross-sectional in nature. However, to further explore the possible reason for average levels of work engagement special reference is made to the February 2011 publication of the European Journal of Work and Organizational Psychology which addresses the fundamental assumptions about work engagement. The key themes included: (1) theory and measurement of engagement; (2) state and task engagement; (3) climate for engagement versus collective engagement with specific implication to the current state of engagement theory and its effect on current and future research (Bakker, Albrecht & Leiter, 2011a).

According to Bakker et al. (2011a) there are several key questions regarding work engagement. One of the most prominent questions present by Bakker et al. (2011a) was the dynamic and temporal nature of the construct. Over the last few years researchers have been examining the daily changes in work engagement, looking closer at temporal patterns of work related experiences and behaviours. According to Bakker, Albrecht and Leiter (2011b) individuals are not equally engaged at work across all days and there are days on which employees feel more vigorous, absorbed, and dedicated than on other days. Sonnentag, Dormann, and Demerouti (2010) summarized existing evidence of state perspective of engagement through a quantitative diary studies. The study demonstrated that work engagement fluctuates substantially within individuals. In a typical diary study, 30–40% of the overall variance can be found at the day (i.e., within-individual) level and 60–70% of the overall variance is at the between-individual level.
The study claimed that in order to investigate the full phenomenological experience of work engagement, one has to focus on state work engagement as a momentary and transient experience that fluctuates within individuals within short periods of time (e.g., from hour to hour, or from day to day).

In the same issue Schaufeli and Salanova (2011) took the concept of state engagement a step further by addressing the need to conceptualize task engagement as well. According Schaufeli and Salanova (2011) jobs consist of several tasks, and employees might feel more engaged while performing some tasks rather than other tasks. Hence, the study of task engagement would allow a more fine-grained analysis of the dynamic nature of work engagement.

The intriguing concept of “climate engagement” was also discussed in the issue. Bakker et al. (2011a) argued that when employees perceive that their organization as providing a supportive, involving, and challenging climate, which accommodates their psychological needs, they are more likely to be engaged, to respond by investing time and energy and by being psychologically involved in the work of their organization.

The above discussion, reflects the current state of affairs in the work engagement literature and could possible explain why the call centre agent displayed average level of work engagement. Over the last several years progress has been made in the study of work engagement however there are still key outstanding issues which need to be resolved (Bakker et al., 2011a).
5.3 Discussion of hypothesis 2, levels of self-efficacy

Call centre agents display high levels of self-efficacy

The general self-efficacy scale (GSE) was used to measure of self-efficacy. Responses are made on a 4-point scale. A response to all 10 items yields a final composite score, which ranges from 10 to 40 with higher scores refer to higher levels of general self-efficacy (Kvarme, Haraldstad, Helseth, Sørum, & Natvig, 2009). Scholz et al. (2002) examined the psychometric properties general self-efficacy scale among 19,120 participants from 25 countries. After analysing the composite score of the GSE, the results indicated that Costa Ricans, exhibit the highest levels of self-efficacy with a mean value of (33.19) while the Japanese exhibit the lowest levels of self-efficacy, with a mean value of (20.22). When compared to the latter study, the results of this study showed that the Mean= 33.41, this indicates centre agents display high levels of self-efficacy. Therefore the Hypothesis 2 was supported by the findings.

This finding is in line with previous research findings (Kocevic, 2006). In a study investigating self-efficacy, work performance and work satisfaction at a call-center company in southern part of Sweden, Kocevic (2006) found that an overwhelming majority of the participants display high degree of self-efficacy. However the results of the study showed that there is a negative correlation between high self-efficacy and work performance. The study also indicates that the probability of promotion and a high degree of locus of control both contribute to work satisfaction among the participants.
Consiglio (2010) investigated the relationship between self-efficacy, job satisfaction and absenteeism. A large sample of 5,426 call centre agents were used, with the aim to: (a) investigating the role of self-efficacy in (positively) predicting job satisfaction and in turn (negatively) predicting sickness absences; (b) hypothesizing the mediating role of job demands and job resources in the relationship between self-efficacy and job satisfaction (c) exploring these relations both at the individual and group level. The results showed that self-efficacy beliefs predicted both demands (negatively) and resources (positively), which in turn predicted (in an opposite manner) job satisfaction. In turn, job satisfaction had a strong impact on both sickness absences indicators. At the individual level self-efficacy had an indirect effect on job satisfaction through job demands and job resources and at the group level on job satisfaction, on short term absenteeism and total absenteeism rates. This model accounted for about respectively the 16% of total sickness and 33% of short term sickness absences variances.

