

**The factorial validity and reliability of a newly-developed strength-based approach  
scale in a sample of South African employees**

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## COMMENTS

The reader is reminded of the following:

- The editorial style as well as the references referred to in this mini-dissertation follow the format prescribed by the Publication Manual (6<sup>th</sup> 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 the APA guidelines were followed in referencing and constructing tables.

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## ABSTRACT

### **Title:**

The factorial validity and reliability of a newly-developed strength-based approach scale in a sample of South African employees

### **Key terms:**

Strengths-based approach, factorial validity, reliability, organisational resources, positive psychology paradigm.

With the introduction of positive psychology it was argued that focussing on employee improvement no longer rests with addressing weaknesses but rather by focusing on using the qualities and strengths of employees, otherwise known as following a strengths-based approach (SBA). The appropriate use of employee strengths could improve experiences in the workplace. Although the effect of an SBA on several employee outcomes (such as work engagement, innovativeness, commitment, and productivity) seems important to investigate, there is no available instrument that can measure whether employees perceive their organisations as optimally focusing on, using and applying their strengths and talents in the workplace. In order to address this gap, a new scale was developed to measure employees' perceptions of an organisational SBA. The authors defined an SBA as employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisation focus on the use of their strengths. The scale is rooted in the framework of three models, namely the Job Demands-Resources (JD-R) Model, the Broaden-and-Build theory of positive emotions and the Happy-Productive Worker Thesis.

The objectives of this study were to determine whether 1) the strengths-based approach (as measured with the new SBA scale) is a one-dimensional construct; 2) the measurement of the strength-based approach (as measured by the new SBA scale) is internally consistent; and 3) whether the SBA approach is an independent organisational resource in a sample of employees in a financial institution.

A cross-sectional field survey approach was used to gather the data. An availability sample of South African employees ( $N = 165$ ) working within the financial institution was utilised. Exploratory factor analysis (EFA) was utilised to test the factorial validity of the new SBA scale and to establish whether the SBA is an independent organisational resource when other resources (supervisor support, autonomy, information and participation) were included in the analyses. The reliability of the newly-developed strengths-based approach scale was determined through Cronbach's alpha coefficient.

The findings indicated a clear one-factor model with strong item loadings ( $\alpha = 0.97$ ). When other resources were included, a five-factor model was identified, where all the items loaded on the posited factors. SBA showed significant relationships of moderate size with the other resources, supporting the independence of SBA as an independent organisational resource.

Recommendations were made for the organisations, as well as for future research.



## OPSOMMING

### **Titel:**

Die faktoriale geldigheid en betroubaarheid van 'n nuut-ontwikkelde sterkpunt-gebaseerde benaderingskaal in 'n populasië van Suid-Afrikaanse werknemers

### **Sleuteltermë:**

Sterkpunt-gebaseerde benadering, faktoriale geldigheid, betroubaarheid, organisatoriese hulpmiddels, positiewe sielkunde paradigma

Met die totstandkoming van positiewe sielkunde word daar beweer dat wanneer gefokus word op werknemers se prestasieverbetering daar nie langer gekyk moet word na die aanspreek van swakhede nie, maar dat eerder gefokus moet word daarop om kwaliteite en sterkpunte van werknemers, ook bekend as die sterkpunt-benadering (SPB) te gebruik. Die toepaslike gebruik van 'n SPB kan ervaringe in die werkplek ten goede kom. Hoewel die effek van 'n SPB op verskeie werknemeruitkomstë (soos werkbetrokkenheid, ondernemendheid, toewyding, en produktiwiteit) belangrik is om te ondersoek, is daar geen instrument beskikbaar om te meet of werknemers ervaar dat die werkplek optimaal daarop gefokus is om hulle sterkpunte te meet, gebruik en toe te pas in die werkplek nie. Om hierdie gaping aan te spreek is 'n nuwe skaal ontwikkel om werknemers se persepsies oor 'n organisatoriese SPB te meet. Die skrywers definieer 'n SPB as werknemers se persepsies oor die mate waartoe die formele en informele beleide, praktyke en prosedures in hulle organisasies fokus op die benutting van hulle sterkpunte. Die skaal is ingebed in die raamwerk van drie modelle, naamlik die Job Demands-Resources (JD-R) Model, die Broaden-and-Build teorie van positiewe emosies, en die Happy-Productive Worker stelling.

Die doelwitte van hierdie studie was om te bepaal of 1) die sterkpuntbenadering (soos gemeet met die nuwe SPB-skaal) 'n een-dimensionele konstruk is; 2) die meting van die sterkpuntgebaseerde benadering (soos gemeet met die nuwe SPB-skaal) intern samehangend is; en 3) die SPB-benadering organisatories-onafhanklik is.

'n Deursnee-veldoorsig benadering is gebruik om die data in te samel. 'n Beschikbaarheidssteekproef van Suid-Afrikaanse werknemers ( $N = 165$ ) wat in 'n finansiële instansie werk is gebruik. Ondersoekende faktoranalise is gebruik om die faktoriale geldigheid van die nuwe SPB-skaal te bepaal en vas te stel of SPB 'n onafhanklike organisatoriese hulpmiddel is as ander hulpmiddels (toesighouerondersteuning, outonomie,

inligting en deelname) in die analyses ingesluit word. Die betroubaarheid van die nuut-ontwikkelde sterkpuntgebaseerde benaderingskaal is vasgestel deur Cronbach se alfa-koëffisiënt.

Die bevindinge dui op 'n duidelike een-faktormodel met sterk item-beladings ( $\alpha = 0.97$ ). As ander hulpmiddels ingesluit is, is 'n vyf-faktormodel geïdentifiseer, waar al die items op die veronderstelde faktore gelaai is. Die SPB toon beduidende mediumgrootte verhoudinge met ander hulpmiddels, en dit ondersteun die onafhanklikheid van die SPB as 'n onafhanklike organisatoriese hulpmiddel.

Aanbevelings is gemaak vir organisasies, sowel as vir toekomstige navorsing.

# **CHAPTER 1**

## **INTRODUCTION**

This mini-dissertation investigates the psychometric properties of a newly-developed strengths-based approach (SBA) scale in a sample of South African employees working within the banking sector. More specifically, this study will focus on the factorial validity and reliability of the new scale, and explores whether an SBA can be viewed as an independent organisational resource (compared to supervisor support, autonomy, information, and participation).

This chapter encapsulates the problem statement, the research objectives (general and specific), the research method, as well as an overview of chapters to follow.

### **1.1 PROBLEM STATEMENT**

Organisations in a competitive environment seek to reach a state where they make optimal use of their allocated resources, reach the utmost level of effective and efficient functioning, and where performance deemed as excellent and outstanding is universal (Van Woerkom & Meyer, in review). In short, organisations strive to flourish. Pinto (2007) states that in the drive for improvement, an organisation's biggest investment and chief asset is its human capital. For organisations to reach their potential of optimal flourishing, they need to invest in human capital (i.e., their employees). Human capital can be isolated as the mechanism through which organisations exceed expectations and performance.

Acknowledging human capital as a valuable asset (Pfeffer, 1998), most organisations are concerned with fixing the weaknesses of their employees instead of investing in their strengths (Stienstra, 2010). A weakness can be defined as a shortage or misapplication of talent, skill or knowledge that causes problems for the individual, and/or for others (Mvulane, 2007). Based on the postulation that the utmost potential for performance improvements lies in the weaknesses of individuals, most Human Resource Development practices are following a deficiency-based approach (DBA) (Buckingham & Clifton, 2001). A DBA has the tendency to focus on aspects, within an individual that are not working satisfactorily. These fragilities are then improved via training, coaching and other means (Clifton & Harter, 2003). Leadership development efforts used in the past within companies tend to be concerned with the conservative view on correcting

weaknesses and, at best, achieve only minimal improvements without providing a strategy for making “good” leaders “great” (Trinka, 2004).

With the introduction of the positive psychology paradigm, today’s organisations are beginning to realise that the workplace needs to have a more balanced view that considers the positive as well as the negative aspects (Luthans & Youssef, 2007). Positive psychology is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions (Gable & Haidt, 2005) and is an umbrella term for the study of positive emotions, positive character traits, and enabling institutions (Seligman, Steen, Park & Peterson, 2005). Organisational researchers also appear to show a greater drive toward a positive psychology movement, which results in numerous tributaries including positive organisational scholarship (Cameron & Caza, 2004; Cameron, Dutton & Quinn, 2003), positive organisational behaviour (Luthans, 2002), strengths coaching (Govindji & Linley, 2007; Linley & Harrington, 2006) and strengths-based development (Hodges & Clifton, 2004).

In line with the new focus on positive organisational behaviour, Buckingham and Clifton (2001) argue that the potential for employee improvement no longer rests with addressing weaknesses but rather by focusing on using the qualities and strengths of employees, otherwise known as following a strengths-based approach (SBA). The SBA is a positive technique, has its roots in positive psychology and focuses on influencing outcomes of the individual and organisation by focusing on the identification, development, and use of employee’s strengths (Stienstra, 2010). It therefore forms a new, dynamic approach to human resource management that targets the achievement of high levels of individual and organisational outcomes by a process of identifying and valuing employee talents, developing them into applicable strengths, and putting these strengths into practice (Van Woerkom & Meyer, in review).

According to Trinka (2004) the best leaders cannot be identified by the absence of shortcomings, but more likely through the qualities that lead to their success. Moreover, the recognition and appreciation of strengths and the focus on success instead of failure can create a positive energy, which seems to produce greater engagement and drive for change. Relying on the positive psychology undertaking, Clifton and Harter (2003) held that the SBA can be seen as “identification of positive personal and interpersonal traits (talents), in order to position and develop individuals to increase the frequency of positive subjective experience” (p. 114). The authors further stated that the success of the SBA is related to the “enduring nature of positive emotions, which serves to broaden and build the individual’s thoughts and actions and produce enduring resources for the future” (p. 115). Seligman (2002) also argues that treatment is not only fixing what is wrong but also

building what is right.

The appropriate use of strengths might improve experiences in the workplace (Elston & Boniwell, 2011). Harter, Schmidt and Hayes (2002) found that the use of strengths could increase employee engagement. Learning, becoming aware of and using one's strengths is also valuable at the individual level. Benefits include positive emotions, feeling more valued at work, a more positive focus, greater sense of authenticity and renewed willingness to take action (Elston & Boniwell, 2011). Following an SBA is therefore likely to impact the performance of organisations. Direct relationships between an SBA, attendance and productivity have been identified. SBA has also been linked to increases in employee engagement, which has been strongly linked to business outcomes including profitability, turnover, safety and customer satisfaction (Harter et al. 2002). Hence, an SBA appears to hold positive outcomes for both the individual and organisation and is likely to have a profound effect on the bottom-line within companies.

It can be argued that the SBA does not show much variation from another approach known as high-involvement work systems (Huselid, 1995; Lawler, 1986; Pfeffer, 1998), in that this approach similarly strives for individuals and organisations to flourish. Critics, however, argue that high-involvement work systems may have negative effects on employee well-being due to the intensification of work (Boxall & Macky, 2008). This is in contrast with the SBA approach, which views organisational resources as a vehicle in supporting the strategies needed to cope with high job demands (Bakker, Demerouti & Euwema, 2005), consequently promoting employee well-being. Boxall and Macky (2009) conversely argue that high-involvement work systems focus on human resource practices, and appear to be inattentive to their operating practices. Boxall and Macky (2009) suggest a shift from what we do, to how it works. The way in which processes work can be explained by the SBA, through grouping the importance of identifying strengths, developing strengths, and using strengths and the value add to organisational performance. Literature in the areas of positive organisational scholarship, appreciative inquiry, strengths coaching and positive organisational behaviour appears to be theoretical in nature. The empirically-based literature is also mainly concerned with positive subjective experiences and positive individual characteristics, rather than positive organisations and communities (Gable & Haidt, 2005). According to Gable and Haidt (2005) a great need exists for literature within the positive psychology realm with specific emphasis on new interventions contributing to the functioning of workplaces. It is therefore necessary to develop an organisational SBA to human resource management that anticipates the implementation of a positive psychology viewpoint in organisations, the benefits, as well as indications of who benefits most from following an SBA in an organisational setting.

