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Job demands, job resources, job control and their relationship with burnout and engagement.

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1. Introduction

1.1 Introduction

Like many other psychological phenomena, well-being at work has tended to be discussed and studied from a problem-oriented, pathological perspective. Thus, usually when well-being at work has been studied, it has actually been a lack of well-being (e.g. burnout, job stress) that has been under scrutiny. Gradually there has been a shift towards positive psychology among researchers, more specifically employee engagement. Research has suggested that the level of employee engagement in general is affected by personal characteristics, the work place (Kirkpatrick, 2007) and the characteristics of the work, including job status and job demands (Mauno, Kinnunen & Ruokolainnen, 2007). Although it is important to increase the studies in the positive perspective, burnout is still a valid ongoing area of research. Therefore the current study adopts a more integrated approach between employee engagement and burnout.

According to Schaufeli and Bakker (2004), both burnout and employee engagement are indicators of employee well-being at work. Therefore, burnout and employee engagement can be integrated within one model (Rothmann, 2001). The present study aims at focusing on a model of burnout and engagement with predictors and consequences proposed by Schaufeli and Bakker (2004) but altering a few variables. Schaufeli and Bakker (2004) extended the Job Demands-Resource model by including engagement and by adding indicators for health impairment and organisational withdrawal to the Comprehensive Burnout and Engagement (COBE) model. The original Schaufeli and Bakker (2004) study looked firstly at an energetic process

which linked job demands with health problems via burnout and secondly a motivational process which linked job resources via engagement with the organisational outcome of turnover intentions. The present study will similarly use job demands and job resources as input variables, but will have the inclusion of job control. The outcome variables in the current study will be turnover intentions and absenteeism. The latter replaces health problems in Schaufeli and Bakker's (2004) model. The aim of this was to provide a more objective measure of absenteeism instead of relying on a self-report measure. Absenteeism was included as it is a more grounded concept for organisations (Porteous, 1997).

The following chapters include a literature review; a discussion of the methodology; the various results found and concluding this report is a discussion of the findings. Chapter 2, the literature review, will look at a range of models of well-being and will discuss various constructs within the current study's model (discussed on page 13) and will conclude with the hypotheses for the current research. Chapter 3, the methodology, focuses on the research design, the sample and the instruments used to measure the various constructs. This chapter concludes with a brief discussion on the different statistical methods used to test the hypotheses. Chapter 4, the results, includes a discussion of all the findings for the hypotheses as well as findings for the demographical data. Chapter 5, the discussion, will look at the current research's findings in relation to other previous research. In the final chapter, the conclusions are discussed in terms of their practical implications for organisations, employees and the need for future research. Limitations of the study are also addressed in this final chapter.

2. Literature Review

This chapter presents literature which discusses various models of well-being and the constructs used in the current study's model. Numerous models of well-being exist and the current review will describe some of the more common, specifically, Warr's Vitamin Model; the Conservation of Resources (COR) theory; the Job Demands - Resources (JD-R) model; the Comprehensive Burnout and Engagement (COBE) model; Maslach and Leiter's model; the Demand - Control Model (DC) and the Demand - Control - Support (DCS) Model. Thereafter Schaufeli and Bakker's model will be looked at, followed by the model to be used in the current research. This review of the models serves as a summary to the literature on well-being and sets the background to the current research's model. After the introduction of the current research's model all the variables within that model will then be discussed in turn. The chapter will conclude with a discussion of the hypotheses.

2.1 Models of Well-Being

Several theories and models have been developed to explain the effects of job demands (e.g. work overload) and lack of resources (e.g. job control) on burnout. These include Warr's Vitamin Model; the Conservation of Resources (COR) theory (Lee & Ashforth, 1990); the Job Demands - Resources (JD-R) model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) (as cited in Rothmann & Joubert, 2007); the Comprehensive Burnout and Engagement (COBE) model an extension of the JD-R model with engagement, health impairment and organisational withdrawal as additional components (Schaufeli & Bakker, 2004); Maslach and Leiter's (1997) model; the Demand - Control (DC) Model and the Demand - Control - Support (DCS)

Model (Karasek, 1979). The theory underlying these models proposes that burnout develops in response to excessive job demands and diminished job resources.

2.1.1. Warr's Vitamin Model

Warr's (1987) Vitamin Model assumes that nine features of the environment (opportunity for control, opportunity for skill use, externally generated goals, variety, environmental clarity, availability of money, physical security, opportunity for interpersonal contact, and valued social position) affect mental health in an analogous manner to the way vitamins affect physical health.

Some of the environmental features are assumed to resemble vitamins A and D in that very high levels not merely cease to be beneficial, but are actually harmful (AD is a convenient abbreviation for 'additional decrement'). Others are assumed to resemble vitamins C and E in that very high levels, while ceasing to be beneficial, are not actually harmful (CE is a convenient abbreviation for 'constant effect'). Warr (1987) suggests that three of the environmental features – availability of money, physical security and valued social position – may reasonably be regarded as falling within the CE category, whereas the remaining six are regarded as falling within the AD category.

2.1.2. Conservation of Resources Theory (COR)

The conservation of resources theory (COR) is a comprehensive theory of stress based on the central tenet that people strive to obtain, build, and protect that which they value (e.g., resources), and psychological stress occurs when these resources are lost,

threatened with loss or if individuals fail to replenish resources after significant investment (Hobfoll, 1988).

2.1.3. Job Demand - Resources Model

Demerouti et al. (2001) developed the Job Demand-Resources (JD-R) model and confirmed that job demands (e.g. physical demands, time pressure and shift work) are associated with exhaustion, whereas the lack of job resources (e.g. feedback, participation in decision making and supervisory support) are associated with disengagement. This model contains similar notions to Karasek's (1979) Demand Control model discussed under 2.1.6.

2.1.4. Comprehensive Burnout and Engagement Model (COBE)

The COBE model assumes two job-related psychological processes, namely an energetic and a motivational process (Bakker, Demerouti & Verbeke, 2004). The energetic process links job demands with health problems via burnout. The motivational process links job resources via engagement with organisational outcomes. Job resources may play either an intrinsic motivational role (by fostering the employee's growth, learning and development) or an extrinsic motivational role (by being instrumental in achieving work goals).

2.1.5. Maslach and Leiter's (1997) Model

Maslach and Leiter (1997) have formulated a model that focuses on the degree of match or mismatch between the person and six domains of his or her job environment, namely workload, control, rewards, community, fairness and values (Maslach, Jackson & Leiter, 1996). The greater the gap, or mismatch, between the person and

the job, the greater the likelihood of burnout. Work overload occurs when job demands exceed human limits, i.e. when individuals have to do too much work in too little time with too few resources. Lack of control occurs when individuals have little control over the work they do either because of rigid policies and tight monitoring or because of chaotic job conditions. Insufficient reward involves a lack of appropriate recompense for the work people do, whether external (e.g. salary and benefits) or internal (pride in doing something of importance).

2.1.6. The Demand – Control Model

The Demand-Control (DC) Model was introduced by the sociologist Karasek (1979), and attempts to relate psychosocial job characteristics to employee health. According to Karasek (1979), the interaction between job demands placed on the employee and the discretion available to the employee to decide how to meet these demands (i.e., job control) contributes importantly to the prediction of strain and active learning.

Karasek (1979) states that work stress originates from the structural or organisational aspects of the workplace rather than from the individuals or the demographics of individuals. Job stressors and job decision latitude are two characteristics which have drastically different effects on psychological functioning, but are often incorrectly diagnosed as one characteristic; 'job demands' (Karasek, 1979). This model encompasses two hypotheses, firstly that a combination of high job demands and low decision latitude leads to job strain and secondly that a combination of both high job demands with high decision latitude will increase work motivation, learning, and personal growth (Karasek, 1979; van Vegchel, de Jonge, Dormann & Schaufeli, 2005).

This model provides a framework for exploring the relationship between work characteristics and health outcomes (Santavirta, Kovero & Solovieva, 2005). Strain results from the interaction of two dimensions of the work environment; psychological demands and lack of control.

The model consists of four distinctly different kinds of psychosocial work experiences which are generated by the interactions of high and low levels of psychosocial demands and decision latitude: high decision latitude jobs, high demand jobs, low decision latitude jobs and low demands jobs. The 2 x 2 matrix (illustrated below) is useful for characterising the dimensions of decision latitude and workload demand (Karasek, 1979).

Figure 1 Psychological Demands/Control Matrix

		Demands	
		Low	High
Control	Low	Passive	High Strain
	High	Low Strain	Active

Karasek hypothesised that job demands (e.g. high workload) are not harmful but, when combined with low employee control, these demands could lead to negative health outcomes, such as the development of cardiovascular disease. When job demands and control are both high Karasek describes the job as 'active'. The model implies that positive outcomes, such as motivation, learning and healthful restoration occur when jobs are simultaneously high in control and high in demand. Under these conditions, job demands act as a source of challenge and regeneration, rather than as a

source of mental and physical stress. Job control provides opportunity for individuals to adjust to demands according to their needs and circumstances (Zavala, French, Zarkin & Omachonu, 2002). Karasek argues that a 'passive' job will generally be dissatisfying as it induces a decline in overall activity and a reduction in general problem-solving activity.

In the DC model, job demands are defined along two criteria: work overload and emotional demands of the job. Job demands are 'the degree to which the environment contains stimuli that peremptorily requires attention and response' (Schaufeli & Bakker, 2004, p. 296) and where there is quantitative overload and role conflict in the job. According to Santavirta et al (2005) job demands refer to workload (amount of work, time pressure and conflicting demands).

Over the past few decades, the nature of job demands has changed considerably as a consequence of the changing nature of work. There has been a shift from physical demands to mental demands and also from physical demands to emotional demands (Dormann & Zapf, 2004 as cited in van Vegchel et al., 2005). It must be noted, however that despite this shift that has occurred, physical demands have not disappeared as they still remain important in certain professions. The increase in the service industry, where employees have direct interactions with clients, has led to greater mental and emotional demands. Mental demands primarily involve information processing, such as memory and planning and psychological demands have an impact on emotion and are strongly related to interpersonal relationships.

Control can be regarded both as a characteristic of the environment and as a personal characteristic. In the DC model, control is regarded as a characteristic of the work environment. Karasek, Russell and Theorell (1982) argue that control enables a person to adjust demands to their needs and circumstances. Terry & Jimmieson, (1999 as cited in van Vegchel et al., 2005) also support that control has been identified as a factor which mitigates the effects of a wide range of stressors (such as a demanding job) and is also seen as a mechanism through which the potentially detrimental effects of increased demands can be avoided because control enables the person to adjust demands to his or her current needs and circumstances.

Karasek (1979) (as cited in Dwyer & Ganster, 1991, p. 289) developed and empirically tested a model of 'job decision latitude', in the DC Model, which he defined as the working individual's potential control over his tasks and his conduct during the working day. Karasek (1989) (as cited in van Vegchel et al., 2005) states that decision latitude is composed of two specific concepts: decision authority and skill discretion, where decision authority is 'the employee's autonomy to make decisions on the job' and skill discretion is the 'breadth of skills used by the worker on the job' (Karasek, 1989) (as cited in van Vegchel et al., 2005, p.92). These two concepts represent different dimensions of control.

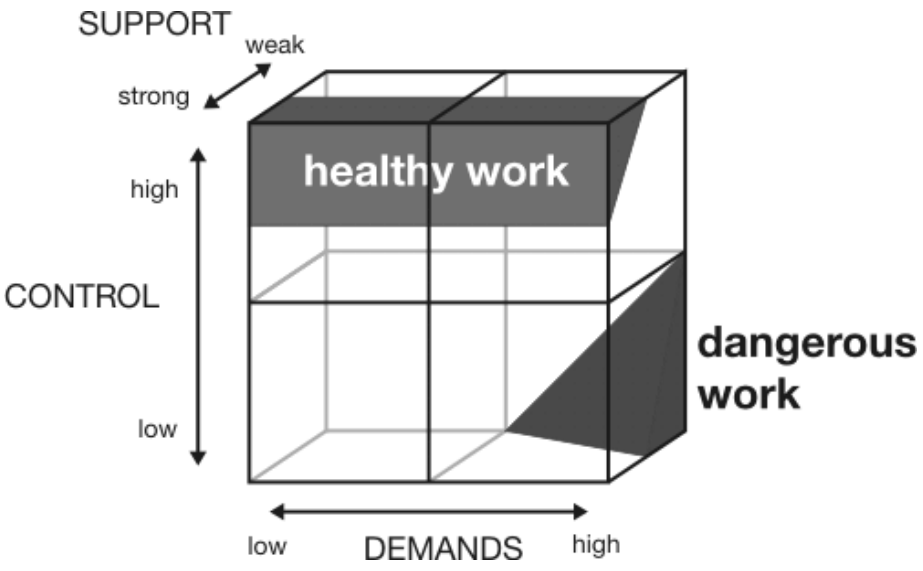
2.1.7. The Demand - Control - Support Model

The Demand - Control - Support Model (DCS) is the expanded version of the Demand - Control (DC) Model. The DCS model assumes that job strain is a result of the interaction of three job dimensions: not only demands and control but also social support which was defined as 'overall levels of helpful social interaction available on

the job from both co-workers and supervisors' (Karasek & Theorell, 1990, p.78). The highest strain arises in the working environment when demands are high and both control and social support are low. This combination can have a negative effect on emotional exhaustion.

A decrease in health and well-being is expected to be found in the work situations that are characterised by high demands, low job control and low support. The extension of the demand-control model to include social support has been advocated by several researchers (Cooper, Dewe & O'Driscoll, 2001; Fletcher & Jones, 1993). Social support can be defined in different ways, e.g. House (1981) has divided social support into four different types: emotional, appraisal, informational, and instrumental social support. Further, the need for social support can refer to problematic situations either at work or in private life. One way to measure social support at work is in terms of the source of the support, i.e. whether support is received from one's supervisor, colleagues, co-workers, and/or friends or family (Greenglass, 1993).

