Occupational self-efficacy as a mediator between strength- and deficiency-based approaches and work engagement in a sample of South African employees

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree Magister Commercii in Industrial Psychology at the North-West University (Potchefstroom Campus)

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COMMENTS

- The editorial style as well as the references referred to in this mini-dissertation follow the format prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University (Potchefstroom) to use APA style in all scientific documents as from January 1999.

- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the South African Journal of Industrial Psychology (which agrees largely with the APA style) is used, but APA guidelines were followed in constructing tables.
DECLARATION OF LANGUAGE EDITOR

I hereby declare that I have edited the thesis of Lani van der Merwe:

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ABSTRACT

**Title:** Occupational self-efficacy as a mediator between strength- and deficiency-based approaches and work engagement in a sample of South African employees

**Key terms:** Positive psychology; strength-based approach; deficiency-based approach; work engagement; job-resources; occupational self-efficacy; mediator; positive organisational behaviour.

To stay competitive organisations need to harness and develop their human potential. Traditionally, a deficiency-based approach (DBA) was followed i.e. the focus was set on the development of employees’ deficiencies and weaknesses. However, focusing on an employee’s weaknesses and deficiencies was not sufficient. Consequently, a positive approach was developed that focuses on an individual’s strengths and talents. Unfortunately, exclusively focusing on only strengths or on weaknesses is not sufficient for optimum human functioning. Therefore, it is suggested that South African organisations make use of a balanced approach (i.e. a balanced focus on both the development and use of strengths and weaknesses). This will assist employees to be more positive and engaged in terms of their work. However, there seems to be a lack of research regarding the use of a balanced approach in organisations.

The general objective of this study was to investigate the relationship between job resources, a strength-based approach (SBA), a DBA, occupational self-efficacy (OSE), and work engagement. This study was further aimed at determining whether OSE mediated the relationship between these variables among South African employees. An availability sample (N = 699) was taken from various South African organisations. This study made use of a quantitative, cross-sectional design to collect data; a biographical questionnaire; a job resources questionnaire (VBBA); an organisational SBA and DBA questionnaire; a OSE questionnaire and a work engagement questionnaire (UWES). Structural equation modelling was chosen as the method to test the hypothesised model. Mediating effects were tested by using the bootstrapping method.

The research results have indicated that there is a positive correlation between autonomy, SBA, DBA, OSE and work engagement. This research found that no correlations existed between relationship with supervisor, information sharing and participation in decision-making and work engagement. There seems to be a significant relationship between autonomy, relationship with colleagues and OSE. From the results OSE can only be seen as the mediator between autonomy and
work engagement. From this one can assume that using SBA and DBA in a balanced approach can lead to higher work engagement.

Recommendations were made for the organisation and future research.
**OPSOMMING**

**Titel:** Beroep-selfdoeltreffendheid as ‘n bemiddelaar tussen ’n sterkte- en tekort-gebaseerde benadering en werksbegeester in ‘n populasie van Suid-Afrikaanse werknemers

**Sleuteltermes:** Positiewe psigologie; sterkte-gebaseerde benadering; tekort-gebaseerde benadering; werksbegeester; werkshulpbronne; beroep-selfdoeltreffendheid.

Suid-Afrikaanse organisasies benodig bogemiddelde prestasie om kompeterend te bly, beide nasionaal en internasionaal. Om kompeterend te bly, moet organisasies hul menslike potensiaal benut en ontwikkel. Tradisioneel is ‘n tekort-gebaseerde benadering (DBA) gevolg, sodat die fokus byvoorbeeld geval het op die werknemer se tekortkominge en swakhede. Gevolglik het ‘n nuwe en positiewe benadering ontwikkel wat fokus op ‘n individu se sterktes en talente. Ekslusiewe fokus net op ‘n individu se sterktes of swakhede, is egter nie genoegsaam vir optimale menslike funksionering nie. Gevolglik word voorgestel dat Suid-Afrikaanse organisasies gebruikmaak van ‘n gebalanseerde benadering (o.a. moet daarop gefokus word om ‘n balans te handhaaf tussen die gebruik van sterktes en swakhede). Dit sal werknemers bystand bied om meer positiwiteit en begeester in ten opsigte van hul werk te ervaar. Ongelukkig is daar ‘n tekort aan navorsing oor ‘n gebalanseerde benadering in organisasies.

Die doelstelling van hierdie studie was om die verhouding tussen werkshulpbronne, ’n sterkte-gebaseerde benadering (SBA), tekort-gebaseerde benadering (DBA), beroep-selfdoeltreffendheid (OSE) en werksbegeester te onderzoek. Die studie het verder geop het om uit te vind of OSE as ‘n bemiddelaar ten opsigt van die veranderlikes in ’n Suid-Afrikaanse populasie sal optree. ‘n Beskikbaarheidsteekproef \( N = 699 \) is gebruik deur ‘n verskeidenheid Suid-Afrikaanse organisasies. Die studie het gebruik gemaak van ‘n biografiese vraelys, ‘n werkshulpbronne vraelys (VBBA), ‘n organisatoriese SBA en DBA vraelys, ‘n OSE vraelys en ‘n werksbegeester vraelys (UWES).Die studie benut ook ‘n korrelasiemodel van die latente veranderlikes. Structurele vergelykings modellering is gekies as die metode om die hipotetiese model te toets. Die studie het spesifiek gebruik gemaakt van bevestigende faktor-ontleding. Bemiddelende effekte is getoets deur die selfopheffings- of bootstrapping–metode toe te pas.
Die navorsingsresultate het ‘n positiewe korrelasie tussen outonomie, SBA, DBA, OSE en werksbegeesting aangedui. Die navorsing toon ook aan dat geen korrelasie tussen verhouding met toesighouer, deling van inligting en deelname in besluitneming en werksbegeesting bestaan nie. Dit wil voorkom of daar ‘n beduidende verhouding is tussen outonomie, verhouding met kollegas en OSE. Van die resultate kan OSE net gesien word as ‘n bemiddelaar tussen outonomie en werksbegeesting. Uit die resultate kan ‘n mens aflei dat die gebruik van SBA en DBA op ‘n gebalanseerde manier kan lei na hoër vlakke van werksbegeesting.

Aanbevelings is gemaak vir die organisasie en verdere navorsing.
CHAPTER 1

INTRODUCTION

This mini dissertation aims to investigate the potential mediating effects of occupational self-efficacy (OSE) between job resources, a strength-based approach (SBA), a deficiency-based approach (DBA) and work engagement among South African employees.

This chapter will look at the problem statement and discuss the research objectives of the study. The general and specific objectives of the study will be set out in this chapter. Further, the research method is explained and an overview of the following chapters will be provided.

1.1 PROBLEM STATEMENT

According to Cravens, Oliver, and Stewart (2010) most people have lived their lives being told what they have done wrong and not what they have been doing right. People have received examination papers that just mark incorrect answers without praising what they have done right. For many people this has continued in the workplace (Cravens et al., 2010). Mello (2006) states that employees are considered to be the biggest asset in the organisation and that they are trained to acquire new skills and knowledge in order to obtain the strategic objectives of the organisation. However, most human resource development practices follow a DBA (Buckingham & Clifton, 2001; Luthans, 2002a) – i.e., training is given to improve employees’ weaknesses or deficiencies in order to develop them (Clifton & Harter, 2003). The world we live in seems predisposed to tell people what their weaknesses are and then to fix it (Clifton & Harter, 2003).

Historically, psychology in general would focus on deficiencies, weaknesses, the identification and treatment thereof (Hutchinson, Stuart, & Pretorius, 2010). Once an individual’s problem, weakness or deficiency has been identified and has been framed as something bad, the reduction thereof can be seen as a success (Harris & Thoresen, 2006). Harris and Thoresen (2006) have identified two main limitations to this approach that focuses only on weaknesses and deficiencies. Firstly, the absence of the negative does not necessarily
ensure the presence of well-being and the positive. Secondly, by only focusing on the negative we sometimes overlook the positive and the strengths of an individual.

Martin Seligman began to realise there was a gap in practice and research and that building on a person’s strengths was seriously neglected (Luthans, 2002a). He therefore initiated the proactive positive psychology movement that focuses on a person’s strengths and those characteristics that make life worth living (Luthans, 2002a). As a result, a paradigm shift has come forward that focuses on positive aspects of human behaviour and the maintenance of an individual’s health, well-being, strengths and optimum human functioning (Hutchinson et al., 2010; Passarelli, Hall, & Anderson, 2010). The field of positive psychology therefore aims to correct the imbalances of the disease model and challenges the assumptions thereof (Peterson & Seligman, 2003). Positive psychology can be seen as a field of study that focuses on positive experiences, positive individual traits of people and the facilitation of the development thereof that would improve an individual’s quality of life and would help to prevent pathologies (Duckworth, Steen, & Seligman, 2005; Seligman & Csikszentmihalyi, 2000).

Since the approach of optimal functioning and positive psychology came forward it has also aroused interest in Organisational or Industrial Psychology (Schaufeli, Bakker, & Salanova, 2006) and it seems to have considerable appeal and significance in the workplace (Luthans, 2002b). One of the movements that positive psychology has spurred in organisations would be the positive organisational behaviour approach (Luthans, 2002a). Positive organisational behaviour is an approach that focuses on the study of human strengths and positive capacities that can be recognised, developed and managed in order to improve performance in organisations (Luthans & Church, 2002). Furthermore, the main focus is designing positive and hopeful organisations, which will divert the attention from focusing only on the deficiencies and encourage positive human potential within the organisation (Avital, Boland, & Lyytinen, 2009).

Based on the work of Gallup Consulting (an international research-based consultancy organisation that has studied human talents and strengths and applied these in the workplace; Clifton & Harter, 2003), it seems that using positive psychological behaviour and potential in the workplace has developed into a SBA (Meyers, 2010; Stienstra, 2010). This approach assumes that the greatest opportunity for development lies with the development of one’s
talents instead of trying to fix one’s weaknesses (Passarelli et al., 2010). According to Hodges and Clifton (2004) the potential of following a SBA is just being realised. A person’s strength can be seen as “the ability to provide consistent, near-perfect performance in a given activity” (Clifton & Harter, 2003, p. 114). Stienstra (2010, p. 8) defines a SBA as “a positive organisational approach that stimulates and appreciates the use of employees’ strengths, derived through a process of identification and development of talents into strengths, to enlarge both individual and organisational outcomes”.

On an individual level, Clifton and Harter (2003) identify three categories in which a SBA in practice can be placed. Firstly, it would entail identifying what an individual is excellent at, where that individual’s greatest potential lies and what the individual’s talents are. This can lead one to know and understand one’s greatest potential (Clifton & Harter, 2003). Secondly, it entails the development and integration of a person’s strengths that can lead to self-awareness. Thirdly, behavioural changes take place where an individual uses his/her strengths and the individual relates these to his/her talents (Clifton & Harter, 2003; Hodges & Clifton, 2004; Meyer, 2010; Stienstra, 2010). The more one is able to use a talent, the stronger the talent becomes (Clifton & Harter, 2003). Another category has also been identified namely appreciation, where an employee’s strengths are valued and appreciated by the organisation (Meyer, 2010; Stienstra, 2010). The identification, use and development of individuals’ strengths can be seen as potentially important and significant in organisational and personal development (Biswas-Diener, Kashdan, & Minhas, 2011).

When an employee uses his/her strengths it can lead to positive behavioural and psychological outcomes (Biswas-Diener et al., 2011). However, only 17% of people say that they are able to use their strengths in the workplace (Buckingham, 2007). When organisations promote positive resources (e.g. nurturing talents and developing and using strengths) it can lead to enhanced long-term subjective and objective well-being. It is also expected that individuals who use their strengths are more productive and successful (Schueller & Seligman, 2010). Stienstra (2010) found that using a SBA in organisations not only leads to higher levels of subjective well-being, but that a SBA also has an influence on task performance. Govindji and Linley (2007) suggest that when employees use their strengths they will be happier. From this the assumption can be made that when employees use their strengths, they will be happier, perform better and employee turnover would be less (Clifton & Harter, 2003). This provides support for the happy-productive worker thesis (Stienstra, 2010). According to Cropanzano
and Wright (2001) the happy-productive work thesis form the hypothesis that employees who are happy would display higher levels of job performance than employees who are unhappy. Therefore, when using a SBA in South African organisations, it can lead to happier and more productive employees which in turn will make South Africa a more competitive country. A SBA will lead to an organisation having greater potential (Clifton & Harter, 2003). It seems that a strength-based organisation would create an environment where employees would be able to use their talents and strengths (Clifton & Harter, 2003). This positive approach also helps employees understand what working entails and then they will be enabled to develop these capabilities (Cummings & Whorley, 2009).

Psychologists should be interested in promoting human potential. Even though it is important to focus on positive aspects and strengths as described above, it is important to not exclusively focus on the positive aspects of human functioning, but also to take into account the negative aspects of human functioning (Peterson & Seligman, 2003). Gable and Haidt (2005) advise that positive psychology should not ignore pathologies, deficits and weaknesses. Rather, it must complement our existing knowledge base. Clifton and Harter (2003, p. 121) state that there is a need for researchers to test the impact of the “focus on weaknesses” against the “focus on strengths and manage weaknesses”. The positive and negative side of human functioning should not be seen as occurring on two opposite poles, but rather as a continuum where one must strive to integrate both the positive and the negative (Linley, Joseph, Harrington, & Wood, 2006; Luthans & Youssef, 2007).

A deficiency or weakness can be seen as something that an employee lacks in his career (Bagraim, 2007). However, a deficiency or weakness that is developed might be of value to the employee at a certain stage of his/her career (Bagraim, 2007). If this deficiency or weakness is present in the individual’s life, the individual would normally like to fulfil this need (Bagraim, 2007). Deficiencies or weaknesses could be improved or enhanced with training and development (Clifton & Harter, 2003) and this could lead to regular learned behaviours (Linley, Woolston, & Biswas-Diener, 2009). An individual can then often repeat these activities and become very good at them. However, it could also drain them of their energy and lead to a sense of disenfranchisement or disengagement (Linley et al., 2009).

There are several reasons why it is essential to not overlook deficiencies or weaknesses (Linley et al., 2009). According to Biswas-Diener et al. (2011) it seems that people are
intrigued by their strengths and the identification thereof. However, it can lead to a period of stagnation where individuals can feel that they don’t know what to do with their strengths (Biswas-Diener et al., 2011). Strengths identification and labelling can therefore also have a detrimental effect when an individual does not have an explicit growth mindset (Biswas-Diener et al., 2011). Linley et al. (2009) found that tackling deficiencies or weaknesses head on and labelling them as such, leads to more authentic, honest, open communication and clients are enabled to take responsibility for their problem areas. Biswas-Diener et al. (2011) state that people believe they are better able to develop themselves when they focus on their weaknesses and people would sometimes rather work at correcting their weaknesses. Based on this assumption one cannot just focus on building a person’s strengths, but should also focus on trying to correct a person’s deficiencies or weaknesses (Luthans & Youssef, 2007). Therefore, even if an organisation makes use of a SBA, it should not ignore deficiencies or weaknesses, but should rather try to manage and understand these weaknesses (Clifton & Harter, 2003; Luthans & Youssef, 2007).

From literature, it appears that a DBA also focuses on developing employees, but differs from a SBA in the focus. A SBA in organisations refers to the extent to which the employee perceives that formal and informal policies, practices and procedures in the organisation focus on the use of their strengths and talents. On the other hand, a DBA on an organisational level refers to an employee’s perception to which an organisations formal informal policies, practices and procedure would focus on the improvement or development of an employee’s weaknesses (Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process). A balance needs to be achieved between practice and theory that provides an explanation of both the positive and negative side of human functioning (Luthans & Youssef, 2007). It seems that employees and organisations can gain more from using an individual’s talents and strengths and improving weaknesses (Clifton & Harter, 2003). Therefore organisations should employ a balanced approach that focuses on the use of strengths and the improvement of deficiencies.

