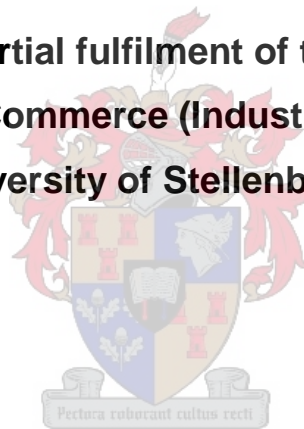


**Engagement in Call Centres:
Exploring Eliciting Factors**

by

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**Thesis presented in partial fulfilment of the requirements for the
degree of Master of Commerce (Industrial Psychology) at the
University of Stellenbosch**



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December 2010**

DECLARATION

I herewith declare this work to be my own, that I have acknowledged all the sources I have consulted in the thesis itself and not only in the references, that all wording unaccompanied by a reference is my own, and that no part of this assignment/essay has been directly sourced from the internet without providing the necessary recognition. I acknowledge that if any part of this declaration is found to be false I shall receive no marks for this thesis and that charges can be laid against me for plagiarism before the Central Disciplinary Committee of the University.

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ABSTRACT

Researchers have labelled call centres as the modern equivalent of the ‘factory sweatshops’ of the industrial era, and refer to them as the ‘satanic mills of the 21st century’. A review of the literature revealed the lack of employee engagement amongst call centre representatives (CCRs) to be a central concern in this fast-emerging global industry. Consequently, the current study was undertaken to identify and investigate various antecedents of employee engagement.

The objective of the study was, firstly, to gauge the level of employee engagement amongst a sample of CCRs in South Africa and, secondly, to track the paths through which salient antecedents affect this engagement. More specifically, the relationships between sense of coherence (SOC), leadership effectiveness (LE), team effectiveness (TE) and employee engagement (E) were investigated. A quantitative research approach was followed whereby a positive psychology paradigm underpinned the examination of specific personal and job resources that could enhance engagement within the call centre environment.

A cross-sectional survey design was used and a non-probability convenient sample of 215 CCRs was selected. The measuring instruments comprised the Utrecht Work Engagement Scale of Schaufeli and Bakker (2003) to measure engagement, the Team Diagnostic Survey of Wageman, Hackman and Lehman (2005) to measure team effectiveness, the Leadership Practices Inventory of Kouzes and Posner (2001) to gauge leadership effectiveness, and the Orientation to Life Questionnaire of Antonovsky (1987) to measure sense of coherence. A series of structural equation modelling analyses were performed.

Contrary to the ‘electronic sweatshop’ image and its attendant symptoms of depression, emotional exhaustion, anxiety, demotivation and dissatisfaction attached to call centre jobs (depicted in the literature), the results show a high

level of employee engagement for the CCRs in the sample. Also, personal resources, such as SOC, and job resources, such as TE, related significantly to E. A non-significant relationship was found to exist between LE and E. The implications of the results for the practice of human resource management in call centres are elaborated upon.

OPSOMMING

Oproepsentrums is al deur navorsers bestempel as die moderne ekwivalent van die 'hongerfabriek' van die industriële tydperk, en as die 'sataniese meule van die 21ste eeu'. 'n Oorsig van die literatuur toon dat die gebrek aan werknemerverbintenis onder oproepsentrumverteenvoerders (*call centre representatives (CCRs)*) 'n sentrale kommer is in hierdie vinnig ontluikende globale bedryf. Gevolglik is hierdie studie onderneem om die verskillende antesedente van werknemerverbintenis te ondersoek.

Die doelwit van hierdie studie was eerstens om die vlak van werknemerverbintenis in 'n steekproef van oproepsentrumverteenvoerders in Suid-Afrika te meet, en tweedens om die weë waardeur die pertinente antesedente hierdie verbintenis beïnvloed, op te spoor. Meer spesifiek is die verhoudings tussen samehangsin (*sense of coherence (SOC)*), leierskapdoeltreffendheid (*leadership effectiveness (LE)*), spandoeltreffendheid (*team effectiveness (TE)*) en die werknemer se verbintenis (*engagement (E)*) ondersoek. 'n Kwantitatiewe navorsingsbenadering is gebruik in terme waarvan 'n positiewe sielkundige paradigma die ondersoek van spesifieke persoonlike en werkhulpbronne ondersteun het wat verbintenis in die oproepsentrum-omgewing kon verhoog.

'n Deursnee- opname-ontwerp is gebruik en 'n nie-waarskynlikheidsgerieflikheidssteekproef van 215 oproepsentrumverteenvoerders is geselekteer. Die meetinstrumente het die volgende behels: die *Utrecht Work Engagement Scale* van Schaufeli en Bakker (2003) om verbintenis te meet; die *Team Diagnostic Survey* van Wageman, Hackman en Lehman (2005) om spandoeltreffendheid te meet; die *Leadership Practices Inventory* van Kouzes en Posner (2001) om leierskapdoeltreffendheid te meet; en die *Orientation to Life Questionnaire* van Antonovsky (1987) om samehangsin te meet. 'n Reeks ontledings van struktuurvergelykingsmodellering is uitgevoer.

In teenstelling met die beeld van 'n 'elektroniese hongerfabriek' en die gepaardgaande simptome van neerslagtigheid, emosionele uitputting, angstigheit, demotivering en ontevredenheid wat met werk in oproepsentrums gepaard gaan (soos in die literatuur uitgebeeld), toon die resultate 'n hoë vlak van werknemerverbintenis vir die oproepsentrumverteenwoordigers in hierdie steekproef. Persoonlike hulpbronne soos samehangsin, en werkhulpbronne soos spandoeltreffendheid, het 'n noemenswaardige verband met verbintenis getoon. 'n Nie-betekenisvolle verhouding is gevind tussen leierskapdoeltreffendheid en verbintenis. Die implikasies van die uitslae vir die menslike hulpbronnepraktyk in oproepsentrums word ook bespreek.

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CHAPTER 1

BACKGROUND AND OBJECTIVES

1.1 INTRODUCTION

The industrial psychology literature related to call centres highlights the negative aspects of call centre work environments and the resultant adverse impact on worker wellbeing. Call centres have been labelled the 'coal mines of the 21st century', 'assembly lines in the head' and 'satanic mills'. The dehumanising features of call centres are also compared to the capitalist rationalisation of 150 years ago, and therefore resonates with Karl Marx's theory of self-alienation (Armistead, Kiely, Hole & Prescott, 2002; Fitzpatrick, 2010).

High stress levels, high staff turnover and emotional burnout are factors that are often associated with call centres. The fairly low-skilled nature of the work is generally associated with low levels of job satisfaction (Armistead *et al.*, 2002; Rose & Wright, 2005). The jobs of call centre representatives (CCRs) are characterised by repetitive movements, while complex information is processed. Good communication skills and efficiency are expected of CCRs. In addition, call centre employees often work in noisy environments under high time pressure and their performance is usually monitored online. As emotional labour is required for high levels of service and customer satisfaction, CCRs are regarded as emotional labourers in call centre operations (Brannan, 2005; Ferreira & Saldiva, 2002). Emotional labour refers to the organisationally prescribed presentation of feeling as a central concept for understanding how employees package their own emotions to fit organisational norms. Jobs high on emotional labour have been associated with a number of negative psychosocial effects. The reason for this is the emotive dissonance and a clash between real feelings and a fake display of feelings (Tracy, 2005). Call centre work is demanding and is weighed down by high attrition rates. Replacement costs on average are equal to a typical worker's salary of two and a half months (Lombard, 2009). In general, call centres are not pleasant workplaces and workers experience a high frequency of daily hassles when performing their everyday chores. Holman

(2005) argues that, whereas some employees may enjoy call centre work, for many it is demanding and stressful. Specific individual personality traits thus enable some CCRs to manage call centre work more effectively than those who succumb to stress, which ultimately leads to burnout and ill-health. For this reason, the call centre environment has become a 'playing field' for industrial psychologists to find ways to counter the negative impact of emotional labour and making call centres more effective and 'humane'.

The rationale for call centres' existence is to provide high levels of satisfaction and convenience for customers in a cost-effective manner, while making the customer feel valued (Kinnie, Hutchinson & Purcell, 2000, p. 968). Modern organisations focus on the management of human talent and its resultant people practices in order to improve performance and increase competitiveness in the changing world of work. Employees are expected to be committed to quality performance, to show initiative, to be proactive and to operate smoothly in teams. Worker input is thus critical in trying to produce quality output. Healthy workers performing their work, as a consequence, now also need to display high emotional energy and need to be dedicated to and absorbed by their work. Managers thus require engaged workers (Stander & Rothmann, 2010).

The notion of employee engagement is relatively new and little research has been conducted with regard to engagement in call centres. "There is a need to change the focus from problems and obstacles to resources" (Eriksson & Lindström, 2005, p. 464). This study makes a paradigm shift away from what Bakker and Schaufeli (2008, p. 148) call the "four D's" (damage, disease, disorder and dysfunction) and focuses on what is fundamental to all call centres' success: work engagement. The job demands-resources (JD-R) model is utilised, thus supporting the work motivation research tradition rather than the job stress tradition with its attendant symptoms. According to the JD-R model, job resources are indicators of a motivational process that enhances work engagement and organisational performance (Bakker & Demerouti, 2007).

Employees high on work engagement are more likely to meet the needs of their customers, thereby improving customer loyalty, sales and profits. Engaged employees are also less likely to leave the organisation, reducing considerable costs and the disruption caused by turnover (Roberts & Davenport, 2002). With call centres being the “factory sweatshops” of this century (Incomes Data Services, in Armistead *et al.*, 2002) and the positive spinoffs of engaged workers consistently being reported, one question needs to be asked: How can engagement be amplified in call centres? The answer to this question requires an investigation of the eliciting factors of engagement.

1.2 RESEARCH-INITIATING QUESTIONS

Taking cognisance of the advantages of work engagement and the reported toxic work environments of call centres, it would be prudent to determine the current levels of employee engagement in South African call centres. Consequently, it would also be beneficial to identify the most salient antecedents that affect the engagement of CCRs. In conclusion, specific interventions and practices need to be explored in order to enhance worker engagement in call centres.

1.3 OBJECTIVES AND METHOD OF THE STUDY

The specific research objectives of this investigation were:

- to determine the level of CCR worker engagement in contemporary South African call centres;
- to determine the most salient eliciting personal and job factors that lead to the engagement of CCRs;
- to propose and test an explanatory worker engagement structural model in the call centre environment (based on the identified salient factors); and
- to recommend practical interventions to enhance CCR engagement in call centres.

The following methodology was employed to achieve the set objectives: Firstly, a literature review was conducted to determine: the difficulties experienced in call centres; the encompassing meaning and definition of engagement; how to measure levels of engagement; the primary causes of engagement; and possible interventions to enhance engagement in call centres. Secondly, an empirical, exploratory study was conducted. Exploratory studies are essential and “can almost always yield new insights into a topic for research” (Babbie & Mouton, 2006, p. 80). A primary data design (data collected by the researcher) was followed to collect quantitative data (instrument scores) in the form of a self-administered questionnaire in order to test specific hypotheses derived from the literature. Informal, personal interviews were conducted with call centre managers and CCRs before the data collection commenced. This study thus followed a correlational, ex post facto design. Variables [engagement (E), team effectiveness (TE), perceived leadership effectiveness (LE) and sense of coherence (SOC)] were measured as experienced by the CCRs. The hypotheses of the study are graphically portrayed in LISREL notation as causal paths in Figure 1.1.

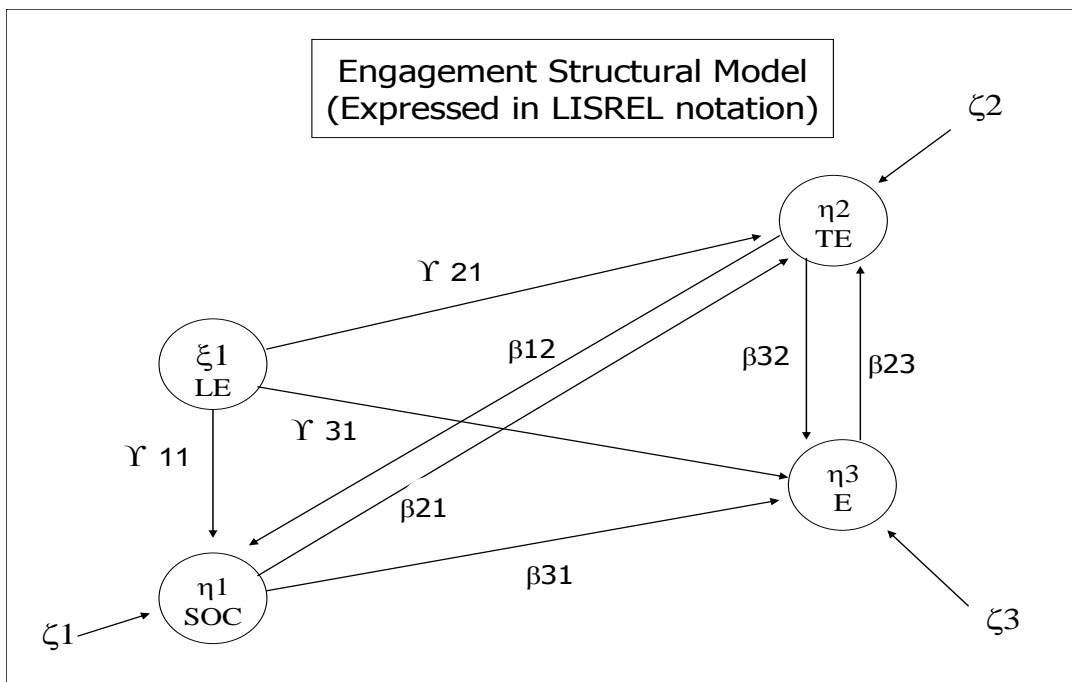


Figure 1.1 Proposed Engagement Structural Model

Purposive (judgemental) sampling was used to select call centres to participate in this study. Purposive sampling enables the researcher to use judgement to select cases that will best enable him or her to answer the research questions and meet the objectives. A requirement for call centres to participate in the study was that each call centre had to operate in a team setting. Seven call centres participated in this study. Three of the seven call centres are located in Cape Town, three in Pretoria and one in Johannesburg. The services offered by these call centres range from client support, selling services, products and insurance, and providing technical support and human resources support to internal personnel. As anonymity and confidentiality were assured, the names of the call centres are not mentioned in this study. A total of 217 call centre agents completed a self-administered questionnaire. Their team supervisors distributed the questionnaire to the call centre agents, who had approximately three days to complete the questionnaire. Informed consent was given by each relevant stakeholder and participant respectively. Participation was voluntary.

The final questionnaire was a nine-page self-administered questionnaire that consisted of biographical information and four sections with instructions that took approximately 15 minutes to complete. Each section consisted of a valid and reliable instrument that measures a specific construct. The measuring instrument comprised of the Utrecht Work Engagement Scale of Schaufeli and Bakker to measure engagement (E), the Team Diagnostic Survey of Wageman, Hackman and Lehman to measure team effectiveness (TE), the Leadership Practices Inventory of Kouzes and Posner to gauge leadership effectiveness (LE), and the Orientation to Life Questionnaire of Antonovsky to measure sense of coherence (SOC). A series of Structural Equation Modelling analyses were also performed (Feldt, Leskinen, Kinnunen & Ruoppila, 2003; Kouzes & Posner, 2001; Schaufeli & Bakker, 2003; Wageman, Hackman & Lehman, 2005).

1.4 DELIMITATIONS

The core aim of this study was to explore the eliciting factors of engagement in call centres. The job demands-resources (JD-R) model of Bakker and Demerouti (2007) was used to examine the eliciting factors and the level of engagement of CCRs. This study focused on the motivational process as expressed by the model. According to the model, job and personal resources will predict engagement in call centres. Wellbeing and psychological safety are mediating factors of engagement, but will not be discussed in this study. Furthermore, this study did not focus on the job stress tradition, whereby job demands initiate health impairment (for example burnout). When using the JD-R model as an encompassing tool in conceptualising this study, extensive focus was placed on the resources available in call centres. The demands of call centres will be named, but not discussed in depth. Job demands, burnout, wellbeing and psychological safety are thus constructs relevant to this study, but that fall outside the parameters of the investigation.

1.5 KEY CONCEPTS DEFINED

Call centres: A call centre is defined as a “work environment in which the main business is mediated by a computer and telephone based technologies that enable the efficient distribution of incoming calls (allocation of outgoing calls) to available staff, and permit the customer-employee interaction to occur simultaneously with the use of display screen equipment and the instant access to, and inputting of, information. It includes parts of companies dedicated to this activity, as well as whole companies that specialize in such services” (Holman, 2005, p. 111). The Call Centre Association defines a call centre as “a physical or virtual operation within an organisation in which a managed group of people spend most of their time doing business by telephone, usually working in a computer-automated environment” (Marr & Neely, 2004, p. 5). Call centres are used to fulfil three main business roles across all business sectors: telemarketing, credit and collection, and customer service and support. The strategic role they play can vary from relatively simple, for example customer

information, to very sophisticated, for example doing financial service transactions (Armistead *et al.*, 2002).

Call centre representatives (CCRs): A call centre representative refers to the individuals employed to work in a call centre and to deal with the customers' concerns and requests telephonically. "Employees in call centres are commonly referred to as call centre agents or customer service representatives (CCRs). CCRs have a very important role, since it is they who represent the organization, and it is they who have the potential to directly influence the customers. As such, companies are paying increased attention to customer-contact employees in an attempt to achieve the required profit and market share objectives" (Malhotra & Mukherjee, in Gordi, 2006, p. 30).

Call centre team leader/supervisor: A call centre team leader or supervisor is responsible for a team of call centre agents; the number of members of the team varies, depending on the organisation. Team leaders spend around 80% of their time with the team members, coaching, reviewing performance, providing feedback on individual and team performance and identify training needs. The team leader is expected to provide leadership, build motivation and morale and bring some 'fun' into the working environment (Kinnie *et al.*, 2000, p. 975).

Disengagement: This refers to members who have uncoupled themselves from work roles and withdraw cognitively and emotionally (Pech & Slade, 2006).

Effective leadership: Effective leadership is "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organisation" (House, as cited in Yukl, 2006, p. 3). In this study, transformational leadership is seen as an effective form of leadership.

Effective team: An effective team is two or more individuals who interact socially (face-to-face or virtual); possess one or more common goals to perform

organisationally relevant tasks; exhibit interdependencies with respect to workflow, goals and outcomes; have a differentiated structure of roles and responsibilities; and are embedded in an encompassing organisational system, with boundaries and linkages to the broader context and task environment (Kozlowski & Ilgen, as cited in Dannhauser, 2007). In this study, effective teamwork was measured by focussing on two main outcomes: how members work together and the feeling of involvement in the team.

Emotional labour: This concept refers to the organisationally prescribed presentation of feeling as a central concept for understanding how employees package emotion to fit organisational norms. High-emotion labour has been associated with a number of negative psychosocial effects (Tracy, 2005).

Engagement: Work engagement is defined by Kahn (1990, p. 692) as “the harnessing of organisation members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances”. Engagement has been used to refer to a psychological state (involvement, commitment, attachment, mood), a performance construct (either effort or observable behaviour, including pro-social and organisational citizenship behaviour), a disposition (positive affect), or some combination thereof (Macey & Schneider, 2008). Wellins and Concelman (in Macey & Schneider, 2008, p. 5) suggest that engagement is “an amalgamation of commitment, loyalty, productivity and ownership”. Work engagement is measured by using three dimensions (Schaufeli & Bakker, 2003), namely vigour, dedication and absorption:

- Vigour is characterised by high levels of energy and mental resilience while working, as well as a willingness to exert effort and to persist even through difficult times.
- Dedication is characterised by a sense of significance in one’s work, feeling enthusiastic, inspired and proud, and by viewing work

as a challenge. Vigour and dedication are the direct opposites of (emotional) exhaustion and mental distance (depersonalisation). The continuum that is spanned by vigour and exhaustion has been labelled energy or activation, whereas the continuum that is spanned by dedication and cynicism has been labelled identification (Schaufeli & Bakker, 2003).

- Absorption comes close to the concept of 'flow' (Nakamura & Csikszentmihalyi, in Van der Colff & Rothmann, 2009), an optimal state of experience in which focused attention, a clear mind, unison of body and mind, effortless concentration, complete control, loss of self-consciousness, distortion of time, and intrinsic enjoyment are experienced.

Job demands: Job demands are the “physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker & Demerouti, 2007, p. 312), for example high work pressure, an unfavourable physical environment, and emotionally demanding interactions with clients.

Job demands-resources (J-DR) model: This model explains how employees' working conditions influence their health and commitment to the organisation through two independent processes. The model assumes that job resources and job demands evoke two different but related processes, namely a motivational process, in which job resources stimulate the employees' motivation to foster engagement and organisational commitment, and secondly, a de-energising process, whereby high job demands deplete the employees' mental and physical resources, leading to job burnout and health impairments (Schaufeli & Bakker, 2004).

Job resources: Job resources are the “physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals; reduce job demands and the associated physiological and psychological costs; and stimulate personal growth, learning, and development” (Bakker & Demerouti, 2007, p. 312).

Personal resources: These “are positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully” (Bakker & Demerouti, 2008, p. 213).

Sense of coherence: Antonovsky (1993) gives the following definition of sense of coherence (SOC): “The sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; the resources are available to one to meet the demands posed by these stimuli; and these demands are challenges, worthy of investment and engagement.” Sense of coherence consists of three components: comprehensibility, manageability and meaningfulness. Fourie, Rothmann and Van de Vijver (2008) describe these concepts in the following way:

- Comprehensibility refers to the extent to which one perceives stimuli from the internal and external environment as information that is ordered, structured and consistent. The stimuli are perceived as comprehensible and make sense on a cognitive level.
- Manageability refers to the extent to which individuals experience events in life as situations that are endurable or manageable, or even as new challenges.
- Meaningfulness refers to the extent to which one feels that life is making sense on an emotional and not just a cognitive level.

1.6 CHAPTER OUTLINE FOR THE STUDY

Chapter 1 states the background to and objectives of this research.

Chapter 2 provides a thorough theoretical framework that sets the scene for the necessity of engagement in South African call centres. Various outcomes will be achieved in this chapter. Firstly, this chapter gives an overview of how call centres are currently experienced in South Africa, and a paradigm shift is made away from the negative view of call centres towards a more positive outlook. The concept of engagement is defined, explained and elaborated on. The job demands-resources model is presented as a guiding framework to understand the factors that elicit engagement in call centres. The individual variables are presented as personal and job resources. They are sense of coherence, leadership effectiveness and team effectiveness. A graphical portrayal of the proposed engagement structural model (expressed in LISREL notation) is provided. Lastly, a summary is given of the literature that justifies the development of the postulated engagement model in call centres.

Chapter 3 presents the research design and methodology of this study. The population and sample, sample size, method of collecting data and ethical considerations are elucidated. The four measuring instruments used in this study are explained and the psychometric properties of each are discussed. The instruments to be discussed are: the Leadership Practices Inventory; the Utrecht Work Engagement Scale; the Orientation to Life Questionnaire; and the Team Diagnostic Survey. Substantial hypotheses for the study are also presented. Data capturing and data analysis are discussed.

In Chapter 4 the results of the statistical analyses are presented and discussed. Reporting is done in the following order: testing reliability; confirmatory factor analysis (CFA) for evaluating measurements models; exploratory factor analysis (EFA) on two constructs where CFA indicated unsatisfactory model fit; correlations to test univariate relationships; regression analysis to test

multivariate effects on engagement (E) and structural equation modelling (SEM) path analysis – which did not provide any fit on the structural model; and, lastly, partial least squares (PLS) path analysis as an alternative method for evaluating the structural model. The total levels of work engagement for CCRs are reported and compared with other occupations scoring high on engagement. The results are interpreted by making use of other studies in the literature.