Figure 2 The Demand - Control - Support Model



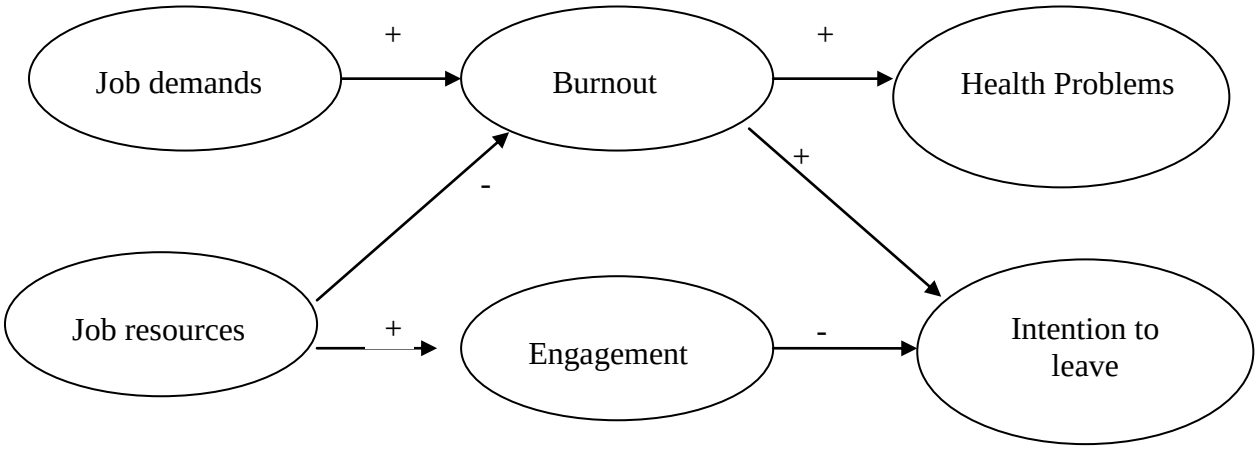
Greenglass (1993) states that workers should be given opportunities to participate in decision-making about their jobs and to increase task control (e.g. work pacing, task organisation, scheduling). If employers can create a workplace environment that fosters decision latitude for all workers, then productivity could be enhanced and absenteeism minimized.

The idea that job control affects health and commitment is closely linked to the role of control in human motivation. White (1959 as cited in van Vegchel, de Jonge, Dormann, & Schaufeli, 2005) suggests that humans have a basic intrinsic need to control their environment. It has also been argued that the motivation to strive for control results from the belief that control ensures positive outcomes or at least minimizes danger (Rodin, Rennert, & Soloman, 1980 as cited in van Vegchel, de Jonge, Dormann, & Schaufeli, 2005), at least when seen as a threat to well-being.

The above models propose that burnout develops in response to excessive job demands and diminished job resources. Although the models describe either a relationship between job demands and job resources or between burnout and engagement, one model including all these constructs has not yet been discussed. Therefore the following model proposed by Schaufeli and Bakker (2004) provides a model which incorporates all the constructs and views burnout and engagement as mediating variables instead of an input or output variable.

2.1.8. Schaufeli and Bakker's (2004) Model

Figure 3 Schaufeli and Bakker's (2004) Model



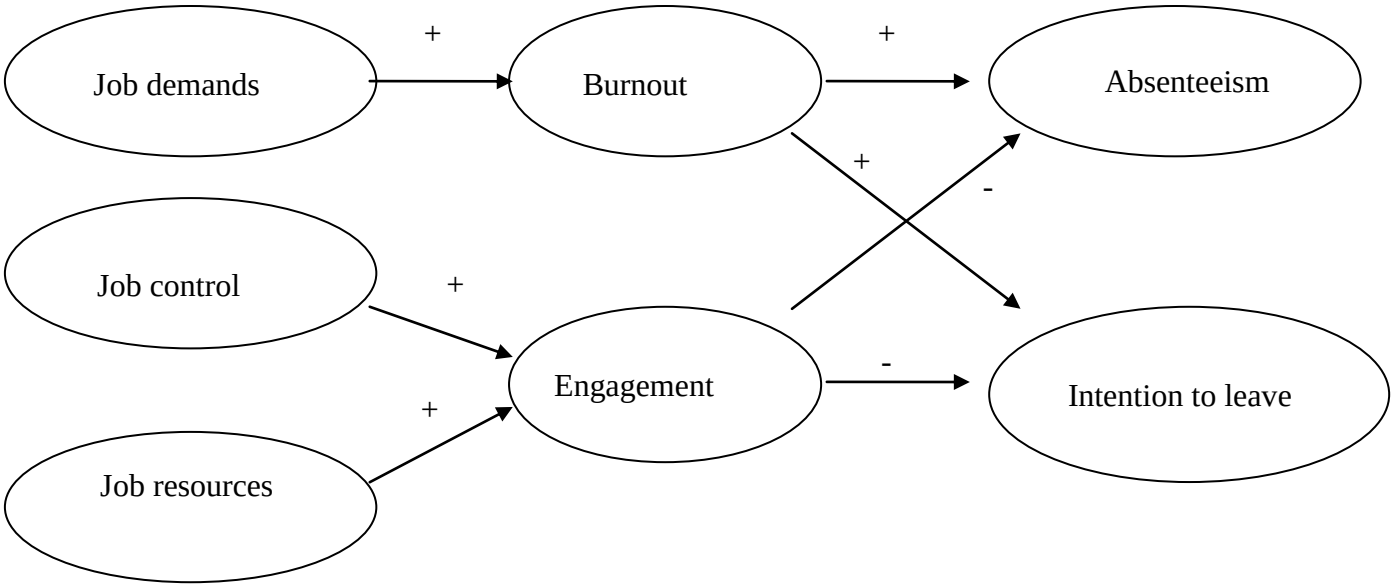
Schaufeli and Bakker (2004) proposed a model of well-being which views engagement and burnout as mediating variables and looks at the precursors and the outcome variables of health problems and intention to leave.

However the current research argues that the addition of job control in the model is needed as it seen as an integral variable in the discussion of well-being at work. Job control includes a combination of autonomy in the job and discretion for using different skills. As the previous models have shown the inclusion of job control has an impact on both job demands and job resources.

The current research also includes a more organisational outcome by viewing health problems in terms of absenteeism. Very few South African researchers have focused on an all-inclusive model which views burnout and engagement as mediators. Therefore the current research's aim was to provide additional research into the work of Schaufeli and Bakker in the South African context.

2.1.9. The Current Research's Model

Figure 4 The Current Research's Model



The remainder of the literature review will focus on the variables within the above model.

2.2. Job Demands, Job Control and Job Resources

Job demands, job control and job resources will be looked at under one heading as the three concepts are interlinked and cannot be discussed separately. Firstly a description for each construct will be provided. Considerable focus has already been given to job demands and job control under the above discussion on the well-being models and therefore this section will focus on job resources. Although these variables are discussed together, each one is researched and looked at thoroughly in terms of their separate importance in the current study.

Job demands are requirements that are placed on employees by the job; physically, mentally and emotionally. Physical demands have an affect on the musculo-skeletal system owing to the execution of physical activities. Mental demands involve information processing, such as memory and planning. Emotional demands are related to interpersonal relationships and have an impact on one's emotions (van Vegchel et al., 2005).

Job control includes a combination of autonomy in the job and discretion for using different skills. Sauter (1989) (as cited in van Vegchel et al., 2005) believes that job control is essential for employee well-being in that the idea of control affects health and productivity and consequently motivation. The motivation to strive for control results from the belief that control ensures positive outcomes. Control can be defined as 'the ability to exert some influence over one's environment so that the environment becomes more rewarding or less threatening' (Dwyer & Ganster, 1991, p.91). Zavala et al (2002) believe that the control domain of an employee's daily work activities is likely to have the strongest impact on employee performance, attendance and well-being.

2.2.1. Job Resources

Job resources refer to all aspects (physical, psychological, social and/or organisational) that ease job demands, facilitate achievement of work goals, and/or stimulate individual growth (Demerouti et al., 2001). Job resources include social support (supervisory and collegial), job enhancement opportunities in the form of increased control and autonomy, participation in decision making and reinforcement contingencies as well as recognition and opportunities for advancement and rewards

(Rothmann & Joubert, 2007). Job resources counterbalance the negative effects of high job demands and the associated physiological and psychological costs.

Job resources may play either an intrinsic motivational role because they foster employees' growth, learning and development and fulfil basic human needs, such as the need for autonomy, or an extrinsic motivational role in that they are instrumental in achieving work goals (Hobfoll, 1988) and foster the willingness to dedicate effort and abilities to the work task. Supportive colleagues and proper feedback from one's superior also increase the likelihood of being successful in achieving one's work goals (Mauno, Kinnunen & Ruokolainnen, 2007).

The current study operationalised job resources by focusing on whether the organisation provides employees with valued job resources that enhance learning, growth and development. Indeed Roberts and Davenport (2002) agree that there are three areas that could be targeted to increase employees' work engagement, namely career development, identification with the organisation and a rewarding work environment. The current study focuses on whether managers provide their employees with support for career development.

For this study, management support is defined as 'the means through which employees learn to achieve their goals by providing them with the necessary tools for information gathering about themselves and the world of work, gaining insight into their talents, interests, values and preferred lifestyles' (Rhoades & Eisenberger, 2002, p.678). Career development involves an organised, formalised, planned effort to

achieve a balance between an individual's career needs and the organisation's workforce requirements (Leibowitz, Farren & Kaye, 1986).

This current research focuses on whether management is seen as a source of support, offering advice and information and listening to employee's career goals. Employees could consider their relationship with their manager or supervisor as contributing positively to their career development if the 'manager provides support for career development by influencing the employee's performance goals, providing useful information on employee advancement, affording performance feedback to employees, working with the employee to develop their own career plans and training the employee' (London, 1993 p. 57). Because supervisors are mainly involved in performance evaluations, feedback, and career development programs their favourable or unfavourable treatment reflect an organisation's view and decisions taken on employees.

Supervisors administer employees' work, providing direct and indirect feedback of their work, and serve as the pivotal person in influencing rewards, appraisal, and career development in an organisation. Supervisors provide useful performance feedback and empowerment and can be instrumental in setting career goals and plans with subordinates that boost motivation. Today's employees, especially those who are equipped with specialised knowledge, would welcome the autonomy to do their work and value being treated with trust and confidence (London, 1993).

In that career development refers to the long term personal and professional growth of individuals (London, 1993), the availability of effective career development practices

not only heightens the growth and self-esteem of employees, enabling them to utilise skills and knowledge, but also serves as an important link in the retention of good employees, motivating them to stay with the organisation. Rhoades and Eisenberger (2002) suggest that organisational reward, promotion, supervisory support, and career development opportunities are mediated by perceived organisational support to reduce turnover intention.

Career development practices are often an ongoing development system associated with an organisation's HR policies and structure. The partnership and mutual exchange of commitment portray career development practices as a long term progressive event (Leibowitz, Farren & Kaye, 1986), hence fostering the capability of employees and at the same time forming a durable and open employment relationship is a vital facet of developing strong job resources for employees.

Several studies have shown that satisfaction with supervisory support reduces turnover intention (Krackhardt, McKenna, Porter, & Steers, 1981; Cotton & Tuttle, 1986; Lee, 2004). Foong-ming (2008) called for further research on the personal and situational characteristics for supervisors to extend employees' positive attitudes and attachment to an organisation, indicating the necessity in examining the effect of supervisory support in providing performance feedback, trust and confidence, empowerment, and career development plans that could influence turnover intention. Moreover, most studies in the Western context reported a positive relationship of supervisory support with perceived organisational support (Rhoades & Eisenberger, 2001; Eisenberger et al., 2002; Shanock & Eisenberger, 2006). These studies have an

implication on the current study in that they illustrate the importance of supervisory support on intention to leave.

A study by Cordes and Dougherty (1993) hypothesised the importance of career development versus burnout in that "individuals who have had greater upward career movement may experience less burnout" (Cordes & Dougherty, 1993, p.637). One reason for this is that upward movement is usually characterised by less recurrent and intense client contact which results in less frequent or stressful job demands. In addition, it is hypothesised that career advancement will foster an increase in perceived personal accomplishment thus counterbalancing this stage of burnout. The affect of career progress on burnout has not been thoroughly researched and hopefully the current research will contribute in this area.

Organisational support theory maintains that mutual commitment between employees and an employer starts with the organisation providing a supportive and caring atmosphere for employees and employees reciprocate by feeling attached, more engaged and actively participate to achieve organisational goals. The underpinning social exchange theory predicts that the exchange of favourable treatment could be prolonged if the receipt of resources from another party is highly warranted and valuable and the actions are considered and not forced. (Foong-ming, 2008).

The availability of career development opportunities illustrates the willingness and effort of the organisation to cherish employees. Generally, organisations that provide relevant quantity and quality development schemes are signalling to employees their likeliness to develop a cadre of skilful employees to grow together with the business.

Huselid (1995 as cited in Foong-ming, 2008) suggested that progressive HR practices that embrace career-related practices could improve the knowledge, skills and the abilities of an organisation's current and potential employees, and so strengthen the retention of quality employees. Effective career development programs enhance individual work performance by encouraging continuous learning and adaptation, while proffering favourable developmental relationships with their employees.

Previous studies have been mentioned which demonstrate relationships between supervisory support, turnover intention and attachment to the organisation. The current study looks at adding job resources in terms of learning, growth and career development. There is also an important focus on managerial support and the effect of developing good working relationships between employees and managers as a contributing factor to the development of individuals' careers.

2.3. Burnout

Job burnout has been conceptualised in many different ways; one definition is "a syndrome of emotional exhaustion, depersonalisation of others, and a feeling of reduced personal accomplishment" (Lee & Ashforth, 1990, p.743). Probably the most frequently cited definition of burnout comes from Maslach and Jackson (1986, p.1). They defined burnout which can occur among individuals who do "people work" of some kind. Maslach, Jackson and Leiter (1996) state that the concept of burnout is 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. This is an important differentiation for dealing with possible causes for absenteeism

The consequences of burnout are potentially serious for staff, clients and the larger institutions in which they interact. Maslach and Jackson (1986) suggested that burnout could lead to deterioration in the quality of care or service that is provided by staff. It also correlates with various self-reported indices of personal dysfunction, increased use of alcohol and drugs and marital and family problems (Maslach &Jackson, 1986) and their effect on performance. Managers suffering from burnout could damage or diminish the organisation as this would induce a ripple effect that would filter it down to their subordinates. Burnout is a self-perpetuating process that affects the attainment of professional goals and depletes the resources of the individual to cope with the process and symptoms of burnout. Furthermore, it appears to be a factor in job turnover, absenteeism, low morale and job dissatisfaction (Schaufeli, Salanova, Gonzalez-Roma & Bakker, 2002).

In early research, burnout was measured by the Maslach Burnout Inventory which was described as a three-dimensional syndrome of emotional exhaustion in terms of interpersonal demands; depersonalisation (viewed as cynical and negative attitudes towards the recipients of one's care or services) and lack of personal accomplishment, where one's own work is viewed as negative (Schaufeli et al., 2002). However burnout cannot only be looked at in terms of the service industry and therefore the MBI-General Survey (MBI-GS) was introduced in 1996 to encompass all types of employees. These two measures differ in terms of the MBI-GS, being more generic as it does not refer to other people with whom one works. The dimensions are however parallel.

The first dimension of the MBI-GS is emotional exhaustion, which is considered to be the most important of the three burnout components. It is "characterised by a lack of energy and a feeling that one's emotional resources are used up. This . . . may coexist with feelings of frustration and tension . . ." (Cordes & Dougherty, 1993, p.623). Leiter and Maslach (1988) note that emotional exhaustion "refers to feelings of being emotionally overextended and drained by one's contact with other people" (p. 297). This emotional exhaustion can manifest itself in physical characteristics such as waking up just as tired as when going to bed or lacking the required energy to take on another task or face-to-face encounter (Maslach & Leiter, 1997).