From the literature review it is proposed that a SBA and a DBA could be seen as job resources on macro or organisational level. The conservation of resources (COR) theory defines job resources as “... those entities that either are centrally valued in their own right, or act as means to obtain centrally valued ends” (Hobfoll, 2002, p. 307). From the Job Demand-Resources (JD-R) model, job resources can be seen as “those physical, social, or organisational aspects of the job that (a) are functional in achieving work-related goals, (b)
reduce job demands and the associated physiological and psychological costs, and (c)
stimulate personal growth and development” (Xanthopoulou, Bakker, Demerouti, &
Schaufeli, 2007, p. 122; Bakker & Demerouti, 2007, p. 312). Therefore, one can assume that
job resources have motivational potential (Llorens, Schaufeli, Bakker, & Salanova, 2007) and
one’s motivation is focused on protecting and increasing one’s resources (Bakker &
Demerouti, 2007).

Xanthopoulou et al. (2007) state that job resources have both intrinsic and extrinsic
motivational potential. Job resources play an intrinsic motivational role because they
stimulate and foster an employee’s personal growth and development (Bakker & Demerouti,
2008). Job resources can also play an extrinsic motivational role because they will help an
employee to achieve his/her work goals (Bakker & Demerouti, 2008). Several job resources
can be distinguished at organisational level (e.g. career development opportunities), the
interpersonal and social relationships within the organisation (e.g. relationships with
colleagues and supervisors), the way in which work is organised (e.g. role clarity), and on task
level (e.g. autonomy and feedback) (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011).

A work environment that focuses and uses employees’ strengths and provides the
opportunities for training to develop weaknesses may foster the willingness of employees to
dedicate their efforts and abilities to their work tasks (Demerouti & Bakker, 2011). However,
the effects of the two different approaches may be different on work-related outcomes.

Using both strengths and deficiencies in a balanced way could lead to personal and
organisational growth and development (Biswas-Denier et al., 2011) and could be functional
in achieving work-related goals (Bagraim, 2007; Clifton & Harter, 2003; Linley &
Harrington, 2006; Luthans & Church, 2002). Strengths-use may act as buffer against negative
outcomes in life and reduce psychological costs (Proctor, Maltby, & Linley, 2011). Therefore,
using strengths and improving deficiencies in a balanced way will have intrinsic and extrinsic
motivational potential and fit the criteria of a job resource from the COR theory and JDR-
model.

An important concept of positive organisational behaviour is work engagement (Bakker &
Demerouti, 2008). Work engagement is a positive work-related state, which is considered as
the opposite of burnout (characterised by cynicism, exhaustion, personal inefficacy)
(Schaufeli et al., 2006). Work engagement can be seen as a significant indicator of work-
related well-being (Bakker & Demerouti, 2008). Work engagement can be seen as a persistent, pervasive, affective cognitive state that is focused on a specific object, event or behaviour, rather than a momentary state (Schaufeli & Bakker, 2001; Schaufeli et al., 2006). Work engagement can be defined as a positive, gratifying, work-related state that is characterised by vigour, dedication and absorption (Schaufeli & Bakker, 2001; Schaufeli et al., 2006). *Vigour* is characterised by high levels of energy when working, willingness to invest time in one’s work and to show high levels of mental resilience. *Dedication* is characterised by being inspired, enthusiastic and involved in one’s work. *Absorption* is characterised by being engrossed in one’s work and the feeling that time passes quickly when working. Vigour and dedication are regarded as the “core dimensions” of work engagement (see Llorens et al., 2007; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003).

There are several positive characteristics of engaged employees. Employees who are engaged in their work will have a sense of energetic and effective connection towards their work (Shaufeli & Bakker, 2003). Engaged employees see themselves as able to deal with their job demands (Shaufeli & Bakker, 2003), are physically more involved in their jobs, cognitively more alert and emotionally more connected towards other people (Olivier & Rothman, 2007). Highly engaged employees have a passion for their work and feel a deep connection with the organisation they are working for (Robbins, Odendaal, & Roodt, 2001). Engaged employees tend to be more creative, productive and are willing to go the extra mile (Bakker & Demerouti, 2008). Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) state that engaged employees know how to mobilise their colleagues, receive support and feedback and to create opportunities in their work environment. Engaged employees are also able to create their own positive feedback in terms of appreciation, accomplishments and recognition (Bakker & Demerouti, 2008). Engaged employees feel tired after a day’s work, but they describe their tiredness as pleasurable and tend to be energetic outside work (Bakker & Demerouti, 2008) as well. Engaged employees enjoy activities outside of work and are not necessarily workaholics (Bakker, Schaufeli, Leiter, & Taris, 2008; Bakker & Demerouti, 2008). However, employees who are disengaged uncouple themselves and withdraw from their work (Luthans & Peterson, 2001). Therefore, employees who are disengaged from work tend to see their work as insignificant and as an unpleasant experience (Luthans & Peterson, 2001).

Employee engagement measured on a business-unit level can be related to meaningful business outcomes (Harter, Hayes, & Schimdt, 2002). A relationship was found between
engagement, productivity, customer-satisfaction loyalty, profitability and safety (Harter et al., 2002). The happy-productive worker makes a clear link between well-being and performance (Harter, Schmidt, & Keyes, 2003). Well-being is positively correlated with perceived task performance and innovation (Gorgievski, Bakker, & Schaufeli, 2010). It seems that employees who experience higher levels of well-being will be more successful (Scheuller & Seligman, 2010). Therefore, it is in companies’ best interest to develop and employ techniques that promote the well-being, and specifically the work engagement of employees (Karunka, Kubicek, Schaufeli, & Hoonakker, 2009).

Hutchinson et al. (2010) state that research done on positive psychology focuses on the promotion of personal strengths, although very little research has been done on the nature of this on psychological well-being in the organisational setting. According to Page and Vella-Brodrick (2009), several theories have conceptualised the link between strengths and well-being and there is a growing body of evidence that suggests that the use of strengths facilitates well-being. The relationship between the use of strengths and work engagement can be described by the Broaden and Build Theory of Fredrickson (2001). When people experience positive emotions it would broaden an employee’s thought-action repertoire (Fredrickson, 2001). Positive emotions will facilitate the broadening of employees’ mindsets and employees will be able to build up psychological resources (Fredrickson, 2004). This in turn will play a role in the promotion of well-being and finding meaning in life (Fredrickson, 2001).

People who know what their strengths are, who are able to use their strengths and who are able to follow their own direction will be happier (Govindji & Lindley, 2007). From this one can assume that employees who are able to use their strengths experience more positive emotions. From the COR theory and JD-R model it further seems that the availability of job resources could lead to an increase in positive outcomes, e.g. work engagement (Xanthopoulou et al., 2007). Recent research has indicated that job resources can be seen as a significant predictor or driver of work engagement (Bakker & Demerouti, 2007; Bakker & Demerouti, 2008; Hakanen, Bakker & Schaufeli, 2006; Schaufeli & Bakker, 2004). Therefore, having job resources in the workplace will broaden an employee’s mindset, will in turn build the necessary psychological resources and lead to well-being (e.g. work engagement) (Fredrickson, 2004). Employees who are absorbed in their work also experience more positive emotions, such as happiness and joy (Bakker, 2010). It seems that employees who are absorbed in their work are able to generate their own job resources and then in turn promote
work engagement over a period of time (Bakker & Demerouti, 2007). Research by Xanthopoulou et al. (2009) supports this and found that a reciprocal relationship exists between job resources and work engagement.

The Broaden and Build theory is further supported by research that indicates that a SBA can be seen as a good predictor of an individual’s well-being (Proctor et al., 2011). When a SBA is used to manage employees, outcomes such as greater work engagement, attendance, productivity and hope will be achieved (Clifton & Harter, 2003). A longitudinal study done by Wood, Linley, Malty, Kashdan, and Hurling (2011) indicates that people who made use of their strengths over a period of time show greater levels of well-being. It further seems that a SBA has a quantifiable impact on employee engagement (Harter et al., 2003; Hodges & Clifton, 2004). It therefore seems that there is a positive relationship between a SBA and work engagement (Clifton & Harter, 2003; Proctor et al., 2011). Unfortunately, no studies have focused on the effect of a DBA to work engagement.

As discussed above, people do not only want to develop their strengths (Biswas-Diener et al., 2011). However, Clifton and Harter (2003) state that a SBA is still more effective than focusing exclusively on the development of weaknesses. It is also possible that when one develops one’s strengths the weaknesses or deficiencies can be simultaneously reduced and one can gain knowledge of more positive ways of thinking (Harris & Thoresen, 2006). From this it can be assumed that a SBA could lead to higher levels of engagement and is more effective than a DBA. As stated above, it is important that a balanced approach is achieved between a SBA and a DBA (Luthans & Youssef, 2007). For example, focusing exclusively on an individual’s weaknesses or regular learned behaviours can lead to disengagement (Linley et al., 2009). It can therefore be assumed that when a SBA and a DBA are combined it can lead to an enhanced experience of work engagement.

An important concept that emerged in Organisational Psychology is OSE. According to Schyns and Von Collani (2002) OSE is a broad concept that is related to various jobs and professions. OSE can be seen as a sense of confidence that is related to the workplace (Schyns & Sanders, 2005) and can be viewed as one’s sense of conviction that one can perform behaviours that are relevant to one’s job (Rigotti, Schyns, & Mohr, 2008; Schyns & Sczensny, 2009) and that one has the ability to successfully fulfil work-related tasks (Rigotti et al., 2008). It is important to study OSE in order to enhance our understanding of well-being, to
enable people to develop positive well-being and to reduce the effects of burnout (Karunka et al., 2009). The concept of OSE is related to the concept of self-efficacy and is based on the social cognitive theory of Bandura. However, self-efficacy is concerned with a person’s belief about their capabilities that they will be able to execute and organise activities in a given situation (Bandura, 1982; Bandura, 1986). It is further concerned with how effectively an individual will be able to deal with a prospective situation or problem (Bandura, 1982; Bandura, 1986).

Bandura (1997) states that self-efficacy should not be seen as a trait but must be seen as a state which is open to development. Bandura (1997) further states that self-efficacy should address a specific task or domain whereas general self-efficacy is seen as a state that is stable over a period of time (Luthans, 2002a; Schyns & Moldizo, 2009). However, general self-efficacy does not fit the criteria of positive organisational behaviour (Luthans, 2002a). Salanova, Peiro, and Schaufeli (2010) indicate that generalised self-efficacy is too broad a concept and not specific enough when predicting a concept such as burnout (or engagement). They also indicate the significance of differentiating between a domain-specific self-efficacy and generalised self-efficacy. Rigotti et al. (2008) state that OSE can be seen as a domain-specific construct. Therefore, OSE can be influenced by different experiences and is less stable than generalised self-efficacy (Schyns & Sczesny, 2009). According to Schyns and Moldizo (2009) the concept of OSE tries to overcome the problem that is experienced with the stable nature of general self-efficacy. Therefore, the study will focus on an employee’s OSE as introduced by Schyns and Von Collani (2002).

The relationship between OSE and work engagement can also be explained in the framework of the Broaden and Build theory. When an employee experiences positive emotions it can increase his/her OSE, which in turn will lead to healthy, creative employees (Fredrickson, 2004). Research findings support this and indicate that employees who have reported high levels of self-efficacy are more likely to create resourceful organisations (Xanthopoulou et al., 2009). Schyns and Von Collani (2002) found a positive relationship between OSE, job commitment and job satisfaction, while Rigotti et al. (2008) found a positive relationship between OSE, performance and job satisfaction in five different countries. From a positive organisational behaviour perspective it seems that after many years of research there is a positive relationship between self-efficacy and performance (Luthans & Peterson, 2001; Stajkovic & Luthans, 1998). Luthans and Peterson (2001) found that when managers...
experience high levels of self-efficacy it can lead to employee engagement and effectiveness. Ouwenaal, Le Blanc, and Schaufeli, (2011) found that self-efficacy positively correlates with work engagement. Therefore, it is hypothesised that OSE will have a positive correlation with work engagement.

This study also aims to investigate the potential mediating effect of OSE. A mediator describes casual effects and the nature of the relationships between variables (Matthiau & Taylor, 2006). Therefore, a mediator is a variable that will help to account for the relationship that exists between the dependent and independent variable (Baron & Kenny, 1986). A mediator (OSE) can be seen as a variable that will help to explain the associations that occur between the independent variables (a SBA and a DBA) and the dependant variable (work engagement) (Bennett, 2000). A mediator plays a vital role in theory development, therefore it is important to decide on the suitable requirements for the testing of mediating effects (Rucker, Preacher, Tormala, & Petty, 2011).

Baron and Kenny (1986) suggest a causal steps approach to identify possible mediating effects. However, Rucker et al. (2011) argue that this traditional way of viewing mediating effects can weaken theory development and is unjustifiable. Rucker et al. (2011) recommend that one should investigative and assess the magnitude and importance of indirect effects when utilising mediating effects in studies. Firstly, Rucker et al. (2011) argue that looking at indirect effects will expand theory development through involving social processes. Secondly, focusing on “partial” or “full” mediating effects will suggest that one is looking at effect sizes or the practical significance of the mediating effect. Therefore, one views a partial mediating effect as less important than a full mediating effect. According to Rucker et al. (2011) indirect effects may vary in size, however, one does not acknowledge this when looking at partial mediating effects. Thirdly, it is not necessary to use words such as partial or full mediators when looking at effect sizes. When testing for mediating effects, evidence must exist for indirect effects and one must look at the magnitude of the indirect effects. However, one must still report on the significance of the total effect (Rucker et al., 2011).

From the broaden and build theory it seems that when people experience positive emotions it will enhance their OSE and will in turn lead to enhanced well-being (work engagement) (Fredrickson, 2004). Based on the COR theory and the JD-R model, one can assume that when a person is able to use their strengths and have available job resources they will
experience positive emotions. Therefore employees will feel more confident in their job and this will lead to enhanced feelings of self-efficacy. From the broaden and build theory (Fredrickson, 2004) one can also assume that when people have the necessary job resources they will be more confident in their job (OSE) and therefore they will experience higher levels of work engagement. This is supported by Proctor et al. (2011) who state that it seems that the use of strengths is positively related to self-efficacy and well-being. It can therefore be assumed that there will be a relationship between a SBA, a DBA and OSE. It is further expected that a relationship would exist between OSE and work engagement. Therefore, it is hypothesised that occupational self-efficacy is a mediator between a SBA, a DBA (job resources) and work engagement amongst South African employees. Figure 1 illustrates the hypothesised model.

Figure 1. The conceptual model: A structural model of job resources, a SBA, a DBA, and work engagement, with OSE as mediator

From the literature review, the following questions emerge:

- What is the relationship between job resources, a SBA, a DBA, OSE and work engagement according to the literature?
- What is the relationship between job resources, a SBA, a DBA, OSE and work engagement in a sample of South African employees?
- Does a SBA and a DBA enhance engagement levels?
- Does OSE mediate between job resources, a SBA and work engagement?
- Does OSE mediate between a job resources, a DBA and work engagement?
• Which recommendations can be made for future research and practice?

1.2. RESEARCH OBJECTIVES

The research objectives are divided into general and specific objectives.

1.2.1 General Objectives

The general objective of this research is to investigate if a relationship exists between job resources, a SBA, a DBA, OSE and work engagement and whether OSE mediates the relationship between these variables among South African employees.

1.2.2 Specific objectives

The specific objectives of this research are to:
• investigate the relationship between job resources, a SBA, a DBA, OSE and work engagement according to the literature.
• determine the relationship between job resources, a SBA, a DBA, OSE and work engagement in a sample of South African employees.
• determine if a SBA and DBA will enhance engagement levels.
• determine if OSE mediates between job resources, a SBA and work engagement.
• determine OSE mediating between a job resources a DBA and work engagement.
• make recommendations for future research and practice.

1.3 RESEARCH METHOD

1.3.1 Research approach

A quantitative, cross-sectional design is used to collect data about the participants. Surveys are used as the method of primary data collection. A cross-sectional design is utilised in the study – data are collected at one point in time from a number of people (Salkin, 2009). This
design enables the researcher to collect quantifiable data to detect patterns of association between two or more variables (Bryman & Bell, 2007), thus making correlations between variables. Therefore, this type of design is used to assess the interrelationship that exists among variables within a population or sample (Struwig & Stead, 2007). This provides one with descriptive and exploratory data. The reason for the use of this design is that it is cost-effective and economic. A complete review of literature provides the researcher with a framework to work within (Salkin, 2009).