The limitations of the empirical study are discussed in Chapter 5. Practical managerial implications are offered that can be used by contemporary call centre managers, team supervisors and industrial psychologists to enhance levels of work engagement. In conclusion, recommendations are made and ideas are presented for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 CALL CENTRES IN SOUTH AFRICA

The international call centre industry is vast and is expanding rapidly, both in terms of workforce size and economic scope. An analyst's report estimated the number of agents working in call centres in the United States to have been 1,55 million in 1999 (more than 1,4% of private-sector employment) and to be growing at a rate of more than 8% per year (Gans, Koole & Mandelbaum, 2003). SA is in a highly favourable position to exploit the international market (South Africa Industry, 2003). Gordi (2006) sums up several reasons investors consider SA to be the ideal location for international call centres:

- There is the favourable exchange rate between the South African rand and any major international currencies. It costs 50% less to operate call centres efficiently in SA than it does to operate them in Europe or America. Jones (as cited in Gordi, 2006) states that, on average, a call centre manager in South Africa earns three times less, and a call centre agent approximately five times less than a call centre manager and agent in the United Kingdom, Ireland or the Netherlands respectively. Another benefit is that many South African information technology companies offer competitive prices for their services.
- South Africa is rich in the amount of skilled labour available for the call centre environment. The South African government is committed to creating a call centre labour force through its free training and development programmes, since South Africa has a large amount of skilled and trainable call centre staff (Durban Investment Promotion Agency, 2004). South Africa's population is equipped with European and African language skills.

- The South African telecommunications industry has advanced technologies with superb cable and satellite links to all major countries.
- South Africa shares a similar time zone to the United Kingdom.

In 2002, the findings of a formal market quantification study, commissioned by Trade and Investment South Africa (Contact Industry Hub, 2008), reported that the total, formal call centre industry in South Africa comprised 410 sites and that the total number of agents employed by these operations amounted to approximately 80 000. Jones (as cited in Gordi, 2006) report that South Africa has built an industry to be immensely proud of and that many of South Africa's major contact centres rank amongst the 'best-of-the-best' in global terms. "We see a mature, well developed BPO and contact centre industry comprising probably close to 1 500 operational call centres and employing an estimated 150 000 to 175 000 agents and a further 30 000 management and support personnel" (Contact Industry Hub, 2008, p. 6).

As mentioned in Chapter 1, negative labels such as 'factory sweatshops' and 'satanic mills' (Incomes Data Services, in Armistead, Kiely, Hole & Prescott, 2002), have been attached to call centres, and these adverse workplaces impact negatively on the behaviour and health of Call Centre Representatives (CCRs). Is this universal for all call centres, or do CCRs in South Africa experience a 'healthy' work environment in which workers are expected to display dedication, a high energy level and be absorbed by their quest for customer satisfaction? Alternatively, what are the levels of work engagement of CCRs in South Africa? Contrary to what its name suggests, the field of Occupational Health Psychology has been concerned almost exclusively with ill health and unwell-being. Statistics reveal that about 95% of all articles that have been published in the Journal of Occupational Health Psychology deals with negative aspects of workers' health and well-being, such as burnout and stress (Schaufeli & Bakker, 2003). Throughout its history, occupation health psychology has been preoccupied with

the study and treatment of psychopathology and damage, neglecting those aspects of the human condition that foster well-being and fulfilment (Seligman & Csikszentmihalyi, 2000). “A small but growing body of research stresses the positive impact of occupational well-being on economic outcomes” (Korunka, Kubicek, Schaufeli & Hoonakker, 2009, p. 253). Ulrich (in Bakker & Schaufeli, 2008, p. 148) writes: “Employee contribution becomes 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.” This objective is not achieved with the prevailing “four D’s approach (damage, disease, disorder, and dysfunction) that focuses on preventing poor performance, low motivation, unwell-being, ill-health, and disengagement” (Bakker & Schaufeli, 2008, p. 148). The aim of positive psychology is “to begin to catalyze a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities” (Seligman & Csikszentmihalyi, 2000, p. 5). Now is the time to extend the research focus and explore more fully the positive side, so as to gain a full understanding of the meaning and effects of the workplace (Turner, Barling & Zacharatos, 2005). In the call centre environment, Crome (1998) advocates moving from 'battery farming' towards the 'free range' approach, with changes in training, job design, team working, involvement and the recognition of employee contributions. The wilful engagement of employees is thus sought to ensure business success.

Managers have sought ways to adapt their human resource (HR) practices to satisfy both customers and employees in the fast-changing call centre environment. In tandem with these new developments, the current study explores the more subtle paradox of what call centres have managed to achieve, despite difficult work circumstances. Kinnie, Hutchinson and Purcell (2000, p. 968) argue that “call centres exhibit fascinating contrasts between satisfying customer needs and motivating employees, between intensive surveillance systems and normative, fun activities, and between the demands of the product market and

the pressures of the labour market". There are call centres that have managed to balance conflicting pressures by incorporating fun-filled HR initiatives, personal and job resources in an environment in which employees are tightly constrained.

In a study of 339 Swiss call centre employees (Grebner *et al.*, 2003), call centre agents were compared with a group comprising five occupations (cooks, sales assistants, nurses, bank clerks and electronics technicians). Similar levels of well-being were found, as were less intention to quit among CCRs compared to other occupational groups. "Call centre work compares favourably with shop floor manufacturing and clerical work with regard to well-being. Indeed, at two call centres the level of well-being was equivalent to, and in many cases better than, these comparable forms of employment" (Holman, 2002, p. 46). Indeed, the call centre industry has turned its focus to high commitment management (HCM) or high involvement work systems. HCM typically involves "recommitment practices which aim to attract and select highly committed and flexible people, internal labour markets which reward commitment and training with promotion and job security; and methods of direct communication and team working" (Wood & De Menezes, in Kinnie *et al.*, 2000, p. 968). Much focus is placed on reviewing the management structure, modifying the reward/recognition systems and increasing flexibility by introducing training for staff.

Empirical studies by Schaufeli and Bakker (2004) have revealed that some employees, regardless of high job demands and long working hours, do not develop burnout. These members seem to find pleasure in hard work and dealing with job demands. In a study by Kinman and Jones (2003) it was found that some employees thrived on the fact that their work was stressful. Hakanen, Bakker and Demerouti (2005) established that job resources are useful in coping with high-demand jobs and can help employees stay engaged. Consequently, this study will focus on the nature and level of engagement of CCRs in South Africa, and on the personal and job resources employed in meeting job demands. Engagement and the enhancement thereof are thus tantamount to the health of

the employee and the survival of call centres. At this juncture, the following hypothesis can be formulated:

Hypothesis 1: A low level of employee engagement exists amongst CCRs in South Africa.

2.2 WORK ENGAGEMENT

Numerous definitions of engagement can be derived from the practice- and research-driven literature. Common to these definitions is the notion that “employee engagement is a desirable condition, has an organisational purpose, and connotes involvement, commitment, passion, enthusiasm, focused effort, and energy, so it has both attitudinal and behavioural components” (Macey & Schneider, 2008, p. 4). Hence, engagement is of fundamental importance to any organisation’s success. Huckerby (in Pech & Slade, 2006) found that only 17% of employees are truly engaged in their organisations, while 63% are not engaged and 20% are disengaged (members who have uncoupled themselves from work roles and withdraw cognitively and emotionally). In research conducted by Tasker (in Pech & Slade, 2006), one in four human resource organisations admitted that their staff was not engaged, that the situation was worsening and that 44% said that tackling this issue was an overwhelming challenge. In order to identify possible factors that could lead to engagement, one should firstly come to a full understanding of the concept of engagement.

Work engagement is defined by Kahn (1990) as “the harnessing of organisation members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances”. Engagement has been used to refer to a psychological state (involvement, commitment, attachment, mood), a performance construct (either effort or observable behaviour, including pro-social and organisational citizenship behaviour), disposition (positive affect), or some combination thereof (Macey & Schneider, 2008). Wellins and Concelman (in Macey & Schneider, 2008, p. 5)

suggested that engagement is "an amalgamation of commitment, loyalty, productivity and ownership".

Individuals who are engaged become physically involved in tasks, are cognitively vigilant and become emphatically connected to others in the work they are doing. Some researchers argue that engagement is the exact opposite of burnout (Maslach & Leiter, 1997) and can be measured on the same continuum, whilst others (Schaufeli, Salanova, González-Romá & Bakker, 2002) indicate that burnout and engagement are conceptually distinct, that their relationship should be studied empirically, and that engagement and burnout scales show moderately negative correlations. Contrary to those who suffer from burnout, engaged employees have a sense of energetic and effective connection with their work activities and see themselves as able to deal well with the demands of their job (Schaufeli & Bakker, 2003). Engaged employees see themselves as competent in dealing with the demands of their job. They are energetic and have a sense of effective connection with their work activities (Van der Colff & Rothmann, 2009). Work engagement is measured by using three dimensions (Schaufeli & Bakker, 2003), namely vigour, dedication and absorption:

- Vigour is characterised by high levels of energy and mental resilience while working, as well as a willingness to exert effort and to persist even through difficult times (Schaufeli & Bakker, 2003). Thus, an employee who feels great vigour at work is highly motivated by his/her job and is likely to remain very persistent when encountering difficulties or hassles at work (Mauno, Kinnunen & Ruokolainen, 2006).
- Dedication is characterised by a strong psychological involvement in one's work, feeling a sense of significance and enthusiasm, being inspired and proud, and by viewing one's work as a challenge. This dimension of work engagement shares some conceptual similarity with the more traditional concept of job involvement, which has been defined as the degree to

which an employee psychologically relates to his/her job and to the work performed therein (Mauno *et al.*, 2006). Vigour and dedication are the direct opposites of (emotional) exhaustion and mental distance (depersonalisation) when one is considering burnout (Schaufeli & Bakker, 2003).

- “Absorption refers to total concentration on immersion in work characterised by time passing quickly and finding it difficult to detach oneself from one’s work” (Schaufeli, in Mauno *et al.*, 2006, p. 151). Absorption is closely related to the concept of ‘flow’ (Nakamura & Csikszentmihalyi, in Van der Colff & Rothmann, 2009), an optimal state of experience where focused attention, a clear mind, unison of body and mind, effortless concentration, complete control and intrinsic enjoyment are experienced. People become so intensely involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost to themselves, purely for the sake of doing it (Mauno *et al.*, 2006).

2.2.1 The benefits of work engagement in call centres

Work engagement is a concept relevant for employee well-being and work behaviour for several reasons (Sonnetag, 2003). Engaged workers are more productive than non-engaged workers; they experience positive emotions, better health, create their own job and personal resources; and transfer their engagement to others. It is conceivable that the transfer of engagement among members of the same work team increases performance. “If colleagues influence each other with their work engagement, they may perform better as a team” (Bakker & Demerouti, 2008, p. 217). Based on this evidence, the following hypothesis was formulated:

Hypothesis 2. Work engagement will have a significant positive effect on team effectiveness.

Work engagement helps individuals derive benefits from stressful work (Britt, Adler & Bartone, in Sonnetag, 2003). Bakker, Demerouti, Hakanen and Xanthopoulou (2007) found that work engagement is positively related to organisational commitment and business unit performance (customer satisfaction, loyalty, profitability, productivity, turnover and safety). Engaged workers tend to work harder and are more likely to produce the results their customers and organisations want. Engaged workers have high energy and self-efficacy (Schaufeli, as cited in Bakker and Demerouti, 2008) and report that their jobs make good use of their skills, that their work is challenging and stimulating, and that their work provides them with a sense of personal accomplishment (Roberts & Davenport, 2002).

Research published by Gallup Global Practice (Knowledge Resources, 2009b) signifies that:

- Publicly listed organisations with engaged workforces outperform the earnings per share of their competitors by 18%.
- In the United States, lost productivity due to disengagement is estimated at about \$300 billion.
- Engaged employees average 27% less absenteeism.
- Staff turnover as a result of disengagement costs businesses millions every year. Organisations focused on maximising the natural talents of employees increase engagement levels by 33% per year on average.
- Companies with disengaged workers lose 51% more of their inventory to theft than companies with engaged workers.
- Engaged employees are more profitable, productive, customer focused, safer and more likely to withstand temptations to leave.

Taking cognisance of the advantages of engaged workers, the following question becomes important: How can engagement be introduced and amplified in call centres?

2.2.2 Drivers of engagement

Gravenkemper (2007, p. 203) notes: "Creating and sustaining feelings of engagement increases the likelihood that individuals will continue to choose to be part of something greater." The author proposes six principles of engagement that are essential for building community in organisations:

- Communicate a compelling message- Capturing the hearts and minds of members is a key success factor in engaging people. People have a natural need to find a place where they belong. People want to be part of communities that are most appealing to their needs, interests and goals.
- Build a guiding coalition- Establish a core leadership team that collaborates in support of a shared goal. When creating this team, use members who are aligned with the key messages and who put community goals above personal goals. The team must engage in projects that support community goals. Successful achievement of these tasks enhances esprit de corps and provides 'campfire stories' that can be communicated to members to illustrate desired behaviours.
- Create principle-based versus compliance-based guidelines for decisions and behaviours- Compliance-based guidelines imply that negative consequences will result from not demonstrating desired behaviours; for example, you will lose an hour's pay if you are late. Principle-based guidelines require interpretation, application and internalisation of the message; for example, treat others the way you would like to be treated. Principle-based guidelines generate possibilities that energise community-building efforts. Formal and informal leaders serve as 'translators', offering support and encouragement to increase commitment in employees.
- Identify early engagement indicators- Identifying early engagement indicators can be very helpful for two reasons: it serves as early signals

that community-building efforts are gaining traction, and these indicators provide information related to successful programmes or initiatives to which the community may allocate additional resources.

- Generate continuous opportunities for dialog at all levels- “Dialog encourages and supports engagement”, and getting people to engage in dialogue creates buy-in (Gravenkemper, 2007, p. 205). Dialogue strengthens the relationships between leaders and increases the commitment they demonstrate to the community.
- Plan assimilation strategies for new members and new leaders- Organisations should create ‘stickiness’ (to spur someone to action) so that individuals will choose to become active as members of the organisation. There should be programmes, for example ‘buddy systems’ that make new members feel valued. This accelerates their integration into the community. Further, the transition from member to leader is of cardinal importance. Put activities in place that facilitate the successful transition to leadership positions. For example, pair a new leader with someone who held the post previously; design and facilitate new leader orientation programmes; update job profiles so that new leaders know their roles and responsibilities; identify and nurture potential leaders to assume positions in the future.

In order to improve job engagement, organisations should know what drives such engagement; in other words, what are the leverage points with the greatest impact on employees’ engagement in their work? A study by Naudé and Rothmann (2006) found that the availability of job resources and personal resources enhanced work engagement levels. Organisational resources, such as social support from colleagues and supervisors, performance feedback, skill variety, autonomy and learning opportunities, are positively associated with work engagement (Bakker & Demerouti, 2008). Organisational resources refer to “the

organisational aspects of a job that are functional in achieving work goals, could reduce job demands and their associated physiological and psychological costs, and, finally, could stimulate personal growth, learning, and development” (Demerouti, Bakker, Nachreiner & Schaufeli, as cited in Salanova, Agut & Peiro, 2005, p. 1218). Management quality (referring to how successfully leaders are perceived to lead or manage) has been found to be associated with high work engagement (Mauno *et al.*, 2006). Hackanen (as cited in Bakker & Demerouti, 2008) further found that job control, information, supervisory support, innovative climate and social climate were positively related to work engagement.

Job resources are assumed to play an intrinsic motivational role (because they foster employees’ growth, learning and development) or an extrinsic motivational role (because they are instrumental in achieving work goals). When looking at intrinsic motivation, resources fulfil basic human needs, such as the need for autonomy, relatedness and competence. The intrinsic motivational potential of job resources is recognised by the job characteristics theory of Hackman and Oldham (as cited in Bakker & Demerouti, 2008). For instance, decision latitude and social support satisfy the need for autonomy and the need to belong. When looking at the extrinsic motivational role, resourceful work environments foster the willingness to dedicate one’s efforts and abilities to the work task. For instance, supportive colleagues and performance feedback increase the likelihood that one is successful in achieving one’s goals. “In either case, be it through the satisfaction of basic needs or through the achievement of work goals, the outcome is positive and engagement is likely to occur” (Bakker & Demerouti, 2008, p. 212).

By listing how employees express engagement, Roberts and Davenport (2002, p. 25) identify key drivers of job engagement:

- “The company provides me with opportunities to learn new skills and develop myself.”

- “If the company is financially successful, I will share in that success.”
- “The company offers a positive, fun work environment.”
- “I will have opportunities to advance in my company in the future.”
- “Overall, I am satisfied with the learning and developmental opportunities at my company.”
- “I consider my department’s goals to be my own.”
- “Employees receive recognition for their contributions to a job well done.”
- “The company helps me identify skills and competencies I will need to succeed at the company.”
- “My immediate supervisor helps me manage my career.”
- “I am satisfied with my level of involvement in decisions that affect my work.”
- “I am proud of the quality of work that we do.”
- “In my job, I feel encouraged to look for new and innovative ways of doing things.”
- “My immediate supervisor is effective at motivating me to do my best.”
- “I have the appropriate amount of decision-making authority to do my job well.”

With resources available to all members of the same organisation, not all members will experience the same level of work engagement. Consequently, there are other factors that come into play when exploring engagement. In order to get a better understanding of what constitutes engagement in call centres, the focus should be on the job demands and resources that are present in call centres. The job demands-resources model (JD-R model) presents such a framework and specifies how health impairment and motivation or involvement in any organisation may be produced by two specific sets of working conditions: demands and resources.

2.3 USING THE JOB DEMANDS-RESOURCES MODEL AS A FRAMEWORK TO IDENTIFY ELICITING FACTORS OF ENGAGEMENT

The job demands-resources (JD-R) model (Bakker & Demerouti, 2007) is used in this study as a guiding framework to examine call centre operator engagement and the positive motivational processes involved. The JD-R model explains how employees' working conditions influence their health and commitment to the organisation through two independent processes. This model assumes that job resources and job demands evoke two different but related processes. The first is a motivational process, in which job resources stimulate the employees' motivation to foster engagement and organisational commitment. Secondly, there is a de-energising process, whereby high job demands deplete the employees' mental and physical resources, leading to job burnout and health impairments (Schaufeli & Bakker, 2004). This study will focus primarily on how job and personal resources predict work engagement in call centre operators.

The JD-R model has been applied to various occupational settings, irrespective of the particular demands and resources involved. It has been tested locally and internationally in many countries (including Germany, the Netherlands, Finland, Spain), as well as for various occupational groups (including teachers, blue- and white-collar workers, nurses and private home-care professionals) and, recently, for call centre employees (Llorens, Bakker, Schaufeli & Salanova, 2006). The basic structure of the JD-R model is maintained even when applied in different national and international contexts. The JD-R model assumes that job resources and personal resources, independently or in combination, predict worker engagement when the job demands are high, as in the case of call centre work. Worker engagement, in turn, has a positive impact on job performance. Job and personal resources thus initiate a motivational process that leads to worker engagement and quality performance. The JD-R model of work engagement is depicted in Figure 2.1.

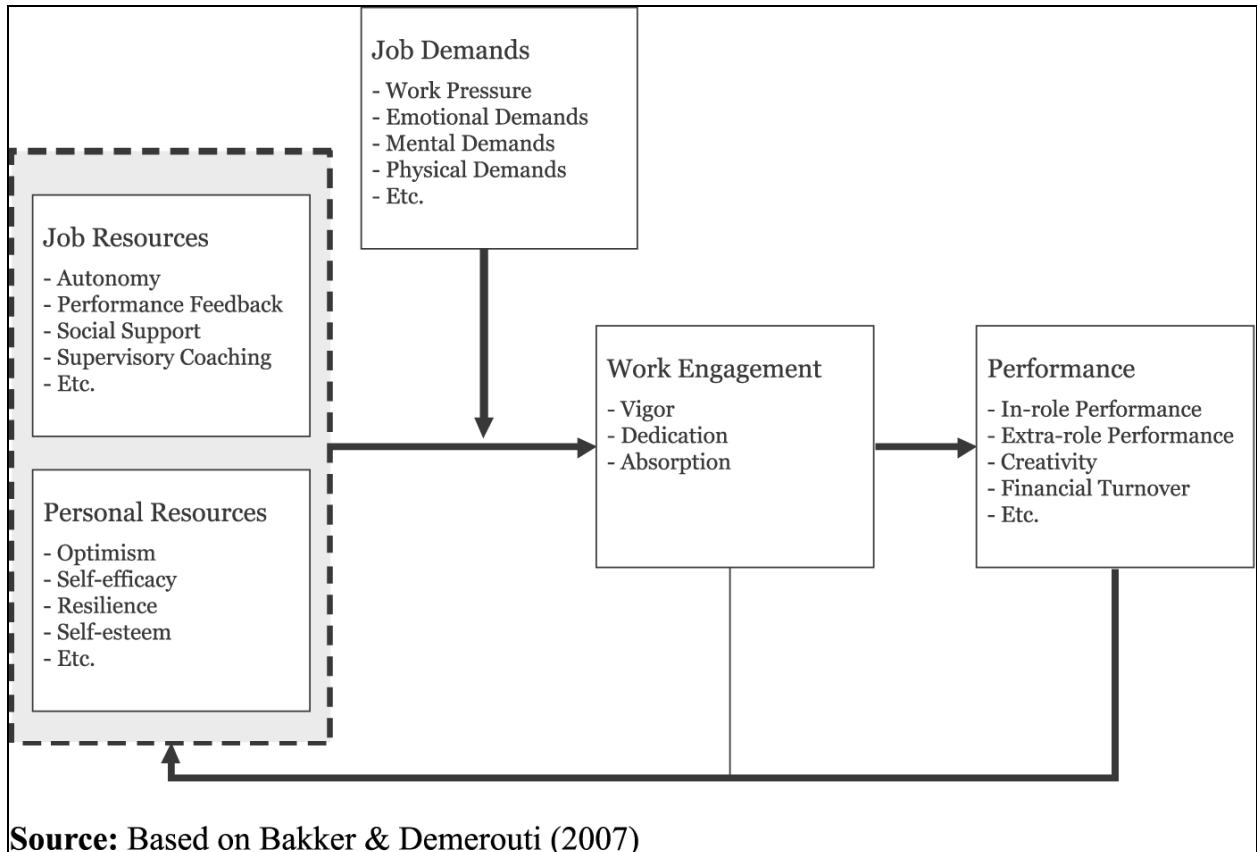


Figure 2.1 The Job Demands-Resources (JD-R) Model of Work Engagement
(Bakker & Demerouti, 2007, p.218)

Muller and Rothmann (2009) identify sense of coherence as a critical **personal resource** that is associated with coping with stress. “Personal resources are positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully” (Bakker & Demerouti, 2008, p. 213). In this study, sense of coherence is defined as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic, feeling of confidence that a) the stimuli deriving from one’s internal and external environments in the course of living are structured, predictable, and explicable; b) the resources are available to one to meet the demands posed by these stimuli; and c) these demands are challenges, worthy of investment and engagement.

Salanova, Llorens, Cifre, Martinez and Schaufeli (2003) formulate the perceived collective efficacy of members of a work group as an important **job resource** impacting on worker engagement. Team members feel engaged as they converge emotionally with other team members, who collaborate closely to accomplish particular tasks. This implies that effective team functioning enhances worker engagement.

Aguilar and Salanova (2005) identify leadership as a further important **job resource** predicting worker engagement. Transformational leaders are effective at increasing worker engagement, compared to leaders displaying a variety of different leadership styles. Transformational leaders are particularly suitable for promoting worker engagement, as they are inspiring and visionary.

The job demands-resources (JD-R) model assumes that every occupation may have its own specific risk factors associated with job stress. These factors can be classified into two general categories, job demands and job resources, thus constituting an overarching model that may be applied to various occupational settings, irrespective of the particular demands and resources involved (Bakker & Demerouti, 2007). "Job demands refer to those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs", for example high work pressure, an unfavourable physical environment, and emotionally demanding interactions with clients (Bakker & Demerouti, 2007, p. 312). Job resources refer to "those physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals; reduce job demands and the associated physiological and psychological costs; and stimulate personal growth, learning, and development" (Bakker & Demerouti, 2007, p. 312). Resources can be a means to the achievement or protection of other valued resources. Job resources may be "located at the level of the organisation at large (pay, career opportunities, job security), the interpersonal

and social relations (supervisor and co-worker support, team climate), the organization of work (role clarity, participation in decision making), and at the level of the task (skill variety, task identity, task significance, autonomy, performance feedback)” (Bakker & Demerouti, 2007, p. 312).