Most instruments within the positive psychology realm are used to identify individual strengths. Two well-known instruments are the Clifton StrengthsFinder (Clifton & Harter, 2003) and the Values in Action questionnaire (Peterson & Seligman, 2004). The international research-based consultancy firm, Gallup, developed the Clifton StrengthsFinder. This questionnaire explores the nature of human talents and strengths in the organisational context (Clifton & Harter, 2003). The Values in Action questionnaire describes and classifies strengths and virtues that enable human prospering. However, there is a need to investigate what the effects are if organisations focus on and optimally *use* employees' strengths. Although the effect of an SBA on several employee outcomes (work engagement, innovativeness, commitment, productivity etc.) seems important to investigate, there is no available instrument that can measure whether employees perceive their organisations as optimally focusing on, using and applying their strengths and talents in the workplace.

In order to address this gap, a new scale was developed to measure employees' perceptions of an organisational SBA (Els, Mostert, Van Woerkom, Rothmann & Bakker, in review). These authors define an SBA as employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisation focus on the use of their strengths. The scale is rooted in the framework of three models, namely the Job Demands-Resources (JD-R) Model (Demerouti & Bakker, 2011), the Broaden-and-Build theory of positive emotions (Frederickson, 2004), and the Happy-Productive Worker Thesis (Cropanzano & Wright, 2001).

The JD-R Model, a recently developed model aimed at studying job characteristics, states that work characteristics can be divided into two categories, namely organisational demands and organisational resources (Bakker, Van Veldhoven & Xanthopoulou, 2010). According to Demerouti and Bakker (2011) this model can be utilised within various occupational settings, regardless of the job demands and organisational resources involved. Job demands refer to those physical, psychological, social, or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs. Organisational resources refer to those physical, psychological, social, or organisational aspects of the job that are either/or: 1) functional in achieving work goals; 2) reduce job demands and the associated physiological and psychological costs; and 3) stimulate personal growth, learning, and development (Demerouti & Bakker, 2011).

According to Demerouti and Bakker (2011), organisational resources can be positioned at different functional levels, namely: the organisational level (e.g., career opportunities, job security and remuneration), the interpersonal level (e.g., team culture, support from superiors and colleagues), the job level (e.g., role clarity, decision-making involvement), and the task level (e.g., autonomy, performance feedback and skill

variety). Furthermore, organisational resources can adopt an intrinsic motivational role or an extrinsic motivational role (Deci & Ryan, 1985). The former suggests that organisational resources are likely to foster growth, as well as learning and development in employees. For example, appropriate feedback on job performance is likely to develop and enrich job competence (Van den Broeck, Vansteenkiste, De Witte & Lens, 2008). The latter is referring to the influence organisational resources have on work goal achievement (Deci & Ryan, 1985). Van den Broeck, A., Vansteenkiste, M., De Witte, H., and Lens, W. (2008) state that the opportunity to participate in decision-making is likely to satisfy the need for autonomy, and the support from a supervisor and colleagues may satisfy the employee's need to belong. According to the effort-recovery model (Meijman & Mulder, 1998), people tend to be increasingly motivated to perform and achieve work goals when they have access to a variety of resources provided by the work environment. The SBA (being considered a job resource at the organisational or macro level) may consequently be viewed as playing an extrinsic motivational role – 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).

The broaden-and-build theory of positive emotions was developed by Barbara Frederickson (2004) and holds that positive emotions broaden an individual's momentary thought-action repertoire. For example, joy incentivises the desire to play, and interest incentivises the desire to explore. Through this action, positive emotions encourage the identification of unique and imaginative actions, ideas, and social bonds, resulting in the construction of an individual's personal resources. These resources may act to enhance coping skills in the future. The gist of this theory lies with the notion that positive emotions are seen as ways to attain psychological growth and improved psychological and physical well-being in the long run (Frederickson, 2004). Frederickson (2001) also postulates that thoughts and actions produced from positive affects are more diverse in nature and less specific than thoughts and actions produced by negative affect. Broad-minded thinking generated through positive affect is therefore likely to enhance innovativeness (Frederickson, 2003) and may also have a link to organisational citizenship behaviour (Cohn & Frederickson, 2006). It can therefore be reasoned that, through applying an SBA in the work setting, employees are equipped to produce positive emotions, which result in high quality work and the motivation to excel at work tasks.

The happy-productive worker thesis as developed by Cropanzano and Wright (2001) postulates that the positive link between the experience of frequent positive affect and performance results from a series of motivational mechanisms including heightened quality in relationships and social support. The latter motivational mechanisms can be seen as organisational resources with an extrinsic

motivational role, which influences the achievement of work tasks (Deci & Ryan, 1985). Studies have demonstrated a positive link between positive affectivity and job performance (Staw & Barsade, 1993; Wright & Staw, 1999). The SBA is said to promote employee engagement, which in turn is likely to lead to increased performance (Van Woerkom & Meyer, in review). Positive affectivity also plays a moderating role in the relationship between SBA and performance. Individuals who have a tendency to experience positive feelings are therefore inclined to perform better (Van Woerkom & Meyer, in review).

Before the new scale (Els et al., in review) was developed, a search was conducted for similar questionnaires. Only two questionnaires could be found that focus on measuring employees' perceptions of the way in which their organisations utilise their strengths. The Strengthspotting scale is a self-report questionnaire that aims to identify the ability to recognise strengths in others (Linley, Garcea, Hill, Minhas, Trenier & Willars, 2010). Based on professionals being opposed to using predetermined frameworks and open-ended expression of strength techniques to identify strengths, the questionnaire was developed (Linley et al, 2010). This questionnaire, however, neglects to measure whether employees experience their organisations as following an SBA. Van Woerkom and Meyer (in review) developed a questionnaire in order to measure the perceptions of employees with regard to an organisational SBA. This Dutch questionnaire covers all the aspects of SBA and is based on the Strengths Knowledge Scale (Govindji & Linley, 2007), the Strengths Use scale (Govindji & Linley, 2007), and the Gallup Workplace Audit (Harter, Schmidt & Hayes, 2002). In short, it measures whether employees feel that their organisations identify, use, develop and appreciate their strengths. Principal component analysis was used to verify the factor structure (Meyers, 2010). The results showed that a forced three-factor solution could be obtained. However, the eigenvalue of the first factor was 11.15 and explained 44.59% of the variance, indicating that there was mainly one significant encompassing factor underlying most of the items.

Based on these findings, a new SBA scale (Els et al., in review) was designed with the aim to address one dimension – employees' perceptions of the effectiveness of their organisations' SBA in using their strengths. Participants are asked to respond to statements regarding the use of their strengths by their organisation – i.e. how the role of the organisation with regards to the use of employee strengths is perceived. A four-step procedure was followed in the development of the new scale, namely: initial construct conceptualisation, item generation and evaluation, item development, and item refinement (DeVellis, 2003).

It is important to validate the new SBA scale for different occupational groups in South Africa, including the banking sector. In the competitive marketplace, organisations such as banks need to be functioning optimally. A top priority for banks within this setting is to identify and nurture its internal talent (Kumudla & Abraham,



2008). This is important not only for survival but also to maintain a competitive advantage. Banks are in need of an appropriate approach to talent management as satisfied employees are beneficial to their functioning (Kumudla & Abraham, 2008). The amount of profitability related to the work that employees deliver indicates that the overall effectiveness of the bank cannot be divorced from employees' effectiveness (Pickens, 1996). Employees who realise their strengths and are capable of using them within the workplace are likely to be more efficient in their work tasks (Stienstra, 2010).

The main focus of this research project is to examine the factorial validity and reliability of this newly-developed SBA scale. This will be done by first testing the factor structure of only the SBA items. Since it is conceptualised as an organisational resource, the factorial validity will be examined in an exploratory factor analysis together with other organisational resources (supervisor support, autonomy, information and participation).

Based on the above problem statement, the following research questions can be formulated:

- What can be found in the literature with regards to an SBA?
- What is the factorial validity of the new SBA scale?
- What is the reliability of the new SBA scale?
- Can an SBA be seen as an independent organisational resource when other organisational resources (supervisor support, autonomy, information, and participation) are included in a factor analysis and correlation matrix. In other words is there substantial overlap between an SBA and other organisational resources?

## **1.2 RESEARCH OBJECTIVES**

The research objectives can be divided into a general objective and specific objectives.

### **1.2.1 General objectives**

The general objective of this study is to determine the factorial validity and reliability of the newly-developed South African SBA scale and to determine whether an SBA is an independent organisational resource.

## **1.2.2 Specific objectives**

The specific objectives of this study are:

- To conceptualise an SBA according to the literature.
- To investigate the factorial validity of the SBA scale.
- To determine the reliability of the SBA scale.
- To determine whether an SBA can be seen as an independent organisational resource when other organisational resources (supervisor support, autonomy, information, and participation) are included in a factor analysis and correlation matrix (i.e. to determine whether there is substantial overlap between SBA and other organisational resources).

## **1.2.3 Hypotheses**

The following hypotheses will be investigated in the remainder of this chapter:

Hypothesis 1: The strength-based approach (as measured with the new SBA scale) is a one-dimensional construct.

Hypothesis 2: The measurement of the strength-based approach (as measured by the new SBA scale) is internally consistent (Cronbach alpha  $\geq 0.70$ ).

Hypothesis 3: The strength-based approach is an independent organisational resource.

## **1.3 RESEARCH METHOD**

The research method includes a literature review, as well as an empirical study. This study followed a quantitative, non-experimental design with a cross-sectional survey approach, suggesting that participants completed the questionnaire at one point in time.

The findings are presented in the form of a research article.

### **1.3.1 Literature review**

During the first phase of this study the psychometric properties of a newly-developed SBA scale is reviewed. These properties include factorial validity, reliability, and determining whether SBA can be seen as a separate job resource when other organisational resources (supervisor support, autonomy, information, and

participation) are included in a factor analysis. Relevant, recently published articles will be consulted via the following databases: EbscoHost, Emerald, Google scholar, Google books, and Science Direct. Applicable journals that support this topic will be accessed. These include: South African Journal of Industrial Psychology, International Coaching Psychology Review, Journal of Applied Psychology and the Management Journal, Journal of Occupational Health psychology, The American Behavioral Scientist, Psychological Inquiry, International Coaching Psychology Review, American Scientist, Review of general Psychology, The Academy of Management Journal, The Psychologist, Journal of Organisational Behavior, Journal of management, Industrial and Labor Relations Review, American Psychologist, Administrative Science Quarterly, and Organisational Science.

### **1.3.2 Research participants**

The respondents consist of 165 participants from the banking sector in South Africa. The sample is regarded as a convenience sample. Both genders, different marital statuses, various age groups, and different ethnic groups (African, White, Coloured and Indian) are represented. The educational level required of the participants is a minimum of a Grade 12 certificate. A good command of the English language is essential in order to complete the scale successfully. The demographic composition of the sample was representative of a diverse South Africa.

### **1.3.3 Measuring instrument(s)**

*Biographical Questionnaire.* The biographical characteristics are collected through the use of a biographical questionnaire. Date of birth, age, gender, home language, ethnicity, educational level, marital and parental status, as well as years of employment with current organisation and current position held within the organisation form the basic biographical characteristics that this questionnaire measures.

*Strength-based approach.* The newly-developed South African SBA scale is used to measure employees' perceptions of their strength-use in their organisation. The SBA scale consists of eight items, developed to measure employees' perceptions of the extent to their organisation focus on the use of their strengths (Els et al., in review). An example of an item is "This organisation uses my strengths". The scale makes use of a frequency-based response format scale: 0 (Almost never), 1 (Rarely), 2 (Occasionally), 3 (Sometimes), 4 (Frequently), 5 (Usually) and 6 (Almost always).