The second dimension is cynicism which reflects a lack of concern or an unresponsive attitude towards work in general, not necessarily with other people (Schaufeli et al., 2002).

The third dimension is professional efficacy which includes both social and non-social aspects of occupational endeavors (Schaufeli et al., 2002). Burnout is considered as a reaction to chronic occupational stress characterised by a lack of personal accomplishment (the tendency to feel incompetent and to assess one's work with other people negatively) (Maslach & Jackson, 1986). Low levels of efficacy are indicative of burnout.

Schaufeli and Bakker (2004) found that professional efficacy appears to be an element of engagement rather than being a burnout component. All professional efficacy items are positively formulated compared to the other two dimensions which are negatively phrased. Therefore, according to Schaufeli and Bakker's (2004) findings

and numerous other studies including Schaufeli & Enzmann (1998); Schaufeli et al (2002) and Schaufeli & Salanova (2007), the current research will interpret burnout in terms of only two dimensions (exhaustion and cynicism) and professional efficacy will be looked at under engagement.

Burnout has been defined; the consequences of burnout have been touched on; the dimensions have been listed and it has been discussed that burnout for the current research will only include two dimensions. The remainder of the review on burnout will focus on previous research and how it is linked to the other variables included in the current study.

Studies in South Africa (e.g. Levert, Lucas & Ortlepp, 2000; Pretorius, 1994; Storm & Rothmann, 2003) confirmed that burnout is related to job demands. In a sample of educators in South Africa, Pretorius (1994) found that role conflict and number of students in classes explained 25% of the variance in emotional exhaustion. Number of students and role ambiguity explained 15% of the variance in depersonalisation while participation in decision-making explained 8% of the variance in personal accomplishment. In a further study Levert, Lucas and Ortlepp (2000) reported that emotional exhaustion and depersonalisation of psychiatric nurses were predicted by work load, lack of collegial support, role conflict and role ambiguity.

Rothmann and Van Rensburg's (2002) research was conducted within the South African Police Service (SAPS) on a sample of 2153 police officials. The sample consisted of 80% males and the mean age was 34.6. They argued that stress in the SAPS contributes to a decline in participants' psychological strengths such that

psychological strengths are probably insufficient to resist the detrimental effects of a harsh environment (e.g. a constantly demanding work situation). The latter argument is supported by studies which showed that dispositional factors explain not more than 30% of the variance in work-related outcomes (e.g. job satisfaction and burnout) (Rothmann, 2001; Kruger, Veldman, Rothmann & Jackson, 2002). Figures for intention to leave were found to be higher when individuals reported their environment as being harsh and having high demands.

These South African studies show the importance of high job demands leading to effects of burnout and a higher intention to leave. From an organisational standpoint, burnout can lead to such outcomes as increases in turnover, absenteeism, greater intentions to leave and reductions in productivity (Cordes & Dougherty, 1993). The end result for organisations is that greater levels of burnout mean lower levels of quality and quantity produced (Maslach & Leiter, 1997).

2.4. Engagement

Engagement is an employee's interest in, enthusiasm for and investment in his or her job (Kirkpatrick, 2007). Kirkpatrick (2007) has argued that empirical studies have revealed that job engagement is associated with various positive behaviours and outcomes for both employees and the organisation. Engagement is "a positive, fulfilling, work-related state of mind that is characterised by vigor, dedication and absorption" (Schaufeli & Bakker, 2004, p. 295). Kahn (1990) defined employee engagement as the process of employees feeling compelled to add value through

exerting considerable effort on behalf of the organisation due to their psychological experiences.

Research on the engagement concept has taken two different but related paths. Maslach and Leiter (1997, p. 23) rephrased burnout as "an erosion of engagement with the job". Work that started out as important, meaningful and challenging becomes unpleasant, unfulfilling and meaningless. In the view of these authors, engagement is characterised by energy, involvement and efficacy, which are considered the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and lack of professional efficacy respectively.

Instead of viewing burnout and engagement as opposites, Schaufeli and Bakker (2004) found this approach to be questionable and inaccurate and believe that the two should be measured independently using vigour, dedication and absorption as subscales. Schaufeli, Salanova, González-Romá and Bakker (2002) consider burnout and engagement to be differing concepts that should be measured independently with distinct instruments. Furthermore, burnout and engagement may be considered two prototypes of employee well-being that are part of a more comprehensive taxonomy constituted by the two independent dimensions of pleasure and activation in the work environment.

Maslach and Leiter (1997) suggest that the three dimensions of burnout have a bipolar character and that burnout and engagement will show strong negative correlations. However, it is noted that a positive concept is measured by negative items (i.e. regarding exhaustion and cynicism). According to Schaufeli and Bakker (2001), two

dimensions of engagement are logically related to burnout, namely vigour (exhaustion) and dedication (cynicism).

Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in ones work and persistence in the face of difficulty. Dedication is one's sense of significance, enthusiasm, inspiration, pride and challenge. Absorption refers to the state in which one is highly concentrated and happily engrossed in work so that s/he feels that the time passes quickly and it is difficult to detach from their work (Schaufeli et al., 2002).

Employee engagement is the level of commitment and involvement an employee has towards their organisation and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organisation. Engagement is centred on the expression of job or organisational commitment. Job commitment is the attachment to the role while organisational commitment is the attitude and attachment toward the organisation (Allen & Meyer, 1991). While these two concepts at first seem similar, it is clear that engagement builds on the concept of commitment. The Corporate Leadership Council (2004) frames engagement as, "the extent to which employees commit to something or someone in their organization, how hard they work, and how long they stay as a result of that commitment".

In 2006, The Conference Board published "Employee Engagement, A Review of Current Research and Its Implications". According to this report, twelve major studies on employee engagement had been published over the prior four years by top

research firms such as Gallup, Towers Perrin, Blessing White, the Corporate Leadership Council and others. Each of the studies used different definitions and, collectively, came up with 26 key drivers of engagement. For example, some studies emphasised the underlying cognitive issues, others the underlying emotional issues. The Conference Board looked across this mass of data and came up with a blended definition and key themes that crossed all of the studies. They define employee engagement as "a heightened emotional connection that an employee feels for his or her organization, that influences him or her to exert greater discretionary effort to his or her work" (Gibbons, 2006, p.10).

Engagement may be important for managers to cultivate given that disengagement or alienation is central to the problem of workers' lack of commitment and motivation
A highly engaged employee will consistently deliver beyond expectations. Roberts and Davenport's (2002) research on employee engagement asked employees 'whether they have the opportunity to do what they do best everyday'. One in five employees strongly agreed with this statement. Those work units scoring higher on this perception have substantially lower intention to leave. Thus employee engagement is critical to any organisation that seeks to retain valued employees.

Organisations with high levels of engagement provide employees with opportunities to develop their abilities, learn new skills, acquire new knowledge and realise their potential. When companies plan for the career paths of their employees and invest in them in this way their people invest in them. Career development influences engagement for employees and retains the most talented employees by providing opportunities for personal development (Allen & Meyer, 1991). There is clear and

mounting evidence that high levels of employee engagement correlates to individual, group and corporate performance in areas such as retention, turnover, productivity, customer service and loyalty.

2.5. Absenteeism

The annual loss to the South African economy caused by absenteeism is in excess of R2 billion (Stelzner, 2005). In 2002 the cost of lost work due to absenteeism in the USA (United States of America) was about $40 billion. It is estimated that over 400 million person days are lost each year as a result of employee absenteeism. This shows the necessary importance of including absenteeism within the current study's model (Stelzner, 2005).

Griffin, O'Leary-Kelly and Collins (1998) argue that absenteeism is any failure to report for, or remain at, work as scheduled, regardless of the reason. Involuntary absence is caused by factors beyond the control of the employee but voluntary absence is the employee's deliberate choice to be absent from work. Both types can be measured by the frequency index – the number of absences in a specified period (Porteous, 1997).

Generally, two different absence measures are distinguished: absence frequency and duration (Bakker et al., 2004). Absence frequency is 'the number of spells or times an individual has been absent during a particular period, regardless of the length of each of those spells' (Bakker et al. 2004, p.342). Absence frequency is usually considered to be an indicator of voluntary absenteeism and a function of employees' motivation.

Whereas absence duration is 'the total length of time an individual has been absent over a specified period regardless of the number of absence spells' (Bakker et al. 2004, p.342). Absence duration is generally considered to be an indicator of involuntary absenteeism that results from the inability rather than the unwillingness to come to work, for example as a result of ill health.

Absenteeism is generally considered an important consequence of burnout at the organisational level. However, emotional exhaustion, depersonalization and reduced efficacy explain on average not more than 2% of the variance in absenteeism (Lawson & O'Brien, 1994; Price & Spence, 1994). After reviewing the literature, Schaufeli and Enzmann (1998) conclude therefore that: ''. . . despite the popular assumption that burnout causes absenteeism, the effect is rather small and is most related to emotional exhaustion'' (p. 91).

Non-work variables accounting for absenteeism include a wide range of factors, such as personal characteristics, sport injuries, smoking, alcohol consumption, psychological disorders, and physical pain (Bakker et al., 2004; Johns, 1997). For example, in their study among 211 employed, married parents, Erickson, Nichols, and Ritter (2000) found that family demands moderated the effect of job burnout on absence frequency. Experiencing a high level of burnout was associated with increased absenteeism if employees had children under 6 living at home or reported having difficulty with their child care arrangements.

Dwyer and Ganster (1991) extended the Karasek demands-control model of stress to the prediction of employee attendance behaviours (i.e tardiness, voluntary absence,

days off due to illness). Results showed that the interaction between perceived workload and control predicted job satisfaction and absence. Under low control, high psychological demands were associated with higher tardiness and more sick days.

In more recent years, the increasing rate of absenteeism has been attributed to physical and socio-emotional conditions in South Africa as reflected in, amongst other factors, the continuing increase in crime and violence, the rising rate of substance abuse and the growing rate of depression and anxiety-related conditions due to work-related stress. In addition, South African organisations are currently experiencing devastating levels of absenteeism due to HIV/AIDS. Moreover, further losses of productive labour result in work absence due to both sick employees and those in good health who have to take care of sick relatives or arrange and attend funerals (Whiteside & Sunter, 2000).

One indirect effect of absenteeism is that it results in extra work for other healthy employees who have to stand in for absent colleagues. In some companies, healthy employees are increasingly working extra hours to compensate for the time lost by their absent, or sick, colleagues. In so doing, not only do companies pay more in terms of overtime, but workers interviewed also pointed out that they were overworked and exhausted.

There are various reasons which account for absenteeism at work. Employees with mental, emotional and substance abuse issues are just some examples of reasons given for sick leave. Workplace stress is another current economic activity. At best, work stress can be a source of great challenge and a stimulus for achievement. At worst, it

can seriously impair peoples' quality of work life, and reduce both their personal and job effectiveness. In fact, the increasing competition in the corporate sector, both locally and globally, is a major contributory factor to work stress (Matlhape, 2001) and an area of growing concern in the corporate world having economic, ethical and health implications.

Previous studies have referred to absenteeism as a workplace epidemic, since management was unable to control it. High absenteeism rates are due to the failure of management to control absenteeism even with disciplinary policies in place. Stelzner (2005) indicates that absenteeism is not monitored consistently nor addressed effectively within organisations and when absenteeism occurs, or there is an abnormal pattern of absenteeism, managers react by dismissing the employees rather than applying positive engagement and sensitivity.

In the current study the process of becoming ill, being absent from work and recovering and resuming work, is viewed in terms of a lack of balance between the person and the environment. This means that health problems may arise as a result of a discrepancy between the workload (demands and requirements) and the capacity of the worker (abilities and skills) (Griffin et al., 1998). Genuine illness is one of the factors which diminish the capacity of an employee and leads to a misfit between the workload and the capacity of an individual. This framework deals therefore with absenteeism related to ill health caused by work as well as with absenteeism related to ill health not linked to work. The current study will ask participants a question pertaining to sick leave. This self-report measure of absenteeism links to the concept

of general health, which is the original output measure that Schaufeli & Bakker (2004) used in their research model.

2.6. Intention to leave

Several studies have viewed intention to leave as a consequence of burnout (Geurts, Schaufeli & de Jonge, 1998; Schaufeli & Bakker, 2004; Weisberg, 1994). Employees may exit an organisation either voluntarily or involuntarily. For the purpose of this research, intention to leave is defined as 'an employee's decision to leave an organisation voluntarily' (Dougherty, Bluedorn & Keon, 1985 as cited in Riley, 2006, p.9). Employees leave for a number of reasons, some to escape negative work environments, some to find more alignment with their career goals, and some to pursue opportunities that are more financially attractive. Mobley, Horner and Hollingsworth, (1978) in their literature identified turnover intention as the immediate precursor for turnover behaviour. However, it has been recognised that the identification of variables associated with turnover intentions (with a view to limiting them) is considered an effective strategy in reducing actual turnover levels (Maertz & Campion, 1998).

One of the main consequences for organisations that have a high turnover is the financial cost. The price tag of losing a high performer, with a high degree of knowledge, skills and abilities, or an employee employed in an area where there is a labour market shortage, can be substantial to the organisation's performance, productivity, and service delivery. In addition, turnover can have a negative impact on other employees by creating additional work load, the impingement of time

schedules, disrupting group socialisation processes and increasing internal conflict which can lead to triggering additional turnover (Riley, 2006).

Intent to leave a job can stem from two opposite reasons, one from stress and dissatisfaction with work and the other from energy and an optimistic belief that the situation can be improved. The decision for employees to stay or leave might depend on whether the work is challenging, whether they gain support at work and if there are opportunities for personal growth. This requires employers to provide resources, tools and the appropriate environment to ensure continued self-development (Maertz & Campion, 1998). This can include emotional and structural support systems and initiatives that foster work/life issues.

Retention and productivity levels of the existing workforce are an essential concern in human resource management (Riley, 2006). Building a knowledge base on what causes an employee to choose to leave gives organisations the opportunity to curtail voluntary turnover and /or to manage the turnover process more effectively. Aspects of the work environment and employee retention strategies can then be created.

Despite vast empirical research in the literature to date, the importance of understanding the factors contributing to an employee's decision to leave an organisation has not been given due importance. According to Dalton, Krackhardt and Porter (1982), further empirical research is required to gain greater understanding of the process of turnover. Morrell, Loan-Clarke and Wilkinson (2001 p. 5) argue, "there is yet no universally accepted account or framework for why people choose to leave". Overall the amount of literature from a South African workforce perspective is sparse. Therefore, the current research adds considerable benefit and dimensions to

the empirical body of knowledge and is of practical value to other large commercial organisations.