The JD-R model assumes that job resources and personal resources, independently or in combination, predict worker engagement when the job demands are high, as in the case of call centre work. Worker engagement, in turn, has a positive impact on job performance. Job and personal resources thus initiate a motivational process that leads to worker engagement and quality performance. The absence of personal and job resources evokes a cynical attitude towards work interactions. It is anticipated that job resources may “buffer the impact of job demands on job strain, including burnout” (Bakker & Demerouti, 2007, p. 314). “Call centre employees who can draw upon job resources such as social support from colleagues and performance feedback feel more dedicated to their work and more committed to their organization, and, consequently, are less inclined to leave the organization” (Bakker, Demerouti, & Schaufeli, 2003, p. 408).

When looking at this JD-R model (Figure 2.1) of work engagement, a few conclusions can be drawn. Firstly, job resources, such as social support from colleagues and supervisors, start a motivational process that leads to work engagement, and consequently to higher performance. Secondly, job resources become more salient and gain their motivational potential when employees are confronted with high job demands. Further, job and personal resources are mutually related, and personal resources can be independent predictors of work engagement. “Thus, employees who score high on optimism, self-efficacy, resilience and self-esteem are well able to mobilize their job resources, and generally are more engaged in their work” (Bakker & Demerouti, 2008, p. 218). It is assumed that job resources and personal resources, independently or in combination, predict work engagement. Job and personal resources particularly

have a positive impact on engagement when job demands are high. “Work engagement, in turn, has a positive impact on job performance. Finally, employees who are engaged and perform well are able to create their own resources, which then foster engagement again over time and create a positive gain spiral” (Bakker & Demerouti, 2008, p. 218).

Bakker *et al.* (2003, p. 55) claim that “even if antecedents such as work role fit, resources and self-consciousness are present and could act as predictors of engagement, the effects of such characteristics are mediated by the psychological conditions of meaningfulness and availability. People therefore need to find their work meaningful and have the resources to make themselves available to engage with their work”.

Roberts and Davenport (2002, p. 25) suggest that “some relatively stable personality traits can influence job attitudes”. The study by Bakker *et al.* (2003) found that engaged employees are successful in mobilizing their job resources. Olivier and Rothmann (2007) concur that all individuals have physical, emotional and cognitive resources with which to perform their tasks at work. While some jobs are less challenging than others, individuals vary in their levels of stamina, flexibility and strength to meet these challenges. If they lack these physical resources, they may become disengaged from their work. It is expected that the availability of resources will lead to greater engagement. Sonnetag (2003) found that the level of work engagement experienced is positively associated with the extent to which employees recovered from their previous working day. Langelaan, Bakker, Schaufeli and Van Doornen (2006) found that personality and temperament make a difference in as far as engagement and burnout are concerned. Muller and Rothmann (2009) identified sense of coherence as a critical personal resource that is associated with coping with stress. Thus, sense of coherence is a key factor that comes into play when exploring engagement.

2.3.1 Sense of coherence (SOC): a critical personal resource in call centres

High stress levels, high staff turnover and emotional burnout are factors that are often associated with call centres. The fairly low-skilled nature of the work is generally associated with low levels of job satisfaction (Rose & Wright, 2005). Working in a call centre implies high emotional labour. High emotional labour has been associated with a number of negative psychosocial effects. The reason for this is said to be due to emotive dissonance and a clash between real feelings and a fake display of feelings (Tracy, 2005). Low job control, low variety and excessive job demands are likely to cause job-related stress in call centres (Holman, 2002). "The work of the CCR is often tightly scripted, repetitive, mentally and physically demanding and stressful. Absence rates and labour turnover are high and well above the norm for an office-type environment" (Kinnie *et al.*, 2000, p. 968). Sprigg and Jackson (2006, p. 207) found that the characteristics of the call centre system are best described as "lean" and that "call centres which are leaner are also meaner".

In a study set out to investigate the effects of job demands, resources and sense of coherence on the burnout and work engagement of non-professional counsellors in South African banks, it was found that non-professional counsellors with a strong sense of coherence experienced less burnout and more work engagement. Presumably, this is because stimuli from the environment are perceived as "making cognitive sense" and as "motivationally relevant and meaningful" (Fourie, Rothmann & Van de Vijver, 2008, p. 44). Muller and Rothmann (2009) report on studies that have shown that sense of coherence is positively related to job satisfaction, work engagement, life satisfaction, general well-being and actively coping with stressors.

A working person with a strong SOC will make cognitive sense of the workplace and will perceive its stimuli as clear, ordered, structured, consistent and predictable information. Such a person will perceive work as holding challenges

that she or he can meet by making use of both personal resources and those under the control of, for example, managers, co-workers and subordinates. In addition, such a person will make motivational sense of work demands as challenges that are worthy of engaging with and investing personal energy in (Strümpfer & De Bruin, 2009). A person with a strong sense of coherence will select the coping strategy that appears most appropriate for dealing with a specific stressor (Herbst, Coetzee & Visser, 2007). Rothmann, Jackson and Kruger (2003) found that sense of coherence contributes to the professional efficacy of employees. A strong sense of coherence might help employees understand stressors and regard them as manageable and meaningful. A person with a weak SOC, on the other hand, could view the world as incomprehensible, hostile and absurd (Strümpfer & De Bruin, 2009). This might lead to job stress, which in turn could lead to burnout (Van der Colff & Rothmann, 2009). Employees with a weak SOC “find it more difficult to make cognitive sense of environmental stimuli” (Strümpfer, in Muller & Rothmann, 2009, p. 9).

In a study of registered nurses in South Africa, a statistical analysis of the effects of sense of coherence on burnout and work engagement revealed that a strong sense of coherence predicted lower levels of emotional exhaustion and depersonalisation, and vice versa. It was also found that a strong sense of coherence predicted higher levels of personal accomplishment and work engagement, and vice versa. The results further revealed that a strong sense of coherence allowed nurses to make use of active coping strategies (for example, seeking emotional/social support) and thus to deal with occupational stressors in a positive, problem-solving manner (Van der Colff & Rothmann, 2009). Hence, based on the abovementioned evidence, the third hypothesis was formulated:

Hypothesis 3. Sense of coherence among CCRs will have a significant positive influence on work engagement in call centres.

Several definitions of SOC exist in the literature. SOC is a dispositional orientation that is presumed to “engender, sustain and enhance health, as well as to engender strength at other endpoints, such as work. SOC is presumed to be a product of idiosyncratic events in one’s life, but also of having grown up in a particular social structure, culture and historical period” (Strümpfer & De Bruin, 2009, p. 1). SOC is a dynamic aspect of the personality that is formed throughout childhood and adolescence. It is believed to be a construct that is “universally meaningful, cutting across lines of gender, social class, region and culture. It is a view in which people expect that things will work out and that life is understandable, manageable, meaningful and it indicates an individual’s general orientation to life” (Muller & Rothmann, 2009, p. 2).

In a research synthesis focusing on a review of empirical studies of the sense of coherence scale and summarising the state of knowledge on the salutogenic concept between 1992 and 2003, Eriksson and Lindström (2005) found that sense of coherence does not seem to be as stable as Antonovsky assumed. The latter authors found evidence that showed sense of coherence to increase with age throughout the lifespan. The older the age of the population sample, the higher the SOC score. Whether the increases in the individual SOC are an effect of natural selection of people (healthy people survive) or a question of people developing a strong SOC is not clear. Eriksson and Lindström (2005) suggest that people develop a higher SOC over time. After age 30, sense of coherence is expected to remain fairly stable, as the individual has already made major commitments in life: marriage, job, lifestyle and social roles. All of these commitments provide an individual with a stable set of life experiences, which enables a sense of coherence to become established (Fourie *et al.*, 2008). “Although not a personality trait, SOC could thus be regarded as an enduring person- and view-of-life-related characteristic influencing appraisals of meaning ascribed to different situations” (Larsson & Kallenberg, 1999, p. 52).

Antonovsky (1993) gives the following definition of SOC: “The sense of coherence is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable; the resources are available to one to meet the demands posed by these stimuli; and these demands are challenges, worthy of investment and engagement.” Sense of coherence consists of three components: comprehensibility, manageability and meaningfulness. Fourie *et al.* (2008) describe these concepts in the following way:

- Comprehensibility refers to the extent to which one perceives stimuli from the internal and external environment as information that is ordered, structured and consistent. The stimuli are perceived as being comprehensible and make sense on a cognitive level.
- Manageability refers to the extent to which one experiences events in life as situations that are endurable or manageable, or even as new challenges.
- Meaningfulness refers to the extent to which one feels that life is making sense on an emotional and not just a cognitive level.

In this study, sense of coherence is defined as a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic feeling of confidence that a) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; b) the resources are available to meet the demands posed by these stimuli; and c) these demands are challenges, worthy of investment and engagement. As the Orientation to Life Questionnaire (OLQ) measures the behaviour as described in this definition, the 13-item, short form of the OLQ was used to measure sense of coherence.

Individuals that are high in SOC usually have resistance to the effects of stress and are more capable of experiencing stressful situations without feeling the negative effects thereof. People high in SOC will make cognitive sense of the workplace, perceiving stimuli as clear, ordered and consistent. These workers that are high in SOC will perceive work as consisting of experiences that are bearable, with challenges that can be met by availing themselves of personal resources under the control of legitimate others. They will make emotional and motivational sense of work demands and will welcome challenges that are worthy of engaging and investing energy in (Herbst *et al.*, 2007). These members tend to experience environmental stimuli in a manner sufficiently structured to enable them to anticipate events and the resources required to meet the demands imposed on them. Such experiences are likely to lead to favourable perceptions of a person's influence at work and to receiving support from supervisors and colleagues (Fourie *et al.*, 2008). Some employees with a weak sense of coherence are not particularly satisfied and passionate about their jobs. Employees with a strong sense of coherence search for meaning in life; consequently they also expect it from challenging assignments in their work. Rothmann (as cited in Muller & Rothmann, 2009) found that SOC is significantly related to job satisfaction. Having a positive relationship with colleagues and management and receiving recognition are helping factors, but they are experienced with a higher frequency by individuals with a strong sense of coherence (as cited in Muller & Rothmann, 2009). Based on the abovementioned studies and knowing that optimal individual contributions are said to set the scene for effective teamwork (Mickan & Rodger, 2002, p. 204), the fourth hypothesis was formulated:

Hypothesis 4. Sense of coherence will have a significant positive effect on team effectiveness in call centres.

Strümpfer (as cited in Gropp, Geldenhuys & Visser, 2007) indicated that SOC is a dispositional orientation and not a state or a trait. It embraces components of

perception, memory, information processing and effect into habitual patterns of appraisal, and develops through repeated experiences of making sense of countless stressors in an individual's life. Through repeated exposure to these experiences of sense making, an individual develops a strong sense of coherence over time.

Feldt (as cited in Fourie *et al.*, 2008) found that sense of coherence influenced the ability to mobilise and generate social resources in the workplace, but not the ability to produce job control. Rothmann, Steyn and Mostert (2005) showed that sense of coherence is moderately related to work engagement. Amirkhan and Greaves (2003) found that individuals with a strong sense of coherence were likely to view more life events as having coherence. This perceptual process seems to be subtle: it influences individuals' perceptions of stressful events, but it does so without their conscious awareness. SOC could also have a direct effect on individuals' work-related well-being. Gropp *et al.* (2007, p. 26) confirmed that several studies have explored the relationship between psychological well-being and meaning or purpose in life.

2.3.1.1 *Increasing sense of coherence (SOC)*

Some authors propose that a SOC questionnaire could be used as a screening instrument aimed at the identification of people at risk of developing a low sense of coherence. However, Eriksson and Lindström (2005, p. 464) do not agree with using it as a screening instrument, arguing: "what does the individual level of sense of coherence at a given time really mean in practice?" These researchers suggest that the SOC concept should rather be implemented as a systematic orientation and perspective in the daily activities and actions of professionals.

Muller and Rothmann (2009, p. 9) state: "Team building activities should be reinforced for individuals with a weak sense of coherence in order to enhance good teamwork and positive relationships among colleagues and management". Hence, the fifth hypothesis was formulated:

Hypothesis 5. Team effectiveness will have a significant positive influence on CCRs' sense of coherence.

A leader's appreciation and support may also aid a worker in coping with job demands, facilitate performance and act as a protector against ill health (Bakker & Demerouti, 2007). If employees are well informed about processes and procedures, the work environment may be perceived as being more manageable and meaningful (Van der Colff & Rothmann, 2009). It takes an effective leader to assist CCRs to deal with the daily stressors of the call centre environment.

2.3.2 Effective leadership: a critical job resource in call centres

Muller and Rothmann (2009) report that a good relationship with one's supervisor may alleviate the influence of job demands (e.g. work overload, emotional- and physical demands) on job strain. This is due to the fact that a leaders' appreciation and support puts job demands in another perspective. Support, motivation and recognition from management and colleagues should be reinforced, as this assists employees in dealing with distress they experience at work. Individuals with a low sense of coherence and high job demands should be well informed about processes and procedures within the company. Van der Colff and Rothmann (2009, p. 8) further advise that, in order for employees to perceive that work expectations are manageable and within their power, employers should ensure that their employees are equipped with the necessary knowledge, skills, material, instruments and other resources, and that there is a balance in the load of tasks to be handled. "Employees will regard their work as meaningful when a degree of independence and freedom of choice is allowed in the performance of their tasks. Participation in decision-making will enhance the employees' feeling of membership and contribute to the meaningfulness component of sense of coherence" (Van der Colff & Rothmann, 2009, p. 8). Based on this rationale, the sixth hypothesis was formulated:

Hypothesis 6. Leadership effectiveness will have a significant positive influence on the sense of coherence of CCRs.

Aguilar and Salanova (2005) identified leadership as a further important job resource predicting worker engagement. Transformational leaders are effective at increasing worker engagement compared to those displaying different leadership styles. Transformational leaders are particularly suitable for promoting worker engagement, as these leaders are inspiring and visionary. According to a survey done by the Chartered Institute of Personnel and Development (2005), 91% out of 664 training managers, deem there is a direct link between investment in leadership development and business performance, and 98% believed that well-designed leadership activities can have a positive influence on the bottom line in organisations. “We have discovered that effective leadership is an important construct in determining success in a call centres,” (personal communication with an HR Executive in one of South Africa’s largest banks, May 5, 2009).

“Team leaders play a pivotal role in developing and maintaining customer-service quality and in maintaining the morale and motivation of customer-service agents. Team leaders support managers by ensuring that customer agents reach and maintain the necessary standards of performance” (Armistead *et al.*, 2002, p. 253). They do not control, monitor and handle complaints like traditional supervisors. Their roles include “creating supportive teams; coaching teams; providing leadership; motivating and making the work environment exciting and fun. Team leaders need excellent interpersonal skills and good technical ability, they must be able to identify training needs, have the competency to have constructive dialog and coaching sessions with agents” (Armistead *et al.*, 2002, p. 253). Leadership styles and patterns need to be explicit and appropriate to the team’s developmental stage. Ideally, the team leader should be appropriately skilled and all team members need clearly delineated roles (Mickan & Rodger, 2002, p. 204).

A call centre team leader/supervisor is responsible for a team of call centre agents; the number of members varies, depending on the organisation. They are expected to spend around 80% of their time with the team members, coaching them, reviewing performance, providing feedback on individual and team performance and identifying training needs. The team leader is expected to provide leadership, build motivation and morale and bring some 'fun' into the working environment by, for example, "introducing spot prizes or raffles" (Kinnie *et al.*, 2000, p. 975). Recent research on call centres has shown that inadequate coaching and training, and a lack of team leader support, can lead to job stress, depression, emotional exhaustion and anxiety. There is evidence of a positive relationship between three job resources (performance feedback, social support and supervisory coaching) and engagement, of which dedication is a core aspect (Bakker *et al.*, 2003). Macey and Schneider (2008) report that transformational leadership has a direct effect on trust and an indirect effect, through the creation of trust, on behavioural engagement.

The nature of leadership in South Africa varies between transactional and transformational leadership dimensions (Shokane, Stanz & Slabbert, 2004). As leadership is brought about by the dynamics of organisational environments, it is important to understand what leadership style works best in which situations. According to Ackerman, transformational leadership serves as the most appropriate style in "managing the changes presently taking place in South African organisations" (as cited in Huysamen, Schepers & Zaaiman, 2003, p. 53). "Despite the absence of a universally agreed upon definition of leadership, the literature on effective leaders seems to suggest that they tend to be transformational rather than transactional" (Harris, Day, Hopkins, Hadfield, Hargreaves & Chapman, as cited in Herbst & Maree, 2008, p. 32). The current emphasis on leadership relates to the ability of an organisation to manage and deliver significant organisational transformation. Stogdill noted that there are as many definitions for leadership as there are people who have tried to express the concept (as cited in Yukl, 2006).

Lussier and Achua (2004, p. 64) defined leadership as “stressing the importance of influencing others to achieve organisational objectives through change”. For this study, the definition composed by House (as cited in Yukl, 2006, p. 3) is the most appropriate: “Leadership is the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organisation.” Strong and powerful leadership has been seen as vital for organisations and society as a whole. Krause (Chartered Institute of Personnel & Development (2005) identifies leadership as the single most important task for society.

2.3.2.1 Transformational leadership

Transformational leadership is a style adopted by leaders to appeal to the moral values of their followers, and to raise their consciousness about ethical issues in order to mobilise their energy and resources to reform organisations (Shokane *et al.*, 2004). Burns was the first to introduce and put forward the concept of transformational leadership and contrast it with transactional leadership (Burns, 1978). According to Bass, the leader transforms followers by making them aware of important task outcomes; the leader persuades followers to surpass self-interest for the sake of the organisation and activates higher-order needs (Yukl, 2006). Transformational leaders offer a purpose that transcends short-term goals and focuses on higher order intrinsic needs. They inspire followers to achieve extraordinary outcomes by providing them with meaning and understanding. They align the objectives and goals of individual followers and the larger organisation (Boerner, Eisenbeiss & Griesser, 2007, p. 16). One outstanding characteristic of a transformational leader is being ‘discontent’ and always wanting to do better. Transformational leaders are never satisfied with the current status quo. They are always encouraging their followers to pursue a more desirable future (Parker, 2005). Bass identified four components of transformational leadership (Yukl, 2006):

Idealised influence- The leader conducts him/herself in a moral and ethical fashion. This behaviour elicits a follower's respect, admiration and trust. Followers identify with the leader's values and become committed to achieving the leader's vision. Followers will make personal sacrifices in order to achieve the vision. The leader shows dedication, a sense of purpose, perseverance and confidence in the purpose of the group. This helps to ensure the success of the group and gives followers a sense of empowerment and ownership (Van Eeden, Cilliers & Van Deventer, 2008). Leaders are regarded as role models and demonstrate high standards of ethical behaviour (Bass, Avolio, Jung & Berson, 2003, p. 208).

Inspirational motivation- The leader communicates an appealing vision for the future that is inspiring to the followers. The leader is seen to commit to the vision and specific goals, and provides meaning to the task at hand (Yukl, 2006). Confidence is expressed in the followers' abilities to achieve these expectations. It is important that the leader has good communication skills, as this allows him/herself to express the vision in a persuasive way (Van Eeden *et al.*, 2008).

Intellectual stimulation- Followers are encouraged to become aware of problems, use a holistic perspective in understanding them and approach problems from different angles. Hence, this component of transformational leadership creates readiness for change and develops the ability to solve current and future problems (Yukl, 2006). The leader values the intellectual abilities of followers and encourages innovation and creativity (Van Eeden *et al.*, 2008).

Individualised consideration- The leader acts as a mentor, giving support and encouragement, listening to concerns, and giving advice (Yukl, 2006). The leader designs strategies to develop followers to achieve their potential. Support is provided and progress is monitored. The fact that each individual can contribute to the team is valued, because there is strength in diversity (Van Eeden *et al.*, 2008). Each follower is taken care of individually and uniquely. This two-way exchange

process highlights mutual trust and sharing concerns between leaders and followers (Bass, 1998).

Idealised attributes- A fifth characteristic, based on the other four leadership behaviours, is identified in the Multifactor Leadership Questionnaire (MLQ) of Bass and Avolio (as cited in Vrba, 2007). Idealised attributes represent the highest level of transformational leadership. "Followers identify fully with the leader; the leader then uses this to develop associates. Such leaders are authentic and have a high degree of credibility among their associates" (Vrba, 2007, p. 26).

2.3.2.2 Transformational versus transactional leadership

Transactional and transformational leadership are defined in terms of behaviours used to influence followers and what effect the leader has on the follower (Yukl, 2006). Bass describes transactional leadership as "an exchange of rewards for compliance and views transformational leadership as the leader's effect on followers in that they feel trust, admiration, loyalty and respect for their leader" (as cited in Vrba, 2007, p. 25). Transformational leadership is based more on emotion than transactional leadership (Palmer, Wallis, Burgess & Stough, 2001). Transactional models of leadership provide the basis for higher levels of transformational leadership to have a positive impact on motivation and performance. If a transactional style is used alone, it does not build trust nor does it develop the motivation for followers to achieve their full potential (Bass, Avolio, Jung & Bruce, 1999).

There is a difference between transactional and transformational leadership, but these two leadership styles should not be used in isolation. Transformational leadership produces levels of performance that extend beyond what would occur with a transactional style alone (Parker, 2005). Research has found that combining transactional and transformational leadership styles will result in higher levels of cohesion, commitment, trust, performance and motivation (Bass *et al.*, 1999). Leaders who combine these two leadership styles are more likely to

have followers that are enthusiastic and feel supported, because these leaders are perceived as providing more psychological support. The reason for this is that when performance-based rewards are in the form of psychological support, employees will have more job-related enthusiasm (Lipley, 2004). Transformational leadership can augment transactional leadership; however, transactional leadership cannot augment transformational leadership to the same extent (Chan & Chan, 2005). The two styles supplement each other in order to offset any weaknesses inherent in each (Shokane *et al.*, 2004). Successful leaders display management styles that are transactional at times and transformational at other times (Proctor-Thomson & Parry, 2001). There is a need for organisations to integrate the transactional and transformational leadership dimensions (Smit, 2000, p. 73).

2.3.2.3 *The effect of transformational leadership on individuals and organisations*

Jung and Avolio noted that the transformational leadership style is responsible for performance that is “quantitatively greater and qualitatively different” from other leadership styles (in Van Eeden *et al.*, 2008, p. 253). Subordinates of transformational leaders express feelings of trust in and respect, admiration and appreciation for them. Followers are motivated to provide extra effort (Bass, 1985). Transformational leaders are able to motivate followers to higher levels of personal expectation and individual commitment (Yammarino & Bass, 1990). “Transformational leaders can influence the extent to which individuals perceive their work activities to be important and self-congruent” (Bono & Judge, 2003, p. 568), because when individuals feel that their work is important, they experience increased job satisfaction and are more willing to do better on a simple task. According to the institute for strategic change, the stock price of well-led companies grew by over 900% over 10 years, compared to a 74% growth for poorly led companies (Chartered Institute of Personnel and Development, 2005).

Transformational leadership is effective in organisations in which major change and transformations are taking place (Bass & Avolio, 1994). It improves employee satisfaction, trust and commitment and consistently promotes greater organisational performance (Barling, Slater & Kelloway, 2000). The transactional leadership style focuses on interpersonal transactions between managers and employees. Leaders are seen as “engaging in behaviours that maintain a quality interaction between themselves and followers” (Kreitner & Kinicki, 2001, p. 567). “Leaders must realise that mutual trust is an important mediator affecting organisational effectiveness and plays a crucial role” (Krafft, Engelbrecht & Theron, 2004, p. 17). When leaders communicate procedures in a sensitive and honest manner (interactional justice), the perception of fairness is elicited in their followers. For transformational leaders to instil trust, they have to treat their employees in a sensitive and considerate manner. The emphasis on achieving trust lies in the way of interaction, not in the procedure of fairness (Krafft *et al.*, 2004). Through the use of procedural justice and trust, a transformational leader can exert a positive influence on organisational citizenship behaviour in his/her followers (Engelbrecht & Chamberlain, 2005). An organisation’s culture mirrors its leader’s personality. Stated differently, organisations take on the personality of their leaders (De Vries, 2003).

2.3.2.4 Transformational leadership and engagement

Organisational effectiveness is closely linked to the role of the leader and the way in which this leadership role impacts on the work engagement of the people in an organisation. The ultimate challenge of leadership is to transform leader behaviour into the organisational outputs of job satisfaction, commitment and collaboration (Kouzes & Posner, 2007). There is an absence of published work on transformational leadership and its purported effects on work engagement. A recent study determined a significant, positive relationship between transformational leadership and followers’ levels of engagement, with “the results of the inter-correlations showing significance at the $p = < 01$ level” (Dibley, 2009, p. 110). This suggests that a change in leadership may well result in some

change in the level of work engagement. Based on the above evidence, the seventh hypothesis was formulated:

Hypothesis 7: Leadership effectiveness will have a significant, positive influence on work engagement in call centres.