1.3.2 Literature review

In Phase 1 a complete review regarding the relationship between a SBA, a DBA, job resources, OSE and work engagement is done. A complete review is also done regarding theoretical paradigms and frameworks, including the social cognitive theory, the broaden and build theory, the happy-productive worker thesis, positive organisational behaviour and positive psychology. Relevant articles between 1977-2011 are consulted (the main focus will be on articles published between 2000 and 2011). The following databases will be consulted during the process: Academic Search Premier; Ebsco Host; Emerald; Jstor; Nexus; PsycArticles; PsycInfo; Sabinet; S AePublications; Science Direct.

1.3.3 Research participants

For the purpose of the study, an availability sample is used. The sample includes several occupational groups in South Africa. The sample consists out of 699 \( (N = 699) \) participants. The participants are representative of both genders, various age groups, different marital statuses and different racial groups (White, Coloured, African and Indian) from South African organisations. It is imperative that the participants have a good command of English in order for them to complete the questionnaire effectively.

1.3.4 Measuring instrument

**Biographical Questionnaire.** A biographical questionnaire is utilised to determine the biographical characteristics of the participants working in South Africa. Characteristics such as year of birth, gender, home language, race, level of education, household status (marital and parental status), years in the organisation and current position are measured with this questionnaire.

**Job resources.** Five job resources are measured for the purposes of the study. These job resources are autonomy, relationship with supervisor, relationship with colleagues, information sharing and participation in decision-making. Job resources are assessed with a four-item scale \( (1 = \text{always}, 4 = \text{never}) \) based on the questionnaire on the experience and assessment of work of Van Veldhoven, Meijman, Broersen, and Fortuin (1997). The questionnaire has been proven to be reliable and valid (Van Veldhoven, Meijman, Broersen & Fortuin, 2002). Autonomy is measured with eleven items (e.g. Do you have freedom in carrying out your work activities?). The Cronbach alpha coefficient for autonomy is 0,90 (Van Veldhoven et al. 2002). The relationship with supervisor is measured with nine items (e.g. Do you get on well with your superior?). The Cronbach alpha coefficient for the relationship with supervisor is 0,90 (Van Veldhoven et al. 2002). The relationship with colleagues is measured with nine items (e.g. If necessary, can you ask your colleagues for help?). The Cronbach alpha coefficient for relationship with colleagues is 0,87 (Van Veldhoven et al. 2002). Information sharing is measured with four items (e.g. Do you receive sufficient information on the results of your work?). The Cronbach alpha coefficient for
information is 0.83 (Van Veldhoven et al. 2002). Participation is measured with four items (e.g. Can you participate in decisions affecting issues related to your work?). The Cronbach alpha coefficient for participation is 0.79 (Van Veldhoven et al. 2002).

Organisational SBA and DBA. A new questionnaire was developed by Els et al. (in process), which is used to measure Organisational SBA and DBA. The questionnaire is scored on a seven-point frequency scale that ranges from 1 (never) to 7 (almost always). Eight items are used to measure Organisational SBA (e.g. This organisation uses my strengths). Eight items are used to measure Organisational DBA (e.g. In this organisation my development plan aim to better my weaknesses. The psychometric properties of this newly developed questionnaire was determined by Rasch analysis and exploratory factor analysis (Els et al., in process).

Work Engagement. The Utrecht Work Engagement Scale (UWES) is used to measure work engagement. The UWES was developed by Schaufeli and Bakker (2001) and it is used to measure the levels of work engagement. The UWES measures three dimensions, namely vigour, dedication and absorption, which is conceptualised as the opposite of burnout (Schaufeli et al., 2006). The core dimensions (vigour and dedication) of work engagement is utilised in this study (see Llorens et al., 2007; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003). Although absorption is seen as a significant aspect of work engagement it is expected to play a less central role in the concept of work engagement (Schaufeli, 2005; Schaufeli & Bakker, 2001). Csikszentmihalyi (1990) states that absorption rather resembles “flow” (a state of optimal functioning), and it seems to be a result of work engagement, rather than a dimension (González-Romá, Schaufeli, Bakker, & Lloret, 2006; Schaufeli & Bakker, 2004; Schaufeli, 2005). It further seems that problems exist with the internal consistency and the wording of the items of absorption for the South African context (see Naude & Rothmann, 2004). The questionnaire is scored on a seven-point frequency scale that varies from 0 (never) to 6 (everyday). Six items are used to measure Vigour (“When I get up in the morning, I feel like going to work”) and five items are used to measure Dedication (“I find the work that I do full of meaning and purpose”). In a study done by Storm and Rothmann (2003) in the South African Police Service a two-factor structure was confirmed. They also reported sufficient Cronbach alpha coefficients of 0.78 for vigour and 0.89 for dedication. Another study done by Jackson, Rothmann, and Van de Vijver (2006) found Cronbach alpha coefficients of 0.70 for vigour and 0.81 for dedication.
**Occupational Self-Efficacy.** The *Short Version OSE Scale* (Rigotti et al., 2008) is used to measure OSE. The shortened version was tested across five countries (Germany, Sweden, Belgium, Great Britain and Spain). Multiple-group comparisons were made which indicated a good fit, therefore a one-dimensional model was accepted for the different language versions (Rigotti et al., 2008). The scale consists of six items (e.g. “My past experiences in my job have prepared me well for my occupational future”). The questionnaire is scored on a seven-point scale that varies from 1 (*Not at all true*) to 6 (*Completely true*). This study further found reliable Cronbach alpha coefficients for this one-dimensional model that range between 0.72 and 0.90. Schyns and Szsesny (2009) found a Cronbach alpha coefficient of 0.78 for this scale.

1.3.5 Research procedure

A letter of request to conduct the study is sent to the organisation of interest in order to obtain consent to conduct research at the organisation. The letter further describes the nature and goals of the research. The questionnaire is administered to various organisations and sectors within the South African context. Questionnaire can be completed either through a hardcopy or a digital version. The questionnaire takes approximately 40 minutes to complete. The data collection period lasts two months, after which the data collection process is closed and data analysis is conducted. The participants are assured of anonymity and confidentiality. They are also ensured that their results will be unrecognisable when reporting the results back to the organisation.

1.3.6 Statistical analysis

The hypothesised model is tested by performing structural equation modelling (SEM) using the Mplus 6.1 program (Muthen & Muthen, 2008-2010). In this study a covariance matrix is utilised as the input type for the models that were tested.

The maximum likelihood (MI) estimator will be used to produce model parameters and help the researcher to make assumptions about observed variables that is measured on a continuous scale. This study does not make use of item parcelling and individual items are used as
indicators (see Bandalos, 2002; Bandalos & Finney, 2001). The study does not make use of error terms in order to improve the fit of the structural model.

Several goodness-of-fit indices are used to test if the models that have been hypothesised fit the expected model. The study focuses on the use of the traditional $\chi^2$ statistics, the comparative fit index (CFI), the Tucker Lewis Index (TLI), the root mean square error of approximation (RMSEA) and the standardised root mean square residual (SRMR). Various arguments exist between what the cut-off scores should be for the various indices (Byrne, 2010; Raykov & Marcoulides, 2006). However, the cut-off score for CFI and TLI should be 0,09 and larger (Byrne, 2010; Raykov & Marcoulides, 2006). The cut-off score of the RMSEA should be less than 0,50 to represent a good fit to the model (Byrne, 2010; Raykov & Marcoulides, 2006). If values of RMSEA range between 0,05 and 0,08 it is indicative of a mediocre fit (Brown & Cudeck, 1989; Byrne, 2010; Raykov & Marcoulides, 2006). SRMR values should be smaller than 0,05. The Aikaike Information criterion (AIC) and Bayeson Information Criterion (BIC) are also be taken into account. The Cronbach alpha coefficients are utilised to evaluate internal consistencies of the scales used in the study.

In this study Bootstrapping is the method of choice when determining indirect effects and is a more valuable and accurate method in determining mediating effects (see Cheung & Lau, 2008; Hayes, 2009; Preacher & Hayes, 2008). Hayes (2009) states the bootstrapping resampling option should be set at least at a 1000 draws – for the purpose of the study it is set at 2000 draws. According to Hayes (2009) this method has its own bootstrap confidence interval, which will be set at 95%. Indirect effects will be significantly different from each other at $p < 0,05$.

The study focuses on the $\kappa^2$ (Kappa-squared) values as recommended by Preacher and Kelly (2011). Using the $\kappa^2$ has various benefits including that it is a standardised method (Preacher & Kelly, 2011). Secondly, $\kappa^2$ doesn’t make use of a particular scale that is used in mediation analysis. The bootstrapping allows for the creation of confidence intervals and is not dependent on the sample size that will be utilised in the study. The study makes use of MBESS to help calculate the effect sizes with an easy R-function (Kelly & Lai, 2010; Preacher & Kelly, 2011). In this study the $\kappa^2$ is calculated by hand using an online calculator developed by Rothman Jnr. (2011).
1.4 OVERVIEW OF CHAPTERS

In Chapter 2, the findings of the research objectives are discussed in the form of a research article. Chapter 3 will consist of the conclusions, limitations and recommendations of this research.

1.5 CHAPTER SUMMARY

This chapter presented the problem statement, research questions and research objectives. The research methodology was outlined along with an overview of the chapters that will follow.
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CHAPTER 2

RESEARCH ARTICLE 1
OCCUPATIONAL SELF-EFFICACY AS A MEDIATOR BETWEEN STRENGTH- AND DEFICIENCY-BASED APPROACHES AND WORK ENGAGEMENT IN A SAMPLE OF SOUTH AFRICAN EMPLOYEES

ABSTRACT

Orientation: The main focus is on the use of positive psychology in South African organisations, more specifically a strength-based approach (SBA) and a deficiency-based approach (DBA).

Research purpose: The purpose of the study is to explore whether occupational self-efficacy (OSE) will act as a mediator between job resources, a SBA, a DBA and work engagement in a sample of South African employees.

Motivation for the study: To get a better understanding of optimal well-being (e.g. by focusing on the organisation’s use of employee strengths and weaknesses).

Research design, approach and method: A quantitative, cross-sectional design was used to collect data from various South African organisations (N = 699). A correlation matrix of the latent variables was used. The hypothesised model was tested by performing structural equation modelling. The bootstrapping method was used to identify possible mediating effects of OSE.

Main findings: The result indicated only one positive relationship between job resources and work engagement – i.e. autonomy. OSE only mediated between autonomy and work engagement. A SBA, a DBA and OSE were significantly related to work engagement. OSE was related to autonomy, relationship with colleagues and a SBA.

Practical/Managerial implications: From the results it seems that a SBA and a DBA lead to work engagement. This study provides evidence that using a balanced approach could lead to more engaged employees. Therefore, organisations should focus on implementing a balanced approach (i.e. focusing on strengths and weaknesses). This study also provided evidence that focusing on the development and use of an employee’s strengths can lead to an employee feeling a greater sense of efficacy (confidence) in their job.

Contribution/Value add: The study provides evidence that using a balanced approach lead to employees being more engaged concerning their work. Further, using strengths can lead to an employee having an enhanced sense of OSE. This study contributes to the development of using a balanced approach in South African organisations. This study further provides a platform that the use of a SBA and DBA can lead to an employee feeling a greater sense of occupational self-efficacy.

Keywords: job resources, strength-based approach; deficiency-based approach; work engagement; occupational self-efficacy; mediating effect; positive organisational behaviour.
INTRODUCTION

The world of work has become a place where higher-than-average performance is necessary – not only for success, but also for survival (Avolio & Luthans, 2006). Employees are considered to be the biggest asset in an organisation (Mello, 2006). However, most human resource practices follow a deficiency-based approach (DBA) to manage employees (Buckingham & Clifton, 2001; Luthans 2002a) – i.e. performance appraisals’ main focus is on improving the negative aspects of performance, rather than following a combined approach and also focus on building employees up and focusing on their positive aspects (Bouskila-Yam & Kluger, 2011; Cravens, Oliver, & Stewart, 2010; Cummings & Whorley, 2009). Therefore, often the focus of training is to improve weaknesses and deficiencies (Clifton & Harter, 2003). However, success in organisations can no longer be achieved by only trying to fix employees’ weaknesses (Luthans & Youssef, 2007). A balance needs to be achieved between the negative and the positive (Luthans & Youssef, 2007).

Historically, psychology as a discipline focuses almost exclusively on the disease model (Peterson & Seligman, 2003). In other words, psychology in general, focuses on pathology, weaknesses, the identification and the treatment thereof (Hutchinson, Stuart, & Pretorius, 2010). However, there seems to be two limitations to this approach (Harris & Thoresen, 2006). The first limitation is that focusing on the negative does not guarantee the presence of positive, optimal functioning and well-being. The second limitation is that by exclusively focusing on the negative we can sometimes overlook the positive side of human functioning. Martin Seligman challenges the field of psychology to change the focus from the negative and what is wrong with people to a more positive approach (Luthans, Luthans, & Luthans, 2004). The aim of positive psychology is therefore to correct the imbalances of the disease model (Peterson & Seligman, 2003). Considerable attention has been given to positive capabilities in the workplace and it aroused attention in Organisational or Industrial Psychology (Avey, Nimnicht, & Pigeon, 2010; Luthans & Jensen, 2002; Luthans & Youssef, 2007; Luthans, 2002b; Schaufeli, Bakker, & Salanova, 2006).

Using positive psychological behaviour and potential in the workplace has developed into a strength-based approach (SBA) (Stienstra, 2010). The main focus of this approach is to encourage optimal human potential in order to create positive and hopeful organisations.
(Avital, Boland, & Lyyten, 2009). Biswas-Diener, Kashdan, and Minhas (2011) state that when an employee uses his/her strengths it can lead to positive behavioural and psychological outcomes, such as subjective and objective well-being (Biswas-Diener et al., 2011; Govindji & Linley, 2007; Scheuller & Seligman, 2010; Stienstra, 2010). Therefore the assumption can be made that employees will be happier in their organisations (Stienstra, 2010; Govindji & Lindley, 2007).

There is a call for a more realistic, balanced approach between the positive and negative side of human functioning (Aspinwall & Staudinger, 2003). Psychologists therefore, should be interested in promoting optimal human functioning (Peterson & Seligman, 2003) - therefore not solely focusing on the positive and ignoring deficiencies, pathologies and weaknesses (Gable & Haidt, 2005). It is insufficient to only focus on the employees’ strengths and the positive side of human functioning (Larson, Hemenover, Norris, & Cacioppo, 2003). Studying a SBA within organisations should not be about avoiding weaknesses and deficiencies, but how strengths and weaknesses are interrelated (Aspinwall & Staudinger, 2003). Ultimately, it seems that optimal human functioning is about joining these two dichotomies and focusing on both strengths and weaknesses (Peterson & Seligman, 2003; Ryff & Singer, 2003). Using a balanced approach (i.e. using both strengths and weaknesses) can be functional in achieving work-related goals (Bagraim, 2007; Clifton & Harter, 2003; Linley & Harrington, 2006; Luthans & Church, 2002).

Clifton and Harter (2003) states that there is a need for researchers to study the impact of the focus on weaknesses against the focus on strengths and management of weaknesses. However, the main focus of research has been on the promotion of strengths, while very little research has been done on the relationship between strengths, deficiencies and work engagement in an organisational setting (Hutchinson et al., 2010; Stienstra, 2010). Therefore, this study will focus on the relationship between a SBA and a DBA and work engagement within South African organisations.

It is also important to study possible mediators in the relationship between SBA, DBA and work engagement. Occupational self-efficacy (OSE) could be an important mediator and is also an important concept in Industrial and Organisational Psychology (Luthans, 2002a) – employees who experience higher levels of self-efficacy are more likely to create more successful and more resourceful organisations. Studying OSE could also enhance our
understanding of optimal human functioning (Karunka, Kubicek, Schaufeli, & Hoonakker, 2009). Indeed, research has indicated that there is a positive relationship between self-efficacy and work engagement (Luthans & Peterson, 2001; Ouweneel, Le Blanc, & Schaufeli, 2011). Proctor, Maltby, and Linley (2011) state that a positive relationship exists between SBA, OSE and work engagement.