2.7. Rationale

The above literature review provides a theoretical and conceptual background to the current study. The purpose of this research was to provide additional research on the work of Schaufeli and Bakker in the South African context. Schaufeli and Bakker (2004) proposed a model of well-being which views engagement and burnout as mediating variables and looks at the precursors and the outcome variables of health problems and intention to leave. However the current research argues that the addition of job control in the model is needed. Schaufeli and Bakker omitted this construct from their model. The aim of the current research is to incorporate job control and so expand on Schaufeli and Bakker's model.

The current research defined burnout in terms of only two dimensions (exhaustion and cynicism) as professional efficacy is looked at under engagement. The current research also includes a more organisational orientated outcome by viewing health problems in terms of absenteeism. Very few South African researchers have focused on an all inclusive model which views burnout and engagement as mediators.

The effect of career progress on burnout has not been thoroughly researched and the current research hopefully contributes in this area. Each variable in the current research's model has been discussed at length and consequently the following hypotheses are proposed.

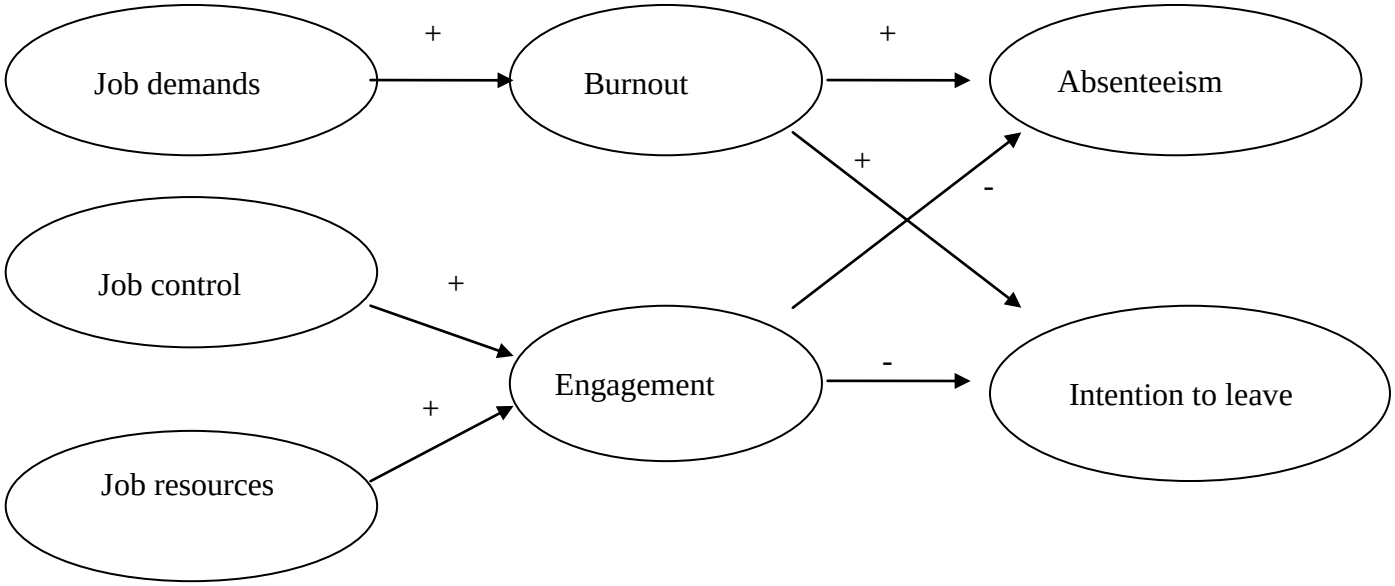
2.8. Hypotheses

Hypothesis 1: Burnout mediates the relationship between job demands and absenteeism.

Hypothesis 2: Engagement mediates the relationship between job resources and (low) intention to leave.

Hypothesis 3: Engagement mediates the relationship between job control and (low) intention to leave.

Hypothesis 4: Various cross-links exist between the variables in the model:



(a) Engagement and burnout are negatively related.

(b) Job demands are positively related to burnout

(c) Job resources are negatively related to burnout.

(d) Job control is negatively related to burnout.

(e) Job control is positively related to engagement

(f) Job resources are positively related to engagement

(g) Job demands and engagement are negatively related.

(h) Burnout is positively related to turnover intention.

(i) Burnout is positively related to absenteeism

(j) Engagement is negatively related to turnover intention

(k) Engagement is negatively related to absenteeism

3. Methodology

This chapter discusses the method used to carry out the current research. Firstly the research design is discussed followed by a description of the sample used. The research procedure is explained and the instruments used to measure the constructs are discussed in detail. A brief description of the analysis is provided. This chapter concludes with a discussion of ethics for the current research.

3.1 Research Design

In light of the fact that the present study aims to ascertain the existence of a relationship between variables at a particular point in time, this research is classified as a non-experimental, cross sectional design (Devlin, 2006). Time constraints and scarcity of resources prevented an in-depth causal investigation. The benefits of non-experimental research design include flexibility and cost-effectiveness. This research is classified as non-experimental owing to the fact that there is no control group and no manipulation of the independent variable (Devlin, 2006). This approach does not allow for causal inferences to be made about the areas for concern but does allow for associations to be made. This is because cross-sectional measures are administered to a single sample at a particular moment in time and no repeat measures are applied. The advantage, however, of using such an approach is that the study is conducted in natural settings and avoids the criticisms associated with artificial environments, for instance, low ecological validity.

3.2. Sample

The sample consisted of fifty five employees from a South African auditing organisation. It was made up of nineteen males and thirty-six females. As illustrated in Table 1 the average age was 30.67 years.

Table 1 Descriptive Statistics for Sample (N = 55)

Variable	Mean	Standard Deviation	Minimum	Maximum	Range
AGE	30.67	9.05	22	63	41
YEARS IN ORGANISATION	4.49	6.13	0.4	25	24.60
YEARS IN CURRENT POSITION	1.47	1.35	0.1	9	8.90

Table 2 Frequency of Demographic Variables of Sample

Demographic	Variable	Frequency	Total	Percentage (%)
LANGUAGE	English	40	55	72.7
	Afrikaans	7		12.7
	Tsonga	2		3.6
	Xhosa	4		7.2
	Other	2		3.6
GENDER	Male	19	55	34.5
	Female	36		65.5
MARITAL STATUS	Married	17	55	30.9
	Never Married	33		60
	Widowed	0		0
	Divorced	3		5.5
	Co-habiting	2		3.6

Demographic	Variable	Frequency	Total	Percentage (%)
RACE	Black	13	55	23.6
	White	32		58.1
	Coloured	3		5.5
	Indian	7		12.7
ORGANISATIONAL LEVEL	Senior	4	55	7.2
	Middle	25		45.5
	Junior	26		47.2
PROMOTION IN LAST YEAR	Yes	28	54	50.9
	No	26		47.2
INVOLVEMENT IN PROMOTION	Pay rise	9	31	29
	More authority	6		19.4
	Higher Grade	3		9.7
	Combination	13		41.9
OVERLOOKED FOR PROMOTION	Yes	26	55	47.3
	No	29		52.7
LAST TIME THAT PARTICPANT WAS PROMOTED	2 years ago	13	26	50
	3-4 years ago	8		30.7
	5-10 years age	4		15.4
	More than 10 years ago	1		3.8

The majority of the sample speaks English (72.2%) and has never been married (60%). Thirty two of the participants are White (58.1%), thirteen are Black (23.6%), seven are Indian (12.7%) and three are Coloured (5.5%). Twenty six participants reported that were juniors in their organisation, twenty five are in middle management and only four were in senior management.

3.3 Sampling Method

A non-probability, convenience sampling method was used in the current study. Non-probability sampling does not involve random selection compared to probability sampling (Devlin, 2006).

3.4 Research Procedure

A South African auditing organisation was approached to request their participation in the study. When access was granted (Appendix B), the questionnaire pack was uploaded onto the company's internal website. The researcher's e-mail address was also available on this internal website. Employees could then access the internal website, open and download the file, fill in the questionnaire and send their responses to the researcher's e-mail address. Attached to the questionnaire pack was a participation information sheet (Appendix A) where the participants were told the purpose of the study and a brief reason for the chosen research area.

3.5 Instruments

The questionnaire comprised of seven separate instruments with an overall total of 91 items.

3.5.1 Demographic questionnaire

The participants were asked to fill in a questionnaire (Appendix C) to obtain biographical information from each participant. Their age, gender, home language, race, marital status, job title, number of years worked at the organisation and number of years in current position were asked. Questions regarding promotions and absenteeism were also asked. The questions asked regarding absenteeism will be

discussed under section 3.5.7. The questions relating to promotion included 'Have you been promoted in the last year?'; 'What did this promotion involve?'; 'Have you ever been overlooked for a promotion?' and 'If you have not been promoted in the last year, when was the last time you were promoted?' The questions pertaining to promotion were included to allow insight into the development of the participants' careers.

3.5.2 Maslach Burnout Inventory-General Survey (MBI-GS)

Burnout was assessed with the MBI-GS (Appendix D). Originally the MBI-GS consisted of three subscales, however as referred to in the literature review, professionally efficacy , in this study, was included under engagement rather than burnout. Therefore the current study measured burnout according to the two subscales of exhaustion (EX) and cynicism (CY). EX consists of five items such as 'I feel used up at the end of a work day'. CY also consists of five items such as 'I doubt the significance of my work'. All items were scored on a seven point frequency rating scale ranging from 0 (never) to 6 (always). High scores on EX and CY are indicative of burnout.

Internal consistencies (Cronbach's alpha) for EX and CY are .89 and .80 respectively. Previous studies (Schaufeli & Bakker, 2004) found that by removing one item, 'I just want to do my job and not be bothered', the reliability of the CY scale substantively increased. Therefore this particular item was not included in this study making the total number of items used for the MBI-GS as 9 items. The psychometric properties of the MBI-GS have been tested and thus far it is considered to be a sound instrument.

With regards to its reliability, "the MBI-GS has evidenced relatively high internal consistency and test-retest reliability . . ." (Lee & Ashforth, 1990, p.743).

Four studies that used the MBI-GS in South African samples were found. In a sample of senior managers in a manufacturing industry, Rothmann and Jansen van Vuuren (2002) found satisfactory alpha coefficients: Exhaustion = .79; Cynicism =. 84 (after item 13 had been omitted); Rothmann and Malan (2002) found higher alphas (Exhaustion = .89; Cynicism = .76); while Kruger et al. (2002) found a lower alpha for Cynicism (.72 after item 13 had been omitted). Storm and Rothmann (2003) found alpha coefficients of .88 (Exhaustion) and .78 (Cynicism) in a sample of 2 396 police officers in South Africa. The reliabilities for the subscales in the current study were found to be good and are as follows: Exhaustion = .84 and Cynicism = .82.

Storm and Rothmann (2003) conducted an exploratory factor analysis and used target (Procrustean) rotation to determine construct equivalence of the MBI-GS for race groups. They found acceptable Tucker's coefficients of agreement (Tucker's phi) higher than .95 for all the groups, which shows construct equivalence of the MBI-GS. They did not found evidence for uniform or non-uniform bias of the items of the MBI-GS for different race groups.

3.5.3 Utrecht Work Engagement Scale (UWES)

Engagement was measured using the Utrecht Work Engagement Scale (Appendix E). The UWES' items are divided into three subscales that reflect the underlying dimensions of engagement. Firstly, vigour (VI) was assessed by six items that refer to high levels of energy and resilience, the willingness to invest effort, not being easily

fatigued, and persistence in the face of difficulties. For example “At my work, I feel bursting with energy” and “At my job, I feel strong and vigorous”. Those who score high on vigour usually have much energy, zest and stamina when working, whereas those who score low on vigour have less energy, zest and stamina as far as their work is concerned.

Secondly, dedication (DE) was assessed by five items that refer to deriving a sense of significance from one’s work, feeling enthusiastic and proud about one’s job, and feeling inspired and challenged by it. For example “I find the work that I do full of meaning and purpose” and “I am enthusiastic about my job”. Those who score high on dedication strongly identify with their work because it is experienced as meaningful, inspiring, and challenging. Besides, they usually feel enthusiastic and proud about their work. Those who score low do not identify with their work because they do not experience it to be meaningful, inspiring, or challenging; moreover, they feel neither enthusiastic nor proud about their work.

Thirdly, absorption (AB) was measured by six items that refer to being totally and happily immersed in one’s work and having difficulties detaching oneself from it so that time passes quickly and one forgets everything else that is around. For example “Time flies when I'm working” and “When I am working, I forget everything else around me”. Those who score high on absorption feel that they usually are happily engrossed in their work, immersed by their work and have difficulties detaching from it because it carries them away. As a consequence, everything else around is forgotten and time seems to fly. Those who score low on absorption do not feel

engrossed or immersed in their work, they neither have difficulties detaching from it, nor do they forget everything around them, including time.

Additionally, professional efficacy (PE), which consists of six items such as 'I can effectively solve problems that arise in my work', was included as a subscale to measure engagement.

Two recent studies using confirmative factor analysis demonstrated the factorial validity of the UWES (Schaufeli et al., 2002). The three scales are moderately to strongly related (mean r = .63 in Sample 1 and mean r = .70 in Sample 2). Also, the fit of the hypothesised three-factor model to the data was superior to a one-factor solution (Maslach et al., 2001; Schaufeli et al., 2002).

Rothmann and Joubert (2007) and Naudé (2003) studied the internal consistency, factorial validity, structural equivalence and bias of the UWES in South Africa. Although structural equation modelling supported a three-factor model of work engagement in both studies, the correlations between the three dimensions (i.e. vigour, dedication and absorption) were high, suggesting the possibility that work engagement (as measured by the UWES) is a one dimensional construct.

Cronbach's alpha for all the engagement subscales in the current study were found to be good: vigour = .81, dedication = .83, absorption = .83 and professional efficacy = .88.

3.5.4 Job demands

Job demands was assessed by Karasek's (1979) 15-item Job demands and Decision Latitude scale (Appendix F). The scale contains three subscales. Firstly, job demands which uses seven items which describe psychological stressors such as workload and time pressures. An example of an item for this subscale is 'To what extent does your job require your working hard?' Eight items describes job decision latitude, of which four relate to an employee's discretion in applying skills to do the job. An example of an item for the employee's discretion subscale is 'To what extent is your work non-repetitious?' The other four items, which make up the third subscale decision authority, describe an employee's authority to make job-related decisions. An example of an item for this subscale is 'To what extent are you assisted in making your own decisions?' Responses range from 1 (never) to 5 (extremely often).

The coefficient alpha for job demands range from .79 to .88 and the coefficient alpha for decision latitude ranges from .77 to .85. (Karasek, 1979). These alphas show that this scale is reliable. The coefficient alphas for the subscales of job demand for the current study were as follows: job demands was .89, for employee discretion it was .62 and for decision authority it was .80.