2.3.2.5 Transformational leadership and team effectiveness

Research on team development has not been able to keep pace with the growing need for understanding how teams can achieve more effective performance. “Given the widespread use of teams in all types of organisations, the time is ripe for an integration of team performance theory with transformational leadership theory” (Dionne, Yammarino, Atwater & Spangler, 2004, p. 178). Previous conceptualisations have linked transformational leadership with various aspects of team performance: Waldman (1994) examined improving multifunctional team innovation processes through reliance on transformational leadership; Bass (as cited in Dionne *et al.*, 2004) investigated improving team decision-making skills through the use of transformational leadership; and Atwater and Bass (1994) presented a general conceptualisation of how transformational leadership may interact with and influence team factors such as cohesion and conflict management (they did not put forth any testable propositions). Kahai, Sosik and Avolio (2000) demonstrated that transformational leaders are likely to increase group performance in so far as they are instrumental in overcoming social loafing among group members, while Balthazard (as cited in Dionne *et al.*, 2004) reported that face-to-face teams were more likely to demonstrate higher levels of shared (transformational) leadership than virtual teams.

In the study by Dionne *et al.* (2004) it was found that idealised influence/inspirational motivation, intellectual stimulation and individualised consideration could produce intermediate outcomes, such as shared vision, team commitment, an empowered team environment and functional team conflict. In turn, these intermediate outcomes could positively affect team communication, cohesion and

conflict management. The integration of transformational leadership theory into team performance is somewhat complex, but in this effort there is a large payoff—transformational leadership has proven to promote team performance beyond expectations. “Transformational leadership theory provides one way to enhance our understanding of team performance” (Dionne *et al.*, 2004, p. 190). Hence, the following hypothesis was formulated.

Hypothesis 8. Leadership effectiveness will have a significant, positive influence on the effectiveness of teams.

2.3.2.6 The Kouzes and Posner model of transformational leadership

Kouzes and Posner (2001) did research to find out how ordinary people accomplished extraordinary things in organisations. Despite the differences in people’s individual stories, the personal-best leadership experiences that they read and listened to revealed similar patterns of action. They found that leaders were at their personal best when they were displaying the following five practices of leadership (Kouzes & Posner, 2001, p. 4):

Challenging the process- “Leaders search for opportunities to change the status quo. They look for innovative ways to improve the organization. In doing so, they experiment and take risks. And because leaders know that risk taking involves mistakes and failures, they accept the inevitable disappointments as learning opportunities.”

Inspiring a shared vision- “Leaders passionately believe that they can make a difference. They envision the future, creating an ideal and unique image of what the organization can become. Through their magnetism and quiet persuasion, leaders enlist others in their dreams. They breathe life into their visions and get people to see exciting possibilities for the future.”

Enabling others to act- “Leaders foster collaboration and build spirited teams. They actively involve others. Leaders understand that mutual respect is what sustains extraordinary efforts; they strive to create an atmosphere of trust and human dignity. They strengthen others, making each person feel capable and powerful.”

Modelling the way- “Leaders establish principles concerning the way people (constituents, colleagues, and customers) should be treated and the way goals should be pursued. They create standards of excellence and then set an example for others to follow. Because the prospect of complex change can overwhelm people and stifle action, they set interim goals so that people can achieve small wins as they work toward larger objectives. They unravel bureaucracy when it impedes action; they put up signposts when people are unsure of where to go or how to get there; and they create opportunities for victory.”

Encouraging the heart- “Accomplishing extraordinary things in organisations is hard work. To keep hope and determination alive, leaders recognize contributions that individuals make. In every winning team, the members need to share in the rewards of their efforts, so leaders celebrate accomplishments. They make people feel like heroes.”

Kouzes and Posner’s model has been used extensively to assess leadership behaviours across a variety of organisations, disciplines and demographic backgrounds (as cited in Herbst & Maree, 2008). The Leadership Practices Inventory (LPI) was created to measure these abovementioned five practices. Kouzes and Posner (2001, p. 5) note that “the more frequently you demonstrate the behaviours included in the LPI, the more likely you will be seen as an effective leader”, and “when people succeed in improving their use of the five leadership practices, they enhance their contributions to their organisations, their families and communities” (Kouzes & Posner, 2001, p. 2). In this study, call

centre team leaders who demonstrate these five practices are seen to be effective leaders. Hence, the Leadership Practices Inventory will be used as a measuring instrument (the LPI will be discussed later). People who frequently demonstrate LPI behaviours are seen as (Kouzes & Posner, 2001):

- being more effective in meeting job-related demands;
- being more successful in representing their units to upper management;
- creating higher-performing teams;
- fostering loyalty and commitment;
- increasing motivational levels and willingness to work hard;
- reducing absenteeism, turnover, and dropout rates; and
- possessing high degrees of personal credibility.

The primary role of a call centre team leader/supervisor is to maintain the morale and motivation of CCRs and ensuring that they reach and maintain the necessary standards of performance. This is done through creating supportive teams, coaching teams, and making the work environment exciting and fun (Armistead *et al.*, 2002). If a team leader is not effective in leading his/her team, there is a great possibility that the team will not function effectively. Dess and Miller conclude that, “when teams are used effectively and provided with proper training, it could lead to increased production, morale, creativity and innovation” (cited in Dionne *et al.*, 2004, p. 179).

2.3.3 Effective teams: a critical job resource in call centres

One of the most surprising results to come out of the survey for the call centre national report (Contact Industry Hub, 2008) was that a large percentage of the total contact centres polled were smaller operations. Approximately 49% of all participating call centres were under 20 seats in size. A total of 151 of the 313 centres surveyed had less than 20 seats; 51 call centres indicated that they were between 20 and 50 seats in size. Middleton notes that managing small call centres present unique challenges as there is little benefit from economies of

scale; but despite this, the small call centres seem to be outperforming the best of call centres. “Something they’re doing is working...perhaps it’s the closer connection of a small team with a common goal? It is something that is certainly worth a closer look” (Contact Industry Hub, 2008, p. 10).

Salanova *et al.* (2003) formulate the perceived collective efficacy of members of a work group as an important job resource having an impact on worker engagement. Team members feel engaged as they converge emotionally with other team members with whom they collaborate closely to accomplish particular tasks. This implies that effective team functioning enhances worker engagement. Organisations around the world have significantly increased their dependency on teams, because teams can better provide a directed and collaborative effort to address complex task concerns (Montoya-Weiss, Massey & Song, 2001).

The body of literature on call centres has continued to grow in recent years, with seemingly every topic of the call centre industry investigated. However, one important area has not been scrutinised – the impact and benefits of team dynamics in call centres. “Surprisingly little attention has been paid to team dynamics in call centres” (Paulet, 2008, p. 423). There is sufficient reason to believe that the significant power of teams and personal relationships can be used as a “driver of engagement” (SHL Employee Engagement Report, 2009) in the call centre environment. Hence, the final hypothesis was formulated:

Hypothesis 9. Team effectiveness will have a significant positive influence on the work engagement of CCRs.

“Most call centre operations organise their workforce around team structures”; three quarters of Australian call centre operations are organised around team structures” (Van den Broek, Barnes & Townsend, 2008, p. 257). Making use of teams is not a new concept in South African call centres. Teamwork is assessed

in quarterly performance appraisals (personal communication with a call centre supervisor, July 21, 2009). When selecting new call centre agents, 'teamwork' is one of the competencies that is assessed (Nicholls, Viviers & Visser, 2009). Teams in call centres vary from co-acting groups (where members are grouped in teams as a method of control and cost saving) to fully-fledged teams (for example in home loan and vehicle financing), where agents work together to create a specific output (personal communication with HR executive in one of South Africa's largest call centres, May 5, 2009). Van den Broek *et al.* (2008) suggest that it is possible to have teams in the workplace without high levels of teamwork. In many call centres, teams are implemented as a method of controlling actions, for peer surveillance and to maintain targets (Townsend, 2007). In call centres, each team has its statistics displayed publicly on a moving message sign, strategically placed above the workspace occupied by the team. The moving message sign displays the number of calls taken by the team that day, the number of CCRs not engaged in active calls and the number of current incoming calls (Brannan, 2005). Many performing units are called teams, although the members are managed as individuals. The 'magic' of team dynamics is then lost. In order to reap the benefits of teamwork, one should build an effective team (Hackman, 1990).

The benefits that result from developing formal team structures include higher productivity; greater levels of employee commitment; staff with more developed skills; reduced turnover and absenteeism; the development of new products; and the removal of hierarchical organisational structures (Armistead *et al.*, 2002). Armistead *et al.* are of the opinion that pressures in call centres come from balancing the demands of surveillance, satisfying customer needs and motivating employees. It is suggested that these pressures can be minimised by balancing fun and surveillance and by using high-commitment practices (Kinnie *et al.*, 2000). Creating teams provides ways for workers to adapt to or develop coping mechanisms in order to survive the rigours of work (Van den Broek *et al.*, 2008, p. 258). Regarding members who have stayed in the call centre environment for

a long period of time, Armistead *et al.* (2002, p. 253) state that “those who have survived are those who have the skills and competencies to embrace, and be committed to team-building”. Hackman (2002) believes that working in groups is at the heart of collaborative and productive cultures. It has been suggested that the organisation of work processes around small teams in call centres provides an added disciplinary mechanism, because CCRs effectively seek to regulate their own workplace behaviour through the essential self-interest of ensuring that their own workload is not increased by the lack of effort on the part of other team members. The organisation of work processes around small teams contributes to the cohesion of call centres through self-regulation and conformity (Brannan, 2005, p. 435).

2.3.3.1 Defining teams

A team can be defined as two or more individuals who interact socially (face to face or virtual), possess one or more common goals to perform organisationally relevant tasks, exhibit interdependencies with respect to workflow, goals and outcomes, have a differentiated structure of roles and responsibilities, and are embedded in an encompassing organisational system with boundaries and linkages to the broader context and task environment (Kozlowski & Ilgen, as cited in Dannhauser, 2007). Katzenbach and Smith (1993, p. 45) define a team as “a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable”. In addition, regular communication, coordination, distinctive roles, interdependent tasks and shared norms are important features of teams (Brannick & Prince, as cited in Mickan & Rodger, 2002).

There is a fundamental irony in the fact that most call centre operations organise their workforce around team structures (Van den Broek *et al.*, 2008, p. 257), but not much literature is available on teams in call centres or what factors lead to team effectiveness in call centres. In Sweden, at least 60% of the workforce in

the average centre is involved in self-managed teams, and the reported use of problem-solving teams is 80% (Holman, Batt & Holtgrewe, 2007, p. 3). Work teams provide management with the potential to utilise peer surveillance as a form of controlling the actions of employees (Townsend, 2007). One call centre manager (information technology call centre manager, personal communication on March 19, 2009) believes that teams are used in their call centre to give agents a sense of belonging, that team spirit is used to increase morale, and that the senior agents in each team aids in educating new agents. In this specific call centre, giving “team rewards” also helps to reduce absenteeism and late arrival at work. Peer pressure ensures that the CCRs do not want to disappoint their fellow team members.

On asking a call centre agent why he decided to work in the call centre environment, he answered (Armistead *et al.*, 2002, p. 252) “you need to be a people’s person; it’s not the sort of job where you can work on your own. It’s being part of a team”. Armistead *et al.* (2002) found teamwork to be important to CCRs and that teamwork enables improvement in work performance”. Van den Broek *et al.* (2008, p. 258) believe that call centre teams could provide collective support for CCRs through challenging managerial directives, or sharing their product and technical knowledge “in order to circumvent the often relentless grind of call centre work processes” and that “teaming up provides ways for workers to develop coping mechanisms in order to survive the rigours of call centre work”.

Blanchard (Knowledge Resources, 2009a) notes that “none of us is as smart as all of us”. Batt and Appelbaum found that teams have a “strong, significant and direct effect on perceived performance” and that “teams appear to help workers through greater shared learning and problem-solving in handling customer relations” (as cited in Kinnie *et al.*, 2000, p. 970). Van der Colff and Rothmann (2009) report that better relationships amongst members of a professional team may relieve stress. McGrath *et al.* (as cited in Van der Colff & Rothmann)

suggest that better team relations could be achieved by means of closer integration during training to enhance an understanding of each other's role, as well as implementing a higher level of education, which might lead to increased confidence and an ability to discuss issues as equals. Rath (Gallup Global Practice Leader) is of the opinion that engaged teams welcome diversity of age, gender, and race, whereas disengaged teams may do the opposite (Knowledge Resources, 2009b).

2.3.3.2 What does team effectiveness imply?

Team effectiveness is a complex phenomenon. Research into team effectiveness has traditionally searched for characteristics of effective teams. Teams are seen as comprising a three-stage system that utilises resources (input), maintains internal processes (throughput) and produces specific products (output). When defining the characteristics of effective teams, the necessary antecedent conditions (input), together with the processes (throughput) of teams, are defined. In contrast, outcomes (output) are generally used to judge or evaluate team effectiveness (Mickan & Rodger, 2002). Supportive organisational structures and optimal individual contributions are said to set the scene for effective teamwork. There are eighteen characteristics of effective teams that fall across three different levels of functions, namely organisational structure, individual contributions and team processes (Mickan & Rodger, 2002, p. 201):

Organisational structure- Seven of the most commonly described structural characteristics include: a clear purpose, appropriate culture, specified task, distinct roles, suitable leadership, relevant members, and adequate resources.

Individual contribution- "Establishing and managing relationships between individuals who have a variety of personalities and a range of professional and non-professional experiences is a critical component of teamwork" (Mickan & Rodger, 2002, p. 204). Individual contributions can be perceived as prerequisite

characteristics of effective teamwork. Individual participation in teams requires self-knowledge, trust, commitment and flexibility.

Team processes- Team processes describe subtle aspects of interaction and patterns of organising that transform input into output. Team processes can be described in terms of the following characteristics: coordination, communication, cohesion, decision-making, conflict management, social relationships and performance feedback (Mickan & Rodger, 2002, p. 204).

In an effort to measure team effectiveness, Wageman, Hackman and Lehman (2005) defined team effectiveness more broadly by looking at the following three-dimensional conceptualisation:

- (1) The productive output of the team (the product, service, or decision) must meet or exceed the standards of quantity, quality, and timeliness of the team's clients. It is the client's views that count, not those of team members. This is known as the process criteria of effectiveness and is a joint function of the following three performance processes (Wageman *et al.*, 2005):
 - (a) the level of effort group members collectively expend carrying out task work,
 - (b) the appropriateness to the task of the performance strategies the group uses in its work, and
 - (c) the amount of knowledge and skill members bring to bear on the task.

Thus, teams that operate in ways that leave one or more of these three functions unfulfilled are likely to fall short of client standards of acceptable performance.

- (2) The social processes that the team uses (in carrying out the work) should enhance the members' capabilities to work together interdependently in the future.
- (3) The group experience must contribute positively to the learning and well-being of individual team members, rather than frustrate, alienate or deskill members.

2.3.3.3 Five enabling conditions that foster team effectiveness

There are five enabling conditions that foster team effectiveness. The chances for team effectiveness are higher when the following conditions are met (Wageman *et al.*, 2005):

Real team- The people responsible for the work are a real team rather than a team in name only. There are clear boundaries that distinguish members from non-members, and the team members are interdependent for some common purpose, producing an outcome for which members bear collective responsibility. Real teams have at least moderate stability of membership, which gives members time and opportunity to learn how to work together well (Wageman *et al.*, 2005).

Compelling direction- The team has a compelling direction for its work. Good team direction is challenging, clear and consequential. Thus, it energises members, orientates them to the main purpose and engages their full range of talents (Wageman *et al.*, 2005).

Enabling structure- The team's structure facilitates rather than impedes collective work. Work teams can encounter complexities if the wrong structure is put in place, for example being over elaborate or under specified. Research has identified the following three structural features as being central in fostering competent teamwork (Wageman *et al.*, 2005):

- Task design: Well-designed group tasks foster high, task-focused effort by team members. The team task should be a whole and meaningful piece of work, for which members have autonomy to exercise judgment about work procedures.
- Team composition: A well-composed team ensures that members have the full complement of knowledge and skills that is required to achieve the team's purposes and increases the ability of members to apply their complementary talents to the collective work. The size of the team should be as small as possible given the work to be accomplished and the team should include members with ample task and interpersonal skills, and should have a good diversity of membership.
- Core norms of conduct: A team must establish clear and explicit specifications for the basic norms of conduct by the members. The clear specification of core norms of conduct facilitates the development of task performance strategies that are appropriate to the team's task and situation.

Supportive organisational context- The organisational context within which the team operates should provide support for task activities. Organisational support is needed for effective performance. The reward system should provide positive consequences for excellent team performance; the educational system should make technical or educational assistance available to the team on issues about which the members are not already knowledgeable, skilled or experienced; and the information system should provide the team with data and projections. Members need to select or invent strategies for carrying out the work (Wageman *et al.*, 2005).

Available, expert coaching- The team must have hands-on coaching available to help the members take the fullest possible advantage of their performance circumstances. The role of the coach is to help the team minimise its exposure to process losses and to maximise its chances of capturing synergistic process gains. The help that coaches can provide for each of the three process criteria of effectiveness are as follows (Wageman *et al.*, 2005):

- The level of effort: helping members to minimise coordination and motivation problems and to build commitment to the group and its task.
- The performance strategies: helping members to avoid relying on habitual routines that may be inappropriate for the task or situation, and to develop innovative ways of proceeding with the work that are well tuned to task requirements.
- The amount of knowledge and skill: helping members to avoid inappropriate weighting of individuals' ideas and contributions and to share their expertise to build the team's skills.

In a case study done by Armistead *et al.* (2002), it was found that, for call centre team leaders, tension existed between the growing volume of calls and finding time to take agents off-line for coaching. Team leaders felt they did not spend enough time on coaching, resulting in agents who felt that it was unfair to expect of them to improve performance without the necessary coaching. In terms of the supportive organisational context, Hackman (1998) found that teams thrived when they were well designed, supported and coached by individuals who had a significant amount of task-related skill. Accordingly, the Team Diagnostic Survey (TDS) found that even skilled coaches could not compensate for poorly designed teams (Wageman *et al.*, 2005, p. 379). As the TDS measures team effectiveness, it will be used in this study. This instrument will be discussed later.

2.3.3.4 Negative aspects of teams

Recent research has confirmed that teamwork is not without its negative consequences and has established the need for a greater understanding of the intricacies of teams and participation. In order to fully understand team effectiveness, it is necessary to look at when and why teams are dysfunctional. Five dysfunctions that every team must overcome are: absence of trust, fear of conflict, lack of commitment, avoidance of accountability and inattention to results. These dysfunctions stem from the following circumstances: absence of trust is driven by members' unwillingness to be vulnerable within the group; fear of conflict is driven by a preference for artificial harmony; lack of commitment is driven by ambiguity about what members really think; avoidance of accountability is driven by low standards for team member behaviour; and inattention to results is driven by the dominance of individual needs such as ego, recognition, or career aspirations over collective success (Lencioni, 2002, p. 187).

2.4 THE PROPOSED ENGAGEMENT STRUCTURAL MODEL (EXPRESSED IN LISREL NOTATION)

On the basis of the literature, various hypotheses were formulated. The overarching research hypothesis is that the structural model (depicted in Figure 2.2) presents a valid account of the psychological process that underlies call centre employee engagement. This figure was also presented in Chapter 1 (Figure 1.1) as part of the overview of the study. The substantive research hypothesis therefore claims that the structural model correctly identifies relevant determinants of employee engagement and specifies the manner in which they combine to determine the engagement levels of employees. The latent variables are expressed in LISREL notation and have the following meaning:

- ξ_1 – Perception of leadership effectiveness (LE) as a job resource;
- η_1 – CCRs sense of coherence (SOC) as a personal resource;
- η_2 – Perception of team effectiveness (TE) as a job resource; and
- η_3 – Engagement (E).

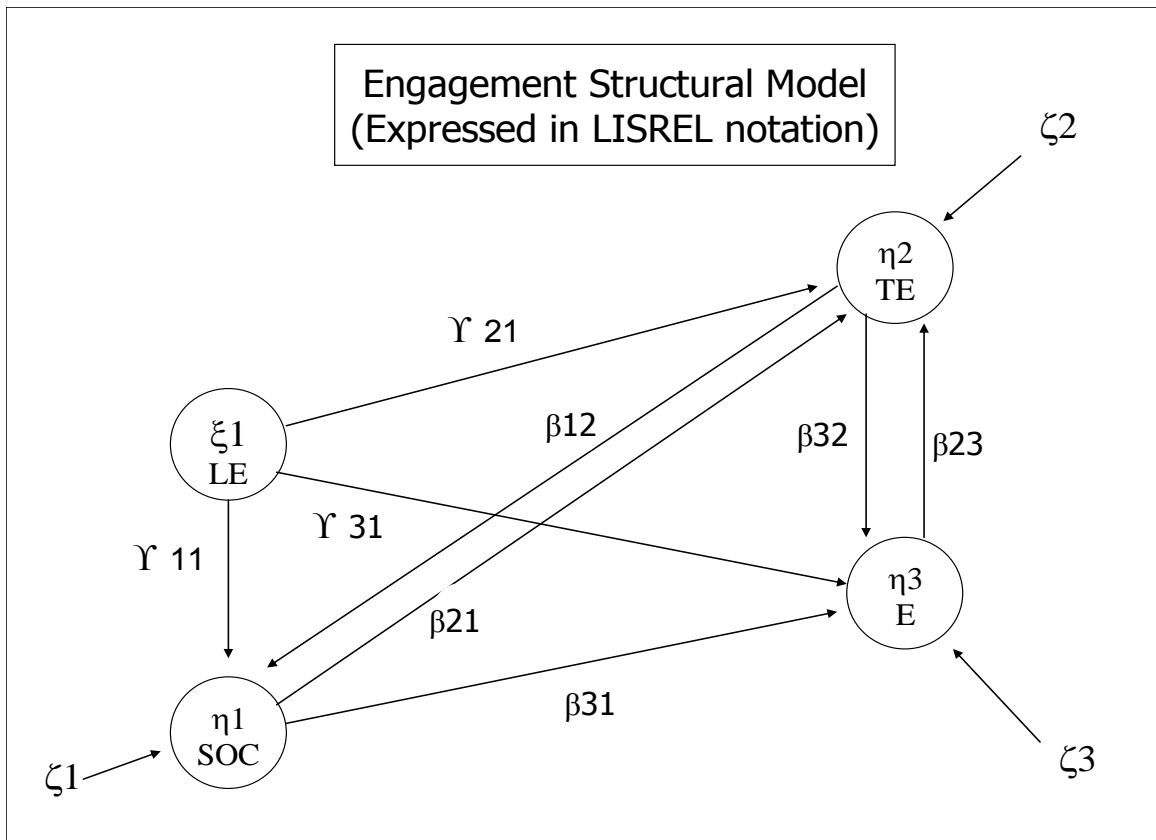


Figure 2.2 Proposed Engagement Structural Model

What follows is a summary of the literature review that justifies each causal path within the proposed engagement model.

Hypothesis 1: A low level of worker engagement exists amongst CCRs in South Africa.

Call centre work compares favourably with shop floor manufacturing and clerical work with regard to well-being. In a study by Holman (2002), the level of well-being at two call centres was found to be equivalent to and in many cases better than comparable forms of employment. Empirical studies by Schaufeli and Bakker (2004) have revealed that some employees, regardless of high job demands and long working hours, do not develop burnout. These members seem to find pleasure in hard work and dealing with job demands. In a study by

Kinman and Jones (2003) it was found that some employees thrive on the fact that their work is stressful.

There are call centres that have managed to balance conflicting pressures by incorporating fun-filled HR initiatives, as well as personal and job resources, in an environment in which employees are tightly constrained. Kinnie *et al.* (2000, p. 968) argue that “call centres exhibit fascinating contrasts between satisfying customer needs and motivating employees, between intensive surveillance systems and normative, fun activities, and between the demands of the product market and the pressures of the labour market”. However, call centres are also known to be ‘electronic sweatshops’ and ‘satanic mills’.

Hypothesis 2: Work engagement (η_3) will have a significant positive effect on team effectiveness (η_2).