The general objective of this study is to investigate the relationship between job resources, including a SBA, a DBA, OSE and work engagement. This study is also aimed at determining whether OSE mediated the relationship between job resources (including SBA and DBA) and work engagement among South African employees.

LITERATURE REVIEW

The Strength-Based Approach and the Deficiency-Based Approach

Based on the work of Gallup Consulting (a research-consultancy firm specialising in the study and application of talents and strengths within organisations) (Clifton & Harter, 2003), it seems that developing and utilising strengths and talents within organisations has developed into a SBA (Meyers, 2010; Stienstra, 2010). A talent is seen as a way to approach an employee’s full potential and can be applied in a productive manner (Clifton & Harter, 2003). A talent can be defined as a natural thought, feeling or behaviour that occurs in one’s everyday life (Clifton & Harter, 2003). From this a person’s strength is defined as “the ability to provide consistent, near-perfect performance in a given activity” (Clifton & Harter, 2003, p. 114). Stienstra (2010, p. 8) defines a SBA as “a positive organisational approach that stimulates and appreciates the use of employees’ strengths, derived through a process of identification and development of talents into strengths, to enlarge both individual and organisational outcomes.”

Clifton and Harter (2003) has identified three important aspects of a SBA on an individual and organisational level. Firstly, the focus would be on identifying where an individual’s greatest potential lies, what an individual’s talents are and what an individual is naturally good at doing (Clifton & Harter 2003). An individual’s talent can be identified by looking at spontaneous reactions, rapid learning and feelings of satisfaction (Buckingham & Clifton,
Secondly, a SBA approach focuses on the development of an individual’s talents (Clifton & Harter, 2003; Meyer, 2010; Stienstra, 2010). Talents are developed into strengths by refining skills and knowledge about one’s talents (Clifton & Harter, 2003). This can lead to enhanced feelings of self-awareness. Thirdly, the more an individual uses his/her talents and strengths the stronger they will become (Clifton & Harter, 2003). This will ultimately lead to positive behavioural changes taking place within an individual (Clifton & Harter, 2003; Hodges & Clifton, 2004; Meyer, 2010; Stienstra, 2010). A fourth category has been added, where an employee’s talents and strengths are appreciated and valued by an organisation (Meyer, 2010; Stienstra, 2010).

A SBA assumes that the greatest return on investment and development lies within the development of employees’ talents and strengths (Clifton & Harter, 2003; Passarelli, Hall, & Anderson, 2010). When employees are able to use their strengths within organisations it will lead to enhanced performance, employee turnover would be less and employees will be happier (Clifton & Harter, 2003). Using a SBA can lead to greater work engagement, attendance, productivity and hope (Wood, Linley, Maltby, Kashdan, & Hurling, 2011). Previous research supports this – it seems that people who use their strengths will achieve their goals more effectively and experience more work satisfaction (Peterson, Stephens, Park, Lee, & Seligman, 2009). Past research has found that using a SBA within organisations can lead to greater well-being (Govindji & Linley, 2007; Wood et al., 2011; Page & Vella Brodrick, 2009). Research also indicates that when employees are able to use their strengths they are happier and have higher energy levels (Govindji & Linley, 2007). This provides support for the happy-productive worker thesis (Stienstra, 2010) that states that when employees are happy they will show higher levels of job performance than employees who are unhappy (Cropanzo & Wright, 2001). One can therefore assume that a SBA can lead to an organisation having greater potential (Clifton & Harter, 2003).

It is important not to exclusively focus on the positive side of human functioning, but also on negative aspects of human functioning (Larson et al., 2003; Peterson & Seligman, 2003). Positive psychology must therefore focus on both strengths and weaknesses (Peterson & Seligman, 2003). Biswas-Diener et al. (2011) support this by suggesting that exclusively focusing on strengths can have negative effects on an individual’s development. It seems that when an individual’s talents and strengths are identified, people are unlikely to invest time and resources into uncovering new opportunities to use them in (Biswas-Diener et al., 2011).
It is important that when one identifies talents and strengths, one must have an explicit personal growth mindset (Biswas-Diener et al., 2011). Further, weaknesses can play an important role in an employee’s life and can be of value at a certain stage of an employee’s career (Bagaim, 2007).

Linley, Woolston, and Biswas-Diener (2009) define weaknesses as behaviour that can cause problems in an individual’s life and career. Weaknesses are something that an employee may lack in his/her career (Bagaim, 2007). If a weakness were present in an individual’s life one would normally like to develop this weakness (Bagaim, 2007). Training can reduce weaknesses within an individual (Clifton & Harter, 2003). Linley et al. (2009) states that when a person uses his/her weaknesses it can lead to regular learned behaviours. Regular learned behaviours are activities that an individual may not be good at performing. By continuous repeats of these actions an individual could become very good at these activities. However, exclusively focusing on weaknesses can drain an individual of energy (Linley et al., 2009).

There is a call for a more realistic and balanced approach that takes both strengths and weaknesses into account (Aspinwall & Staudinger, 2003; Luthans & Youssef, 2007). It seems that a SBA and a DBA both focus on developing employees. These two approaches differ from each other in focus. A SBA in organisations refers to the extent to which the employee perceives that formal and informal policies, practices and procedures in the organisation focus on the use of their strengths and talents. On the other hand, a DBA on an organisational level refers to an employee’s perception to which an organisations formal informal policies, practices and procedures would focus on the improvement or development of an employee’s weaknesses (Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process).

From the literature it is proposed that a SBA and a DBA could be seen as job resources on macro or organisational level. The conservation of resources (COR) theory defines job resources as “... those entities that either are centrally valued in their own right, or act as means to obtain centrally valued ends” (Hobfoll, 2002, p. 307). According to the COR theory job resources can be seen as factors that play a role in gaining new resources and to enhance an individual’s well-being (Hobfoll, 2002). From the Job Demand-Resources (JD-R) model job resources can be defined as “those physical, social, or organisational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the
associated physiological and psychological costs, and (c) stimulate personal growth and development” (Bakker & Demerouti, 2007, p. 312; Xanthopoulou Bakker, Demerouti, Schaufeli, 2007, p. 122).

Job resources have both intrinsic and extrinsic motivational potential (Llorens, Schaufeli, Bakker, & Salanova, 2007; Xanthopoulou et al., 2007). Job resources are valued by people and they motivate people to obtain, retain and protect their resources (Bakker & Demerouti, 2007). Bakker and Demerouti (2008) state that job resources play an intrinsic motivational role because it will help to promote and encourage an employee’s personal growth and development. Job resources also have extrinsic motivational potential because they help employees to achieve work-related goals (Bakker & Demerouti, 2008). Job resources can further be seen as a driver of well-being, motivation and work engagement (Hakanen, Perhoniemi, & Toppinen-Tanner, 2008). Therefore, if an organisation makes use of strengths and weaknesses in a balanced way it could lead to personal and organisational development and dedication (Bakker & Demerouti, 2011; Biswas-Diener et al., 2011). Using a balanced approach could further be functional in achieving work-related goals (Bagaim, 2007; Clifton & Harter, 2003; Linley & Harrington, 2006; Luthans & Church, 2002).

**Work engagement**

Work engagement can be seen as an important concept in positive organisational behaviour (Bakker & Demerouti, 2008). Since the positive psychology movement came to the forefront, research on burnout (characterised by cynicism, exhaustion, personal inefficacy) has shifted towards an opposite, positive state, namely work engagement (Schaufeli et al., 2006; Storm & Rothmann, 2003). Work engagement can be seen as a persistent, pervasive, affective, gratifying, cognitive state that is focused on a specific object, event or behaviour, rather than a momentary state (Schaufeli & Bakker, 2001; Schaufeli et al., 2006). Work engagement is characterised by vigour, dedication and absorption (Schaufeli & Bakker, 2001; Schaufeli et al., 2006). **Vigour** is characterised by high levels of energy and mental resilience. **Dedication** is characterised by being inspired, enthusiastic and involved in one’s work. **Absorption** is characterised by being engrossed in one’s work. The UWES (Utrecht Work Engagement Scale) was specifically developed to measure work engagement (Schaufeli et al., 2006). However, this study will only focus on vigour and dedication (the direct opposite of the core dimensions of burnout, namely, exhaustion and cynicism). Vigour and dedication are
regarded as the “core dimensions” of work engagement (see Llorens et al., 2007; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003). Absorption seems to be a consequence of work engagement and resembles the concept of “flow” (Llorens et al., 2007; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003). Flow can be seen as a state of optimal human functioning (Csikszentmihalyi, 1990). Problems may also exist with the item construction of absorption i.e. items that contain metaphors (e.g., “Time flies when I am working”; Bakker, Schaufeli, Leiter, & Taris, 2008). Therefore, researchers tend to only use the “core dimensions of work engagement” (Langelaan, Bakker, Van Doornen, & Schaufeli, 2006; Llorens et al., 2007; Schaufeli & Bakker, 2004).

Having engaged employees in organisations can have positive outcomes on a personal and organisational level (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). On a personal level engaged employees seem to be more successful (Gorvieski, Bakker, & Schaufeli, 2010). They seem to deal better with their job demands (Schaufeli & Bakker, 2003) and are also seen as more passionate, creative and productive workers (Bakker & Demerouti, 2008; Robbins, Odendaal, & Roodt, 2001). On an organisational level, work engagement can lead to meaningful business outcomes such as productivity, customer-satisfaction, loyalty, profitability and safety (Harter, Hayes & Schmidt, 2002). Further, there is a positive relationship between employee well-being and performance (Harter et al., 2002). Therefore, it is in an organisation’s best interest to develop and employ techniques that promote employee engagement (Karunka et al., 2009).

**The relationship between job resources, a SBA, a DBA and work engagement**

The COR theory and JD-R model assume that the availability of job resources can lead to various positive outcomes i.e. well-being and work engagement (Bakker Hakanen, Demerouti, Xanthopolou, 2007; Schaufeli, & Bakker, 2004; Xanthopoulou et al., 2007). The JD-R model makes a significant assumption about the psychological process of work resources (Bakker et al., 2007). Job resources can act as a buffer against the impact of job demands and ultimately burnout (Bakker et al., 2007). Job resources can either play an extrinsic or intrinsic motivational role (Bakker et al., 2007; Bakker & Demerouti, 2008). Job resources play an intrinsic motivational role because they will foster an employee’s need to grow, learn and develop (Bakker et al., 2007; Bakker & Demerouti, 2008). Deci and Ryan
(1985) support this by stating that job resources play an important role in an individual’s needs for competence, relatedness and autonomy. Job resources further play an extrinsic motivational role because they are seen as the instrument that helps an individual achieve work-related goals (Bakker et al., 2007; Bakker & Demerouti, 2008). Meijman and Mulder (1998) support this by stating that when an employee experiences a resourceful environment, they will be more willing to dedicate their abilities and put more effort into the task at hand. In both cases, through the achievement of basic needs or work goals the outcomes can be seen as positive (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007). Therefore, work engagement is more likely to occur when adequate job resources are available (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007).

Several studies support these notions that job resources have motivational potential and that a positive relationship exists between job resources and work engagement (Bakker & Demerouti, 2008). It is found that when employees have job resources in their job (e.g. autonomy, support from colleagues, proper coaching and feedback, the opportunity for development) they will intrinsically motivate them to achieve work-related goals (Bakker & Demerouti, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). A longitudinal study by Schaufeli, Bakker, and Van Rheenen (2008) found that when there is an increase in job resources, work engagement will also increase. Cross-sectional studies indicate that there is a positive relationship between several job resources (autonomy, social support, supervisory coaching, performance feedback and opportunity for professional development) (Hakanen, Bakker, & Schaufeli, 2006; Xanthopolou et al., 2007) and work engagement. Therefore, support is provided that job resources play a motivational role in predicting work engagement (Schaufeli & Bakker, 2004; Schaufeli et al., 2008).

**Hypothesis 1a:** Job resources are positively related to work engagement.

The relationship between a SBA, a DBA and work engagement can be best described by the broaden and build theory of Fredrickson (2001). The theory states that when a person experiences more positive emotions it will broaden a person’s thought-action repertoire (Fredrickson, 2001; Fredrickson, 2004). Govindji and Linley (2007) found that employees who are able to use their strengths are happier and this broadens an individual’s mindset (leading to work engagement). Previous studies support this assumption by stating that a relationship exists between SBA and work engagement (Biswas-Diener et al., 2011; Harter et
al., 2002; Clifton & Harter, 2003; Hutchinson et al., 2010). Wood et al. (2010) find that making use of SBA can lead to greater work engagement, attendance, productivity and hope. It seems that a SBA is more effective than focusing on employee weaknesses (Clifton & Harter, 2003). If an organisation exclusively focuses on a DBA it can lead to a sense of disengagement (Linley et al., 2009). As stated, it is important to achieve a realistic balance between a SBA and a DBA (Luthans & Youssef, 2007). However, no known studies have been done on the relationship between a balanced approach and work engagement.

Hypothesis 1b: There is a positive relationship between a SBA and work engagement.

Hypothesis 1c: There is a positive relationship between a DBA and work engagement.

Occupational self-efficacy (OSE) and the relationship with job resources and work engagement

OSE is a broad concept that is related to various occupations and jobs (Schyns & Von Collani, 2002). OSE can be defined as an individual’s sense of conviction that one is able to perform work-related tasks (Rigotti, Schyns, & Mohr, 2008; Schyns & Sczensny, 2010). OSE can further be seen as the sense of confidence that is related to being able to perform in the workplace and to complete work-related tasks successfully (Rigotti et al., 2008; Schyns & Sanders, 2005). The concept of OSE is closely related to self-efficacy as described by the Social Cognitive theory of Bandura. According to Bandura (1982; 1986) self-efficacy is concerned with how effectively an individual would be able to deal with, organise and execute a prospective problem or situation.

It seems that general self-efficacy does not fit the criteria of positive organisational behaviour (Luthans, 2002a). Generalised self-efficacy seems too broad a concept and not specific enough when predicting well-being, e.g. work engagement or burnout (Salanova, Piero, & Schaufeli, 2010). According to Bandura (1997) self-efficacy must address a specific domain or tasks and it must be seen as a trait, not a state which is open to development. Salanova et al. (2010) indicate that it is important to distinguish between a domain-specific self-efficacy and a generalised self-efficacy. Generalised self-efficacy is stable over time, is not open to development and, therefore, is seen as a trait, not a state (Luthans, 2002a; Schyns & Moldizo, 2009). Rigotti et al. (2008) found that OSE can be influenced by different occupational experiences and is less stable than generalised self-efficacy (Schyns & Sczesny, 2010).
Therefore, OSE is seen as a state, not a trait (Rigotti et al., 2008). The concept of OSE was developed to overcome the problem experienced with the stable nature of generalised self-efficacy (Schyns & Moldizo, 2009). This study will focus on the concept of OSE as introduced by Schyns and Von Collani (2002).

The broaden and build theory of Fredrickson (2001) can be used to describe the relationship between job resources and OSE. This theory states that when an individual experiences positive emotions, these emotions will automatically broaden an individual’s action-thought repertoire and build enduring personal resources (Fredrickson, 2001; Fredrickson, 2004). The relationship between job resources and OSE can be described by the concept of flow by Csikzentmihalyi (1997, p. 29), who describes the experience as being intensely involved in any given activity and nothing else seems to matter. From this it seems that when employees experience positive emotions, enduring personal resources are developed and people will feel more confident in their work (e.g. OSE). From the COR and JD-R model it seems that when employees have job resources available it will lead to positive outcomes (Xanthopoulou et al., 2007). Schyns and Von Collani (2002) find that there is a positive relationship between job resources (leadership support, satisfaction with superiors and with colleagues) and OSE. Therefore, one can assume that when employees have the necessary job resources, their action-thought repertoire will broaden and they will experience higher levels of work flow. This in turn will lead to employees feeling more confident in their job (e.g. OSE).