3.5 5. Job control

Job control was measured using twenty-two Likert-scaled items which make up a scale developed by Ganster (1989) (Appendix G). The scale describes the extent to which workers perceive they have control over numerous aspects of their work environment. The scale covers a variety of work domains including control over the variety of tasks performed, the order of task performance, pacing, scheduling of rest

breaks, procedures and policies in the workplace, and arrangement of the physical environment. Examples of the items are 'How much control do you have over the variety of methods you use in completing your work?' and 'How much can you choose among a variety of tasks or projects to do?' Items will be scored on a five-point frequency scale, ranging from 1 (very little) to 5 (very much). The scale yields an internal consistency reliability of .87 (Dwyer & Ganster, 1991). The Cronbach's alpha for job control in the current study was .89.

3.5.6. Job resources

As mentioned in the literature review, Schaufeli and Bakker (2004) focus on the fact that engaged workers have a low tendency to leave the organisation and they provide them with valued job resources that enhance learning, growth and development. Therefore, this study operationalised job resources by measuring it in terms of management support for career development. Since there is no single scale that specifically measures management's support for career development, two previously used measures were combined. A subscale taken from the Communication Dimension Questionnaire, developed by Penley and Hawkins (1985), forms one part of this measurement.

This scale measures various dimensions of communication. Two out of five of these dimensions include aspects of communication that relate to career development. The performance communication scale was used as it contains items that assess the degree to which managers transmit information about the quality of the subordinates' work. Secondly, career communication was used to measure the extent to which managers reviews training opportunities with subordinates and provide them with career advice.

Items were scored on a five-point frequency scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The scale yields an internal consistency reliability of .88 and .92 for performance communication and career communication respectively. In total 13 items made up a measure for management support for career development (Appendix H). Examples of the items are 'My manager lets me know which areas of my performance are weak' and 'My manager lets me know how I can do better in my work'.

The Cronbach's alphas for the subscales of job resources were found to be good as career communication revealed a .84 alpha and performance communication was .84.

3.5.7 Absenteeism

Absenteeism was measured by a series of self-report questions, where participants were required to state how many days, excluding vacation days, they have missed work over the last year; how many of these days were due to sick leave; whether they have come to work when they have been sick and to what extent their illness was due to; either headaches, backaches, cold/flu or they could specify another illness. These questions were included with the demographic questions (Appendix C).

3.5.8 Intention to leave

Intention to leave was measured using O'Driscoll and Beehr's (1994) Turnover Intentions Scale (Appendix I). The participants were asked how they feel about their present job, compared with an alternative that they may be interested in or able to obtain. This measure contains three items: "Thoughts about quitting my job cross my mind" measured on a six-point response scale from *strongly disagree* to *all the time*.

"I plan to look for a new job within the next 12 months" measured on a six-point response scale *strongly disagree* to *strongly agree*; and "How likely is it that, over the next year, you will actively look for a new job outside of this firm" measured on a six point response scale *very unlikely* to *very likely*. The Cronbach's alpha for turnover intentions is .91 (Riley, 2006). The Cronbach's alpha for intention to leave for the current study was .89.

The following table is a summary of the reliabilities for each of the subscales used in the current study. Cronbach's alpha for all sub-scales in this study are good and therefore each item on the various scales correlates highly with the other items for that scale.

Table 3 Reliabilities for Scales in Current Study

Variable	**Cronbach Coefficient Alpha**
Burnout	.84
Engagement	.83
Job demands	.89
Job resources	.84
Job control	.89
Intention to leave	.89

3.6 Analysis

Whilst a brief overview of the statistical procedures is explained, further descriptions and statistical details are provided within the results chapter.

In order to answer the main hypotheses, correlations were conducted to determine if the mediator variables (burnout and engagement) did have a significant relationship

with the other variables. The mediated regressions approach followed the guidelines as outlined by Baron and Kenney (1986). Their analyses require three separate equations needing to be estimated. The first equation involves regressing the mediator variable on the predictor variable. The second equation entails regressing the criterion variable on the predictor variable. Finally, the third equation involves regressing the criterion variable concurrently onto the predictor variable and the mediator variable. Furthermore, Baron and Kenny (1986) outline four conditions that must be met:

Condition 1: The antecedent/predictor variable must be significantly related to the mediator

Condition 2: The antecedent/predictor variable must be significantly related to the criterion variable

Condition 3: The mediator variable must be significantly related to the criterion variable

Condition 4: The effect of the predictor variable must be less in equation three than in equation two.

Full mediation is achieved when the predictor variable influences the criterion through the mediator. In terms of the regression equation, the beta weight for the predictor is significant in equation two but non-significant in equation three when the mediator is controlled for. Partial mediation is achieved when the predictor variable influences the criterion variable through the mediator indirectly and directly. Baron and Kenny (1986) argue that partial mediation warrants a conclusion of a mediation

effect as it is unrealistic to eliminate the relationship between the predictor variable and the criterion variable totally.

In order to examine any significant relationships between the variables, correlations were also run. A Pearson Product-Moment Correlation coefficient was calculated as all data was interval. This coefficient can be seen as measuring the strength of the linear relation between two variables (Devlin, 2006). Therefore, if the relationship between two variables is strong and positive, then the coefficient will be positive and will reflect a value above .50. Should the relationship be a negative one, the coefficient will reflect a negative value. A weak correlation is when *r* lies between 0 and .30, a moderate correlation is when *r* lies between .30 and .50, a strong correlation is when *r* lies between .50 and .70 and a very strong correlation is when *r* is greater than .70.

As mentioned in the design section there is no possibility of determining cause-and-effect relationships with correlations. This research is simply trying to determine whether a relationship exists between two variables across the entire sample, not between groups. In essence the researcher wants to determine whether one variable increases as the other increases (a positive correlation) or decreases (a negative correlation). Furthermore, whilst partial correlations were used to test the main hypotheses, further statistical procedures were run in order to explore possible significant trends within the demographic data.

A two independent t-test was run to examine whether the sample mean of participants who were female differed from the male participants. This statistical procedure was

deemed to be the most appropriate as the two groups are being compared with reference to the main variables (Devlin, 2006).

One-way ANOVAs were run to examine whether there was any difference in the results for participants with different languages and race. A one-way ANOVA was also run to determine whether there was any difference between the different marital statuses. Tukey's Studentized Range (HSD) post-hoc test was used to find the differences between the means of all of the age groups. The critical value is the HSD (Honestly Significant Difference) and it must be computed. It is the point when a mean difference becomes honestly significantly different (Devlin, 2006).

Pearson Product-Moment Correlation coefficients were calculated to determine whether there were any significant results between the correlation of age, years in the organisation, years in current position and the various subscales.

3.7 Ethics

In the participant information letter (Appendix A) the participants were told the purpose of the study and a brief reason for the chosen research area. They were asked to complete the attached questionnaire, which was completely voluntary, and they were told that they would not be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire. They were not asked for their names or ID numbers and therefore they will remain anonymous in the study but not anonymous to the researcher. This is owing to correspondence via e-mail. They were told that the questionnaire would not be seen by anyone but the researcher.

Their responses were confidential in the study as their responses were only looked at in relation to all the other responses in order to establish trends. The participants were told that completion of the questionnaire is regarded as consent to participate in the study.

4. RESULTS

This chapter includes all the results established from the analyses. Firstly the descriptive statistics for the scales and subscales are provided. Secondly the hypotheses are discussed in turn. The first three hypotheses were addressed by performing mediated regression and the fourth hypothesis was addressed by means of a Pearson Product-Moment Correlation. The demographic data is then discussed in turn, including gender, age, marital status, language, race, years in organisation, years in current position, promotion in last year and overlooked for promotion. The appropriate analysis for the type of data collected was used in these analyses. The chapter concludes with a final summary of trends.

4.1. Descriptive Statistics

Table 4 Descriptive Statistics of Scales and Subscales

Variable	**Mean**	**Std Dev**	**Minimum**	**Maximum**	**Range**
Burnout	25.89	10.60	10.00	60.00	50.00
Engagement	78.49	16.05	44.00	106.00	62.00
Job demands	52.73	7.83	39.00	74.00	35.00
Job resources	45.24	9.78	14.00	61.00	47.00
Job control	68.65	13.73	33.00	102.00	69.00
Intention to leave	10.89	4.47	3.00	18.00	15.00
Absenteeism	4.40	10.60	0	20.00	20.00
Exhaustion	25.90	10.61	10.00	48.00	38.00
Cynicism	10.71	5.57	1.00	21.00	20.00
Vigour	21.67	6.89	10.00	50.00	40.00
Dedication	18.04	5.37	8.00	28.00	20.00

Variable	Mean	Std Dev	Minimum	Maximum	Range
Absorption	20.22	6.27	8.00	34.00	26.00
Professional efficacy	18.56	3.69	5.00	24.00	19.00
Job demands	25.64	5.79	11.00	35.00	24.00
Employee discretion	14.07	2.87	7.00	20.00	13.00
Decision authority	13.01	3.19	6.00	20.00	14.00
Career communication	27.60	5.93	9.00	39.00	30.00
Performance communication	17.63	4.24	5.00	25.00	20.00

By comparing the mean to the maximum, the table above illustrates that on average the participants experienced moderate burnout but reported fairly high engagement scores especially for the absorption and dedication subscales. Average scores were reported for job demands whereas fairly high scores for job resources and job control were stated. Career communication scores are quite high in terms of a job resource. Moderate to high scores were found for intention to leave. On average 4.40 days per year were reported for absenteeism.

4.2. Primary Hypotheses Results

4.2.1. Mediated Regression

Mediated regressions were chosen to in order to attempt to address the first three hypotheses. As discussed in the methodology chapter, in order for full mediation to be achieved four conditions must be met. Correlations were conducted to assess whether the mediator variables did have a significant relationship with the other variables. Therefore the following table presents a correlation matrix. The line diagrams following the correlation matrix show the correlation coefficients between the variables

as well as whether the relationship was significant or not. Significant relationships are illustrated by a tick √ and non-significant relationships are illustrated by a cross 'X'. These are shown in order to address conditions 1 and 3 stated by Baron and Kenny (1986): The antecedent/ predictor variable must be significantly related to the mediator and the mediator variable must be significantly related to the criterion variable.

Table 5 Correlation Matrix for Total Scales

		1	2	3	4	5	6	7
1	BURNOUT	1.00						
2	ENGAGEMENT	-0.43 0.001*	1.00					
3	JOB DEMANDS	0.11 0.40	-0.38 0.01*	1.00				
4	JOB RESOURCES	-0.30 0.02*	0.21 0.13	0.36 0.01*	1.00			
5	JOB CONTROL	-0.28 0.03*	0.24 0.07	0.26 0.05*	0.24 0.08	1.00		
6	INTENTION TO LEAVE	0.31 0.02*	-0.36 0.01*	-0.20 0.13	-0.22 0.09	0.23 0.08	1.00	
7	ABSENTEEISM	0.03 0.81	-0.13 0.32	0.13 0.34	0.07 0.59	-0.05 0.67	-0.09 0.49	1.00

Significant correlations are represented with an asterisk

* p < or = to 0.05, ** p< or = to 0.01, *** p < or = to 0.001.

Hypothesis 1: Burnout mediates the relationship between job demands and absenteeism.

Job demands ⟶ Burnout ⟶ Absenteeism

0.11 X

0.03 X

Hypothesis 2: Engagement mediates the relationship between job resources and (low) intention to leave.



Hypothesis 3: Engagement mediates the relationship between job control and (low) intention to leave.



The diagrams above illustrate that the four conditions were not met in order for mediated regressions to be performed. Condition 1 stated that the antecedent/ predictor variable must be significantly related to the mediator. In all three cases the predictor variable was not significantly related to the mediator. Condition 2 stated that the antecedent/predictor variable must be significantly related to the criterion variable. Again for all three cases the predictor variable was not significantly related to the criterion variable. Condition 3 was that the mediator variable must be significantly related to the criterion variable. Although for Hypothesis 2 and Hypothesis 3 the mediator variable was significantly related to the criterion variable, in order for full mediation to be achieved all four conditions need to be met. Condition 4 was that the effect of the predictor variable must be less in equation three than in equation two. This condition was not met either. Therefore mediated regressions could not be performed.

4.2.2. Correlation Matrix

In order to examine any significant relationships between the variables and to address Hypothesis four, correlations were also run. A Pearson Product-Moment Correlation coefficient was calculated as all data was at least interval. Table 5 is repeated for ease of reference which illustrates the coefficients between the total scales whereas Table 6 shows the coefficients of the subscales. All eleven hypotheses under Hypothesis four are discussed in turn. All eleven hypotheses were supported.

Table 5 Correlation Matrix for Total Scales

		1	2	3	4	5	6	7
1	BURNOUT	1.00						
2	ENGAGEMENT	-0.43 0.001*	1.00					
3	JOB DEMANDS	0.11 0.40	-0.38 0.01*	1.00				
4	JOB RESOURCES	-0.30 0.02*	0.21 0.13	0.36 0.01*	1.00			
5	JOB CONTROL	-0.28 0.03*	0.24 0.07	0.26 0.05*	0.24 0.08	1.00		
6	INTENTION TO LEAVE	0.31 0.02*	-0.36 0.01*	-0.20 0.13	-0.22 0.09	0.23 0.08	1.00	
7	ABSENTEEISM	0.03 0.81	-0.13 0.32	0.13 0.34	0.07 0.59	-0.05 0.67	-0.09 0.49	1.00

Significant correlations are represented with an asterisk

* p < or = to 0.05, ** p< or = to 0.01, *** p < or = to 0.001.

Table 6 Correlation Matrix for Subscales

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Exhaustion	1.00													
2	Cynicism	0.89 <.0001*	1.00												
3	Vigour	-0.36 0.05*	-0.30 0.03*	1.00											
4	Dedication	-0.51 <.0001*	-0.58 <.0001*	0.45 0.001*	1.00										
5	Absorption	-0.16 0.25	-0.19 0.17	0.40 0.002*	0.49 0.0001*	1.00									
6	Professional efficacy	-0.18 0.20	-0.07 0.59	0.16 0.23	0.30 0.06	0.20 0.15	1.00								
7	Job demands	0.41 0.002*	0.16 0.24	0.25 0.05*	0.18 0.19	0.26 0.06	-0.03 0.80	1.00							
8	Employee discretion	-0.23 0.09	-0.30 0.02*	0.40 0.002*	0.57 <.0001*	0.17 0.23	0.31 0.02*	0.27 0.04*	1.00						
9	Decision authority	-0.25 0.06	-0.21 0.13	-0.02 0.88	0.26 0.05*	-0.31 0.02*	0.24 0.08	-0.18 0.20	0.38 0.004*	1.00					
10	Career comm..	-0.22 0.11	-0.25 0.07	0.13 0.34	0.33 0.01*	-0.21 0.11	0.19 0.17	0.09 0.51	0.33 0.01*	0.30 0.02*	1.00				
11	Performance Comm.	-0.39 0.003*	-0.44 0.001*	0.25 0.06	0.44 0.005*	-0.02 0.83	0.22 0.11	0.07 0.58	0.45 0.0005*	0.41 0.001*	0.85 <.0001*	1.00			
12	Job control	-0.28 0.039*	-0.23 0.09	0.05 0.74	0.40 0.002*	0.04 0.75	0.31 0.02*	-0.13 0.33	0.39 0.003*	0.52 <.0001*	0.18 0.20	0.30 0.02*	1.00		
13	Intention to leave	0.31 0.02*	0.41 0.001*	-0.33 0.01*	-0.38 0.005*	-0.33 0.01*	0.14 0.29	-0.28 0.04*	-0.11 0.41	0.10 0.45	-0.24 0.07	-0.19 0.16	0.23 0.08	1.00	
14	Absenteeism	0.03 0.81	0.04 0.85	-0.13 0.32	-0.14 0.36	-0.17 0.23	-0.07 0.59	0.13 0.34	0.15 0.19	0.10 0.40	0.07 0.59	0.05 0.60	-0.05 0.67	-0.09 0.49	1.00

Note: p is significant at .05 or better.