Engagement among members of the same work team increases performance. “If colleagues influence each other with their work engagement, they may perform better as a team” (Bakker & Demerouti, 2008, p. 217). Engaged employees are successful in mobilising their job resources (Schaufeli & Bakker, 2003, p. 8), hence a team of engaged workers is more likely to have the resources it needs to be effective than a team of unengaged workers.

Hypothesis 3: Sense of coherence among CCRs (η_1) will have a significant positive influence on work engagement (η_3) in call centres.

SOC is positively related to job satisfaction, work engagement, competence and life satisfaction, general well-being, and active coping with stressors (Rothmann, Steyn & Mostert, 2005). The availability of job resources and personal resources (SOC) enhances work engagement levels (Naudé & Rothmann, 2006). A strong SOC predicts higher levels of personal accomplishment and work engagement, and vice versa (Van der Colff & Rothmann, 2009). SOC could have a direct effect on individuals’ work-related well-being (Amirkhan & Greaves, as cited in Fourie *et al.*, 2008). Employees with a weak SOC are not particularly satisfied and

passionate about a job. SOC is significantly related to job satisfaction (Muller & Rothmann, 2009).

Hypothesis 4: Sense of coherence (η_1) will have a significant positive effect on team effectiveness (η_2) in call centres.

Employees with a weak SOC are not particularly satisfied and passionate about their jobs. Having a higher level of SOC is significantly related to having more positive relationships with colleagues and management (Muller & Rothmann, 2009). Knowing that SOC influences the ability to mobilise and generate social resources in the workplace (Fourie *et al.*, 2008), and that optimal individual contributions set the scene for effective teamwork (Mickan & Rodger, 2002, p. 204), it can be inferred that a team consisting of members with low SOC may demonstrate lower team effectiveness.

Hypothesis 5: Team effectiveness (η_2) will have a significant positive influence on CCRs' sense of coherence (η_1).

Team-building activities should be reinforced for individuals with a weak SOC in order to enhance good teamwork and positive relationships among colleagues and management. These individuals should be assisted in dealing with distress they experience at work. Support, motivation and recognition from management and colleagues should be reinforced (Muller & Rothmann, 2009, p. 9). Call centre teams could provide collective support for CCRs in order to circumvent the often relentless grind of call centre work processes", as "teaming up provides ways for workers to develop coping mechanisms in order to survive the rigours of call centre work" (Van den Broek *et al.*, 2008, p. 258).

Teams can better provide a collaborative effort to address complex task concerns to help workers through greater shared learning and problem-solving (Dionne *et al.*, 2004; Kinnie *et al.*, 2000) and will lead to higher productivity; greater levels of employee commitment and staff with more developed skills (Armistead *et al.*, 2002, p. 253).

Hypothesis 6: Leadership effectiveness (ξ_1) will have a significant positive influence on the sense of coherence of CCRs (η_1).

“A high quality relationship with one’s supervisor may alleviate the influence of job demands (e.g. work overload, emotional and physical demands) on job strain, since leaders’ appreciation and support puts demands in another perspective. Leaders’ appreciation and support may also aid the worker in coping with the job demands, facilitate performance, and act as a protector against ill health” (Bakker & Demerouti, 2007, p. 316). Leaders should give support, motivation and implement interventions to assist members with low SOC, who should be well informed about processes and procedures within the company (Muller & Rothmann, 2009, p. 9).

Leaders can contribute to the development of employees’ SOC by giving information in a consistent, structured, ordered and understandable format. “By equipping employees with the necessary knowledge, skills, material, instruments, resources, and by ensuring a balance in the load of tasks to be handled, employees will increasingly feel that the work expectations are manageable and within their power” (Rothmann *et al.*, 2003, p. 59). Employees will regard their work as meaningful when a degree of independence and freedom of choice is allowed in the performance of their tasks. “Participation in decision-making will enhance the employees’ feeling of membership and contribute to the meaningfulness component of sense of coherence” (Van der Colff & Rothmann, 2009, p. 8).

SOC is a dispositional orientation and not a state or a trait. It embraces components of perception, memory, information processing and effect into habitual patterns of appraisal, and develops through repeated experiences of making sense of countless stressors in an individual’s life. Through the repeated exposure to these experiences of sense making, an individual develops a strong sense of coherence over time (Gropp *et al.*, 2007).

Hypothesis 7: Leadership effectiveness (ξ_1) will have a significant positive influence on work engagement (η_3) in call centres.

Leadership is an important job resource predicting worker engagement (Aguilar & Salanova, 2005) and is the “ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organisation” (House, as cited in Yukl, 2006, p. 3). Effective leadership improves employee satisfaction, trust and commitment, and consistently promotes greater organisational performance (Barling *et al.*, 2000). There is evidence of a positive relationship between three job resources (performance feedback, social support and supervisory coaching) and engagement (Bakker *et al.*, 2003). A recent study determined a significant, positive relationship between transformational leadership and followers’ levels of engagement (Dibley, 2009, p. 110).

“Transformational leaders can influence the extent to which individuals perceive their work activities to be important and self-congruent” (Bono & Judge, 2003, p. 568), because, when individuals feel that their work is important, they experience increased job satisfaction and are more willing to do better on a simple task. Leaders who frequently demonstrate ‘LPI behaviours’ are seen as being more effective in increasing motivational levels and willingness to work hard, thereby reducing absenteeism, turnover and dropout rates, and as possessing high degrees of personal credibility (Kouzes & Posner, 2001).

The subordinates of transformational leaders expressed feelings of trust, respect, admiration and appreciation toward them. Followers are motivated to make an extra effort (Jung & Avolio, as cited in van Eeden *et al.*, 2008, p. 253). Through the use of trust a transformational leader can exert a positive influence on organisational citizenship behaviour in followers (Engelbrecht & Chamberlain, 2005). Transformational leadership has a direct effect on trust, as well as an indirect effect through the creation of trust through behavioural engagement (Macey & Schneider, 2008).

Hypothesis 8: Leadership effectiveness (ξ_1) will have a significant positive influence on the effectiveness of teams (η_2).

Team leaders play a pivotal role in maintaining the morale and motivation of customer-service agents (Armistead *et al.*, 2002, p. 253). Transformational leaders are likely to increase group performance in that they are instrumental in overcoming social loafing among group members (Kahai *et al.*, 2000). Furthermore, they produce outcomes such as shared vision, team commitment, an empowered team environment and functional team conflict. In turn, these intermediate outcomes could positively affect team communication, cohesion and conflict management. “Transformational leadership theory provides one way to enhance our understanding of team performance” (Waldman, Bass, Atwater & Bass, in Dionne *et al.*, 2004).

Transformational leadership promotes team performance (Dionne *et al.*, 2004). People who frequently demonstrate LPI behaviours are seen as being more effective in meeting job-related demands, and as being more successful in representing their units to upper management, creating higher-performing teams and fostering loyalty and commitment (Kouzes & Posner, 2001). Dess and Miller (in Dionne *et al.*, 2004, p. 179) conclude that, when teams are used effectively and provided with proper training, they could experience “increased production, morale, creativity and innovation.”

Hypothesis 9: Team effectiveness (η_2) will have a significant positive influence on the work engagement (η_3) of CCRs.

Team members feel engaged when they converge emotionally with other team members with whom they collaborate closely to accomplish particular tasks. This implies that effective team functioning enhances worker engagement (Salanova *et al.*, 2003). A team has been called a “driver of engagement” (SHL Employee Engagement Report, 2009). Working in groups is the heart of collaborative and productive cultures (Hackman, 2002). In the call centre, those CCRs who have survived are those who have the skills and competencies to

embrace, and be committed to, team-building, as teamwork enables improvements in work performance (Armistead *et al.*, 2002, p. 253).

The benefits that result from developing formal team structures include higher productivity, greater levels of employee commitment, staff with more developed skills, reduced turnover and absenteeism, the development of new products, and the removal of hierarchical organisational structures (Armistead *et al.*, 2002). Better relationships amongst members of a professional team may relieve stress. (McGrath *et al.*, in Van der Colff & Rothmann, 2009), and when teams are used effectively it could lead to increased “production, morale, creativity and innovation” (Dess and Miller, in Dionne *et al.*, 2004, p. 179).

2.5 SUMMARY

This chapter revealed an optimistic overview of how contemporary call centres are experienced in South Africa. The concept of engagement was thoroughly explained by making use of the Job-demands Resources Model as a guiding framework to understand the factors that elicit engagement in call centres. The variables that were presented were: sense of coherence as a personal resource; leadership effectiveness and team effectiveness as job resources. A graphic portrayal of the proposed engagement structural model was expressed in LISREL notation. This model was justified by providing a summary of the proposed hypotheses (confined in the literature review) which justified the development of the engagement model.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter presents the overall plan of the research that was conducted and the structure that was used in order to obtain answers to the research-initiating questions. Before elaborating on the research design and methodology, it is necessary to revisit the objectives of this study. In summary, the objectives were to:

- determine the level of CCR worker engagement in call centres
- identify the most salient eliciting factors of engagement for CCRs
- propose and test an explanatory worker engagement structural model
- recommend practical interventions to enhance engagement in call centres.

3.2 RESEARCH DESIGN

The questions driving this research are: What levels of engagement are currently experienced in call centres and what are the most salient factors impacting on engagement? Consequently, how can engagement be amplified in call centres? An empirical, exploratory study was undertaken to find answers to these questions. An exploratory study is “a valuable means of finding out what is happening; to seek insights; to ask questions and to assess phenomena in a new light” (Saunders, Lewis & Thornhill, 2007, p. 133). Exploratory studies are essential and can almost always yield new insights for research (Babbie & Mouton, 2006). Furthermore, this study followed a correlational, ex post facto design. It is a non-experimental approach and does not require that the identified constructs be manipulated by means of experiments (Theron, 2007). The identified variables (engagement, team effectiveness, perceived leadership effectiveness and sense of coherence) were observed across the subjects (CCRs) in various call centre teams. The correlational strategy involves measuring variables, as they exist naturally, to establish that a relationship exists between the variables and to describe the relationship between the variables (Oehley, 2007). The ex post facto design is used to test the empirical validity of

the statement: “if x then y”. Using the ex post facto design has some disadvantages. There is a risk that interpretations will not be done properly, it lacks the power to randomise and it is not able to manipulate independent variables (Chamberlain, in De Vos, 2006).

This investigation was conducted as a cross-sectional study, which means that it is only a “snapshot” describing the incidence of a phenomenon or how factors are related at a given time (Saunders *et al.*, 2007). A primary data design (data collected by the researcher) was followed to collect quantitative data (instrument scores) with a self-administered questionnaire. Preliminary, informal interviews were conducted with call centre managers and CCRs as a means of gaining insight into the nature of the call centre environment.

3.3 RESEARCH METHODOLOGY

The research methodology focuses on the kind of tools, procedures and sampling used in the research process (Babbie & Mouton, 2006). The methods used to arrive at specific conclusions determine the validity and credibility of the conclusions (Theron, 2007). For this reason, particular care was taken during the data collection process.

3.3.1 Population and sample

Call centres located across South Africa were approached to participate in this study. Of the 14 call centres that were approached, seven consented. Of these, three are located in Cape Town, three in Pretoria and one in Johannesburg. The services offered by these call centres range from providing client support, selling services, products and insurance, providing technical and human resource support to internal personnel, offering telephonic support with regard to client/patient care, handling queries on disease and drug use, and providing emotional support and counselling. Anonymity and confidentiality were assured. To make participation more attractive, each call centre could earn, by participating, a feedback file containing a feedback report and a collection of

salient call centre articles and team-building activities for their use; this incentive 'toolbox' was designed so that it would not sacrifice the anonymity, privacy or confidentiality of the respondents. An inclusion criterion was set that required the call centre to operate within a team structure and each team to be supervised by a team leader. A formal letter outlining the purpose of the study was provided to each call centre (see Appendix A). Each participant in the study also signed an informed consent form that gave a comprehensive explanation of the study. Participation was voluntary. The time period from sending out the formal letter asking the call centres to participate to capturing the data was approximately eight months during 2009 and 2010.

3.3.2 Sample method and sample size

A non-probability sampling method was used for this study. Non-probability sampling techniques provide the opportunity to use subjective judgement to select a sample purposefully and to reach difficult-to-identify members of the population. The specific technique used was purposive (judgemental) sampling. Purposive sampling enables the researcher to use judgement to select cases that will best enable him or her to answer the research questions and meet the objectives. This form of sample is often used by researchers who wish to select cases that are informative and who adopt the grounded theory strategy (Saunders *et al.*, 2007). No true random method was used to select the call centres to participate in the study. However, this method was the only feasible one, as call centres in South Africa have restricted time available for research activities. In order to minimise bias, call centres across South Africa were asked to participate in the study (Johannesburg, Cape Town, Durban and Pretoria).

The size of the sample was influenced by the fact that structural equation modelling (SEM) requires the sample size to be greater than 200 (Hussey & Eagan, 2007). Hu and Bentler (in Spangenberg & Theron, 2005) advised that this proposed threshold should be used cautiously. Furthermore, a general rule for SEM is that five to 10 observations are required for each model parameter

estimated. Hair, Anderson, Tatham and Black (in Hussey & Eagan, 2007) recommend a sample size of 100 to 200 when using the maximum likelihood estimation (MLE) procedure. For this study 217 individuals representing seven call centres completed the questionnaire. The study population included 90 males (42%), 122 females (58%) and five respondents (2%) who did not indicate their gender. The average age of the respondents was 29.2 years; the mean organisational tenure was 3.3 years, whilst the average period of serving in a team was 1.2 years. The demographics of the respondents looked as follows: 39% white, 32% coloured, 24% African and 4% Indian. Thirty-five percent of the CCRs were from Pretoria, 49.8% from Cape Town and 15.2% from Johannesburg.

3.3.3 Data collection

The time period from sending out the formal letter asking the call centres to participate in this study to capturing all the data was approximately eight months. Each call centre gave formal, written permission before the data was officially collected. Clear instructions were given to the manager on how to complete the questionnaire; all questions and concerns were addressed. Team supervisors distributed the questionnaire to the team members at team meetings. When all the questionnaires had been completed, the researcher personally collected the data from the manager. The total response rate (completed questionnaires) was 77%.

3.3.4 Ethical considerations

Ethical issues were addressed by means of an informed consent form that was completed by each relevant stakeholder in the respective call centres. Each participant in the study also signed an informed consent form that gave a comprehensive explanation of the study (see Appendix B). Participation was voluntary. The objectives of the study were explained to each call centre manager at their place of work. Confidentiality and anonymity was assured.

3.4 MEASURING INSTRUMENTS

The final questionnaire was a nine-page, self-administered questionnaire that consisted of biographical information and four subsequent sections, with instructions for each (see Appendix C). The instructions were easy to understand and the respondents took about 10 to 15 minutes to complete the questionnaire. Each section consisted of a valid and reliable instrument that measures a specific construct. The perception of leadership effectiveness was measured with the Leadership Practices Inventory (Kouzes & Posner, 2001); engagement was measured with the nine-item Utrecht Work Engagement Scale (Schaufeli & Bakker, 2003); sense of coherence was measured with the 13-item Orientation to Life Questionnaire (Antonovsky, 1987); and team effectiveness was measured with two sections of the Team Diagnostic Survey (Wageman, Hackman & Lehman, 2005). Formal permission was received from the developers of each of these instruments to make use of them in this study. Each instrument used in the final questionnaire is discussed comprehensively below.

3.4.1 Biographical information

A biographical section was included in the questionnaire. This was used to gather information concerning the demographic characteristics of the participants (including gender, age, race, organisational tenure, period of time working as a member of the team and the name of the work team they are serving in).

3.4.2 Utrecht Work Engagement Scale (UWES)

For the purpose of this study, the shortened Utrecht Work Engagement Scale (UWES-9) was used. The UWES-9 has been shortened to nine items. The original UWES-17 measures levels of engagement on a 17-item, seven-point frequency rating scale, ranging from 0 (never) to 6 (every day) (Fourie, Rothmann & Van de Vijver, 2008). It includes the three components of work engagement: vigour, dedication, and absorption. Vigour is assessed by six items that refer to high levels of energy and resilience, willingness to invest effort, not being easily fatigued, and persistence in the face of difficulties. Those who score

high on vigour usually have much more energy, zest and stamina when working, whereas those who score low on vigour have less energy, zest and stamina as far as their work is concerned. Dedication is assessed by five items that refer to deriving a sense of significance from one's work, feeling enthusiastic and proud about one's job, and feeling inspired and challenged by it. Those who score high on dedication strongly identify with their work because it is experienced as being meaningful, inspiring and challenging. These workers usually feel enthusiastic and proud about their work. Absorption is measured by six items that refer to being totally and happily immersed in one's work and having difficulties detaching oneself from it so that time passes quickly and one forgets everything else in the outside world. Those who score high on absorption feel that they usually are engrossed in their work, they feel immersed by their work and have difficulties detaching from it because it 'carries them away'. As a consequence, everything else around them is forgotten and time seems to fly (Schaufeli & Bakker, 2003).

3.4.3 Psychometric properties of the Utrecht Work Engagement Scale

Van der Colff and Rothmann (2009) report internal consistency and reliability coefficients on the UWES for the three subscales (between 0.68 and 0.91). Improvement of the alpha coefficient (ranging from 0.78 to 0.89) seems possible without adversely affecting the internal consistency of the scale. The three-factor structure of work engagement (vigour, dedication and absorption) was not confirmed. Instead, a one-factor model of engagement reflected the best data fit. Van der Colff (as cited in Fourie *et al.*, 2008) also found evidence for a one-factor model of work engagement. Naudé and Rothmann (2006) confirmed the construct validity of the UWES in a South African sample.

On the basis of data collected in 10 different countries (N = 14 521) it was found that the original 17-item Utrecht Work Engagement Scale (UWES) could be shortened to nine items (UWES-9). The factorial validity of the UWES-9 was demonstrated using confirmatory factor analyses and the three scale scores have good internal consistency and test-retest reliability (Schaufeli & Bakker,

2003). “The UWES-9 has good construct validity and use of the 9-item version has been recommended for research. Moreover, Structural Equation Modelling showed high rank-order stabilities for the work engagement factors (between 0.82 and 0.86). Work engagement seems to be a highly stable indicator of occupational well-being” (Seppala *et al.*, 2009, p. 459).

3.4.4 Orientation to Life Questionnaire (OLQ)

The Orientation to Life Questionnaire (OLQ) is used to measure sense of coherence. The questionnaire consists of 29 items (Gropp, Geldenhuys & Visser, 2007). There are 11 items measuring comprehensibility, 10 measuring manageability and eight measuring meaningfulness. The 29 self-reporting items on various aspects of life each has seven possible statements to choose from. Respondents are requested to mark the numbers (ranging from 1 to 7) that are most applicable to them (Herbst, Coetzee & Visser, 2007). Strümpfer and De Bruin (2009, p. 2) state that “researchers who wish to use a total SOC-score may use the short form, which is less than half the length of the long form, without much loss of information or accuracy”. Hence, the 13-item short form of the OLQ was used for the purposes of this study. The 13-item version of the OLQ includes four items measuring meaningfulness, five items measuring comprehensibility and four items measuring manageability. The 13-item version of the OLQ (also known as the SOC-13) uses item numbers 4, 5, 6, 8, 9, 12, 16, 19, 21, 25, 26, 28 and 29 of the longer, 29-item version of the OLQ. Five items are reverse scored (depending on how anchors are presented) so that a high score on each item indicates a high level of meaningfulness, comprehensibility and manageability (Feldt, Leskinen, Kinnunen & Ruoppila, 2003). Answers are given on a seven-point Likert scale on which the extreme answers (i.e. 1 = never and 7 = always) are formulated for each question (Fourie *et al.*, 2008). A total score is summed, and this can range from 13, which indicates a low sense of coherence, to 91, which indicates a high sense of coherence (Pallant & Lae, 2002). This study measures sense of coherence of CCRs.

3.4.5 Psychometric properties of the Orientation to Life Questionnaire

“To our opinion there is at present no need for further testing of the SOC instrument because the findings prove the SOC instrument being reliable, valid, feasible, and cross culturally applicable. Furthermore, there is no need to develop new SOC versions” (Eriksson & Lindström, 2005, p. 463). Antonovsky (1993) reported alpha coefficients of the OLQ varying between 0.85 and 0.91 in 29 research studies. Van Schalkwyk and Rothmann (as cited in Muller & Rothmann, 2009) found an alpha coefficient of 0.75 for an 11-item OLQ, while Fourie *et al.* (2008) reported an alpha coefficient of 0.93 for a 12-item OLQ (as cited in Muller & Rothmann, 2009). High inter-correlations between the three components of meaningfulness, comprehensibility and manageability have been found in previous studies (Flannery & Flannery; Kravets, Drory & Florian, cited in Muller & Rothmann, 2009, p. 9). Pallant and Lae (2002) found that the 13-item short form of the SOC showed good internal consistency, with a Cronbach’s alpha coefficient of 0.84.

3.4.6 Leadership Practices Inventory (LPI)

The Leadership Practices Inventory (LPI) provides information on leadership behaviour and serves as a useful tool for achieving self-discovery and self-development. The LPI is usually completed by the leader (LPI-self) and observers (LPI-observer). Both the leader and the observers indicate how frequently they engage in each of 30 behaviours (six for each leadership practice). The inventory uses a 10-point frequency scale, where 1 = almost never and 10 = almost always (Kouzes & Posner, 2001).

Research indicates that trust in a leader is essential if other people are going to follow that person over time. One of the ways that trust is developed is through consistency in leader behaviour. Therefore, the closer the view of the leader is to the view of the observers, the more likely it is that the observers will trust the leader. In the ideal scenario, the leaders’ self-ratings are consistent with the observers’ ratings. In the real world, however, scores are not always consistent.

The observers may see the leader differently from the way the leader sees himself/herself, and the observers may also differ among themselves in how they see the same leader (Kouzes & Posner, 2001). For the purpose of this study, the CCRs' perceptions of their team leader's effectiveness will be measured. The team supervisor/leader of each team will not be asked to rate his/her own leadership effectiveness.

3.4.7 Psychometric properties of the LPI

The LPI has strong internal reliability, with scales generally above .80. This means that the six statements pertaining to each leadership practice are highly correlated with one another. The LPI show significant test-retest reliability (or consistency) at levels greater than .90. This means that scores from one administration of the LPI to another within a short time span (a few months) and without any significant intervening event (such as a leadership-training programme) are consistent and stable. However, the LPI scores would be expected to change from one administration to another if, in the intervening period, the respondents attended a leadership workshop. The five scales are generally independent (statistically orthogonal). Thus, the five scales corresponding to the five leadership practices do not all measure the same phenomenon. Instead, they measure five different practices, which is appropriate. Given that the items on the LPI are related to the statements that workshop participants generally make about their own or others' personal-best leadership experiences, the LPI has excellent face validity. "The LPI has excellent payoff validity, as shown by studies of the relationship between LPI scores and such variables as work-group performance, team cohesiveness, member commitment and loyalty, satisfaction (both with the job and with the leader), upward influence, and credibility" (Kouzes & Posner, 2001, p. B-1). With regard to the five leadership practices, Carless (2001) reports the following findings: Challenging the Process (alpha = .81), Inspiring a Shared Vision (alpha = .90), Enabling Others to Act (alpha = .89), Modelling the Way (alpha = .86), and Encouraging the Heart (alpha = .94).

3.4.8 Team Diagnostic Survey (TDS)

The Team Diagnostic Survey (TDS) assesses the properties of organisational work teams and has been designed specifically to be useful both in scholarly research on teams and in the practical diagnosis of teams' strengths and weaknesses (Wageman *et al.*, 2005). The TDS is useable for any type of task-performing team, and can be completed in 20 minutes or less. When completed in full, the TDS generates a profile of a team. This represents the conditions that foster team effectiveness, whilst exploring the stance of the team on the measured factors. The survey tests for team effectiveness on three dimensions (Wageman *et al.*, 2005, p. 379):

- the quality of output in terms of “meeting or exceeding standards of quantity, quality, and timeliness” (team effectiveness);
- group procedures that promote collaboration (enabling structure); and
- the group experience that yields benefits for individual members (supportive organisational context).

According to the TDS, team effectiveness increases when “people participate in ‘real teams’ as opposed to other groups. Such teams exhibit member interdependence, stability, and have well defined membership barriers” (Wageman *et al.*, 2005, p. 379).