*Organisational resources.* Four other organisational resources are measured with a questionnaire on the experience and assessment of work (Van Veldhoven, Meijman, Broersen & Fortuin, 1997), including

supervisor support (four items, e.g. “Can you count on your superior when you come across difficulties in your work?”), autonomy (four items, e.g. “Can you decide on the content of your work activities yourself?”), information (four items, e.g. “Do you receive sufficient information on the results of your work?”) and participation (four items, e.g. “Can you participate in decisions affecting issues related to your work?”). All items are rated on a Likert-response scale ranging from 1 (*never*) to 4 (*always*). The Cronbach alpha coefficients for the four organisational resources are acceptable:  $\alpha = 0.90$  for supervisor support;  $\alpha = 0.81$  for autonomy;  $\alpha = 0.89$  for information; and  $\alpha = 0.87$  for participation 0.87 (Van Veldhoven, Meijman, Broersen & Fortuin,1997).

### **1.3.4 Research procedure**

Authorisation is obtained from managers of the respective organisations to permit the use of data for research purposes. The participants are asked to grant informed consent, before the commencement of the data-collection process, which is elicited through self-administered, self-report questionnaires. The participants are provided with a letter preceding the completion of the questionnaire that states the purpose of the study and confirms the confidentiality of their responses. The questionnaires are sent electronically, and contain questions with regards to biographical information, as well as responses to the SBA scale and the organisational resources questionnaire. Feedback will be provided to the department head on the findings of this study. This feedback may be distributed to all levels of participants.

### **1.3.5 Statistical analysis**

The statistical analysis is conducted through the use of the SPSS programme (SPSS Inc., 2011, version 20). The factorial validity of the new SBA scale is tested using exploratory factor analysis (EFA). Due to the SBA scale being newly-developed, there is no empirical research that has been done on the factor structure within the South African context. Consequently, EFA is seen as the preferred method in determining the factor structure of the newly developed SBA scale. EFA is furthermore used to identify the underlying factor structure of the newly-developed SBA scale with other organisational resources (including supervisory support, autonomy, information, and participation). Scree plots together with eigenvalues are used to determine the number of underlying factors of the scale (Floyd & Widaman, 1995; Zwick & Velicer, 1986). Where the scree plot indicates a one-factor model, a principal component extraction is used. The latent structure of the SBA is explored through principal axis factoring with maximum likelihood extraction approach with the items of the other organisational resources. EFA is conducted using an oblimin rotation where there are more than one factor and if the factors prove to be related. In the case where the opposite is

true, a principal component analysis is done using a varimax rotation (Tabachnik & Fidell, 2001).

Cronbach's alpha coefficient is used to assess the reliability of the scale (Clark & Watson, 1995). To determine the nomological net between the SBA subscale and other organisational resources (supervisory support, autonomy, information, and participation), the product-moment correlation coefficient is used. The statistical significance level is set at a 95% confidence interval level ( $p \leq 0.05$ ). Effect size is considered to estimate the practical significance, due to the likelihood that statistical significant results show little practical significance (Cohen, 1988; Steyn, 2002). According to Steyn (2002), effect size should recognise the practically important results. The correlation coefficient's practical significance cut-off point is set at 0.30 (moderate effect) and 0.50 (large effect) (Cohen, 1988).

### **1.3.6 Ethical considerations**

For this study to be deemed successful, careful considerations of fairness and ensuring the ethical conduct of research are vital. Ethical issues such as voluntary participation, informed consent, doing no harm, confidentiality and privacy is being taken into account (Devous, 2002).

## **1.4 OVERVIEW OF CHAPTERS**

The results of the research objectives are discussed in Chapter 2, in the form of a research article. The conclusions, limitations and recommendations of this research are included in Chapter 3.

## **1.5 CHAPTER SUMMARY**

The problem statement and research objectives were presented in this chapter. An overview of the measuring instruments and the research method used in this study was provided, followed by a brief summary of the chapters that follow.

## REFERENCES

- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180.
- Bakker, A. B., Van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model thriving on high job demands and resources. *Journal of Personnel Psychology, 9*(1), 3-16.
- Boxall, P., & Macky, K. (2008). *High-performance work systems and employee well being: Does employee involvement really intensify work?* Auckland, New Zealand: University of Auckland.
- Boxall, P., & Macky, K. (2009). Research and theory on high performance-work systems: Progressing the high involvement stream. *Human Resource Management Journal, 19*(1), 3-23.
- Buckingham, M., & Clifton, D. O. (2001). *Now, discover your strengths*. New York, NY: Free Press.
- Cameron, K. S., & Caza, A. (2004). Introduction: Contributions to the discipline of positive organizational scholarship. *The American Behavioral Scientist, 47*(6), 731-739.
- Cameron, K. S., Dutton, J. E., & Quinn, R. E. (2003). Foundations of positive organizational scholarship. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 3-13). San Francisco, CA: Berrett-Koehler.
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7*(3), 309-319.
- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). San Francisco, CA: Berrett-Koehler.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (Rev. ed.). Orlando, FL: Academic Press.
- Cohn, M. L., & Frederickson, B. L. (2006). Beyond the moment, beyond the self: Shared ground between selective instrument theory and the Broaden-and-Build Theory of Positive Emotions. *Psychological Inquiry, 17*, 39-44.
- Cropanzano, R., & Wright, T. A. (2001). When a “happy” worker is really a “productive” worker: A review and further refinement of the happy-productive worker thesis. *Consulting Psychology Journal: Practice and Research, 53*(3), 182-199.
- Deci, E. L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press.
- Demerouti, E., & Bakker, A. B. (2011). The job demands–resources model: Challenges for future research. *South African Journal of Industrial Psychology, 37*(2), 1-9.
- Devellis, R. F. (2003). *Scale development: Theory and application* (2nd ed). Thousand Oaks, CA: Sage Publications.

- Devous, D. (2002). *Surveys in social research*. Sydney, Australia: Routledge.
- Els, C., Mostert, K., Van Woerkom, M., Rothmann, S. Jnr., & Bakker, A. B. (in review). Following a strength-based and deficiency-based approach: The development and psychometric properties of a new scale.
- Elston, F., & Boniwell, I. (2011). A grounded theory study of the value derived by women in financial services through a coaching intervention to help them identify their strengths and practice using them in the workplace. *International Coaching Psychology Review*, 6(1), 16-32.
- Floyd, F. J., & Widaman, K. F. (1995). Factor Analysis in the Development and Refinement of clinical assessment instruments. *Psychological Assessment*, 7(3), 286-299.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The Broaden and build theory of positive emotions. *The American Psychologist*, 56(3), 218-226.
- Frederickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American Scientist*, 91, 330-335.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society*, 359, 1367-1377.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103-110.
- Govindji, R., & Linley, P. A. (2007). Strengths use, self-concordance and well-being: Implications for strengths coaching and coaching psychologists. *International Coaching Psychology Review*, 2(2), 143-153.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87, 268-279.
- Hodges, T. D., & Clifton, D. O. (2004). Strengths-based development in practice. In P. A. Linley, & S. Joseph, (eds.). *Positive psychology in practice* (pp. 256-268). Hoboken, NJ: Wiley.
- Kumudha, A. & Abraham, S. (2008). Organization career management and its impact on career satisfaction: A study in the banking sector. *Journal of Bank Management*, 7(3), 48-58.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *The Academy of Management Journal*, 44(5), 1039-1050.
- Lawler, E. E. (1986). *High-involvement management. Participative strategies for improving organizational performance*. San Francisco, CA: Jossey-Bass.
- Linley, P. A., Garcea, N., Hill, J., Minhas, G., Trenier, E., & Willars, J. (2010). Strengthspotting in coaching: Conceptualisation and development of the Strengthspotting Scale. *International Coaching Psychology Review*, 5(2), 165-176.

- Linley, P. A., & Harrington, S. (2006). Playing to your strengths. *The Psychologist*, 19(2), 86-89.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23(6), 659-706.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management*, 33, 321-349.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth & H. Thierry (Eds.), *Handbook of Work and Organizational Psychology* (pp. 5-33), Hove, UK: Psychology Press.
- Meyers, M. C. (2010). *Strengths-based development and its influence on positive emotions, employee innovativeness and organizational citizenship behaviour*. (Unpublished masters' thesis). Tilburg University, The Netherlands.
- Mvulane, M. (2007). *The use of strengths-based development practices in large South African businesses* (Unpublished master's thesis). University of Pretoria, South Africa.
- Peterson, C., & Seligman, E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston, MA: Harvard Business School Press.
- Pickens, D. D. (1996). *The effect of a human resource development plan on the attitude and behaviour of bank employees*. (Doctoral dissertation). University of Mississippi, United States of America.
- Pinto, J. (2007). *Investing in human capital, people assets*. Retrieved May, 15, 2011, from the world wide web <http://www.automation.com/resources-tools/articles-whitepapers/articles-by-jim-pinto/investing-in-human-capitalpeople-assets>
- Seligman, M. E. P. (2002). *Handbook of positive psychology*. Retrieved from [http://212.26.15.55/files2/tiny\\_mce/plugins/filemanager/files/281464/positiev%20psychology.pdf](http://212.26.15.55/files2/tiny_mce/plugins/filemanager/files/281464/positiev%20psychology.pdf)
- Seligman, E. P., Steen, A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American Psychologist*, 60(5), 410-421.
- SPSS Inc. (2011). *SPSS 20.0 for Windows*. Chicago, IL: SPSS Inc.
- Staw, B. M., & Barsade, S. G. (1993). Affect and managerial performance: A test of the sadder-but-wiser vs. happier-and-smarter hypotheses. *Administrative Science Quarterly*, 38(2), 304-331.
- Steyn, H. S. (2002). Practically significant relationships between two variables. *South African Journal of Industrial Psychology*, 28(3), 10-15.
- Stienstra, M. (2010). *Strength based development as organizational approach* (Unpublished masters' thesis). University of Tilburg, the Netherlands.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed). Boston, MA: Allyn &



Bacon.

- Trinka, K. (2004). *What's a manager to do?* Retrieved April, 13, 2011, from the world wide web <http://pnwbc.com/PDF/whats-a-manager-to-do.pdf>
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationship between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work and Stress, 22*(3), 277– 294.
- Van Veldhoven, M., Meijman, T. F., Broersen, J. P. J., & Fortuin, R. J. (1997). *Handleiding VBBA: Onderzoek naar de beleving van psychosociale arbeidsbelasting en werkstress met behulp van de vragenlijst beleving en beoordeling van de arbeid* [Manual VBBA: Research on the experience of psychosocial workload and job stress by means of the Questionnaire on the Experience and Evaluation of Work]. Amsterdam: SKB.
- Van Woerkom, M., & Meyer, C. (in review). Making happy and unhappy workers flourish: The effects of a strength-based approach. Paper submitted for publication.
- Wright, T. A., & Staw, B. M. (1999). Affect and favourable work outcomes: Two longitudinal tests of the happy productive worker thesis. *Journal of Occupational Health Psychology, 20*(1), 1-23.
- Zwick, W. & Velicer, W. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin, 99*, 432-442.

## **CHAPTER 2**

### **RESEARCH ARTICLE 1**

# THE FACTORIAL VALIDITY AND RELIABILITY OF A NEWLY-DEVELOPED STRENGTH-BASED APPROACH SCALE IN A SAMPLE OF SOUTH AFRICAN EMPLOYEES

## ABSTRACT

**Orientation:** A strength-based approach (SBA) scale was developed to determine employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisations focus on the use of their strengths.

**Research purpose:** To ascertain the validity and reliability of the newly-developed SBA scale and to establish whether SBA is an independent organisational resource.

**Motivation for the study:** Knowing the validity and reliability of a newly-developed SBA scale assists in measuring this aspect accurately. Measuring it with other organisational resources could assist in establishing its independence as an organisational resource.