(a) Engagement and burnout are negatively related.

The result of the correlation indicated that the total burnout score was significant, strongly and negatively correlated with engagement (r = -.43, p = .001). This shows that high values in burnout are associated with low values in engagement. Therefore the hypothesis is supported. The result of the correlation indicated that exhaustion was moderately and negatively correlated with two subscales of engagement; vigour (r = -. 36, p = .05) and dedication (r = -.51, p = .001).

(b) Job demands are positively related to burnout

A positive correlation exists between job demands and burnout (r = .11, p = .40) and a positive significant correlation was found between exhaustion and job demands (r = .41, p = .002). This infers that the higher the job demands the higher a participant will experience exhaustion. A negative significant relationship exists between employee discretion and cynicism (r = -.30. p =-.02). High values in employee discretion are associated with low values in cynicism.

(c) Job resources are negatively related to burnout.

The total burnout score was significant, moderately and negatively correlated with job resources (r = -.30, p = .02). Negative significant correlations exist between performance communication and both the burnout subscales; exhaustion (r = -.39, p = -.003) and cynicism (r = -.44, p = -.0001).

(d) Job control is negatively related to burnout.

The total burnout score was significant, moderately and negatively correlated with job control (r = -.28, p = .03). The significant relationship between job control and exhaustion is negative (r = -.28, p = -.03).

(e) Job control is positively related to engagement

Job control and engagement were found to be positively correlated (r = .24, p = .07). A positive significant relationship exist between job control and dedication (r = .40, p =.002) and professional efficacy (r = .31, p = .02).

(f) Job resources are positively related to engagement

Job resources were found to be positively correlated with engagement (r = .21, p = .13). A positive significant relationship exists between career communication and dedication (r = .33, p = .01) and a positive significant correlation was found between performance communication and dedication (r = .44, p = .005).

(g) Job demands and engagement are negatively related.

The total engagement score was significantly, negatively and moderately correlated with job demands (r = -.38, p = .01). This implies that the more engaged a person is the less job demands they will have. A negative significant relationship was found between authority and absorption (r = -.31, p = -.02). Positive significant relationships exist between employee discretion and three of the four subscales of engagement: vigour (r = -.30, p = .002), dedication (r = .57, p = .0001) and professional efficacy (r = -.31, p = .02).

(h) Burnout is positively related to turnover intention.

Burnout was significantly and positively correlated with intention to leave (r = .31, p = .02). This association implies that higher burnout scores are related to high turnover intention scores. Positive significant relationships were found between both subscales of burnout and intention to leave: exhaustion (r = .31, p = .02) and cynicism (r = .41, p = .001).

(i) Burnout is positively related to absenteeism

Although a positive correlation was found between burnout and absenteeism (r = .03, p = .81), it is very weak and non-significant.

(j) Engagement is negatively related to turnover intention

The total engagement score was significantly, negatively and moderately correlated with intention to leave (r = -.36, p = .01). Negative significant correlations were found between intention to leave and vigour (r = -.33, p =-.01), dedication (r = -.38, p = -.004) and absorption (r = -.33, p = -.01).

(k) Engagement is negatively related to absenteeism

A negative correlation was found between engagement and absenteeism (r = -.13, p = .32), however the strength of this association is weak. The negative result still implies that the more one is engaged the less likely they are to report absenteeism.

4.3. Analysis of demographic data

Further analyses were performed to determine whether any of the demographic information had any impact on the main variables. The following tests included the subsequent demographic data: gender, age, marital status, language, race, years in organisation, years in current position, job level, whether the participant had been promoted in the past year and whether they had been overlooked for promotion.

4.3.1. Gender

A two independent t-test was run to examine whether the sample mean of participants who were males differed from females. This statistical procedure was deemed to be the most appropriate as the two groups are being compared with reference the main variables. If there is equal variance, then the "pooled" method must be used. If there is unequal variance, then the "Satterthwaite" method must be used. As all variables yielded a non-significant result, the variances are equal and thus the pooled method was adopted. No significant results were found.

4.3.2. Age

A Pearson Product-Moment Correlation coefficient was calculated to determine whether there were any significant results between the correlation of age and the various subscales (Table 7). This statistical procedure revealed the there were significant results for professional efficacy (r = -.37; p = 0.005) and performance communication (r = -.25; p = 0.04).

Table 7 Correlation Matrix for Age (N = 55)

	AGE	
	Pearson Correlation Coefficient	**P – value**
Burnout – Exhaustion	0.05	0.67
Burnout – Cynicism	0.05	0.69
Engagement – Vigour	-0.03	0.80
Engagement – Dedication	-0.05	0.69
Engagement – Absorption	-0.24	0.07
Engagement - Professional efficacy	-0.37	0.005*
Job demands	-0.06	0.64
Employee discretion	0.01	0.98
Decision authority	0.17	0.20
Career communication	-0.20	0.13
Performance communication	-0.25	0.04*
Job control	0.13	0.33
Intention to leave	0.06	0.61
Absenteeism	0.07	0.30

Note: p is significant at .05 or better.

4.3.3. Marital status

A one-way ANOVA was run to determine whether there was any disparity between the different marital statuses. A significant result was found for job control (F= 4.07; p=.01).

Table 8 One-way ANOVA for Marital Status

Variable	**F Value**	**P Value**
Burnout – Exhaustion	1.18	0.32
Burnout – Cynicism	2.14	0.10
Engagement – Vigour	1.68	0.18
Engagement – Dedication	1.81	0.15
Engagement – Absorption	1.92	0.13

Variable	F Value	P Value
Engagement - Professional efficacy	0.55	0.64
Job demands	0.28	0.84
Employee discretion	0.77	0.51
Decision authority	1.56	0.21
Career communication	0.85	0.47
Performance communication	0.37	0.77
Job control	4.07	0.01*
Intention to leave	1.95	0.13
Absenteeism	1.62	0.20

Note: p is significant at .05 or better.

Table 9 Summary of Tukey's Studentized Range (HSD) Test for Significant Finding (Job Control)

Marital Status	Difference between means
Married - Cohabitating	29.77
Cohabitating – Never Married	30.12

The Tukey HSD (honestly significant difference) procedure revealed that the above two pairwise differences among means were significant. It showed that married participants had significantly higher job control scores than the participants who were cohabiting at the .05 level of significance. Cohabitating participants had higher job control scores than those who were never married. All other comparisons were not significant.

4.3.4. Language

A one-way ANOVA was run to examine whether there was any differentiation in the results for participants with varying languages. Significant results in the ANOVA were found for cynicism (F = 3.43; p = .014) and vigour (F = 2.82; p = .03).

Table 10 One-way ANOVA for Language

Variable	**F Value**	**P Value**
Burnout – Exhaustion	2.50	0.053
Burnout – Cynicism	3.43	0.01*
Engagement – Vigour	2.82	0.03*
Engagement – Dedication	0.23	0.91
Engagement – Absorption	2.10	0.09
Engagement - Professional efficacy	0.63	0.64
Job demands	0.97	0.43
Employee discretion	2.23	0.07
Decision authority	1.15	0.34
Career communication	0.78	0.54
Performance communication	0.31	0.86
Job control	0.61	0.65
Intention to leave	1.50	0.21
Absenteeism	2.14	0.08

Note: p is significant at .05 or better.

Table 11 Summary of Tukey's Studentized Range (HSD) Test for Significant Finding

	Language	**Difference between means**
Burnout - Cynicism	English – Other	10.65
Engagement - Vigour	Tsonga – Other	20.00

Post hoc comparisons using the Tukey HSD test indicated that the mean score for the English speaking participants was significantly different than those who spoke

another language in terms of cynicism. When looking at vigour, participants who spoke Tsonga were also significantly different to those who spoke another language.

4.3.5. Race

A one-way ANOVA was run to examine whether there was any difference in the results for participants with different races. The table below shows that exhaustion (F = 4.80; p = .005), cynicism (F = 6.46; p = .0009) and job demands (F = 3.37; p = .025) were found to be significant.

Table 12 One-way ANOVA for Race

Variable	**F Value**	**P Value**
Burnout – Exhaustion	4.80	0.005*
Burnout – Cynicism	6.46	0.0009*
Engagement – Vigour	0.15	0.92
Engagement – Dedication	0.79	0.50
Engagement – Absorption	2.08	0.11
Engagement - Professional efficacy	1.13	0.34
Job demands	3.37	0.02*
Employee discretion	1.34	0.27
Decision authority	1.52	0.22
Career communication	2.12	0.11
Performance communication	0.99	0.40
Job control	2.45	0.07
Intention to leave	2.39	0.07
Absenteeism	0.12	0.95

Note: p is significant at .05 or better.

Table 13 Summary of Tukey's Studentized Range (HSD) Test for Significant Finding

	Race	**Difference between means**
Burnout – Exhaustion	Black – White	10.56
Burnout – Cynicism	Black – White	10.87
Job demands	White – Indian	11.03

The Tukey HSD post hoc test showed that for both exhaustion and cynicism Black participants were significantly higher than the White participants. In terms of job demands, White participants were found to have significantly higher score than Indian participants.

4.3.6. Years in organisation

A Pearson Product-Moment Correlation coefficient was calculated to determine whether there were any significant results for the amount of years in the organisation. A significant result was found for professional efficacy (r = -.31; p = 0.02).

Table 14 Correlation Matrix for Years in Organisation (N = 55)

	YEARS IN ORGANISATION	
	Pearson Correlation Coefficient	**P – Value**
Burnout – Exhaustion	-0.03	0.83
Burnout – Cynicism	-0.07	0.61
Engagement – Vigour	-0.08	0.57
Engagement – Dedication	0.01	0.89
Engagement – Absorption	-0.14	0.28
Engagement - Professional efficacy	-0.31	0.02*
Job demands	-0.07	0.59

	YEARS IN ORGANISATION	
	Pearson Correlation Coefficient	**P – Value**
Employee discretion	0.04	0.76
Decision authority	0.14	0.30
Career communication	-0.21	0.13
Performance communication	-0.20	0.14
Job control	0.15	0.27
Intention to leave	-0.0002	0.99
Absenteeism	0.11	0.44

Note: p is significant at .05 or better.

4.3.7. Years in current position

A Pearson Product-Moment Correlation coefficient was calculated to determine whether there were any significant results between participant's years in current position. A significant result was found between absenteeism and years in current position (r = .33, p = .01). This result shows that participants who have more years in their current position have taken more time off from work.

Table 15 Correlation Matrix for Years in Current Position (N = 55)

	YEARS IN CURRENT POSITION	
	Pearson Correlation Coefficient	**P – Value**
Burnout – Exhaustion	-0.02	0.86
Burnout – Cynicism	-0.09	0.49
Engagement – Vigour	-0.12	0.34
Engagement – Dedication	0.22	0.10

	YEARS IN CURRENT POSITION	
	Pearson Correlation Coefficient	**P – Value**
Engagement – Absorption	0.03	0.81
Engagement – Professional efficacy	0.006	0.96
Job demands	0.05	0.67
Employee discretion	0.02	0.88
Decision authority	0.14	0.32
Career communication	0.04	0.73
Performance communication	-0.03	0.79
Job control	0.24	0.08
Intention to leave	-0.08	0.53
Absenteeism	0.33	0.01*

Note: p is significant at .05 or better.

4.3.8. Promotion in last year

A two sample t-test was run in order to determine whether there was any significant difference between participants that were promoted in the past year and those who were not. This statistical procedure was deemed to be the most appropriate as the two groups are being compared with reference to the variables being measured.

Table 16 Equality of Variance on Two Sample t-test (N =28)

Variable	**Num DF**	**Den DF**	**F Value**	**P – Value**
Burnout – Exhaustion	25	27	1.07	0.86
Burnout – Cynicism	27	25	3.67	0.001*
Engagement – Vigour	27	25	1.37	0.43
Engagement – Dedication	27	25	1.50	0.31
Engagement – Absorption	27	25	1.73	0.17

Variable	Num DF	Den DF	F Value	P – Value
Engagement - Professional efficacy	27	25	1.60	0.24
Job demands	27	25	1.17	0.69
Employee discretion	25	27	1.62	0.23
Decision authority	25	27	1.89	0.11
Career communication	25	27	1.36	0.43
Performance communication	25	27	1.80	0.13
Job control	27	25	1.48	0.33
Intention to leave	27	25	3.95	0.0009*
Absenteeism	27	25	1.01	0.41

Note: p is significant at .05 or better.

Table 17 Results for Two Sample t-test

Variable	Method	Variances	DF	t Value	P – Value
Burnout – Exhaustion	Pooled	Equal	52	-0.93	0.35
Burnout – Cynicism	Satterthwaite	Unequal	51.3	0.43	0.67
Engagement – Vigour	Pooled	Equal	52	-0.45	0.65
Engagement – Dedication	Pooled	Equal	52	-0.15	0.88
Engagement – Absorption	Pooled	Equal	52	-3.81	0.0004*
Engagement - Professional efficacy	Pooled	Equal	52	0.21	0.83
Job demands	Pooled	Equal	52	-1.70	0.10
Employee discretion	Pooled	Equal	52	2.13	0.04*
Decision authority	Pooled	Equal	52	1.37	0.17
Career communication	Pooled	Equal	52	2.61	0.01*
Performance communication	Pooled	Equal	52	2.02	0.04*
Job control	Pooled	Equal	52	-1.17	0.24
Intention to leave	Satterthwaite	Unequal	52	0.43	0.67
Absenteeism	Pooled	Equal	52	1.10	0.28

Note: p is significant at .05 or better.

The table above shows that there is a significant difference whether a participant was promoted in the last year or not for the following variables: absorption (t_{52} = -3.81, p = .0004), employee discretion (t_{52} = 2.13, p = .04), career communication (t_{52} = 2.61, p = .01) and performance communication (t_{52} = 2.02, p = .04).