The results indicate that the call centre agents have a strong belief in their own competence to tackle difficult or novel tasks and to cope with adversity in specific demanding situations.

Self-efficacy is commonly understood as being task-specific or domain-specific. However, some researchers have also conceptualized a generalized sense of self-efficacy that refers to a global confidence in one’s coping ability across a wide range of demanding or novel situations (Schwarzer & Jerusalem, 1995). General self-efficacy (GSE), the measures used in the current study, assesses a broad and stable sense of personal competence to deal effectively with a variety of stressful situations.
5.4 Discussion of hypothesis 3, levels of optimism

Call centre agents display low levels of optimism

The Life Orientation Test (LOT-R) – Revised was used to measure optimism. Responses to scored items are to be coded so that high values imply optimism. Each item is scored 0-4, so that high values imply optimism. On a scale of 0 to 24, 0 is extreme pessimism, 24 extreme optimism. For each assessment, there’s a scoring algorithm leading to one of three acuity ranges: low, moderate, or high.

**Algorithm**

- Total = 19-24 High Optimism
- Total = 14-18 Moderate Optimism
- Total = 0-13 Low Optimism

The results indicate mean value for optimism Mean=16.1508, suggests that respondents reported moderate levels of optimism. Therefore the **Hypothesis 2 was not supported by the findings**.

The research findings do not support Hypothesis 3 as the result indicates that the call centre agents have moderate levels of optimism. These finding are subsequently inconsistent with previous research on optimism within a call centres. Tuten and Neidermeyer (2004) measured the role of optimism and its effects on stress in the call centre. Utilising the Life Orientation test Tuten and Neidermeyer (2004) found higher levels of optimism.
To better understand the implications of the results, one has to look at the possible variables that effect optimism. Research has supported the view that optimism has positive effect on mental and physical health (Cassidy, 2000) but variables influencing levels of optimism are less well understood. Research at the individual level has documented effects of genetic variables (Plominet, Scheier, Bergeman, Pedersen, Nesselroade, & McClearn, 1992), socio-economic factors (Heinonen, Raikkonen, Matthews, Scheier, Raitakari, & Pulkki, 2006), social network resources (Segerstrom, 2007) religiosity (Mattis, Fontenot, & Hatcher-Kay, 2003) and culture (Ji, Zhang, Usborne, & Guan, 2004) as potential variable influencing levels of optimism. How these variables affect the levels of optimism is beyond the scope of the study, however it does provide insight into why the call centre agents displayed average levels of optimism.

5.5 Discussion of hypothesis 4, relationship between self-efficacy, optimism and work engagement

There is a statistically significant relationship between self-efficacy, optimism and work engagement amongst call centre employees. *Hence, hypothesis was accepted.*

Pearson correlations were used to determine the degree to which one variable is related to another. As indicated by Table 10 there is a statistically significant and direct correlation between optimism and self efficacy. Similarly, there is a statistically significant positive relationship between optimism and work engagement. There is also a statistically significant and direct relationship between self-efficacy and work engagement.
The relationship between self-efficacy, optimism and work engagement has been corroborated by research. In a South African study, Roux (2010) found a significant positive correlation exists between optimism and self-efficacy. It was also found that optimism is sequentially related to self-efficacy. Furthermore a significant positive correlation was found to exist between self-efficacy and work engagement as well as a significant positive correlation was found for optimism and work engagement.