**Research design, approach and method:** A cross-sectional field survey approach was used to gather the data. A convenience sample of South African employees ( $N = 165$ ) working within the financial institution was utilised. Exploratory factor analysis (EFA) was utilised to test the factorial validity of the new SBA scale and to establish whether SBA is an independent organisational resource when other resources (supervisor support, autonomy, information and participation) are included in the analyses. The reliability of the newly-developed strengths-based approach scale was determined through Cronbach's alpha coefficient.

**Main findings:** The findings indicated a clear one-factor model with strong item loadings ( $\alpha = 0.97$ ). When other resources were included, a five-factor model was identified, where all the items loaded on their posited factors. SBA showed significant relationships of medium size with the other resources, supporting the independence of SBA as an independent organisational resource.

**Practical/Managerial implications:** A valid and reliable SBA scale could improve the identification of employees' perceptions of SBA initiatives within their organisations. This, in turn, could lead to increased SBA awareness within organisations and assist in determining the influence and value of an SBA intervention.

**Contribution/Value-add:** This study contributes to the limited research available in South Africa pertaining to whether employees perceive their organisations to be using their strengths. Evidence for the validity and reliability of the SBA scale will allow for future research on the strengths-based approach.

**Keywords:** strengths-based approach, factorial validity, reliability, organisational resources, positive psychology paradigm.

## INTRODUCTION

Knowing the impact that environmental factors within the workplace have on employee productivity and morale could hold many benefits for organisations and individuals (Castro & Martins, 2010), including optimising resources to be as effective and efficient as possible. For organisations to reach their potential and to flourish, they have to invest in human capital (i.e., their employees). Human capital constitutes the most important resource for stimulating optimal functioning and organisational productivity (Pinto, 2007). However, in the drive to optimise human capital, most organisations are concerned with fixing the weaknesses of their employees instead of investing in their strengths (Stienstra, 2010). That is, many organisations employ a deficiency-based approach (DBA).

When following a DBA, *weaknesses* are seen as the focus of employees' development plans. The aim is therefore to identify and rectify employees' limitations (Bouskila-Yam & Kluger, 2011; Clifton & Harter, 2003; Harris & Thoresen, 2006). In any organisation, the identification of weaknesses is necessary and is associated with the reduction of unrealistic expectations, dealing with and realising the reality of a situation, and allowing others to contribute to the situation (Linley, Govindji, & West, 2007). However, it is also related to negative aspects including the tendency to drain energy levels of employees and could lead to negative feelings such as frustration and anxiety (Page & Vella-Broderick, 2008). A DBA might furthermore reduce chances of employees to deliver their ultimate contributions and hinder optimal performance and the sense of well-being (Roberts, Spreitzer, Dutton, Quinn, Heaphy & Barker, 2005). Studies supporting this approach show only minimal improvement in employee behaviour, and provide few if any suggestions for reaching excellence (Trinka, 2004).

With the emergence of the positive psychology paradigm, organisational psychologists have come to the realisation that weaknesses need to be managed and the focus should move towards improving employee strengths and talents. This is known as following a strengths-based approach (SBA) (Buckingham & Clifton, 2001). In contrast to a DBA, an SBA aims to reach optimal functioning not through improving weaknesses, but through building strengths (Roberts et al., 2005). An SBA is therefore viewed as a positive technique, which aims to improve individual and organisational productivity by emphasising the identification, development, use and appreciation of employee strengths (Stienstra, 2010).

It is evident that an SBA holds many benefits for both the individual and organisation (Harter, Schmidt & Hayes, 2002; Elston & Boniwell, 2011). Employees who capitalise on strengths use are seen to be more engaged within the work setting (Harter, Schmidt & Hayes, 2002), show increased rates of development

(Minhas, 2010) and ultimately better work performance (Smedley, 2007; Stefanyszyn, 2007). A Gallup study conducted at a school in the United States found that the employment of an SBA generated lower levels of absenteeism and tardiness (Harter, 1998). Similar results were found when an SBA was employed by organisations. According to Hodges and Clifton (2011) the Toyota North American Parts Center California (NAPCC) had the desire to improve their work teams through employing a strengths-based intervention (Connelly, 2002). The results culminated in a 6% increase in per-person-productivity as well as a further 9% increase in productivity within six months (Hodges & Clifton, 2011). Benefits for the individual include the experience of positive emotions (Govindji & Linley, 2007), an increased sense of authenticity, and enthusiasm to take action (Elston & Boniwell, 2011) and is also related to increased well-being (Proctor, Maltby, & Linley, 2010; Seligman, Steen, Park & Peterson, 2005).

Although it seems important to study the effectiveness of an SBA, limited empirical research has been carried out on how employees perceive their organisations, effectiveness in identifying and using their strengths (Gable & Haidt, 2005). The available research appears to be mostly theoretical in nature and concerned with positive subjective experiences and positive individual characteristics, rather than positive organisations and communities (Gable & Haidt, 2005). Furthermore, a strong need exists for empirical research within the positive psychology paradigm with specific emphasis on new interventions contributing to the functioning of workplaces (Gable & Haidt, 2005). It is therefore necessary to develop an organisation-based SBA to human resource management that anticipates the implementation of a positive psychology viewpoint in organisations. It is also important to empirically investigate the benefits as well as indications of who benefits most from following an SBA in organisations.

This is also true for the finance sector. However, little research could be found with regards to the well-being of employees within the financial sector, specifically pertaining to the effect that a SBA might have. However, it has been noted that the economic downturn has made it imperative for banks to identify and nurture internal talent in order to stay afloat and maintain a competitive advantage within the marketplace (Kumudla & Abraham, 2008). Banks benefit from satisfied employees. Analysing the profit made by banks has shown that employee effectiveness has contributed to the overall effectiveness of these organisations (Pickens, 1996). Employee happiness within the financial sector should therefore produce positive benefits, such as better job performance for both the employee and those whom he/she interacts with (Kaya, Koc & Topcu, 2010; Wright & Cropanzano, 2004). It therefore seems important to investigate the effects of an SBA also on employees in the financial sector.

A main limitation in reaching the above goals is the lack of instruments measuring the perceptions of employees and the use of their strengths in their organisations. Although instruments and studies exist which aim to identify and describe individual strengths (e.g., the Values in Action, Peterson & Seligman, 2004; and the Clifton StrengthsFinder, Clifton & Harter, 2003), no instruments could be identified that measure how employees perceive their organisations to be optimally focussed on, using and applying their strengths in the workplace. Such an instrument is important in order to investigate what the effects are if organisations focus on and optimally use employees' strengths (where effects could include work engagement, innovativeness, commitment, and productivity).

In order to address this gap, a new SBA scale was developed (Els, Mostert, Van Woerkom, Rothmann, Bakker, in review). However, it is not clear what the reliability and the validity of the new scale are, specifically for employees in the financial institution. The primary purpose of this study was to a) determine the factorial validity and reliability of the newly-developed SBA scale in a sample of employees in a financial institution; and b) determine whether the newly-developed SBA scale is an independent organisational resource.

## **LITERATURE REVIEW**

### **Conceptualising a strengths-based approach**

The SBA falls within the positive psychology paradigm and is concerned with positively impacting on individual and organisational performance through the identification, development and use of strengths (Stienstra, 2010). The SBA as described by Rodríguez-Carvajal et al. (2010) is focused on optimal functioning and potential of both the employee and the organisation. As mentioned above, Els et al. (in review) recently developed a new SBA scale and define SBA as employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisation focus on the use of their strengths. The scale is rooted in the framework of three models, namely the Job Demands-Resources (JD-R) Model (Demerouti & Bakker, 2011), the Broaden-and-Build theory of positive emotions (Frederickson, 2004), and the Happy-Productive Worker Thesis (Cropanzano & Wright, 2001).

### *The Job Demands-Resources model*

The JD-R Model is a useful model to study organisational characteristics and the effect thereof on well-being. One of the basic premises of this model is that work characteristics can be divided into two categories, namely job demands and job resources (Bakker, Van Veldhoven & Xanthopoulou, 2010). Job demands refer to those physical, psychological, social or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs. Organisational resources on the other hand refer to those physical, psychological, social, or organisational aspects of the job that either are functional in achieving work goals; reduce job demands and the associated physiological and psychological costs; or stimulate personal growth, learning, and development (Demerouti & Bakker, 2011).

Organisational resources can be positioned on different functional levels, namely the organisational level (e.g., career opportunities, job security and remuneration), the interpersonal level (e.g., team culture, support from superiors and colleagues), the job level (role clarity, decision-making involvement), and the task level (e.g., autonomy, performance feedback and skill variety) (Demerouti & Bakker, 2011). Organisational resources can also adopt an intrinsic or an extrinsic motivational role (Deci & Ryan, 1985). The former suggests that organisational resources are likely to foster growth, as well as learning and development in employees (e.g., appropriate feedback on job performance is likely to develop and enrich job competence) (Van den Broeck, Vansteenkiste, De Witte & Lens, 2008). The latter refers to the influence organisational resources have on work goal achievement (Deci & Ryan, 1985).

Organisational resources have been described as job features with the ability to motivate (Hackman & Oldman, 1980). Kahn (1990) defines organisational resources as the features of the working environment that mould the way in which people engage themselves (physically, cognitively or emotionally) while performing work tasks. Organisational resources are likely to contribute to organisational commitment and lower employees' tendency towards leaving the organisation (Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003). Clifton and Harter (2003) conducted a meta-analytical study on the results of 65 firms that use employee engagement interventions. Four of these organisations made use of strengths-based interventions (study group), while the rest of the sample (control group) did not. The findings highlighted significantly higher levels of engagement for the study group than for the control group (Page & Vella-Brodrick, 2008).

Meijman and Mulder (1998) ascertained that employees are more motivated to perform and work towards goal attainment when they have support in the form of available resources. Since organisations that

emphasise both the focus on employee strengths and the development of weaknesses may facilitate motivation towards dedicated work procedures (Demerouti & Bakker, 2011), the SBA could be considered to be a resource at the organisational or macro-level (Els et al., in review). It may consequently be viewed as playing an intrinsic and extrinsic motivational role – 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).

#### *The broaden-and-build theory*

Frederickson's (2001) broaden-and-build theory suggests that positively charged emotions could be created and developed (Mills, 2010). This argument implies that the development and use of interventions could be reinforced by the broaden-and-build theory (Frederickson, 1998; Frederickson, 2001). In essence, this theory states that positive emotions increase the number of thoughts leading to a greater variety of actions to be taken by an individual, consequently broadening thought-action repertoires (Frederickson, 1998). Tugade and Frederickson (2004) demonstrate that positive emotions lead to increasingly more positive emotions, ultimately creating an upward spiral. This assists people in their resiliency levels and overall well-being (Frederickson, 2001).

The broaden-and-build theory of positive emotions also assists in the realisation of the benefits positive emotions hold for organisations to flourish (Mills, 2010). Frederickson (2001) demonstrates that a positive orientation can act as a way to affect psychological growth and increase well-being. Trait features of happiness, with specific emphasis on positive emotions, could inspire productivity over the long term (Zelenski, Murphy, & Jenkins, 2008). Positive emotions can be fostered and maintained by means of supportive working environments (Froman, 2009). Frederickson (1998, 2001) also argues that positive emotions 'broaden and build' skills and relations. Individuals experiencing moods of a positive state are more accommodating, helpful, and show lower levels of aggression (Isen & Baron 1991). These characteristics are likely to lead to improved productivity in work contexts (Zelenski et al., 2008).