4.3.9. Overlooked for promotion

In order to determine whether there was any significant difference between participants that were overlooked for promotion and those who were not a t-test was run. This statistical procedure was deemed to be the most appropriate as the two groups are being compared with reference to the variables being measured.

Table 18 Equality of Variance on Two Sample t-test (N =29)

Variable	**Num DF**	**Den DF**	**F Value**	**P – Value**
Burnout – Exhaustion	19	28	2.81	0.01*
Burnout – Cynicism	19	28	2.40	0.03*
Engagement – Vigour	28	19	1.10	0.85
Engagement – Dedication	19	28	1.62	0.23
Engagement – Absorption	19	28	1.32	0.48
Engagement - Professional efficacy	19	28	2.49	0.02*
Job demands	19	28	1.24	0.59
Employee discretion	28	19	1.37	0.47
Decision authority	28	19	1.14	0.78
Career communication	28	19	4.26	0.001*
Performance communication	28	19	3.41	0.007*
Job control	28	19	4.03	0.002*
Intention to leave	28	19	1.26	0.61
Absenteeism	19	28	1.19	0.66

Note: p is significant at .05 or better.

Table 19 Results for Two Sample t-test

Variable	Method	Variances	DF	t Value	P – Value
Burnout - Exhaustion	Satterthwaite	Unequal	28.3	1.25	0.22
Burnout - Cynicism	Satterthwaite	Unequal	29.8	1.97	0.06
Engagement - Vigour	Pooled	Equal	47	-1.31	0.20
Engagement - Dedication	Pooled	Equal	47	-3.15	0.002*
Engagement - Absorption	Pooled	Equal	47	-2.44	0.02*
Engagement - Professional efficacy	Pooled	Unequal	47	-0.90	0.37
Job demands	Pooled	Equal	47	-1.40	0.17
Employee discretion	Pooled	Equal	47	-0.66	0.51
Decision authority	Pooled	Equal	47	0.16	0.87
Career communication	Satterthwaite	Unequal	43	-0.01	0.99
Performance communication	Satterthwaite	Unequal	44.9	-0.46	0.64
Job control	Satterthwaite	Unequal	43.5	-2.56	0.01*
Intention to leave	Pooled	Equal	47	3.02	0.004*
Absenteeism	Pooled	Equal	47	2.25	0.03*

Note: p is significant at .05 or better.

The table indicates that there is a significant difference between participants who have been overlooked for a promotion and those who have not in terms of dedication (t_{47} = -3.15, p = .002), absorption (t_{47} = 2.44, p = .02), job control ($t_{43.5}$ = -2.56, p = .01), intention to leave (t_{47} = 3.02, p = .004) and absenteeism (t_{47} = 2.25, p = .03).

4.4 Summary of Trends

Although partial correlations were performed, no significant results were found and therefore correlations were conducted where several interesting significant results were found. The result of the correlation indicated that exhaustion was moderately

and negatively correlated with two subscales of engagement; vigour and dedication. A positive significant correlation was found between exhaustion and job demands. A negative significant relationship exists between employee discretion and cynicism Positive significant relationships exist between employee discretion and three of the four subscales of engagement: vigour, dedication and professional efficacy.

A negative significant relationship was found between authority and absorption and a positive significant relationship exists between career communication and dedication. Negative significant correlations exist between performance communication and both the burnout subscales; exhaustion and cynicism. However a positive significant correlation was found between performance communication and dedication.

The significant relationship between job control and exhaustion is negative whereas positive significant relationships exist between job control and dedication and professional efficacy. Positive significant relationships were found between both subscales of burnout and intention to leave. However negative significant correlations were found between intention to leave and vigour, dedication and absorption.

In terms of the biographical data, no significant results were found for gender. For age, significant results were found for professional efficacy and performance communication. For marital status, a significant result was found for job control in that participants who were never married reported a slightly higher score for job control compared to married participants. In terms of language, significant results were found for cynicism and vigour. For race, significant results were found for

exhaustion, cynicism and job demands. For the amount of years in the organisation, a significant result was found for professional efficacy.

A significant result was also found between absenteeism and years in current position. In terms of whether the participant had been promoted in the last year or not significant results were found for absorption, employee discretion, career communication and performance communication.

5. Discussion

This chapter aims to examine the results found in Chapter 4 in relation to previous research. Each hypothesis will be discussed; following this are the practical implications for the current research. The limitations of the study will then be outlined and directions for future research will also be included. The chapter ends with a conclusion for the current study.

The purpose of this study was to provide additional research into the work of Schaufeli and Bakker in a South African context. Schaufeli and Bakker (2004) proposed a model of well-being which views engagement and burnout as mediating variables and looks at the precursors and the outcome variables of health problems and intention to leave.

However this current research argued that the addition of job control in the model was needed. Schaufeli and Bakker omitted this construct from their model. The aim of the current research was to incorporate job control and expand on Schaufeli and Bakker's (2004) model in which job control was regarded as a job resource at the task level. The current research viewed job demands, resources and control all at the task level.

As a conceptual framework advanced by Karasek (1979) was examined to determine the relative importance of job control, workload demand and job resources on employee absenteeism and intention to leave. Few studies have extended Karasek's model to examine the impact of job control, workload demand and job resources on labour market outcomes such as absenteeism and intention to leave.

The current research defined burnout in terms of only two dimensions (exhaustion and cynicism) and professional efficacy was looked at under engagement. The current research also included a more organisational orientated outcome by viewing health problems in terms of absenteeism. Very few South African researchers have focused on an all inclusive model which views burnout and engagement as mediators. Another aim of this study was the affect of career progress on burnout has not been thoroughly researched and the current research hopefully contributes in this area.

5.1 Discussion of Hypotheses

Mediated regressions were chosen to in order to attempt to address the first three hypotheses. Before mediated regressions could be done, correlations were performed to determine if the four conditions outlined by Baron and Kenny (1986) were met. However, it was revealed that the four conditions were not met in order for mediated regressions to be performed. Therefore the first three hypotheses could not be answered by means of mediated regression. One reason why this could have occurred is the small sample size. This is further discussed under the limitations of the study.

In order to answer all the hypotheses under Hypothesis four, correlations were conducted. The results of the correlations are discussed below.

Job demands

A positive correlation was found between job demands and burnout. In terms of the subscales, a positive significant correlation was found between exhaustion and job

demands and a negative significant relationship exists between cynicism and employee discretion. Maslach and Leiter (1997) deduced a similar conclusion that work overload occurs when job demands exceed human limits and the individual becomes exhausted.

The total engagement score was negatively and moderately correlated with job demands. This implies that the more engaged a person is the less job demands they will have and vice versa. Positive significant relationships exist between employee discretion and three of the four subscales of engagement: vigour, dedication and professional efficacy. A negative significant relationship was found between authority and absorption. The implications of these findings suggest by engaging with employees in a holistic way, by understanding the motivations within different groups of employees; and by harnessing their experiences and knowledge within the business environment, organisations will benefit by harnessing this information to inform strategies which will ultimately impact on productivity. Employees who experience less job demands (physically, mentally and emotionally) are more likely to be engaged at work.

Job resources

The current study also found that the total burnout score was significantly, moderately and negatively correlated with job resources. Negative significant correlations exist between performance communication and both the burnout subscales; exhaustion and cynicism. Similarly Cordes and Dougherty (1993, p.637) hypothesised that "individuals who have had greater upward career movement may experience less burnout". Huselid (1995 as cited in Foong-ming, 2008) suggested that progressive

HR practices that embrace career-related practices could improve knowledge, skills and the abilities of an organisation's current and potential employees, and enhance the retention of quality employees. Maslach and Jackson (1986) state that burnout is a self-perpetuating process that affects the attainment of professional goals by depleting the resources of the individual to cope with the process and symptoms of burnout.

Results from this study found a positive significant correlation between performance and career communication and dedication. These results imply that employees consider their relationship with their manager or supervisor as contributing positively to their career development. London (1993) found that the availability of effective career development practices not only heightens the growth and self-esteem of employees enabling them to utilise skills and knowledge, it also serves as an important link in retaining good employees to stay with the organisation. The results from the current study imply that employees whose managers communicate with them about their performance and advances in their career are more likely to experience dedication to their work.

Job control

The total burnout score was significantly, moderately and negatively correlated with job control. The significant relationship between job control and exhaustion is negative, whereas positive significant relationships exist between job control and dedication and professional efficacy.

It is essential for employers to foster job control for all workers, whenever possible. Karasek (1979) notes that if jobs could be redesigned with more decision latitude,

opportunities for taking responsibility through participative decision making, would allow demands to be seen as challenges and would be associated with increased learning and motivation, with more effective performance and less risk of illness. This implies that employee attendance can be improved without sacrificing productivity but rather adding value for both employee and employer.

Burnout and Engagement

The result of the Pearson Product-Moment Correlation coefficients indicated that the total burnout score was significantly, strongly and negatively correlated with engagement. Therefore high values in burnout are associated with low values in engagement. In particular exhaustion was moderately and negatively correlated with two subscales of engagement: vigour and dedication. This result confirms Schaufeli and Bakker's (2004) results in their research. Similarly Maslach and Leiter (1997) also found that the relationship between burnout and engagement show strong negative correlations. This result was expected as numerous studies have established the same result.

Intention to leave

The total engagement score was negatively and moderately correlated with intention to leave. Therefore high values in engagement are associated with low values in intention to leave. More specifically negative significant correlations were found between intention to leave and vigour, dedication and absorption.

Burnout was positively correlated with intention to leave. In particular positive significant relationships were found between both subscales of burnout and intention

to leave. In today's rapidly changing organisational environment, where labour is transient in nature, holding on to a skilled and motivated workforce is essential for the continuing success of an organisation's mission, goals, and objectives. Therefore, this research has contributed to the understanding of the turnover process to expand on current knowledge regarding turnover intentions.

Absenteeism

Although a positive correlation was found between burnout and absenteeism it is very weak and non-significant. A negative correlation was also found between engagement and absenteeism however the strength of this association is also insubstantial. Schaufeli and Enzmann (1998) advocate that the consequence of burnout causing absenteeism is rather small and is most related to emotional exhaustion. Indeed, several meta-analytic studies on absenteeism show that work-related stress is but one of many variables accounting for employee absence behaviour, so we should not expect job stress and absenteeism to be strongly correlated (Beehr, 1995; Nicholson, 1993).

5.2 Practical Implications

The results of this study also have some practical implications. Since job demands play a central role that might lead to burnout and absenteeism, but also to potential negative organisational outcomes such as the intention to leave the organisation, reducing those demands seems to be warranted. Many preventive organisational based strategies exist to tackle high job demands, such as job redesign, flexible work schedules, and goal expectations. Increasing job resources (e.g., through participative

management, increased social support, and team building), should lead to more engagement with the job; but its indirect effect on turnover intention is rather small as is its direct effect on burnout. Hence, from a preventive perspective, decreasing job demands is to be preferred above increasing job resources.

Secondly, an important practical implication for direct managers as well as the HR department is the need to engage in meaningful conversation with their employees about developing career expectations. Managers should be aware that a 'one size fits all' approach to increasing job resources and job control might not be the most effective criteria and need to demonstrate adaptability in adopting a more individualised approach. Managers should value employee engagement as a long-term and on-going process that requires continued interactions in order to encourage a trained and skilled employee to stay in the organisation.

Thirdly, organisations are facing a crisis in how to retain their most valuable employees and therefore need to determine strategies to enable them to win the war to maintain talented and valued employees. Employee turnover will continue to be a challenging phenomenon for companies but by identifying some antecedents to intention to leave, the current study sheds some light on a number of variables contributing to this phenomenon.

5.3 Limitations of the Study

The research design of this study was cross sectional and it is thus not possible to infer a causal relationship. Undertaking research at one period in time can only reflect that period in time. A greater focus on longitudinal research designs may give an enhanced indication of turnover intentions and highlight stronger underpinning associations.

Nonprobability sampling techniques cannot be used to infer from the sample to the general population. Owing to the nature of the sampling method used in this study, the likelihood that the sample represents a good cross section from the population is slim. The sample consisted mainly of white females. As only a few other ethnic groups were included, the sample was under representative of the population.

The small sample size could be viewed as the main limitation of this current research. Future research studies should make use of stratified random sampling to ensure satisfactory representation of different groups. The use of larger sampling might also provide increased confidence that study findings would be consistent across other (similar) groups. The small sample size for the current research impaired the use of mediated regression. In order for this analysis to show any satisfactory significant results the sample would need to be larger.

The research was only from one organisation therefore the results are only specific for that organisation. However, other South African studies also only used specific samples such as nurses or the SAPS, which are in the service industry. Therefore the current study is still adding to this body of research as it is building on a broader profile from the corporate domain.

In addition, the participants came from a range of positions so the findings cannot be generalised to other organisations. Despite this, it is argued that, for the most part, the findings should be relevant to other similar occupations and professions in similar organisations.

An added limitation is that the data was obtained by self-report and therefore responses may have been influenced by common method variance. Allen and Meyer (1991, p. 16) state that common method variance is the "overlap in variance between two variables attributable to the type of measurement instrument used rather than due to a relationship between the underlying constructs". This may artificially inflate relationships between variables and may bias the results concerning associations.

5.4 Directions for Future Research

Although this current research is able to indicate some of the critical actions such as improved communication, upward feedback and involvement, that organisations can take to raise levels of engagement from the perspective of fulfilling employee job satisfaction and therefore retention; the key question of how, precisely, different organisations go about managing engagement and with what degree of success, remains unanswered and somewhat elusive. Surprisingly little academic research has been conducted into employee engagement, and much of what is presented to organisations by consultancies and survey organisations is not based on rigorous, academically credible research. Due to the excess of definitions of employee engagement, there is currently no real shared understanding of the connotation of engagement; just as there is equally little systematic knowledge about what really works in terms of raising levels of engagement in organisations. There is therefore a real need for more in-depth investigation into the management of engagement in a widening range of organisational settings, in order to advance both understanding and management practice.

The results of this study suggest that employee engagement remains a meaningful construct that is worthy of future research. One avenue would be to consider other potential predictors of engagement. Though this research took into account Maslach et al's (2001) model there are other variables that could be explored as key factors for both job and organisational engagement, for example, human resource practices such as flexible work arrangements, training programmes and incentive compensation. Future research could also survey the different types of role engagement (e.g. job, organisation, group).

This study was a cross-sectional study and only correlations among variables could be examined and no causal inferences could be made. Although difficult to conduct, longitudinal studies need to be undertaken to allow for stronger causal inferences. Research is definitely indicated in order to assess the generalisability of the findings to a broader, more representative, population that the purposive sample used in this study.