**Hypothesis 2a: There is a positive relationship between job resources and OSE.**

Linley and Harrington (2006, p. 41) state that “When we use our strengths, we feel good about ourselves, we are better able to handle and achieve things, and we are working toward fulfilling our potential.” It seems that using a SBA can lead to a positive subjective experience (Clifton & Harter, 2003). A recent study by Govindji and Linley (2007) found that when people use their strengths, this is positively linked to subjective well-being. Meyers (2010) states that when people use their strengths, it will lead to enhanced feelings of competence in their jobs. From the broaden and build theory it seems that when a person experiences positive emotions it can lead to building personal resources (e.g. OSE). From this one can assume that when strengths and talents are identified, developed, used and appreciated (Meyers, 2010; Steinstra, 2010) this will lead to an employee feeling more efficacious
towards their work. However, no known studies have been done with regard to this relationship.

*Hypothesis 2b: There is a positive relationship between a SBA and OSE.*

From the literature review one can see it is important to not only focus on an individual’s strengths, but also on his/her weaknesses (Peterson & Seligman, 2003). If a weakness is present an individual would usually like to be developed in that specific area (Bagairm, 2007). People would sometimes rather develop their areas of weaknesses and correct these areas (Biswas-Diener et al., 2011; Luthans & Youssef, 2007). Individuals can then be sent on training courses to help them develop these weaknesses (Clifton & Harter, 2003). According to the broaden and build theory (Fredrickson, 2001), one can assume that when people are able to become better in the areas of weaknesses (e.g. via training and development) they will experience more positive emotions (Biswas-Diener et al., 2011). When developing an individual’s weaknesses they can become very good at these, given the activities (Linley et al., 2009). Further, when people are able to tackle their weaknesses and deficiencies head-on it can lead to people being more open, honest and taking responsibility for their problem areas (Linley et al., 2009). Therefore, this will broaden an employee’s action-thought repertoire. From this one can assume that when employees are able to develop themselves and become good at difficult tasks they will become more efficacious towards their work. Unfortunately, no known studies have been done with regard to this relationship.

*Hypothesis 2c: There is a positive relationship between a DBA and OSE.*

The broaden and build theory of Fredrickson (2001) provides a framework where the relationship between OSE and work engagement can be explained. If an employee experiences more positive emotions at work it can lead to an individual feeling more efficacious towards work. Therefore, this will lead to more creative and committed employees (Fredrickson, 2004). This is supported by the work of Schyns and Collani (2002) who make the assumption that when an organisation provides an individual with a climate where they feel able to do their job they will feel more attached to their job. It seems that when people have a higher belief of self-efficacy, they will persist longer in the tasks that are given to them (Multon, Brown, & Lent, 1991). They also seem to seek out more challenging tasks (Sexton & Tuckman, 1991). Employees who have a greater sense of efficacy towards their job will be
able to deal with their job demands better (Rigotti et al., 2008). Schyns and Von Collani (2002) found a positive relationship between occupational self-efficacy, job commitment and job satisfaction. Therefore, one can assume that they will perform better (Rigotti et al., 2008) and be more engaged to their work. It seems that high levels of OSE will lead to enhanced performance, effectiveness and work engagement (Luthans & Peterson, 2001). Various studies support this assumption by stating that there is a positive relationship between OSE and work engagement (Koutsoumari & Antoniou, 2011; Chaudhary, Rangnekar, & Barua; 2012).

**Hypothesis 3: There is a positive relationship between OSE and work engagement.**

**Occupational self-efficacy as a mediator**

This study also aims to investigate the potential mediating effect of OSE. A mediator describes casual effects and the nature of the relationships between variables (Matthiau & Taylor, 2006). Therefore, a mediator is a variable that will help to account for the relationship that exists between the dependent and independent variable (Baron & Kenny, 1986). Baron and Kenny (1986) suggest a casual steps approach to identify possible mediating effects. However, Rucker, Preacher, Tormala, and Petty (2011) argue that this traditional way of viewing mediating effects can weaken theory development and is unjustifiable. Rucker et al. (2011) recommend that one should investigate and assess the magnitude and importance of indirect effects. Firstly, Rucker et al. (2011) argue that looking at indirect effects will expand theory development through involving social processes. Secondly, focusing on “partial” or “full” mediating effects will suggest that one is looking at effect sizes or the practical significance of the mediating effect. Therefore, one views a partial mediating effect as less important than a full mediating effect. Thirdly, it is not necessary to use words such as partial or full mediators when looking at effect sizes.

According to Bandura (1982) there are four factors that play an important role in the development of self-efficacy, namely mastery experience, social persuasion, vicarious learning and emotional states. Schyns (2004) considers that these four factors will play an important role in an individual’s experience of OSE. According to Schyns (2004) it will influence a person’s OSE by the successful execution of a task (mastery experience), when a person is able to learn something from somebody else (vicarious experience) and when people
are told that they are able to execute tasks successfully (social persuasion). From the broaden and build theory it seems that when employees experience mastery experience, vicarious experiences and social persuasion it will lead to enhanced positive emotions. In turn, a person would feel more efficacious towards their work. This in turn will enhance their well-being (work engagement) (Fredrickson, 2004). Based on the COR theory and the JD-R model, one can assume that when a person is able to use their strengths and have available job resources they will experience positive emotions. Therefore, employees will feel more confident in their jobs and this will lead to enhanced feelings of self-efficacy and in turn work engagement. Job resources play an important role in making employees feel competent in their job (Deci & Ryan, 1985). Therefore, one can assume that having the necessary job resources will lead to enhanced feelings of OSE. Proctor et al. (2011) assume that the use of strengths is positively related to self-efficacy and well-being. Koutsounari and Antoniou (2011) also found a positive relationship between job resources, OSE and work engagement. From the literature review and the broaden and build theory (Fredrickson, 2004) it seems that training an individual’s weaknesses will lead their action-thought repertoire to broaden. Therefore, they will be more efficacious towards their work and experience more work engagement.

**Hypothesis 4a:** OSE is a mediator between job resources and work engagement

**Hypothesis 4b:** OSE is a mediator between a SBA and work engagement

**Hypothesis 4c:** OSE is a mediator between a DBA and work engagement

Figure 1 illustrates the hypothesised model that will be tested in the study:
Figure 1

The conceptual model: A structural model of job resources, SBA, DBA, and work engagement, with OSE as mediator

RESEARCH DESIGN

Research approach
The study makes use of a quantitative approach, where the primary method of data collection was the use of surveys. A cross-sectional design is utilised and data is collected at one point in time from various participants (Salkin, 2009). The rationale for using this type of design is that it would enable the researcher to detect patterns of association between two or more variables and to assess the interrelationships between these variables (Bryman & Bell, 2007; Struwig & Stead, 2007). This type of design provides the researcher with descriptive and exploratory data. This design is further cost-effective and economic.

Research method
Research participants

The populations consisted out of employees in various industries and sectors within South Africa. The units of analysis were the individual responses in the study. For the purpose of the study an availability sample was taken from employees in South African organisations ($N = 699$). This sampling method was chosen to enable the researcher to make generalisations for the South African population. The survey was sent out to approximately 1385 employees in the South African context.

The final sample provided the researcher with 699 usable questionnaires with a response rate of 51%.

Table 1 provides the characteristics of the participants. The sample consisted out of female (57.4 %) and male (41.2 %) participants that are mostly married with children (36.3 %). The population consists predominantly out of African (39.3%) and White (42.2 %) participants. The participants mostly speak English (23.6 %), Afrikaans (36.1 %) and Sesotho (12.6 %). The majority of the sample has a Grade 12 Certificate (41.1 %), working in the mining and metals sector (23.0 %).
Table 1

*Characteristics of the Participants (N = 699)*

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<td></td>
<td>Single, with children living at home</td>
<td>103</td>
<td>14.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married/living with a partner, without children living at home</td>
<td>113</td>
<td>16.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Married/living with partner, with children living at home</td>
<td>254</td>
<td>36.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Living with parents</td>
<td>50</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Automobiles</td>
<td>6</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chemicals</td>
<td>4</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>52</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>37</td>
<td>5.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finance</td>
<td>21</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Media</td>
<td>3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mining and Metals</td>
<td>161</td>
<td>23.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td>37</td>
<td>5.3</td>
<td></td>
</tr>
</tbody>
</table>
Table 1 (Continued...)

*Characteristics of the Participants (N = 699)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and Gas</td>
<td></td>
<td>2</td>
<td>0,3</td>
<td></td>
</tr>
<tr>
<td>Police</td>
<td></td>
<td>5</td>
<td>0,7</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td>27</td>
<td>3,9</td>
<td></td>
</tr>
<tr>
<td>Sport</td>
<td></td>
<td>1</td>
<td>0,1</td>
<td></td>
</tr>
<tr>
<td>Telecommunications</td>
<td></td>
<td>7</td>
<td>1,0</td>
<td></td>
</tr>
<tr>
<td>Tourism, Leisure and Recreation</td>
<td></td>
<td>3</td>
<td>0,4</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td>8</td>
<td>1,1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>148</td>
<td>21,2</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The total percentages do not add up to 100% because of missing values

**Measuring instrument(s)**

The following measuring instruments are utilised in the study:

*Biographical questionnaire.* A biographical questionnaire is utilised in the study to establish the demographical information of the participants included in the study. The questionnaire established biographical characteristics such as year of birth, gender, home language, race, level of education, household status (marital and parental status), years in the organisation and current position.

*Job resources.* Five job resources were measured for the purpose of the study. These five job resources were autonomy, relationship with supervisor, relationship with colleagues, information sharing and participation. The job resources was assessed with a four-point Likert scale (1 = always, 4 = never) based on the questionnaire on the experience and assessment of work of Van Veldhoven, Meijman, Broersen, and Fortuin (1997). The questionnaire has proved to be reliable and valid (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). Autonomy is measured with five items (e.g. Can you decide on how your work is executed?). The Cronbach alpha coefficient for autonomy is 0,90 (Van Veldhoven et al., 2002). Relationship with the supervisor is measured with five items (e.g. If necessary, can you ask your supervisor for help?). The Cronbach alpha coefficient for relationship with supervisor is 0,90 (Van Veldhoven et al., 2002). Relationship with colleagues is measured with three items (e.g. Do you get on well with your colleagues?). The Cronbach alpha coefficient for relationship with colleagues is 0,87 (Van Veldhoven et al., 2002). Information is measured.
with four items (e.g. Do you receive sufficient information on the results of your work?). The Cronbach alpha coefficient for information is 0.83 (Van Veldhoven et al., 2002). Participation is measured with four items (e.g. Can you participate in decisions affecting issues related to your work?). The Cronbach alpha coefficient for participation is 0.79 (Van Veldhoven et al., 2002).

Organisational SBA and DBA. A newly developed questionnaire is used to measure organisational SBA and DBA (Els et al., in process). A seven-point frequency scale, that ranges from 1 (never) to 7 (always), is utilised. Organisational SBA is measured with eight items (e.g. This organisation uses my strengths). Organisational DBA is also measured with eight items (e.g. In this organisation my development plan aims to better my weaknesses). The psychometric properties of the questionnaire are determined by Rasch analysis and exploratory factor analysis (Els et al., in process).

The Utrecht Work Engagement Scale (UWES). This questionnaire is utilised to measure work engagement. Schaufeli and Bakker (2001) developed the UWES. The UWES measures three dimensions, namely vigour, dedication and absorption, which is conceptualised as the opposite of burnout (Schaufeli et al., 2006). The core dimensions (vigour and dedication) of work engagement is utilised in this study (see Llorens et al., 2007; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003). The questionnaire is scored on a seven-point frequency scale that varies from 0 (never) to 6 (everyday). Six items are used to measure vigour (“When I get up in the morning, I feel like going to work”) and five items are used to measure dedication (“I find the work that I do full of meaning and purpose”). Storm and Rothmann (2003) found a two-factor structure for the South African Police Service. They further reported sufficient Cronbach alpha coefficients of 0.78 for vigour and 0.89 for dedication. Another study done by Jackson, Rothmann, and Van de Vijver (2006) reported Cronbach alpha coefficients of 0.70 for vigour and 0.81 for dedication.

OSE. The short version of the OSE Scale (Rigotti et al., 2008) is utilised to measure occupational self-efficacy in the study. The questionnaire is scored on a seven-point frequency scale. The scale varies from 1 (not at all true) to 6 (completely true). The scale consists out of six items (e.g. “My past experiences in my job have prepared me well for my occupational future”). The shortened version of the questionnaire has been tested in five countries (Germany, Sweden, Belguim, Great Britian and Spain) and a one-dimensional
model is accepted for the different language versions. Rigotti et al. (2008) find reliable Cronbach Alpha coefficients for this one-dimensional model that range between 0.72 and 0.90. Schyns and Szensny (2010) also find a reliable Cronbach alpha Coefficient of 0.78 for this scale.

**Research procedure**

Research participants have been randomly selected in South African organisations. A letter of request has been sent to the organisation to obtain consent to conduct research at the organisation. The letter describes the nature, goals and other relevant information of the research. The questionnaire takes the form of a self-administered and self-report questionnaire. The questionnaire takes approximately 40 minutes to complete. The participants are assured of relevant ethical aspects, including anonymity and confidentiality. Data is collected in the form of a hard copy with a covering letter that briefly explains the goals of the research and to confirm the confidentiality and anonymity of respondents. Data is collected over a two-month period from various participants in South Africa. Data is collected either through a digital version of the questionnaire or a hardcopy is provided to the participants.

**Statistical analysis**

The hypothesised model is tested by performing structural equation modelling (SEM) using the Mplus 6.1 program (Muthen & Muthen, 2008-2010). In this study the covariance matrix is utilised as the input type for the models being tested. The maximum likelihood (ML) estimator is used to produce model parameters and the assumption is made that observed variables are measured on a continuous scale. In the study item parcelling is not used and individual items are utilised as indicators (see Bandalos, 2002; Bandalos & Finney, 2001). The study does not allow the use of error terms in order to improve the fit of the structural model.

Several goodness-of-fit indices are used to test if the models fit the data. The study focuses on the use of the traditional $\chi^2$ statistic, the comparative fit index (CFI), the Tucker Lewis Index (TLI), the root mean square error of approximation (RMSEA) and the standardised root mean square residual (SRMR). There seems little agreement on what the cut-off scores would be for the various indices (Byrne, 2010; Raykov & Marcoulides, 2006). However, the cut-off score
for CFI and TLI is used as 0.90 and larger (Byrne, 2010; Raykov & Marcoulides, 2006). The cut-off score of the RMSEA should be less than 0.05 to represent a good fit to the model (Byrne, 2010; Raykov & Marcoulides, 2006). However, if values of RMSEA range between 0.05 and 0.08, it is indicative of a mediocre fit (Brown & Cudeck, 1989; Byrne, 2010; Raykov & Marcoulides, 2006). SRMR values should be smaller than 0.05. The Aikake Information criterion (AIC) and Bayeson Information Criterion (BIC) are also taken into account. The Cronbach alpha coefficients are used to evaluate internal consistencies of the scales used in the study.

Baron and Kenny (1986) suggest a causal steps approach to identify possible mediating effects. However, Rucker et al. (2011) argue that this traditional way of viewing mediating effects can weaken theory development and is unjustifiable. Rucker et al. (2011) recommend that one should investigate and assess the magnitude and importance of indirect effects when utilising mediating effects in studies. Bootstrapping should be seen as the method of choice in determining indirect effects and this is a more valuable and accurate method in determining mediating effects (see Cheung & Lau, 2008; Hayes, 2009; Preacher & Hayes, 2008). Hayes (2009) states that the bootstrapping resampling option should be set at least at a 1000 draws – for the purpose of the study it was set at 2000 draws. According to Hayes (2009) this method has its own bootstrap confidence interval, which will be set at 95%. From this it can assumed that indirect effects will be significantly different from each other at $p < 0.05$.