Xanthopoulou et al. (2009a) investigated how daily fluctuations in job resources (autonomy, coaching, and team climate) are related to employees’ levels of personal resources (self-efficacy, self-esteem, and optimism), work engagement, and financial returns. Multi-level analysis revealed that job resources have a positive effect on day-level financial returns through the mediation of day-level personal resources and day-level work engagement.

5.6 Discussion of hypothesis 5

Self-efficacy and optimism will statistically significantly explain the variance in work engagement.

The results of the current study found that 13% percentage of the variance in work engagement can be explained by the self-efficacy and optimism. Various studies have examined the role self-efficacy and, and optimism in predicting work engagement. Xanthopoulou et al. (2007) examined the role of three personal resources (self-efficacy, organizational based self-esteem and optimism) in predicting work engagement. The results showed that personal resources explained
the variance in work engagement. Xanthopoulou et al. (2009a) replicated Xanthopoulou et al (2007) findings in a follow-up study. The findings indicated that self-efficacy, organizational-based self-esteem, and optimism make a unique contribution to explaining variance in work engagement over time, over and above the impact of job resources.

Roux (2010) included authentic leadership, optimism, and self-efficacy as the predictors (independent variables), and work engagement as the criterion (dependent variable). The results of the multiple regression analysis found that all the independent variables contribute significantly to the prediction of work engagement, except for optimism. All three of the independent variables explain 25% of the variance in work engagement. Hence, hypothesis was accepted.

Although the results suggest a moderate percentage of the variation in work engagement is explained by the optimism and self-efficacy it’s recommended that future research explore additional variables that could potentially influence the results.

5.7 Limitations

- Although the sample size ($N = 93$ call centre employees) of the current study is considered appropriate, for future research studies a larger group of respondents could be considered.

- The current research utilised a non-probability sampling method in the form of convenience sampling, hence, certain groups may have been under-presented. Therefore, for future research it is recommended that a stratified random sample be adopted which
would enable greater rigour and strive for greater precision and control with respect to the sample.

- This study has similar limitations as most cross-sectional studies. The findings cannot be generalised over a wider population of employees because the data was collected at a specific point of time. As a result, the observed significant relationships between the constructs should be interpreted with caution and no causal inferences should be made. Future research should address this limitation by conducting a longitudinally study instead.

- The current study did not take entire call centre into consideration due to time constraints; the study was only conducted in the customer services department of the call centre. Therefore, the results of the current study cannot be generalized.

- The concept of work engagement is fairly new and the notion of engagement in call centres in South Africa has not been explored before. Consequently there is paucity of literature available, especially literature reporting the levels of work engagement in call centres.

- Research has indicated the job demand resource model provides a useful theoretical platform to examine the causes and consequences of engagement. Although many studies have explored relationship between job demand job resource and work engagement, only few studies have examined the concept within a call centre environment. Future research
should therefore explore the relationship between job demand, job resource and work engagement within the call centre environment.

5.8 Recommendation

This section deals with how to enhance work engagement within the workplace. Although only a few interventions on how to improve work engagement exist and have been tested, Schaufeli & Salanova (2010) proposed that it will be useful to classify engagement interventions in terms of organizational, job, and individual-level interventions. In line with research findings the following recommendations have been put forth:

5.8.1 Individual-based interventions

One of key principles of positive psychology is the assertion that living a authentic life and fully realising one’s potential, strengths and talents can contribute to enhancing overall well-being as well as work engagement. Identifying and developing ones unique personal strength or signature strengths could play a crucial role in enhancing well-being and improving work engagement. The Signature Strength Questionnaire (Peterson & Seligman, 2004) and Strengths Finder (Buckingham & Clifton, 2001) are two measures that could used to help employees indentify their strengths. Once identified, employees should be encouraged to utilize these strengths in their everyday life and find new and different ways to use these strengths to increase happiness. Employers should provide constructive feedback in conjunction with follow up activities to
dominant talent which in turn could significantly increase employee work engagement (Clifton & Harter, 2003)

Setting and pursing goals plays important roles in not only improving self-efficacy and work engagement but it also has the ability to boost self esteem and confidence. The research findings has indicated that the call centre agent display high levels of self-efficacy, this is a potential opportunity area that can be employed to improve the levels of work engagement.

