

**JOB DEMANDS, JOB RESOURCES, EMOTIONAL INTELLIGENCE  
AND WORK-RELATED WELL-BEING IN A CALL CENTRE**

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## FOR THE READER'S ATTENTION

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- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the *South African Journal of Industrial Psychology* (which agrees largely with the APA-style) is used, but the APA guidelines were followed in the construction of tables.
- Each chapter of the mini-dissertation has its own reference list.

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## SUMMARY

**Title:** Job demands, job resources, emotional intelligence and work-related well-being in a call centre

**Key words:** Emotional intelligence, burnout, work engagement, job demands, job resources, well-being, call centre

Call centre employees in the insurance industry constantly interacts and negotiates with strangers, and are confronted with the unknown, unfamiliar and the unpredictable. They use interactive display terminals during telephone calls and thus perform multiple-tasks with frequent interruptions. Their jobs are also characterised by repetitive movements, while complex information is processed. In addition, call centre employees often work in noisy environments under time pressure, and their performance is usually monitored on line. Job demands and job resources can influence the well-being of call centre employees. Emotional intelligence is deemed to aid in the conceptualisation of psychological well-being and can be applied as a means to successfully cope with daily demands and pressures.

The objective of this research was to determine the relationship between job demands, job resources, emotional intelligence (EQ) and work-related well-being of call centre employees. A cross-sectional survey design was used. The study population ( $n = 141$ ) consisted of call centre employees in a corporate insurance environment in Gauteng. The Bar-On EQ-i, Maslach Burnout Inventory-General survey, UWES, Job characteristics scale and a biographical questionnaire were used as measuring instruments. Cronbach alpha coefficients, inter-item correlation coefficients, factor analysis, Pearson product moment correlation coefficients and structural equation modelling were used to analyse the data.

Principal component analysis resulted in a fifteen factor model of emotional intelligence namely emotional self-awareness, assertiveness, self-regard, self-actualisation, independence, empathy, interpersonal relationship, social responsibility, problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism. Regarding the Job Characteristics Scale, eight factors were extracted, namely role clarity, supervision, pay and benefits, workload, job security, colleague support, opportunity to grow and social contact

between the call centre agents. For the MBI-GS two factors were extracted namely: exhaustion and cynicism and for the UWES one factor was extracted, namely vigour/dedication.

The correlation coefficients indicated that exhaustion was statistically a significant positive correlation (practically significant, large effect) with cynicism and a statistically significant positive correlation (practically significant, medium effect) with workload. Exhaustion was also a statistically significant negative correlation (practically significant, large effect) with engagement and a statistically significant negative correlation (practically significant, medium effect) with role clarity, colleague support, self-regard, self-actualisation, flexibility, stress tolerance, impulse control, and happiness. Cynicism showed a statistically significant negative correlation (practical significant, large effect) with engagement and a statistically significant negative correlation (practical significant, medium effect) with role clarity, supervision, opportunity to grow, engagement, emotional self-awareness, self-regard, self-actualisation, flexibility, and happiness.

The results indicated that EQ directly influences the experience of burnout (main effect), however, no results could be obtained supporting the moderating effect of EQ between emotional demands and burnout.

Recommendations were made for call centre management in the insurance industry and for future research purposes.

## OPSOMMING

**Titel:** Werksvereistes, werkbronne, emosionele intelligensie en werksverwante welstand in 'n oproepsentrum

**Sleutelwoorde:** Emosionele intelligensie, uitbranding, verbintenis, werkvereistes, werkbronne, welstand, oproepsentrum

Oproepsentrumwerknemers in die versekeringsbedryf skakel en onderhandel gedurig met vreemdelinge en word gekonfronteer met die onbekende, ongewone en onvoorspelbare. Hulle gebruik interaktiewe vertoonterminale tydens telefoonoproep en voer dus veelvuldige take met gereelde onderbrekings uit. Hulle werk word ook gekenmerk deur herhalende bewegings, terwyl komplekse inligting verwerk word. Daarbenewens werk oproepsentrumwerknemers dikwels in luidrugtige omgewings onder tydsdruk, terwyl hulle werkverrigting gewoonlik aanlyn gemonitor word. Poseise en poshulpbronne kan die welsyn van hierdie werknemers beïnvloed. Emosionele intelligensie word geag die konseptualisering van sielkundige welstand te bevorder en kan aangewend word as 'n metode om daaglikse eise en druk suksesvol te hanteer.

Die doelwit van die navorsing was om die verhouding tussen werkvereistes, werkbronne, emosionele intelligensie en die werksverwante emosionele welstand van oproepsentrum werkers vas te stel. 'n Dwarsneeopname-ontwerp is gebruik in die studie. Die studie populasie ( $n = 141$ ) het bestaan uit oproepsentrum werkers in 'n korporatiewe verskeringsomgewing in Gauteng. Die Bar-On EQ-i, Maslach Algemene Uitbrandingsvraelys, Utrecht-Werksbegeesteringskaal, Werkskenmerke skaal en 'n biografiese vraelys is gebruik as meetinstrumente. Cronbach alphakoeffisiënt, inter-item-korrelasiekoeffisiënt, faktoranalise, Pearson korrelasiekoeffisiënte en strukturele vergelykingsmodellering is gebruik om die data te ontleed.

Hoofkomponente-analise het gelei tot 'n vyftienfaktor-model van Emosionele Intelligensie, naamlik Emosionele selfbewustheid, Selfgeldendheid, Selfagting, Selfverwesenliking, Onafhanklikheid, Empatie, Interpersoonlike verhoudings, Maatskaplike verantwoordelikheid, Probleemoplossing, Werklikheidstoetsing, Aanpasbaarheid, Strestoleransie, Impulsbeheer, Geluk en Optimisme. By die Werkskenmerke-skaal is agt faktore onttrek, naamlik



duidelikheid van rol, toesig, vergoeding en voordele, werkslading, werksekuriteit, ondersteuning van kollegas, geleentheid om te groei en sosiale kontak tussen die oproepsentrumagente. Vir die MBI-GS is twee faktore onttrek, naamlik uitputting, sinisme en vir die UWES is een faktor onttrek naamlik: energie/toewyding

Die korrelasiekoëffisiënte het aangedui dat uitputting statisties beduidend positief korreleer (prakties beduidend, groot effek) met sinisme en statisties beduidend positief korreleer (prakties beduidend, medium effek) met werkslading. Uitputting het ook statisties beduidend negatief gekorreleer (prakties beduidend, groot effek) met verbintenis en statisties beduidend negatief gekorreleer (prakties beduidend, medium effek) met duidelikheid van rol, ondersteuning van kollegas, selfagting, selfverwesenliking, aanpasbaarheid, strestoleransie, impulsbeheer en geluk. Sinisme het statisties beduidend negatief gekorreleer (prakties beduidend, groot effek) met verbintenis en statisties beduidend negatief gekorreleer (prakties beduidend, medium effek) met duidelikheid van rol, toesig, geleentheid om te groei, verbintenis, emosionele selfbewustheid, selfagting, selfverwesenliking, aanpasbaarheid en geluk.

Die resultate het aangedui dat emosionele intelligensie die belewing van uitbranding (hoofeffek) regstreeks beïnvloed. Daar was egter geen resultate wat die modererende effek van emosionele intelligensie tussen emosionele eise en uitbranding steun nie.

Aanbevelings vir die versekeringsbedryf en vir toekomstige navoring word gemaak.

## CHAPTER 1

### 1. INTRODUCTION

This mini-dissertation deals with the job demands, job resources, the well-being and emotional intelligence of call centre workers. In this chapter the motivation for the research is discussed in terms of the problem statement and aims of the research. Thereafter the research method and division of chapters are discussed.

#### 1.1 Problem statement

The insurance industry has expanded rapidly as a result of positive economic growth, urbanisation and higher education levels in the late 19th Century (Chan, 2002). Industry and organisational change coupled with technological advancement have resulted in employees, (at all levels of the organisation) experiencing feelings of stress, insecurity, misunderstanding, underevaluation and alienation. Typical organisational changes include downsizing, outsourcing, mergers and most commonly, restructuring (Lindström, Leino, Seitsam, & Tordtila, 1997). The well-being of the employees are mostly influenced by an increased pressure to perform. A typical example is found in the insurance industry where an insurance agent constantly interacts and negotiates with strangers, and is confronted with the unknown, unfamiliar and the unpredictable (Lindström et al., 1997). The latter is also true for call centre employees.

Call centres facilitate remote human encounters between the customer and the service organisation employee over the telephone. The rapid growth of these call centres can be attributed to technological advances in integrated telephone computer technology, the convenience factor for consumers and cost reductions achieved by telephone service delivery as opposed to face-to-face contact (Malhotra & Mukherjee, 2004). Call centres provide both customer service (via inbound calls) and sales opportunities through telemarketing to the public (via outbound calls) (Tuten & Neidermeyer, 2004). Designed with the intention to help companies achieve economies of scale in service delivery and sales/marketing efforts, call centres can consist of five to several hundred workers who conduct customer transactions by phone (Witt, Andrews & Carlson, 2004).

Call centre operators use interactive display terminals during telephone calls and thus perform multiple-tasks with frequent interruptions. Their jobs are also characterised by repetitive movements, while complex information is processed. Meanwhile, communication skills and efficiency are expected. In addition, call centre employees often work in noisy environments under time pressure, and their performance is usually monitored on line (Ferreira & Saldiva, 2002). These job demands and conditions inevitably lead to fatigue, tension, psychological strain, tension and the break down of interpersonal relationships (Chan, 2002).

Research in call centres has shown that a lack of job control, performance monitoring, related performance stress factors, inadequate coaching and training, emotional labour, and the lack of team leader support can all lead to job stress – including depression, emotional exhaustion and anxiety (Bakker, Demerouti & Schaufeli, 2003).

The Job Demands-Resources model specifies how health impairment and motivation or involvement in any organisation may be the result of two sets of working conditions. The first set, i.e. job demands (JD), refer to the physical, psychological, social and organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort. They are consequently associated with particular physiological and/or psychological costs (Bakker, Demerouti, de Boer & Schaufeli, 2003; Bakker, Demerouti & Schaufeli, 2003; Bakker, Demerouti & Verbeke, 2004). Examples of job demands include work pressure, role overload, poor environmental conditions and problems related to re-organisation (Bakker, Demerouti, de Boer et al., 2003). The second set, i.e. job resources (JR), refer to the physical, psychological, social or organisational aspects of the job. These can be either functional in achieving work goals, reduce job demands and the associated physiological and psychological costs and/or stimulate personal growth and development. Examples of job resources are time management, performance feedback, a supportive leader and trusting relationships with colleagues (Bakker, Demerouti, de Boer et al., 2003). Diener and Fujita (1995) found that people use resources to progress and to achieve status, companionship and well-being.

Burnout and work engagement are indicators of the well-being of employees within organisations. The core dimensions of burnout is exhaustion and cynicism (or disengagement). When the external environment lacks resources, individuals cannot reduce

the negative influences of high job demands and can therefore not achieve their work goals. Also, they cannot progress in either the job or the organisation (Bakker et al., 2004). The construct of work engagement has been introduced as the opposite pole of burnout (Maslach, Schaufeli & Leiter, 2001) and is characterised by vigour, dedication and absorption. The conclusion can be drawn that burnout and engagement can be viewed as factors of psychological wellbeing.

Emotional intelligence (EI) is deemed to aid in the conceptualisation of psychological wellbeing (Goleman, 1995). Research suggests that people with high levels of EI experience have greater career success (Dulewicz & Higgs, 2000), feel less job insecurity (Jordan, Ashkanasy, & Hartel, 2002), lead more effectively (Palmer, Donaldson, & Stough, 2000), and are more successful in both team leadership and team performance (Day & Carroll, 2004, Higgs, 2004). They are also more adaptable to stressful events (Nikolaou & Tsaousis, 2002) and have better coping skills (Bar-On, Brown, Kirkcaldy, & Thomé, 2000). Nel (2005) also proposed that the more emotionally intelligent people are, the more they will use their job resources to cope with job demands, which will ultimately lead towards job satisfaction. The conclusion can be drawn that emotional intelligence possibly have a moderating effect in coping with job demands for example emotional exhaustion.

The nature of call centre work gives rise to a range of 'people issues' (Kessler, 2002). The emphasis on personal traits and behavioural skills is apparent. In general there does appear to be a significant emphasis on interpersonal skills and personal resilience (Pickard, 2001). Emotional intelligence (EI) has been proposed both as an important addition to the landscape of human individual differences and as a key determinant of real-life outcomes, for example success in work and personal relationships and physical and emotional wellness (Saklofske, Austin, & Minski, 2003). While cognitive intelligence is able to predict quite well how one will do scholastically at school, it doesn't predict performance after school. As such, IQ is a rather weak predictor of performance in interpersonal relations, at work and in coping with a wide variety of problems that surface in the course of one's life on a daily basis. Something was missing from the human performance formula that was needed to explain why some people do very well in life while others do not, irrespective of how academically intelligent they may be. One of the first attempts by psychologists to identify additional predictors of performance in other aspects of life was made by Edward Thorndike in 1920 when he described "social intelligence" as the ability to perceive one's own and others' internal states,

motives and behaviours and to act toward them optimally on the basis of that information (Bar-On, 2003). In a study of over 200 UK retail managers it was found that individuals with high EI scores experienced less stress, had significantly better levels of health and well-being and were rated by their line managers as higher performers than those with moderate to low scores (Slaski & Cartwright, 2003).