It is also important to report on the $\kappa^2$ (Kappa-squared) values as recommended by Preacher and Kelley (2011). Preacher and Kelley (2011) state that using $\kappa^2$ has various benefits, including that it is a standardised method. Secondly, $\kappa^2$ is not devoted to a particular scale that is used in mediation analysis. It is insensitive to the sample size used in the study and when using the bootstrapping method it allows for the construction of confidence intervals (Preacher & Kelley, 2011). Preacher and Kelley (2011) further suggest that one should make use of MBESS (Kelley & Lai, 2010) to help calculate effect sizes and to use R-function. However, due to the current limitation of statistical software, it has been decided to calculate $\kappa^2$ by hand. An online calculator in this regard was developed by Rothman Jr. (2011).
RESULTS

Confirmatory factor analysis

Nine latent variables are created, including autonomy, relationship with colleagues, relationship with supervisor, information, participation, SBA, DBA, work engagement and OSE. The items are used to create the nine latent variables in measurement model (Model 1). A structural model is tested to determine whether a relationship exists between job resources, SBA, DBA and work engagement. The study further determines whether OSE can be seen as a mediator between job resources, SBA, DBA and work engagement.

The results of the measurement model and structural model are reported in Table 2.

Table 2
Results of the SEM Analysis (N = 699)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>Df</th>
<th>$P$</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>AIC</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement model</td>
<td>2372,21</td>
<td>1091</td>
<td>0,00</td>
<td>0,92</td>
<td>0,92</td>
<td>0,04</td>
<td>0,05</td>
<td>94567,50</td>
<td>94819,03</td>
</tr>
<tr>
<td>Structural model</td>
<td>2935,77</td>
<td>1091</td>
<td>0,00</td>
<td>0,91</td>
<td>0,91</td>
<td>0,05</td>
<td>0,05</td>
<td>94567,50</td>
<td>94819,03</td>
</tr>
</tbody>
</table>

$\chi^2$ = chi-square; df = degrees of freedom; $P$ = statistical significance; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; AIC = Akaike information criterion; BIC = Bayesian information criterion

As stated earlier, no errors are allowed to correlate to increase the model fit. As can be seen in Table 2, the CFI and TLI values are larger than 0,90. The RMSEA and SRMR is 0,05 or below. Therefore, both the measurement and structural model show good fit. This can be seen as a reasonable explanation for the observed inter-item covariance.
Table 3

Correlation Matrix (r) of the Latent Variables

<table>
<thead>
<tr>
<th>Variable name</th>
<th>M</th>
<th>SD</th>
<th>( \alpha )</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Autonomy</td>
<td>2.85</td>
<td>0.73</td>
<td>0.82</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relationship with</td>
<td>3.36</td>
<td>0.62</td>
<td>0.71</td>
<td>0.24*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Relationship with</td>
<td>3.19</td>
<td>0.73</td>
<td>0.82</td>
<td>0.29*</td>
<td>0.49*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Information sharing</td>
<td>2.88</td>
<td>0.82</td>
<td>0.86</td>
<td>0.38*</td>
<td>0.29*</td>
<td>0.53*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Participation</td>
<td>2.60</td>
<td>0.81</td>
<td>0.88</td>
<td>0.62*</td>
<td>0.18*</td>
<td>0.36*</td>
<td>0.56*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. SBA</td>
<td>3.92</td>
<td>1.49</td>
<td>0.96</td>
<td>0.47*</td>
<td>0.22*</td>
<td>0.36*</td>
<td>0.55*</td>
<td>0.52*</td>
<td>0.54*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. DBA</td>
<td>3.20</td>
<td>1.52</td>
<td>0.93</td>
<td>0.25*</td>
<td>0.21*</td>
<td>0.34*</td>
<td>0.57*</td>
<td>0.39*</td>
<td>0.54*</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Engagement</td>
<td>4.35</td>
<td>1.27</td>
<td>0.87</td>
<td>0.32*</td>
<td>0.32*</td>
<td>0.41*</td>
<td>0.48*</td>
<td>0.37*</td>
<td>0.52*</td>
<td>0.50*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. OSE</td>
<td>4.80</td>
<td>0.96</td>
<td>0.86</td>
<td>0.31*</td>
<td>0.24*</td>
<td>0.25*</td>
<td>0.35*</td>
<td>0.26*</td>
<td>0.31*</td>
<td>0.22*</td>
<td>0.42*</td>
<td>-</td>
</tr>
</tbody>
</table>

Correlations is statistically: \( p < 0.001 \)
Correlations is practically significant (medium effect): \( r > 0.30 \)
Correlations is practically significant (large effect): \( r > 0.50 \)

Table 3 reports the mean, standard deviations, internal consistencies and the relationships that exist between the different variables. As seen in the Table 3, the internal consistencies of all the scales are acceptable (\( \alpha \geq 0.70 \)). Therefore, all scales used in this study are reliable.

Further, as seen in Table 3 all correlations between the constructs statistically significant at \( p < 0.01 \). There is a positive correlation between job resources (autonomy, relationship with colleagues, relationship with supervisor, information sharing and participation), a SBA, a DBA, work engagement and occupational self-efficacy. Moreover, autonomy is positively and statistically significantly related to relationship with colleagues, relationship with supervisor and a DBA with a medium effect. Autonomy is also positively and statistically significantly related to information sharing, participation, a SBA, Engagement and OSE with a large effect.

Further, relationship with colleagues is positively and statistically significantly related to relationship with supervisors and engagement with a large effect. Relationship with colleagues also has a positive relationship with information sharing, participation, a SBA, a DBA and OSE (statistically and practically significant with a medium effect). Relationship with supervisor is positively related to information sharing, participation, a SBA, a DBA and engagement (statistically and practically significant with a large effect). Furthermore, participation has a positive relationship with a SBA, a DBA, engagement (statistically and practically significant with a large effect) and OSE (statistically and practically significant
with a medium effect). A SBA is statistically and practically significantly related to a DBA, engagement and OSE (with a large effect.)

Moreover, there is a positive relationship between a DBA and Information sharing with a large effect. Work engagement is positively related to relationship with supervisor and participation with a medium effect. All correlations are significant and in the expected direction.

Next, the estimates of the direct structural paths in the structural model are given in Table 4.

Table 4

<table>
<thead>
<tr>
<th>Structural Path</th>
<th>Estimates (Unstandardised)</th>
<th>S.E (Unstandardised)</th>
<th>Estimates (Standardised)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement -&gt; Autonomy</td>
<td>0,00</td>
<td>0,12</td>
<td>0,00</td>
<td>0,98</td>
</tr>
<tr>
<td>Engagement -&gt; Relationship with Colleagues</td>
<td>0,34</td>
<td>0,16</td>
<td>0,10</td>
<td>0,04*</td>
</tr>
<tr>
<td>Engagement -&gt; Relationship with Supervisor</td>
<td>0,23</td>
<td>0,12</td>
<td>0,16</td>
<td>0,06</td>
</tr>
<tr>
<td>Engagement -&gt; Information sharing</td>
<td>0,13</td>
<td>0,13</td>
<td>0,07</td>
<td>0,33</td>
</tr>
<tr>
<td>Engagement -&gt; Participation</td>
<td>0,03</td>
<td>0,12</td>
<td>0,02</td>
<td>0,79</td>
</tr>
<tr>
<td>Engagement -&gt; SBA</td>
<td>0,27</td>
<td>0,06</td>
<td>0,23</td>
<td>0,00*</td>
</tr>
<tr>
<td>Engagement -&gt; DBA</td>
<td>0,24</td>
<td>0,06</td>
<td>0,22</td>
<td>0,00*</td>
</tr>
<tr>
<td>Engagement -&gt; OSE</td>
<td>0,35</td>
<td>0,07</td>
<td>0,22</td>
<td>0,00*</td>
</tr>
<tr>
<td>OSE -&gt; Autonomy</td>
<td>0,24</td>
<td>0,09</td>
<td>0,18</td>
<td>0,01*</td>
</tr>
<tr>
<td>OSE -&gt; Relationship with Colleagues</td>
<td>0,25</td>
<td>0,12</td>
<td>0,12</td>
<td>0,04*</td>
</tr>
<tr>
<td>OSE -&gt; Relationship with Supervisor</td>
<td>0,05</td>
<td>0,09</td>
<td>0,03</td>
<td>0,63</td>
</tr>
<tr>
<td>OSE -&gt; Information sharing</td>
<td>0,16</td>
<td>0,10</td>
<td>0,12</td>
<td>0,10</td>
</tr>
<tr>
<td>OSE -&gt; Participation</td>
<td>-0,02</td>
<td>0,07</td>
<td>-0,02</td>
<td>0,80</td>
</tr>
<tr>
<td>OSE -&gt; SBA</td>
<td>0,09</td>
<td>0,05</td>
<td>0,12</td>
<td>0,05*</td>
</tr>
<tr>
<td>OSE -&gt; DBA</td>
<td>0,01</td>
<td>0,04</td>
<td>0,01</td>
<td>0,81</td>
</tr>
</tbody>
</table>

* Note: p ≤ 0,05

The results indicate the following regarding the relationships that have been explored in Hypothesis 1a. Table 4 indicates the relationships between work engagement and autonomy (β = -0,00), relationship with supervisors (β = 0,16), information sharing (β = 0,07) and participation (β = 0,02) are not statistically significant (p < 0,05). Therefore, no relationship exists between these variables. The only significant relationship exists between work
engagement and relationship with colleagues ($\beta = 0.10; p < 0.05$). Therefore, Hypothesis 1a can only be partially accepted. A positive relationship exists between a SBA and work engagement ($\beta = 0.23$), which is statistically significant ($p < 0.05$). Therefore, Hypothesis 1b can be accepted. Table 4 further indicates that there is a significant relationship between a DBA and work engagement ($\beta = 0.22; p < 0.05$). Therefore, Hypothesis 1c can be accepted. Table 4 indicates that there is a positive significant relationship between OSE, autonomy ($\beta = 0.18; p < 0.05$) and relationship with colleagues ($\beta = 0.18; p < 0.05$). There is no statistically significant relationship ($p < 0.05$) between OSE and relationship with supervisors ($\beta = 0.03$), information sharing ($\beta = 0.10$) and participation ($\beta = -0.02$). Therefore, Hypothesis 2a can only be partially accepted. The results indicated that there is a significant relationship between OSE and a SBA ($\beta = 0.12; p < 0.05$). Hypothesis 2b can be fully accepted. Furthermore, the results indicated that the relationship between OSE and a DBA ($\beta = 0.01; p < 0.05$) is not statistically significant. Therefore, Hypothesis 2c can be rejected. The results indicate that there is a significant relationship between OSE and work engagement ($\beta = 0.22; p < 0.05$). Hypothesis 3 can be accepted.

Next, the results regarding the mediating effect investigated in Hypothesis 4a, b and c are reported in Table 5.

Table 5

<table>
<thead>
<tr>
<th>Indirect effect</th>
<th>Estimate</th>
<th>S.E</th>
<th>$P$</th>
<th>Confidence intervals (95%)</th>
<th>$\kappa^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.04</td>
<td>0.02</td>
<td>$0.01^*$</td>
<td>-0.00</td>
<td>0.08</td>
</tr>
<tr>
<td>Relationship with Colleagues $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.03</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>Relationship with Supervisor $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.01</td>
<td>0.02</td>
<td>0.63</td>
<td>-0.03</td>
<td>0.05</td>
</tr>
<tr>
<td>Information sharing $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.02</td>
<td>0.02</td>
<td>0.15</td>
<td>-0.02</td>
<td>0.08</td>
</tr>
<tr>
<td>Participation $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>-0.00</td>
<td>0.02</td>
<td>0.80</td>
<td>-0.04</td>
<td>0.03</td>
</tr>
<tr>
<td>SBA $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.03</td>
<td>0.01</td>
<td>0.06</td>
<td>-0.01</td>
<td>0.06</td>
</tr>
<tr>
<td>DBA $\rightarrow$ OSE $\rightarrow$ Engagement</td>
<td>0.00</td>
<td>0.01</td>
<td>0.81</td>
<td>-0.03</td>
<td>0.03</td>
</tr>
</tbody>
</table>

* Note: $p \leq 0.05$
Table 5 indicates results regarding the mediating effects investigated in Hypothesis 4a, b and c. Table 5 indicates that OSE mediates the relationship only between autonomy and work engagement $0.04 \ (p < 0.001; 95\% \ CI [-0.00, 0.08])$. All other mediating relationships are not statistically significant ($p < 0.05$). Therefore, Hypothesis 4a is only partially accepted. Hypothesis 4b and 4c are not accepted.

According to Preacher and Kelley (2011) it would make sense to interpret $\kappa^2$ in the same context as squared correlation coefficients. This would be done in accordance with Cohen’s (1988) guidelines where small, medium and large effect sizes are stated as 0.01, 0.09, 0.25 respectively. The $\kappa^2$ value for the mediating effect of occupational self-efficacy between autonomy and work engagement was calculated to be $\kappa^2 = 0.02$ (small effect).

**DISCUSSION**

A balanced approach (i.e. focusing on both strengths and weaknesses) is not much discussed in scientific literature, but it is of high relevance for academics and organisations. It seems that most organisations use a DBA (Clifton & Harter, 2003). Martin Seligman challenges this negative view to become more positive and focus on an individual’s strengths (Luthans et al., 2004). There is therefore a need for researchers to focus on the impact of weaknesses vs. the focus on strengths and the management of weaknesses (Clifton & Harter, 2003). However, there is very little research on the effect of a SBA, a DBA and work engagement in an organisational setting (Hutchinson et al., 2010; Stienstra 2010). It has therefore been the aim of this study to test a structural model of job resources, a SBA and DBA and work engagement. The study further investigates the possible mediating effects of OSE. This will provide the researcher with a better understanding of well-being.

Structural equation modelling indicates that only one job resource (relationship with colleagues) has a significant relationship with work engagement. There is no significant relationship between autonomy, relationship with supervisors, information sharing participation and work engagement. These results lead to the partial conformation of Hypothesis 1a. These findings are not in line, either, with previous research studies that have indicated that there is a positive correlation between job resources and work engagement (Bakker et al., 2007; Bakker & Demerouti, 2007; Llorens et al., 2007; Schaufeli & Bakker,
Although the results are surprising, previous research studies have found similar results \cite{montgomery2003,mauno2009,saks2006}. These findings could be explained by means of the COR-theory. According to this theory, job resources will influence each other and act together as a resource pool \cite{hobfoll1998}. However, when an employee does not have enough job resources, one would fail to invest one’s time into work and it will reduce an employee’s inputs \cite{hobfoll1998,rothmann2006}. It seems that when an employee lacks external environment resources they will not be able to handle the influence of job demands, nor achieve work-related goals \cite{rothmann2006}. From this, one can assume that when employees perceive that they do not have any resources in their resource pool, job resources will not enhance work engagement. Further, one can assume that certain resources are beneficial for one’s own functioning, but it is less consequential in predicting a concept such as work engagement \cite{koutsoumari2011}.

Structural equation modelling further indicates that when employees are able to develop and use their strengths and weaknesses it will lead to employees being more engaged in their work. These results lead to the acceptance of H1b and H1c. These findings can be explained by the broaden and build theory of Fredrickson \cite{fredrickson2001,fredrickson2004}. From this theory one can assume that when employee strengths and weaknesses are used as an organisational resource, they will broaden an individual’s action-thought repertoire. This is supported by Govindji and Linley \cite{govindji2007}, who state that when employees are able to use their strengths it will lead them to experience more positive emotions. According to the COR-theory one can assume that if an organisation makes use of a SBA and a DBA (as an organisational resource) it will lead to employees gaining new resources and building a pool of new resources \cite{hobfoll2002}. In turn, this will ultimately lead to employee well-being (e.g. work engagement) \cite{hobfoll2002}. The COR-theory and JD-R model assume that when an employee has resources available, these resources will lead to more positive outcomes \cite{xanthopoulou2007}. JD-R model theorises that job resources have both extrinsic and intrinsic motivational potential, which will ultimately lead to work engagement \cite{bakker2007,bakker2008}. From the results one can assume that a SBA and a DBA approach can be seen as a job resource and a driver of work engagement.