The TDS is organised into 10 sections. Section 1 captures general descriptions of the team. Sections 2 to 7 assess the model-specified conditions for team effectiveness to transpire. Sections 8 and 9 provide measures of the three effectiveness criteria. Section 10 asks for biographical information on the respondents. In the actual instrument, items are intermixed within sections. Except where otherwise noted, all items use a five-point scale ranging from highly inaccurate = 1 to highly accurate = 5. Group-level composite scores are computed by averaging responses across items and respondents. Reverse scored items are indicated with “R” (Wageman *et al.*, 2005).

For the purpose of this study, only two sections (Sections 8 and 9) of the TDS were used. These two sections provide measures of the three effectiveness criteria. Section 8 gives 13 statements in relation to which the team member has to mark the statement that is accurate in describing how members of the team work together. Each statement is marked on a five-point scale, where 1 = very inaccurate and 5 = very accurate. This section consists of four subscales, namely effort, performance strategy, knowledge and skill, and quality of interaction.

Section 9 presents 13 statements about how a member feels about his/her involvement with the team. Team members must indicate if they agree with each statement by giving each a point on a five-point scale, where 1 = strongly disagree and 5 = strongly agree. This section consists of four subscales, namely relationship satisfaction, internal motivation, general satisfaction and growth satisfaction. Figure 3.1 is a graphic representation of the model on which the TDS is based.

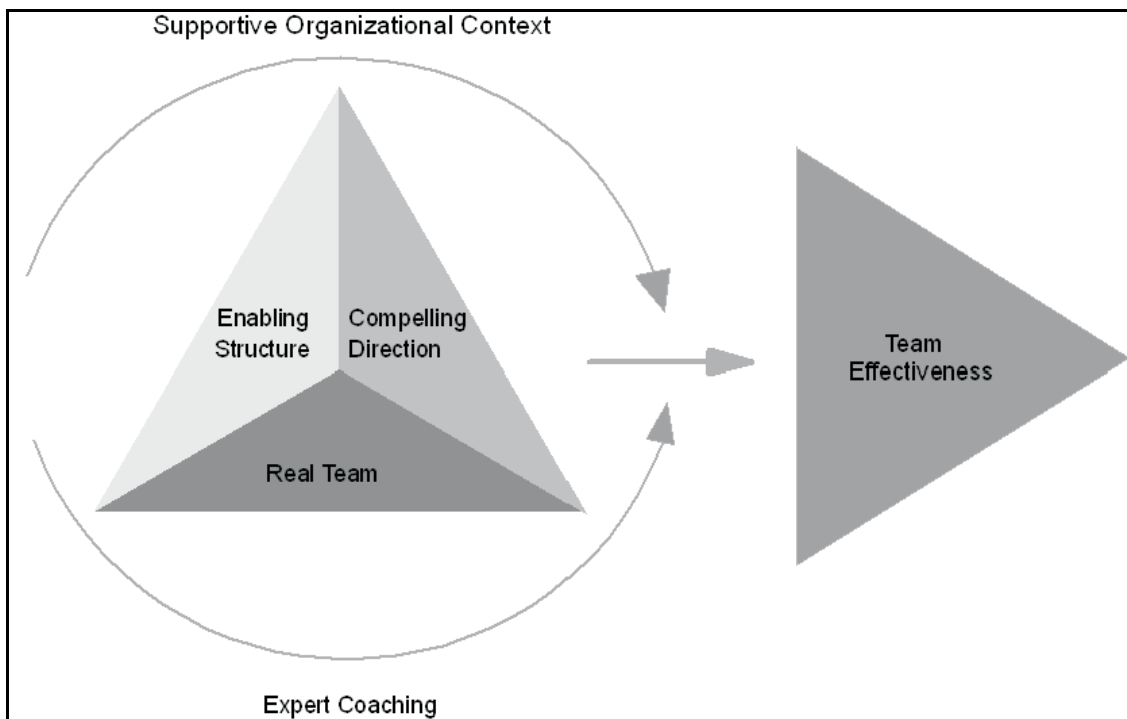


Figure 3.1 Team Diagnostic Survey (TDS) model (Wageman *et al.*, 2005)

3.4.9 Psychometric properties of the Team Diagnostic Survey (TDS)

“The psychometric properties of the TDS are satisfactory, based on analyses of data from 2,474 members of 321 teams in a diversity of organisations”, and the instrument’s psychometric properties are “strong enough for it to be used in scholarly research on team behaviour and performance” (Wageman *et al.*, 2005, p. 373). No research studies have tested the psychometric properties of this instrument in South Africa.

3.5 DATA CAPTURING AND METHODS USED FOR DATA ANALYSIS

Data was captured by the researcher using a Microsoft Excel Spreadsheet. A control sheet was created to minimise error in the datasheet. When capturing scores for each item, upper and lower limits were set for each item. Thus, if an item could only be rated 0-6 and 7 was entered; it automatically showed ‘error’. A further method used to minimise error was to only capture 10 questionnaires at any given time. Regular backups were made and random spot checks were done to ensure that no mistakes were made during data capturing.

3.5.1 Missing values and reverse scores

Missing values presented a problem and had to be addressed before the analyses could proceed (Theron, 2007). Initially, the Excel spreadsheet containing the data included 217 respondents. Two respondents left out a large number of items in the questionnaire. For this reason they were not taken into account as part of the sample. The final number of respondents used in the data analyses was 215. A relatively small number of respondents failed to respond to every item. The multiple imputation procedure was used to replace the missing values for the respondents who did not complete all the items. “Imputation refers to a process of substituting real values for missing values. The substitute values replaced for a case are derived from one or more other cases that have a similar response pattern over a set of matching variables” (Theron, Spangenberg & Henning, 2004, p. 37). The questionnaire that was administered comprised a

number of questions that were phrased negatively. Hence, various items were reverse scored before the data was analysed statistically.

3.5.2 Data analyses

Data was captured using Microsoft Excel. Various statistical techniques were used to analyse the data and test the engagement model. These include:

- Cronbach's alpha for testing reliability;
- Confirmatory factor analysis (CFA) for evaluating measurement models;
- Exploratory factor analysis (EFA) on two constructs where CFA indicated unsatisfactory model fit;
- correlations to test univariate relationships;
- regression analysis to test multivariate effects on engagement (E); and
- Structural equation modelling (SEM) path analysis.

SEM is a general statistical model that “integrates multivariate techniques such as regression and factor analysis into a powerful tool for refinement of complex concepts” such as engagement (Larsson & Kallenberg, 1999, p. 52). SEM consists of two components, a measurement model and a structural model (Hussey & Eagan, 2007, p. 303). Finally, partial least squares (PLS) path analysis was conducted as an alternative method for evaluating the structural model.

The following software was used to analyse the data:

- Statistica 9 for general descriptive statistics, Cronbach's alphas and EFA;
- LISREL 8.8 for CFA and SEM path analysis; and
- SmartPLS for partial least squares (PLS) path analysis.

3.6 SUMMARY

This chapter presented the research design and methodology that was followed to obtain answers to the research-initiating questions. The investigation was conducted as a cross-sectional study for which a primary data design was

followed. The method of sampling was a non-probability, purposive technique. This chapter described the participants in the study and elucidated the questionnaire that was used for this study. Further, it reported the psychometric properties of each instrument that was used in the final questionnaire. These included the Utrecht Work Engagement Scale (UWES-9); the 13-item version of the Orientation to Life Questionnaire (OLQ); the Leadership Practices Inventory (LPI) and two sections of the Team Diagnostic Survey (TDS). The substantive research hypotheses were presented and, finally, data capturing and the methods used for data analysis were explained. Chapter 4 presents the results of the data analyses and the interpretation thereof in detail.

CHAPTER 4

RESULTS

4.1 INTRODUCTION

In this chapter the analysis of the data is reported and interpreted. The main aim of this chapter is to report on the structural equation modelling exercise, firstly by validating the measurement model fit and, secondly, by fitting the proposed engagement structural model. The measurement model specifies a confirmatory factor analysis (CFA) of proposed relationships between the manifest (observed) indicators and the latent (theoretical) constructs. The structural model specifies the hypothesised relationships among the latent constructs (Hussey & Eagan, 2007), hence fitting the proposed engagement model (Figure 1.1). The theoretical engagement model was derived from the literature and is stated in the form of hypothesised structural relationships between latent variables. The hypothesised structural relationships were used to formulate specific statistical hypotheses. The main findings of the statistical analyses used to test these substantive hypotheses are reported. Reporting is done in the following order:

- Cronbach's alphas for testing reliability;
- Confirmatory factor analysis (CFA) for evaluating measurement models;
- Exploratory factor analysis (EFA) on two constructs where CFA indicated unsatisfactory model fit;
- Correlations to test univariate relationships;
- Regression analysis to test multivariate effects on engagement (E) and structural equation modelling (SEM) path analysis (which did not provide any fit on the structural model); and
- Partial least squares (PLS) path analysis as an alternative method for evaluating the structural model.

4.2 VALIDATING THE MEASUREMENT MODEL

The measurement model specifies a confirmatory factor analysis (CFA) of proposed relationships between the manifest indicators and the latent constructs (Hussey & Eagan, 2007, p. 307). The evaluation of the model fit should be derived from a variety of sources and based on several criteria that can assess model fit from a diversity of perspectives (Diamantopoulos & Siguaw, 2000). Validating the measurement model is primarily accomplished by confirmatory factor analysis (CFA). Before evaluating the measurement model, item analysis was done on all the items used in the engagement questionnaire (Appendix C).

4.2.1 Item analysis

An item analysis identifies and eliminates items not contributing to an internally consistent description of the various latent dimensions of the construct in question (Theron, 2007). Item analysis was performed on the items of all the measuring instruments after imputation. Items that did not contribute to an internally consistent description of the latent variables (measured by the instrument) were flagged as problematic. These items indicate a substantial increase in Cronbach's alpha and overall scale reliability when deleted (Spangenberg & Theron, 2005). Item analysis gave an initial indication of the appropriateness of the subsequent analysis procedures. Table 4.1 is a table summarising the Cronbach's alpha and average inter-item correlation for each subscale. Note that 0.7 was used as the measure for acceptable reliability. All the alphas complied with this measure. The Cronbach's alpha of the subscales of leadership effectiveness ranged between 0.89 and 0.94. The engagement subscales ranged from 0.72 to 0.85. With the sense of coherence (SOC) items, the Cronbach's alphas ranged from 0.58 to 0.71, which is still acceptable. Team effectiveness in section 4A and 4B seemed to be problematic. The Cronbach's alphas of the eight different subscales ranged from 0.42 to 0.65, which is not acceptable. The inter-item correlations were shown to be positive on all the subscales. After close inspection, it was decided not to delete any items, but to do confirmatory factor analyses (CFA) on all the items.

Table 4.1 Cronbach's Alpha and Average Inter-item Correlation for Subscales

<u>Subscale</u>	<u>Cronbach's alpha</u>	<u>Average inter-item correlation</u>
Leadership effectiveness:		
Challenging the process (C)	0.92	0.70
Inspiring vision (I)	0.94	0.74
Enabling others to act (EA)	0.89	0.62
Modelling the way (M)	0.93	0.70
Encouraging the heart (EH)	0.93	0.73
Engagement:		
Vigour (VI)	0.85	0.67
Dedication (DE)	0.85	0.68
Absorption (AB)	0.72	0.48
Sense of coherence:		
Meaningfulness (ME)	0.58	0.26
Comprehensibility (COM)	0.65	0.28
Manageability (MA)	0.71	0.4
Team effectiveness:		
Effort (EFOT)	0.59	0.33
Performance strategy (STRT)	0.47	0.24
Knowledge and skill (TLNT)	0.29	0.15
Quality of interaction (IPRL)	0.67	0.34
Growth satisfaction (GROWSAT)	0.48	0.27
Relationship satisfaction (RELSAT)	0.42	0.25
General satisfaction (GSAT)	0.56	0.32
Internal motivation (IMOT)	0.42	0.21

4.2.2 Confirmatory factor analysis (CFA) and exploratory factor analysis (EFA)

Confirmatory factor analysis (CFA) was done on each scale/section (leadership effectiveness, engagement, sense of coherence and team effectiveness) with LISREL 8.80. Section 1 (leadership effectiveness) had too many items for one CFA, hence different CFA sets were done for each subscale of team effectiveness. The CFA component allows researchers to specify a measurement model to assess how well the observed indicators measure the theoretical latent variables they are supposed to reflect (Oehley, 2007). The findings for the subscales of leadership effectiveness were satisfactory, as seen in Table 4.2.

Table 4.2 CFA for Subscales of Leadership Effectiveness (LE)

Subscale	RMSEA	P-value for close fit	Goodness of fit index	Adjusted goodness of fit index	Variance extracted	Construct reliability
Challenging the process (C)	0.031	0.65	1.00	1.00	0.71	0.94
Inspiring vision (I)	0.085	0.08	1.00	1.00	0.76	0.95
Enabling others to act (EA)	0.036	.60	1.00	1.00	0.71	0.94
Modelling the way (M)	0.04	0.52	1.00	1.00	0.75	0.95
Encouraging the heart (EH)	0.036	0.6	1.00	1.00	0.76	0.95

All factor loadings were significant at a 5% significance level and greater than 0.5

An investigation of the RMSEA of the leadership effectiveness subscales showed that they were acceptable, as they ranged from 0.031 to 0.085. For RMSEA, values of 0.08 or below indicate acceptable fit, values below 0.05 indicate good fit, and values below 0.01 indicate outstanding fit. For the p-value for close fit,

values > 0.05 indicate good fit. In this case the subscales ranged from 0.08 to 0.65, thus it was found to have good fit. For the goodness of fit index (GFI), values closer to 1 and > 0.90 represent good fit. All subscales were found to have a GFI of 1. For the adjusted goodness of fit index (AGFI), values closer to 1 indicate better fit, with values > 0.90 indicating good fit. In this case all the AGFI were 1, thus indicating good fit.

Table 4.3 CFA for Subscales of Engagement (E), SOC and Team Effectiveness (TE)

Section	RMSEA	P-value for close fit	Goodness of fit index	Adjusted goodness of fit index	Variance extracted	Construct reliability
Section 2 Engagement	0.076	0.056	0.99	0.99	0.52 (AB) 0.74 (DE) 0.67 (VI)	0.76 (AB) 0.90 (DE) 0.86 (VI)
Section 3 SOC	0.094	0.00	0.97	0.95	0.39(COM) 0.44 (MA) 0.32 (ME)	0.73 (COM) 0.76 (MA) 0.64 (ME)
Section 4A How members work together	0.14	0.00	0.93	0.90	Not applicable, hence EFA was done	Not applicable, hence EFA was done
Section 4B Feeling of involvement in the team	0.12	0.00	0.94	0.91	Not applicable, hence EFA was done	Not applicable, hence EFA was done

Factor loadings were significant at a 5% significance level and greater than 0.5 for E

The findings for the different scales of engagement (absorption, dedication and vigour) and sense of coherence (comprehensibility, meaningfulness and manageability) were also found to be satisfactory and are reported in Table 4.3. The RMSEA for engagement and SOC was shown to be acceptable, as they ranged from 0.076 to 0.094. Furthermore, engagement and SOC proved to have

an acceptable p-value for close fit, and both had an acceptable GFI and AGFI. However, team effectiveness (which is divided into Section 4A, measuring '*how members work together*', and 4B, measuring '*feeling of involvement in the team*') was found to be problematic. The data presented in this research did not support the postulated subscales identified by Wageman, Hackman and Lehman (2005) in the Team Diagnostic Survey (TDS). The RMSEA in Section 4A was 0.14, and in section 4B it was 0.12, which is more than the recommended 0.05. It was decided to do an exploratory factor analysis (EFA) to determine the number of factors in Sections 4A and 4B respectively. Factor analysis is a statistical procedure "designed to take a larger number of items and reduce them to a smaller number of factors that describe these measures with parsimony" (George & Mallery, 2004, p. 371).

After doing the EFA, it was determined that team effectiveness (which is measured by '*how members work together*' and '*feeling of involvement in the team*') did not have a total of four factors in each section, as determined initially. The EFA determined that there were only two factors for '*how members work together*' and two factors for '*feeling of involvement in the team*'. '*How members work together*' was initially postulated to consist of four subscales, namely effort, performance strategy, knowledge and skill, and quality of interaction. The two factors that were finally identified from the EFA for '*how members work together*' were *dedication* and *equity*. *Dedication* refers to members of the team being committed and innovative, sharing knowledge and expertise, learning from experience and being energised and uplifted by other team members. As reported in Table 4.4, items 3* and 6* did not work in on this new-found factor, and hence they were removed. *Equity* refers to whether members do their fair share of work, notice changes in the situation or the level of unpleasantness, how team members react when their actions are corrected and whether they carry out plans made to proceed with a task.

Table 4. 4 Factor Loadings on 'How Members Work Together'

Item	Questions for each item	Factor 1 Dedication	Factor 2 Equity
1	Members demonstrate their commitment to our team by putting in extra time and effort to help it succeed.	0.553688	0.013476
2	Our team often comes up with innovative ways of proceeding with the work that turn out to be just what is needed.	0.602541	-0.078165
3*	How seriously a member's ideas are taken by others on our team often depends more on who the person is than on how much he or she actually knows.	-0.308749	0.444927
4	There is a lot of unpleasantness among members of this team.	0.017853	0.505311
5	Everyone on this team is highly motivated to have the team succeed.	0.577387	0.008006
6*	The longer we work together as a team, the <i>less</i> well we do.	0.096581	0.395647
7	Some members of our team do not carry their fair share of the overall workload.	0.108156	0.526356
8	Members of our team actively share their special knowledge and expertise with one another.	0.527824	0.073084
9	Our team often falls into mindless routines, without noticing any changes that may have occurred in our situation.	0.129691	0.430742
10	Working together energises and uplifts members of our team.	0.574453	0.001815
11	Our team has a great deal of difficulty actually carrying out the plans we make for how we will proceed with the task.	-0.107397	0.614703
12	Every time someone attempts to correct a team member whose behaviour is not acceptable, things seem to get worse rather than better.	0.062184	0.585310
13	Our team is quite skilled at capturing the lessons that can be learned from our work experiences.	0.493148	-0.016618

* Indicates deleted items; bold items are indicative of the factor loading on the item

The two factors (*dedication* and *equity*) were determined by means of parallel analysis. In parallel analysis, the focus is on the number of components derived from random data and the process involves comparing the actual eigenvalues with the random data eigenvalues (O’Conner, 2000). Eigenvalues refer to “the proportion of variance explained by each factor” (George & Mallery, 2004, p. 371). Oblique varimax rotation was used to find the factor loadings, because the two factors correlated with each other. The results of the parallel analysis determined that 32.3% of the variance was explained by *dedication* (factor 1, with an eigenvalue of 4.2) and 14.6% by *equity* (factor 2, with an eigenvalue of 1.9).

Section 4B measures the ‘*feeling of involvement in the team*’ and consists of four subscales, namely relationship satisfaction, internal motivation, general satisfaction and growth satisfaction. The two factors that were identified were *internal satisfaction* and *functional satisfaction*. All the items loaded on one of the two factors (i.e. internal satisfaction or growth satisfaction), thus no items were deleted. *Internal satisfaction* refers to learning a lot from the work; enjoying the work; feeling personal satisfaction if the team succeeds; feeling bad when the team performs poorly; enjoying working with teammates and getting to know them; advancing personal knowledge and skills; feeling personal accomplishment if the team does well; and having personal satisfaction with the team. *Functional satisfaction* refers to relations with team members; whether own creativity and initiative are suppressed by the team; whether working in the team is frustrating; and whether own feelings are affected by team performance. Oblique rotation determined that the two factors were found not to correlate with each other, thus there was no shared variance between the two factors.

Table 4.5 presents the questions that were asked in Section 4B (feeling of involvement in the team) and the factors, internal satisfaction and functional satisfaction. The figures presented in *bold* are indicative of the factor loading on the item.

Table 4.5 Factor Loadings on ‘Feeling of Involvement in the Team’

Item	Questions for each item	Factor 1 Internal satisfaction	Factor 2 Functional satisfaction
1	I learn a great deal from my work on this team.	0.712891	0.110047
2	My relations with other team members are strained.	0.022185	0.783458
3	I enjoy the kind of work we do in this team.	0.671509	0.004838
4	I feel a real personal satisfaction when our team does well.	0.594172	0.018059
5	I feel bad and unhappy when our team has performed poorly.	0.502844	-0.077100
6	I very much enjoy talking and working with my teammates.	0.703021	0.188749
7	My own creativity and initiative are suppressed by this team.	0.047546	0.775452
8	The chance to get to know my teammates is one of the best parts of working on this team.	0.698173	0.085589
9	Working on this team is an exercise in frustration.	0.306136	0.721993
10	My own feelings are not affected one way or the other by how well our team performs.	-0.045435	0.529747
11	Working on this team stretches my personal knowledge and skills.	0.770044	0.049689
12	When our team has done well, I have done well.	0.612046	0.003884
13	Generally speaking, I am very satisfied with this team.	0.701385	0.236529

Bold items are indicative of the factor loading on the item

Item analyses were done for team effectiveness (Section 4A and 4B) again. The findings were acceptable, with the Cronbach’s alphas for the subscales (new factors) were as follows: dedication = 0.8, equity = 0.76, internal satisfaction = 0.84 and functional satisfaction = 0.67. This is indicated in Table 4.6.

Table 4.6 Item Analysis for New factors of Team Effectiveness

<u>Subscale</u>	<u>Cronbach's alpha</u>	<u>Average inter-item correlation</u>
New factors for team effectiveness:		
Dedication (DEDIC)	0.80	0.41
Equity (EQUIT)	0.76	0.40
Internal satisfaction (INTSAT)	0.84	0.38
Functional satisfaction (FUNCSAT)	0.67	0.35

Table 4.7 reports the confirmatory factor analyses that were done on team effectiveness (Section 4) the second time. The findings were very positive (as could be expected), because the CFA was done on the same data set as that on which the EFA was done. Ideally, one should take a new sample to complete Sections 4A and 4B of the engagement questionnaire and then test the new, independent data set to see if the findings are still the same.

Table 4.7 Confirmatory Factor Analyses for Team Performance

Subscale	RMSEA	P-value for close fit	Goodness of fit index	Adjusted goodness of fit index	Variance extracted	Construct reliability
How members work together	0.048	0.35	.99	0.98	0.48 (dedic)	0.85 (dedic)
					0.48 (equit)	0.82 (equit)
Feeling of involvement	0.074	0.013	0.98	0.96	0.44 (funcsat)	0.73 (funcsat)
					0.49 (intsat)	0.90 (intsat)

All factor loadings were significant at a 5% significance level and greater than 0.5

When looking at the RMSEA of 'how members work together' and 'feeling of involvement' in team effectiveness, it proved to be acceptable as the values ranged from 0.048 to 0.074. For the p-value for close fit, the subscales ranged

from 0.35 to 0.013; this too was found to be acceptable. GFI showed good fit, as the subscales were found to range between 0.99 and 0.98. For AGFI, the values ranged between 0.98 and 0.96, indicating good fit.

4.3 FITTING THE STRUCTURAL MODEL

Whilst the previous section (measurement model) specified a CFA of proposed relationships between the manifest (observed) indicators and the latent (theoretical) constructs, the structural model will specify the hypothesised relationships among the latent constructs (Hussey & Eagan, 2007). Stated differently, this section reports on the total fit of the engagement model.

An attempt was made to fit the original model, but the model did not want to converge in LISREL 8.80. LISREL allows for the evaluation of both a measurement model and a structural equation model. The fact that the model did not converge possibly was an indication that the sample size was too small for the number of parameters that had to be tested. The only solution was to modify the model by removing two of the path coefficients. The engagement model depicted in Chapter 1 (Figure 1.1) was found to require modification after statistical analyses of the model. As this study focuses mainly on determining factors that lead to engagement, it was decided to remove the path coefficients **not** leading directly to engagement. As seen in the literature review, the evidence is stronger for SOC to have a positive significant impact on team effectiveness than vice versa. Hence, the path coefficient pointing from team effectiveness to SOC was removed. The same applies to engagement having a positive, significant effect on team effectiveness. The literature indicates that team effectiveness has a greater effect on engagement than vice versa. For this reason, the path coefficient pointing from engagement to team effectiveness was removed. Figure 4.1 graphically portrays the revised engagement model.