EI as a set of abilities was first introduced by Mayer and Salovey (1997). Mayer and Salovey coined emotional intelligence as the ability to facilitate the perception, expression, assimilation, understanding and regulation of emotions, so as to promote emotional and intellectual growth. Mayer and Salovey (1990) explained that EI comprises four abilities: (1) the ability to perceive emotions in oneself and others, as well as in objects, art and stories, (2) the ability to generate emotions in order to use them in other mental processes, (3) the ability to understand and reason about emotional information and how emotions combine and progress through relationship transitions and (4) the ability to be open to emotions and to moderate them in oneself and others (Dulewicz & Higgs, 2000; Thi-Lam & Kirby, 2002). According to Bar-On (2003) to be emotionally and socially intelligent is to effectively understand and express oneself, to understand and relate well to others and to successfully cope with daily demands and pressures. Being emotionally and socially intelligent means to effectively manage personal, social and environmental change by coping with the immediate situation and solving problems realistically and flexibly. To do this one needs to manage one's emotions so that they work for one and not against one, and we need to be sufficiently optimistic, positive and self-motivated.

According to the problem statement, job demands and resources can influence the well-being of call centre workers. Emotional intelligence can be applied as a means to successfully cope with daily demands and pressures.

The following research questions arise on the basis of the description of the research problem:

- How are the constructs of emotional intelligence, job demands and job resources, burnout and engagement (well-being) conceptualised in the literature?
- What is the validity and reliability of measures of emotional intelligence, job characteristics and well-being (burnout and engagement) of call centre workers?

- What is the relationship between emotional intelligence, job demands, job resources and well-being (burnout and engagement) of call centre workers in a corporate insurance group?
- What is the moderating effect of emotional intelligence between emotional demands and burnout for different emotional quotient (EQ) groups (i.e. higher EQ and lower EQ)?

## **1.2 Research objectives**

The research objectives are divided into general and specific objectives.

### **1.2.1 General objective**

With reference to the above formulation of the problem, the general objective of this research is to establish the relationship between job demands and resources, emotional intelligence and the well-being of call centre workers.

### **1.2.2 Specific objectives**

The specific objectives are to:

- To conceptualise the constructs of emotional intelligence, job demands, job resources, burnout and engagement (well-being) from the literature.
- To determine the validity and reliability of measures of emotional intelligence, job characteristics and well-being (burnout and engagement) of call centre workers.
- To determine the relationship between emotional intelligence, job demands, job resources and well-being (burnout and engagement) of call centre workers in a corporate insurance group.
- To determine the moderating effect of emotional intelligence between emotional demands and burnout for different EQ groups (i.e. higher EQ and lower EQ).

## **1.3 Research method**

The research method consists of a literature review and an empirical study.

### **1.3.1 Literature review**

The literature review was conducted by making use of databases such as EBSCOHost, Emerald on-line, ERIC and Academic Search Premier and PsycInfo. The results were used to determine the relationship between the constructs in the form of a research article.

### **1.3.2 Empirical study**

Phase 2 consists of the empirical study and comprises the research design, the participants, the measuring battery, and statistical analysis. It is designed to assist in achieving the research objectives.

#### **1.3.2.1 Research design**

A cross-sectional design with a survey as technique of data collection was used to research the objectives of this research. Cross-sectional designs are appropriate where groups of subjects at various stages of development are studied simultaneously, whereas the survey technique of data collection gathers information from the target population by means of questionnaires (Coetzer, 2004).

#### **1.3.2.2 Participants**

The participants were call centre employees ( $n = 200$ ) in a corporate insurance environment. A stratified random sample was taken for this study.

#### **1.3.2.3 Measurement battery**

The following measuring instruments were used in the empirical study:

A *biographical questionnaire* was developed to gather information about the demographical characteristics of the participants. Information gathered included age, gender, race, home language, education and years employed in the company and current position.

The *Bar-On EQ-i* is used to determine the participants' level of emotional intelligence. The Emotional Quotient Inventory (EQ-i) measures abilities and the potential for performance rather than performance itself; it is process-oriented, rather than outcome-oriented (Bar-On et al., 2000; O'Connor & Little, 2003). The EQ-i is a self-report inventory comprising of 133 declarative statements phrased in the first-person singular. Participants are required to indicate the degree to which each statement is true of the way they typically think, feel or act on a five-point scale (1 = Very seldom or not true of me, 5 = Very often true of me or true of me). The items of the EQ-i are summed to yield scores on 15 lower-order sub-scales, five higher-order composite scores and an overall emotional intelligence score.

Of the 133 items that comprise the EQ-i, eight items comprise a Positive Impression Scale, and seven items comprise a Negative Impression Scale. These two scales are designed to determine whether a participant is responding in an overly positive or overly negative fashion. In addition, there is an Inconsistency Index, calculated by summing the differences in scores between responses on ten pairs of similar items designed to assess random responding. The final item is a self-report on honesty of responding and is not included in any scale. If a participant's response to this item is either "2" or "1" (Seldom true of me or very seldom or not true of me), his or her response is considered invalid. Participant's responses are also considered invalid if a certain percentage of questions/statements are not answered (Omission rate). If the omission rate is higher than 6%, the EQ-i results are considered invalid. Higher scores indicate a higher level of emotional intelligence (Palmer, Manocha, Gignac & Stough, 2003).

The *Maslach Burnout Inventory-General Survey* is used to measure burnout. The MBI-GS consists of three subscales (i.e. exhaustion, cynicism and professional efficacy). Exhaustion is measured using five items, including "I feel burned out from my work", and "I feel tired when I get up in the morning and have to face another day on the job". Cynicism is also measured using five items. Example items are: "I have become less enthusiastic about my work" and "I have become more cynical about whether my work contributes anything". Professional efficacy is measured using six items, including "I feel I am making an effective contribution to what this organisation does", and "In my opinion, I am good at my job". Leiter and Schaufeli (1996) have shown that the internal consistency of each of these scales is satisfactory. They found Cronbach alpha coefficients ranging from 0,84 to 0,90 for exhaustion, 0,74 to 0,84 for cynicism, and from 0,70 to 0,78 for professional efficacy.

The *Utrecht Work Engagement Scale* (UWES) (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002) measures levels of engagement. Initially engagement was viewed as the positive antithesis of burnout, but according to the scale developers, it can be operationalised in its own right. The UWES includes three dimensions, namely vigour, dedication and absorption, which are conceptually regarded as the opposite of burnout and are scored on a seven-point frequency-rating scale, varying from 0 (*never*) to 6 (*every day*). The questionnaire consists of 17 questions and includes questions like "I am bursting with energy every day in my work"; "Time flies when I am at work" and "My job inspires me". The alpha



coefficients for the three subscales varied between 0,68 and 0,91. Storm (2002) obtained the following alpha coefficients for the UWES in a sample of 2 396 members of the South African Police Service: Vigour: 0,78; Dedication: 0,89; Absorption: 0,78. Coetzer (2004) obtained among a sample of employees in an insurance company, the following alpha coefficients: Vigour (0,80); Dedication (0,87), and Absorption (0,69).

The *Job Characteristics Scale (JCS)* is developed to measure job demands and job resources for employees in the insurance industry (Coetzer, 2004). The JCS consists of 48 items. Various demands and resources are measured on a 4-point scale ranging from 'never' (1) to 'always' (4). The dimensions of the JCS include pace and amount of work, mental load, emotional load, work variety, opportunities to learn, work independence, relationships with colleagues, relationship with immediate supervisor, ambiguities at work, information, communications, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. The internal consistency and construct validity of the scale in an insurance industry has been established with Alpha Cronbach values ranging from 0,70 -0,91 for the different job demands and resources.

#### **1.3.2.4 Statistical analysis**

The statistical analysis is carried out with the help of the SPSS-programme (SPSS Inc., 2003) and the Amos-programme (Arbuckle, 2003). Descriptive statistics (e.g. means, standard deviations, distortion and kurtosis) is used to analyse the data. Cronbach alpha coefficients are used to determine the internal consistency, homogeneity and unidimensionality of the measuring instruments (Clark & Watson, 1995). Coefficient alphas contain important information regarding the proportion of variance of the items of a scale in terms of the total variance explained by that particular scale.

Pearson product-moment correlation coefficients are used to specify the relationship between the variables. In terms of statistical significance, it is decided to set the value at a 95% confidence interval level ( $p \leq 0,05$ ). Effect sizes (Steyn, 1999) are used to decide on the practical significance of the findings. A cut-off point of 0,30 (medium effect, Cohen, 1988) is set for the practical significance of correlation coefficients.

Covariance analysis or structural equation modelling (SEM) methods, as implemented by AMOS (Arbuckle, 2003), are used to construct and test a structural model of work well-being. Hypothesised relationships were tested empirically for goodness-of-fit with the sample data. The  $\chi^2$  statistic and several other goodness-of-fit indices summarise the degree of correspondence between the implied and observed covariance matrices. However, because the  $\chi^2$  statistic equals  $(N-1) F$  in this value tends to be substantial when the model does not hold and the sample size is large (Byrne, 2001). Researchers addressed the  $\chi^2$  limitation by developing goodness-of-fit indices that take a more pragmatic approach to the evaluation process.

A value  $<2$  for  $\chi^2/\text{degrees of freedom ratio}$  (CMIN/df) (Wheaton, Muthén, Alwin, & Summers, 1977) indicates acceptable fit (Tabachnick & Fidell, 2001). The hypothesised relationships with the data are also tested using the following goodness-of-fit statistics: Adjusted Goodness-of-Fit Index (AGFI), Parsimony Goodness-of-Fit Index (PGFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

Multivariate analysis of variance (MANOVA) is used to determine the significance of differences between emotional intelligence levels (lower and higher). MANOVA tests whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance (Tabachnick & Fidell, 2001). In MANOVA a new dependent variable that maximises group differences was created from the set of dependent variables. One-way analysis is then performed on the newly-created dependent variable. Wilk's lambda was used to test the likelihood of the data under the assumption of equal population mean vectors for all groups against the likelihood under the assumption that the population mean vectors were identical to those of the sample mean vectors for the different groups. When an effect is significant in MANOVA, one-way analysis of variance (ANOVA) is used to discover which dependent variables had been affected. Because multiple ANOVA is used, a Bonferroni-type adjustment is made for inflated Type I error. Tukey tests is conducted to indicate which groups differed significantly when ANOVAs are done.

#### **1.4 Research procedure**

The measuring battery was compiled. A letter requesting participation and motivating the research was included. Ethical aspects regarding the research were discussed with the participants. The test battery was administered in small groups at the head office on suitable dates. The results were analysed and feedback was given to all individuals who requested it.

#### **1.5 Chapter division**

Chapter 1: Introduction, problem statement and objectives

Chapter 2: Research article: Job demands, Job resources, Emotional Intelligence and Work-Related Well-being in a Call centre

Chapter 3: Conclusion, limitations and recommendations

#### **1.6 Chapter summary**

In this chapter, the problem statement and motivation for the research were discussed. The purpose of the research was formulated, the methodology of the research was outlined, and the methods used for the statistical analysis were described.

A research article on Job demands, Job resources, Emotional Intelligence and Work-Related Well-being in a Call Centre will be presented in Chapter 2.

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**CHAPTER 2**

**RESEARCH ARTICLE**

# **JOB DEMANDS, JOB RESOURCES, EMOTIONAL INTELLIGENCE AND WORK-RELATED WELL-BEING IN A CALL CENTRE**

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## **ABSTRACT**

The objective of this research was to determine the relationship between job demands, job resources, emotional intelligence and work-related well-being of call centre employees. A cross-sectional survey design was used. The study population ( $n = 141$ ) consisted of call centre employees in a corporate insurance environment in Gauteng. The Bar-On EQ-i, Maslach Burnout Inventory-General survey, Utrecht Work Engagement Scale, Job characteristics scale and a biographical questionnaire were used as measuring instruments. Cronbach alpha coefficients, inter-item correlation coefficients, factor analysis, Pearson product moment correlation coefficients and structural equation modelling were used to analyse the data. The results indicate that emotional intelligence directly influences the emotional demands of the relationship and burnout. The results pinpointed that emotional intelligence has a significant effect on the experience of burnout. None of the results supported the moderating effect of emotional intelligence between emotional demands and burnout.

## **OPSOMMING**

Die doelwit van die navorsing was om die verhouding tussen werkvereistes, werkbronne, emosionele intelligensie en werksverwante emosionele welstand van oproepsentrum werkers vas te stel. 'n Dwarsnecopname-ontwerp is gebruik in die studie. Die studie populasie ( $n = 141$ ) het bestaan uit oproepsentrum werkers in 'n korporatiewe verskeringsomgewing in Gauteng. Die Bar-On EQ-i, Maslach Algemene Uitbrandingsvraelys, Utrecht Werksbegeestering vraelys, Werkskenmerke skaal en 'n biografiese vraelys is gebruik as meetinstrumente. Cronbach alfa-koeffisiënt, interitem-korrelasiekoeffisiënt, faktoranalise, Pearson-korrelasiekoeffisiënt en structurele vergelykingsmodellering is gebruik om die data te ontleed. Die resultate ondersteun 'n direkte effek van emosionele intelligensie op die emosionele vereistes van verhoudings en uitbranding. Die resultate toon dat emosionele intelligensie 'n direkte invloed op uitbranding het. Geen resultate kon die moderator effek van emosionele intelligensie tussen emosionele vereistes en uitbranding ondersteun nie.



Nowadays it is almost impossible to avoid coming into contact with a call centre. From opening a bank account to ordering products, almost every individual is accustomed to a phone conversation rather than a face-to-face interaction (Higgs, 2003). In the past decade, service firms such as insurance companies and banks are extensively using call centres to transact with their customers. Organisations benefit from call centres because it enables them to reduce costs and to improve customer services facilities (Bakker, Demerouti, & Schaufeli, 2003).