With regard to the relationship between job resources and OSE, the results indicate that autonomy and relationship with colleagues are the only job resources that have a positive
influence on how efficacious an individual feels in his/her job. Therefore, this leads to the partial confirmation of Hypothesis 2a. The broaden and build theory (Fredrickson, 2001; 2004) and the theory of flow (Csikzentmihalyi, 1997) can be used to describe the relationship that exists between the autonomy, relationship with colleagues and OSE. When an employee experiences autonomy and a positive relationship with colleagues at work they will experience more positive emotions and feelings of flow. Therefore, they will become engrossed with their work and feel more efficacious in work-related tasks (OSE). Surprisingly, it seems that a relationship with supervisors, information sharing and participation in decision-making do not lead to higher levels of OSE in this sample of employees. These findings are in line with research findings by Koutsoumari and Antoniou (2011). Their study finds that only certain job resources are effective in predicting a concept such as OSE. Koutsoumari and Antoniou (2011) argue that the type and quality of the job resources used in a study may contribute to the relationship that exists between job resources and OSE. It seems that certain job resources (except autonomy and relationship with colleagues) may not be sufficient to predict a personal resource such as OSE (Koutsoumari & Antoniou, 2011). The relationships between job resources and OSE can further be influenced by uncertain economical conditions and the changing labour market - where one deals with small- and medium-sized organisations that lack motivational strategies and methods (Koutsoumari & Antoniou, 2011).

Concerning the relationship between a SBA and OSE, the results indicate that when employees are able to develop and use their strengths within an organisation it would lead to higher levels of OSE. This leads to confirmation of Hypothesis 2b. The broaden and build theory can be used to explain the relationship between a SBA and OSE (Fredrickson , 2001; 2004). It seems that when employees are able to identify and use their strengths it will lead to higher levels of subjective well-being (Clifton & Harter, 2003). Strengths development and use will also lead to employees being happier (Govindji & Linley, 2007). It further seems that when employees experience their strengths being used it will lead to their experiencing higher levels of competence in their jobs (Meyers, 2010). When people are able to use their strengths they will feel good about themselves, will be able to handle situations better and achieve things more efficiently (Linley & Harrington, 2006). From the broaden and build theory (Fredrickson, 2001, 2004) it seems that when employees are able to use their strengths it will lead to their experiencing more positive emotions. In turn, this will broaden employee’s
action-thought repertoire, and employees will build up enduring personal resources such as OSE.

Surprisingly, using a DBA approach in organisations does not lead to higher levels of OSE. These results lead to the rejection of Hypothesis 2c. From the results, it seems that it is still more effective to use a SBA in organisations in order to enhance OSE (Clifton & Harter, 2003). Therefore, one can assume that focusing on the development and use of an individual’s weaknesses in organisations is not sufficient to enhance a personal resource such as OSE.

From the broaden and build theory (Fredrickson, 2001; 2004) it seems that focusing on an individual’s weaknesses can trigger a negative emotion in a person. In turn, an individual’s action-thought repertoire will narrow and this will lead to an individual focusing only on the execution of one task at a time. A person can, however, still be sent for training and become very effective at this task (i.e.) that will still drain them of energy (Linley et al., 2009). From this, one can see that using one’s weaknesses to complete a task will not necessarily lead to positive emotions. When organisations make use of a DBA, it could mean that employees feel less confident in their jobs (i.e. they will experience less OSE).

With regard to the relationship between OSE and work engagement, structural equation modelling showed that a positive relationship existed between OSE and work engagement. These findings lead to the acceptance of Hypothesis 3. This in turn will lead to employees experiencing more dedication and vigour (i.e. work engagement) towards their job. Previous research confirm this notion by stating that when employees experience OSE it will persist longer in work-related tasks (Multon et al., 1991), seek out more challenging tasks (Sexton & Luckman, 1991), and deal better with job demands (Schyns & Von Collani, 2002). When employees experience high levels of OSE it will lead to enhanced performance, effectiveness and work engagement (Luthans & Peterson, 2001). Recent studies support this and found a positive correlation between OSE and work engagement (Koutsoumari & Antoniou, 2011). The relationship between OSE and work engagement can also be explained by the broaden and build theory (Fredrickson, 2001; 2004). From this, theory one can assume that when experiences OSE it will lead to the conviction that one is able to perform work-related tasks successfully (Rigotti et al., 2008; Schyns & Sczesny, 2010). One can assume that when an employee feels efficacious towards his/her job it will lead to positive emotions. In turn, this will broaden an employee’s action-thought repertoire which will ultimately lead to employees feeling more engaged in their work.
The results indicate that OSE acts as a mediator between autonomy and work engagement. OSE does not mediate between any other job resources (including a SBA and a DBA) and work engagement. This leads to the partial confirmation of Hypothesis 4a and the rejection of Hypotheses 4b and 4c. Preacher and Hayes (2008) present a possible explanation for this phenomenon. It is possible that a significant indirect effect may exist, even if no evidence exists for a significant total effect (Preacher & Hayes, 2004). Specific indirect effects may be generally weakened by the extent to which mediators are correlated (Preacher & Hayes, 2008). The cause of this is collinearity among the predictors of the dependent variable (work engagement). In certain cases, collinearity may lead to findings that a variable (OSE) does not mediate between the independent (job resources) and dependent (work engagement) variable; however, the mediator does mediate between the variables.

In conclusion the results indicate that there is a positive relationship between job resources and work engagement and more specifically, autonomy, a SBA, a DBA and OSE lead to higher levels of work engagement. Autonomy, relationship with colleagues and a SBA can lead to an increase in the efficacy an employee experiences towards work. OSE only mediates the relationship between autonomy and work engagement.

Managerial implications

Managing human resources is about implementing best practices in the work context (Bakker, Van Veldhoven, & Xanthopoulou, 2010). It is the role of managers to maximise their employee’s efforts to achieve the organisation’s goals (Bakker et al., 2010). The results indicate very important implications for both the organisation and the individual. It is best practice for organisations to have an environment in place where tasks are successfully completed and work-related goals are achieved (Bakker, 2009). It is important for organisations to understand the drivers of OSE and work engagement. The results indicate that using a SBA and a DBA could have positive outcomes for both the individual and the organisation. The results make a good case for using a SBA and a DBA in human resource development. The study indicates that a SBA and a DBA could lead to higher levels of work engagement. However, from the study it seems that DBA does not have an effect on OSE. One can conclude that using a SBA is still more effective than focusing exclusively on a DBA. Organisations should put methods and processes in place where there will be a focus on
both strengths and weaknesses to enhance work engagement. It is important for the organisation to focus on identification, development and use of talents and strengths in organisations. This can for example be done through role-shaping and teamwork. Employee’s functions within organisations should be shaped according to their strengths and be put into teams where their strengths can be used accordingly. However, employees should also be provided with opportunities and training to help develop their deficiencies. This will help them become good at tasks they may not necessarily be able to perform effectively.

The study indicates that certain job resources positively relate to OSE and work engagement. Relationship with colleagues is positively related to both OSE and work engagement. However, autonomy has a positive relationship only with OSE. OSE is also a mediator between autonomy and work engagement. Relationship with colleagues plays an important role because it will satisfy an employee’s need for autonomy and relatedness, respectively (Bakker, 2009; Deci & Ryan, 1985). Organisations should focus on monitoring their employee’s autonomy and relationship with colleagues in order for them to cope better with their demands, to stay healthy, to be more efficacious towards their job and to be engaged in their work (Bakker, 2009). Organisations should also put interventions in place to increase an employee’s autonomy and relationship with colleagues (e.g. participative management and team-building). Organisations create a climate and culture that foster the relationship that employees have with colleagues and improve autonomy in their work. This can include setting systems in place where colleagues can support each other beyond their daily task description. In order to enhance autonomy, employers can focus on developing employees beyond their normal daily tasks.

In conclusion, it is important for organisations to study personal, job and organisational resources more in order to get a better understanding of optimal human functioning. This will help organisations and managers to set strategies/interventions in place to enhance organisational well-being. The HR department must create an environment where employees have the necessary job resources and where employees can focus on the development and use of their strengths in their everyday tasks. The HR department should also look at creating interventions at developing people’s weaknesses where necessary. It is important that line managers learn how to provide the necessary job resources and to use a SBA and a DBA in a balanced way.
Limitations and directions for future research

The study had several limitations. The first limitation of the study was the use of a cross-sectional design. The implication of using a cross-sectional design is that data is only collected at one point in time. Therefore, one cannot assume the causality of relationships in this study. This is one of the first studies in South Africa that focuses on job resources, a SBA, a DBA, OSE and work engagement. Therefore, the findings in this study are only tentative. In future this study should be replicated and use should be made of a longitudinal design to get a more accurate perception on the relationship between the different variables. The study does not test for reversed casual effects; this might have had an influence on the mediating effects that are investigated in the study (Kenny, Kashy, and Bolger, 1998). Reversed casual effects would give the researcher a better understanding of how the variables are interrelated and how they will interact with each other.

The method in which data has been collected could also be problematic in the study. The data in this study is gathered from a single self-report questionnaire. The analysis of data is based on individual ratings. These individual ratings can be influenced by an employee’s subjective perception of the items and bias. Therefore, the ratings on the questions would differ according to the employee’s perception of the items and the intended (actual) rating on the item. It is suggested that more objective measures should be included in future research. For future research it is suggested that employees should not only give individual ratings, but should also be assessed by multiple sources (for example, get ratings from an employee’s supervisor and colleagues). Using multiple sources as a method for giving ratings would lessen the effect of the common method variance bias.

Another limitation of the study would be the sample that was used. The sample group was randomly selected from various organisations and industries. Further, it seems that the number of participants that were selected from the industries differ greatly. Due to this limitation findings cannot be generalised to a specific industry or to the broader South Africa. For future research it is recommended that studies should focus on a specific industry (i.e. only focus on the mining industry). Then generalisations can be made within a specific industry. It can also be suggested that equal sample sizes should be taken from different industries to compare findings between industries. Therefore, this would enable the researcher to generalise within a specific industry and over the South African population. Further, the
sample size used in this study is quite small. Therefore, making generalisations concerning the
greater South Africa might be problematic. It could be very beneficial to study the effects of a
SBA, DBA, OSE and work engagement with larger sample sizes in the South African context.

The results indicate that job resources included in the study provide unexpected results. As
discussed, one must focus on the type and the quality of the job resources included in a study
(Koutsoumari & Antoniou, 2011). Another limitation is that only five job resources are
included and one personal resource (OSE). For future research it is suggested that more job
resources be included in other studies. This will help to obtain a more accurate perception of
the effect of job resources on OSE and work engagement. The study has yielded unexpected
results on the potential mediating effects of OSE. Therefore, it is suggested that other
potential mediators be included future studies. This will help to predict the full potential of the
COR theory, the JD-R model and the broaden and build theory.
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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter discusses the results in terms of the general and the specific objectives of the study. This chapter will focus on the limitations that have been encountered during the study. Lastly, the chapter will make recommendations for the organisation and future research.

3.1 CONCLUSIONS

The general objective of the study is to investigate the relationship between job resources, a strength-based approach (SBA), a deficiency-based approach (DBA), occupational self-efficacy (OSE) and work engagement among South African employees. The study further investigates if OSE mediates the relationship between job, a SBA, a DBA and work engagement. Little research has been found on this topic in South Africa.

The first objective of the study is to investigate the relationship between job resources, SBA, a DBA, OSE and work engagement according to the literature. Various sources are used to gather information and have been consulted to determine the relationships that exist between the variables. From literature it seems that organisations focus on developing and improving employees’ weaknesses (Biesmans, 2010). In the past, psychology has generally focused on the disease model, i.e. an approach that looks at what is wrong with people, their deficiencies, weaknesses and pathologies (Hutchinson, Stuart, & Pretorius, 2010; Peterson & Seligman, 2003). Further, employees are encouraged to strengthen their weak points and deficiencies i.e. this approach focuses on tracing, analysing and improving weak points (Biesman, 2010; Buckingham & Clifton, 2001). Organisations no longer find it hard to point out and identify employees’ weaknesses (Biesmans, 2010). However, Seligman challenges the field of psychology to shift views from a negative to a positive approach (Luthans, Luthans, & Luthans, 2004). Success in organisations can therefore no longer be achieved by only focusing on an employee’s weaknesses (Luthans & Yousseff, 2007). There is a need of integration of both the positive and the negative side of human functioning (Aspinwall & Staudinger, 2003). A more realistic and balanced approach (i.e. the use of a person’s strengths
and weaknesses) should therefore be used within organisations (Aspinwall & Staudinger, 2003).

Developing and using talents and strengths within organisations has developed into a SBA (Meyers, 2010; Stienstra, 2010). A SBA in organisations is defined as the extent to which the employee perceives that formal and informal policies, practices and procedure in the organisation focus on the use of their strengths and talents. On the other hand one should also focus on an individual’s deficiencies and weaknesses (Larson, Hemenover, Norris, & Cacioppo, 2003; Peterson & Seligman, 2003) i.e. a DBA. A DBA on an organisational level is defined as an employee’s perception to which an organisations formal informal policies, practices and procedure would focus on the improvement or development of an employee’s weaknesses (Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process). These two approaches should be used as a balanced approach (Aspinwall and Staudinger, 2003; Luthans & Youssef, 2007).

This study proposed that a SBA and a DBA can be seen as a job resource on an organisational level. Job resources exist on task, interpersonal and organisational level. From the Job Demand-Resources (JD-R) Model job resources are “those physical, social, or organisational aspects of the job that (a) are functional in achieving work-related goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development” (Bakker & Demerouti, 2007, p. 312; Xanthopoulou, Bakker, Demerouti, & Schaufeli., 2007, p. 122). The conservation of resources (COR) theory describes job resources as “... those entities that either are valued in their own right, or act as means to obtain centrally valued ends” (Hobfoll, 2002, p 307). From this one can assume that job resources have extrinsic and intrinsic motivational potential (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007). Using a balanced approach (i.e. focusing on both strengths and weaknesses) in organisation can lead to personal and organisational development (Bakker & Demerouti, 2011; Biswas-Diener, Kashdan, & Minhas, 2011). A balanced approach is functional in achieving work-related goals and is a driver of work engagement (i.e. well-being) (Bagaim, 2007; Clifton & Harter, 2003; Harter, Hayes, & Schmidt, 2002; Linley & Harrington, 2006; Luthans & Church, 2002).

Work engagement can be seen as a positive, persistent, gratifying state that is characterised by vigour, dedication and absorption (Schaufeli, Bakker, & Salanova, 2006). Work engagement
is a very important concept and indicator of work-related well-being (Bakker & Demerouti, 2008). From previous research it clear that when employees are engaged to their work they will be more successful and will be better able to deal with their job demands (Schaufeli & Bakker, 2003). Engaged employees will be more involved in their job, they will feel a stronger emotional connection towards their work and will be cognitively more alert (Olivier & Rothman, 2007). Further, work engagement on an organisational level can lead to positive outcomes on a business-unit level (Harter et al., 2002). A positive relationship is found between work engagement and customer satisfaction, productivity, profitability, safety and loyalty (Harter et al., 2002).

OSE is a concept that has become popular in Industrial and/or Organisational Psychology. According to Schyns and Von Collani (2002) OSE is an individual’s sense of conviction that he/she will be able to perform tasks that are relevant to the workplace. OSE is based on the concept of self-efficacy as defined by the Social Cognitive theory of Bandura. Bandura (1982; 1986) defines self-efficacy as the sense of conviction that one will be able to handle a prospective problem, situation or task. Further, Bandura (1997) states that self-efficacy must address a specific task or domain. Self-efficacy must further be seen as a state and not a trait (Rigotti, Schyns, & Mohr. 2008) which is open to development (Luthans 2002; Schyns & Moldizo, 2009). OSE has been developed to overcome the stable nature of generalised self-efficacy (Schyns & Von Collani, 2002).