#### *The happy-productive worker thesis*

Cropanzano and Wright (2001) developed the happy-productive worker thesis, which motivates a positive connection between positive affect and performance that results from a series of motivational mechanisms including heightened quality in relationships and social support. The motivational mechanisms can be seen as organisational resources with an extrinsic motivational role, which influences the achievement of work tasks (Deci & Ryan, 1985). Studies showed a positive link between positive affectivity and job performance



(Staw & Barsade, 1993; Wright & Staw, 1999). The SBA is said to promote employee engagement, which in turn is likely to lead to increased performance (Van Woerkom & Meyer, in review). Positive affectivity also plays a moderating role in the relationship of an SBA and performance. Individuals who tend to experience positive feelings are therefore inclined to perform better (Van Woerkom & Meyer, in review). Adding to the happy-productive worker thesis, research has shown connections between several measures of employee well-being (subjective) and that of job-related performance (Wright & Cropanzano, 2004). A study of MBA students supports the notion that high levels of well-being facilitate decision-making, interpersonal interaction, and help to obtain high performance ratings (Wright & Cropanzano, 2004). Employees showing signs of happiness in their work tend to be more productive and show higher levels of organisational citizenship behaviour and lower job withdrawal tendencies (Lyubomirsky, King, & Diener, 2005).

### **Measurement of the SBA**

Traditionally, practitioners use popular instruments such as the Values In Action (VIA) (Peterson & Seligman, 2004) and the Gallup Strengths Finder (Clifton & Harter, 2003) to identify individual strengths. The VIA was developed due to the failure of the Diagnostic and Statistical Manual (DSM) to identify what is right with individuals and only focussing on psychopathologies (Boniwell, 2006). Peterson and Seligman (2004) describe the VIA as mainly focusing on the description and classification of strengths and virtues that empower individuals to flourish. The Gallup organisation developed the StrengthsFinder instrument that explores the nature of strengths within the organisational setting (Clifton & Harter, 2003). Donald Clifton and Edward Anderson were interested in the aspects that contribute to excellent individual performance within the work setting and consequently interviewed top performers globally (Boniwell, 2006). This resulted in the identification of 34 strengths. They viewed a talent as the foundation of a strength in contrast to the VIA which views talents and strengths as separate constructs. Clifton and Anderson (Boniwell, 2006) explained the formation of a strength as the consequence of the refinement of a talent.

Although the VIA and StrengthsFinder assist individuals in identifying their strengths, there is a need to investigate the consequences for organisations should they use employees' strengths. A search was conducted to identify instruments that attempt to measure the way in which employees perceive their organisation's implementation of an SBA. Two questionnaires, namely the Strengthspotting scale and a questionnaire developed by Van Woerkom and Meyer (in review), have been identified.

The Strengthspotting scale was developed to measure the ability to identify the strengths of others (Linley, Garcea, Minhas, Trenier & Willars, 2010). The initial item pool consisted of 50 items of which 20

measured the big five dimensions of personality, 10 items measured optimism, 20 items measured positive affect and a further eight items measured the extent to which people realise their own strengths (Linley et al., 2010). It uses a seven-point Likert scale, ranging from 1 (strongly agree) to 7 (strongly disagree). The Strengthspotting scale consists of five domains namely: ability (how good you are at identifying strengths), emotional (emotional reaction towards the identification of strengths), motivation (level of motivation to spot strengths), application (what to do when strengths have been identified), and frequency (how often strengthspotting is practised). All five domains demonstrated very good internal consistency ( $\alpha \geq 0.82$ ) (Linley et al., 2010). This instrument, however, neglects to measure the employee's perception of whether the organisation's values use his/her strengths and rather measures the capabilities of the people who are likely to identify the strengths in others.

A Dutch designed questionnaire developed by Van Woerkom and Meyer (in review) measures employees' perceptions of whether their organisations identify, use, develop and appreciate their strengths. This questionnaire is based on the Strengths Knowledge Scale (Govindji & Linley 2007), the Strengths Use Scale (Govindji & Linley, 2007), and the Gallup Workplace Audit (Harter, Schmidt & Hayes, 2002). The items were developed in Dutch and later translated into English. The identification of strengths was measured through the use of five items (e.g., "In this organisation I am made aware of my competencies"). Seven items gauge the development of strengths (e.g., "In this organisation I am stimulated to further develop my competences"). An additional seven items assessed the use of strengths (e.g., "In this organisation I get the opportunity to do what I am good at"). Six items evaluated the appreciation of strengths (e.g., "In this organisation I receive compliments for performing well"). A five-point Likert scale was used to plot responses from one (totally disagree) to five (totally agree). Principal component analysis was used to explore the factor structure (Meyers, 2010), indicating that a forced three-factor solution could be obtained. However, the eigenvalue of the first factor was 11.15 and explained 44.59% of the variance, indicating that there was mainly one significant encompassing factor underlying most of the items.

### **The newly-developed SBA scale**

The newly-developed strength-based approach scale was designed with the aim to determine the perception employees have of their organisations' SBA (Els et al., in review). This scale is primarily concerned with the use of employees' strengths. Participants were typically asked about the perception they have regarding their organisation's role in the use of their strengths. The following four steps as observed in DeVellis (2003) outlined the development of this new scale:

- *Initial construct conceptualisation.* Drawing on the JD-R model, SBA was conceptualised as an organisational resource. An SBA was defined as employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisation focus on the use of their strengths.
- *Item generation and item evaluation.* The initial item pool consisted of items used by existing instruments (specifically the Dutch questionnaire), as well as several new items focusing on the role the SBA plays in organisations. The items were placed in the following categories: items deemed 100% correct and applicable to the newly-developed scale; items in need of minor wording changes; items where certain parts can be utilised; items deemed as not applicable; and finally items useful for constructing new items. The final item classifications were evaluated to determine the future use of the items. Items rendered as not applicable were discarded, and the remaining items were used during the item development phase.
- *Item development.* The remaining items from the initial item pool were re-evaluated and adapted in order to fit the proposed definition in the best possible way. The wording of some items was modified in order to correspond with the designated frequency-based response format scale used to rate SBA items. Although some items were adapted, most items were newly developed.
- *Item refinement and item judgement.* This phase included the revision of items by five industrial psychology Master's students. They were asked to classify the SBA items, together with items from other scales (deficiency-based approach, strengths oriented behaviour, and deficiency oriented behaviour). They were given a definition of the SBA construct and were then asked to place the items into the different construct categories, in so doing also identifying unclear or ambiguous items. Drawing from their findings, items were refined and finally submitted to an accredited language editor. Results led to the approval of eight items for the final SBA scale.

### **Potential value add**

Utilising employees' strengths may foster greater organisational commitment, performance, engagement and innovativeness. The employees' perceptions of the extent to which the formal and informal policies, practices and procedures in their organisations focus on the use of their strengths is likely to affect motivation to perform and reach goals. The newly-developed SBA scale will enable researchers and practitioners to determine the extent to which the organisation utilises employees' strengths. Gallup studies confirmed that organisations that focus on strengths encourage employee engagement, and this evolves in the formation of stronger organisations (Asplund & Blacksmith, 2011). A strengths-focussed approach is therefore likely to result in better performance and organisational output. This behaviour may result in organisational commitment, performance, engagement and innovativeness, all of which impact on the

bottom-line directly. There is a dearth of literature regarding the SBA, especially within the South African context. Consciousness of the factorial validity and reliability of the new SBA scale within the South African setting will contribute to the scarce available literature, as well as to the existing void regarding a scale measuring an SBA as an organisational resource.

### **What will follow**

The following hypotheses will be investigated in the remainder of this chapter:

Hypothesis 1: The strength-based approach (as measured by the new SBA scale) is a one-dimensional construct.

Hypothesis 2: The measurement of the strength-based approach (as measured by the new SBA scale) is internally consistent (Cronbach alpha  $\geq 0.70$ ).

Hypothesis 3: The strength-based approach is an independent organisational resource.

## **RESEARCH DESIGN**

### **Research approach**

This study followed a quantitative, non-experimental design with a cross-sectional survey approach, suggesting that participants completed the questionnaire at one point in time.

### **Research method**

#### **Research participants and procedure**

A convenience sample of 165 participants from a financial institution was used to address the objectives. The participants were made up of different departments within one specific bank. Data were collected through means of an electronic questionnaire. This questionnaire was delivered through a secure website and was in a self-report format. Participants were given a detailed description of the purpose of the study. The confidentiality of their responses was assured before the completion of the questionnaire. Informed consent was obtained from the participants. It took an average of 20 to 30 minutes to complete the questionnaire. Authorisation from the industrial psychologist and general managers of the respective organisational segments were given, to allow for the utilisation of the data for research purposes. Aspects such as voluntary participation, informed consent, doing no harm, confidentiality and privacy were taken into account to ensure fair, unbiased and ethical practices during the research procedure (Devous, 2002). From the 376

questionnaires that were distributed among the seven different departments on the bank, 165 questionnaires were completed. This resulted in a response rate of 44%. The characteristics of this sample are presented in Table 1.

Table 1

*Characteristics of the Participants (N =165)*

<b>Item</b>	<b>Category</b>	<b>Frequency</b>	<b>%</b>
Gender	Male	51	30.9
	Female	114	69.1
Age	22 – 25 years	16	9.7
	26 – 36 years	113	68.5
	37– 47 years	26	15.7
	48 – 58 years	10	6.1
Home Language	English	84	50.9
	Afrikaans	33	20
	Setswana	8	4.8
	isiXhosa	9	5.5
	Xitsonga	3	1.8
	isiZulu	10	6.1
	Sesotho	14	8.5
	isiNdebele	1	0.6
	Sepedi	1	0.6
	Other	2	1.2
Ethnicity	Black	48	29.1
	White	48	29.1
	Coloured	51	30.9
	Asian	15	9.1
	Other	3	1.8
Education	Grade 10	2	1.2
	Grade 11	6	3.6
	Grade 12	92	55.8
	Technical College Diploma	10	6.1
	Technicon Diploma	20	12.1
	University Degree	18	10.9
	Post-graduate Degree	17	10.3
Department	Cellphone Banking	1	0.6
	EasyPlan	3	1.8
	eWallet	2	1.2
	Life	2	1.2
	Housing Finance	1	0.6
	Smart Loans	111	67.3
	Smart Transactional Banking	45	27.3

Table 1 Continues

*Characteristics of the Participants (N =165)*

Household Status	Single without children living at home	26	15.8
	Single with children living at home	26	15.8
	Married/living with a partner, without children living at home	25	15.2
	Married/living with a partner, with children living at home	64	38.8
	Living with parents	10	6.1
	Missing	14	8.5
	Years in Organisation	1 month – 10 years	129
11 – 20 years		19	11.5
21 - 48 years		17	10.3
Years in Position	0 – 10 years	153	92.7
	11 – 20 years	8	4.9
	21 – 36 years	4	2.4

The sample consisted of English (50.9%), Afrikaans (20%), Setswana (4.8%), isiXhosa (5.5%), Xitsonga (1.8%), isiZulu (6.1%), Sesotho (8.5%), isiNdebele (0.6%), and Sepedi (0.6%) speaking participants. The participants represented ethnic groups comprising Whites (29.1%), Blacks (29.1%), Coloureds (30.9%), Asians (9.1%), and other races (1.8%). The participants were mostly between the ages of 37 and 47 (68.5%). The majority of the participants were women (69.1%) and possessed a Grade 12 (55.8%) qualification. In terms of household status, most participants indicated that they were married/living with their partner, with children living at home (38.8%). In total, 67.3% of the participants fell within the Smart Loans division. The majority (78.2%) of participants indicated that they had been working for this organisation for 10 years or less. One hundred and fifty three (92.7%) participants indicated being in the same position for 10 years or less.

**Measuring instruments**

*Biographical Questionnaire.* The biographical questionnaire was used to gather the biographical particulars of the participants. These particulars included date of birth, age, gender, home language, ethnicity, educational level, marital and parental status, as well as years of employment with current organisation and current position held within the organisation.

*Strength-Based Approach.* The newly-developed South African SBA scale was used to measure employees' perceptions of their strength-use in their organisation. As described above, the SBA scale consists of eight items, developed to measure employees' perceptions of the extent to which their organisation focus on the use of their strengths (Els et al., in review). An example of an item is "This organisation uses my strengths". The scale makes use of a frequency-based response format scale: 1 (Never), 2 (Rarely), 3 (Occasionally), 4 (Sometimes), 5 (Frequently), 6 (Usually) and 7 (Almost always).