A call centre is a work environment in which the main business is conducted by computer and telephone-based technologies. These enable the efficient distribution of incoming calls to qualified staff, and permit customer-employee interaction to occur simultaneously with the use of display screen equipment and the instant access to, and inputting of, information (Holman, Chissick, & Totterdell, 2002).

Employees working in a call centre perform an important role in the management of customer relationships. Consequently, the importance of call centres has shifted from an operational tool to a strategic role in terms of relationship management (Kantsperger & Kunz, 2005). Customers' perceptions of quality service are significantly affected by the nature of the interaction with front line staff. The customer experiences the quality of the interaction as the service provided. The conduct of the employee is therefore central to the success of the service transaction (Deery, Iverson, & Walsh, 2002).

Consequently, the challenge is to ensure that the right person is handling the right call in the right manner (Higgs, 2003). Even in call centres driven by quality rather than quantity, call centre work is of itself- demanding, repetitive and stressful (Dernovsek, 2004; Lewig & Dollard, 2003). As a result, absenteeism and staff turnover are important problems for many call centres (Bakker et al., 2003).

Holman et al. (2002) mentioned the following factors as reasons for absenteeism and staff turnover in call centres: performance of multiple-tasks with frequent interruptions, their repetitive movements while complex information is processed, work in noisy environments under high time pressure, and performance monitored on line (Bakker et al., 2003). Turnover

in call centres where high stress levels are experienced is reported to be almost double the industry average (Lewig & Dollard, 2003).

The above-mentioned factors make it necessary for organisations to consider the overall well-being of their employees. This can help to optimise the effectiveness and well-being of call centre employees and decrease the costs of turnover and absenteeism (Lewig & Dollard, 2003).

Well-being is currently broadly construed as the upper-end of a continuum of holistic well-being in important life domains, including cognitive, emotional, spiritual, physical, social, occupational and ecological components (Wissing, 2004). Ryff and Singer (1998) conceptualised human well-being as an issue of engagement in living, involving expression of a broad range of human potentialities: intellectual, social, emotional and physical. This committed living is universally expressed in (i) leading a life of purpose; (ii) deep and meaningful connections to others, and (iii) self-regard and mastery.

Cowen (1991) sees well-being not only as the absence of psychopathology, but as a collection of positive aspects of functioning promoted by the attainment of strong attachment relationships, the acquisition of age-appropriate cognitive, interpersonal and coping skills, and exposure to conducive and empowering environments. People with higher levels of well-being use a more heuristic approach to processing information and making decisions. They take short cuts, make greater use of experience and are more likely to make quicker, definitive decisions, partly because they trust their own judgement. They often have bigger networks and trust them more, and their levels of self-esteem are higher (Higgs, 2004b). Higher self-esteem can help call centre employees to cope with a stressful environment. A possible health impairment environment, and lack of motivation or involvement in any organisation may be the result of two sets of working conditions as described by the Job demands-resources (JD-R) model (Bakker et al., 2003; Bakker, Demerouti, & Verbeke, 2004; Bakker, Demerouti, De Boer, & Schaufeli, 2003).

The JD-R model proposes that employee well-being is related to a wide range of workplace variables that can be conceptualised as either job demands or job resources. Job demands (JD) are the physical, social or organisational aspects of the job that require sustained physical or psychological effort (Lewig & Dollard, 2003). Job resources (JR) on the other hand are those aspects that may reduce job demands, aid in achieving work goals, or

stimulate personal growth, learning and development (Lewig & Dollard, 2003). Examples of job demands are high work pressure, role overload, poor environmental conditions and problems related to re-organisation (Bakker, Demerouti, De Boer et al., 2003). Examples of job resources are time control, performance feedback, a supportive leader and trusting relationships with colleagues (Bakker, Demerouti, De Boer et al., 2003). The JD-R model proposes that work characteristics may evoke two different processes. First, high job demands such as work overload may exhaust employees' mental and physical resources and may therefore lead to health problems or burnout. Second, poor or lacking job resources makes it difficult to reach goal accomplishment, which is likely to cause failure or frustration. This, in turn, may lead to withdrawal from work and reduced motivation or commitment (Bakker, Demerouti, de Boer & et al., 2003).

Research in call centres has shown that lack of job control, role stress, performance monitoring, inadequate coaching and training, emotional labour, and a lack of team leader support can all lead to job stress – including depression, emotional exhaustion and anxiety (Bakker, Demerouti, & Schaufeli, 2003). Emotional exhaustion is one of the three components of burnout (Burke & Mikkelsen, 2005). The term “burnout” was first introduced in the late 1960s and early 1970s in the United States as a metaphor to describe a state or process of mental exhaustion. Two persons almost simultaneously “discovered” burnout. Herbert Freudenberger, a practising psychiatrist considered burnout as a mental disorder that is mainly caused by personal characteristics (such as intra-personal conflict, dysfunctional personality traits or cognitions and wrong coping patterns). The emphasis of this view was on clinical observation, diagnoses, counselling, individual treatment and rehabilitation. In contrast, Christina Maslach, a social psychological teacher, considered the interpersonal, social and organisational factors as the root-causes of burnout (Jackson & Rothmann, 2004).

Schaufeli and Enzmann (1998, p. 36) define burnout as follows: “Burnout is a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional attitudes and behaviours at work”. Burnout has come to be measured principally, although not exclusively, by the MBI. Although initially burnout was restricted to the helping professions, it was later broadened and defined as a crisis in one's relationship with work in general, and not necessarily as a crisis in one's relationship with people at work. The three original burnout dimensions were redefined and

an alternative version of the MBI – the MBI-General Survey (MBI-GS) – was developed that can also be used outside the human services environment (Naudé & Rothmann, 2004). According to Schaufeli and Enzmann (1998), burnout incorporates the following three dimensions:

- **Exhaustion:** this refers to the depletion or draining of emotional resources and feelings of being overextended. It is accompanied by distress, a sense of reduced effectiveness, decreased motivation and the development of dysfunctional attitudes and behaviours at work.
- **Cynicism:** this refers to the interpersonal dimensions of burnout and results in a negative, callous or excessively detached response to various aspects of the job.
- **Professional efficacy:** this refers to the self-evaluation dimension of burnout and is a feeling of competence, productivity and achievement at work. Professional efficacy encompasses both social and non-social accomplishments at work (Coetzer, 2004).

The core dimensions of burnout are exhaustion and cynicism (or disengagement). Demerouti, Bakker, Nachreiner, and Schaufeli (2000) state that exhaustion is most clearly the result of job demands (including workload, emotional demands, unfavourable physical working environment) and that cynicism and professional efficacy are most strongly related to job resources (including autonomy, social support and performance feedback). Exhaustion seems to be the most important predictor of absenteeism; cynicism and efficacy are more often found to predict staff turnover and client satisfaction. Bakker et al. (2003) conceptualise exhaustion as an extreme form of fatigue as a consequence of prolonged and intense physical, affective and cognitive strain caused by prolonged exposure to specific working conditions (Bakker et al., 2004).

When a person's workload is particularly high and he or she is already fatigued, extra energy to compensate for fatigue has to be mobilised through mental effort in order to maintain task performance. The effects of high workload demands can accumulate gradually, carrying over from one day to the next. This implies that when people become exhausted under the influence of environmental demands, they will not be able to perform well because their energy resources are diminished. When the external environment lacks resources, individuals cannot reduce the negative influences of high job demands and can therefore not achieve their work goals; they cannot develop themselves further in their job and organisation (Bakker et al., 2004).

Various research findings confirmed the high risk that call centre employees have for possible burnout due to the fact that there is a high level of stress at work, both with regard to the work tasks and to the interactions with customers (Dickter & Grandey, 2004; Hemp, 2004; James, 2004; Rose & Wright, 2005; Witt, Andrews & Carlson, 2004)

The construct of work engagement has been introduced as the opposite pole of burnout (Maslach, Schaufeli, & Leiter, 2001). Work engagement is a persistent, positive affective-motivational state of fulfilment (Kahn, 1992). It is characterised by vigour, dedication and absorption. Vigour refers to an employee's level of energy and mental resilience while working, as well as a willingness to exert effort and to persist even through difficult times. Dedication is more directly related to the job itself-, and is characterised by a sense of significance in one's work, feeling enthusiastic, inspired and proud and by viewing it as a challenge (Bakker et al., 2003). Absorption (Csikszentmihalyi, 1990) comes close to the concept of "flow", an optimal state of experience where 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. Work engagement is a concept relevant for employee well-being and work behaviour for several reasons. First, work engagement is a positive experience in itself. Second, it is related to good health and positive work affect. Third, work engagement helps individuals derive benefits from stressful work. Fourth, work engagement is positively related to organisational commitment and is expected to affect employee performance (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Several studies have shown that job resources are important predictors of involvement. Bakker, Demerouti, and Schaufeli (2002) found that job resources such as performance feedback, supervisor support and job control, were the only predictors of dedication.

Emotional intelligence is another construct that is proposed to aid in the conceptualisation of psychological well-being. Salovey and Mayer (1990) first introduced emotional intelligence as a type of social intelligence which involves the ability to monitor one's own and others' emotions, to distinguish between them, and to use the information to guide one's thinking and actions. Goleman (1995) stated that emotional intelligence is one's capacity for recognising one's own feelings and those of others, for motivating oneself, and for managing emotions in oneself and in one's relationships (Goleman, 1995). Bar-On et al. (2000) has placed emotional intelligence in the context of personality theory. Emotional intelligence is an

umbrella concept for non-cognitive capabilities, competencies and skills which helps an individual to become more efficient in coping with environmental demands and pressures. Emotional Intelligence has five broad areas of skills: intra-personal skills, inter-personal skills, adaptability, stress management and general mood. There are important links between emotion and cognition. Slaski and Cartwright (2003) reports that cognitive appraisals and emotional response states such as fear, anger, guilt and shame fall under the larger rubric of emotion. The negative and positive effect that is produced as a result of negative and positive cognitions, respectively, determine the overall psychological health of each individual.

Various studies confirmed the importance of emotional intelligence in maintaining the psychological health of individuals:

- Cherniss (in Goleman, 1998) conducted research in a national insurance company, and found that insurance sales agents who were weak in emotional competencies such as self-confidence, initiative, and empathy sold policies with an average premium of \$54,000. Those who were very strong in at least five of eight key emotional competencies sold policies worth \$114,000.
- Sheehan (1999) studied managers who needed to bring about a process of change in an organisation. The development of emotional intelligence in managers dealing with the demands, rapidity and uncertainty of change may help them become aware of their own needs and the needs of others. This will have an impact on the effectiveness of their operational skills.
- Ciarrochi, Chan and Caputi (2000) induced moods in students and examined whether people high in emotional intelligence were better than others at managing their moods and preventing their moods from biasing their social judgements. The results of the study indicated that people with high emotional intelligence tended to recall more positive memories than people with a low emotional intelligence.
- A study done by Ciarrochi, Deane and Anderson (2002) reported that mental health variables – depression, hopelessness and suicidal ideation – are interrelated and also related to stress measures. They found that people who are able to positively manage others' emotions responded to stress with less suicidal ideation than others. They also reported less depression and hopelessness.

- Ashkanasy and Dasborough (2003) viewed the results of students where emotional concepts were incorporated into an undergraduate leadership course. Results showed that interest in and knowledge of emotional intelligence predicted team performance, and individual performance was directly related to emotional intelligence.
- A study conducted by Slaski and Carthwright (2003) confirmed that emotional intelligence can be taught, can be learnt and may be useful in reducing stress and improving health, well-being and performance.
- A study conducted by Vakola, Tsaousis and Nikolaou (2004) indicated that people with high emotional intelligence were able to use emotions in order to develop positive attitudes towards change and an increased ability to cope with change.
- Higgs (2004) confirmed the following hypotheses from his study:
  - Successful call centre agents have higher levels of EQ interpersonal sensitivity than other call centre agents.
  - Successful call centre agents have higher levels of EQ resilience than other call centre agents.
  - Successful call centre agents have higher levels of EQ motivation than other call centre agents.
  - Successful call centre agents have higher levels of EQ self-awareness than other call centre agents.
- Tuten and Neidermeyer (2004) measured the role of optimism and its effect on stress in call centres. They found that pessimists experienced significantly higher perceptions of job stress and work/non-work conflict as compared to optimists. This suggests that optimists do not internalise stress to the same degree as pessimists.
- Nel's (2005) research objective was to investigate the correlation between emotional intelligence, job characteristics, burnout and engagement among nurses in the Gauteng and North-West Provinces. The results showed that a positive attitude or emotions are directly related to vigour, dedication, professional efficacy, own emotions, others' emotions and emotional management. The results confirmed that people who are not emotionally intelligent won't be able to cope with tough job demands and will be more prone to burnout and disengagement.

The research conducted in all the call centre environments was insufficient. Consequently, this study will focus on the emotional intelligence aspects in a call centre environment within an insurance industry.

## 1. RESEARCH METHOD

### 1.1 Research design

A cross-sectional survey design was used to collect the data and to obtain the research results. Cross-sectional designs are appropriate where groups of subjects at various stages of development are studied simultaneously, whereas the survey technique of data collection gathers information from the target population by means of questionnaires (Coetzer, 2004).

### 1.2 Participants

The participants consisted of call centre employees ( $N = 141$ ) in a corporate insurance environment. A stratified random sample was taken for this study.