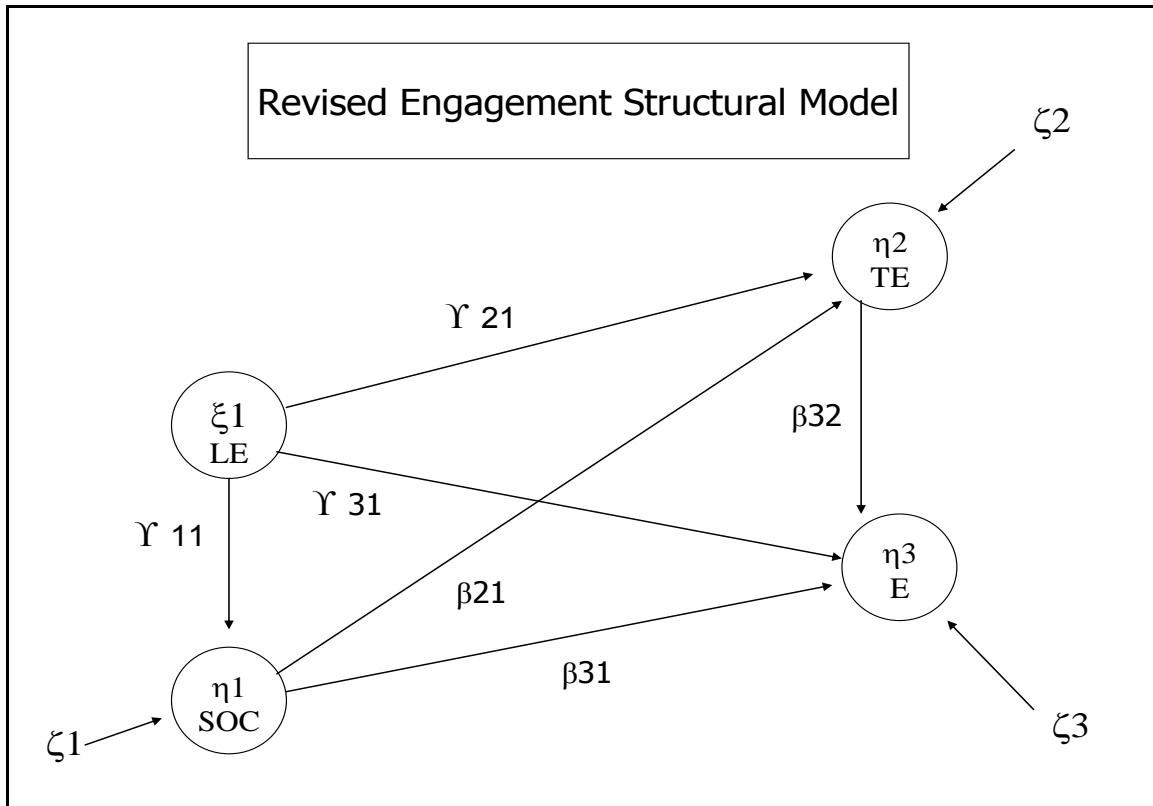


Figure 4.1 Revised Engagement Structural Model

This revised model differs from the initial engagement model (presented in Figure 1.1) in the sense that the arrow pointing from TE to SOC and the arrow pointing from E to TE have been removed.

4.3.1 Correlation analyses and reliability analyses of latent variables

The correlation coefficient (r) represents the strength of the correlation between two variables by means of a number ranging from -1 to +1. A correlation of $r = 1$ indicates a perfect positive relationship, while $r = -1$ indicates a perfect negative correlation. A value of 0 indicates that the variables are perfectly independent (Saunders, Lewis & Thornhill, 2007).

Probability (also known as significance) is a measure of the rarity of a particular statistical outcome given that there is actually no effect. Significance levels of 5% ($p < .05$) were used as a guideline for testing significant results (rejecting the null hypothesis). All correlations were found to be statistically significant at the 1%

level ($p < .01$). Although all the correlations were significant, three of them proved to be weak correlations. Table 4.8 reports the findings of the three weak correlations: leadership effectiveness vs. engagement ($r = 0.35$), leadership effectiveness vs. SOC ($r = 0.19$), and SOC vs. team effectiveness ($r = 0.25$). Leadership effectiveness vs. engagement ($r = 0.35$), engagement vs. team effectiveness ($r = 0.46$) and engagement vs. SOC ($r = 0.42$) proved to have a medium correlation. Leadership effectiveness vs. team effectiveness had a strong correlation ($r = 0.51$).

Furthermore, Table 4.8 also reports the final mean scores of the four constructs (team effectiveness = 3.7, SOC = 4.67, engagement = 4.18 and leadership effectiveness = 7.51). In relation to determining the reliability of the latent variables, the findings were satisfactory. The Cronbach's alpha of leadership effectiveness was 0.97, that of engagement was 0.90, SOC was 0.80 and team effectiveness was 0.70. The inter-item correlations were all found to be positive and satisfactory.

Table 4.8 Mean Scores and Product-Momentum Correlations

Scale	Mean score	Standard deviation	Cronbach's alpha	Average inter-item correlation	1	2	3
1. Team effectiveness	3.7	0.54	0.70	0.37	-	-	-
2. Sense of coherence	4.67	1.05	0.80	0.57	0.25*	-	-
3. Engagement	4.18	1.11	0.90	0.75	0.46*+	0.42*+	-
4. Leadership effectiveness	7.51	1.95	0.97	0.89	0.51*++	0.19*	0.35*+

* $p < .01$ – statistically significant

+ $r > .30$ – practically significant (medium effect)

++ $r > .50$ – practically significant (large effect)

4.3.2 Multiple regression analysis

Following the correlation analysis, a multiple regression analysis was conducted to test the relationships of leadership effectiveness, SOC and team effectiveness with engagement. Multiple regression analysis is the process of calculating a coefficient of multiple determination and a regression equation using two or more independent variables and one dependent variable (Saunders *et al.*, 2007). Multiple regression analysis can be used for hypothesis testing. “A significant regression coefficient indicates that the independent variable is associated with the dependent variable at higher than chance” (Terre Blanche, Durrheim & Painter, 2006, p. 259). R^2 refers to the percentage of accountable variation. The R^2 for the multiple regression analysis was found to be 0.32, which means that 32% of the variance in engagement in call centres is determined by SOC, team effectiveness and leadership effectiveness. Thus, 68% of engagement is determined by other factors that were not considered in this study. Table 4.9 reports that the leadership effectiveness was close to being significant ($p = .05$), while SOC and team effectiveness were significant ($p < .01$). Thus, the regression results support the previously mentioned correlation analyses.

Table 4.9 Results of Multiple Regression Analysis for Engagement

	Standardised beta coefficient	Std err. of b	T (211)	P-value
Intercept			-0.870730	0.384891
LE	0.129789	0.066087	1.963905	0.050854
SOC	0.319077	0.058810	5.425575	0.000000
TE	0.309385	0.066981	4.619030	0.000007

“Although it is often said that correlation does not imply causation, path analysis uses theoretical assumptions and regression analytic techniques to enable researchers to build causal models from correlational data” (Terre Blanche *et al.*, 2006, p. 259). Thus, with the results that were obtained, the PLS (partial least

squares) path modelling approach was used to fit the model by making use of the SmartPLS software program. PLS path modelling (PLSPM) - also known as PLS path analysis - is a prediction-oriented structural equation modelling technique. It is based on the partial least squares (PLS) algorithm. PLSPM has gained increasing popularity across many scientific disciplines (business and social sciences), as it is an easy, powerful estimation technique for structural equation models. It is used to predict endogenous latent variables and to estimate as well as test relationships between latent variables (causal analysis). It is characterised by robustness, prediction orientation and its capability to estimate formative measurement models (Hansmann & Ringle, 2004).

The path diagram was converted into a set of structural and measurement models. The outer-model measurement fit was found to be satisfactory, thus the subscale factors all measure what they are supposed to measure. Table 4.10 reports that the composite reliability ranged between 0.79 and 0.98, which indicates acceptable reliability. The Cronbach's alpha ranged between 0.69 and 0.97, also indicative of acceptable reliability.

Table 4.10 Summary Statistics for the PLS Path Model

Variables	Composite reliability (inner model)	Cronbach's alpha (inner model)	R square (outer model)
Engagement	0.9346	0.8951	0.3821
Leadership effectiveness	0.9802	0.9747	0
SOC	0.8728	0.7979	0.0473
Team effectiveness	0.7983	0.6931	0.3175

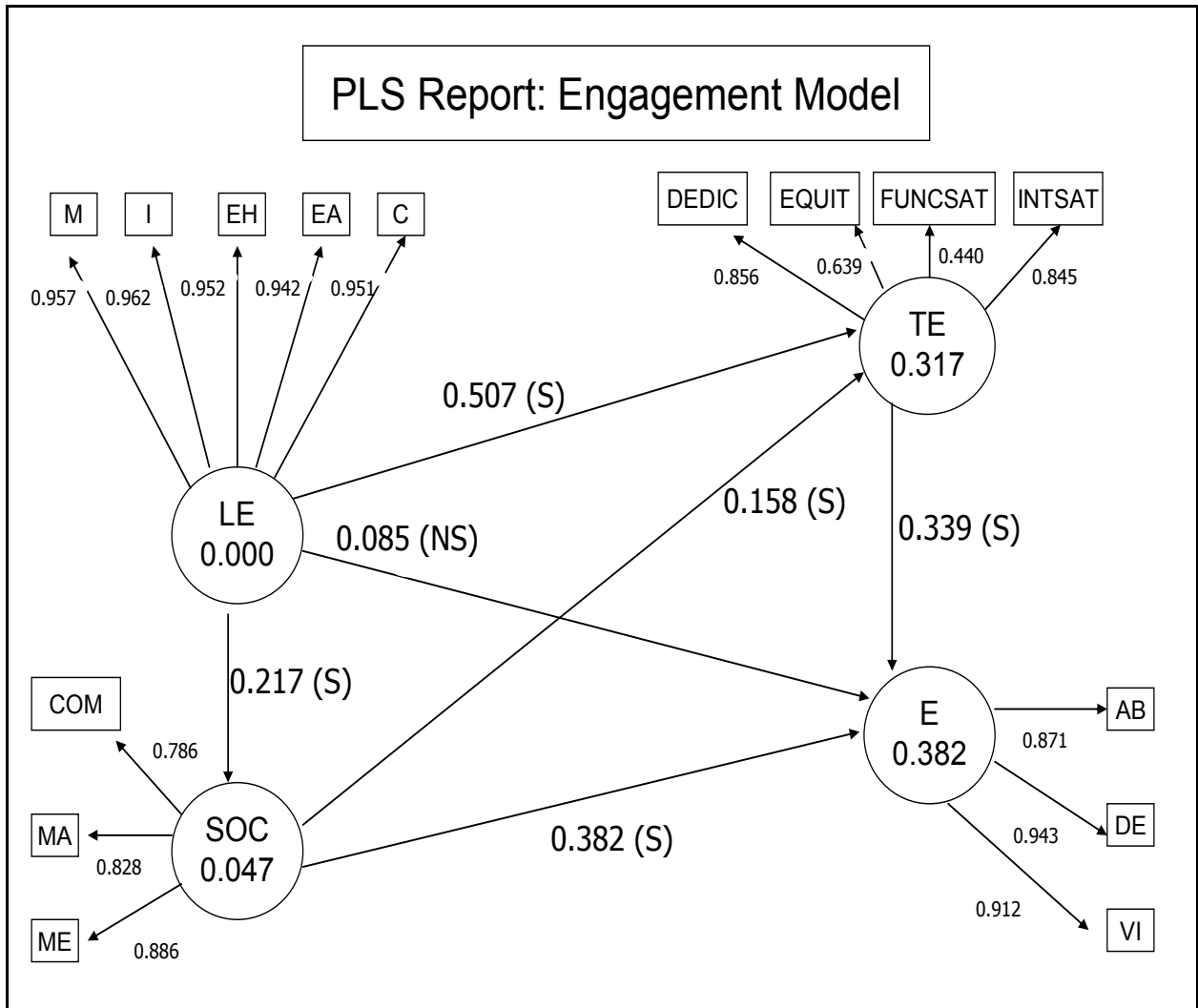
Confidence intervals on the factor loadings were determined using bootstrap analyses. Significance was determined by checking if zero falls within the 95% confidence interval. The PLS path coefficient indicates the "strength" of the path between two variables. The standard path coefficient can range from -1 to +1. A value of 0 indicates that there is no path (see Table 4.11).

Table 4.11 PLS Path Analysis for the Engagement Model

	PLS path coefficient	Bootstrap lower	Bootstrap upper	Significance
Leadership effectiveness -> Engagement	0.0847	-0.0583	0.2233	Non-significant
Leadership effectiveness -> SOC	0.2175	0.0969	0.3484	Significant
Leadership effectiveness -> Team effectiveness	0.5074	0.3862	0.613	Significant
SOC -> Engagement	0.3817	0.2602	0.4943	Significant
SOC -> Team effectiveness	0.1584	0.0493	0.2796	Significant
Team effectiveness -> Engagement	0.3386	0.1983	0.4821	Significant

In the PLS path analysis, depicted in Figure 4.2, the following findings surfaced: the path coefficient from leadership effectiveness to engagement was 0.085, which signifies that there is no significance. However, all other PLS path coefficients in the model were found to be significant. Hence the following findings: leadership effectiveness to SOC (0.217); leadership effectiveness to team effectiveness (0.507); SOC to engagement (0.382); SOC to team effectiveness (0.158); and team effectiveness to engagement (0.339).

Figure 4.2 shows the PLS total model fit. In this model, statistically significant and non-significant standardised paths are shown. The inner-model measurement fit was found to be satisfactory, thus the subscale factors all measure what they are supposed to measure (refer back to Table 4.10 – Summary Statistics for the PLS Path Model). When looking at the outer-model measurement, only one path was found to be not significant.



(S) indicates a significant path and (NS) indicates a non-significant path

Figure 4.2 PLS Report for the Engagement Model

The PLS results show that there is no significant relationship between leadership effectiveness and engagement (LE = 0). The other paths were all found to be significant: SOC = 0.0473; team effectiveness = 0.3175; engagement = 0.382. This, once again, confirms that which was found previously in the regression analyses.

4.5 REPORTING AND INTERPRETING FINAL SCORES

Final total scores were reported for each team in the feedback reports for the participating call centres. Final scores for each team were reported for

engagement, team effectiveness, leadership effectiveness and SOC. Table 4.12 shows the average scores for each team that participated in the study. Note that fictitious team names are given to ensure confidentiality.

Table 4.12 Mean Scores of Teams for Each Variable

Team name	Number of CCRs	Mean score: Leadership effectiveness	Mean score: Engagement	Mean score: SOC	Mean score: Team effectiveness	
					How members work together	Feeling of involvement in the team
A	6	8.34	5.09	2.69	3.46	3.65
AA	28	7.50	3.74	3.92	3.12	3.63
AB	5	8.93	4.84	3.4169	3.08	3.57
AC	4	8.28	4.02	3.25	3.19	3.50
AD	4	5.83	3.50	4.38	3.38	3.38
AE	5	9.20	4.28	2.43	3.18	3.53
AF	3	8.60	4.25	3.79	3.41	3.84
AG	2	5.18	4.33	3.84	2.69	3.73
AH	2	6.66	5.00	3.23	3.26	3.76
AI	2	6.70	5.05	3.57	3.26	3.80
AJ	2	5.75	3.00	4.26	2.69	3.03
AK	3	7.67	3.81	3.38	3.00	3.38
AL	2	8.58	3.17	3.34	2.84	3.26
AM	1	8.33	2.88	5.69	3.07	3.23
AN	1	9.53	5.12	3.15	3.15	3.46
AO	1	6.66	5.66	4.84	3.23	3.61
AP	1	8.36	5.11	2.76	2.92	3.61
AQ	3	8.14	4.40	3.67	3.74	3.64
AR	16	5.66	4.03	3.55	3.23	3.48
AS	9	8.65	4.82	3.50	3.24	3.75
AT	10	8.65	4.89	3.15	3.19	3.82
AU	3	7.96	4.48	3.64	2.97	3.56

Team name	Number of CCRs	Mean score: Leadership effectiveness	Mean score: Engagement	Mean score: SOC	Mean score: Team effectiveness	
					How members work together	Feeling of involvement in the team
B	9	7.26	3.37	3.87	2.89	3.45
C	5	8.50	3.88	4.13	3.32	3.47
D	6	6.71	4.00	4.15	3.30	3.55
E	3	7.87	4.07	3.76	3.02	3.58
F	4	6.90	5.11	3.63	3.32	3.88
G	2	7.53	3.10	4.03	3.11	3.61
H	1	7.40	5.00	5.61	3.76	3.76
I	11	8.25	4.20	3.42	3.01	3.70
J	9	9.10	4.72	3.65	3.10	3.74
K	11	6.66	4.28	3.48	3.11	3.37
L	8	6.62	4.11	3.54	2.97	3.53
M	6	7.51	5.05	3.27	3.28	3.62
N	9	5.70	4.12	3.58	3.11	3.48
O	1	1.31	3.22	3.61	3.46	2.84
P	1	9.73	0.44	2.61	3.23	3.15
Q	1	8.72	3.44	2.20	3.07	3.15
R	1	8.16	5.44	4.00	3.61	4.15
S	1	9.33	5.00	2.23	3.15	3.53
T	1	7.31	3.12	4.33	3.38	4.00
U	1	9.62	4.00	4.77	None	3.50
V	1	1.00	1.33	4.75	2.07	3.00
W	2	9.25	5.05	3.50	3.65	3.84
X	3	7.62	4.03	4.11	3.10	3.46
Y	4	8.91	4.11	4.13	3.36	3.36
Z	3	8.45	3.51	4.00	3.00	3.38

4.4.1 Interpreting the engagement scores

In this study, the respondents' average scores for the dimensions of engagement were as follows: vigour = 3.99; dedication = 4.35; absorption = 4.21. The results are displayed in Table 4.13.

Table 4.13 Scoring the UWES With Mean Scores

Dimensions	Median	Mean	Standard deviation
Vigour	4.0	3.99	1.26
Dedication	4.67	4.35	1.28
Absorption	4.33	4.21	1.14

The total level of engagement of the respondents was found to be 4.18 on average. Figure 4.3 displays the results of the total engagement level for the CCRs, with the median = 4.44, the mean = 4.18 and the standard deviation = 1.11.

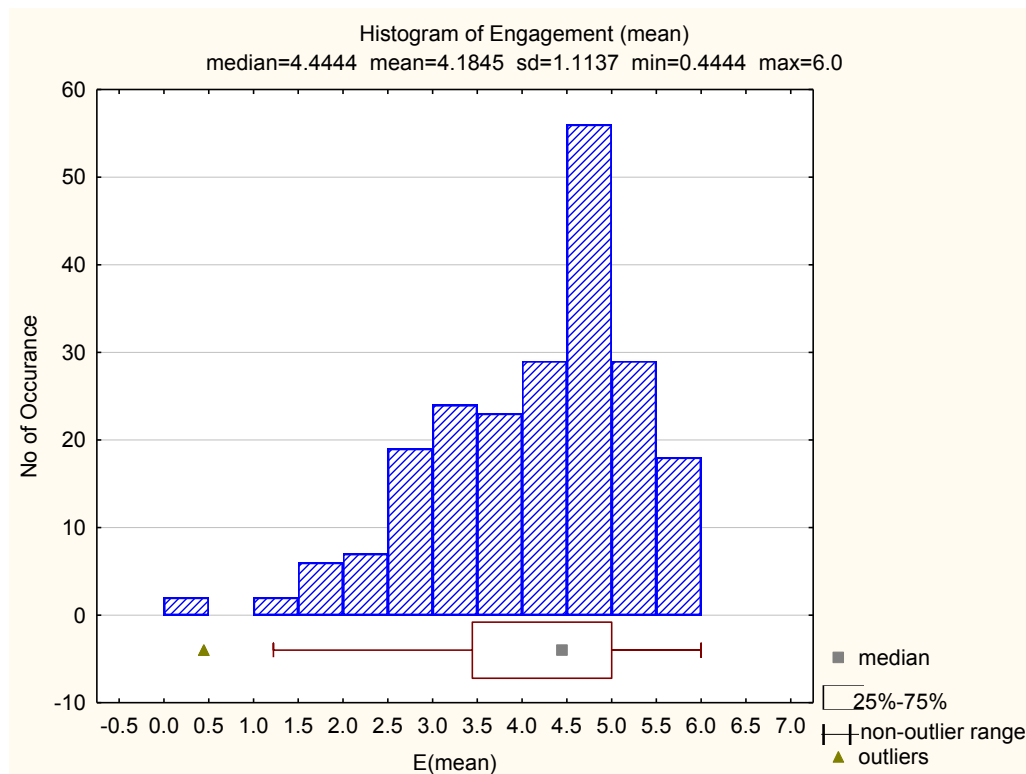


Figure 4.3 Total Level of Work Engagement for CCRs

When determining a group's engagement level by making use of the UWES-9, the mean scale score of the three UWES subscales is computed by adding the scores on the particular scale and dividing the sum by the number of items of the subscale involved. A similar procedure is followed for the total score. The three subscale scores and the total score range between 0 and 6. In order to interpret what a mean score for engagement truly means, the scores on the UWES have been recorded in Table 4.14 (Schaufeli & Bakker, 2003).

Table 4. 14 Scoring the UWES With Mean Scores

Mean score	Level of engagement
0 to 0.99	1 (once a year or less)
1 to 1.99	2 (at least once a year)
2 to 2.99	3 (at least once a month)
3 to 3.99	4 (at least a couple of times a month)
4 to 4.99	5 (at least once a week)
5 to 6	6 (a couple of times per week or daily)

When looking at Table 4.14, it is evident that the mean score of 4.18 for the CCRs indicates that the level of engagement is 5. This is interpreted to mean that CCRs experience work engagement at least once a week. When interpreting the scores for the dimensions of engagement, the following can be said about CCRs:

- The mean score for vigour was 3.99, thus the level of engagement is 4. CCRs experience high levels of energy and mental resilience while working, as well as a willingness to exert effort and to persist even through difficult times at least a couple of times per month.
- The mean score for dedication was 4.35, thus the level of engagement is 5. CCRs have a sense of significance in their work, feeling enthusiastic, inspired and proud, and they view their job as a challenge. Vigour and dedication are the direct opposites of emotional exhaustion and depersonalisation (Schaufeli & Bakker, 2003).

- The mean score for absorption was 4.21, thus the level of engagement is 5. CCRs experience an optimal state where attention is focused, the mind is clear, and unison of body and mind, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment are experienced.

Schaufeli and Bakker (2003) report on a comparison of the level of work engagement between occupational groups. They report that farmers and managers exhibit the highest scores on all dimensions, whereas blue-collar workers and physicians show the lowest scores. Table 4.15 displays the means and standard deviations of the three occupational groups with the highest and the lowest scores on the total level of engagement (measured with the UWES-15).

Table 4.15 Total Score for Occupational Groups

Occupational group	N	Mean	Standard deviation
Highest scores			
Farmers	875	4.24	1.04
Managers	632	4.22	1.00
White collar workers (profit)	1 826	3.97	1.12
Lowest scores			
Military police officers	3 193	3.69	1.12
Blue collar workers	376	3.63	1.24
Physicians	655	3.10	0.87
Total group	9 679	3.82	1.10

(Schaufeli & Bakker, 2003)

When comparing the levels of engagement of the CCRs (mean = 4.18) with occupations scoring highest on engagement (farmers and managers, with

average scores of 4.24 and 4.22), it appears that call centres are not the typical “sweat shops” as often reported in the literature. Instead, call centres seem more like “sweetshops” (Boonzaier & Boonzaier, 2008).

4.4.2 Interpreting the team effectiveness score

Each CCR's perception of the team's effectiveness was measured by looking firstly at how the members work together, and secondly at the feeling of involvement in the team. In this study, the mean score for the CCRs' team effectiveness was 3.7 (refer back to Table 4.8 for total mean scores). A high score (5) can be interpreted as team members generally interacting well, who are growing in their capability to work together and who experience personal satisfaction with the quality of the relationships they have with their teammates. A low score (1) means that the members are having trouble working together as a team. A score of 3 can be interpreted as having average interaction and relationships in the team. In this instance the teams scored rather average on team effectiveness (3.7), meaning that there is average satisfaction with the teams' interaction and the relationships within the teams.