*Organisational resources.* Four other organisational resources were measured with a questionnaire on the experience and assessment of work (Van Veldhoven, Meijman, Broersen & Fortuin, 1997), including supervisor support (four items, e.g. "Can you count on your superior when you come across difficulties in your work?"), autonomy (four items, e.g. "Can you decide on the content of your work activities yourself?"), information (four items, e.g. "Do you receive sufficient information on the results of your work?") and participation (four items, e.g. "Can you participate in decisions affecting issues related to your work?"). All items were rated on a Likert-response scale ranging from 1 (*never*) to 4 (*always*). The Cronbach alpha coefficients for the four organisational resources were acceptable:  $\alpha = 0.90$  for supervisor support;  $\alpha = 0.81$  for autonomy;  $\alpha = 0.89$  for information; and  $\alpha = 0.87$  for participation 0.87 (Van Veldhoven et al., 1997).

### **Statistical analysis**

The statistical analysis was carried out with the help of the SPSS 20.0 for windows programme (SPSS Inc., 2011). Because the SBA scale is a newly-developed scale, exploratory factor analysis (EFA) was used to determine the factorial validity (Costello & Osborne, 2005; Henson & Roberts, 2006). EFA was also used to determine the underlying factor structure of the SBA scale together with the other organisational resources (including supervisory support, autonomy, information, and participation). Because researchers have shown concern for using eigenvalues greater than 1.0 in isolation to determine the number of underlying factors of a questionnaire (Floyd & Widaman, 1995; Zwick & Velicer, 1986), scree plots were also examined in order to determine the number of factors to retain. Where eigenvalues and the scree plot indicated a one-factor model, the principal components (PC) extraction method was used. A principal-axis factoring approach with maximum likelihood extraction was used to explore the latent structure of the SBA items together with the items of the other organisational resources. This was followed by orthogonal (Varimax) rotation methods when factors were not correlated or oblique (Direct Oblimin) rotation methods when factors were correlated. The cut-off point for the factor loadings was set at 0.40 (Netemeyer, Bearden, & Sharma, 2003).



Cronbach alpha coefficients were used to assess the reliability of the SBA scale (Clark & Watson, 1995). Product-moment correlation coefficients were used to investigate the nomological net between the SBA subscales and other organisational resources. With regards to statistical significance, it was decided to set the value at a 95% confidence interval level ( $p \leq 0.05$ ). The effect size was used to decide on the practical significance of the findings (Steyn, 2002). Cut-off points of 0.30 (moderate effect), and 0.50 (large effect) were set for the practical significance of correlation coefficients (Cohen, 1988).

## RESULTS

First, the results of the factorial analysis of the new SBA scale were examined. Thereafter, the underlying factor structure of the SBA items and items of the other organisational resources were explored.

### Factorial validity of the newly-developed SBA scale

The factor structure of the newly-developed SBA scale was examined through EFA in order to test Hypothesis 1. Examination of the eigenvalues and the scree plot showed that one factor could be extracted, explaining 82.35% of the total variance. The factor loadings and communalities are reported in Table 2.

Table 2

#### *Factor Loadings of the SBA Scale*

Item	Factor Loadings	Communalities ( $h^2$ )
SBA Item 1	0.79	0.62
SBA Item 2	0.89	0.78
SBA Item 3	0.93	0.86
SBA Item 4	0.94	0.88
SBA Item 5	0.93	0.87
SBA Item 6	0.94	0.88
SBA Item 7	0.91	0.83
SBA Item 8	0.94	0.87

Table 2 shows that the items loaded strongly on the SBA factor, suggesting a clear indication of measuring a one-factor construct. Factor loadings were all well above the cut-off point of 0.40 with accompanying strong communalities.

### **Exploratory factor analysis with SBA and other organisational resources**

When the other organisational resources were included in the factor analysis, the eigenvalues and scree plot indicated that five factors should be retained, which accounted for 76.53% of the total variance. Principle axis factoring was utilised to extract the factors. Because all the factors were correlated, a direct oblimin rotation was used. The items comprising the five-factor model are listed in order of the strength of their loadings in Table 3.

Table 3

*Pattern Matrix for SBA and Organisational Resources*

Item	Factor					$h^2$
	SBA	Supervisor Support	Autonomy	Information	Participation	
SBA 4	<b>0.95</b>	0.03	-0.01	0.06	0.01	0.56
SBA 3	<b>0.94</b>	0.01	-0.01	0.02	0.02	0.77
SBA 5	<b>0.94</b>	0.02	0.05	0.04	0.05	0.85
SBA 6	<b>0.93</b>	0.03	0.01	0.09	-0.04	0.87
SBA 8	<b>0.90</b>	-0.00	-0.06	-0.05	-0.06	0.86
SBA 7	<b>0.85</b>	0.08	-0.06	-0.01	-0.02	0.87
SBA 2	<b>0.82</b>	-0.08	0.11	-0.15	0.05	0.81
SBA 1	<b>0.69</b>	-0.03	-0.02	-0.06	-0.09	0.87
Supervisor Support 3	-0.01	<b>0.93</b>	-0.02	0.03	-0.03	0.39
Supervisor Support 4	-0.01	<b>0.87</b>	0.04	-0.02	-0.01	0.50
Supervisor Support 2	0.01	<b>0.77</b>	0.10	-0.05	-0.02	0.67
Supervisor Support 1	0.08	<b>0.68</b>	-0.01	-0.04	0.02	0.63
Autonomy 4	0.02	0.04	<b>0.86</b>	-0.03	0.14	0.54
Autonomy 3	0.04	0.01	<b>0.74</b>	0.09	-0.10	0.71
Autonomy 2	-0.01	0.01	<b>0.56</b>	-0.06	-0.19	0.84
Autonomy 1	0.04	0.04	<b>0.50</b>	-0.04	-0.13	0.65
Information 3	-0.01	-0.12	0.11	<b>-0.95</b>	-0.01	0.64
Information 2	0.11	-0.00	0.00	<b>-0.73</b>	-0.04	0.86
Information 1	-0.02	0.20	-0.11	<b>-0.69</b>	-0.08	0.67
Information 4	0.04	0.28	0.00	<b>-0.61</b>	-0.01	0.46
Participation 3	-0.05	0.01	0.07	0.02	<b>-0.85</b>	0.73
Participation 2	0.08	0.00	-0.02	0.04	<b>-0.84</b>	0.73
Participation 4	0.05	-0.03	0.09	-0.13	<b>-0.64</b>	0.63
Participation 1	0.05	0.06	0.00	-0.06	<b>-0.60</b>	0.78

As can be seen in Table 3, the analyses confirmed a clear five-factor solution. The five factors that were extracted included SBA (eight items explaining 45.42% of the variance, measuring employees' perceptions of the extent to which their organisation focus on the use of their strengths), Supervisor Support (four items

explaining 11.73% of the variance, measuring the experience and assessment of supervisor support at work), Autonomy (four items explaining 9,16% of the variance, measuring the experience and assessment of autonomy at work), Information (four items explaining 5.77% of the variance, measuring the experience and assessment of information at work), and Participation (four items explaining 4.45% of the variance, measuring the experience and assessment of participation at work). It is also evident that the SBA items were loaded on a separate factor, with no double-loadings on other factors, providing support for Hypothesis 3 that SBA is indeed a separate organisational resource.

Next, the item means, standard deviations, internal consistencies and correlations between SBA and organisational resources are displayed in Table 4.

Table 4

*Descriptive Statistics and Product-Moment Correlations between SBA and Organisational Resources*

	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5
1 SBA	3.74	1.60	0.97	1.00				
2 Supervisor support	3.35	0.75	0.90	0.44**	1.00			
3 Autonomy	2.75	0.75	0.81	0.47**	0.31**	1.00		
4 Information	3.00	0.85	0.89	0.44**	0.57**	0.36**	1.00	
5 Participation	2.45	0.77	0.87	0.56**	0.37**	0.58**	0.50**	1.00

\*\* Statistically significant ( $p \leq 0.01$ )

$r \geq 0,30$  is practically significant (medium effect);  $r \geq 0,50$  is practically significant (large effect)

Table 4 shows the item means, standard deviations, reliabilities and the correlations found between the different variables. All the scales were reliable ( $\alpha \geq 0.70$ , Nunnally & Bernstein, 1994). More specifically, a Cronbach alpha of 0.97 was found for SBA, indicating that the scale is internally consistent. This provides support for Hypothesis 2. Furthermore, the SBA had positive relationships with the other four organisational resources. All these relationships were statistically significant ( $p \leq 0.01$ ) and of moderate size, suggesting that there is no significant conceptual overlap between the constructs. This provides further support for the independent nature of the SBA as an additional organisational resource.

## DISCUSSION

This study examined the factorial validity and reliability of a newly-developed strengths-based approach scale. The relationships between a SBA and other organisational resources were also examined. Many instruments have been designed to identify strengths and talents. However, not many instruments exist that measure how employees perceive their organisations to be employing an SBA. There is a demand for positive psychology literature pertaining to new interventions facilitating workplace functioning (Gable & Haidt, 2005). For this reason a new SBA scale was developed. According to available knowledge, it is the first scale developed within the South African context which aims to determine the perception employees have about their organisations' SBA.

Due to its new nature, exploratory factor analysis was employed to determine the factorial validity of the newly-developed SBA scale (Costello & Osborne, 2005; Henson & Roberts, 2006). As expected, the resulting eigenvalues and the scree plot indicated that one factor could be extracted, explaining 82.35% of the total variance. All eight items loaded strongly on the one factor, suggesting a definite measurement of a SBA. With regards to the reliability of the new scale, the results showed a Cronbach alpha of 0.97, indicating good internal consistency for the scale. However, the high value may propose that items correlate at to a high extent suggesting not enough variance between items, or that items may possibly measure the same thing, due to similar wording amongst items (Nunnally & Bernstein, 1994).

An SBA is defined as an organisational resource (Els et al., in review), which is defined as physical, psychological, social or organisational aspects of the job that are functional in achieving work goals, reduce job demands and the associated physiological and psychological costs and stimulate personal growth, learning, and development (Demerouti & Bakker, 2011). The SBA is seen as an approach, which increases the productivity of employees through the adoption of a strengths focus (Stienstra, 2010). An SBA leads to the experience of positive emotions of employees (Govindji & Linley, 2007), and a greater sense of authenticity and motivation to take action (Elston & Boniwell, 2011). Organisational resources can also adopt intrinsic (fostering growth and development) and extrinsic (goal achievement) motivational roles (Deci & Ryan, 1985; Van den Broeck et al., 2008).

A third and final hypothesis was that the SBA is an independent organisational resource. To find support for this assumption, an exploratory factor analysis was conducted where other organisational resources were included (i.e. supervisor support, autonomy, information and participation). The findings showed

a five-factor solution, where the SBA items clearly loaded on a separate factor (no double-loadings were found on other factors). In addition, correlations between the SBA dimension and other organisational resources were positive and ranged between 0.44 and 0,56, indicating no significant conceptual overlap between the dimensions. It can therefore be concluded that in this sample SBA can be seen as a separate organisational resource.

In conclusion, it seems that in this sample the newly-developed SBA scale is a single factor construct. The results of this preliminary analysis show support for the potential use of the new scale, as it appears to validly and reliably measure employees' perception of their organisations using an SBA in the financial institution. In addition, it can also be concluded that an SBA can be rendered an independent organisational resource, which could have important implications for outcomes such as employee engagement, job satisfaction etc. The new SBA scale therefore has the potential to assist both the employee and the organisation in identifying perceptions of SBA within the organisation. This study was a first attempt to establish validity and reliability evidence for the SBA scale, which could lead to more accurate findings with regards to this concept, as well as lay the groundwork for future effective and consistent measurement of the SBA.