Table 1  
*Characteristics of the Participants (N = 141)*

Item	Category	Percentage
Gender	Male	27,7
	Female	71,5
Race	Black	25,5
	Coloured	19,0
	Indian	11,7
	White	43,8
Language	African	26,3
	English	30,7
	Afrikaans	41,6
	Other	1,5
Age (years)	18-24	21,2
	25-35	65,0
	36-45	8,8
	46-55	4,4
	56+	0,7
Qualification	Less than Grade 12	0,7
	Grade 12	77,4
	Bachelors degree	16,1
	Honours degree	1,5
	Masters degree	0,7
	Doctoral	0,0



Item	Category	Percentage
Years in company	One year and less	19,7
	1-2 years	25,5
	3-4 years	34,3
	5-10 years	18,2
	11-15 years	2,2
	16-20 years	0,0
	20 and more years	0,0
Years in call centre	One year and less	19,7
	1-2 years	23,4
	3-4 years	41,6
	5-10 years	15,3
	11-15 years	0,0
	16-20 years	0,0
	20 and more years	0,0
Days ill	0 days	5,1
	1-5 days	51,1
	6-10 days	27,7
	11-15 days	7,3
	15 and more days	8,8
Call centre	Brokers	48,2
	Clients	51,8

It can be seen from Table 1 that the sample was made up of White, Black, Coloured and Indian employees. The majority of the participants were female (71,5%), white (43,8%), had Afrikaans as their home language (41,6%), fell in the age group of 25-35 years (65,0%) and were from the client services call centre (51,8%). Of the participants 77,4% had Grade 12 qualifications. The majority of the participants had been employed by the company for three to four years (34,3%) and 41,6% of the participants had been in the call centre for three to four years. The majority of the participants had been ill for one to five days (51,1%) during the period July 2004 to June 2005.

### 1.3 Measuring battery

A *biographical questionnaire* was developed to gather information about the demographical characteristics of the participants. Information gathered included age, gender, race, home language, education, years employed by the company and in the current position.

The *Bar-On EQ-i* was used to determine the participants' level of emotional intelligence. The EQ-i measures abilities and the potential for performance rather than performance itself; it is process-oriented, rather than outcome-oriented (Bar-On, Brown, Kirkcaldy & Thomé, 2000; O'Connor & Little, 2003). The EQ-i is a self-report inventory comprising of 133 declarative statements phrased in the first-person singular. Participants are required to indicate the degree to which each statement is true of the way they typically think, feel or act on a five-point

scale (1 = Very seldom or not true of me, 5 = Very often true of me or true of me). The items of the EQ-i are summed to yield scores on 15 lower-order sub-scales, five higher-order composite scores and an overall emotional intelligence score. Of the 133 items that comprise the EQ-i, eight items comprise a positive impression scale, and seven items comprise a negative impression scale. These two scales are designed to determine whether a participant is responding in an overly positive or overly negative fashion. In addition, there is an inconsistency index, calculated by summing the differences in scores between responses on ten pairs of similar items designed to assess random responding. The final item is a self-report on honesty of responding and is not included in any scale. If a participant's response to this item is either "2" or "1" (Seldom true of me or very seldom or not true of me), his or her response is considered invalid. A participant's responses are also considered invalid if a certain percentage of questions are not answered (Omission rate). If the omission rate is higher than 6%, their EQ-i results are considered invalid. Higher scores indicate a higher level of emotional intelligence (Palmer, Manocha, Gignac, & Stough, 2003).

The *Maslach Burnout Inventory-General Survey (MBI-GS)* was used to measure burnout. The MBI-GS consists of three subscales (i.e. exhaustion, cynicism and professional efficacy). Exhaustion is measured using five items, including "I feel burned out from my work", and "I feel tired when I get up in the morning and have to face another day on the job". Cynicism is also measured using five items. Example are: "I have become less enthusiastic about my work" and "I have become more cynical about whether my work contributes anything". Professional efficacy is measured using six items, including "I feel I am making an effective contribution to what this organisation does", and "In my opinion, I am good at my job". Leiter and Schaufeli (1996) have shown that the internal consistency of each of these scales is satisfactory. They found Cronbach alpha coefficients ranging from 0,84 to 0,90 for exhaustion, 0,74 to 0,84 for cynicism, and from 0,70 to 0,78 for professional efficacy.

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli et al., 2002) measures levels of engagement. Initially engagement was viewed as the positive antithesis of burnout, but according to the scale developers, it can be operationalised in its own right. The UWES includes three dimensions, namely vigour, dedication and absorption, which are conceptually regarded as the opposite of burnout and are scored on a seven-point frequency-rating scale, varying from 0 (*never*) to 6 (*every day*). The questionnaire consists of 17 questions and includes questions like "I am bursting with energy every day in my work"; "Time flies when

I am at work” and “My job inspires me”. The alpha coefficients for the three subscales varied between 0,68 and 0,91. Storm (2002) obtained the following alpha coefficients for the UWES in a sample of 2 396 members of the South African Police Service: Vigour: 0,78; Dedication: 0,89; Absorption: 0,78. Coetzer (2004) obtained among a sample of employees in an insurance company (South Africa), the following alpha coefficients: Vigour (0,80); Dedication (0,87), and Absorption (0,69).

The *Job Characteristics Scale (JCS)* was developed to measure job demands and job resources for employees in the insurance industry (Coetzer, 2004). The JCS consists of 48 items. Various demands and resources are measured on a 4-point scale ranging from 'never' (1) to 'always' (4). The dimensions of the JCS include pace and amount of work, mental load, emotional load, work variety, opportunities to learn, work independence, relationships with colleagues, relationship with immediate supervisor, ambiguities at work, information, communications, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. The internal consistency and construct validity of the scale in an insurance industry has been established with alpha cronbach values ranging from 0,70 -0,91 for the different job demands and resources.

#### **1.4 Statistical analysis**

The statistical analysis was carried out with the help of the SPSS-programme (SPSS Inc., 2003) and the Amos-programme (Arbuckle, 2003). Descriptive statistics (e.g. means, standard deviations, distortion and kurtosis) were used to analyse the data. Cronbach alpha coefficients were used to determine the internal consistency, homogeneity and unidimensionality of the measuring instruments (Clark & Watson, 1995). Coefficient alphas contain important information regarding the proportion of variance of the items of a scale in terms of the total variance explained by that particular scale.

Pearson product-moment correlation coefficients were used to specify the relationship between the variables. In terms of statistical significance, it was decided to set the value at a 95% confidence interval level ( $p \leq 0,05$ ). Effect sizes (Steyn, 1999) were used to decide on the practical significance of the findings. A cut-off point of 0,30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients.

Covariance analysis or structural equation modelling (SEM) methods, as implemented by AMOS (Arbuckle, 2003), were used to construct and test a structural model of work well-being. Hypothesised relationships were tested empirically for goodness-of-fit with the sample data. The  $\chi^2$  statistic and several other goodness-of-fit indices summarise the degree of correspondence between the implied and observed covariance matrices. However, because the  $\chi^2$  statistic equals  $(N-1) F$  in this value tends to be substantial when the model does not hold and the sample size is large (Byrne, 2001). Researchers addressed the  $\chi^2$  limitation by developing goodness-of-fit indices that take a more pragmatic approach to the evaluation process.

A value  $<2$  for  $\chi^2/\text{degrees of freedom}$  ratio (CMIN/df) (Wheaton, Muthén, Alwin, & Summers, 1977) indicates acceptable fit (Tabachnick & Fidell, 2001). The hypothesised relationships with the data were also tested using the following goodness-of-fit statistics: Adjusted Goodness-of-Fit Index (AGFI), Parsimony Goodness-of-Fit Index (PGFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between emotional intelligence levels (lower and higher). MANOVA tests whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance (Tabachnick & Fidell, 2001). In MANOVA a new dependent variable that maximises group differences was created from the set of dependent variables. One-way analysis was then performed on the newly-created dependent variable. Wilk's lambda was used to test the likelihood of the data under the assumption of equal population mean vectors for all groups against the likelihood under the assumption that the population mean vectors were identical to those of the sample mean vectors for the different groups. When an effect was significant in MANOVA, one-way analysis of variance (ANOVA) was used to discover which dependent variables had been affected. Because multiple ANOVAs were used, a Bonferroni-type adjustment was made for inflated Type I error. Tukey tests were conducted to indicate which group differed significantly when ANOVAs were done.

## 2. RESULTS

Table 2 shows the factor loadings, communalities, percentage variance for principle factor extraction and varimax rotation on work evaluation items.

Table 2

Factor Loadings, Communalities ( $h^2$ ), Percentage Variance for Principle Factor Extraction and Varimax Rotation on Work Evaluation Items

Item	F1	F2	F3	F4	F5	F6	F7	F8	$h^2$
11. Does your work make sufficient demands on all your skills and capacities?	<b>0,66</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,58
12. Do you have enough variety in your work?	<b>0,68</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,63
14. Does your work give you the feeling that you can achieve something?	<b>0,45</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,61
15. Does your job offer you the possibility of independent thought and action?	<b>0,73</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,59
16. Do you have freedom in carrying out your work activities?	<b>0,07</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,59
17. Do you have influence in the planning of your work activities?	<b>0,52</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,44
18. Can you participate in the decision about when a piece of work must be completed?	<b>0,53</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,40
25. Do you know exactly what other people expect of you in your work?	<b>0,50</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,50
26. Do you know exactly for what you are responsible and which areas are not your responsibility?	<b>0,48</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,60
32. Is Momentum's decision-making process clear to you?	<b>0,49</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,44
22. Can you count on your supervisor when you come across difficulties in your work?	0,00	<b>-0,78</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,69
23. Do you get on well with your supervisor?	0,00	<b>-0,69</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,57
24. In your work, do you feel appreciated by your supervisor?	0,00	<b>-0,76</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,67
27. Do you know exactly what your direct supervisor thinks of your performance?	0,00	<b>-0,64</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,54
29. Do you receive sufficient information on the results of your work?	0,00	<b>-0,55</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,57
30. Does your direct supervisor inform you about how well you are doing your work?	0,00	<b>-0,78</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,63
34. Can you discuss work problems with your direct supervisor?	0,00	<b>-0,69</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,60
36. Do you have a direct influence on your department's decisions?	0,00	<b>-0,32</b>	0,00	0,00	0,00	0,00	0,00	0,00	0,27
43. Do you think that the organisation pays good salaries?	0,00	0,00	<b>-0,88</b>	0,00	0,00	0,00	0,00	0,00	0,76
44. Can you live comfortably on your pay?	0,00	0,00	<b>-0,88</b>	0,00	0,00	0,00	0,00	0,00	0,78
45. Do you think you are paid enough for the work that you do?	0,00	0,00	<b>-0,88</b>	0,00	0,00	0,00	0,00	0,00	0,79
46. Does your job offer you the possibility to progress financially?	0,00	0,00	<b>-0,64</b>	0,00	0,00	0,00	0,00	0,00	0,66
1. Do you have too much work to do?	0,00	0,00	0,00	<b>0,54</b>	0,00	0,00	0,00	0,00	0,50
2. Do you work under time pressure?	0,00	0,00	0,00	<b>0,58</b>	0,00	0,00	0,00	0,00	0,49
4. Do you have to be attentive to many things at the same time?	0,00	0,00	0,00	<b>0,69</b>	0,00	0,00	0,00	0,00	0,53
5. Do you have to give continuous attention to your work?	0,00	0,00	0,00	<b>0,36</b>	0,00	0,00	0,00	0,00	0,14
6. Do you have to remember many things in your work?	0,00	0,00	0,00	<b>0,57</b>	0,00	0,00	0,00	0,00	0,36
7. Are you confronted in your work with things that affect you personally?	0,00	0,00	0,00	<b>0,46</b>	0,00	0,00	0,00	0,00	0,52
8. Do you have contact with difficult clients in your work?	0,00	0,00	0,00	<b>0,58</b>	0,00	0,00	0,00	0,00	0,48
9. Does your work put you in emotionally upsetting situations?	0,00	0,00	0,00	<b>0,72</b>	0,00	0,00	0,00	0,00	0,58

Item	F1	F2	F3	F4	F5	F6	F7	F8	H <sup>2</sup>
40. Do you need to be more secure that you will still be working in one year's time?	0,00	0,00	0,00	0,00	<b>0,90</b>	0,00	0,00	0,00	0,80
41. Do you need to be more secure that you will keep your current job in the next year?	0,00	0,00	0,00	0,00	<b>0,94</b>	0,00	0,00	0,00	0,90
42. Do you need to be more secure that next year you will keep the same function level as currently?	0,00	0,00	0,00	0,00	<b>0,87</b>	0,00	0,00	0,00	0,79
19. Can you count on your colleagues when you come across difficulties in your work?	0,00	0,00	0,00	0,00	0,00	<b>0,86</b>	0,00	0,00	0,76
20. If necessary, can you ask your colleagues for help?	0,00	0,00	0,00	0,00	0,00	<b>0,83</b>	0,00	0,00	0,76
21. Do you get on well with your colleagues?	0,00	0,00	0,00	0,00	0,00	<b>0,54</b>	0,00	0,00	0,46
13. Does your job offer you opportunities for personal growth and development?	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,62</b>	0,00	0,64
47. Does your organisation give you opportunities to follow training courses?	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,62</b>	0,00	0,65
48. Does your job give you the opportunity to be promoted?	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,55</b>	0,00	0,55
37. Do you have contact with colleagues as part of your work?	0,00	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,58</b>	0,49
38. Can you have a chat with colleagues during working hours?	0,00	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,85</b>	0,74
39. Do you find that you have enough contact with colleagues during working hours?	0,00	0,00	0,00	0,00	0,00	0,00	0,00	<b>0,69</b>	0,65
Percentage variance	19,52	7,71	7,14	6,67	5,04	4,25	4,09	3,42	

F1 Role clarity F2 Supervision F3 Pay and Benefits F4 Workload F5 Job security F6 Colleague support F7 Opportunity to grow F8 Social contact

The eight extracted factors accounted for 57,84% of the total variance in the data. The cut-off value of 0,30 was set for inclusion of a variable in the interpretation of a factor.