A number of organisations are offering mentoring and career development programmes to attract and retain high calibre employees to their organisations and these are a feasible, ongoing and effective recruitment strategy to entice future employees to their organisations where there are benefits the organisation and the employee. However, these can be costly programmes for organisations in terms of economic and manpower resources and empirical research has been limited in this area as to their overall strategy at maintaining higher levels of employee engagement.

5.5 Conclusion

This research included a more positive approach to well-being at work, looking at engagement as a constructive prevention to absenteeism. It aimed at focusing on a model of burnout and engagement having different predictors and consequences from prior research models. Burnout was defined in terms of only two dimensions (exhaustion and cynicism) and professional efficacy was looked at under engagement as recommended by Schaufeli and Bakker's (2004) prior research.

Although partial correlations were performed, no significant results were found and therefore correlations were conducted where several interesting significant results were found. Some of which include that the total burnout score was negatively correlated with engagement, however a positive correlation was found between exhaustion and job demands and a negative relationship exists between cynicism and employee discretion. The total engagement score was negatively correlated with job demands and a positive correlation between performance and career communication and dedication was found. The total burnout score was negatively correlated with job resources and job control and the total engagement score was negatively correlated with intention to leave. Burnout was positively correlated with intention to leave.

As noted by Rothmann (2001), tracking employees' effectiveness in coping with demands of the new world of work, and stimulating their growth in areas that could possibly impact on individual well-being and organisational efficacy and effectiveness are crucial. Therefore, this study, which investigated the relationship between job demands, job resources, job control and burnout and engagement, with

the outcome variables of absenteeism and intention to leave, is deemed an important step for building further foundational work in this still little understood area.

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Appendix A





Psychology

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Good day,

My name is Caitlin Shimmin and I would like to invite you to participate in a research study I am currently conducting for the purposes of obtaining my Masters in Organisational Psychology at the University of Witwatersrand. As part of our course we are required to perform supervised research in a particular area of Organisational Psychology. For my research project I have chosen to examine the relationships between job demands and absenteeism and job control, job resources and intention to leave. These relationships will be looked at with reference to burnout and engagement.

Engagement is an employee's interest in, enthusiasm for and investment in his or her job. Job demands are requirements that are placed on employees by the job, physically, mentally and emotionally whereas job resources counterbalance the negative effects of high job demands. Examples of job resources include social support from colleagues and supportive supervisors. Job control is the ability to exert some influence over one's environment so that the environment becomes more rewarding or less threatening. This research's aim is to test a model including all of these variables.

Participation in this research will involve completing the attached questionnaire which will take approximately 45 minutes. Participation is completely voluntary. You will not be advantaged or disadvantaged in any way by choosing to complete or not complete this questionnaire. While some questions are asked about your personal circumstances, no identifying information such as your name or ID number are required of you. Your completed questionnaire will not be seen by anyone but myself. Your responses will also be looked at only in relation to all other responses in order to establish trends.

If you are willing to participate in the study please complete the attached questionnaire as honestly and carefully as possible. Completion of the questionnaire is regarded as consent to participate in the study. Once you have completed the questionnaire, please e-mail it back to the sender.

On completion of the research, feedback of general trends will be available, as I will e-mail you a copy from February 2009. Should you require further information or assistance in completing the form please feel free to contact me or my supervisor, Karen Milner. Thank you for taking the time to read this letter and if you are willing to participate, thank you for your assistance.

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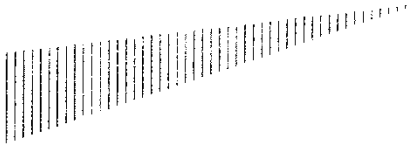
Appendix B



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Caitlin Shimmin
School of Humanity & Community Development
University of the Witwatersrand

28 July 2008

Access to organisation for research purposes

Dear Caitlin:

This letter serves to confirm that your research questionnaire and accompanying letter has been posted on our internal Ernst & Young People Forum database. Visitors to the site are encouraged to complete the questionnaire if they have a few minutes to spare, with instructions to return the completed questionnaire to your personal email address. The option to respond is entirely voluntary and is not being tracked or managed in any way from our side.

Wishing you all the best with your research project.

Sincerely,

M. Vallabh

Meera Vallabh
Senior Consultant
Africa Sub-Area People Team

Chief Executive: Philip Hourquebie
A list of Directors is available from the website.

A member firm of Ernst & Young Global Limited

Appendix C

Demographic Questionnaire

Please complete the following biographical details. The following will only be used to describe the sample.

1) Age

2) Gender

M	F

3) Home Language

English	Afrikaans	Ndebele	Northern Sotho	Southern Sotho
Tswana	Tsonga	Swazi	Zulu	Venda
Xhosa	Other			

4) Race

Black	White	Coloured	Indian	Other

5) Marital status

Married	Never Married	Widowed	Divorced	Co-habiting

6) Job title:

7) Organisational Level

Senior Management	Middle Management	Junior Management

8) How many years have you worked at your organisation?

9) How many years have you worked in your current position?

10) Have you been promoted in the last year?

Yes	No

11) What did this promotion involve?

Pay rise	More authority	Higher Grade	A combination (Please specify)

12) Have you ever been overlooked for a promotion?

Yes	No

13) If you have not been promoted in the last year, when was the last time you were promoted?

2 years ago	3 - 4 years ago	5 – 9 years ago	More than 10 years ago

14) Please indicate which of the following statements most accurately describes how satisfied you are with your career progress to date within this organisation.

Not at all satisfied	Somewhat satisfied	Moderately satisfied	Satisfied	Extremely satisfied

15) How many days, excluding vacation days, have you missed work over the last year?

16) How many of these days were due to sick leave?

17) Have you come to work when you've been sick?

Yes	No

If yes, approximately how many days?

18) To what extent has your illness been due to?

Headaches	Backaches	Cold/ Flu	Other (Please specify)

Below are listed a number of statements which could be used to describe a job. Please read each statement carefully and indicate the extent to which each is an accurate description of *your* job by highlighting a number for each question.

1. I find it hard to relax after a day's work.

0	1	2	3	4	5	6

Never Always

2. I feel drained when I finish work.

0	1	2	3	4	5	6

Never Always

3. When I finish work I feel so tired I can't do anything else

0	1	2	3	4	5	6

Never Always

4. It is getting increasingly difficult for me to get up for work in the morning

0	1	2	3	4	5	6

Never Always

5. I feel used up at the end of a work day

0	1	2	3	4	5	6

Never Always

6. I have become less interested and enthusiastic about my job

0	1	2	3	4	5	6

Never Always

7. I have become less enthusiastic about my work

0	1	2	3	4	5	6

Never Always

8. I feel increasingly less involved in the work I do

0	1	2	3	4	5	6

Never Always

9. I doubt the significance of my work.

0	1	2	3	4	5	6

Never Always

10. I can’t really see the value and importance of my work

0	1	2	3	4	5	6

Never Always

Appendix E

Below are listed a number of statements which could be used to describe a job. Please read each statement carefully and indicate the extent to which each is an accurate description of *your* job by highlighting a number for each question.

1. At my work, I feel bursting with energy

0	1	2	3	4	5	6

Never Always

2. At my job, I feel strong and vigorous

0	1	2	3	4	5	6

Never Always

3. When I get up in the morning, I feel like going to work

0	1	2	3	4	5	6

Never Always

4. I can continue working for very long periods at a time

0	1	2	3	4	5	6

Never Always

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

0	1	2	3	4	5	6

Never Always

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

0	1	2	3	4	5	6

Never Always

7. I find the work that I do full of meaning and purpose

0	1	2	3	4	5	6

Never Always

8. I am enthusiastic about my job

0	1	2	3	4	5	6

Never Always

9. My job inspires me

0	1	2	3	4	5	6

Never Always

10. I am proud of the work that I do

0	1	2	3	4	5	6

Never Always

11. For me, my job is challenging

0	1	2	3	4	5	6

Never Always

12. Time flies when I'm working

0	1	2	3	4	5	6

Never Always

13. When I am working, I forget everything else around me

0	1	2	3	4	5	6

Never Always

14. I feel happy when I am working intensely

0	1	2	3	4	5	6

Never Always

15. I am immersed in my work

0	1	2	3	4	5	6

Never Always

16. I get carried away when I'm working

0	1	2	3	4	5	6

Never Always

17. It is difficult to detach myself from my job

0	1	2	3	4	5	6

Never Always

18. I efficiently solve any problems that may arise in my work

0	1	2	3	4	5	6

Never Always

19. In my opinion, I am good at doing my job.

0	1	2	3	4	5	6

Never Always

20. Other people say I am good at doing my job.

0	1	2	3	4	5	6

Never Always

21. I am competent in my job

0	1	2	3	4	5	6

Never Always

Appendix F

Below are listed a number of statements which could be used to describe a job. Please read each statement carefully and indicate the extent to which each is an accurate description of *your* job by highlighting a number for each question.

1. To what extent does your job require your working fast?

1	2	3	4	5
never				extremely often

2. To what extent does your job require your working hard?

1	2	3	4	5
never				extremely often

3. To what extent does your job require a great deal of work to be done?

1	2	3	4	5
never				extremely often

4. To what extent is there not enough time for you to do your job?

1	2	3	4	5
never				extremely often

5. To what extent is there excessive work in your job?

1	2	3	4	5
never				extremely often

6. To what extent do you feel there is not enough time for you to finish your work?

1	2	3	4	5
never				extremely often

7. To what extent are you faced with conflicting demands on your job?

1	2	3	4	5

never extremely often

8. To what extent is high level required?

1	2	3	4	5

never extremely often

9. To what extent are you required to learn new things?

1	2	3	4	5

never extremely often

10. To what extent is your work non-repetitious?

1	2	3	4	5

never extremely often

11. To what extent does your job require creativity?

1	2	3	4	5

never extremely often

12. To what extent do you have the freedom to decide how to organize your work?

1	2	3	4	5

never extremely often

13. To what extent do you have control over what happens on your job?

1	2	3	4	5

never extremely often

14. To what extent does your job allow you to make a lot of your own decisions?

1	2	3	4	5

never extremely often

15. To what extent are you assisted in making your own decisions?

1	2	3	4	5

never extremely often

Appendix G

The questions below measure the amount of support you feel you receive from management, within your organisation, in terms of providing you with the necessary tools for developing your career. Please indicate, by making highlighting the appropriate block, the response that best describes the way that you feel.

1	2	3	4	5
Strongly disagree	Disagree	Unsure	Agree	Strongly agree

1. My manager lets me know which areas of my performance are weak

1	2	3	4	5

Strongly disagree Strongly agree

2. My manager lets me know how I can do better in my work

1	2	3	4	5

Strongly disagree Strongly agree

3. My manager lets me know how to handle problems in my work.

1	2	3	4	5

Strongly disagree Strongly agree

4. My manager encourages me to develop my career

1	2	3	4	5

Strongly disagree Strongly agree

5. My manager discusses with me how to get additional training

1	2	3	4	5

Strongly disagree Strongly agree

6. My manager gives me advice on developing my career

1	2	3	4	5

Strongly disagree Strongly agree

7. My manager makes me aware of the demands of future jobs in my career path

1	2	3	4	5

Strongly disagree Strongly agree

8. My manager gives me information on training opportunities for skills development

1	2	3	4	5

Strongly disagree Strongly agree

9. My manager provides me with training programmes which focus on the application of the learning with respect to both professional and personal life

1	2	3	4	5

Strongly disagree Strongly agree

10. My manager has a style that encourages me to take responsibility and authority

1	2	3	4	5

Strongly disagree Strongly agree

11. My manager provides me with a useful performance appraisal

1	2	3	4	5

Strongly disagree Strongly agree

12. My manager provides me with ongoing feedback

1	2	3	4	5

Strongly disagree Strongly agree

13. My manager often provides me with opportunities for growth and to do interesting work

1	2	3	4	5

Strongly disagree Strongly agree

Appendix H

Below are listed a number of statements which could be used to describe a job. Please read each statement carefully and indicate the extent to which each is an accurate description of *your* job by highlighting a number for each question.

1	2	3	4	5
Very little	Little	A moderate amount	Much	Very much

1. How much control do you have over the variety of methods you use in completing your work?

1	2	3	4	5

Very little Very much

2. How much can you choose among a variety of tasks or projects to do?

1	2	3	4	5

Very little Very much

3. How much control do you have personally over the quality of your work?

1	2	3	4	5

Very little Very much

4. How much can you generally predict the amount of work you will have to do on any given day?

1	2	3	4	5

Very little Very much

5. How much control do you have personally over how much work you get done?

1	2	3	4	5

Very little Very much

6. How much control do you have over how quickly or slowly you have to work?

1	2	3	4	5

Very little Very much

7. How much control do you have over the scheduling and duration of your rest breaks?

1	2	3	4	5

Very little Very much

8. How much control do you have over when you come to work and leave?

1	2	3	4	5

Very little Very much

9. How much control do you have over when you can take vacations or days off?

1	2	3	4	5

Very little Very much

10. How much are you able to predict what the results of decisions you make on the job will be?

1	2	3	4	5

Very little Very much

11. How much are you able to decorate, rearrange, or personalize your work area?

1	2	3	4	5

Very little Very much

12. How much can you control the physical conditions of your work station (lighting, temperature)?

1	2	3	4	5

Very little Very much

13. How much control do you have over how you do your work?

1	2	3	4	5

Very little Very much

14.How much can you control when and how much you interact with others at work?

1	2	3	4	5

Very little Very much

15.How much influence do you have over the policies and procedures in your work unit?

1	2	3	4	5

Very little Very much

16.How much control do you have over the sources of information you need to do your job?

1	2	3	4	5

Very little Very much

17.How much are things that affect you at work predictable, even if you can't directly control them?

1	2	3	4	5

Very little Very much

18.How much control do you have over the amount of resources (tools, material) you get?

1	2	3	4	5

Very little Very much

19.How much can you control the number of times you are interrupted while you work?

1	2	3	4	5

Very little Very much

20. How much control do you have over the amount you earn at your job?

1	2	3	4	5

Very little Very much

21. How much control do you have over how your work is evaluated?

1	2	3	4	5

Very little Very much

22. In general, how much overall control do you have over work and work-related matters?

1	2	3	4	5

Very little Very much

Appendix I

In this section I would like to ask you how you feel about your present job, compared with alternative jobs that that you maybe interested in or able to obtain. Please place a cross [X] on one of the spaces underneath each question to indicate how you feel.

1) Thoughts about quitting my job cross my mind

:_____:	:_____:	:_____:	:_____:	:_____:	:_____:
Strongly disagree	Rarely	Sometimes	Often	Very often	All the time

2) I plan to look for a new job within the next 12 months

:_____:	:_____:	:_____:	:_____:	:_____:	:_____:
Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree

3) How likely is it that, over the next year, you will actively look for a new job outside of this firm

:_____:	:_____:	:_____:	:_____:	:_____:	:_____:
Very unlikely	Moderately unlikely	Somewhat unlikely	Somewhat likely	Moderately likely	Very likely

Thank You for your time.