There various ways to pursue goals, one of was simplest method is to write goals down. Long term goals written down and then broken into higher level goals which further broken down into smaller goals. A realistic date is set with each goals set and once smaller goals are attained the individual should be encouraged to obtain higher level goals.

Increase ones resilience helps combat daily stressors and help individuals develop coping skills. Stress and burnout are often factors that erode personal growth and work engagement. It is well documented that call centre environments are highly stressful environment with high levels of burnout, resilience could play an important role in helping call centre agent deal with stress.

There many methods of increase resilience, on a basic level to increase resilience one has to:

- Find meaning in adversity.
- Build a community of support.
- Focus on gratitude.
- Accept & anticipate change.
Programmes aimed at increasing work engagement could focus on building personal resources such as psychological capital (e.g., efficacy beliefs, optimism, hope, and resiliency) for employees. Additionally training, coaching, and developmental supports may aim, for example, at building positive effect, emotional intelligence, and positive adaptive behavioural strategies (Schaufeli & Salanova, 2010).

5.8.2 Organisational-based interventions

Bakker et al. (2011) used the example of Civility Respect and Engagement at Work (CREW) programme as possible organizational-based interventions to improve work engagement. The programme builds upon a 6-month sequence of group sessions following principles of organizational development to improve civility among colleagues According to Leiter et al. (2009) research has shown that increasing civility and decreasing incivility among colleagues could improve work engagement. Leiter et al. (2009) found that high levels of civility is indicated by more positive scores on the exhaustion and cynicism subscales of the MBI as well as on the short version of the UWES. They contend that a key to the effectiveness of this approach is its sustained implementation that permits employees to identify new ways of interacting with one another, opportunities to practice these new behaviors, and responsibility to the workgroup to make best efforts for improving their collegiality (Bakker et al., 2011b).

However, to sustain the implementation of any organisational-based interventions, it requires senior leadership endorsement that is ideally realized by acknowledging engagement as a core value. Regular employee surveys provide a means of monitoring engagement and its variations
across units. An open, effective communication strategy will send that information to leaders who can use it to guide their development of employees.

Any strategy that is implemented requires well thought-through policies that integrate engagement into decisions regarding performance management and career development. On both the operational level and strategic levels, information about engagement successes and shortfalls across the organization would inform decisions that should foster the achievement of a genuine system of engagement.

5.8.3 Job-based interventions

Job and personal resources play an important role in engagement. When redesigning jobs or programmes aimed at increasing work engagement, factors that increase job resources plays an important role. These factors include physical, social or organizational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development (Xanthopoulou et al., 2007). Developing social support and changing work procedures to enhance feedback and autonomy may create a structural basis for work engagement. Also, job rotation and changing jobs might result in higher engagement levels because they challenge employees, increase their motivation, and stimulate learning and professional development (Bakker et al., 2011).
5.9 Conclusion

The results showed that call centre agents display average levels of work engagement and optimism but high levels of self-efficacy. The findings have also revealed that there is statistically significant and direct correlation between optimism and self-efficacy, optimism and work engagement and between self-efficacy and work engagement. Furthermore a moderate percentage of the variation in work engagement was explained by the optimism and self-efficacy.

Over the last several years there has been a proliferation in engagement related research. Enormous advances having been made about how best to understand and manage engagement. The study has contributed to this endeavor by exploring the concept of work engagement within a call centre environment. The study has highlighted the importance of work engagement in organizational contexts and has emphasized the relevance of engagement in making a positive difference in organizational contexts.
REFERENCES


doi: 10.1348/096317904322915892


Philippines to overtake India. (2010, November, 4). *The Times of India.*


RCO on boarding overview: *A generic overview of financial services* (n.d.) Learners Guide.