The first factor relates to the role clarity that call centre employees experience in their line of duty. It deals with, amongst other things, the extent to which call centre agents use their skills and capacities, the variety of their work, the feeling of achievement, the usage of independent thought and action, the freedom to carry out work activities, the amount of influence a call centre agent has in the planning of work activities, the amount of control regarding task completion, the clarity of others' expectations of the call centre agent, the knowledge of areas of responsibilities, and the clarity of the decision-making process.

The second factor deals with supervision, and includes the support from the supervisor, the relationship with the supervisor, the feeling of appreciation displayed by the supervisor, feedback on work performance, feedback on the results of the work performed, feedback on the satisfaction level with the work, freedom to discuss work problems with the supervisor, and the amount of influence on the department's decision-making process.

The third factor, pay and benefits, includes the participant's view if the company pays good salaries, if one can live comfortable on the pay, if the participant thinks that he or she is paid enough and if the job offers possibilities to progress financially.

The fourth factor, workload, relates to the workload that call centre agents come across in their line of duty. It deals with the amount of work, the time pressure, the fact that call centre agents need to be attentive to many things at the same time, the continuous attention, that they need to remember many things, are confronted with situations that affect them personally, have contact with difficult clients, and are exposed to emotionally upsetting situations.

The fifth factor is related to job security and includes aspects such as knowing that one will be able to work in a year's time, knowing that one will be able to keep one's current job the next year and be able to work at the same functional level.

Colleague support is the sixth factor and deals with the fact if one can count on one's colleagues' support during difficult times at work, if one can ask for help, and whether one gets on with one's colleagues.

The seventh factor is the opportunity to grow and refers to the opportunity that the company creates for personal growth and development, if the participant can attend training courses, and the possibility of promotion.

The last factor, factor eight, addresses the social contact between call centre agents. This factor includes if there is contact with colleagues as part of the work, can participants chat during working hours, and whether there is sufficient social contact during working hours.

Table 3 shows the descriptive statistics, alpha coefficients and inter-item correlation coefficients of the Bar-On EQ-I, JCS, MBI-HSS and UWES.

Table 3  
Descriptive Statistics and Alpha Coefficients of the Bar-On EQ-i, JCS, MBI-HSS and UWES (n =141)

Item	Mean	SD	Distortion	Kurtosis	$\alpha$
<b>Bar-On EQ-i</b>					
Emotional self-awareness	30,84	4,65	-0,05	-0,42	0,70
Assertiveness	25,77	4,59	-0,30	0,05	0,72
Self-regard	36,76	6,23	-0,90	0,54	0,86

Self-actualisation	36,96	5,55	-0,78	0,53	0,81
Independence	27,60	4,18	-0,74	0,96	0,71
Empathy	33,41	4,16	-0,60	-0,04	0,68
Interpersonal relationship	45,26	5,50	-0,76	1,74	0,73
Social responsibility	43,41	5,09	-1,02	1,12	0,74
Problem-solving	32,64	3,99	-0,26	-0,09	0,69
Reality testing	39,42	5,50	-0,52	-0,04	0,75
Flexibility	29,60	4,76	-0,19	-0,08	0,72
Stress tolerance	34,08	4,82	-0,48	0,54	0,72
Impulse control	34,53	5,99	-0,60	0,76	0,77
Happiness	37,80	4,75	-0,86	1,14	0,72
Optimism	32,45	4,41	-0,53	0,13	0,75
<b>Job demands and resources (JCS)</b>					
Role clarity	27,88	5,72	-0,20	-0,53	0,84
Supervision	22,85	4,77	0,17	-0,56	0,84
Pay	10,17	3,26	-0,09	-0,76	0,87
Workload	24,70	3,77	-0,45	0,31	0,75
Job security	7,18	3,04	-0,17	-1,15	0,91
Colleague support	10,35	1,81	-0,74	-0,73	0,78
Opportunity to grow	7,40	2,28	-0,11	-0,74	0,77
Social contact	9,14	2,17	-0,29	-0,77	0,71
<b>MBI-GS</b>					
Exhaustion	14,39	7,03	-0,05	-0,88	0,85
Cynicism	7,56	5,47	0,37	-0,54	0,75
<b>UWES</b>					
Vigour/dedication	49,18	11,33	-0,68	-0,21	0,87

The scores on the Bar-on EQ-i, Job Characteristics Scale, MBI-GS, and UWES are normally distributed except for the following factors: Interpersonal relations, social responsibility and job security who showed peaked responses. The Cronbach alpha coefficients of all the measuring instruments are considered to be acceptable compared to the guidelines of  $\alpha > 0,70$  (Nunnally & Bernstein, 1994) except for the alpha coefficients of the following scales: Empathy and problem-solving which are below the accepted 0,70 guideline. The inter-item correlations are considered acceptable compared to the guideline of  $15 < r < 0,50$  (Clarke & Watson, 1995). It appears that there are acceptable levels of internal consistency between the Bar-On EQ-i, Job Characteristics Scale, MBI-GS, and UWES.

Table 4 shows the correlation coefficients between Emotional Intelligence, Job Characteristics, Burnout and Engagement.



**Table 4**  
**Correlation Coefficients between Emotional Intelligence, Job Characteristics, Burnout and Engagement (n =141)**

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Exhaustion	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Cynicism	0,60*++	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Role clarity	-0,38*+	-0,62*++	-	-	-	-	-	-	-	-	-	-	-	-
4. Supervision	-0,29*	-0,37*+	0,42*+	-	-	-	-	-	-	-	-	-	-	-
5. Pay	-0,11*	-0,19*	0,33*+	0,21	-	-	-	-	-	-	-	-	-	-
6. Workload	0,50*+	0,26	-0,14*	-0,29*	-0,19*	-	-	-	-	-	-	-	-	-
7. Job security	-0,24*	-0,07*	0,04*	-0,07*	-0,15*	0,02*	-	-	-	-	-	-	-	-
8. Colleague support	-0,31*+	-0,24*	0,22	0,35*+	0,09	-0,25*	-0,11*	-	-	-	-	-	-	-
9. Social contact	-0,23*	-0,23*	0,36*+	0,37*+	0,30*	-0,15*	-0,08*	0,28	-	-	-	-	-	-
10. Opportunity to grow	-0,24*	-0,35*+	0,48*+	0,37*+	0,44*+	-0,26*	-0,07*	0,26	0,30*	-	-	-	-	-
11. Engagement	-0,52*++	-0,70*++	0,61*++	0,31*+	0,30*	-0,19*	0,09	0,16	0,14	0,46*+	-	-	-	-
12. Emotional self-awareness	-0,27*	-0,33*+	0,19	0,19	-0,09*	-0,10*	-0,09*	0,14	0,11	-0,10	0,17	-	-	-
13. Assertiveness	-0,29*	-0,19*	0,09	0,12	-0,05*	0,00	0,05*	0,01*	0,09	-0,09	0,08	0,61*++	-	-
14. Self-regard	-0,38*+	-0,34*+	0,20	0,26	0,05*	-0,10*	0,02*	0,15	0,12	-0,00-	0,19	0,49*+	0,55*++	-
15. Self-actualisation	-0,41*+	-0,42*+	0,23	0,25	0,08	-0,11*	0,07	0,17	0,11	0,02*	0,24	0,53*++	0,47*+	0,72*++
16. Independence	-0,22*	-0,13*	-0,08*	-0,01*	0,01*	0,05*	0,01*	-0,01*	0,00-	-0,21*	0,10	0,37*+	0,48*+	0,43*+
17. Empathy	-0,04*	-0,18*	0,06	0,20	0,01*	-0,04*	-0,08*	0,25	0,03*	0,16	0,07	0,35*+	0,14	0,29
18. Interpersonal relationship	-0,24*	-0,24*	0,17	0,29	-0,06*	-0,09*	-0,07*	0,30*	0,15	0,00	0,11	0,67*++	0,52*++	0,54*++
19. Social responsibility	-0,11*	-0,23*	0,10	0,17	-0,03*	0,04*	-0,07*	0,13	-0,03*	0,10	0,18	0,40*+	0,13	0,36*+
20. Problem-solving	-0,23*	-0,22*	0,18	0,13	0,11	-0,10*	-0,00	0,12	-0,01*	-0,07*	0,16	0,42*+	0,36*+	0,47*+
21. Reality testing	-0,29*	-0,28*	0,10	0,22	-0,03*	-0,11*	-0,03*	0,18	-0,01*	-0,11*	0,15	0,66*++	0,35*+	0,57*++
22. Flexibility	-0,31*+	-0,37*+	0,29	0,22	0,08	0,02*	-0,07*	0,27	0,23	0,17	0,33*+	0,48*+	0,47*+	0,45*+
23. Stress tolerance	-0,31*+	-0,24*	0,10	0,26	0,04*	-0,05*	-0,04*	0,15	0,04*	-0,11*	0,15	0,46*+	0,44*+	0,58*++
24. Impulse control	-0,36*+	-0,28*	0,12	0,13	-0,01*	-0,22*	0,03*	0,20	0,02*	0,05*	0,18	0,31*+	0,09	0,39*+
25. Happiness	-0,34*+	-0,32*+	0,19	0,25	0,10	-0,14*	0,02*	0,14	0,13	0,01*	0,21	0,48*+	0,51*++	0,75*++
26. Optimism	-0,26*	-0,21*	0,11	0,24	0,00	-0,13*	-0,12*	0,13	0,07	-0,08*	0,14	0,52*++	0,53*++	0,65*++

\* Statistically significant correlation,  $p < 0,05$   
+ Practically significant correlation (medium effect),  $r > 0,30$   
++ Practically significant correlation (large effect),  $r > 0,50$

**Table 4 (cont.)**  
**Pearson Product-moment Correlation Coefficients between Emotional Intelligence, Job Characteristics, Burnout and Engagement (n =141)**

Item	15	16	17	18	19	20	21	22	23	24	25
1. Exhaustion	-	-	-	-	-	-	-	-	-	-	-
2. Cynicism	-	-	-	-	-	-	-	-	-	-	-
3. Role clarity	-	-	-	-	-	-	-	-	-	-	-
4. Supervision	-	-	-	-	-	-	-	-	-	-	-
5. Pay	-	-	-	-	-	-	-	-	-	-	-
6. Workload	-	-	-	-	-	-	-	-	-	-	-
7. Job security	-	-	-	-	-	-	-	-	-	-	-
8. Colleague support	-	-	-	-	-	-	-	-	-	-	-
9. Social contact	-	-	-	-	-	-	-	-	-	-	-
10. Opportunity to grow	-	-	-	-	-	-	-	-	-	-	-
11. Engagement	-	-	-	-	-	-	-	-	-	-	-
12. Emotional self-awareness	-	-	-	-	-	-	-	-	-	-	-
13. Assertiveness	-	-	-	-	-	-	-	-	-	-	-
14. Self-regard	-	-	-	-	-	-	-	-	-	-	-
15. Self-actualisation	-	-	-	-	-	-	-	-	-	-	-
16. Independence	0,44**	-	-	-	-	-	-	-	-	-	-
17. Empathy	0,36**	0,06	-	-	-	-	-	-	-	-	-
18. Interpersonal relationship	0,53**+	0,26	0,52++	-	-	-	-	-	-	-	-
19. Social responsibility	0,40**	0,15	0,79++	0,55**+	-	-	-	-	-	-	-
20. Problem-solving	0,46**	0,48**+	0,41+	0,43**+	0,41**	-	-	-	-	-	-
21. Reality testing	0,57**+	0,43**+	0,38+	0,42**	0,47**	0,55**+	-	-	-	-	-
22. Flexibility	0,42**	0,30*	0,30	0,45**	0,33**	0,39**	0,41**	-	-	-	-
23. Stress tolerance	0,55**+	0,49**+	0,29	0,44**	0,40**	0,56**+	0,59**+	0,49**	-	-	-
24. Impulse control	0,31**	0,19	0,23	0,16	0,35**	0,27	0,54**+	0,28	0,42**	-	-
25. Happiness	0,65**+	0,36**+	0,31+	0,66**+	0,40**	0,35**	0,47**	0,42**	0,53**+	0,23	-
26. Optimism	0,61**+	0,47**	0,40+	0,57**+	0,46**	0,57**+	0,58**+	0,48**	0,71**+	0,30	0,64+

\* Statistically significant correlation;  $p < 0,05$

+ Practically significant correlation (medium effect);  $r > 0,30$

\*\* Practically significant correlation (large effect);  $r > 0,50$

Table 4 indicates that exhaustion is statistically significantly positively correlated (practically significant, large effect) with cynicism and statistically significantly positively correlated (practically significant, medium effect) with workload. Exhaustion statistically significantly negatively correlated (practically significant, large effect) with engagement and statistically significantly negatively correlated (practically significant, medium effect) with role clarity, colleague support, self-regard, self-actualisation, flexibility, stress tolerance, impulse control, and happiness. Cynicism is statistically significantly negatively correlated (practically significant, large effect) with engagement and role clarity and statistically significantly negatively correlated (practically significant, medium effect) with supervision, opportunity to grow, emotional self-awareness, self-regard, self-actualisation, flexibility, and happiness.