4.4.3 Interpreting the leadership effectiveness score

Leadership is like a race in which there is no finish line; the best leaders are constantly learning and striving to better their leadership practices. That said, researchers have looked at the distribution of scores for each LPI practice and have attached labels to them, although it would be most accurate to refer to these scores in a descriptive way, rather than in terms of “effectiveness” (personal communication with Barry Posner, 26 November, 2009). Hence the call centre teams were asked to interpret each team's team effectiveness score by comparing it to the mean found in this study. In this study, the CCRs gave the team leaders an average score of 7.5. In order for call centres to make sense of the team leader scores, each team had to compare their team's leadership effectiveness result with the mean of 7.5 to see if it fell above or below this average. The rating scale for effective leadership behaviour ranged from 1

(almost never) to 10 (almost always). Thus, this study's leadership effectiveness mean (7.5) can be interpreted as that the call centre team leaders displayed effective leadership behaviours fairly often.

4.4.4 Interpreting the SOC score

Each CCR's sense of coherence requires certain inherent prerequisites for coping successfully, which are represented by the concepts of comprehensibility, manageability and meaningfulness (Antonovsky, 1987). The SOC-13 was used to measure the CCRs' sense of coherence levels. The respondents gave answers on a seven-point Likert scale (1 = never and 7 = always). In this study, SOC scores can be interpreted as being low if they fall between 1 and 3, medium if they fall between 3.03 and 5, and high if they fall between 5.03 and 7. The total mean SOC score was found to be 4.67, which means that the CCRs have a medium level of SOC. The mean score for comprehensibility was 4.45, thus the extent to which the CCRs structure their world to be understandable, orderly and consistent instead of chaotic, random and unpredictable is medium. The mean score for manageability was 4.48, thus the extent to which the CCRs experienced events in life as endurable, and even as new challenges, is also medium. The mean score for meaningfulness was 5.07, thus the extent to which the CCRs feel that life makes sense on an emotional and not just on a cognitive level is rather high.

4.5 INTERPRETING RESULTS IN TERMS OF PROPOSED HYPOTHESES

"A common misconception about SEM is that it provides statistical evidence of a causal link between variables. The estimated coefficients in SEM tell us nothing about causality per se. Causality can only be inferred from the hypothesised model originally constructed by the researcher, and not merely from the statistical test of that model" (Terre Blanche *et al.*, 2006, p. 263). Keeping this in mind, the statistical findings are interpreted in terms of the previously proposed hypotheses:

Hypothesis 1: A low level of employee engagement exists amongst CCRs in South Africa – **This was found to be false**. The CCRs participating in this study scored an average mean of 4.18 on engagement. Thus, the CCRs experienced work engagement at least once a week. Contrary to popular belief, this means that the CCRs are not disengaged [members who have uncoupled themselves from work roles and withdraw cognitively and emotionally (Pech & Slade, 2006)]. This finding cannot be compared directly to other studies measuring engagement in South African call centres (no such results have been reported yet).

It is possible that the high level of work engagement was found due to the type of call centres that were selected to participate in this study. A prerequisite to form part of the sample was that each call centre had to operate in a team structure. Thus, the sample consisted of call centres that already made use of job resources (teams) to cope with job demands. Further, the call centres that agreed to participate in this study were eager to receive the feedback report and a “developmental toolkit”. Hence, the sample possibly consisted of “open-minded” call centres that were eager to improve the work environment. It is possible that these call centres were already using various personal and job resources to cope with the rigors of the call centre environment.

Hypothesis 2: Work engagement (η_3) will have a significant positive effect on team effectiveness (η_2) – **This hypothesis was never tested**. As the sample was too small to test the parameters, the engagement model was modified and this path coefficient was removed.

Hypothesis 3: Sense of coherence among CCRs (η_1) will have a significant positive influence on work engagement (η_3) in call centres – **This hypothesis was found to be significant** (PLS path coefficient = 0.3817). This finding affirms the findings of Naudé and Rothmann (2006) and Van der Colff and Rothmann (2009).

Hypothesis 4: Sense of coherence (η_1) will have a significant positive effect on team effectiveness in call centres (η_2) – **This hypothesis was found to be significant** (PLS path coefficient = 0.1584). This finding is consistent with the findings of Muller and Rothman (2009), who found that employees with a high SOC have better relationships with their colleagues and management. Mickan and Roger (2002) also demonstrated that optimal individual contributions set the scene for effective teamwork.

Hypothesis 5: Team effectiveness (η_2) will have a significant positive influence on CCRs' sense of coherence (η_1) – **This hypothesis was never tested.** As the sample was too small to test the parameters, the engagement model was modified and this path coefficient was removed.

Hypothesis 6: Leadership effectiveness (ξ_1) will have a significant positive influence on the sense of coherence of CCRs (η_1) in call centres – **This hypothesis was found to be significant** (PLS path coefficient = 0.2175). This finding is consistent with the findings of Van der Colff and Rothmann (2009), Bakker and Demerouti (2007) and Muller and Rothmann (2009).

Hypothesis 7: Leadership effectiveness (ξ_1) will have a significant positive influence on work engagement (η_3) in call centres – **This hypothesis was not found to be significant** (PLS path coefficient = 0.0847). This finding differs from that of Aguilar and Salanova (2005), who state that leadership is an important job resource predicting worker engagement. It is possible that, within call centres, a team leader does not play a major role in the daily work life of a CCR. It could be true that other mediating factors (that were not explored in this study) may have a larger influence on the level of engagement of CCRs. An example of such a mediator is trust (Macey & Schneider, 2008). It is also likely that the CCRs were not honest when rating their team leaders.

Hypothesis 8: Leadership effectiveness (ξ_1) will have a significant positive influence on the effectiveness of teams (η_2) – **This hypothesis was found to be significant** (PLS path coefficient = 0.5074). This finding is consistent with other studies proving that effective leadership leads to effective teams (Armistead, Kiely, Hole & Prescott, 2002; Dionne, Yammarino, Atwater & Spangler, 2004; Kahai, Sosik, & Avolio, 2000).

Hypothesis 9: Team effectiveness (η_2) will have a significant positive influence on the work engagement of CCRs (η_3) – **This hypothesis was found to be significant** (PLS path coefficient = 0.3386). This finding is consistent with Salanova, Llorens, Cifre, Martinez and Schaufeli (2003), who found that team members feel engaged when they converge emotionally with other team members. This finding also affirms the findings of Dionne *et al.* (2004), namely that if teams are used effectively it could lead to increased production.

Finally, the R^2 for the multiple regression analyses was found to be 0.32, which means that 32% of the variance in engagement was determined by SOC, team effectiveness and leadership effectiveness in the call centres. Thus, 68% of work engagement in the call centres was caused factors that were not explored in this study.

4.6 SUMMARY

This chapter reported on the data analyses and findings, firstly by validating the measurement model fit and, secondly, by fitting the proposed engagement structural model. Reporting was done in the following order: testing reliability; confirmatory factor analysis (CFA) for evaluating measurements models; exploratory factor analysis (EFA) of two constructs for which CFA indicated an unsatisfactory model fit; correlations to test univariate relationships; regression analysis to test multivariate effects on engagement (E) and structural equation modelling (SEM) path analysis - which did not provide any fit on the structural model; and lastly, partial least squares (PLS) path analysis as an alternative

method for evaluating the structural model. In conclusion, the final scores for engagement, team effectiveness, leadership effectiveness and SOC were reported and interpreted. Finally, the results of the study were interpreted in terms of the proposed hypotheses by indicating whether they were found to be significant or not.

CHAPTER 5

LIMITATIONS, APPLICATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter places the research results in the proper context by indicating pertinent shortcomings of the study. Furthermore, guidelines are provided for managers and practitioners on how to improve CCR engagement levels, and recommendations are made for future research efforts.

5.2 LIMITATIONS OF THE STUDY

After briefing the team supervisors, the questionnaires were handed to them to administer. It is likely that the CCRs were biased positively when rating their leaders as a result of this procedure, as they knew that the team supervisor had access to the scores (in spite of the promised confidentiality).

Locating call centres to participate in this study was a challenge. In the call centre industry, input must equal output and time equals money. The only reason why the call centres decided to participate in this study was because a 'developmental toolkit' was provided as an incentive. This 'toolkit' included a formal feedback report on the findings for the specific call centre, prominent call centre articles and valuable team-building activities. Only 50% of the call centres approached were willing to participate, hence the relatively small sample of 217. The ideal was to have a bigger sample so that the fit of the initial engagement model (Figure 1.1) could be tested without revision. The participating call centres were likely to have engaged CCRs who were comfortable with and open to scrutiny. The participating call centres also made use of a job resource (teamwork) to counter the rigors of job demands, hence higher engagement could be expected and was confirmed by the results.

This study aimed to explore contemporary concepts. The notion of engagement in call centres in South Africa has not been explored in the field of industrial psychology. As both these concepts are fairly new, a paucity of literature is

available, especially literature reporting the levels of work engagement in call centres. Call centre studies often report on the high stress levels, high staff turnover and emotional burnout associated with call centre work. There is a lack of published works on the positive potential of call centres, on leadership effectiveness in this environment and on its purported effects on work engagement. Furthermore, the concept of team effectiveness in relation to teams in call centres has not been researched adequately.

The questionnaire that was used to measure team effectiveness (the Team Diagnostic Survey) has not been validated in a South African sample, and for this reason further developmental work is needed. With regard to the statistical techniques employed, SEM is a relatively recent development. As such, the methodology is constantly developing and fundamental concepts are subject to challenge and revision. These rapid changes in analysis techniques are a source of excitement for some researchers, and a source of frustration for others (Terre Blanche, Durrheim & Painter, 2006).

All the above-mentioned limitations presented the opportunity to add novel value to the field of industrial psychology in South Africa. The limitations did not detract significantly from the practical implications of the results.

5.3 PRACTICAL APPLICATION

As 32% of the variance in engagement is determined by SOC, team effectiveness and leadership effectiveness in call centres, a range of practices can be introduced to increase engagement based on these three constructs. Although leadership effectiveness was found to have a non-significant influence on engagement, it has a positive, significant effect on team effectiveness and SOC. By increasing leadership effectiveness, team effectiveness and SOC will increase, consequently having a mediating effect on engagement. Below are 'tools' that call centre managers/practitioners can use to enhance engagement in order to counter the excessive demands of the call centre environment.

1.1.1 Enhancing engagement through effective leadership

To use effective leadership as a mediator to enhance engagement in call centres, the following suggestions by Kouzes and Posner (2001) should be considered:

- Team leaders need to lead the way by setting a good example for CCRs. The value of role clarification is critical in this process.
- Team leaders need to inspire a shared vision by instilling in CCRs a commitment to the future of their work and what it entails.
- Team leaders need to challenge the work processes by searching for new possibilities and by embracing change.
- Team leaders need to afford CCRs the opportunity to act and to become part of the solution to problems. This will lead to collaboration and the development of trust, because these individuals become willing to participate in the work process.
- Team leaders need to encourage the heart by recognising CCRs' achievements, providing encouraging messages and celebrating victories and achievements.

The following could serve as recommendations for call centre managers when developing optimum leadership behaviour so as to indirectly create higher levels of engagement (Dibley, 2009):

- Comprehensive and detailed feedback should be given to team supervisors on the basis of an in-depth understanding of being an effective leader.

- Formal training of team leaders could be established through the implementation of mentorship programmes whereby the team leader is provided with constant development feedback on behaviour and reactions. The rating of leadership behaviour in training programmes could provide insight into a team leader's personal leadership style.
- Implementing a peer coaching system by providing ongoing feedback reports to team leaders and team members. This would enhance the understanding of the basics of effective leadership.

5.3.2 Enhancing engagement through the provision of job resources

Managers and team leaders play an important role in improving engagement in the workplace. Organisational commitment is related to job engagement. To be a successful CCR, one should be connected to work activities (Stander & Rothmann, 2010). Organisations that want to improve their engagement should consider ways in which to enhance how people identify with the organisation. The more rewarding the day-to-day work environment, the more engaged people will be with their work (Roberts & Davenport, 2002). The following practices can be implemented:

- Make the work environment more fun, e.g. have team-building sessions at least once a quarter and celebrate team and individual successes. Van Zyl (in Fitzpatrick, 2010) notes that the use of humour must not be underestimated. In this study, attrition rates decreased by 22% after humour was brought into the workplace. Practical examples are the placement of jokes on the bulletin board and having 'silly hat days' for all CCRs.
- Give recognition – have a prize-giving at the end of the year, give monthly/quarterly certificates, have a floating trophy for the year, appoint

- an employee of the month/year (which could be linked to a financial reward).
- Involve CCRs in the decision-making authority, e.g. have a committee for each team and let each team member have a role/position to fulfil; for example, a 'social member' to plan functions, a 'finance member' to obtain funds for social events, and a 'discipline member' to monitor discipline and morale in the team.
 - CCRs that have been working in the team for a long period should be granted the opportunity to act as 'coach' for new members joining the call centre. This will enhance organisational commitment.
 - Enhance career development – have succession planning in place, especially for new CCRs. If the CCRs know that there is a long-term career plan, it will reduce their intention to quit.

Job resources, such as social support and feedback, may reduce the perception of job demands. Job resources are those physical, psychological, social or organisational aspects of the job that reduce job demands and the associated physiological and psychological costs, are functional in achieving work goals, or stimulate personal growth, learning and development. Resources may be introduced at the following levels (Bakker, Demerouti, Hakanen & Xanthopoulou, 2007):

- Organisational – salary and career opportunities;
- Interpersonal and social relations – supervisor/team leader and co-worker support;

- The organisation of work – role clarity and participation in decision making;
- The tasks: performance feedback and skill variety. Skill variety is not always possible in the call centre environment, but having alternative roles, for example in the ‘team committee’ as mentioned above, could aid variety. Van Zyl (in Fitzpatrick, 2010) suggests making use of rotation – different members should do different tasks each week in order to break boring routines.

5.3.3 Enhancing engagement through augmenting SOC and effective teamwork

A strong SOC predicts higher levels of work engagement (Van der Colff & Rothmann, 2009). Bear in mind that SOC is a dispositional orientation and not a state or a trait. Through repeated exposure to experiences of sense making, an individual develops a strong sense of coherence over time (Gropp, Geldenhuys & Visser, 2007). For this reason, call centre managers and team members should apply the following practices to ‘strengthen’ the SOC of CCRs:

- Make use of team-building activities to enhance good teamwork and positive relationships among colleagues and management. Individuals with a weak SOC should be assisted in dealing with the distress they experience at work. Support, motivation and recognition from management and colleagues should be reinforced (Muller & Rothmann, 2009).
- Make use of a mentoring or ‘buddy’ system in teams. This may provide a collaborative effort to address complex task concerns to help workers through greater shared learning and problem solving.

- Team leaders must be supportive and learn to develop active listening skills. A high-quality relationship with one's supervisor may alleviate the influence of job demands, since the leader's appreciation, motivation and support places demands in perspective and in a more positive light.
- Team leaders should have regular, structured team meetings. CCRs with low SOC should be well informed about processes and procedures in the company (Muller & Rothmann, 2009). Leaders can contribute to the development of employees' SOC by giving information in a consistent, structured, ordered and understandable format (Rothmann, Jackson & Kruger, 2003).
- Team leaders should equip CCRs with the necessary knowledge, skills, material, instruments and resources, and further ensure a balance in the load of tasks to be handled. CCRs will increasingly feel that the work expectations are manageable and within their power (Rothmann *et al.*, 2003).
- CCRs should be given a degree of authoritative power, for example let the team come up with ideas for fundraisers, social events, prizes and floating trophies. Participation in decision making will enhance the CCRs' feeling of membership and contribute to the meaningfulness component of SOC (Van der Colff & Rothmann, 2009).

Engagement can be enhanced through team effectiveness. Consider the following practices when dividing CCRs into teams:

- Teams should function as teams in nature and not just in name. There are call centre teams, but they do not all function fully as a team. Also, ensure that members in the team select their own team name; this will enhance team commitment.

- Most engaged teams are diverse, having a variety of members that differ in age, gender and race, while disengaged teams are not diverse (Knowledge Resources, 2009b). When CCRs are divided into teams, ensure that the teams are diverse in nature.
- Engagement is contagious, hence it may be 'infectious'. Monitor team dynamics and try to have engaged members in all teams. This process of transference enhances the collective engagement of a team. The collective level of engagement of the team is associated with the individual level of engagement of the team members. Thus, the more engaged the team, the more engaged the CCRs (Schaufeli & Bakker, 2003).
- Engaged teams are able to acquire more job resources than teams that are less engaged. This consequently has a positive impact on the level of engagement of the team and of each member in the team. Belbin's Team Role Inventory could be used to find the CCRs that are natural 'resource finders'. Try to make up teams that have at least one resource finder in each team.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

After scanning the literature and conducting this study, it was clear that the empirical study of engagement in call centres is in its infancy. While there have been numerous studies and a lot of research on call centres, there is a lack of national and international research on engagement and teamwork in call centres. This study identified factors responsible for only 32% of the variance in engagement in call centres. Other factors that elicit work engagement in call centres should be identified and explored. To facilitate this quest, ideas for future research are offered:

- Replacing this study with a multi-level analysis could provide further interesting findings. Thus, doing structural equation modelling at the group level could be separated from data relevant to individual team members. In this manner, the effects of a single team's effectiveness on engagement and the other constructs (LE and SOC) could be traced.
- The psychometric properties of the Team Diagnostic Survey need to be tested on a South African sample. The results of the exploratory factor analysis (EFA) of team effectiveness should thus be validated. EFA determined that team effectiveness comprised of two factors for 'how members work together' (these factors are dedication and equity), and two factors for 'feeling of involvement in the team' (these factors are internal satisfaction and functional satisfaction). The confirmatory factor analysis was done on the same data for team effectiveness. Ideally, one should take a new sample to complete the two sections for team effectiveness (Sections 4A and 4B) and then test the new, independent data set to see if the findings are authentic.
- An alternative method to conduct this study would be to measure engagement and burnout on the same continuum to determine the level of well-being for CCRs in call centres. Added to this, constructs that measure job demands, job resources (for example, succession plans and training) and job design, and their relationships with burnout and engagement, could be examined. This will give further insight into which resources elicit engagement in call centres.
- Another variable that has been neglected grossly in call centres is group emotional intelligence and the benefits that it may have for CCRs.

- Also, determining the profile of an engaged CCR could yield interesting conclusions. Such information could aid in the selection techniques for CCRs.
- There is a dire need to change the management focus in call centres from problems and obstacles to available resources. The exploration and formulation of a 'golden compass' to manage call centre levels of engagement should be supported. Consequently, the profitability and chances for success of call centres will increase, leading to satisfied customers and CCRs. South Africa could become a world leader in call centre management. International organisations will be eager to invest in South Africa and unemployment could be reduced.

5.5 CONCLUDING REMARK

This study displays another side of call centres. Some contemporary call centres in South Africa have successfully transformed the focus from problems/obstacles to resources/practices in order to keep CCRs engaged in the workplace. The CCR compares favourably with occupations that score high on engagement measures. Through the effective employment of personal and job resources, one can turn a 'sweatshop' into a 'sweet shop'.

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APPENDIX A**ENGAGEMENT IN CALL CENTRES: EXPLORING ELICITING FACTORS
REQUEST TO COLLECT DATA FOR RESEARCH****1. *Background information***

I, Yolandi Janse van Rensburg, am currently doing my Internship at the Military Psychological Institute (Gezina), whilst doing my Masters in Industrial Psychology (MComm Psych) through the University of Stellenbosch. I have a particular interest in the dynamic, complex environment of call centres; hence I have decided to do my Master's thesis on Call Centres in South Africa. An abstract of my thesis follows:

Call centres are the latest international business trend. Critics have called call centres the modern equivalent of 'factory sweatshops' or 'satanic mills of the 21st century'. My thesis challenges this image by shifting the paradigm from a 'sweatshop' towards a 'sweetshop' approach by focusing on the resources call centres have to offer, rather than on the demands. The contemporary call centre industry has come to realise that by focusing on job- and personal resources (effective leadership, teamwork and sense of coherence); engagement will be enhanced. This study determines the factors that elicit engagement in call centres. The variables are proposed in a call centre engagement structural model (expressed in LISREL notation). The significance of the hypothesized paths and the model's fit will be tested.

2. *My request*

I humbly request to enter your premises to collect data. Data collection will be done by asking call centre agents to complete a questionnaire. This questionnaire measures:

- individual's level of work engagement;
- the perception of leadership effectiveness;
- individual's sense of coherence; and
- perception of teamwork effectiveness.

The questionnaire takes approximately 20 minutes to complete. I will avail myself for the duration it takes for the call centre to complete the questionnaire; should any questions arise. I realise that your call centre cannot be left unattended; hence I can wait for members to complete the questionnaire one at a time/in small groups. A date and time that best suits you is required.

3. *Confidentiality*

Any information that is obtained in connection with this study will remain confidential. Neither your Company's name nor will participant's names appear anywhere. Original questionnaires will be stored at the Department of Industrial and Organisational Psychology, University of Stellenbosch. Only my Study Supervisor and I will have access to information obtained.

4. *What you will gain from participating in my study*

As I have attended the 3rd Annual Call Centre Conference in 2009 and have researched call centres for the past year, I am sure you may benefit from this study. A file containing a feedback report (on the findings of your call centre); a written data CD (with relevant and interesting articles on call centres) and some team building exercises/initiatives will be given to you after participating in this

study. This information can be used for teambuilding sessions and for further developing your employees. This study could have a direct and indirect positive impact on your call centre; further, it will be a good investment in the development of the academic understanding of call centres in general.

You can be assured that the knowledge gained in my visit will be used for academic purposes only. With sincere thanks and waiting for your reply in anticipation.

Kind regards,

YOLANDI-E JANSE VAN RENSBURG

INTERN AT THE MILITARY PSYCHOLOGICAL INSTITUTE: CAPT

APPENDIX B**STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH**

ENGAGEMENT IN CALL CENTRES: EXPLORING ELICITING FACTORS.

You are asked to participate in a research study conducted by Yolandi Janse van Rensburg (B.Mil Honours from the Department of Industrial and Organisational Psychology at Stellenbosch University). The results and findings of this study will contribute to her Masters thesis. You were selected as a possible participant because you are an active worker in the call centre.

1. PURPOSE OF THE STUDY

The purpose of this study is to develop and test an explanatory worker engagement structural model in the call centre environment. This will be done by:

Proposing (based on the literature) primary constructs that elicit engagement in call centres; designing an attendant worker engagement structural model (expressed in LISREL notation); evaluating the significance of the hypothesized paths in the model; and determining whether the proposed model possesses validity regarding the assumptions by testing the model's fit.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

Complete a questionnaire. There is no right or wrong answers; therefore, you only have to respond to *how you feel*. Answers will be treated as confidential and will not be used to your detriment. Take your time to answer questions. Mark each item. Ask the researcher if you do not understand a statement/question. Please hand in the questionnaire as soon as it is completed.

3. POTENTIAL RISKS AND DISCOMFORTS

None.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

When you have been frank in all the questions, the findings may provide results that could improve the nature of call centers!

5. PAYMENT FOR PARTICIPATION

There is no monetary compensation, but YOU have contributed to the better management of call centres!

6. CONFIDENTIALITY

Any information that is obtained in connection with this study will remain confidential. Note that your name WILL NOT APPEAR ANYWHERE and your supervisor will not have direct access (based on the individual) to this information. Feedback will be given to management in group format. Questionnaires will be stored at the Department of Industrial and Organisational Psychology, University of Stellenbosch. The combined findings can possibly be published in an article.

7. PARTICIPATION AND WITHDRAWAL

Participation is voluntary. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer certain questions you do not want to answer and still remain in the study.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact me, Yolandi Janse van Rensburg (022 702 3168) or my supervisor Dr. B. Boonzaier (University of Stellenbosch).

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Maléne Fouché at the Unit for Research Development of SU (021 808 4622 or mfouch@sun.ac.za).

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
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The information above was described to me in [*Afrikaans/English/Xhosa/other*] and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I have read and understood the foregoing information and concede to participate in the study under the stated conditions.

Signature of Subject/Participant or Legal Representative

Date

Questionnaire for Call Centre Agents

**Administered by:
Yolandi Janse van Rensburg**

This questionnaire consists of “Biographical Information” and 4 different Sections, read the instructions before answering each section’s questions. For each question/statement, cross only the appropriate box/number that is most applicable to you. Please ask if you have any uncertainties or questions.

1. Gender: **Female** **Male**

2. How old are you? **Years**

3. What is your Race (e.g. African, White, Indian, ect)?

4. How long have you been a member of this organization (years/months)?

Years and **months**

5. How long have you been a member of the team you are currently working in?

Years and/or **months**

6. If your team has a name, specify the team’s name: