

**The mediating effect of positive work-home interaction between
job resources, a strength-based approach and work engagement
among South African employees**

Cherí Botha

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

Supervisor: Prof. K. Mostert

November 2012

Potchefstroom

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 (6th edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University (Potchefstroom) to use the 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 constructing the tables.

DECLARATION

I, Cherí Botha, hereby declare that **The mediating effect of positive work-home interaction between job resources, a strength-based approach and work engagement among South African employees** is my own work and that the views and opinions expressed in this work are my own and relevant literature references as shown in the references.

Furthermore, I declare that the contents of this research study will not be submitted for any other qualification at any other tertiary institution.

CHERÍ BOTHA

NOVEMBER 2012

DECLARATION FROM THE LANGUAGE EDITOR

I hereby declare that the dissertation **The mediating effect of positive work-home interaction between job resources, a strength-based approach and work engagement among South African employees** by Cherí Botha, was edited by me.

Prof. Keren le Roux

November 2012

ACKNOWLEDGEMENTS

This was certainly a journey filled with a great deal of excitement, and included moments which ensured my personal development and growth. I will always remember this as a year that I experienced both *highs* and *lows*. Eventually it was the encouragement and support of the wonderful people who crossed my path who motivated me. Without them this project would not have been successful, let alone be possible.

Therefore, I would like to thank the following:

- Firstly, my God and Father, for giving me the insight, motivation, patience, perseverance, mental health, and the opportunity. I would never have been able to complete this project without His support and guidance.
- Prof. Karina Mostert, my exceptional supervisor. Words fail me to describe how grateful I am for all your time, expertise, and excellent guidance. Your passion for research, your proficiency and high quality standards inspired me to push myself to explore the world of research, and to achieve more. It was truly an honour to learn from the best of the best.
- My parents, Pieter and Alta. I am grateful for all your support, love and encouragement. I do not know where to begin to describe how blessed and thankful I am to have you both as parents, friends and mentors. You are truly wonderful role-models; thank you!
- The organisations and employees who took part in this research study. Thank you for being willing, and for taking the time from your busy schedules to complete the questionnaires. It is much appreciated.
- My family and friends, who have supported, motivated and loved me through all the trying times. This project would not have been a success without such amazing people in my life.
- My very special colleagues at Cullinan Diamond Mine (Pty.) Ltd., whom I have come to know and love in the past year. Thank you for motivating and supporting me to persist to achieve my goals.
- Prof. Keren le Roux, for the professional and efficient way in which the language editing was done.

TABLE OF CONTENTS

List of Figures	vii
List of Tables	viii
Summary	ix
Opsomming	xi
 CHAPTER 1: INTRODUCTION	
1.1 Problem statement	1
1.2 Research objectives	10
1.2.1 General objective	10
1.2.2 Specific objectives	10
1.3 Research hypotheses	10
1.4 Research method	11
1.4.1 Literature review	11
1.4.2 Research participants	11
1.4.3 Measuring instruments	12
1.4.4 Research procedure	13
1.4.5 Statistical analysis	14
1.4.6 Ethical considerations	15
1.5 Overview of chapters	15
1.6 Chapter summary	16
References	17
 CHAPTER 2: THE RESEARCH ARTICLE	
Abstract	25
Introduction	26
Literature review	28
The Job Demands-Resources model and work engagement	28
An organisational SBA, individual SOB and the relationship with work engagement	30
Positive WHI as a mediator	32
Research design	35
Research approach	35
Research method	35
Research participants	35
Measuring instrument(s)	37
Research procedure	39

TABLE OF CONTENTS CONTINUES

Statistical analysis	39
Results	41
Discussion	45
Implications for management	49
Limitations of the study and recommendations for future research	51
References	53

CHAPTER 3: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

3.1	Conclusions	60
3.2	Limitations of the research	67
3.3	Recommendations	68
3.3.1	Recommendations for the organisations	68
3.3.2	Recommendations for future research	69
	References	71

LIST OF FIGURES

Figure

- | | | |
|----------|--|----|
| Figure 1 | A structural model of job resources, organisational SBA, individual SOB and positive WHI as mediator. | 9 |
| Figure 2 | The hypothesised model of job resources, organisational SBA, individual SOB, work engagement and positive WHI as mediator. | 34 |

LIST OF TABLES

Table 1	Characteristics of the participants ($N = 699$)	35
Table 2	Results of the SEM analysis	41
Table 3	Correlation matrix and descriptive statistics of the latent variables	42
Table 4	Estimates of the direct structural paths in the standardised model	43
Table 5	Estimates, confidence intervals and kappa-squared of the indirect structural paths in the standardised model	44

SUMMARY

Title:

The mediating effect of positive work-home interaction between job resources, a strength-based approach and work engagement among South African employees.

Keywords:

Strength-based approach; individual strength-oriented behaviour; job resources; positive work-home interaction; work engagement; mediating effect; positive psychology.

It is important for organisations to develop their employees. However, organisations will not be able to keep a competitive advantage by merely focussing on the development of their employees' weaknesses. Employees should also be provided with sufficient job resources and opportunities to develop and/or use their strengths, as this could lead to positive work-home interaction (WHI), and work engagement.

The general objective of this research study was to test a structural model of job resources, an organisational strength-based approach (SBA), individual strength-oriented behaviour (SOB), and work engagement, and to investigate if positive WHI mediates between job resources, organisational SBA, individual SOB, and work engagement among South African employees. This study was conducted in order to gain more knowledge and a better understanding of the outcomes of following a SBA, both from an organisational and the employees' standpoint within the South African context.

A cross-sectional research approach was used. An availability sample ($N = 699$) of employees from various occupational groups in South Africa was used. Structural equation modelling was used to test the structural model and to determine the indirect effect of positive WHI.

The results confirmed that there exists a significant relationship between the job resources that are provided by the organisation and the employees experiencing increased work engagement levels. Furthermore, the results indicated that there is a significant relationship between following an organisational SBA and more employee work engagement. The results showed that there is also a significant relationship between the employees' applying

individual SOB and work engagement. The results confirmed that there is a significant relationship between the job resources that are provided by the organisation and positive WHI. However, the results showed that there was not a significant relationship between following an organisational SBA and positive WHI. Furthermore, the results indicated that there exists a significant relationship between the employees' applying individual SOB and positive WHI.

The results indicated that positive WHI was only a mediator in the relationship between information and work engagement, with an indirect effect of 0,11 ($p < 0,00$; 95% CI [0,07, 0,14]), and in the relationship between colleague relationships and work engagement, with an indirect effect of 0,04 ($p < 0,01$; 95% CI [0,01, 0,07]). The results also confirmed that positive WHI was a mediator in the relationship between individual SOB and work engagement, with an indirect effect of 0,05 ($p < 0,00$; 95% CI [0,02, 0,08]).

The knowledge gained from following a SBA will assist individuals in becoming aware of their talents, and of developing them into strengths. This study will also assist organisations in gaining a better understanding of an organisational SBA, and this variable's relationship with positive WHI and work engagement. This study adds value to the field of positive psychology; more specifically, to the limited research on following a SBA, and possible outcomes within the South African context.

Recommendations were made to be applied in practice, as well as for future research.

OPSOMMING

Titel:

Die bemiddelende uitwerking van positiewe werk-huis interaksie tussen werkshulpbronne, 'n sterkte-baseerde benadering en die werksbetrokkenheid van Suid-Afrikaanse werknemers

Sleutelwoorde:

Sterkte-gebaseerde benadering; individuele sterkte-georiënteerde gedrag; werkshulpbronne; positiewe werk-huis interaksie; werksbetrokkenheid; bemiddelende uitwerking; positiewe sielkunde.

Dit is vir organisasies belangrik om hul werknemers te ontwikkel. Die organisasies sal egter nie hul mededingende voorsprong kan behou deur bloot hul werknemers se swak eienskappe te ontwikkel nie. Die werknemers moet van voldoende werkshulpbronne en geleenthede voorsien word om hul sterktes te ontwikkel en/of te gebruik. Dit sou positiewe werk-huis interaksie tot gevolg kon hê, met verhoogde werksbetrokkenheid.

Die oorkoepelende doelwit met hierdie navorsingstudie was om 'n strukturele model van werkshulpbronne, 'n organisatoriese sterkte-gebaseerde benadering (SGB), individuele sterkte-gebaseerde gedrag (SGG) en werksbetrokkenheid te toets, en om vas te stel of positiewe WHI as bemiddelaar optree tussen werkshulpbronne, organisatoriese SGB, individuele SGG, en die werksbetrokkenheid van Suid-Afrikaanse werknemers.

'n Kruisdeursnee navorsingsbenadering is gevolg. 'n Beskikbaarheidsteekproef ($N = 699$) van werknemers van verskeie beroepsgroepe in Suid-Afrika is gebruik. Strukturele gelykmakende modellering is gebruik om die strukturele model te toets en om die indirekte uitwerking van positiewe WHI vas te stel.

Die uitslae het bevestig dat daar 'n beduidende verhouding bestaan tussen die werkshulpbronne wat deur die organisasie verskaf word en die feit dat die werknemers verhoogde vlakke van werksbetrokkenheid beleef. Die uitslae het verder aangedui dat daar 'n beduidende verhouding bestaan tussen die navolging van 'n organisatoriese SGB en werknemers se verhoogde werksbetrokkenheid. Die uitslae het gewys dat daar ook 'n

beduidende verhouding bestaan tussen werknemers se aanwending van individuele SGG en werksbetrokkenheid. Die uitslae het bevestig dat daar 'n beduidende verhouding bestaan tussen die werkshulpbronne wat deur die organisasie voorsien word en positiewe WHI. Die uitslae het egter gewys dat daar nie 'n beduidende verhouding bestaan het tussen die navolging van 'n organisatoriese SGB en positiewe WHI nie. Die uitslae het verder aangedui dat daar 'n beduidende verhouding bestaan tussen die werknemers se aanwending van individuele SGG en positiewe WHI.

Die uitslae het aangedui dat positiewe WHI slegs 'n bemiddelaar is in die verhouding tussen inligting en werksbetrokkenheid, met 'n indirekte effek van 0,11 ($p < 0,00$; 95% CI [0,07, 0,14]), en in die verhouding tussen verhoudings-met-kollegas en werksbetrokkenheid, met 'n indirekte effek van 0,04 ($p < 0,01$; 95% CI [0,01, 0,07]). Die uitslae het ook bevestig dat positiewe WHI 'n bemiddelaar was in die verhouding tussen individuele SGG en werksbetrokkenheid met 'n indirekte effek van 0,05 ($p < 0,00$; 95% CI [0,02, 0,08]).

Die kennis wat opgedoen is deur die navolging van 'n SGB sal individue help om bewus te word van hul eie talente en om dit in sterktes te ontwikkel. Hierdie studie sal ook organisasies help om 'n organisatoriese SGB beter te verstaan, asook hierdie veranderlike se verhouding met positiewe WHI en werksbetrokkenheid. Hierdie studie voeg waarde toe tot die veld van positiewe sielkunde. Meer in die besonder voeg hierdie studie waarde toe tot die beperkte navorsing op die navolging van 'n SGB, en moontlike uitkomst binne die Suid-Afrikaanse konteks.

Aanbevelings is gemaak vir gebruik in die praktyk, asook vir verdere navorsing.

CHAPTER 1

INTRODUCTION

This mini-dissertation will be investigating the mediating effect of a positive work-home interaction between job resources, a strength-based approach, and work engagement among South African employees.

In this chapter the problem statement will be provided, as well as an overview of research already done on job resources, a strength-based approach (SBA) and positive work-home interaction (WHI). An explication of the research questions, research objectives and research hypotheses will be followed by a discussion of the research methodology. Lastly, the layout of the chapters and a summary of this chapter will be given.

1.1 PROBLEM STATEMENT

The world of work has become a place where higher-than-average skills, knowledge, talent and performance are essential for survival, let-alone in being successful in a competing global market (Luthans & Youssef, 2007). South African organisations are under great pressure to compete both on a local and international market level (Denton & Vloeberghs, 2003). They will not be able to sustain a successful competitive edge when merely focusing on and attending to employees' weaknesses (Luthans & Youssef, 2007). According to Shults (2008), the most valuable asset of any organisation is its human capital; it is therefore of the utmost importance to develop the employees in order to ensure increased performance and a competitive advantage. However, in order to increase performance, many organisations are following a 'deficiency approach', namely developing their employees' weaknesses (Buckingham & Clifton, 2001). According to Clifton and Harter (2003), an organisation that follows a deficiency approach focuses on employees who do not function well by providing them with training in respect of their weak points or areas of underdevelopment.

At the turn of the century a paradigm shift occurred, and the science of positive psychology emerged (Kristjánsson, 2010; Seligman & Csikszentmihalyi, 2000). *Positive psychology*

entails the scientific study of individuals' positive experiences and character traits, and also of the institutions that facilitate their development (Duckworth, Steen, & Seligman, 2005; Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Parks, & Peterson, 2005). This positive approach to psychology is concerned with the well-being and the optimal functioning of the individual (Duckworth et al., 2005). It aims to catalyse a change from focusing on and correcting their worst aspects, to enhancing their best and strongest qualities (Seligman, 2002). This new approach does not ignore weaknesses, illnesses or diseases, but rather serves as an addition to the science of pathology (Seligman et al., 2005). According to Linley, Joseph, Harrington and Wood (2006), the science of positive psychology is reliable and valuable, and represents a far greater contribution to the so-called 'normal' human experiences than does the deficiency approach.

The development of the individuals' talents into strengths is at the forefront of the positive psychology movement (Jimerson, Sharkey, Nyborg, & Furlong, 2004). This shift of focus is indicative of the fact that the world appears to be naturally inclined to telling others in which areas they are weak. It is easier for persons to notice that others are different from them, than to focus on what they are lacking (Clifton & Harter, 2003). This causes them to be unfamiliar with their talents, and their strengths are not realised or implemented. According to Clifton and Harter (2003), a 'talent' is a natural pattern of thought, feeling or behaviour that re-occurs, and can be applied in a productive manner, while a 'strength' denotes "...the ability to provide consistent, near perfect performance in a given activity" (Clifton & Harter, 2003, p. 111). Linley and Harrington (2006, p. 39) define a 'strength' as "...a natural capacity for behaving, thinking or feeling in a way that allows optimal functioning and performance in the pursuit of valued outcomes." Individuals' strengths are not innate (Page & Vella-Brodrick, 2009); talents serve as the foundation for the development of a strength. A talent becomes a strength when it is identified, refined, and used in conjunction with the appropriate skills and knowledge (Page & Vella-Brodrick, 2009).

The development of the positive psychology movement also gained popularity with organisational researchers focusing on its implications in the work environment (Luthans & Youssef, 2007). In this respect a number of domains and approaches has recently emerged (Luthans & Youssef, 2007). One of these new domains and/or approaches is called 'positive organisational behaviour' (Luthans, 2002a; Luthans & Youssef, 2007). According to Luthans (2002b, p. 59), 'positive organisational behaviour' can be defined as "...the study and

application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace". Thus, with reference to the definition of positive organisational behaviour and the basis of positive psychology, there seems to be a link between positive organisational behaviour and following a SBA. According to Biswas-Diener, Kashdan and Minhas (2011), a SBA views an individual's strengths as personal capacities or potential, and has to be cultivated by means of effort in the most effective manner. Individuals who become aware of their talents have a better understanding of their potential, and can begin to combine their talents with the correct amount of skills and knowledge to develop strengths (Clifton & Harter, 2003). According to Seligman (2002), a person's happiness increases when he/she is able to implement his/her strengths.

Research has indicated that when people develop and use their strengths, it leads to positive psychological and behavioural outcomes (Biswas-Diener et al., 2011; Linley et al. 2010). They are happier, have less feelings of depression (Seligman et al., 2005), and are more productive (Clifton & Harter, 2003). These findings also correlate with the 'happy-productive' thesis, which indicates that happy employees are more productive (Zelenski, Murphy, & Jenkins, 2008). Studies done by Govindji and Linley (2007), and Linley, Nielsen, Wood, Gillett and Biswas-Diener (2010) indicate that when applying their strengths, people have higher levels of energy and vitality. Where employees indicated that they had the opportunity to develop and use their strengths, organisations demonstrated higher customer loyalty, and lower employee turnover (Clifton & Harter, 2003). The organisations that provide development opportunities enhance the development of their employees' skills, as well as the acquisition of assets and emotional benefits, which in turn, lead to a positive interaction between the work and home domains (Voydanoff, 2004). Following a SBA can thus be perceived from an individual (employee) and organisational perspective (Clifton & Harter, 2003). By developing their employees' strengths they assist them to reach their full potential, which is beneficial to the family, the organisation, and to society (Linley & Harrington, 2006).

Organisations that follow a SBA do not ignore weaknesses. They, instead, focus on the identification, the development and the correct application and use of strengths, and the management of weaknesses. This is done in order to ensure optimal functioning and to develop organisational potential (Clifton & Harter, 2003). This identification, development,

and the use of strengths are important for personal, as well as organisational development (Biswas-Diener et al., 2011). According to Linley and Harrington (2005, 2006), individuals have a natural tendency to grow and develop their potential, and if they find themselves in an environment that supports their need for development, they will flourish. Research indicated that when employees' strengths are implemented, it adds to their goal-attainment, and enhances their self-esteem and well-being. This results in them feeling happier and more fulfilled (Govindji & Linley, 2007; Linley et al., 2010). These positive emotions result in their functioning at a higher level (Fredrickson, 2004), which, in the long term, contributes to the well-being of the organisation (Liemann, 2009).

It is suggested that much more research has to be done on people's strengths (Gable & Haidt, 2005; Seligman, 2002), as very little empirical research has been done on the role of strengths and the effects of the use of employees' talents and strengths (Duckworth et al., 2005). In positive psychology, attention has already been given to the value of having and implementing strengths (Wood, Linley, Maltby, Kashdan, & Hurling, 2010). Although empirical research has been done on the effect of strengths on well-being, research on the positive outcomes of following a SBA is still very limited (Wood et al., 2010).

One positive outcome of following a SBA is in respect of *work engagement*. According to Schaufeli and Bakker (2004, p. 295), "...work engagement is a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption" (see also Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). *Vigour* consists of high energy levels and mental resilience while working. *Dedication* implies that one is strongly involved in the task at hand, and that feelings of significance, enthusiasm and challenge are experienced. *Absorption* is considered to mean full concentration, being happily engrossed in one's work; it is difficult to detach oneself from it, and time passes swiftly (Schaufeli & Bakker, 2004). These engagement characteristics are seen as the opposite of the variables characterising burnout, except for absorption which is not considered as the opposite of professional inefficacy (Schaufeli & Bakker, 2004). Therefore this study only includes the 'core' concepts of engagement, namely vigour and dedication (Schaufeli & Bakker, 2004).

It is important that employees remain engaged in their work, due to the positive outcomes of engagement for both the individual and the organisation (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). According to Schaufeli et al. (2002), 'work engagement' is perceived

as a positive experience in itself. Several researchers indicated that work engagement contributes to an employee having good health, and to a positive work affect (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Rothbard, 2001). It was found that engaged employees are more committed to the organisation (Demerouti et al., 2001), express positive behaviour by taking initiative, and are motivated to learn (Sonnentag, 2003). Harter, Schmidt, and Hayes (2002) found that employees' engagement levels have a positive influence on the performance of business-units, namely higher organisational profitability, enhanced productivity, more customer satisfaction and loyalty, lower employee turnover, and improved safety. Therefore, engaged employees provide the organisation with a competitive advantage (Bakker, Schaufeli, Leiter, & Taris, 2008).

The Job Demands-Resources (JD-R) Model is often used to explain the impact of job demands and job resources on employees' work engagement (Bakker & Demerouti, 2007). The JD-R model (Bakker & Demerouti, 2007; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Demerouti & Bakker, 2011) indicates that every occupation has its own specific risk factors, which can be categorised into job demands and resources, and are associated with job-related stress. The JD-R Model can be used in various occupational settings, irrespective of the particular demands and resources involved (Demerouti & Bakker, 2011). These demands include the physical, psychological, social, and organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort, and are associated with physiological and/or psychological costs (Bakker, Demerouti, & Verbeke, 2004). A *job resource* is the physical, psychological, social, or organisational aspect of the individual's work that decreases the job demands and the physiological and psychological costs that are associated with it. It assists in the attainment of goals, and encourages personal growth, learning and development (Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004). Previous research indicated a positive relationship between work engagement and the job resources offered by the organisation; including support from colleagues and supervisors, feedback on an employee's performance, a variety of skills, autonomy, and learning opportunities (Bakker & Demerouti, 2007).

The development of the individual's personal resources is also encouraged by the job resources that they are provided with (Demerouti & Bakker, 2011). According to the JD-R Model, job resources become more important and motivational as the demands of the job increase (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). Thus, employees are

more engaged when their job demands and job and personal resources are high (Demerouti & Bakker, 2011). *Personal resources* are positive self-evaluations that are related to resiliency, and refer to the individual's sense of his/her ability to control the environment and to have a successful impact on it (Hobfoll, Johnson, Ennis, & Jackson, 2003). According to Bakker and Demerouti (2008), personal resources include optimism, self-efficacy, self-esteem, resilience, and an active coping style.

Research has indicated a relationship between the development of employees' strengths and higher work engagement levels (Biswas-Diener et al., 2011; Harter et al., 2002). According to Linley and Harrington (2006), the development of strengths leads to enhanced engagement, energy and motivation, resulting in positive emotions, more resilience, creativity, and better work performance. Clifton and Harter (2003) conducted a study on employee engagement interventions in 65 organisations. The identification of talents and the SBA was used by four of the 65 organisations. The study group comprised of four organisations, and the other 61 organisations made up the control group. The results indicated that the study group's work engagement levels were extensively higher than that of the control group, from the first to the second year of the study. Thus, indicating that organisations that follow a SBA will contribute to employees experiencing higher work engagement levels.

In this study two constructs from a new instrument will be used to test the relationship between the use of strengths and work engagement (see Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process), namely 1) following an organisational SBA, and 2) individual strength-oriented behaviour (SOB). An *organisational SBA* refers to the 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. An organisational SBA can be seen as a job resource at the macro or organisational level that may play an extrinsic motivational role (in addition to other job resources), in the sense that a work environment that focuses and uses employees' strengths may foster the willingness of the employees to dedicate their efforts and abilities to the work task (Demerouti & Bakker, 2011; Els et al., in process; Meijman & Mulder, 1998). *Individual SOB* refers to self-starting behaviour directed towards using one's strengths in the workplace. Individual SOB can be considered as a personal resource and is related to concepts such as self-efficacy, optimism and resilience, but refer more to the pro-active behaviour of the individual to apply his/her strength specifically in the workplace (Els et al., in process).

According to Rucker, Preacher, Tormala and Petty (2011), it is important to understand the psychological processes by means of which independent variables affect dependent variables (i.e., mediators). Although different variables can explain the process by which an organisational SBA and individual SOB influence work engagement, no study has been found to test for the indirect effect of positive WHI in this relationship. Positive WHI is part of the broader concept of WHI (an interactive process in which a worker's functioning in one domain (e.g., the home) is influenced by (negative or positive) load effects that have built up in the other domain (e.g., at work) (Demerouti, Geurts, & Kompier, 2004, p. 7). Positive WHI is therefore the positive load reactions that employees develop in the work domain, and that facilitate their functioning in the home domain (Geurts et al., 2005).

Initially literature on WHI mainly focused on the negative aspects of WHI, until the emergence of the positive psychology movement, when researchers started to investigate the positive influences that these domains may have on each other (Grzywacz & Marks, 2000; Voydanoff, 2004; Wayne, Grzywacz, Carlson, & Kacmar, 2007). Positive interaction research (also referred to as *positive facilitation* or *positive spill-over* between the work and home domains) is still very limited (Frone, 2003). According to Wayne et al. (2007), very little empirical research has been done on a SBA and positive WHI.

It seems that there may be a relationship between SBA, positive WHI, and work engagement, and that positive WHI may have a mediating effect in the relationship between SBA and work engagement. According to Bakker and Demerouti (2008), job resources play an intrinsic motivational role, because they encourage employees to learn, to grow, and to develop. They can be an extrinsic motivator by being instrumental in the achievement of work goals. Organisations that provide their employees with many job resources (e.g., performance feedback and opportunities for professional development) will create a willingness to dedicate the learnt abilities to the task at hand (Bakker & Geurts, 2004). According to Mostert, Peeters and Rost (2011), an essential prerequisite for positive WHI is to generate and conserve resources. This is in line with the conservation of resources (COR) Theory of Hobfoll (2001), which states that the individual's primary motivation is to maintain and accumulate resources. Hobfoll (2001) indicated that individuals who have more resources than others will most likely be more capable of gaining new resources. The generation of resources in one domain promotes an individual's performance or affect in another domain, thus bringing about enrichment (Greenhaus & Powell, 2006). Employees who feel that their

resources in one domain (i.e., work) are beneficial to or have a positive influence on the other domain (i.e., the home), will most likely give cognitive acknowledgment to the source that brought about the enrichment (Wayne et al., 2007). Thus, if employees experience that their work domain has enriched their home domain, they will be more engaged in their work (the originating domain of the positive emotions).

Employees who have the opportunity to develop their skills and who derive satisfaction from their work will experience more positive moods (Bakker & Geurts, 2004). If employees are competent and satisfied with their work, these positive feelings will enhance their self-worth, and lead to positive interaction within the home domain (Mostert, 2006; Van Aarde & Mostert, 2008). Development opportunities for employees are energy resources that enhance positive outcomes (e.g., the attainment of new skills and positive attitudes) in the work domain, and are beneficial for functioning in the home domain (Wayne et al., 2007).

The Broaden-and-Build Theory also explains individuals' positive emotions by means of momentary broadened thought-action repertoires, and over time they build personal resources, like social connections, better coping strategies, and knowledge of the environment (Fredrickson, 2004; Fredrickson & Losada, 2005). The discovery of new thought patterns and actions build an individual's physical, intellectual, social and psychological resources (Fredrickson & Joiner, 2002). According to Fredrickson and Losada (2005), positive emotions or moods change individuals for the better by making them more resilient, socially acceptable, and effective. Individuals who have enriching jobs will most likely develop skills and experience positive emotions at work that will have a positive effect in their home domain (Wayne et al., 2007). According to Voydanoff (2004), more learning opportunities and meaningful work have as result the fact that employees experience higher positive interaction between the work and home domains.

From the above it is hypothesised that there exists a relationship between SBA and positive WHI among South African employees. Employees who have the opportunity to identify and develop their talents into strengths tend to be happier (Seligman, 2002) and attain new skills, thus they experience positive moods (Voydanoff, 2004). It is assumed that these positive feelings in the work domain will spill over and have a positive influence on the home domain. Development opportunities also provide employees with enhanced energy levels (Wayne et al., 2007). Thus, less time for recovery is needed, and employees can spend more

time with their families. The result is positive dispositions, and them feeling energised for and more engaged in their work. Harter et al. (2002) and Linley and Harrington (2006), indicate that there exists a positive relationship between SBA and work engagement. Therefore, positive WHI will inevitably have an indirect effect on the relationship between SBA (organisational and individual) and work engagement.

The importance and need for empirical research on the relationship between SBA (Duckworth et al., 2005; Wood et al., 2010) and positive outcomes (Bakker et al., 2008; Luthans, 2002a; Schaufeli & Bakker, 2004) have been indicated. At this stage no research has been done on the relationship between job resources, organisational SBA, individual SOB, work engagement, and the mediating role of positive WHI. These relationships are indicated in the structural model of this study, and are presented in Figure 1.

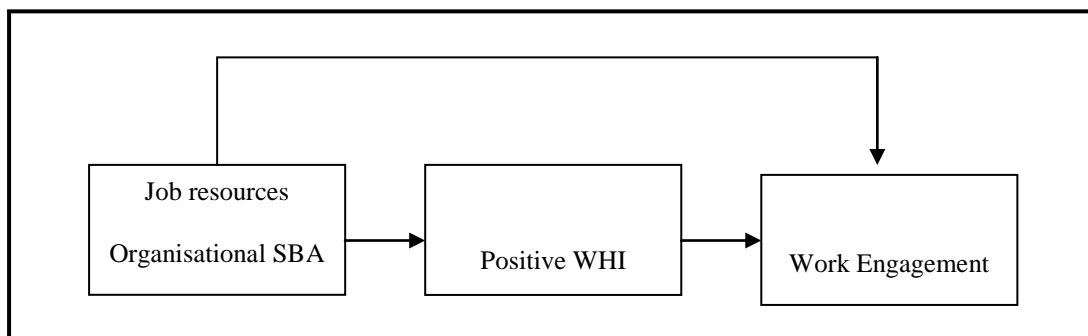


Figure 1. A structural model of job resources, organisational SBA, individual SOB, work engagement and positive WHI as mediator.

The following research questions emerged from the above-mentioned problem statement:

- What is the relationship between job resources, organisational SBA, individual SOB, positive WHI and work engagement, as indicated in the literature?
- What is the relationship between job resources, organisational SBA, individual SOB, positive WHI and work engagement among South African employees?
- Do organisational SBA and individual SOB impact on work engagement?
- Does positive WHI mediate between job resources, organisational SBA, individual SOB and work engagement?
- What recommendations can be made for future research and practice?

1.2 RESEARCH OBJECTIVES

The research objectives are divided into the following, namely a general objective and specific objectives.

1.2.1 General objective

The general objective of this research study is to test a structural model of job resources, organisational SBA, individual SOB and work engagement, and to investigate if positive WHI mediates between job resources, organisational SBA, individual SOB and work engagement among South African employees.

1.2.2 Specific objectives

The specific objectives of this research are:

- To investigate the relationship between job resources, organisational SBA, individual SOB, positive WHI and work engagement, in respect of the literature;
- To determine the relationship of job resources, organisational SBA, individual SOB, positive WHI and work engagement among South African employees;
- To determine whether organisational SBA and individual SOB impact on work engagement
- To determine whether positive WHI mediates between job resources, organisational SBA, individual SOB and work engagement;
- To test a structural model that includes job resources, organisational SBA, individual SOB, positive WHI and work engagement; and
- To make recommendations for future research and practice.

1.3 RESEARCH HYPOTHESES

H 1a: There is a significant relationship between job resources and work engagement.

H 1b: There is a significant relationship between organisational SBA and work engagement.

H 1c: There is a significant relationship between individual SOB and work engagement.

H 2a: There is a significant relationship between job resources and positive WHI.

H 2b: There is a significant relationship between organisational SBA and positive WHI.

H 2c: There is a significant relationship between individual SOB and positive WHI.

H 3a: Positive WHI mediates between job resources and work engagement.

H 3b: Positive WHI mediates between organisational SBA and work engagement.

H 3c: Positive WHI mediates between individual SOB and work engagement.

1.4 RESEARCH METHOD

The research method consists of two phases, namely a literature review and an empirical investigation. The results are presented in the form of a research article.

1.4.1 Literature review

In Phase 1 a review is done of job resources, SBA, positive WHI and work engagement. Articles relevant to the study that were published between 1991 and 2011 are obtained by doing computer searches via databases, such as Academic Search Premier, Business Source Premier, PsycArticles, PsycInfo, EbscoHost, Emerald, ProQuest, SACat, SAePublications, Science Direct, and Nexus. The most relevant journals that are consulted include *Journal of Occupational Health Psychology*, *Journal of Managerial Psychology*, *Journal of Educational Psychology*, *Journal of Positive Psychology*, *Scandinavian Journal of Work Environment and Health*, *South African Journal of Psychology*, *Review of General Psychology*, *Work and Stress*, *International Coaching Psychology Review*, *Journal of Applied Psychology*, *The Coaching Psychologist*, *Computers in Human Behavior*, *Journal of Organizational Behavior*, *Social Indicators Research*, *Management Dynamics*, *South African Journal of Industrial Psychology*, *Administrative Science Quarterly*, *Journal of Cross-Cultural Psychology*, *Journal of Happiness Studies*, *American Psychologist* and *Personality and Individual Differences*.

1.4.2 Research participants

For the purpose of this study, an availability sample of employees from various occupational groups in South Africa is obtained ($N = 699$). The sample group represents different genders, marital statuses, ages and racial groups. It is required from the participants to possess at least

a grade 12-certificate. If they are not in possession of a grade 12-certificate, but of a grade 10 or 11, it is then required that they should have a good command of the English language in order to complete the questionnaire successfully. The sample group is representative of the rest of South Africa.

1.4.3 Measuring instruments

Biographical Questionnaire. A questionnaire is used to determine the biographical characteristics of the participants, such as year of birth, gender, home language, race, level of education, household status (marital and parental status), years working in the organisation, and current position within the organisation.

Job Resources. Five aspects, namely autonomy, relationship with colleagues, relationship with supervisors, information, and participation, are measured by means of the questionnaire on experience and assessment of work (Dutch abbreviation: VBBA) (Van Veldhoven, Meijman, Broersen, & Fortuin, 1997). All the items are scored on a four-point frequency-rating scale ranging from 1 (always) to 4 (never). Autonomy is measured by five items, e.g., can you decide on your own how your work has to be done? Relationship with colleagues is measured by means of three items, e.g., do you get on well with your colleagues? The individuals' relationship with their supervisors is measured by four items, e.g., if necessary, may you ask your supervisor for help? Information is measured by four items, e.g., do you receive sufficient information on the outcomes of your work? Participation is measured by four items, e.g., are you allowed to participate in decisions affecting issues related to your work?

The validity and reliability of the VBBA have been proven before (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). Van Veldhoven et al. (2002) reported sufficient Cronbach alpha coefficients for autonomy ($\alpha = 0,82$), relationship with colleagues ($\alpha = 0,71$), relationship with the supervisors ($\alpha = 0,82$), information ($\alpha = 0,86$), and participation ($\alpha = 0,88$).

Organisational SBA and Individual SOB. Organisational SBA and individual SOB are measured by means of the new questionnaire developed by Els et al. (in process). Organisational SBA is measured by eight items, e.g., this organisation uses my strengths, and

individual SOB is measured by eight items, e.g., I use my strengths at work. All the items are scored on a seven-point scale ranging from 0 (never) to 6 (almost always). The psychometric properties (validity and reliability) of the questionnaire are tested by conducting the Rasch analysis (Els et al., in process; Tabiri, 2012), and the exploratory and confirmatory factor analysis (Els et al., in process; Keenan, 2012).

Positive WHI. Positive WHI is measured using the positive WHI scale of the Survey Work-Home Interaction-Nijmegen (SWING) (Geurts et al., 2005). Positive WHI denotes the positive effect of the work domain on the home domain. Six items measure positive WHI. The spillover of the positive mood developed at work to the home domain is measured by two items, e.g. how often does it happen that you come home cheerfully after a successful day at work, positively affecting the atmosphere at home? The transfer of skills learned at work that improve functioning at home is measured by four items, e.g. how often does it happen that you fulfil your domestic obligations better because of what you have learnt on your job? All the items are scored on a four-point frequency-rating scale ranging from 0 (never) to 3 (always). Geurts et al. (2005) reported that the Cronbach alpha coefficient for this scale is reliable ($\alpha = 0,75$). Several authors also confirmed the reliability of this scale for different South African populations, where the Cronbach alpha coefficients range between 0,77 and 0,84 (Marais, Mostert, Geurts, & Taris, 2009; Mostert, 2006; Pieterse & Mostert, 2005; Rost & Mostert, 2007).

Work Engagement. Work engagement is measured by means of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). The UWES is scored on a seven-point frequency-rating scale, varying from 0 (never) to 6 (every day). Vigour is measured by four items, e.g. at work I feel like bursting with energy. Dedication is measured by four items, e.g. I am enthusiastic about my job. The Cronbach alpha coefficients range between 0,75 and 0,86 (Schaufeli et al., 2002). In a sample of 2 396 members of the South African Police Service, Storm and Rothmann (2003) obtained sufficient Cronbach alpha coefficients for vigour ($\alpha = 0,78$) and for dedication ($\alpha = 0,89$).

1.4.4 Research procedure

After permission is obtained from the management in the various occupational groups, a letter requesting participation is e-mailed to the individuals who are to take part in the

research study. The letter explains the objectives and importance of the study. The questionnaire is sent to different organisations and sectors in South Africa. The questionnaire is completed by different departments or clusters within the different organisations. The time-frame to complete the questionnaire is approximately 40 minutes. The participants are given two to three weeks to complete the questionnaires. They are reminded of the completion a week before the questionnaires are collected, after which the data collection process is ended, and the data analysis is performed. Participation in the study is voluntary, and the confidentiality and anonymity of the participants are emphasised. The different organisations that participate in the study are given comprehensive feedback, individually, regarding the results that are obtained.

1.4.5 Statistical analysis

The statistical analysis of this study is carried out by means of the SPSS program (SPSS Inc., 2009) and Mplus 6.1 (Muthén & Muthén, 2010). The data are analysed by making use of descriptive statistics (e.g. means, standard deviations) and inferential statistics. The Cronbach alpha coefficients are used to determine the reliability of the constructs that are measured, and effect sizes are used to determine the practical significance of the results (Steyn & Swanepoel, 2008). Cut-off points of 0,30 (medium effect) and 0,50 (large effect) are set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance is set at a value of 95% ($p \leq 0,05$). The specification of continuous latent variables in this model investigation is conducted by means of Mplus. It is assumed by the popular maximum likelihood (ML) estimator that the observed variables are measured on a continuous scale. The covariance matrix represents the input type. The latent variables are created by using individual items as indicators. Thus, item parcelling methods are not used (Bandalos & Finney, 2001).

The goodness-of-fit of the models are tested by using the traditional χ^2 statistic, comparative fit index (CFI), Tucker–Lewis index (TLI), root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Even though there is only a small agreement on the cut-off values for adequate fit (Lance, Butts, & Michels, 2006), conformist guidelines are followed for this study, whereby fit is considered adequate if CFI and TLI values are larger than 0,90 (Byrne 2010; Hoyle, 1995). A RMSEA value of 0,05 or less indicates a good fit, and values between 0,08 and 0,05 represent a moderately good

model fit (Browne & Cudeck , 1993). According to Hu and Bentler (1999), the SRMR value should be smaller than 0,05. The Akaike information criterion (AIC) and sample adjusted Bayesian information criterion (BIC) values are also reported.

In this study a mediation analysis is conducted to emphasis the significant value of the indirect effect of positive WHI (Rucker et al., 2011). A bootstrapping method is used to test for mediation. According to Preacher and Hayes (2008), ‘bootstrapping’ is a non-parametric resampling method that is used to test indirect effects, and is a valid and powerful method to test indirect effects (also see Hayes, 2009; MacKinnon, Lockwood, & Williams, 2004). The bootstrap method is set to at least 1000 draws (Hayes, 2009). The bootstrap confidence interval level for this study is set at 95%, therefore it is expected that the indirect effects would differ significantly at $p < 0,05$. In this study the effect of the independent variables (autonomy, relationship with colleagues, relationship with supervisors, information, participation, organisational SBA, and individual SOB,) on the dependent variable (work engagement), which is mediated by the mediating variable (positive WHI), is investigated. Furthermore, the κ^2 (kappa-squared) values are calculated by a public online calculator (see Rothmann, 2011 for more information), which assists in establishing a basis to determine the magnitude of the mediating effect sizes (Preacher & Kelley, 2011).

1.4.6 Ethical considerations

It is essential for the success of a project of this kind to conduct research that is fair and ethical. Issues such as voluntary participation, informed consent, protection from harm, confidentiality, and the maintenance of privacy are taken into account (Salkind, 2009). The research proposal is submitted to the North-West University’s ethical committee for review.

1.5 OVERVIEW OF THE CHAPTERS

In Chapter 2 the findings of the research objectives will be discussed in the form of a research article. Chapter 3 deals with the conclusions, limitations and recommendations of this research study.

1.6 CHAPTER SUMMARY

In this chapter the following were presented, namely the problem statement, research objectives and the research hypotheses. The measuring instruments and the research method used in the study were also explained, followed by a brief overview of the chapters.

REFERENCES

- Bakker, A. B., & Demerouti, E., (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of Stress Management*, 10(1), 16-38.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104.
- Bakker, A. B., & Geurts, S. A. E. (2004). Toward a dual-process model of work-home interference. *Work and Occupations*, 31(3), 345-366.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Bandalos, D. L. & Finney, S. J. (2001). Item parcelling issues in structural equation modelling. In: G. A. Marcoulides & R. E. Schumaker (Eds.), *New developments and techniques in structural equation modelling* (pp. 269-296). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Biswas-Diener, R., Kashdan, T. B., & Minhas, G. (2011). A dynamic approach to psychological strength development and intervention. *The Journal of Positive Psychology*, 6(2), 106-118.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.
- Buckingham, M., & Clifton, D. O. (2001). *Now, discover your strengths*. New York: Free Press.
- Byrne, B. M. (2010). *Structural equation modelling with AMOS* (2nd ed.). Taylor & Francis Group.

- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In A. K. S. Cameron, B. J. E. Dutton & C. R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). San Francisco: Berrett-Koehler Publishers Inc.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Orlando: Academic 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.
- Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work Environment and Health*, 27, 279-286.
- Demerouti, E., Geurts, S. A. E., & Kompier, M. (2004). Positive and negative work-home interaction: Prevalence and correlates. *Equal Opportunities International*, 23(1), 6-35.
- Denton, M., & Vloeberghs, D. (2003). Leadership challenges for organisations in the new South Africa. *Leadership & Organization Development Journal*, 24(2), 84-95.
- Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Clinical Psychology Review*, 1, 629-651.
- Els, C., Mostert, K., Van Woerkom, M., Rothmann, S. Jnr., & Bakker, A. B. (in process). *Following a strength-based and deficiency-based approach: The development and psychometric properties of a new scale*.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society*, 359, 1367-1377.
- Fredrickson, B. L., Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *American Psychological Society*, 13(2), 172-175.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60(7), 678-686.
- Frone, M. R. (2003). Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of Occupational Health Psychology* (pp. 143-162). Washington, DC: American Psychological Association.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology*, 9(2), 103-110.
- Geurts, S. A. E., Taris, T. W., Kompier, M. A. J., Dikkers, J. S. E., Van Hooff, M. L. M., & Kinnunen, U. M. (2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work and Stress*, 19(4), 319-339.

- 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.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and families are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92.
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualising the work-family interface: An ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.
- 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.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monograph*, 76(4), 408-420.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337-370.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84, 632-643.
- Hoyle, R. H. (1995). The structural equation modelling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modelling: concepts, issues, and applications* (pp. 1-15). Thousand Oaks, CA: Sage.
- Hu, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6 (1), 1-55.
- Jimerson, S. R., Sharkey, J. D., Nyborg, V., & Furlong, M. J. (2004). Strength-based assessment and school psychology: A summary and thesis. *The California School Psychologist*, 9, 9-19.
- Keenan, E. (2012). *The factorial validity and reliability of the Strength-Based Approach Scale in a sample of South African employees*. Unpublished master's dissertation, North-West University, Potchefstroom, South Africa.
- Kristjánsson, K. (2010). Positive psychology, happiness, and virtue: The troublesome conceptual issues. *Review of General Psychology*, 14(4), 296-310.

- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cut-off criteria: What did they really say? *Organizational Research Methods*, 9, 202-221.
- Liehmman, L. (2009). *How to build a strength-based organization: Learnings from craigwood youth services*. Unpublished doctoral thesis, Benedictine University, East Eisenhower, U.S.A.
- Linley, P. A., Garcea, N., Hill, J., Minhas, G., Trenier, E., & Willars, J. (2010). Strength spotting in coaching: Conceptualisation and development of the strength spotting scale. *International Coaching Psychology Review*, 5(2), 165-176.
- Linley, P. A., & Harrington, S. (2005). Positive psychology and coaching psychology: Perspectives on integration. *The Coaching Psychologist*, 1(1), 13-14.
- Linley, P. A., & Harrington, S. (2006). Strengths coaching: A potential-guided approach to coaching psychology. *International Coaching Psychology Review*, 1(1), 37-46.
- Linley, P. A., Joseph, S., Harrington, S., & Wood, A. M. (2006). Positive psychology: Past, present, and (possible) future. *The Journal of Positive Psychology*, 1(1), 3-16.
- Linley, P. A., Nielsen, K. M., Wood, A. M., Gillett, R., & Biswas-Diener, R. (2010). Using signature strengths in pursuit of goals: Effects on goal progress, need satisfaction, and well-being, and implications for coaching psychologists. *International Coaching Psychology Review*, 5(1), 8-17.
- Luthans, F. (2002a). The need for and meaning of positive organizational behaviour. *Journal of Organizational Behavior*, 23, 695-706.
- Luthans, F. (2002b). Positive organisational behaviour: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-75.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behaviour. *Journal of management*, 33(3), 321-349.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128.
- Marais, C., Mostert, K., Geurts, S., & Taris, T. (2009). The psychometric properties of a translated version of the survey work-home interaction-nijmegen (SWING) instrument. *South African Journal of Psychology*, 39(2), 202-219.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry & C. J. De Wolff (Eds.), *Handbook of work and organizational psychology 2nd ed.* (pp. 5-33). Hove: Erlbaum.

- Mostert, K. (2006). Work-home interaction as partial mediator between job resources and work engagement. *Southern African Business Review*, 10(2), 53-74.
- Mostert, K., Peeters, M., & Rost, I. (2011). *Work-home interference and the relationship with job characteristics and well-being: A South African study among employees in the construction industry*. Retrieved July 13, 2011 from <http://www.wileyonlinelibrary.com>
- Muthén, L. K., & Muthén, B. O. (2010). *Mplus user's guide* (6th ed.). Los Angeles, CA.
- Page, K. M., & Vella-Brodrick, D. A. (2009). The “what”, “why”, and “how” of employee well-being: A new model. *Social Indicators Research*, 90, 441-458.
- Pieterse, M., & Mostert, K. (2005). Measuring work-home interaction: A validation of the Survey Work-Home Interaction Nijmegen (SWING) instrument. *Management Dynamics*, 14(2), 2-15.
- Preacher, K. J., & Hayes, A. (2008). Assymtotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16, 93-115.
- Rost, I., & Mostert, K. (2007). The interaction between work and home of employees in the earthmoving equipment industry: Measurement and prevalence. *South African Journal of Industrial Psychology*, 33(2), 54-61.
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655-684.
- Rothmann, S. (Jr.) (2011). *Kappa-squared: Mediation Effect Size*. Retrieved August 11, 2011 from <http://www.stats.myresearchsurvey.com>
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5(6), 359-371.
- Salkind, N. J. (2009). *Exploring research* (7th ed.). New Jersey, USA: Pearson Prentice Hall.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.

- Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3–9). New York: Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, *55*(1), 5-14.
- Seligman, M. E. P., Steen, T. A., Parks, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*(5), 410-421.
- Shults, C. (2008). Making the case for a positive approach to improving organizational performance in higher education institutions. *Community College Review*, *36*(2), 133-159.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, *3*, 518-528.
- SPSS Inc. (2009). *SPSS 18.0 for Windows*. Chicago, IL: SPSS Inc.
- Steyn, H. S., & Swanepoel, C. J. (2008). *Praktiese statistiek (2end ed.)*. Potchestroom: Noordwes Universiteit.
- Storm, K., & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology*, *29*(4), 62-70.
- Tabiri, N. (2012). *An evaluation of the reliability and validity of the Strengths-Based Approach Scale using Rasch analysis in a South African population*. Unpublished master's dissertation, North-West University, Potchefstroom, South Africa.
- Van Aarde, A., & Mostert, K. (2008). Work-home interaction of working females: What is the role of job and home characteristics? *South African Journal of Industrial Psychology*, *34*(3), 1-10.
- 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 Veldhoven, M., Meijman, T. F., Broersen, J. P. J., & Fortuin, R. J. (2002). *Handleiding VBBA(2nd ed.)*. Amsterdam: SKB Vragenlijstservices.
- Voydanoff, P. (2004). Implications of work and community demands and resources for work-to-family conflict and facilitation. *Journal of Occupational Health Psychology*, *9*(4), 275-285.

- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review, 17*, 63-76.
- Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2010). Using personal and psychological strengths leads to increases in well-being over time: A longitudinal study and the development of the strengths use questionnaire. *Personality and Individual Differences, 50*, 15–19.
- Zelenski, J. M., Murphy, S. A., & Jenkins, D. A. (2008). The happy-productive worker thesis revisited. *Journal of Happiness Studies, 9*, 521-537.

CHAPTER 2

RESEARCH ARTICLE

THE MEDIATING EFFECT OF POSITIVE WORK-HOME INTERACTION BETWEEN JOB RESOURCES, A STRENGTH-BASED APPROACH AND WORK ENGAGEMENT AMONG SOUTH AFRICAN EMPLOYEES

ABSTRACT

Orientation: Organisations will not be able to keep a competitive advantage by merely focussing on the development of their employees' weaknesses. Employees should also be provided with sufficient job resources and opportunities to develop and/or use their strengths, as this could lead to positive work-home interaction (WHI) and work engagement.

Research purpose: To determine if positive WHI mediates between job resources, an organisational strength-based approach (SBA), individual strength-oriented behaviour (SOB) and work engagement among South African employees.

Motivation for the study: To gain more knowledge and a better understanding of the outcomes of following a SBA within the South African context.

Research design, approach and method: A cross-sectional research approach was used. An availability sample ($N = 699$) of employees from various occupational groups in South Africa was used. A mediation analysis was carried out in order to determine the indirect effect of positive WHI.

Main findings: The results indicated that positive WHI was only a mediator in the relationship between information and work engagement and in the relationship between colleague relationships and work engagement. The results also confirmed that positive WHI was a mediator in the relationship between individual SOB and work engagement.

Practical/managerial implications: Knowledge of following a SBA will assist individuals in becoming aware of their talents, and of developing them into strengths. This study will also assist organisations in gaining a better understanding of organisational SBA and the relationship with positive WHI and work engagement.

Contribution/value-add: This study adds value to the limited research on following a SBA, and possible outcomes within the South African context.

Keywords: Strength-based approach; individual strength-oriented behaviour; job resources; positive work-home interaction; work engagement; mediating effect; positive psychology.

INRODUCTION

Organisations in South Africa are under great pressure to compete both on a local and international market level (Denton & Vloeberghs, 2003). According to Shults (2008), human capital is the most valuable asset of any organisation. It is, therefore, vital that an organisation develops its employees to ensure increased performance and a competitive advantage. However, an organisation that focuses exclusively on developing and improving the employees' weaknesses will not be able to attain and to maintain a successful competitive edge (Luthans & Youssef, 2007). According to Buckingham and Clifton (2001), many organisations are, however, still following a deficiency-based approach (DBA) by developing their employees' weaknesses. Research done by the Gallup Organisation found that an individual's talents present the best opportunity to achieve success, and if these talents are developed into strengths, the individual will sustain higher performance levels (Clifton & Harter, 2003). It is, therefore, important to investigate the outcomes of a strength-based approach (SBA) from both an organisational and an individual (employee) perspective, more specifically referred to as organisational SBA and individual strength-oriented behaviour (SOB) (Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process).

The SBA emerged from the recent positive psychology movement (Kristjánsson, 2010; Seligman & Csikszentmihalyi, 2000) as a result of people being unfamiliar with their talents and not realising or using their strengths. Following a SBA holds numerous positive outcomes for both the organisation and its employees. When organisations and their employees work in collaboration to identify, develop, and use their strengths, it is not only beneficial to the employees' personal development, but also for the organisations' development (Biswas-Diener, Kashdan, & Minhas, 2011). Several research studies found that the identification, development and use of the employees' strengths help them with goal attainment, and enhance their self-esteems, their well-being, and their energy levels, and that results in them feeling happier and more fulfilled (Govindji & Linley, 2007; Linley, Nielsen, Wood, Gillett, & Biswas-Diener, 2010). According to Fredrickson (2004), positive emotions help individuals to function at their utmost over a long period of time, thus resulting in improved organisational well-being (Liehmann, 2009). A study done by Clifton and Harter (2003) proved that organisations with more employees who have the opportunity to develop and use their strengths indicated a higher customer loyalty and a lower employee turnover. It

was found that from a theoretical viewpoint, positive psychology has given equal attention to the value of both having and using strengths (Wood, Linley, Maltby, Kashdan, & Hurling, 2010). However, very little empirical research has been done on the role of the employees' strengths, and the effect of using their strengths and talents (Duckworth, Steen, & Seligman, 2005). According to Wood et al. (2010), research has been done to determine what the effect of having strengths is on an individual's well-being, but research on the positive outcomes for organisations when following a SBA, and when employees themselves are using their strengths in the workplace, is still very limited.

Studies report that one of the many positive outcomes of following a SBA is that the work engagement levels of the individual increase (Biswas-Diener et al., 2011; Harter, Schmidt, & Hayes, 2002). Furthermore, according to Voydanoff (2004), the result for organisations that provide their employees with the opportunity to develop themselves, is the attainment of more skills and assets, thus benefitting the employees emotionally, which in turn leads to, amongst other, positive interaction between their work and home domains. However, following a SBA is still a relatively new concept (Stienstra, 2010), and the interest in positive WHI has only just started to increase in recent years (Sanz-Vergel, Demerouti, Mayo, & Moreno-Jiménez, 2010). Thus, very little and insufficient empirical research have been done in this respect (Wayne, Grzywacz, Carlson, & Kacmar, 2007).

The work and home domains are not separate entities (Greenhaus & Powell, 2006; Mostert, 2006; Wayne et al., 2007). According to Dallimore and Mickel (2006), employees who demonstrate a well-integrated balance between their work and home domains will have more time for their families, plus also an increase in work performance; thus, positive WHI seems to be beneficial to both the employee and the organisation. Research done formerly indicated that a relationship exists between job resources, positive WHI and work engagement (Mostert, Cronje, & Pienaar, 2006). It is thus to be expected that positive WHI acts as a mediator in the relationship between job and personal resources (including organisational SBA and individual SOB) and work engagement.

As far as is known, the relationship among job resources, organisational SBA, individual SOB, work engagement, and the mediating role of positive WHI has never before been researched and tested.

The objectives of this study are to develop a structural model and to test:

- 1) The relationships between job resources, an organisational SBA, individual SOB and work engagement;
- 2) The relationships between job resources, an organisational SBA, individual SOB and positive WHI; and
- 3) The possible mediating effect of positive WHI between job resources, an organisational SBA, SOB and work engagement.

LITERATURE REVIEW

The Job Demands-Resources Model and work engagement

The Job Demands-Resources (JD-R) Model can be used to explain how job resources affect the employees' work engagement levels. The JD-R Model (Bakker & Demerouti, 2007; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Demerouti & Bakker, 2011) professes that every occupation has its own specific risk factors that are associated with job-related stress. According to Demerouti and Bakker (2011), these factors can be categorised into two groups, namely *job demands* and *job resources*. The above model can be applied in various occupational settings, irrespective of the particular demands and resources involved (Demerouti & Bakker, 2011). *Job demands* can be defined as the physical, psychological, social, and organisational aspects of a job that require sustained physical and/or psychological (cognitive and emotional) effort, and are associated with physiological and/or psychological costs (Bakker, Demerouti, & Verbeke, 2004). A *job resource* is the physical, psychological, social, or organisational aspect of an individual's job that decreases the job demands and the physiological and psychological costs that are associated with it; thus a job resource helps individuals to attain their goals and encourages their personal growth, learning and development (Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004).

Schaufeli and Bakker (2004, p. 295) define *work engagement* as "...a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption" (see also Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). In this study only the 'core' concepts of engagement, namely vigour and dedication were used (Schaufeli &

Bakker, 2004). According to Schaufeli et al. (2002), *vigour* refers to the consistent high energy levels and mental resilience that individuals experience while they work. *Dedication* implies that individuals are strongly involved in their work, and experience feelings of significance, enthusiasm, and challenge (Schaufeli et al., 2002). *Absorption* denotes that the individuals are fully concentrating and happily engrossed in their work, where time passes quickly; and it is difficult to detach them from their work (Schaufeli & Bakker, 2004). These engagement dimensions are seen as the opposite of the burnout scales, except for absorption which is not considered as the opposite of professional inefficacy (Schaufeli & Bakker, 2004). Absorption is considered to be a relevant aspect of work engagement but plays a less central role; it can rather be seen as a consequence of engagement (Schaufeli & Bakker, 2004).

It is very important that the employees of any organisation stay engaged, because of all the positive outcomes of engagement for both the employees and organisation (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). Research has indicated that work engagement contributes to the employees' experiencing good health, and a positive work affect (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001; Rothbard, 2001). According to Demerouti et al. (2001), employees who are engaged in their work are more committed to the organisation, and they express this positive behaviour by taking personal initiative; they are also motivated to learn (Sonnentag, 2003). A study done by Harter et al. (2002) found that the employees' engagement levels have a positive impact on the performance of the organisation's business-units (i.e., higher organisational profitability, enhanced productivity, more customer satisfaction and loyalty, a lower employee turnover, and improved safety). Thus, it is crucial for employees to be engaged in their work, on grounds of the fact that it will help the organisation to attain and to maintain a competitive advantage (Bakker, Schaufeli, Leiter, & Taris, 2008).

According to the JD-R Model, job resources become more important and motivational when job demands increase (Bakker & Demerouti, 2007; Bakker et al., 2007; Demerouti & Bakker, 2011; Hakanen, Bakker, & Schaufeli, 2006). Thus, employees are more engaged when they experience high job demands, together with many job resources to lessen these demands (Demerouti & Bakker, 2011). According to Bakker and Demerouti (2007), there is a positive relationship between the job resources that are offered by an organisation (for example, support from colleagues and supervisors, feedback on an employee's performance, a variety

of skills, autonomy and learning opportunities) and the employees' work engagement levels. Indeed, several studies, internationally and also in South Africa, reported positive relationships between job resources and work engagement (Bakker & Demerouti, 2007; Bakker & Demerouti, 2008; Mostert, 2006; Mostert, Peeters, & Rost, 2011; Schaufeli & Bakker, 2004). Based on these assumptions, it can be hypothesised that job resources indicate a significant relationship with work engagement (Hypothesis 1a).

An organisational SBA, individual SOB and the relationship with work engagement

Organisational SBA refers to the 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 (see Els et al., in process). An organisational SBA can be conceptualised as a job resource at the macro or organisational level that can play an extrinsic motivational role (in addition to other job resources), in the sense that a work environment that focuses on and uses its employees' strengths may foster the willingness of the employees to dedicate their efforts and abilities to the work task (Demerouti & Bakker, 2011; Els et al., in process; Meijman & Mulder, 1998).

According to the JD-R Model, job resources have a positive impact on the employees' work engagement (Bakker & Demerouti, 2007; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a). Therefore, because an organisational SBA can be seen as a job resource, it seems possible that an organisational SBA will play a fulfilling and motivational role, and will provide the employees with an additional resource, which in turn, will lead to an eagerness to perform their tasks, and increase their engagement in their work (Bakker & Demerouti, 2008). Indeed, in a study done by Linley and Harrington (2006), the results indicated that when an organisation focuses on the development of its employees' strengths, the employees will most likely be more engaged, have higher energy levels, and be more motivated, which will lead to improved work performance. Based on this information it can be hypothesised that there is a significant positive relationship between organisational SBA and work engagement (Hypothesis 1b).

Just recently, the JD-R Model also included the aspects of personal resources in explaining work engagement (Bakker & Demerouti, 2008; Demerouti & Bakker, 2011; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). *Personal resources* can be defined as positive self-

evaluations that are related to resiliency, and refer to the individuals' sense of their ability to control and to have a successful impact upon their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). Personal resources include, for example, optimism, self-efficacy, self-esteem, resilience, and an active coping style (Bakker & Demerouti, 2008). Recently Els et al. (in process) mentioned that the strengths-approach is also applicable in the case of individual employees, and they labelled this as an additional personal resource, namely individual SOB. *Individual SOB* refers to the self-starting behaviour of individuals that is directed towards using their own strengths in the workplace (see Els et al., in process). It, therefore, refers to the proactive behaviour of the individual in applying his/her strengths specifically in situations at the workplace.

According to the Conservation of Resources (COR) Theory of Hobfoll (2001), individuals' main motivation in the workplace is to maintain and to accumulate resources. This Theory also indicates that resources do not exist in isolation; thus, individuals who own many resources will easily obtain more and, as a result, build resource caravans (Hobfoll, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b). According to Xanthopoulou et al. (2009b), an organisation that provides resources (i.e., in respect of the employees having autonomy over their own work tasks, or the opportunity to develop their skills) is likely to increase its employees self-efficacy levels, make them feel that they are valued, and bring about more optimism, because the employees will then believe in their own abilities to reach their goals. As a result, the employees will most likely be more engaged in their work, seeing that they will be intrinsically motivated to commit themselves to the task at hand (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2008). A study done by Xanthopoulou et al. (2007) indicated that there exists a significant relationship between personal resources (i.e., self-efficacy, organisational-based self-esteem, and optimism) and work engagement. Based on this reasoning and the fact that individual SOB is perceived as a personal resource, it can be hypothesised that there is a significant relationship between individual SOB and work engagement (Hypothesis 1c).

Positive WHI as a mediator

Positive WHI is perceived to be part of the broader concept of work-home interaction. *Work-home interaction* can be defined as "...an interactive process in which an employee's functioning in one domain (e.g., the home) is influenced by (negative or positive) load effects

that have built up in the other domain (e.g., work)” (Demerouti, Geurts, & Kompier, 2004, p. 7). According to Geurts et al. (2005), positive WHI is the positive load reactions that employees develop at the work domain that facilitate their functioning in the home domain. Other related terms for positive WHI include enrichment, positive spill-over or facilitation.

There seems to be a positive relationship between job resources and positive WHI. Organisations that provide their employees with sufficient resources (i.e., autonomy to perform tasks, social support, and the opportunity to develop their skills) will ensure that they have more time and energy to perform their work tasks, resulting in the development of skills, and in experiencing positive moods. Thus, the employees will produce more energy than is consumed, which will bring about positive load reactions that are developed at the work domain, and that spill over and influence the home domain in a positive manner (Geurts et al., 2005; Meijman & Mulder, 1998). According to Greenhaus and Powell (2006), the generation of resources in one domain (i.e., at work) will not only have a positive influence on the individuals’ performance in the same domain, but also on the other domain that they function in (i.e., the home). Therefore it is essential for individuals to obtain and conserve resources in order to experience positive WHI. Research has indicated a relationship between sufficient job resources and positive WHI (Mostert, 2006; Mostert et al., 2006; Mostert et al., 2011). Thus, it is expected that there has to be a significant relationship between job resources and positive WHI (Hypothesis 2a).

According to Voydanoff (2004), more learning opportunities and meaningful work cause employees to experience higher positive interactions between the work and home domains. Organisations that provide their employees with the necessary resources doubtlessly create a positive feeling and/or environment of being valued (Xanthopoulou et al., 2009b). In a study conducted by Fredrickson and Losada (2005) the results indicated that positive emotions or moods change the individuals for the better by making them more resilient, socially integrated, and effective. Furthermore, according to the Broaden-and-Build Theory (Fredrickson, 2004), individuals’ positive emotions cause them to broaden their thought-action repertoires, and over time they start to develop their personal resources, like social connections with other people, as well as improved coping strategies, and better environmental knowledge (Fredrickson, 2004; Fredrickson & Losada, 2005). Concluding from this, it is hypothesised that there is a positive relationship between an organisational

SBA and positive WHI (Hypothesis 2b), and between individual SOB and positive WHI (Hypothesis 2c).

It was found that if individuals feel that the resources that they obtained in the one domain influence the other domain in a positive manner, they will make cognitive acknowledgements to the source that brought about the positive influence (Wayne et al., 2007). Thus, if they feel that the resources they have obtained in their work domain have influenced their home domain in a positive manner, they will most likely be more motivated, committed and engaged in their work. This is in line with the JD-R Model that indicates that both job resources and personal resources act as motivators, thus lead to enhanced work engagement levels (Bakker & Demerouti, 2007). In a longitudinal study by Mauno, Kinnunen, and Ruokolainen (2007), it was found that there exists a positive relationship between the job resources that are provided by an organisation and their employees' work engagement levels. The results of this study were confirmed by those of another longitudinal study done with the managers of a telecom company ($N = 201$). These results indicated that the increase in resources led to higher work engagement within a period of 12 months (Schaufeli, Bakker, & Van Rhenen, 2009). More specifically, the results showed that increased job resources like autonomy, social support, development opportunities and performance feedback all contribute to the workforce being more engaged. More recently, a longitudinal study by Xanthopoulou et al. (2009b) also found that there were reciprocal relationships between the job resources provided by the organisation, and personal resources, and the employees' work engagement levels.

A *mediator* can be defined as someone or something that brings about an effect, for example, the effect that independent variables have on dependent variables (Rucker, Preacher, Tormala, & Petty, 2011). Research found that positive WHI mediates the relationship between job resources and work engagement (Mostert, 2006; Mostert et al., 2006). A recent longitudinal study also confirmed that positive WHI acts as a mediator between the provided job resources and employees experiencing more work engagement (Hakanen, Peeters, & Perhoniemi, 2011). The research study was conducted over a period of three years testing the enrichment processes, and activating the spirals that take place in the work and home domains of Finnish dentists ($N = 1\ 632$). Based on the findings of these studies it is expected that positive WHI will mediate the relationship between job resources (Hypothesis 3a), an organisational SBA (also a job resource) (Hypothesis 3b) and work engagement.

Bakker and Demerouti (2008) stated that job and personal resources can be regarded as the main predictors of employees experiencing higher work engagement levels. Researchers previously indicated that there is a positive relationship between job and personal resources, and work engagement (Llorens, Schaufeli, Bakker, & Salanova, 2007; Xanthopoulou et al., 2007; Xanthopoulou et al., 2009b). Furthermore, several research studies also confirmed that positive WHI mediates the relationship between job resources and work engagement (Hakanen et al., 2011; Mostert et al., 2006; Mostert et al., 2011). Thus, based on the above reasoning, and seeing that individual SOB is regarded as a personal resource for the purposes of this study, it is hypothesised that positive WHI mediates the relationship between individual SOB and work engagement (Hypothesis 3c).

In the light of the above, the following model will be tested:

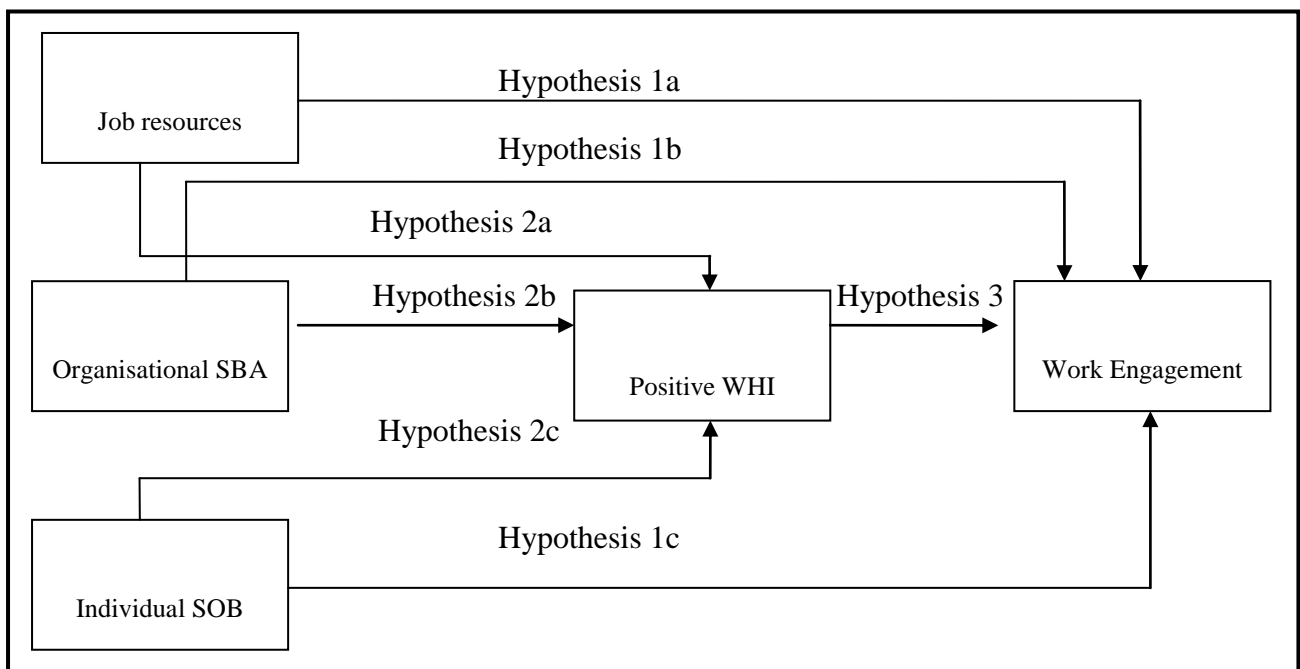


Figure 2. The hypothesised model of job resources, an organisational SBA, individual SOB, work engagement and positive WHI as mediator.

RESEARCH DESIGN

The research approach

This study is quantitative in nature, following a cross-sectional research approach. A cross-sectional method examines numerous groups of people at one point in time (Salkind, 2009). This approach is ideal for this study due to its economical and time effectiveness. The study is both descriptive and exploratory. Although the hypotheses are supported by existing theory, little is known about the field of, and possible relationships with a SBA. The data analysis was done by using a correlation approach.

The research method

Research participants

For the purpose of this study, a sample of employees from various occupational groups in South Africa was collected ($N = 699$). The sample group represents different genders, marital statuses, ages and racial groups. The characteristics of the participants are displayed in Table 1.

Table 1

Participants Characteristics (N = 699)

Item	Category	Frequency	Percentage
Home Language	English	165	23,6
	Afrikaans	252	36,1
	Setswana	59	8,4
	isiXhosa	45	6,4
	Xitsonga	7	1,0
	isiZulu	36	5,2
	Sesotho	88	12,6
	isiNdebele	2	0,3
	Tshivenda	5	0,7
	siSwati	3	0,4
	Sepedi	20	2,9
Gender	Other	11	1,6
	Male	288	41,2
	Female	401	57,4
Race	Asian	21	3,0

Table 1 Continues

Item	Category	Frequency	Percentage
Education	Black	275	39,3
	Coloured	85	12,2
	White	299	42,8
	Other	9	1,3
	Grade 10 (Standard 8)	44	6,3
	Grade 11 (Standard 9)	27	3,9
	Grade 12 (Standard 10)	287	41,1
	Technical college diploma	86	12,3
	Technicon diploma	69	9,9
	University degree	87	12,4
	Post-graduate degree	88	12,6
Household Status	Single, without children living at home	145	20,7
	Single, with children living at home	103	14,7
	Married/living with a partner, without children living at home	113	16,2
	Married/living with a partner, with children living at home	254	36,3
	Living with parents	50	7,2
	Other	9	1,3
Industry	Automobiles	6	0,9
	Chemicals	4	0,6
	Engineering	52	7,4
	Education	37	5,3
	Finance	21	3,0
	Media	3	0,4
	Mining and Metals	161	23,0
	Nursing	37	5,3
	Oil and Gas	2	0,3
	Police	5	0,7
	Retail	27	3,9
	Sport	1	0,1
	Telecommunications	7	1,0
	Tourism, Leisure and Recreation	3	0,4
	Transport	8	1,1
	Other	148	21,2

Note. Where percentages do not sum to a 100, it is due to missing values

As indicated in Table 1, the sample consisted of 401 (57,4%) females and 288 (41,2%) males. The home language that was predominantly spoken by the participants was Afrikaans (252) (31,1%), while 165 participants (23,6%) spoke English, followed by Sesotho (12,6%) and Setswana (8,4%). The other languages represented 24,3% of the total sample. Furthermore, 299 (42,8%) of the sample were White, 275 (39,3%) Black, 85 (12,2%) Coloured, 21 (3,0%) Asian, and 9 (1,3%) consisted of other racial groups. From the sample, 287 (41,1%) indicated that they had a Grade 12-certificate, and 330 (47,2%) had a tertiary qualification. The sample was constituted of various industries within the South African context, the largest proportion being represented by the mining and metals industry, namely 161 (23%); the transport industry, namely 148 (21,2%); and education, namely 877 (19,9%). Of the participants 254 (36,3%) were married/living with a partner, with children living at home.

Measuring instrument(s)

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

Job Resources. Five resources, namely autonomy, relationship with colleagues, relationship with the supervisors, information, and participation, were measured with the questionnaire on the experience and assessment of work (Dutch abbreviation: VBBA) (Van Veldhoven, Meijman, Broersen, & Fortuin, 1997) for the purpose of this study. All the items were scored on a four-point frequency-rating scale ranging from 1 (always) to 4 (never). Autonomy was measured by means of five items (e.g., Can you decide on your own how your work is to be executed?); relationship with colleagues were measured by three items (e.g., Do you get on well with your colleagues?); relationship with the supervisors was measured by four items (e.g., If necessary, can you ask your supervisor for help?); information was measured by four items (e.g., Do you receive sufficient information on the results of your work?); participation was measured by four items (e.g., Can you participate in decisions affecting issues related to your work?). The validity and reliability of the VBBA have been proven on numerous occasions (Van Veldhoven, Meijman, Broersen, & Fortuin, 2002). Van Veldhoven et al. (2002) reported sufficient Cronbach alpha coefficients for autonomy ($\alpha = 0,82$), relationships

with colleagues ($\alpha = 0,71$), the relationship with the supervisor ($\alpha = 0,82$), information ($\alpha = 0,86$) and participation ($\alpha = 0,88$).

Organisational SBA and Individual SOB. Organisational SBA and individual SOB were measured by means of the new questionnaire developed by Els et al. (in process). Organisational SBA was measured by eight items (e.g., This organisation uses my strengths) and individual SOB was measured by eight items (e.g., I use my strengths at work.). All the items were scored on a seven-point scale ranging from 0 (never) to 6 (almost always). The psychometric properties (validity and reliability) of the questionnaire were tested by conducting the Rasch analysis (Els et al., in process; Tabiri & Mostert, 2012) and exploratory and confirmatory factor analysis (Els et al., in process; Keenan & Mostert, 2012).

Positive WHI. Positive WHI was measured using the positive WHI scale of the Survey Work-Home Interaction-Nijmegen (SWING) (Geurts et al., 2005). Positive WHI is the positive interference from the work domain on the home domain. There were six items that measured positive WHI. The spill-over of positive mood developed at work to the home domain was measured by two items (e.g., How often does it happen that you come home cheerfully after a successful day at work, positively affecting the atmosphere at home?). The transfer of skills learned at work that improve functioning at home was measured by four items (e.g., How often does it happen that you fulfil your domestic obligations better because of the things you have learned on your job?). All the items were scored on a four-point frequency-rating scale ranging from 0 (never) to 3 (always). Geurts et al. (2005) reported that the Cronbach alpha coefficient for this scale is reliable ($\alpha = 0,75$). Several authors also confirmed the reliability of this scale for different South African populations, where the Cronbach alpha coefficients range between 0,77 and 0,84 (Marais, Mostert, Geurts, & Taris, 2009; Mostert, 2006; Pieterse & Mostert, 2005; Rost & Mostert, 2007).

Work Engagement. Work engagement was measured by the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). The UWES is scored on a seven-point frequency-rating scale, varying from 0 (never) to 6 (every day). Vigour was measured by four items (e.g., At my work I feel I am bursting with energy). Dedication was measured by four items (e.g., I am enthusiastic about my job). Cronbach alpha coefficients range between 0,75 and 0,86 (Schaufeli et al., 2002). In a sample of 2 396 members of the South African Police Service,

Storm and Rothmann (2003) obtained sufficient Cronbach alpha coefficients for vigour ($\alpha = 0,78$) and dedication ($\alpha = 0,89$).

Research procedure

After permission was obtained from the management of the various occupational groups, a letter requesting their participation was e-mailed to the individuals who were to take part in the study. The letter explained the objectives and importance of the study. The questionnaire was then sent to different organisations and sectors in South Africa. The participants completed the questionnaires electronically and/or manually, on being provided with an electronic questionnaire or manual booklet based on their need and/or preference. The questionnaire was completed by the different departments or clusters within the organisations. The time-frame indicated for the completion of the questionnaire was about 40 minutes. The participants were given two to three weeks to return the questionnaires. They were reminded of its completion a week before the questionnaires were to be collected. Thereafter the data analysis was performed. Participation in the study was voluntary, and the confidentiality and anonymity of the participants were emphasised. The different organisations that participated in the study were given comprehensive feedback, individually, regarding the results that were obtained. In the sample of $N = 699$, a total of 1457 questionnaires were distributed, and a response rate of 47,98 % was obtained.

Statistical analysis

The statistical analysis of this study was carried out by means of the SPSS program (SPSS Inc., 2009) and Mplus 6.1 (Muthén & Muthén, 2010). The data were analysed by using descriptive statistics (e.g., means, standard deviations) and inferential statistics. The Cronbach alpha coefficients were used to determine the reliability of the constructs that were measured, and effect sizes were used to determine the practical significance of the results (Steyn & Swanepoel, 2008). A cut-off point of 0,30 (medium effect) and 0,50 (large effect) were set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0,05$). The specification of continuous latent variables in this model investigation was conducted with Mplus. It is assumed by the popular maximum likelihood (ML) estimator that the observed variables are measured on a continuous scale. The covariance matrix represented the input

type. The latent variables were created by using individual items as indicators. Thus, item parcelling methods were not used (Bandalos & Finney, 2001).

The goodness-of-fit of the models were tested by using the traditional χ^2 statistic, the comparative fit index (CFI), the Tucker–Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Even though there is only little agreement on the cut-off values for adequate fit (Lance, Butts, & Michels, 2006), conformist guidelines were followed for this study, whereby fit was considered adequate if CFI and TLI values were larger than 0,90 (Byrne, 2010; Hoyle, 1995). A RMSEA value of 0,05 or less indicates a good fit, and values between 0,08 and 0,05 represent a moderately good model fit (Browne & Cudeck, 1993). According to Hu and Bentler (1999), the SRMR value should be smaller than 0,05. The Akaike Information Criterion (AIC) and sample adjusted Bayesian Information Criterion (BIC) values were also reported.

In this study a mediation analysis was conducted in order to emphasise the significant value of the indirect effect of positive WHI (Rucker et al., 2011). A bootstrapping method was used to test for mediation. According to Preacher and Hayes (2008), *bootstrapping* is a non-parametric resampling method that is used to test indirect effects, and is a valid and powerful method (Hayes, 2009; MacKinnon, Lockwood, & Williams, 2004). The bootstrap method was set to at least 1000 draws (Hayes, 2009). The bootstrap confidence interval level for this study was set at 95%, therefore it was expected that the indirect effects would be significantly different from one another at $p < 0,05$. In this study the effect of the independent variables (autonomy, relationship with colleagues, relationship with the supervisors, information, participation, organisational SBA, individual SOB) on the dependant variable (work engagement) which is mediated by the mediating variable (positive WHI) were investigated. Furthermore, the κ^2 (kappa-squared) values were calculated by a public online calculator (see Rothmann, 2011 for more information), which assisted in establishing a basis to determine the magnitude of the mediating effect sizes (Preacher & Kelley, 2011).

RESULTS

The measurement model was tested by creating nine latent variables, which included autonomy, relationship with colleagues, relationship with the supervisors, information, participation, an organisational SBA, individual SBO, work engagement and PWHI. The items were used as indicators of each latent variable in the measurement model. In order to test the hypothesised structural model, direct paths were specified between job resources and work engagement (Hypothesis 1a); an organisational SBA and work engagement (Hypothesis 1b); and individual SBO and work engagement (Hypothesis 1c). Direct paths were also specified for hypothesis 2 as follows: between job resources and positive WHI (Hypothesis 2a); between an organisational SBA and positive WHI (Hypothesis 2b); and individual SOB and positive WHI (Hypothesis 2c). The direct path that was identified for Hypothesis 3 was specified between positive WHI and work engagement. The results of the measurement model and structural model are shown in Table 2.

Table 2

Results of the SEM analysis

Model	χ^2	df	p	CFI	TLI	RMSEA	SRMR	AIC	BIC
Measurement model	2768.04	1091	0,00	0,92	0,92	0,05	0,04	92646,94	92898,47
Structural model	2768,04	1091	0,00	0,92	0,92	0,05	0,04	92646,94	92898,47

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

According to Table 2, the CFI and TLI values are larger than 0,90, the RMSEA is 0,05 and the SRMR is smaller than 0,05. Therefore, both the measurement model and the structural model show good model fit. Table 3 shows the correlation statistics and descriptive statistics of the latent variables.

Table 3

Correlation Matrix (r) and Descriptive Statistics of the Latent Variables

Variable name	<i>M</i>	<i>SD</i>	α	1	2	3	4	5	6	7	8
1. Autonomy	2,85	0,73	0,82	-							
2. Relationship with colleagues	3,36	0,62	0,71	0,23	-						
3. Relationship with supervisors	3,19	0,73	0,82	0,29	0,49	-					
4. Information	2,84	0,82	0,86	0,38	0,29	0,52	-				
5. Participation	2,60	0,81	0,88	0,62	0,18	0,36	0,56	-			
6. Organisational SBA	3,92	1,49	0,96	0,47	0,22	0,36	0,55	0,52	-		
7. Individual SOB	4,56	1,18	0,92	0,32	0,23	0,22	0,42	0,37	0,51	-	
8. Engagement	4,35	1,27	0,87	0,32	0,32	0,41	0,48	0,37	0,52	0,46	-
9. Positive WHI	1,98	0,78	0,87	0,22	0,29	0,33	0,47	0,26	0,32	0,35	0,52

Note: $p \leq 0,01$ for all values

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

As can be seen from Table 3, there were positive relationships between all the measured job resources (autonomy, relationship with colleagues, relationship with the supervisors, information and participation). There was also a positive relationship between all the measured job resources, an organisational SBA, individual SOB, PWHI, and engagement. In addition, the Cronbach alpha coefficients were all higher than 0,70, thus indicating that the measured variables are reliable. Eventhough all the variables were reliable the Cronbach alpha coefficients were very high. This indicates the possibility of multi-collinearity between the different constructs that were measured. In Table 4 the estimates and significance of the direct structural paths in the model are indicated.

Table 4

Estimates (β) of the Direct Structural Paths in the Standardised Model

Structural path	Estimates (Unstandardised)	S.E (Unstandardised)	Estimates (Standardised)	<i>p</i>
Engagement → Autonomy	0,03	0,11	0,01	0,84
Engagement → Relationship with colleagues	0,23	0,16	0,07	0,17
Engagement → Relationship with supervisors	0,27	0,12	0,12	0,03*
Engagement → Information	0,07	0,12	0,04	0,56
Engagement → Participation	0,04	0,11	0,02	0,70
Engagement → Organisational SBA	0,30	0,07	0,25	0,00*
Engagement → Individual SOB	0,22	0,07	0,16	0,00*
Positive WHI → Autonomy	0,01	0,07	0,01	0,86
Positive WHI → Relationship with colleagues	0,22	0,09	0,13	0,01*
Positive WHI → Relationship with supervisors	0,06	0,07	0,05	0,44
Positive WHI → Information	0,35	0,06	0,35	0,00*
Positive WHI → Participation	-0,04	0,06	-0,05	0,46
Positive WHI → Organisational SBA	0,01	0,03	0,02	0,78
Positive WHI → Individual SOB	0,12	0,03	0,17	0,00*
Engagement → Positive WHI	0,60	0,09	0,30	0,00*

* $p \leq 0,05$

With regards to the paths investigated in Hypothesis 1, the results indicate that there was only one significant relationship between job resources and work engagement, that of the relationship with the supervisor and work engagement ($\beta = 0,12$; $p < 0,03$). This provides only partial support for Hypothesis 1a. The results show that there were significant positive relationships between an organisational SBA and work engagement ($\beta = 0,25$; $p < 0,00$) and between individual SOB and work engagement ($\beta = 0,16$; $p < 0,00$); therefore providing support for Hypothesis 1b and Hypothesis 1c.

Regarding the paths investigated in Hypothesis 2, the results showed that a significant relationship existed between information ($\beta = 0,35$; $p < 0,00$) and positive WHI. It also shows that there was a significant relationship between the relationships with colleagues ($\beta = 0,13$; $p < 0,01$) and positive WHI. Thus, the results provide partial support for Hypothesis 2a. The results indicate that there was not a significant relationship between an organisational SBA and positive WHI ($\beta = 0,02$; $p < 0,78$). Therefore, the results do not support Hypothesis 2b. Finally, there was a significant relationship between individual SOB and positive WHI ($\beta =$

0,17; $p < 0,00$), providing support for Hypothesis 2c. The results also show that there was a significant relationship between positive WHI and work engagement ($\beta = 0,30$; $p < 0,00$).

In Table 5, the results of the estimates, confidence intervals and Kappa-squared values of the indirect structural paths are reported.

Table 5

Estimates (β), Confidence Intervals and Kappa-squared (κ^2) of the Indirect Structural Paths in the Standardised Model

Indirect effect	Estimate	S.E	p	Confidence Intervals (95%)		κ^2
				Lower	Upper	
Autonomy→ Positive WHI→ Engagement	0,01	0,02	0,87	-0,05	0,05	
Relationship with colleagues→ Positive WHI→Engagement	0,04	0,02	0,01*	-0,00	0,08	
Relationship with supervisor→Positive WHI→ Engagement	0,02	0,02	0,45	-0,04	0,07	
Information→ Positive WHI →Engagement	0,11	0,02	0,00*	0,05	0,17	0,09
Participation→ Positive WHI →Engagement	-0,02	0,02	0,46	-0,07	0,04	
Organisational SBA→ Positive WHI→ Engagement	0,01	0,02	0,79	-0,04	0,05	
Individual SOB→ Positive WHI→ Engagement	0,05	0,02	0,00*	0,01	0,09	0,05

* $p \leq 0,01$

As can be seen in Table 5, positive WHI was only a mediator in the relationship with colleagues and work engagement, with an indirect effect of 0,04 ($p < 0,01$; 95% CI [-0,00, 0.08]) and in the relationship between information and work engagement, with an indirect effect of 0,11 ($p < 0,00$; 95% CI [0,05, 0.17]). Therefore, only partial support was found for Hypothesis 3a. No significant indirect effect was found for an organisational SBA, therefore Hypothesis 3b is rejected. Hypothesis 3c was confirmed, namely positive WHI was a mediator in the relationship between individual SOB and work engagement, with an indirect effect of 0,05 ($p < 0,00$; 95% CI [0,01, 0.09]).

According to Preacher and Kelley (2011), the κ^2 values should be interpreted in the same manner as the squared correlation coefficients. Thus, following and applying the guidelines of Cohen (1988), where 0,01 is perceived to be a small effect size, 0,09 a medium effect size and 0,25 a large effect size (pp. 79–81). Therefore, the κ^2 value for the mediating effect of

positive WHI between individual SOB and work engagement was determined as being $\kappa^2 = 0,05$ (a small effect); the κ^2 value for the mediating effect of positive WHI between information and work engagement was determined as being $\kappa^2 = 0,09$ (a small to medium effect).

DISCUSSION

The aim of this study is to test a structural model of job resources, an organisational SBA, individual SOB and work engagement, and to investigate if positive WHI mediates between job resources, an organisational SBA, individual SOB and work engagement among South African employees. The relationship between these specific variables has never before been tested within the South African context. Furthermore, the hypotheses were based on strong theoretical and conceptual frameworks, namely the JD-R Model, the COR Theory and the Broaden-and-Build Theory.

Hypothesis 1a stated that job resources have a significant relationship with work engagement. Based on the literature on the JD-R Model, it was argued that employees will be more engaged in their work if they are provided with job resources to help them to decrease the demands of their work, because of the motivational role that job resources fulfils (Bakker & Demerouti, 2008; Demerouti & Bakker, 2011). The results indicated that only one job resource is related to work engagement, namely the relationship with one's supervisors. Therefore, the employees are more engaged in their work when they have a positive relationship with their supervisors, which will most likely motivate them to achieve their work goals, leading towards higher work performance (Bakker et al., 2008). This is in concurrence with several previous research studies that also found a significant relationship between having a positive relationship with one's supervisor, which in turn, leads to experiencing a more positive work engagement (Bakker & Demerouti, 2007; Hakanen et al., 2006; Mostert, 2011), and ultimately overall performance (Bakker & Demerouti, 2008). There were no significant relationships found between the other job resources that were included in the study, and work engagement. These findings were unexpected, since they were not coherent with previous studies that found significant relationships between autonomy (Bakker & Demerouti, 2008), relationship with colleagues (Bakker & Demerouti,

2008), information (Bakker et al., 2008), and participation (Bakker, Van Veldhoven, & Xanthopoulou, 2010). Therefore, the result only partially supports Hypotheses 1a.

Hypothesis 1b stated that there is a significant positive relationship between an organisational SBA and work engagement. The results indicated that there is indeed a significant relationship between following an organisational SBA and work engagement. It was argued that an organisational SBA is a job resource that fulfils an extrinsic motivational role at a macro level. This reasoning was based on the JD-R Model's definition of a job resource (Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004), and on the motivational nature of a job resource, according to the JD-R Model (Bakker & Demerouti, 2007). Organisations that use their employees' strengths may foster their willingness to dedicate their efforts and abilities to the task at hand (Demerouti & Bakker, 2011; Meijman & Mulder, 1998). This can also be linked to the COR Theory, which states that people are motivated to obtain, retain and protect their resources (Hobfoll, 2001), especially when high job demands are experienced (Bakker & Demerouti, 2007). Furthermore, the significant relationship between an organisation SBA and work engagement was also confirmed by a previous study that was conducted by Linley and Harrington (2006). Thus, this finding expands the literature on the JD-R Model, by confirming it, and adding an organisational SBA as a job resource. Support was therefore found for Hypothesis 1b.

Hypothesis 1c stated that there is a significant relationship between individual SOB and work engagement. The results confirmed this hypothesis. It was argued that individual SOB should be perceived as a personal resource, fulfilling a motivational role that is intrinsic in nature. This is based on literature regarding the JD-R Model which states that personal resources fulfil a motivational role, especially when job demands are high (Xanthopoulou et al., 2009a). Furthermore, this reasoning is also linked to Hobfoll's (2001) COR Theory which states that people are motivated to obtain, retain and protect their resources. Studies done previously also concluded that the employees' personal resources influence them to experience more work engagement (Demerouti & Bakker, 2011; Xanthopoulou et al., 2009b). Thus, individual SOB can be regarded as a personal resource that serves as a predictor of work engagement. This finding is supported by the conclusions in a study that was conducted by Bakker and Demerouti (2008), namely that both job and personal resources serve as important predictors of work engagement.

Hypothesis 2a stated that there is a significant relationship between job resources and positive WHI. The results supported this suspected relationship. It was indicated that this relationship is significant, especially when employees are provided with the necessary information, and have positive relationships with their colleagues. The relationship between job resources [relationships with colleagues ($r = 0,29$) and information ($r = 0,47$)], individual SOB ($r = 0,35$) and positive WHI was relatively strong. These findings are therefore in support of a recent study that was done by Mostert et al. (2011) which indicated that the attainment of resources is a prerequisite for experiencing positive WHI. It is also aligned with the COR Theory (Hobfoll, 2001). This theory states that individuals derive their motivation from the attainment and conservation of resources. The attainment of resources in the one domain enhances an individual's performance, or has a positive influence on the other domain, thus leading to enrichment (Greenhaus & Powell, 2006; Hobfoll, 2001). Thus, the results only partially support Hypothesis 2a.

Hypothesis 2b stated that a positive relationship exists between an organisational SBA and positive WHI. However, the results did not find a significant relationship between these variables. This finding was unexpected, since it was argued that an organisational SBA is a job resource (Hypothesis 1b accepted), and according to the JD-R Model, job resources help employees with handling their job demands (Demerouti & Bakker, 2011). Furthermore, job resources also fulfil a motivational role, which results in experiencing higher work engagement levels (Hypothesis 1a accepted). According to Seligman (2002), the use of the employees' strengths will make them feel happier, and since the work and home domains are not separate entities, these positive feelings will spill over to the home domain. This reasoning is supported by previous studies which found that there is a positive relationship between the job resources that are provided by the organisation and the employees' home domains (Mostert, 2006; Mostert et al., 2006). However, the results rejected Hypothesis 2b.

Hypothesis 2c stated that there is a positive relationship between individual SOB and positive WHI. The results confirmed this. This finding is supported by numerous studies that were previously conducted (Bakker & Geurts, 2004; Mostert, 2006; Van Aarde & Mostert, 2008). These studies found that if individuals are provided with development opportunities, and feel competent and satisfied in their work, they will experience positive moods, which will have a positive influence on their home domains. According to the Broaden-and-Build Theory, positive emotions will broaden the individuals' momentary thought-action repertoires, and

over a long period of time they will build personal resources (Fredrickson, 2004; Fredrickson & Losada, 2005). This is linked back to individual SOB that can be regarded as a personal resource (Hypothesis 1c accepted), and therefore has a positive affect on the home domain. Support was therefore found for Hypothesis 2c.

Hypothesis 3a stated that positive WHI will mediate the relationship between job resources and work engagement. This relationship was not only confirmed by the results, but are also supported by previous studies that tested the mediating role of positive WHI between job resources and work engagement (Hakanen et al., 2011; Mostert, 2006; Mostert et al., 2006; Mostert et al., 2011). More specifically, the results indicated that positive WHI serves as a mediator between job resources and work engagement when employees have a good relationship with their colleagues, and/or are provided with sufficient information regarding their work. These two job resources fulfil a motivational role and help the employees with handling high job demands (Demerouti and Bakker, 2011). Therefore, it is important for employees to not only obtain, but also conserve their resources (Hobfoll, 2001). Furthermore, based on the definition by WHI (Demerouti et al., 2004), the work and home domains are not separate entities, but have an impact on each other, whether positive or negative. In a study by Greenhaus and Powell (2006) it was found that the generation of resources in one domain (i.e., work) will not only have a positive influence on the individuals' performance in the same domain, but also on the other domain that they are functioning in (i.e., the home). This finding is also in line with a study conducted by Wayne et al. (2007), indicating that employees make cognitive acknowledgments to the source or domain that was responsible for the enrichment. Therefore, if employees feel that their work domain has a positive influence on their home domain they will be more engaged in their work (the originating domain of the positive emotions). Thus, the results partially support Hypothesis 3a.

Hypothesis 3b stated that positive WHI mediates the relationship between an organisational SBA and work engagement. However, the results indicated that positive WHI does not mediate the relationship between an organisational SBA and work engagement. This finding was unexpected, since it was argued that an organisational SBA is a job resource that will increase the employees work engagement levels (Hypothesis 1b accepted). Furthermore, previous studies indicated that positive WHI mediates between job resources that are provided by the organisation, and the employees' work engagement levels (Mostert, 2006; Mostert et al., 2006). The results indicated that a significant relationship existed between

following an organisational SBA and work engagement (Hypothesis 1b accepted). Furthermore, the results found a significant relationship between positive WHI and work engagement. However, the results did not confirm a significant relationship between an organisational SBA and positive WHI (Hypothesis 2b rejected). Thus, positive WHI does not act as a mediator in the relationship between an organisational SBA and work engagement, and Hypothesis 3b is rejected.

Hypothesis 3c stated that positive WHI mediates the relationship between individual SOB and work engagement. The results confirmed this hypothesis. The results also confirmed that individual SOB is a personal resource which fulfils an intrinsic motivational role, and together with job resources, acts as a predictor of work engagement (Bakker & Demerouti, 2008). According to Greenhaus and Powell (2006), the generation of resources in an employee's work environment will have a positive impact on both his home domain and his overall work performance. This explains why positive WHI mediates between individual SOB and work engagement. Previous studies only researched and tested the mediating role of positive WHI between job resources and work engagement (Hakanen et al., 2011; Mostert et al., 2006). This is the first study to test and find that positive WHI mediates between individual SOB and work engagement. Thus, not only does this finding contribute to the literature on positive aspects in the field of psychology, but also to the literature on personal resources and the work-home interface. Thus, the results supported Hypothesis 3c.

In conclusion, the results revealed that only two of the five job resources that were included and tested in this study had significant relationships with work engagement, and where positive WHI acted as a mediator in these relationships. However, the results showed that there was no significant relationship between an organisational SBA, positive WHI, and work engagement, which was unexpected. However, the results confirmed that individual SOB is a personal resource that has significant relationships with both positive WHI and work engagement, thus aligning the results with the formulated hypotheses.

Implications for management

Organisations in South Africa are under great pressure to compete with local and international competitors (Denton & Vloeberghs, 2003). However, organisations will not be able to attain and keep their competitive advantage by merely focussing on developing their

employees' weaknesses (Luthans & Youssef, 2007). It is, therefore, of vital importance that organisations and individuals shift their focus towards the application of an organisational SBA, individual SOB, and the provision and attainment of resources. These are the factors that will not only have an impact on the individuals' home domains in a positive manner, but will also lead to happier and more engaged employees working towards goal achievement.

The results indicated that if organisations provide their employees with sufficient job resources, such as supervisory support and by following an organisation SBA, it will increase their work engagement levels. Job resources will not only assist the employees in handling high job demands, but will most likely motivate the employees to apply self-starting behaviour by using their strengths to perform their work tasks, which in turn, will also contribute to a more engaged workforce. This will not only be beneficial to the employees themselves, but also to the organisation. Employees who are engaged in their work do not only experience good health, but also a positive work affect (Demerouti et al., 2001; Rothbard, 2001). Moreover, Harter et al. (2002) found that employees' engagement levels have a positive impact on the performance of the organisation's business-units (i.e., higher organisational profitability, enhanced productivity, more customer satisfaction and loyalty, lower employee turnover, and improved safety).

It is important that organisations do not perceive and focus on the work domain as an entity that functions on its own, but that they will be aware of the dual interactions that take place between the work and home domains. The results found that if organisations provide their employees with sufficient information regarding their work, and the employees have a positive relationship with their colleagues, it will have a positive effect on the home domains. Furthermore, the results indicated that positive WHI mediates between the job resources that are provided by the organisation, individual SOB and work engagement. It is therefore important that organisations consider what impact the employees' home domains have on the work domain, and visa-versa, since it will have an indirect effect on the work engagement levels of the employees. Thus, ultimately, it will not only influence the success, but also the competitive advantage of the organisation.

Limitations of the study and recommendations for future research

It is important to take note of certain limitations of this study. The first limitation is that a cross-sectional research approach was followed, which does not allow for the measurement of variables that change over time. Thus, the relationships that existed between the different variables were interpreted, and not established. It is therefore recommended that future research should conduct longitudinal studies in order to determine the positive outcomes and the relationships between job resources, an organisational SBA, individual SOB, positive WHI and work engagement.

The second limitation is that self-report questionnaires were used to obtain the data. This could have increased the problem of having to deal with common method variance. This means that self-report questionnaires are biased in nature, and could therefore have influenced the results that were obtained. However, there are not many alternative methods available that can be used to deal with the problem of self-report questionnaires. Thus, it is recommended that future research studies make use of measurement methods that are more objective.

The third limitation is that this study only focussed on the positive aspects in the field of psychology. According to Peterson and Seligman (2003), the positive psychology movement's aim is to correct the imbalance that occurred due to only focussing on the negative aspects. Even though the positive psychology movement only made its appearance in recent years and the literature on the positive aspects (i.e., job resources, following a SBA with organisations, positive WHI and work engagement) are still relatively limited, it is important to also take the negative aspects (i.e., job demands, following exclusively a DBA, negative WHI, and burnout) into consideration in order to ensure that a balance is kept. It is therefore recommended that future research studies also include other variables, such as those indicated above, when testing a structural model.

The sample group included several occupational groups in different industries, as well as different genders, marital statuses, ages and racial groups. However, the fourth possible limitation is that the participants were required to have at least a grade 12-qualification, and if not, they should have a good understanding of the English language. Furthermore, they should be part of South Africa's workforce. This means that the results cannot be generalised

to all South Africa's employees. Additionally, English may have been the respondents' second, and in some instances even third language, which increased the chances of the participants not understanding the questions correctly. It is recommended that future research take these factors into account and not limit their sample group to language and/or qualification factors.

REFERENCES

- Bakker, A. B., & Demerouti, E., (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of Stress Management*, 10(1), 16-38.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104.
- Bakker, A. B., & Geurts, S. A. E. (2004). Toward a dual-process model of work-home interference. *Work and Occupations*, 31(3), 345-366.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- 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.
- Bandalos, D. L. & Finney, S. J. (2001). Item parcelling issues in structural equation modelling. In: G. A. Marcoulides & R. E. Schumaker (Eds.), *New developments and techniques in structural equation modelling* (pp. 269-296). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Biswas-Diener, R., Kashdan, T. B., & Minhas, G. (2011). A dynamic approach to psychological strength development and intervention. *The Journal of Positive Psychology*, 6(2), 106-118.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.

- Buckingham, M., & Clifton, D. O. (2001). *Now, discover your strengths*. New York: Free Press.
- Byrne, B. M. (2010). *Structural equation modelling with AMOS* (2nd ed.). Taylor & Francis Group.
- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In A. K. S. Cameron, B. J. E Dutton & C. R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). San Francisco: Berrett-Koehler Publishers Inc.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Orlando: Academic Press.
- Dallimore, E., & Mickel, A. (2006). Quality of life: Obstacles, advice, and employer assistance. *Human Relations*, 59(1), 61-103.
- 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.
- Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work Environment and Health*, 27, 279-286.
- Demerouti, E., Geurts, S. A. E., & Kompier, M. (2004). Positive and negative work-home interaction: Prevalence and correlates. *Equal Opportunities International*, 23(1), 6-35.
- Denton, M., & Vloeberghs, D. (2003). Leadership challenges for organisations in the new South Africa. *Leadership & Organization Development Journal*, 24(2), 84-95.
- Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical practice. *Clinical Psychology Review*, 1, 629-651.
- Els, C., Mostert, K., Van Woerkom, M., Rothmann, S. Jnr., & Bakker, A. B. (in process). Following a strength-based and deficiency-based approach: The development and psychometric properties of a new scale.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society*, 359, 1367-1377.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60(7), 678-686.
- Geurts, S. A. E., Taris, T. W., Kompier, M. A. J., Dijkers, J. S. E., Van Hooff, M. L. M., & Kinnunen, U. M. (2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work and Stress*, 19(4), 319-339.

- 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.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and families are allies: A theory of work-family enrichment. *Academy of Management Review*, 31, 72-92.
- Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *The Journal of School Psychology*, 43, 495-513.
- Hakanen, J. J., Peeters, M. C. W., & Perhoniemi, R. (2011). Enrichment processes and gain spirals at work and at home: A 3-year cross-lagged panel study. *Journal of Occupational and Organizational Psychology*, 84, 8-30.
- 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.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monograph*, 76(4), 408-420.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50, 337-370.
- Hobfoll, S. E. (2002). Social and psychological resources and adaption. *Review of General Psychology*, 6, 307-324.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84, 632-643.
- Hoyle, R. H. (1995). The structural equation modelling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modelling: concepts, issues, and applications* (pp. 1-15). Thousand Oaks, CA: Sage.
- Hu, L. T., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Keenan, E., & Mostert, K. (2012). *The factorial validity and reliability of the Strength-Based Approach Scale in a sample of South African employees*. Unpublished master's dissertation, North-West University, Potchefstroom, South Africa.
- Kristjánsson, K. (2010). Positive psychology, happiness, and virtue: The troublesome conceptual issues. *Review of General Psychology*, 14(4), 296-310.

- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cut-off criteria: What did they really say? *Organizational Research Methods*, 9, 202-221.
- Liehmman, L. (2009). *How to build a strength-based organization: Learnings from craigwood youth services*. Unpublished doctoral thesis, Benedictine University, East Eisenhower, U.S.A.
- Linley, P. A., & Harrington, S. (2006). Strengths coaching: A potential-guided approach to coaching psychology. *International Coaching Psychology Review*, 1(1), 37-46.
- Linley, P. A., Nielsen, K. M., Wood, A. M., Gillett, R., & Biswas-Diener, R. (2010). Using signature strengths in pursuit of goals: Effects on goal progress, need satisfaction, and well-being, and implications for coaching psychologists. *International Coaching Psychology Review*, 5(1), 8-17.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior*, 23, 825-841.
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behaviour. *Journal of management*, 33(3), 321-349.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(1), 99-128.
- Marais, C., Mostert, K., Geurts, S., & Taris, T. (2009). The psychometric properties of a translated version of the survey work-home interaction-nijmegen (SWING) instrument. *South African Journal of Psychology*, 39(2), 202-219.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70, 149-171.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry & C. J. De Wolff (Eds.), *Handbook of work and organizational psychology 2nd ed.* (pp. 5-33). Hove: Erlbaum.
- Mostert, K. (2006). Work-home interaction as partial mediator between job resources and work engagement. *Southern African Business Review*, 10(2), 53-74.
- Mostert, K., Cronje, S., & Pienaar, J. (2006). Job resources, work engagement and the mediating role of positive work-home interaction of police officers in the north west province. *Acta Criminologica*, 19(3), 64-87.

- Mostert, K., Peeters, M., & Rost, I. (2011). *Work-home interference and the relationship with job characteristics and well-being: A South African study among employees in the construction industry*. Retrieved July 13, 2011 from <http://www.wileyonlinelibrary.com>
- Muthén, L. K., & Muthén, B. O. (2010). *Mplus user's guide* (6th ed.). Los Angeles, CA.
- Peterson, C. M., & Seligman, M. E. P. (2003). Positive organizational studies: Lessons from positive psychology. In A. K. S. Cameron, B. J. E. Dutton, & C. R. E. Quinn (Eds.), *Positive organisational scholarship* (pp. 14-31). San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Pieterse, M., & Mostert, K. (2005). Measuring work-home interaction: A validation of the Survey Work-Home Interaction Nijmegen (SWING) instrument. *Management Dynamics*, 14(2), 2-15.
- Preacher, K. J., & Hayes, A. (2008). Assymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16, 93-115.
- Rost, I., & Mostert, K. (2007). The interaction between work and home of employees in the earthmoving equipment industry: Measurement and prevalence. *South African Journal of Industrial Psychology*, 33(2), 54-61.
- Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655-684.
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5(6), 359-371.
- Sanz-Vergel, A. I., Demerouti, E., Mayo, M., & Moreno-Jiménez, B. (2011). Work-home interaction and psychological strain: The moderating role of sleep quality. *Applied Psychology: An International Review*, 60(2), 210-230.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30, 893-917.

- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3-9). New York: Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Shults, C. (2008). Making the case for a positive approach to improving organizational performance in higher education institutions. *Community College Review*, 36(2), 133-159.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 3, 518-528.
- SPSS Inc. (2009). *SPSS 18.0 for Windows*. Chicago, IL: SPSS Inc.
- Steyn, H. S., & Swanepoel, C. J. (2008). *Praktiese statistiek (2end ed.)*. Potchestroom: Noordwes Universiteit.
- Stienstra, M. (2010). *Strength based development as organizational approach* (Unpublished master's dissertation). University of Tilburg, Utrecht.
- Storm, K., & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology*, 29(4), 62-70.
- Tabiri, N., & Mostert, K. (2012). *An evaluation of the reliability and validity of the Strengths-Based Approach Scale using Rasch analysis in a South African population*. Unpublished master's dissertation, North-West University, Potchefstroom, South Africa.
- Van Aarde, A., & Mostert, K. (2008). Work-home interaction of working females: What is the role of job and home characteristics? *South African Journal of Industrial Psychology*, 34(3), 1-10.
- 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 Veldhoven, M., Meijman, T. F., Broersen, J. P. J., & Fortuin, R. J. (2002). *Handleiding VBBA (2nd ed.)*. Amsterdam: SKB Vragenlijstservices.

- Voydanoff, P. (2004). Implications of work and community demands and resources for work-to-family conflict and facilitation. *Journal of Occupational Health Psychology, 9*(4), 275-285.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review, 17*, 63-76.
- Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2010). Using personal and psychological strengths leads to increases in well-being over time: A longitudinal study and the development of the strengths use questionnaire. *Personality and Individual Differences, 50*, 15-19.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14*(2), 121-141.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology, 13*(4), 345-356.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior, 74*, 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology, 82*, 183-200.

CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The conclusions that are provided in this chapter arise from the general and specific objectives of the study.

The limitations of the study will also be discussed, followed by recommendations for future research.

3.1 CONCLUSIONS

The general objective of this research study was to test a structural model of job resources, an organisational strength-based approach (SBA), individual strength-oriented behaviour (SOB) and work engagement, and to investigate if positive work-home interaction (WHI) mediates between job resources, an organisational SBA, individual SOB and work engagement, among South African employees.

The first objective of the study was to investigate the relationship between job resources, an organisational SBA, individual SOB, positive WHI and work engagement, according to the literature. In order to achieve this objective, various articles and resources were consulted. The Job Demands-Resources (JD-R) Model was used as theoretical framework to explain what effect job resources may have on the employees' work engagement levels. Based on the JD-R Model, a *job resource* is perceived as the physical, psychological, social, or organisational aspect of an individual's job that decreases the job demands and the physiological and psychological costs that are associated with it; thus, a job resource helps individuals to attain their goals, and encourages their personal growth, learning and development (Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004). According to the JD-R Model, job resources play a motivational role, and should be increased when the demands of the job become more (Bakker & Demerouti, 2007; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004).

Schaufeli and Bakker (2004, p. 295) define *work engagement* as "...a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption". Research has indicated that employees who are engaged in their work are more committed to the organisation (Demerouti, Bakker, De Jonge, Janssen, & Schaufeli, 2001), and express their positive behaviour by taking personal initiatives; they are also more motivated to learn (Sonnentag, 2003). According to Harter, Schmidt and Hayes (2002), the employees' engagement levels influence the performance of the organisation's business-units in a positive way, namely by means of higher organisational profitability, enhanced productivity, more customer satisfaction and loyalty, lower employee turnover, and improved safety.

It has been indicated in previous studies that there exists a positive relationship between the job resources that are offered by an organisation (for example, support from colleagues and supervisors, feedback on an employee's performance, a variety of skills, autonomy, and learning opportunities) and the employees' work engagement levels (Bakker & Demerouti, 2007). Research that was conducted in respect of the South African context also confirmed that there exists a relationship between the job resources that are provided by the organisation, and work engagement (Mostert, 2006; Mostert, Peeters, & Rost, 2011). Thus, employees will most likely experience higher engagement levels in their work when they experience high job demands, together with many job resources to deal with these demands (Bakker et al., 2007; Demerouti & Bakker, 2011).

In this study the relationship between an organisational SBA, as a job resource at macro or organisational level, and work engagement was investigated. An *organisational SBA* refers to the employees' perceptions of the extent to which the formal and informal policies, practices and procedures within their organisation focus on the use of their strengths (see Els, Mostert, Van Woerkom, Rothmann, & Bakker, in process). Research found that when an organisation focuses on the development of its employees' strengths, they will be more engaged, have higher energy levels, and be more motivated, all of which will lead to improved work performance (Linley & Harrington, 2006). This thus relates back to the motivational processes of job resources, according to the JD-R Model.

Recently studies that make use of the JD-R Model as theoretical framework also started to include personal resources in this model (Bakker & Demerouti, 2008; Demerouti & Bakker, 2011; Xanthopoulou, Bakker, Demerouti, & Schaufeli 2007). *Personal resources* are

perceived as positive self-evaluations that are related to resiliency, and refer to the individuals' sense of their ability to control, and to have a successful impact on their environment (Hobfoll, Johnson, Ennis, & Jackson, 2003). According to Els et al. (in process), the strengths-approach can also be applied to individual employees, and named this an additional personal resource, namely individual SOB. *Individual SOB* refers to the self-starting behaviour of individuals that is directed towards their using their own strengths in the workplace (see Els et al., in process). Even though no literature was found on individual SOB and its relationship with work engagement, research studies have, however, indicated that there is a positive relationship between personal resources and higher work engagement levels (Bakker & Demerouti, 2008; Xanthopoulou et al., 2007). Therefore it was hypothesised that there is a significant relationship between individual SOB and work engagement.

Literature on positive WHI indicated that there is a positive relationship between job resources and positive WHI (Bakker & Geurts, 2004; Mostert, 2006; Mostert, Cronje, & Pienaar, 2006; Van Aarde & Mostert, 2008; Voydanoff, 2004). Demerouti, Geurts, and Kompier (2004, p. 7) define *positive WHI* as "...an interactive process in which an employee's functioning in one domain (e.g., home) is influenced by (negative or positive) load effects that have built up in the other domain (e.g., work)". It was thus expected that there would be a significant relationship between job resources and positive WHI. According to Voydanoff (2004), employees who are provided with more learning opportunities and meaningful work, experience higher positive WHI. Accordingly, it was also hypothesised that there will be a significant relationship between following an organisational SBA and positive WHI.

According to Hobfoll's (2001) Conservation of Resources (COR) Theory, individuals' main motivation is to accumulate and maintain resources. Xanthopoulou, Bakker, Demerouti and Schaufeli (2009b) maintain that an organisation that provides resources (i.e., employees having autonomy over own work, or the opportunity to develop their skills) is likely to increase its employees' self-efficacy levels. Thus, it will make them feel that they are valued, and create more opportunities for optimism. Based on the Broaden-and-Build Theory (Fredrickson, 2004), the positive emotions that employees experience will have as outcome that they increase their thought-action repertoires, and build their personal resources over time. In the literature it was found that there exists a positive relationship between personal

resources and work engagement (Bakker & Demerouti, 2008; Xanthopoulou et al., 2007). Individuals who are engaged in their work will experience positive moods, which will transfer across the work and home domains (Wayne, Randel, & Stevens, 2006). It was thus hypothesised that there is a significant relationship between individual SOB and positive WHI.

Research has indicated that if the resources that individuals obtain in the one domain (i.e., the work domain) influence the other domain (i.e., the home domain) positively, they will give cognitive acknowledgement to the source where the positive influence originated from (Wayne, Grzywacz, Carlson, & Kacmar, 2007). It was, therefore, expected that there would be a significant relationship between positive WHI and work engagement. The literature on positive WHI and work engagement also supports this assumption (Mostert et al., 2006; Mostert et al., 2011).

The second objective of this study was to determine the relationship between job resources, an organisational SBA, individual SOB, positive WHI, and work engagement among South African employees. The results indicated that there were positive relationships between all the measured job resources (autonomy, relationship with colleagues, relationship with the supervisors, information, and participation), an organisational SBA, individual SOB, positive WHI, and work engagement. However, not all of these relationships were significant. The results confirmed that there was a significant relationship between the employees' relationships with their supervisors and their work engagement. Thus, if the employees have good relationships with their supervisors and feel that their supervisors provide them with the necessary support, it will motivate them to be more committed and engaged in their work. There were no significant relationships found between the other job resources that were included in the study, and work engagement. These findings were unexpected, since they do not correlate with previous studies that indicated significant relationships between autonomy (Bakker & Demerouti, 2008), relationship with colleagues (Bakker & Demerouti, 2008), information (Bakker, Schaufeli, Leiter, & Taris, 2008), and participation (Bakker, Van Veldhoven, & Xanthopoulou, 2010).

Furthermore, the results indicated that there were significant relationships between an organisational SBA and an employee's work engagement levels. Thus, organisations that make use of their employees' strengths may foster the willingness of the employees to

dedicate their efforts and abilities to the task at hand (Demerouti & Bakker, 2011; Meijman & Mulder, 1998). A significant relationship between an organisation SBA and work engagement was also confirmed in a previous study that was conducted by Linley and Harrington (2006). Moreover, the results also indicated that an organisational SBA is, indeed, a job resource. Organisations that provide their employees with the opportunities to develop their strengths and skills, motivate their employees to start applying these newly-developed skills and strengths in the work domain to achieve their work goals. These development opportunities and the use of their strengths would create happier employees (Seligman, Steen, Parks, & Peterson, 2005), and also more productive ones (Clifton & Harter, 2003).

The results confirmed that there is a significant relationship between individual SOB and work engagement, and that individual SOB is a personal resource that plays a motivational role. This finding is supported by the literature on the JD-R Model which states that personal resources play a motivational role, especially when job demands are high (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a). Previous research concluded that personal resources have an effect on employees experiencing more work engagement (Demerouti & Bakker, 2011).

The results also indicated that there was a significant relationship between the employees' relationship with their colleagues and positive WHI, as well as between the information that is provided to employees and positive WHI. Several studies confirm these findings by indicating that there is a relationship between the provided resources and positive WHI (Bakker & Geurts, 2004; Mostert et al., 2006; Van Aarde & Mostert, 2008). The attainment of resources in the one domain enhances an individual's performance, and has a positive influence on the other domain, thus leading to enrichment (Greenhaus & Powell, 2006; Hobfoll, 2001). Thus, employees who receive support from their colleagues and are provided with information as regards their performance, will be happy and motivated in their work domain, and these positive emotions will influence their home domains positively.

The results did not show a significant relationship between an organisational SBA and positive WHI. This conclusion was unexpected, since it was confirmed that an organisational SBA is a job resource and, according to the JD-R Model, job resources help employees to handle their job demands (Demerouti & Bakker, 2011). Job resources also fulfil a motivational role, which results in the employees experiencing higher work-engagement

levels (Hypothesis 1a accepted). According to Seligman (2002), the use of employees' strengths will cause them to be happier at work, and since the work and home domains are not separate entities, these positive feelings will spill over to the home domains. This reasoning is supported by other studies indicating that there is a positive relationship between the job resources that are provided by the organisation, and the employees' home domains (Mostert, 2006; Mostert et al., 2006).

The results confirmed that there is also a significant relationship between individual SOB and positive WHI, that it is a personal resource. This finding is supported by research that showed that there is a positive relationship between the employees' personal resources and work engagement (Demerouti & Bakker, 2011), and that engaged employees' positive emotions spill over towards their home domains (Wayne et al., 2006). Thus, the employees will be motivated to use their strengths, because they feel that the organisation regards them to be important and valuable assets, hence causing their positive emotions to spill over to their home domains.

The third objective of this study was to determine if positive WHI mediates between job resources, an organisational SBA, individual SOB, and work engagement. The results confirmed that positive WHI acts as a mediator in the relationship between job resources and work engagement. More specifically, the results indicated that positive WHI serves as a mediator in this relationship when the employees' relationships with their colleagues are positive, and the organisation provides its employees with the relevant information. These two job resources fulfil a motivational role, and help employees in situations where high job demands are being experienced (Demerouti and Bakker, 2011).

The results indicated that positive WHI does not mediate the relationship between an organisational SBA and work engagement. This finding was unexpected, since it was argued that an organisational SBA is a job resource that will increase the employees' work engagement levels. Previous studies showed that positive WHI mediates between job resources that are provided by the organisation, and the employees' work engagement levels (Mostert, 2006; Mostert et al., 2006). The results confirmed that there was a significant relationship between following an organisational SBA and work engagement, as well as between positive WHI and work engagement. However, the results did not confirm this

relationship. Thus, positive WHI does not act as a mediator in the relationship between an organisational SBA, and work engagement.

The results showed that positive WHI serves as a mediator in the relationship between individual SOB, and work engagement. Individual SOB is a personal resource which plays an intrinsic motivational role that predicts higher work engagement levels (Bakker & Demerouti, 2008). A study that was conducted by Greenhaus and Powell (2006), showed that the generation of resources in the work domain will have a positive impact on the home domain, and on the employees' overall work performance. This explains why positive WHI mediates between individual SOB and work engagement. Previously studies only researched and tested the mediating role of positive WHI between job resources and work engagement (Hakanen, Peeters, & Perhoniemi 2011; Mostert et al., 2006). This is the first study to test and to find that positive WHI mediates between individual SOB and work engagement.

The fourth objective was to test a structural model that includes job resources, an organisational SBA, individual SOB, positive WHI, and work engagement. In order to achieve this objective, a structural model was tested by creating direct paths that were specified between job resources and work engagement; an organisational SBA and work engagement; and individual SOB and work engagement. Direct paths were also specified between job resources and positive WHI; between an organisational SBA and positive WHI; and individual SOB and positive WHI. In addition, direct paths were specified between job resources, positive WHI and work engagement; between an organisational SBA, positive WHI and work engagement; and between individual SOB, positive WHI and work engagement. The results indicated that both the measurement model and structural model showed good model fit.

The results showed that positive WHI serves as a mediator between job resources and work engagement. More specifically, that positive WHI serves as a mediator between the relationship with colleagues and information as job resources, and work engagement. The results also indicated that positive WHI does not mediate the relationship between an organisational SBA and work engagement. The results confirmed that positive WHI mediates the relationship between individual SOB, and work engagement. Thus, the results revealed that only two of the five job resources that were included and tested in this study and individual SOB, had significant relationships with work engagement, where positive WHI

acted as a mediator in these relationships. However, the results showed that there was no significant relationship between an organisational SBA, positive WHI, and work engagement, and this was unexpected

3.2 LIMITATIONS OF THE RESEARCH

This study indicated interesting and meaningful results. It should, however, be mentioned that certain limitations were observed in the study.

The first limitation was in respect of the method which was used, namely a cross-sectional research method. According to Salkind (2009), this method examines numerous groups of people at a point in time. However, one of the disadvantages of using this specific method is that the comparability of groups is being limited (Salkind, 2009). Also, this method does not reveal anything with regards to the continuity of development on an individual basis (Salkind, 2009). Thus, the relationships that exist between the different variables were interpreted, and not established. It is therefore recommended that future research should conduct longitudinal studies in order to determine the positive outcomes, as well as the relationships between job resources, an organisational SBA, individual SOB, positive WHI, and work engagement.

The second limitation was that self-report questionnaires were used to obtain the data. This could have increased the problem of having to deal with common-method variance. This means that self-report questionnaires are biased in nature, and could have influenced the results that were obtained. However, there are not many alternative methodologies available that can be used to deal with the problem of self-report questionnaires. It is consequently recommended that future research studies make use of measurement methods that are more objective.

The third limitation of this study was that the focus was only on the positive aspects in the field of psychology. According to Peterson and Seligman (2003), the positive psychology movement's aim is to correct the imbalance that occurs due to focussing only on the negative aspects. The positive psychology movement only made its appearance quite recently, and literature on the positive aspects (i.e., job resources, following a SBA with organisations, positive WHI, and work engagement) is still relatively scarce. Previous research studies

indicated that there is a great need for more literature on the positive aspects (Bakker & Schaufeli, 2008; Luthans, 2002; Rost & Mostert, 2007; Seligman & Csikszentmihalyi, 2000; Seligman, Parks, & Steen, 2004). It is, however, also vital to take the negative factors, such as job demands, following an exclusive deficiency-based approach (DBA), negative WHI and burnout, into consideration, in order to obtain a balance between the positive and the negative aspects. Studies have indicated that the work and home domains influence each other in both a positive and negative way (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006; Mostert, 2006). Therefore, it is important to determine both the positive and negative factors that influence this interaction in order to ensure the well-being of both the organisation and its employees.

The fourth limitation was that it was expected from the participants to have at least a grade 12-certificate in order to participate in this research project, and if not, they should have a good command of the English language, to ensure that the questionnaire is completed successfully. The focus of this study was thus mainly on people who are functioning at a higher academic level, which limited the generalisation of the results for the rest of the South African context.

3.3 RECOMMENDATIONS

Even though this study has certain limitations, the findings hold valuable implications for the organisations, and for research studies that may be conducted in future.

3.3.1. Recommendations for the organisations

The main purpose of this study was to determine whether or not positive WHI mediates the relationship between job resources, an organisational SBA, individual SOB, and work engagement. More importantly, this study's aim was to assist organisations in reaching a better understanding of what the outcomes would be when following an organisational SBA, and to determine whether or not the employees felt that their talents were being developed into strengths, and being used by their organisations. Studies by Schaufeli and Bakker (2004), Bakker and Demerouti (2007), Demerouti and Bakker (2011) and Mostert et al., (2011) emphasised the importance of providing sufficient job resources and opportunities to identify and develop the employees' strengths. This will not only enhance the well-being of the

employees, but will also ensure better production, goal-achievement and customer-satisfaction, that will definitely result in attaining and maintaining a competitive advantage.

Organisations and their employees will hopefully be encouraged by this research to become more aware of following an organisational SBA, and of applying individual SOB. Organisations are urged to provide their employees with sufficient job resources, namely competent and supportive supervisors, and to help them to develop their strengths, and to acquire new skills by means of training. It is also recommended that organisations provide their employees with information and feedback on their performance on a regular basis. Previous studies indicated the importance of the employees building and maintaining positive relationships with their supervisors and colleagues, and of receiving information. Furthermore, it is important that organisations become aware of the interaction which exists between the work and the home domains. Organisations have to consider the impact of their employees' home domains on their work domain, and visa-versa, since it will have an indirect impact on the levels of their engagement in their work. Ultimately it will add to the success and competitive advantage of the organisation.

3.3.2. Recommendations for future research

Even though this study delivered interesting and meaningful results, it should, however, be noted that certain limitations may be overcome by means of future research studies. It is recommended that future studies follow a longitudinal design. A longitudinal design will assist in determining the positive outcomes of job resources, an organisational SBA, and individual SOB with regards to employees' work engagement over a long period. Furthermore, a longitudinal study will add value to the literature on positive WHI by investigating the positive outcomes and effects of job resources and personal resources on the employees' home domains. This will also add and extend the literature on the COR Theory (Hobfoll, 2001) and the Broaden-and-Build Theory (Fredrickson, 2004).

It is recommended that future studies explore and expand the literature on aspects relating to the field of positive psychology, which only emerged in recent years. The literature on the positive aspects is still relatively scarce; but an imbalance may occur if only focusing on the negative aspects (Peterson & Seligman, 2003). It is also recommended that future studies consider and include the variables that are indicated to be the opposite of job resources, an

organisational SBA, positive WHI, and work engagement; thus, job demands, an organisational DBA, negative WHI, and burnout.

It is further recommended that future research will take into consideration the fact that the newly-developed instrument that was used to measure an organisational SBA and individual SOB is only available in English. South Africa has eleven official languages; therefore there may be a problem as far as the language of instruction is concerned, due to the fact that English is many persons' second and in some instances even their third language. It is therefore recommended that future research adapt this instrument to be used by other language groups within the South African context.

REFERENCES

- Bakker, A. B., & Demerouti, E., (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209-223.
- Bakker, A. B., & Geurts, S. A. E. (2004). Toward a dual-process model of work-home interference. *Work and Occupations*, 31(3), 345-366.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behaviour: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29, 147-154.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- 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.
- Clifton, D. O., & Harter, J. K. (2003). Investing in strengths. In A. K. S. Cameron, B. J. E. Dutton & C. R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). San Francisco: Berrett-Koehler Publishers Inc.
- 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.
- Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work Environment and Health*, 27, 279-286.
- Demerouti, E., Geurts, S. A. E., & Kompier, M. (2004). Positive and negative work-home interaction: Prevalence and correlates. *Equal Opportunities International*, 23(1), 6-35.
- Els, C., Mostert, K., Van Woerkom, M., Rothmann, S. Jnr., & Bakker, A. B. (in process). Following a strength-based and deficiency-based approach: The development and psychometric properties of a new scale.
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society*, 359, 1367-1377.

- Greenhaus, J. H., & Powell, G. N. (2006). When work and families are allies: A theory of work-family enrichment. *Academy of Management Review*, *31*, 72-92.
- Hakanen, J. J., Peeters, M. C. W., & Perhoniemi, R. (2011). Enrichment processes and gain spirals at work and at home: A 3-year cross-lagged panel study. *Journal of Occupational and Organizational Psychology*, *84*, 8-30.
- 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.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, *50*, 337-370.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, *84*, 632-643.
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, *47*, 149-162.
- Linley, P. A., & Harrington, S. (2006). Strengths coaching: A potential-guided approach to coaching psychology. *International Coaching Psychology Review*, *1*(1), 37-46.
- Luthans, F. (2002). The need for and meaning of positive organizational behaviour. *Journal of Organizational Behavior*, *23*, 695-706.
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry & C. J. De Wolff (Eds.), *Handbook of work and organizational psychology 2nd ed.* (pp. 5-33). Hove: Erlbaum.
- Mostert, K. (2006). Work-home interaction as partial mediator between job resources and work engagement. *Southern African Business Review*, *10*(2), 53-74.
- Mostert, K., Cronje, S., & Pienaar, J. (2006). Job resources, work engagement and the mediating role of positive work-home interaction of police officers in the north west province. *Acta Criminologica*, *19*(3), 64-87.
- Mostert, K., Peeters, M., & Rost, I. (2011). *Work-home interference and the relationship with job characteristics and well-being: A South African study among employees in the construction industry*. Retrieved July 13, 2011 from <http://www.wileyonlinelibrary.com>
- Peterson, C. M., & Seligman, M. E. P. (2003). Positive organizational studies: Lessons from positive psychology. In A. K. S. Cameron, B. J. E. Dutton, & C. R. E. Quinn (Eds.),

- Positive organisational scholarship (pp. 14-31). San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Rost, I., & Mostert, K. (2007). The interaction between work and home of employees in the earthmoving equipment industry: Measurement and prevalence. *South African Journal of Industrial Psychology*, 33(2), 54-61.
- Salkind, N. J. (2009). *Exploring research (7th ed.)*. New Jersey, USA: Pearson Prentice Hall.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Seligman, M. E. P. (2002). Positive psychology, positive prevention, and positive therapy. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 3–9). New York: Oxford University Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.
- Seligman, M. E. P., Parks, A. C., & Steen, T. (2004). A balanced psychology and a full life. *The Royal Society*, 359, 1379-1381.
- Seligman, M. E. P., Steen, T. A., Parks, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410-421.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 3, 518-528.
- Van Aarde, A., & Mostert, K. (2008). Work-home interaction of working females: What is the role of job and home characteristics? *South African Journal of Industrial Psychology*, 34(3), 1-10.
- Voydanoff, P. (2004). Implications of work and community demands and resources for work-to-family conflict and facilitation. *Journal of Occupational Health Psychology*, 9(4), 275-285.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S., & Kacmar, K. M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17, 63-76.
- Wayne, J. H., Randel, A. E., & Stevens, J. (2006). The role of identity and work-family support in work-family enrichment and its work-related consequences. *Journal of Vocational Behavior*, 69(3), 445-461.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, *14*(2), 121-141.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, *74*, 235-244.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, *82*, 183-200.