Role clarity is statistically significantly positively correlated (practically significant, large effect) with engagement and a statistically significantly positively correlated (practically significant, medium effect) with supervision, pay, social contact, and opportunity to grow. Supervision is statistically significantly positively correlated (practically significant, medium effect) with colleague support, social contact, opportunity to grow, and engagement. Pay is statistically significantly positively correlated (practically significant, medium effect) with opportunity to grow. Opportunity to grow is statistically significantly positively correlated (practically significant, medium effect) with engagement. Engagement is statistically significantly positively correlated (practically significant, medium effect) with flexibility.

Emotional self-awareness is statistically significantly positively correlated (practically significant, large effect) with assertiveness, self-actualisation, interpersonal relationships, reality testing, and optimism and statistically significantly positively correlated (practically significant, medium effect) with self-regard, independence, empathy, social responsibility, problem-solving, flexibility, stress tolerance, impulse control, and happiness. Assertiveness is statistically significantly positively correlated (practically significant, large effect) with self-regard, interpersonal relationships, happiness, and optimism and statistically significantly positively correlated (practically significant, medium effect) with self-actualisation, independence, problem-solving, reality testing, flexibility, and stress tolerance.

Self-regard is statistically significantly positively correlated (practically significant, large effect) with self-actualisation, interpersonal relationships, reality testing, stress tolerance, happiness, and optimism and statistically significantly positively correlated (practically

significant, medium effect) with independence, social responsibility, problem-solving, flexibility, and impulse control. Self-actualisation is statistically significantly positively correlated (practically significant, large effect) with interpersonal relationship, reality testing, stress tolerance, happiness, and optimism and statistically significantly positively correlated (practically significant, medium effect) with independence, empathy, social responsibility, problem-solving, flexibility, and impulse control. Independence is statistically significantly positively correlated (practically significant, medium effect) with problem-solving, reality testing, stress tolerance, happiness, and optimism. Empathy is statistically positively correlated (practically significant, large effect) with interpersonal relationships and social responsibility and statistically significantly (practically significant, medium effect) with problem-solving, reality testing, happiness and optimism.

Interpersonal relationships are statistically significantly positively correlated (practically significant, large effect) with social responsibility, happiness, and optimism and statistically significantly positively correlated (practically significant, medium effect) with problem-solving, reality testing, flexibility, and stress tolerance. Social responsibility is statistically significantly positively correlated (practically significant, medium effect) with problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism. Problem-solving is statistically significantly positively correlated (practically significant, large effect) with reality testing, stress tolerance, and optimism and statistically significantly positively correlated (practically significant, medium effect) with flexibility, and happiness. Reality testing is statistically significantly positively correlated (practically significant, large effect) with stress tolerance, impulse control, and optimism and statistically significantly positively correlated (practically significant, medium effect) with flexibility, and happiness. Flexibility is statistically significantly positively correlated (practically significant, medium effect) with stress tolerance, happiness, and optimism. Stress tolerance is statistically significantly positively correlated (practically significant, large effect) with happiness and optimism and statistically significantly positively correlated (practically significant, medium effect) with impulse control. Happiness is statistically significantly (practically significant, large effect) with optimism.

Next MANOVA analysis was used to determine the relationship between burnout (i.e. cynicism and exhaustion) and emotional demands. Emotional intelligence groups (higher and

lower) were first analysed for statistical significance using Wilk's Lambda statistics. The results of the comparison are given in Table 5.

Table 5  
MANOVAS – Differences in Burnout and Emotional demands of EQ Groups (higher and lower)

<i>Variable</i>	<i>Value</i>	<i>F</i>	<i>Df</i>	<i>P</i>	<i>Partial Eta Squared</i>
EQ group	0,83	8,80	3	0,00*	0,17

\* Statistically significant difference:  $p < 0,05$

Table 5 shows that there was a significant effect of burnout and emotional demands on the combined dependent variable emotional intelligence groups (higher and lower) ( $F_{(3,133)} = 8,80$ ,  $p < 0,05$ ; Wilks' Lambda = 0,83 partial eta squared = 0,17). This was a large effect (Cohen, 1988), where 17% of the variance is explained. Analysis of each individual dependent variable, using a Bonferroni adjusted alpha level of 0,0167, showed that there were significant differences between the levels of Ex ( $F_{(1,0000)} = 24,73$ ,  $p = 0,00$ ), where lower EQ group showed higher levels of emotional exhaustion and cynicism ( $F_{(1,0000)} = 14,87$ ,  $p = 0,00$ ).

Structural equation modelling with the aid of the AMOS program (Arbuckle, 1999), was used in order to test the hypothesised model of the moderating effect of emotional intelligence between emotional demands and burnout (i.e. cynicism, exhaustion) for different EQ groups (i.e. higher EQ and lower EQ). According to West, Finch and Curran (1995) an inflated  $\chi^2$  goodness-of-fit statistic could be obtained if the frequency distribution of items demonstrated deviations from normality as evidenced by elevated distortion (higher than 2,0) and kurtosis (higher than 7,0) levels. In the present study, however, inspection of the item distribution did not produce possible multivariate outliers and items approaching these critical levels of distortion and kurtosis.

Analysis of the data was done by firstly studying the overall  $\chi^2$  goodness-of-fit statistic in conjunction with its degrees of freedom and statistical significance of probability value per EQ group. Comparative fit indices, such as Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), the Parsimony Goodness-of-Fit Index (PGFI), the Normed-Fit Index (NFI), the Comparative-Fit Index (CFI), the Tucker-Lewis Index (TLI) and the

Root Mean Square Error of Approximation (RMSEA) were also used to indicate the fit of the original theoretical factorial model of the MBI-GS and the UWES with the empirical data.

In the second step, exploratory model modification analysis was initiated, based on the information gained from the modification indices where misspecifications in the empirical model were found. Alternative model construction and re-specification resulted in the alternative model being fitted to the data and evaluated during the post hoc analysis process. This process continued to the point where an acceptable solution, comparable with previous related studies, could be found.

The full hypothesised model was tested for each EQ group separately in order to determine construct equivalence. Statistics of the fit between the theoretical model and the empirical data are given in Table 6.

Table 6  
Goodness-of-Fit Statistics for the Hypothesised Model Determining the Moderating Effect of EQ

Model	$\chi^2$	$\chi^2/df$	GFI	AGFI	PGFI	NFI	TLI	CFI	RMSEA
Model 1 – Lower EQ group	21,41	4,28	0,89	0,68	0,30	0,74	0,55	0,77	0,22
Model 2 – Lower EQ	5,73	1,91	0,97	0,84	0,19	0,93	0,86	0,96	0,12
Model 1 – Higher EQ group	17,92	3,58	0,91	0,73	0,30	0,80	0,67	0,84	0,20
Model 2 – Higher EQ	1,84	0,61	0,99	0,95	0,20	0,98	1,05	1,00	0,00

Statistics of the fit between the theoretical model and the empirical data for both EQ groups are given in Table 6. The  $\chi^2$  values of 21,41 ( $df = 5$ ;  $p = 0,00$ ) obtained for the lower EQ group and of 17,92 ( $df = 5$ ,  $p = 0,00$ ) for the higher EQ group are indicative of a poor overall fit. The goodness-of-fit indices also support this finding by not reaching the recommended critical values. The PGFI is lower than 0,80 and values lower than 0,90 for GFI, AGFI, NFI, TLI and CFI were found. The RMSEA value was also higher than the recommended value of 0,05. In order to obtain a better fit between the theoretical three-factor model with the population data, modification of the model was needed. To pinpoint possible areas of misfit, modification indices were examined.

Errors of two item pairs (namely ED1-ED3 and ED2-ED3) were allowed to correlate, given the comparatively high co-variance associated with these errors. By allowing these constrained error co-variances to correlate within their postulated dimensions in the model, ultimately resulted in a better fit to the data. Fit statistics for Model 2 are presented in Table 6.

The various fit statistics in Table 6 indicate an incremental improvement from the first model fit with the empirical data. With the exception of the AGPI, PGFI and RMSEA, all fit indices indicated a marginally acceptable fit at best with the data for the lower EQ group, with  $\chi^2 = 5,73$  ( $df = 3, p = 0,00$ ). With the exception of the PGFI, all fit indices indicated a marginally acceptable fit at best with the data for the higher EQ group, with  $\chi^2 = 1,84$  ( $df = 3; p = 0,00$ ).

A difference of  $\chi^2 = 15,68$  was found between Model 1 and Model 2 for the lower EQ group and a difference of  $\chi^2 = 16,08$  was found between Model 1 and Model 2 for the Higher EQ group. Both these differences are substantial. The other fit statistics seem to support an acceptable fit of Model 2 with the empirical data for both EQ groups. The PGFI, however, is below the acceptable levels of fit. The RMSEA is acceptable for the Higher EQ group, but higher than the 0,05 level for the lower EQ group. Because this model represented acceptable comparative evidence of fit for both EQ groups, no further modification of the model was deemed necessary.

Next, tests of invariance in the different EQ groups were determined, and these are detailed in Table 7.

Table 7  
*Goodness-of-Fit Statistics for Tests of Invariance of the Hypothesised Model for Employees in an Insurance Company in Different EQ Groups*

Model	Groups	Comparative model	$\chi^2$	df	$\Delta\chi^2$	$\Delta df$	P
Hypothesised model (Model 1)	High EQ/Low EQ	Model 2	7,57	6	-	-	-
Factor loadings, variances and covariances constrained equally	High EQ/Low EQ	Model 1	10,69	9	3,12	3	p

The results in Table 7 show that construct equivalence exists, with factor loadings ( $>0,34$ ), variances ( $>0,7$ ) and co-variances constrained equally among the various EQ groups. The equality of error co-variances was not tested, due to the restrictive nature of the test on the data and the relative unimportance thereof (Byrne, 2001). The separate results support a main effect of EQ on the relationship between emotional demands and burnout. The results indicated that EQ directly influence the experience of burnout. However, no results could be obtained supporting the moderating effect of EQ between emotional demands and burnout. It is possible that other job characteristics may impact this relationship.

### **3. DISCUSSION**

The aim of this study was to determine the relationship between job demands, job resources, emotional intelligence and work-related well-being of call centre employees within a corporate insurance group. The results indicated:

The Cronbach alpha coefficients of all the measuring instruments are considered to be acceptable compared to the guidelines of  $\alpha > 0,70$  (Nunnally & Bernstein, 1994) except for the alpha coefficients of the following scales: empathy and problem-solving which were below the accepted 0,70 guideline. The scores on the Bar-On EQ-i, Job characteristics, MBI-GS and UWES were normally distributed except for the following factors: interpersonal relations, social responsibility and job security and happiness which showed peak responses.

The results obtained with the product-moment correlations indicated that exhaustion is positively related to cynicism and workload. Exhaustion is also negatively related towards engagement, role clarity, colleague support, self-regard, self-actualisation, flexibility, stress tolerance, impulse control and happiness.

Cynicism correlates negatively with engagement, role clarity, supervision, opportunity to grow, emotional self-awareness, self-regard, self-actualisation, flexibility and happiness.

Role clarity is positively related to engagement, supervision, pay, social contact and opportunity to grow. Supervision is positively related to colleague support, social contact, opportunity to grow and engagement. Pay is positively related to opportunity for growth.



Opportunity to grow is positively related to engagement and engagement is positively related to flexibility.

Emotional self-awareness is positively related to assertiveness, self-actualisation, interpersonal relationships, reality testing, optimism, self-regard, independence, empathy, social responsibility, problem-solving, flexibility, stress tolerance, impulse control and happiness. Assertiveness is positively related to self-regard, interpersonal relationships, happiness, optimism, self-actualisation, independence, problem-solving, reality testing, flexibility and stress tolerance.

Self-regard is positively related to self-actualisation, interpersonal relationships, reality testing, stress tolerance, happiness, optimism, independence, social responsibility, problem-solving, flexibility and impulse control. Self-actualisation is positively related to interpersonal relationships, reality testing, stress tolerance, happiness, optimism, independence, empathy, social responsibility, problem-solving, flexibility and impulse control. Independence is positively related to problem-solving, reality testing, stress tolerance, happiness and optimism. Empathy is positively related to interpersonal relationships, social responsibility, problem-solving, reality testing, happiness and optimism.

Interpersonal relationships are positively related to social responsibility, happiness, optimism, problem-solving, reality testing, flexibility and stress tolerance. Social responsibility is positively related to problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism. Problem-solving is positively related to reality testing, stress tolerance, optimism, flexibility and happiness. Reality testing is positively related to stress tolerance, impulse control, optimism, flexibility and happiness. Flexibility is positively related to stress tolerance, happiness, and optimism. Stress tolerance is positively related to happiness, optimism and impulse control and happiness is positively related to optimism.

From the results it was established that if employees have emotional intelligence they will be able to recognise their own emotions and their effects and will therefore know which emotions they are feeling and why; they will also realise the links between their feelings and what they think, do and say. They will recognise how their feelings affect their performance and will therefore be able to adjust their emotions to ensure optimal outcomes. According to Mayer, Salovey and Caruso (2000) emotional intelligence is seen as a traditional intelligence

that relates to information processing. They see emotional intelligence as the capacity to reason with and about emotions, including (1) the ability to perceive accurately, appraise, and express emotions; (2) the ability to access and/or generate feelings when they facilitate thought; (3) the ability to understand emotion and emotional knowledge, and (4) the ability to regulate emotions to promote emotional and intellectual growth.

It is very important that call centre employees have emotional intelligence. Emotional intelligence should be applied to their daily activities such as the ability to remain calm amid the pressure of responding to a stream of customer calls. Call centre workers should also have the ability to be friendly, positive and tactful while at the same time remaining disengaged psychologically as a defence against rude and abusive customers. Active listening is necessary. For example, skills such as responding to the cues given by the customer, having patience and empathy especially when the customer is upset, and being able to ascertain the customer's needs in order to resolve customer queries and problems quickly and efficiently. Emotional intelligence also entails learning and unlearning as this is related to product-, procedure- and system changes (Rose & Wright, 2005).

Emotional intelligence has performance implications. When emotions are intertwined with role, performance, or both, they tend to interfere with task achievement. Depending on whether the emotions are perceived as enhancing or distracting, the perception and regulation of emotions operate through two opposite emotional control mechanisms: buffering and personal engagement. Buffering is a way to control undesirable emotions. Personal engagement has been linked to flow, or a state of peak performance in which emotions are not just contained and channelled, but positive, energised and aligned with the task at hand (Thi-Lam & Kirby, 2002). Because individuals with well-developed emotional intelligence are able to identify and control their own emotions and those of others, they are less likely to be paralysed by fear, negative emotions, and anxiety (Thi-Lam & Kirby, 2002).

The results indicate that call centre employees with emotional self-awareness will be able to cope with their environment by applying the following skills – assertiveness, reality testing, interpersonal relationships, social responsibility, independence, problem-solving, empathy, stress tolerance and impulse control. They experience self-actualisation, optimism and high self-regard. This, in turn, will increase their overall psychological well-being. This was supported by a study done by Reuven Bar-On whereby a moderate, yet significant,

connection between emotional intelligence and psychological well-being was confirmed (Bar-On, 2003).

Assertiveness is the ability to express feelings, beliefs and thoughts, and to defend one's rights in a non-destructive manner (Palmer et al., 2003). Assertiveness enhances the call centre employee's coping skills as it allows the employee to express his or her views without feeling that he or she can't control the onslaught of the customer. Reality testing is the ability to assess the correspondence between what is being experienced and what objectively exists (Palmer et al., 2003). If the call centre employee has been taught assertiveness, he or she will be able to objectively summarise the situation and will be able to respond accordingly without feeling overwhelmed by the situation.

Interpersonal relationships are the ability to establish and maintain mutually satisfying relationships (Palmer et al., 2003). This is an important aspect of the call centre employee's responsibilities since they provide a link between the external customer and environment and the internal operations of the organisation. They represent the company and directly influence the service quality perceptions of the customer (Malhotra & Mukherjee, 2004).

Social responsibility is the ability to demonstrate oneself as a cooperative contributing, and constructive member of one's social group and independence is the ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency (Palmer et al., 2003). These are also important factors as the call centre employee forms part of a team and yet, in most instances, are measured on an individual basis. The employee must be able to handle the work-station in a self-controlled manner and must not experience anxiety when independent decisions need to be made.

Problem-solving is the ability to identify and define problems as well as to generate and implement potentially effective solutions (Palmer et al., 2003). It is important for call centre employees to get to the crux of the problem quickly and to find solutions for customer queries.

Empathy is the ability to be aware of, to understand, and to appreciate the feelings of others (Palmer et al., 2003). Empathy helps the call centre employee to deal with a negative customer because he or she has a real understanding for the frustrations of the customer.

Stress tolerance is the ability to withstand adverse events and stressful situations and flexibility is the ability to adjust one's emotions, thoughts, and behaviour to changing circumstances (Palmer et al., 2003). Call centre employees must be able to handle the stressful call centre environment but they also need to be flexible to adjust to the constant changes in the environment. Impulse control (the ability to resist or delay an impulse, drive or temptation to act, Palmer et al., 2003) will also ensure that the call centre employee will be able to handle impulses pertaining to the handling of the difficult customer.

Optimism is the ability to look at the brighter side of life and to maintain a positive attitude (Palmer et al., 2003). Optimism helps to reduce perceptions of stress and to increase an individual's ability to perform. Whether it is an employee's ability to perform in a high-stress environment, an individual's ability to cope with an emotional loss or a patient's ability to heal, optimists are better able to succeed despite the presence of stress (Tuten & Neidermeyer, 2004).

Results on the job demands and resources scales indicated the following:

Role clarity will ensure that call centre employees feel engaged, have a good relationship with their supervisors, are content with their pay, are happy with the amount of social contact with colleagues and feel that there is sufficient opportunity to grow. The basic components of work engagement are vigour, dedication and absorption. Call centre employees who experience role clarity will therefore have high levels of energy and will strongly identify with his or her work. Role clarity also enhances employee well-being as work engagement is a positive experience in itself, it is related to good health and a positive attitude towards work. It helps individuals to derive benefits from stressful work and is positively related to organisational commitment (Sonnetag, 2003). Opportunity to grow also has a large effect on engagement.

Supervision plays an important role in the employee's experience of colleague support, social contact, opportunity to grow and engagement. On the basis of a sample of 940 call centre employees, Wilk and Moynihan (2005), found that worker emotional exhaustion varied across supervisors within jobs, suggesting that emotion is influenced at the supervisory, rather than job level. Furthermore, the importance supervisors place on interpersonal job demands of their workers was positively related to worker emotional exhaustion (Wilk &

Moynihan, 2005). Rose & Wright (2005) also indicate that low levels of support from supervisors and high levels of monitoring and target setting had a significant negative impact on employee satisfaction.

Call centre employees associated fair pay with opportunity to grow. They might feel they are appreciated for the work they do, and that they get the support that they need. This will lead to greater vigour and dedication towards work.

Too high job demands, coupled with too few job resources, will lead to cynicism and eventually emotional and mental exhaustion and disengagement. This can have a negative impact on work well-being if it is not managed correctly. It can also have a huge effect on performance as the call centre employees may feel that they can not cope with the workload, that they experience little or no colleague support and this in turn will have an impact on their flexibility, impulse control, stress tolerance and happiness levels. Because they are the first-entry level into the organisation, it can have a detrimental effect on the company's service level credibility.

The results indicated that emotional intelligence directly influences the experience of burnout. Call centre employees with emotional intelligence are better able to manage their own and other's emotions, are more able to use emotional support systems and are more engaged towards their work because they are able to handle the environmental pressures more effectively. This ultimately leads towards achieving work well-being.

The study had several limitations. First, self-report measures were exclusively relied upon. Future studies conducted in this manner would confirm whether bias and equivalence do indeed exist for the different language groups. A further limitation is that the study was conducted on call centre employees, which has significant limitations in terms of the generalisation of the findings applied to the total study population. Another limitation is the size of the sample, specifically the distribution of the language groups and the fact that the questionnaires were only in English so the language disparity could also have influenced the results.

#### **4. RECOMMENDATIONS**

The insurance industry should add interventions to their employment assistance programmes to prevent the dysfunctional effect of burnout and to increase the functional effect of work engagement. Well-being levels should be monitored on an annual basis or after stressful events such as take-overs, downsizing or mergers. The monitoring of psychological well-being should be incorporated in the company policy and made part of the organisation's culture. It should then be made part of the strategic planning efforts to make the organisation less stressful. Implementing strategies to lower job demands and to increase the use of job resources can do this.

Emotional intelligence competencies should be incorporated in training and development programmes and tied to leadership performance. Emotional intelligent behaviour should be rewarded to encourage the use of emotional intelligence skills. This can be done by directly linking the emotional intelligent behaviour (performance of the competency) to the required results that is embedded in the organisation's mission and vision. The main effect of emotional intelligence on burnout should be investigated further for all occupational groups throughout the organisation. Emotional intelligence as a way of coping with burnout should be incorporated in the induction programmes of new employees.

Future research can focus on the development and validation of a causal model of psychological well-being of call centre workers. The effect of emotional labour/emotion work on the experience of burnout and engagement should be investigated. The main effect of emotional intelligence on the emotion work of call centre workers should be studied. The relationship between emotion work, (the display of positive and negative emotions required by the insurance industry) emotional intelligence, job demands, job resources and well-being should be established.

The validation of the Bar-On EQ-i in different occupational groups in South Africa will add value to reliable measurement of emotional intelligence in South Africa prior to development efforts. This can be done by translating the Bar-On EQ-i into different African languages and to determine the construct equivalence. Another method is the development of an emotional intelligence measure for South Africa and to establish norms within different occupational

groups; the differences in experiencing emotions and emotion management should be investigated for all the different cultural groups in South Africa.

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## CHAPTER 3

### CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter encompasses the conclusions regarding the specific objectives as mentioned in Chapter 1. The limitations of the study are highlighted and recommendations are made for the profession of call centre workers.

#### 3.1 Conclusions

The *first objective* of the study was to conceptualise constructs of emotional intelligence, job demands and job resources, burnout and engagement from the literature. Being emotionally and socially intelligent means to effectively manage personal, social and environmental change by coping with the immediate situation and solving problems realistically and flexibly. Emotions must be managed and employees must be optimistic, positive and self-motivated (Bar-On, 2003).

Emotional intelligence is further conceptualised as the capacity for recognising one's own feelings and those of others, for motivating the self, and for managing emotions in the self and in relationships (Goleman, 2004). Emotional intelligence is knowing what one is feeling in the moment, using those preferences to guide one's decision-making, having a realistic assessment of one's own abilities and a well-grounded sense of one's self-confidence. Handling one's emotions will help one to facilitate rather than interfere with the task at hand, being conscientious and delaying gratification to pursue goals as well as recovering well from emotional distress. Emotional intelligence will also help to take initiative and to strive to improve, as well as perseverance in the face of setbacks and frustrations.

Emotional intelligence helps one to determine what other people are feeling, being able to see their perspective, and cultivating rapport and harmony with a broad diversity of people. It improves social skills by helping one to handle emotions in relationships well and to accurately read social situations and networks which improves negotiating skills and enhance settlement of disputes (Goleman, 2004).

The call centre environment is stressful with the tendency for organisations to manage the way their employees feel and look as well as the way they behave (Warhurst & Nickson,

2001). Call centre employees are typically provided with explicit, specific operational guidelines in the forms of “*talk time*” (the targeted average call length) and customer interaction scripts. Scripts may specify phrases to be used at different points in the conversation e.g.: “*Thank you for calling company X.*” Phrases like “*How may I help you*”, display rules: emotions to be manifested during the interaction with the client (Witt, Andrews & Carlson, 2004).

Call centre employees are expected to handle a specified number of calls daily along with a target for the average call length. The abandonment rate (clients who hang up before being answered) can cause additional stress and is often a heavily weighted criterion of performance management. The speed and volume of calls comprise important criteria for call centre performance. Clients can also bring tension to the work environment. They may be abusive and irritating and their demands may be unreasonable. In order to manage these situations and protect themselves from abuse or ill treatment, employees are often encouraged to suppress their true feelings and emotionally detach themselves from hostile or difficult customers. This disjuncture between what employees might feel towards their customers and what they are expected to display may prove difficult to resolve and may cause considerable anxiety. Another source of stress relates to the tension between management’s goals of customer satisfaction and customer throughput. Although employees are often monitored for service quality there is normally greater pressure placed on productivity (Deery, Iverson, & Walsh, 2002). Many negative factors, such as withdrawal, absenteeism, emotional exhaustion and burnout could be prevented if call centre employees are emotionally competent. This study focused on engagement, burnout and job characteristics.

Burnout and work engagement are indicators of the well-being of employees within an organisation. They could, therefore, be combined in a model of well-being at work (Schaufeli, 2003; Schaufeli & Bakker, 2004). Work well-being can be conceptualised within two dimensions: exhaustion versus vigour and cynicism versus dedication (Coetzer, 2004). The hallmarks of burnout are exhaustion (low energy) and cynicism (poor identification). Emotional exhaustion is regarded as the core component of job burnout (Jackson, Schwab & Schuler, 1986). It is characterised by feelings of tiredness and fatigue, a lack of energy and the depletion of an individual’s emotional resources (Moore, 2000). Jackson et al. (1986, p 630) define burnout as a “state of emotional exhaustion caused by excessive psychological and emotional demands made on people helping people”. The burnout syndrome is seen as a

specific type of stress resulting from working conditions that feature high levels of interpersonal contact (Cordes & Dougherty, 1993). There are a number of factors that affect the occurrence of emotional exhaustion. These relate to the nature of the work demands placed upon individuals. Amongst the most important of these factors are workload, role overload, work pressure and role conflict (Cordes & Dougherty, 1993). High workload, in particular, has consistently been linked to emotional exhaustion in a range of studies (Jackson et al., 1986). Also, where individuals feel that they lack the training and skills to deal satisfactorily with the requirements of their job (role overload) they are more likely to experience emotional exhaustion (Maslach & Pines, 1977). Role conflict (the extent to which incompatible expectations are communicated to the employee) has been identified as another determinant of emotional exhaustion (Jackson et al., 1986).

There are a number of variables that could be expected to affect the level of emotional exhaustion of call centre employees in a call centre environment. They can be grouped into four clusters: those pertaining to the nature of the job and to the work setting; those relating to social support in the organisation, those pertaining to personal dispositions and assessments, and finally, demographic variables, such as age, gender and employment status (Deery et al., 2002). It was noted earlier that call centre employees are normally required to follow a scripted dialogue with clients. This can restrict the employees' sense of autonomy and ability to provide more customised service (Deery et al., 2002). Another factor is the requirement to create a particular emotional climate between the employee and the client and that such a "manufactured" climate may bear little relationship to the employee's real feelings. This can create tensions between the employee's inner feelings and the requirements of outward display. Emotional expressivity refers to the difficulty that employees experience in containing their true feelings when servicing their clients (Deery et al., 2002). The contradictory messages conveyed to employees about the importance of quality service to clients can also play a role. Managers appear to place a greater emphasis on the quantity, rather than the quality of calls. Where employees experience incompatible demands their continued attempts to meet those demands can result in frustration and emotional distress (Jackson et al., 1986). Another distinctive feature of call centre work is the repetitive nature of the tasks which are performed. Call centre employees will have higher levels of emotional exhaustion if they view their jobs as routine and lacking in task variety (Deery et al., 2002). The extensive use of performance monitoring is another characteristic of interactive service work. A lack of opportunity for self-monitoring increases the likelihood of emotional

exhaustion (Deery et al., 2002). Another factor is the limited promotional and career development opportunities because of the flat organisational structures. The frequency of interpersonal interactions also affect the level of emotional exhaustion. On the other hand, where employees spend longer on the telephone with each client they experience less exhaustion. The reason is that they have a greater opportunity to build a rapport with the client thereby making the interaction more rewarding and pleasant (Deery et al., 2002). The considerable pressure on employees to reduce the “wrap-up” time on calls can lead to feelings of anxiety and frustration (Deery et al., 2002). The impact of emotional exhaustion is employee withdrawal as well as a tendency for call centre employees to be absent for one or two days (Deery et al., 2002). It is therefore important to establish engagement in work to prevent burnout from happening and to ensure the wellbeing of the call centre employee.