From the broaden and build theory of Fredrickson (2001) it seems that when an employee has the necessary job resources, their strengths are being utilised and their weaknesses are managed. This can lead to them experiencing higher levels of OSE. It is assumed that when an employee experiences positive emotions their action-thought repertoire would automatically broaden and an individual would be able to build up enduring personal resources (for example OSE). (Fredrickson 2001; Fredrickson, 2004). From the COR and JD-R model it seems that when employees have the necessary job resources it will lead to positive outcomes (Xanthopoulou et al., 2007). Further, when employees have the necessary job resources they will experience a sense of flow and will be engrossed in their jobs (Csikzentmihalyi, 1997). A positive relationship was found between leadership support, satisfaction with superiors, satisfaction with colleagues and OSE (Schyns & Von Collani, 2002).
Further, from the literature it seems that a SBA and a DBA can be seen as a job resource on an organisational level. It seems that people want to develop and use both strengths and weaknesses (Aspinwall & Staudinger, 2003). When organisations make use of SBA, employees will feel they are better able to handle situations and will be able to work towards fulfilling their true potential (Linley & Harrington, 2006). Using strengths will also lead to employees experiencing more subjective well-being (Govindji & Linley, 2007). However, one should not just focus on strengths, but also on weaknesses. If a person experiences a weakness in his/her life they would usually like to develop that area (Bagraim, 2007). Employees can be sent for training to develop in their areas of weakness and become very good at the given activities (Clifton & Harter, 2003). Further, if employees are able to develop their areas of weaknesses, it will lead to more open, honest communication and the individual will feel better equipped to take responsibility for problem areas (Linley, Woolston & Biswas-Diener, 2009). The relationship between a SBA, a DBA and OSE can best be described by the broaden and build theory (Fredrickson 2001; Fredrickson, 2004). It seems that if organisations use strengths and weaknesses in a balanced way it will lead to them experiencing positive emotions (Biswas-Diener et al., 2011). Therefore, employees will build up personal resources and begin to feel more confident in their job.

The relationship between OSE and work engagement can also be explained by the broaden and build theory (Fredrickson, 2001; Fredrickson 2004). It seems that when an employee is provided with an environment where they can feel efficacious about their job, they will feel more attached to their job (Schyns & Von Collani, 2002). Employees will also persist longer in tasks given to them (Multon, Brown, & Lent, 1991), and seek out more challenging tasks (Sexton & Tuckman, 1991). There is a positive relationship between OSE, job commitment and satisfaction. Therefore, one can assume that when an employee is efficacious towards his/her job they will experience positive emotions and persist longer in tasks. Therefore, employees will become more creative, committed (Fredrickson, 2001; Fredrickson, 2004) and engaged in terms of their work. Koutsoumari and Antoniou (2011) support this notion and find that there is a positive relationship between OSE and work engagement.

The COR and the JDR models assume that when employees are able to use their job resources, strengths and weaknesses it can lead to enhanced positive emotions. From the broaden and build theory it seems that one can assume that when an employee experiences positive emotions it can lead to an enhanced sense of confidence (self-efficacy). This will in
turn lead to enhanced work engagement (Fredrickson, 2004). Research supports that a there is a positive relationship between SBA and well-being (e.g. work engagement) (Proctor, Maltby, & Linley, 2011). Luthans and Peterson (2001) have found that when a person has high levels of OSE it can lead to enhanced performance, effectiveness and work engagement.

The second objective of the study was to determine if a relationship exists between job resources, SBA, DBA, OSE and work engagement in a sample of South African employees. Firstly, structural equation modelling indicates that relationship with colleagues is significantly related to work engagement. Thus, if an employee has a good relationship with their colleagues it will lead employees to be more vigorous and dedicated to their jobs. Unfortunately, no significant relationships were found between autonomy, relationship with supervisors, information sharing, participation and work engagement. Although the results are surprising, it is in line with previous research findings (Montgomery, Peeters, Schaufeli, & Den Ouden, 2003; Mauno, Kinnunen, & Ruokalainen, 2007; & Saks, 2006). Koutsoumari and Antoniou (2011) assume that certain job resources are less consequential when predicting a concept such as work engagement. The COR theory can also provide a possible explanation for the unexpected results. Hobfoll (1998) states that job resources act together as a resource pool and would ultimately influence each other. If an employee perceives that there is not enough resources, they would invest less time in their job (Hobfoll, 1998; Rothmann & Jordaan, 2006). Therefore, one can assume if employees perceive they do not have sufficient job resources, their input would decrease, and ultimately an employee would not experience work engagement.

Further, the results indicate that there is a significant relationship between autonomy, relationship with colleagues and work engagement. From the results one can assume autonomy and relationship with colleagues would have a positive influence on how efficacious an individual is towards their job. This relationship can best be described by the broaden and build theory (Fredrickson, 2001; Fredrickson, 2004) and the theory of flow (Csikzentmihalyi, 1997). When an employee experiences that he can work autonomously and have a relationship with colleagues, their action-thought repertoire would broaden and they would experience a feeling of flow. Therefore, they will experience positive emotions and a sense of flow towards their work. This, in turn would make employees feel more engrossed in their work and they would be more efficacious towards their work. Surprisingly, a relationship with supervisors, information sharing and participation in decision-making does
not have an influence on how efficacious a person would be towards his/her job. Koutsoumari and Antoniou (2011) have found that only certain job resources are effective enough to predict a concept such as OSE. The type and the quality of job resources used in the study may contribute to the relationships that exist between job resources and OSE (Koutsoumari & Antoniou, 2011). The relationship between job resources and OSE can also be influenced by uncertain economical conditions and the changing labour market (Koutsoumari & Antoniou, 2011).

The results confirm that if employees are able to develop and use their strengths in the workplace it will assist them in being more efficacious towards their job. The broaden and build theory of Fredrickson (2001; 2004) can be used to explain the relationship between a SBA and OSE. If a SBA is used in organisations employees will experience more subjective well-being (Clifton & Harter, 2003). It seems that when employees use their strengths they will be happier (Govindji & Linley, 2007), they will feel good about themselves and will be able to handle prospective situations and problems better (Linley & Harrington, 2006). Therefore, when employees are able to use their strengths in organisations, they will experience higher levels of positive emotions. When an individual experiences positive emotions it will broaden their action-thought repertoire and they would be able to handle more than one task. Individuals will be able to develop personal resources such as OSE.

Surprisingly, structural equation modelling indicates that a DBA does not lead to higher levels of OSE. From the broaden and build theory (Fredrickson, 2001; Fredrickson, 2004) one can assume that when organisations focus on the development and use of an employee’s weaknesses it will lead to their experiencing negative emotions. An individual’s action-thought repertoire would narrow and they would experience less flow in their jobs. This in turn, would lead to employees only focusing on the execution of one task at a time. From this one can assume that using a SBA is still more effective than a DBA (Clifton & Harter, 2003). Using a DBA will not necessarily lead to positive emotions and employees will not feel more confident in their jobs. However, employees can still be sent for training to help develop weaknesses and become good at these given tasks (Bagriam, 2007). Even if the person becomes good at these activities it will still drain their energy (Linley et al., 2009).

The results indicated that if an employee feels efficacious towards his/her job it will lead to their experiencing more vigour and dedication. The broaden and build theory (Fredrickson,
2001; Fredrickson, 2004) can be used to describe the relationship between OSE and work engagement. When an employee experiences OSE it will lead to the conviction that they are able to perform work-related tasks successfully (Rigotti et al., 2008). When an employee experiences that he/she is able to perform in work-related tasks it will lead to positive emotions. When an employee experiences positive emotions it will lead to an employee’s action-thought repertoire to broaden. This will lead an employee being able to focus on more than one task and will ultimately lead to work engagement. Previous research provides support for this theory. When an employee feels efficacious about their jobs they will seek out more challenging tasks (Sexton & Tuckman, 1991). When an employee experiences OSE, such an employee would be enabled to handle their job demands better (Schyns & Von Collani, 2002). Luthans and Peterson (2001) found that when an employee is efficacious about his/her job it will lead to performance, effectiveness and work engagement. Koutsoumari and Antoniou (2011) also found a positive correlation between OSE and work engagement.

The third objective of the study was to determine whether a SBA and DBA would enhance work engagement in a sample of South African employees. Further, structural equation modelling indicates that there is a significant relationship between a SBA, a DBA and work engagement. From this one can assume that employees want to focus on the development and use of both strengths and weaknesses. If strengths and weaknesses are used in a balanced approach it will ultimately lead to employees being more engaged in their work. From the COR theory one can assume that when a SBA and a DBA is used in balanced approach (as an organisational resource) it will lead employees to build up enduring resources (Hobfoll, 2002). Employees will build up a pool of resources and this could ultimately lead to employee well-being (e.g. work engagement) (Hobfoll, 2002). From the JD-R model one can assume that using a SBA and a DBA will have both extrinsic and intrinsic motivational potential and this will lead to work engagement (Bakker & Demerouti, 2007). Therefore, a SBA and a DBA can be seen as an organisational resource and ultimately a driver of work engagement. Previous research supports this, stating that focusing on strengths-use can be seen as a driver of work engagement (Harter, et al., 2002). Further, if a balanced approach (i.e. focusing on strengths and weaknesses) is followed, it can lead to personal and organisational development (Bakker & Demerouti, 2011; Biswas-Diener et al., 2011).
The fourth and fifth objectives were to determine if OSE will mediate the relationship between a SBA, a DBA and work engagement. Unfortunately, OSE does not act as a mediator between a SBA, a DBA and work engagement. No indirect effects were found with relation to these variables. Preacher and Hayes (2004) state that even if no evidence exists for a significant indirect effect, indirect effects may still exist (Preacher & Hayes, 2008). The reason for this is that indirect effects may be weakened by the extent to which mediators are correlated. When collinearity exists one might see results, such as that the mediator does not mediate between the dependent and independent variable. Therefore, one can still assume that OSE can act as a mediator between a SBA, a DBA and work engagement.

3.2 LIMITATIONS OF THIS RESEARCH

Although the study has yielded interesting results it has several limitations. The first limitation of this study was that it made use of a cross-sectional design. The limitation of this approach is that the researcher has only collected data at one point in time and the causality of the relationships cannot be assumed (Salkin, 2009). This is one of the first studies in South Africa that focuses on job resources, a SBA, a DBA, OSE and work engagement. Therefore, the results can be interpreted but it is only tentative. In future research can focus on the use of a longitudinal study on order to get a better idea of the cause-and-effect between the different variables (Salkin, 2009). The study does not focus on testing for reversed casual effects. This can play an important role when mediating effects are investigated (Kenny, Kashy & Bolger, 1998). Testing for reversed casual effects would give the researcher a clearer idea of how the variables are interrelated with each other. It would further give a better idea of the cause-and-effect between the variables investigated in the study.

Another limitation that could be problematic in the study was the use of a single self-report questionnaire. Therefore, the ratings are based only on an individual’s rating and this can be influenced by the subjective perception and bias towards the questions. Therefore, the results can be influenced because of the employee’s perception of the item and the intended (actual ratings). This could increase the likelihood of the common method variance. For future research it is suggested that more objective measures be included.
The sample that was used in the study could be problematic. The study makes use of a random sample across various industries and organisations. Problems associated with this type of sampling method are that it might be subjective to larger errors than other types of sample methods (Struwig & Stead, 2007). Further, generalisations about the broader South Africa may be difficult (Struwig & Stead, 2007). The participants are selected from different industries that differ greatly from each other. Due to this it seems that generalisations on the findings cannot be made within a specific industry or the broader South Africa.

The results have yielded unexpected findings. The results indicate that only relationship with colleagues, a SBA and a DBA predicted work engagement. Further, only autonomy, relationship with colleagues and a SBA predicted OSE. From this one can see that the job resources included were not sufficient to predict a concept such as OSE and/ or work engagement. For future research it is suggested that the type and quality of job resources that is included in the study (Koutsoumari & Antoniou, 2011) be studied. The study has further yielded unexpected results on the potential mediating effects of OSE. It is suggested that other possible mediators be included in future studies.

### 3.2 RECOMMENDATIONS

Despite the limitations of the study it still gives valuable insight in the relationship that exists between job resources, a SBA, a DBA, OSE and work engagement. This study can make a valuable contribution for South African organisations and future research.

### 3.3.1 Recommendations for the organisation

Based on the results of the study recommendations can be made for South African organisations. In organisations today, managing human resources is about implanting interventions and strategies that are best practice in the works context (Bakker, Van Veldhoven & Xanthopoulou, 2010). A lot of money is spent on the development of employees to enhance performance. It is further the role of the manager to maximise an employee’s effort to obtain a competitive advantage (Bakker et al., 2010). It is in an organisation’s best interest to set strategies in place to achieve work-related goals and to be successful (Bakker, 2009). The results indicate that it is important for organisations to
understand and study the drivers of OSE and work engagement. The study indicates that a SBA and a DBA can lead to an employee experiencing higher levels of work engagement. Further, the results indicate that a SBA has a positive influence on OSE. From this one can conclude that following a SBA is still more effective than following a DBA. However, it is still important to not exclusively focus on a SBA or a DBA (Gable & Haidt, 2005; Larson et al., 2003). These findings indicate the importance of organisations setting methods, procedures and interventions in place, so that they will be able to identify, develop and use an individual’s talents and strengths within the organisation. Employee’s roles and job should to a certain extent be shaped to fit their talents and strengths. Organisations can make use of techniques such as talent identification, role-shaping and team work. However, employees must still be able to develop their weaknesses and deficiencies within the organisations. This will help them perform tasks well, in which they would not necessarily be able to perform.

It is important that organisations provide employees with the necessary job resources. In this study only certain job resources are positively related to OSE and work engagement. The results indicate that a relationship with colleagues is only positively related to OSE. Relationship with colleagues will satisfy an employee’s need for relatedness and autonomy (Bakker, 2009; Deci & Ryan, 1985). It is important that organisations monitor employees’ autonomy and relationship with colleagues (Bakker, 2009). This will help employees to cope better with job demands, to be more confident and engaged in their work (Bakker, 2009). Organisations should create a culture where employees will be able to act autonomously in their job and have the opportunity of a relationship with colleagues. Organisations can make use of various interventions to enhance an employee’s autonomy and a relationship with colleagues. The organisation can make use of participative management, team work and teambuilding. Further, organisations can set strategies in place for employees to have relationships with their colleagues outside their normal daily tasks. Employers can focus on enhancing autonomy by focusing on developing employees beyond their normal daily tasks.

It is best practice for organisations to study various personal, job and organisational resources to get a better understanding of optimal well-being. Therefore, organisations, managers and the HR department will be able to put interventions in place that will help to enhance optimal well-being of employees. This will further help organisations to understand what employees would need to handle their job demands successfully. The HR department can create a
workplace where employees get the necessary resources. Further, HR and line managers must create an environment where a balanced approach (i.e. strengths and weaknesses) is utilised.

3.3.2 Recommendations for future research

Based on this study recommendations can be made for future research. For future research it is suggested that a longitudinal design be used. This will enable the researcher to make better inferences on the causality of the relationships. The researcher will also be able to get a better understanding of the relationship that exists between the latent variables over a period of time. Future research can also focus on testing for reversed causal effects. This will provide valuable information on the impact of COR-, broaden and build theory and the motivational processes of the JD-R model.

It is further suggested that future research makes use of more objective measures to collect data. It is suggested that the study does not just make use of a self-rating questionnaire. This would only provide the researcher with subjective information. Future studies should focus on collecting data from multiple sources (i.e. get self-ratings, supervisor ratings and colleague ratings). This type of data collection would lessen the effect of the common method variance bias. Further, it will also give better insight on the relationship between job resources, a SBA, a DBA, OSE and work engagement.

For future research one must consider making use of other sampling methods (i.e stratified sampling). If a different sample method is used it can provide the researcher with more valuable information on the relationship between variables, the participants and industries. One must consider choosing participants from one industry (i.e. the financial industry). This will help the researcher to make generalisations within a specific industry. It can also be suggested that one can make use of bigger sample sizes from different sectors. This will enable the researcher to make more accurate generalisations within a specific industry or over various industries in the South African economy. Using a bigger and more stratified sample size could also provide the researcher with more valuable information on the relationships between job resources, a SBA, a DBA, OSE and work engagement.

The job resources in the study have provided unforeseen results. Koutsoumari and Antoniou (2011) suggest that one must study the type and quality of job resources. It is further
suggested that more job resources be included in future studies. This would help to get a more accurate perception of the effect of job resources on OSE and work engagement. However, ultimately it would offer a better understanding of optimal human functioning. It is further suggested that other potential mediators and moderators be included in future studies. This will provide one with better insight on the COR theory, the JD-R model and the broaden and build theory.
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