### **Limitations**

Certain limitations of this study are worth mentioning. The first limitation was utilising an online assessment technique to gather data. Despite several advantages, online questionnaires hold challenges in that the researcher has less control over the completion of the questionnaire. This may have a negative influence on the standardised procedure of test administration necessary to statistically validate the results obtained. The self-report nature of the questionnaire could cause a possible common method variance problem, although this is not classified as a major issue (Semmer, Zapf & Grief, 1996; Spector, 1992).

An additional methodological limitation is the fact that the SBA and other scales have different response scales (both in length and style) that could result in the SBA items emerging as their own factor. This is the general criticism of joint factor analysis as opposed to interbattery factor analysis (Brown, 2007; De Bruin, 2000).

A cross-sectional research design was used to determine a specific outcome, at a specific point in time, for a specific population. This approach lacks sequence of events, such as showing that SBA leads to positive work output. Although a cross-sectional design was acceptable in determining the factor structure of the

SBA scale, a longitudinal study could enrich the understanding when the structure is replicable over time. This is so due to the fact that a cross-sectional study only measures at one point in time, whereas a longitudinal study shows results over a longer period of time. This may show the results to be more reliable as it may show the same results over time for the same sample groups. Another limitation is known as range restriction caused by a sample within one bank forming part of one organisational culture. This corporate culture may not be prevalent in other organisations, hence could result in different findings. This limitation may lead to concerns with regards to generalisability of the findings, due to conducting the study in a single South African bank (Liao & Toya, 2009). A final limitation may be the size of the sample. Although sufficient to analyse the factor structure and reliability, the sample has to be larger in order to make significant cross-cultural comparisons.

### **Recommendations**

Despite the abovementioned limitations, the current study holds important implications for future research as well as for organisations. The effects of an SBA could have a profound impact on the financial sector and the way in which the employees function. Although it seems that the new SBA scale is valid and reliable for this particular bank, future research could consider the impact of an SBA across a wider array of organisations (Liao & Toya, 2009). This may assist in drawing accurate inferences when applied to employees from different organisational industries. Furthermore, the different tendencies of various organisations to employ an SBA, as well as how employees perceive the use of the SBA in their organisations, can be researched.

The scale should also be administered on a larger and more diverse sample in order to gain increased generalizability of the findings to the greater population. The larger the sample, the more representative it is of the South African population, consequently increasing the validity of the use of the instrument.

Furthermore, the newly-developed SBA scale should be compared to other scales measuring similar aspects with regards to the use and identification of strengths. Confirmatory factor analysis could furthermore be used to confirm the underlying factor structure of the newly-developed strength-based approach scale. Future studies should also evaluate to what extent the SBA impacts on organisational outcomes (productivity, engagement and job satisfaction).

Equivalence is a principal concern when conducting cross-cultural research. Meaningful comparisons among different racial and language groups can only be made when the data from different cultures groups can be

compared (Van de Vijver & Poortinga, 1997). Bias is another important construct to consider for future research. Bias appears when the meaning of a score for a specific group is different from the meaning of the score for another group (Gregory, 1996). Equivalence and bias are related: the occurrence of bias causes a decrease in the level of equivalence (Vorster, Olckers, Buys & Schaap, 2005). Research conducted with regards to equivalence and bias is important, as cultural values, attitude, and leadership style adopted by organisations are likely to influence the way in which participants understand and complete the SBA questionnaire (Vorster, Olckers, Buys & Schaap, 2005). No differences in the SBA scores of different cultures and language groups could suggest that the SBA scale can be used across different cultural groups (Vorster, Olckers, Buys & Schaap, 2005).

Recommendations for organisational SBA can also be made. As mentioned before, limited research has been done on the way in which employees perceive their organisation to be identifying and using their strengths. The available research appears to be of a theoretical nature and seems to focus more on positive individual characteristics than organisational characteristics (Gable & Haidt, 2005). Future research relating to an SBA can concern itself with SBA specifically pertaining to community and organisational functioning. Allowing employees the opportunity to identify their perceptions of their organisation's SBA could lead to the adoption of a more positive organisational approach, which could possibly influence the functioning of both the employee and the organisation.

Organisations should become aware of the positive potential of adopting an SBA (Van Woerkom & Meyer, in review). SBA has been said to relate to organisational citizenship behaviour and innovativeness. Consequently, it could add tremendous value to organisations relying on teamwork, supervisor and colleague support as an SBA assists all employees in performing optimally (Van Woerkom & Meyer, in review). The specific rate at which performance and profits increase with the employment of an SBA can furthermore be assessed. This could lead to a return on investment study, which may further promote the implementation of an SBA. These studies could explain the many benefits an SBA holds for both the employee and the organisation, as well as identify who benefits most from an SBA.



## REFERENCES

- Asplund, J., & Blacksmith, N. (2011). *Strengths-based development: How strengths boost engagement*. Retrieved April 07, 2011, from the world wide web <http://gmj.gallup.com/content/146972/Strengths-Boost-Engagement.aspx>
- Bakker, A. B., Demerouti, E., Taris, T., Schaufeli, W. B., & Schreurs, P. (2003). A multi-group analysis of the job demands–resources model in four home care organisations. *International Journal of Stress Management, 10*, 16-38.
- Bakker, A. B., Van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model thriving on high job demands and resources. *Journal of Personnel Psychology, 9*(1), 3-16.
- Boniwell, I. (2006). *Positive psychology in a nutshell* (2<sup>nd</sup> eds.). London: PWBC.
- Bouskila-Yam, O., & Kluger, A. N. (2011). Strength-based performance appraisal and goal setting. *Human Resource Management Review, 21*, 137–147.
- Brown, G. T. (2007). An introduction to multi-battery factor analysis: overcoming method artefacts. *Assessment, Research and Education, 12*, 1-13.
- Buckingham, M., & Clifton, D. (2001). *Now, discover your strengths*. New York, NY: Free Press.
- Castro, M. L., & Martins, N. (2010). The relationship between organisational climate and employee satisfaction in a South African information and technology organization. *South African Journal of Industrial Psychology, 26*(1), 1-9.
- Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment, 7*(3), 309–319.
- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In K. S. Cameron, B. J. E. Dutton, & C. R. E. Quinn (Eds.), *Positive organisational scholarship*. San Francisco, CA: Berrett-Koehler Publishers.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (Rev. ed.). Orlando, FL: Academic Press.
- Connelly, J. (2002). All together now. *The Gallup Management Journal, 2*(1), 13-18.
- Costello, A.B., & Osborne, J.W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation, 10*(7), 1–9.
- Cropanzano, R., & Wright, T. A. (2001). When a “happy” worker is really a “productive” worker: A review and further refinement of the happy-productive worker thesis. *Consulting Psychology Journal, Practice & Research, 53*, 182–199.
- De Bruin, G. P. (2000). An interbattery factor analysis of the Comrey Personality Scale and 16PF questionnaire. *South African Journal of Industrial Psychology, 26*, 4-7.
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behaviour*. New

- York, NY: Plenum Press.
- Demerouti, E., & Bakker, A. B. (2011). The job demands–resources model: Challenges for future research. *South African Journal of Industrial Psychology, 37*(2), 1-9.
- Devellis, R. F. (2003). *Scale development: Theory and application* (2nd ed). Thousand Oaks, CA: Sage Publications.
- Devous, D. (2002). *Surveys in social research*. Sydney, Australia: Routledge.
- Elston, F., & Boniwell, I. (2011). A grounded theory study of the value derived by women in financial services through a coaching intervention to help them identify their strengths and practice using them in the workplace. *International Coaching Psychology Review, 6*(1), 16-32.
- Els, C., Mostert, K., Van Woerkom, M., Rothmann, S. Jnr., & Bakker, A. B. (in review). Following a strength-based and deficiency-based approach: The development and psychometric properties of a new scale.
- Floyd, F.J., & Widaman, K.F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*(3), 286-299.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2*, 300-319.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society, 359*, 1367-1377.
- Froman, L. (2009). Positive psychology in the workplace. *Journal of Adult Development, 17*(2), 59-69.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology, 9*, 103-110.
- Gliem, J. A., & Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. Retrieved from <https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20%26%20Gliem.pdfsequence=1>
- Govindji, R., & Linley, P. A. (2007). Strengths use, self-concordance and well-being: Implications for strengths Coaching and Coaching Psychologists. *International Coaching Psychology Review, 2*(2), 143-153.
- Gregory, R. J. (1996). *Psychological testing history, principles and applications* (2nd ed). Needham Heights, MA: Allyn & Bacon.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Harris, A. H. S., & Thoresen, C. E. (2006). Extending the influence of positive psychology interventions into health care settings: Lessons from self-efficacy and forgiveness. *Journal of Positive Psychology, 1*(1),

27-36.

- Harter, J.K. (1998). *Gage Park High School research study*. Princeton, NJ: The Gallup Organization.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*, 268–279.
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comments on improved practice. *Educational and Psychological Measurement, 66*, 393-416.
- Hodges, T. D., & Clifton, D. O. (2011). Strength-based development in practice. In P. A. Linley & S. Joseph (Eds.). *International Handbook of Positive Psychology: From research to application*. New Jersey, NY: Wiley and Sons.
- Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organisational-behaviour. In B. M. Staw & L. L. Cummings (Eds.), *Research in organisational behaviour* (pp. 1–53). Greenwich, CR: JAI Press.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*, 692 – 724.
- Kaya, N., Koc, E., & Topcu, D. (2010). An exploratory analysis of the influence of human resource management activities and organizational climate on job satisfaction in Turkish banks. *The International Journal of Human Resource Management, 21*(11), 2031–2051.
- Kumudha, A., & Abraham, S. (2008). Organization career management and its impact on career satisfaction: A study in the banking sector. *Journal of Bank Management, 7*(3), 48-58.
- Liao, H., & Toya, K. (2009). Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology, 94*(2), 371–391.
- Linley, P. A., Garcea, N., Hill, J., Minhas, G., Trenier, E., & Willars, J. (2010). Strengthspotting in coaching: Conceptualisation and development of the Strengthspotting Scale. *International Coaching Psychology Review, 5*(2), 165-176.
- Linley, P. A., Govindji, R., & West, M. A. (2007). Positive psychology approaches to public services leadership: An introduction to strengths-based leadership. *The International Journal of Leadership in Public Services, 3*(4), 44-55.
- Lyubomirsky, S., King, L., & Dienier, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 13*(6), 803-855.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In: P. J. D. Drenth, & H. Thierry (Eds.), *Handbook of Work and Organisational Psychology* (pp. 5-33), Hove, UK: Psychology

Press.