Engagement should be viewed as part of a more general emerging trend towards a “positive psychology” that focuses on human strengths and optimal functioning rather than on weaknesses and malfunctioning (Seligman & Csikszentmihalyi, 2000). Schaufeli and his colleagues defined work engagement as a persistent, positive affective motivational state of fulfilment (Maslach, Schaufeli, & Leiter, 2001). Work engagement is important for employee well-being for several reasons. First, work engagement is a positive experience in itself. Second, it is related to good health and positive work affect. Third, work engagement helps individuals derive benefits from stressful work and lastly, work engagement is positively related to organisational commitment (Sonnentag, 2003). The basic components of work engagement are vigour, dedication and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Engagement is concerned with how the individual employs him- or herself during the performance of his or her job. It entails the active use of emotions and behaviour, in addition to cognition (May, Gilson, & Harter, 2004). Engaged employees are assumed to have a sense of energetic and effective connection with their work activities and they see themselves as able to deal completely with the demands of the work (Montgomery, Peeters, Schaufeli, & Den Ouden, 2003). It is important for call centre employees to feel engaged towards their work as this in turn will lead to passionate employees who will identify more with their work and as a result deliver better client service. Kahn (1990) proposed that physical, emotional, and psychological resources are a necessary prerequisite for engaging at work.



Job demands and job resources together form the job characteristics of a person's job. At the heart of the Job Demands-Resources (JD-R) model lies the assumption that the characteristics of working environments can always be classified in these two general categories. This overarching model can thus be applied to various occupational settings, irrespective of the particular demands and resources involved (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Job demands refer to those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs. Examples are high work pressure, role overload, poor environmental conditions and problems related to restructuring. Job resources refer to those physical, psychological, social or organisational aspects of the job that are functional in achieving work goals, reduce job demands and the associated physiological and psychological costs or stimulate personal growth and development (Bakker, Demerouti, de Boer, & Schaufeli, 2003). Work characteristics may evoke two different processes. First, high job demands may exhaust the employee's mental and physical resources and may therefore lead to health problems or burnout. Second, poor or lacking resources have an influence on goal accomplishment, which can cause failure and frustration. This in turn may lead to withdrawal from work, and reduced motivation and commitment (Bakker et al., 2003). When the external environment lacks resources, the employees cannot reduce the negative influence of high job demands and cannot achieve his or her work goals. In such a situation, commitment is reduced as a defence mechanism to prevent future frustration of not obtaining work related goals (Bakker et al., 2003).

From the literature it is evident that the employee with emotional intelligence has significantly better levels of health and well-being and is able to outperform others (Ashkanasy & Dasborough, 2003; Ciarrochi, Chan & Caputi, 2000; Ciarrochi, Deane & Anderson, 2002; Slaski and Carthwright 2003;). Various research findings confirmed the high risk that the call centre employee has for possible burnout due to the fact that there is a high level of stress at work, both with regard to the work tasks and to the interactions with customers (Witt et al., 2004; Dickter & Grandey, 2004; Hemp, 2004; James, 2004; Rose & Wright, 2005).

The *second objective* of this study was to determine the validity and reliability of the measures of emotional intelligence, job demands and resources, burnout and engagement for the call centre worker. According to the descriptive statistics, the scores on the questionnaires

Bar-On EQ-i, JCI, MBI and UWES are normally distributed. The cronbach alpha coefficients of all the measuring instruments are considered to be acceptable compared to the the guidelines of  $> 0,70$  (Nunnally & Bernstein, 1994) except for the alpha coefficients of the empathy (0,68) and problem-solving (0,69) scales of the Bar-On EQ-i. Eight factors were extracted for the *Job Characteristics Scale*: Role clarity, supervision, pay, workload, job security, colleague support, opportunity for growth and social contact. MBI-GS (Burnout) consisted of two factors namely exhaustion and cynicism. The UWES (Engagement) comprised of one factor: vigour/dedication. The bar-on EQ-i consisted out of the following factors: emotional self-awareness, assertiveness, self-regard, self-actualisation, independence, empathy, interpersonal relationship, social responsibility, problem-solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism.

The *third objective* of this study was to establish the relationship between engagement, burnout, job characteristics and emotional intelligence. Product-moment correlations indicated that exhaustion is positively related to cynicism and workload and negatively related to engagement, role clarity, colleague support, self-regard, self-actualisation, flexibility, stress tolerance, impulse control and happiness. Cynicism is negatively related with engagement, role clarity, supervision, opportunity for growth, emotional self-awareness, self-regard, self-actualisation, flexibility and happiness. Role clarity is positively related to engagement, supervision, pay, social contact and opportunity for growth. Supervision is positively related with colleague support, social contact, opportunity for growth and engagement. Pay is positively related to opportunity for growth and engagement. Engagement is positively related to flexibility.

Emotional self-awareness is positively related to the five broad areas of emotional intelligence namely intrapersonal skills (assertiveness, self-regard, self-actualisation, independence), interpersonal skills (empathy, interpersonal relationship, social responsibility), adaptability skills (problem-solving, reality testing, flexibility), stress management skills (stress tolerance, impulse control) and general mood (happiness). Assertiveness is positively related to self-regard, interpersonal relationships, happiness, optimism, self actualisation, independence, problem-solving, reality testing, flexibility and stress tolerance. Self-regard is positively related to self-actualisation, interpersonal relationships, reality testing, stress tolerance, happiness, optimism, independence, social responsibility, problem-solving, flexibility and impulse control. Self-actualisation is

positively correlated to interpersonal relationship, reality testing, stress tolerance, happiness, optimism, independence, empathy, social responsibility, problem-solving, flexibility and impulse control. Independence is positively related to problem-solving, reality testing, stress tolerance, happiness and optimism. Empathy is positively related to interpersonal relationships, social responsibility, problem-solving, reality testing, happiness and optimism.

Interpersonal relationships are positively related to social responsibility, happiness, optimism, problem solving, reality testing, flexibility and stress tolerance. Social responsibility is positively related to problem solving, reality testing, flexibility, stress tolerance impulse control, happiness and optimism. Problem solving is positively related to reality testing, stress tolerance, optimism, flexibility and happiness. Reality testing is positively related to stress tolerance, impulse control, optimism, flexibility and happiness. Flexibility is positively related to stress tolerance, happiness and optimism. Stress tolerance is positively related to happiness, optimism and impulse control. Happiness is positively related to optimism.

It is evident from the research that call centre employees that display emotional intelligence will be able to manage their emotions and use them as sources of creativity, problem-solving, decision-making and motivation. They will therefore be better able to deal with the stresses of the environment (Salovey, 2003).

Emotional intelligence enables people to deal with just about anything life dishes out with balance and maturity. Emotionally intelligent people have a deep-rooted sense of self, which also helps them to understand other people; they keep things in proportion, which helps them to retain focus and an understanding of what's important in life; retain a positive viewpoint almost all of the time and can be relied on to put an "opportunity" spin on anything that happens; they are known to have their own definition of "success" in life and are usually successful in whatever they choose to do; they are likely to have a high work performance and personal productivity levels and consequently enjoy greater job satisfaction (Barton, 2004).

Call centre employees will be able to perform better when they apply emotional intelligence. Once emotions occur and are recognised by the cognitive systems of the brain, the ability to guard against distracting emotions and to build on positive emotions facilitates individual task performance as well as team performance. Depending on how emotions are perceived

(distracting or positive), the regulation of emotions operates through two opposite emotional control mechanisms: buffering and personal engagement (Lam & Kirby, 2002). Buffering is a way to control undesirable emotions. Buffering involves segregating emotions so that they do not interfere with the task at hand (Lam & Kirby, 2002).

Personal engagement reflects the highest level of motivation and results in a high level of performance. Personal engagement has been likened to flow, or a state of peak performance in which emotions are not just contained and channelled, but positive, energised, and aligned to the task at hand (Lam & Kirby, 2002). Because call centre employees with well-developed emotional intelligence are able to identify and control their own emotions and those of others, they are less likely to be paralysed by fear, negative emotions and anxiety, all of which can have a negative effect on both individual and team performance (Lam & Kirby, 2002). A study conducted by Ciarrochi et al. (2000) confirmed that highly emotional intelligent people tend to recall more positive memories in positive mood and to report feeling more positive indicating that they can control their emotions better than people with low emotional intelligence. Emotional intelligence also has an impact on management processes which involves change. Employees with high emotional intelligence are able to use emotions in order to develop positive attitudes towards change and increase their ability to cope with change (Vakola, Tsaousis, & Nikolaou, 2004).

Research in call centres has shown that a lack of job control, role stress, performance monitoring, inadequate coaching and training, emotional labour, and lack of team leader support can all lead to job stress – including depression, emotional exhaustion and anxiety (Bakker, et al., 2003). Other research (Rose & Wright, 2005) also emphasise other factors such as the organisation of work and individual job design factors, employee involvement, empowerment, and skills. Another important factor is the client's actual behaviour during the service transaction. It appears that this can cause more stress than the length or frequency of interactions with the client (Dollard, Dormann, Boyd, Winefield & Winefield, 2003). The results indicate that call centre employees who experience the work demands to be in excess of the job resources will find it difficult to be engaged and committed to their work. This can lead to cynicism and emotional withdrawal and will have an impact on the quality of their work as well as their overall well-being.

The *fourth objective* was to determine the moderating effect of emotional intelligence on engagement, job characteristics and burnout. No results could be obtained supporting the moderating effect of emotional intelligence between emotional demands and burnout. The results did indicate that emotional intelligence influenced the experience of burnout. Call centre employees with well developed emotional intelligence skills are better able to cope with the environmental demands and they experience overall well-being because of the fact that they can control and manage their emotions.

### **3.2 Limitations**

This study had several limitations. First, self-report measures were exclusively relied upon. Future studies conducted in this manner would confirm whether bias and equivalence do indeed exist for the different language groups. A further limitation is that the study was conducted on call centre employees, which has significant limitations in terms of the generalisation of the findings applied to the total study population for the insurance industry.

Another limitation is the size of the sample, specifically the distribution of the language groups and the fact that the questionnaires were only in English so the language disparity could also have influenced the results.

### **3.3 Recommendations**

The following recommendations are given to the profession as well as for future research in South Africa.

#### **3.3.1 Recommendations for the profession**

Call centre employees play a vital role in customer retention. The work requires constant interaction with customers, and the requirement to regulate emotions at work.

The following interventions are recommended:

- Assess the leadership in the call centre department and if necessary implement training of leaders in participative and transformation leadership to ensure inspirational dialogue with employees.
  
- Review the selection process by implementing the Bar-On EQ-i as measuring instrument of emotional intelligence for new employees and ensure ongoing emotional intelligence training for new employees.
  
- Develop a task oriented and relationship oriented culture for the call centre department. As part of the task oriented culture, look at work redesign and job rotation. As part of relationship oriented culture, examine employee consultation processes and mechanisms (communication channels). Investigate ways to increase participation of employees in decision-making as well as ways to increase autonomy of employees.
  
- Ensure that the performance management system set clear goals and generate positive feedback. The following aspects must be covered for the call centre department:
  - Automated workflow system (AWD)
  - Taping and playback of calls
  - Qualitative and quantitative performance targets
  - Silent listening by team leader
  - Team scoreboards
  - Team meetings
  - Monthly performance feedback
  - Quarterly performance appraisal
  - Team competitions
  
- Present training programmes in self-development, stress management, time management, “role separation”.
  
- Implement role clarification team building sessions.

- Identify aspects of the work that employees find most engaging and assess what interventions could be implemented to enhance the positive aspects of the work experience.
- Ensure work/life balance empowerment.
- Ensure enough recovery time for call centre employees.
- Attend to the ergonomics in the call centre department to prevent repetitive strain injury.
- Organise a well being day and include awareness training such as stress management and the role of ergonomic factors. Schedule free screening for hypertension, diabetes, cholesterol and sight. Include fitness, nutrition and weight promotion.
- Have counselling services available for employees.
- Have one-on-one counselling services available for employees and allocate mentors to each new employee.
- Ensure that the induction programme covers all aspects of information needed by a call centre agent as well as implementing an “adopt-a-buddy programme” for new employees for the first month.

### 3.3.2 Recommendations for future research

Future studies could include variables such as emotional structure, personality dimensions, sense of coherence and locus of control. A larger sample could be used to enable generalisation of the findings in similar groups. Because no results could be obtained to support the moderating effect of emotional intelligence between emotional demands and burnout, it is possible that other job characteristics may impact on this relationship and consequently further studies are recommended. The question of how emotional intelligence affects task-interdependent activities, organizational commitment and job satisfaction should be investigated.

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