- Meyers, M. C. (2010). *Strengths-based development and its influence on positive emotions, employee innovativeness and organizational citizenship behaviour*. Unpublished masters' thesis. Tilburg University, Tilburg, The Netherlands.
- Mills, M. J. (2010). *Rethinking the hedonic treadmill within the context of broaden-and-build theory: Developing resources through positive employees*. Published dissertation, Kansas University, Kansas, United States of America.
- Minhas, G. (2010). Developing realised and unrealised strengths: Implications for engagement, self-esteem, life satisfaction and well-being. *Assessment and Development Matters*, 2(1), 1216.
- Netemeyer, R., Bearden, W., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA: Sage.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd Ed.). New York, NY: McGraw-Hill.
- Page, K. M., & Vella-Brodrick, D. A. (2008). *The 'What', 'Why' and 'How' of employee well being: A new model*. Published masters' dissertation. Monash University, Caulfield, Australia.
- Peterson, C., & Seligman, M. E. P. (2004). *Character, strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press.
- Pickens, D. D. (1996). *The effect of a human resource development PLAN on the attitude and behaviour of bank employees*. PhD Dissertation, University of Mississippi.
- Pinto, J. (2007). *Investing in human capital, people assets*. Retrieved May, 15, 2011, from the world wide web <http://www.automation.com/resources-tools/articles-whitepapers/articles-by-jim-pinto/investing-in-human-capitalpeople-assets>
- Rodríguez-Carvajal, R., Moreno-Jiménez, B., Rivas-Hermosilla, S., Álvarez-Bejarano, A., & Sanz Vergel, A. I. (2010). Positive psychology at work: Mutual gains for individuals and organisations. *Journal of work and organisational psychology*, 26(3), 235-253.
- Proctor, C.L., Maltby, J., & Linley, P.A. (2010). Strengths use as a predictor of wellbeing and health-related quality of life. *Journal of Happiness Studies*. <http://dx.doi.org/10.1007/s10902-009-9181-2>.
- Roberts, L. M., Spreitzer, G., Dutton, J., Quinn, R., Heaphy, E., & Barker, B. (2005). How to play to your strengths. *Harvard Business Review*, 83(1), 74.
- Staw, B. M., & Barsade, S. G. (1993). Affect and managerial performance: A test of the sadder-but-wiser vs. happier-and-smarter hypotheses. *Administrative Science Quarterly*, 38(2), 304-331.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60, 410-421.
- Semmer, N., Zapf, D., & Grief, S. (1996). Shared job strain: A new approach for assessing the validity of

- job stress measurements. *Journal of Occupational and Organizational Psychology*, 69, 293–310.
- Smedley, T. (2007). The powers that BAE. *People Management*, 13(22), 40–43.
- Spector, P. E. (1992). A consideration of the validity of meaning of self-report measures of job conditions. In C. L. Cooper & L. T. Robertson, (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 281–328). Chichester, UK: Wiley.
- SPSS Inc. (2011). *SPSS 20.0 for Windows*. Chicago, IL: SPSS Inc.
- Steyn, H. S. (2002). Practically significant relationships between two variables. *South African Journal of Industrial Psychology*, 28(3), 10–15.
- Stefanyszyn, K. (2007). Norwich Union changes focus from competencies to strengths. *Strategic HR Review*, 7, 10–11.
- Stienstra, M. (2010). Strength based development as organizational approach (Unpublished masters' thesis). University of Tilburg, Tilburg, Netherland.
- Trinka, K. (2004). *What's a manager to do?* Retrieved April 13, 2011, from <http://pnwbc.com/PDF/whats-a-managerto-do.pdf>
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86, 320–333.
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationship between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work and Stress*, 22(3), 277–294.
- Van de Vijver, F. J.R. & Poortinga, Y.H. (1997). Towards an integrated analysis of bias in cross-cultural assessment. *European Journal of Psychological Assessment*, 13, 29–37.
- Van Veldhoven, M., Meijman, T. F., Broersen, J. P. J., & Fortuin, R. J. (1997). *Handleiding VBBA: Onderzoek naar de beleving van psychosociale arbeidsbelasting en werkstress met behulp van de vragenlijst beleving en beoordeling van de arbeid* [Manual VBBA: Research on the experience of psychosocial workload and job stress by means of the Questionnaire on the Experience and Evaluation of Work]. Amsterdam: SKB.
- Van Woerkom, M., & Meyer, C. (in review). Making happy and unhappy workers flourish: The effects of a strength-based approach. Paper submitted for publication.
- Vorster, M., Olckers, C., Buys, M. A., & Schaap, P. (2005). The construct equivalence of the Job Diagnostic Survey for diverse South African cultural groups. *South African Journal of Industrial Psychology*, 31(1), 31–37
- Wright, T. A., & Staw, B. M. (1999). Affect and favourable work outcomes: Two longitudinal tests of the happy productive worker thesis. *Journal of Occupational Health Psychology*, 20(1), 1–23.

- Wright, T. A., & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organisational Dynamics*, 33(4), 338-351.
- Zelenski, J. M., Murphy, S. A., & Jenkins, D. A. (2008). The happy-productive worker thesis revisited. *Journal of Happiness Studies*, 9(4), 521–537.
- Zwick, W., & Velicer, W. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, 99, 432-442.

## **CHAPTER 3**

### **CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS**

This chapter encapsulates the conclusions drawn from the general and specific objectives. In addition, it addresses the limitations, followed by recommendations for future research with regards to this study.

#### **3.1 CONCLUSIONS**

The general aim of this study was to determine the factorial validity and reliability of the newly-developed strength-based approach (SBA) scale in South African employees. This research further explored the SBA as an independent job resource when other job resources (supervisor support, autonomy, information and participation) were included in the factor analysis.

The first and second objectives of this study were to determine the factorial validity and reliability of the new SBA scale. Exploratory factor analysis was employed to determine the factorial validity of the newly-developed SBA scale (Costello & Osborne, 2005; Henson & Roberts, 2006). The resulting eigenvalues and the scree plot indicated that one factor could be extracted, explaining 82,35% of the total variance. All eight items loaded strongly on the one factor, suggesting a definite measurement of an SBA. With regards to the reliability of the new scale, the results showed a Cronbach alpha of 0.97, indicating good internal consistency for the scale.

The third objective of this study was to determine whether an SBA can be seen as an independent organisational resource when other organisational resources (supervisor support, autonomy, information, and participation) are included in a factor analysis and correlation matrix (i.e. to determine whether there is a substantial overlap between an SBA and other organisational resources). An exploratory factor analysis was conducted where other organisational resources were included (i.e. supervisor support, autonomy, information and participation). The findings showed a five-factor solution, where the SBA items clearly loaded on a separate factor (no double-loadings were found on other factors). In addition, correlations between the SBA dimension and other organisational resources were positive and ranged between 0.44 and 0.56, indicating no significant conceptual overlap between the dimensions. It can therefore be concluded that in this sample SBA can be seen as a separate organisational resource.

This study served to show the factorial validity and reliability of the newly-developed strength-based approach scale when applied to employees within the banking sector in South African.

### **3.2 LIMITATIONS OF THIS RESEARCH**

Certain limitations of this study are worth mentioning. The first limitation of this study was using an online technique to gather data. It was difficult to determine whether participants were answering the questions correctly and they may have found it difficult to ask questions on the completion of the scale (Carleton, 2009). Online questionnaires hold challenges for the researcher in that the control factor is lost where the researcher has less control over the completion and the response rate of the questionnaire.

Secondly, a self-report response style was employed to gather data. This technique has been criticised due to the possible common method variance problem. However, research has shown this not to be a major concern (Semmer, Zapf & Grief, 1996; Spector, 1992). Self-report techniques hold many benefits such as providing meaningful information, and being cost-effective in nature. Self-report questionnaires furthermore are prone to elicit self-perceived perceptions of the construct and not necessarily the true construct, which is ideal for the purpose of this study.

Thirdly, this study made use of a cross-sectional research design. This type of design is used to determine a specific outcome, at a specific point in time, for a specific population. One limitation to cross-sectional research design is the lack of sequence of events, namely whether an SBA leads to positive work output. This aspect could limit the understanding of the impact an SBA has on individual- and organisational level.

This study was conducted within a South African bank. As a result, the generalisability of this study to the greater public and other industries may be a concern (Liao & Toya, 2009). The arguments from which the hypotheses originated are not culturally bound. This sample furthermore consisted of participants from a single bank. This bank may have a specific corporate culture not present in other organisations. This culture could also constrain the response style of the employees. This could furthermore lead to range restriction, which might have influenced the results.

The sample consisted of 165 participants. This sample size was sufficient to analyse the instrument; however, the scale needs to be administered to a larger sample to make significant cross-cultural comparisons.



### **3.3 RECOMMENDATIONS**

Even though this study contains limiting aspects, the findings hold important benefits for organisations, for future research and for the industrial psychology field.

#### **3.3.1 Recommendations for the organisation**

This study forms the foundation and sets the stage for future research in the area of SBA in the workplace. The first recommendation could build on concerns that positive psychology research focuses on theoretical aspects, more so than on the practical implementation of SBA (Youssef & Luthans, 2007).

Establishing the factorial validity and reliability of the new SBA scale facilitates the development of industrial psychology in South Africa (Guse, 2010), specifically for the banking sector. This suggests that the SBA instrument measures the perception of SBA within an organisation effectively. Providing employees with opportunities to identify their perceptions about the SBA of their organisation could improve the culture and functioning of both the employee and the organisation.

#### **3.3.2 Recommendations for future research**

Building on the EFA conducted in this study, Confirmatory Factor Analysis (CFA) can be utilised in future to confirm the underlying factor structure (Harvey, Billings, & Nilan, 1985). It determines whether the factor loadings imitate the expected results (Voster, Olckers, Buys, & Schaap, 2005). CFA uses tests of significance for each loading in order to offer more detailed insight into the SBA scale's factor structure (Madurai, Olckers & Buys, 2008). The CFA will in addition be useful in comparing gender, racial and age groups (Madurai, Olckers & Buys, 2008).

A future study would also benefit from focussing on a longitudinal research design, which makes use of repeated measures before and after the implementation of an SBA in an organisation. This design is likely to identify the cause and effect relationship between SBA and other dependent variables (Van Woerkom & Meyer, in review). A longitudinal design assists in evaluating the changes in the functioning of employees and organisations due to implementations of SBA, over time.

An additional recommendation would be to explore the effects of an SBA on individual, group and organisational level and to compare these. The flourishing of these levels does not sprout from fixing weaknesses, but rather from building on strengths (Seligman, 2002; Seligman & Csikszentmihalyi, 2000). This will allow the researcher to establish the extent to which an SBA has an impact when applied to the individual, group or organisation as a whole. Employees are likely to adopt a positive approach to work tasks when an SBA is employed within the work setting. This could lead to increased positivity and teamwork at group level, which ultimately will impact on the functioning of the greater organisation.

The SBA scale would need to be validated for different occupational industries, in order to draw accurate conclusions when applied to people from different organisational backgrounds. Responses to the SBA scale may have been industry-specific. It is therefore recommended that future research investigate whether the experience of an SBA is different among various occupational groups. The same is true for different language groups within the South African context. The culture and gender fairness of the SBA scale should also be examined, the reason being that some responses with regards to SBA may have been due to gender or cultural characteristics and values.

The scale should also be administered to larger samples in order to achieve a more reliable representation of the population. A larger sample is a better representative of the population consequently generalising the findings to the population is more valid.

Overall, further research should continue to explore and consider the recommendations suggested above in order to provide a valuable contribution towards the literature and various industries.

## REFERENCES

- Carleton, E. L. (2009). *Happiness at work: Using positive psychology interventions to increase worker well-being*. Published masters' dissertation. Saint Mary's University, Halifax, Nova Scotia.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation, 10*(7), 1–9.
- Guse, T. (2010). Positive psychology and the training of psychologists: students' perspectives. *South African Journal of Psychology, 36*(2), 1-6.
- Harvey, R. J., Billings, R. S., & Nilan, K. J. (1985). Confirmatory factorial analysis of the Job Diagnostic Survey: good news and bad news. *Journal of Applied Psychology, 70*(3), 461–468.
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comments on improved practice. *Educational and Psychological Measurement, 66*, 393-416.
- Liao, H., & Toya, K. (2009). Do they see eye to eye? Management and Employee Perspectives of High-Performance Work Systems and Influence Processes on Service Quality. *Journal of Applied Psychology, 94*(2), 371–391.
- Madurai, M., Olckers, C., & Buys, M. (2008). The construct validation of an instrument designed to assess organisational socialization. *South African Journal of Industrial Psychology, 34*(1), 1-9.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist 55*(1), 5-14.
- Semmer, N., Zapf, D., & Grief, S. (1996). Shared job strain: A new approach for assessing the validity of job stress measurements. *Journal of Occupational and Organizational Psychology, 69*, 293–310.
- Spector, P. E. (1992). A consideration of the validity of meaning of self-report measures of job conditions. In C. L. Cooper & L. T. Robertson, (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 281–328). Chichester, UK: Wiley.
- Van Woerkom, M., & Meyer, C. (in review). Making happy and unhappy workers flourish: The effects of a strength-based approach. Paper submitted for publication.
- Vorster, M., Olckers, C., Buys, M. A., & Schaap, P. (2005). The construct equivalence of the Job Diagnostic Survey for diverse South African cultural groups. *South African Journal of Industrial Psychology, 31*(1), 31-37

Youssef, C. M., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33, 774-800.