

BURNOUT AND WORK ENGAGEMENT OF SOUTH AFRICAN PACKAGING MANUFACTURING MANAGERS

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COMMENTS

The reader is reminded of the following:

- The references as well as the editorial style as prescribed by the *Publication Manual (5th edition)* of the American Psychological Association (APA) were followed in this mini-dissertation. This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University to use APA style in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article. The name of the study leader appears on the article.

DEDICATION

I want to take this opportunity to first thank my God who made it possible for me to write this dissertation. Father, without you I would never have been able to do this. Secondly, I'd like to thank the love of my life. Thank you for your patience and understanding. And last but not least, I would like to thank my mother and father who have continuously supported me. Thank you for your love and your faith in me. You keep me going and it gives me great pleasure to dedicate this research project to you.

“All things are possible to him who believes”

Mark 9: 23

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SUMMARY

Title: Burnout and work engagement of packaging manufacturing managers in South Africa.

Key terms: Job burnout, work engagement, job demands, job resources, packaging manufacturing, manager

Stress and burnout among workers are reaching epidemic proportions, resulting in loss of millions in revenue due to absenteeism and corresponding reduction in productivity. The question as to whether the participants of this study experience low levels of work wellness (i.e., low burnout and high work engagement) or not, is not easy to answer. Therefore, research is needed regarding the understanding of how burnout manifests itself, as well as underlying factors contributing to the work engagement of managers and their relationship with job demands and resources thereof. The objective of this study was to investigate which job demands and job resources will predict burnout and work engagement of managers in the packaging manufacturing sector and how different job characteristics will affect their levels of engagement.

A cross-sectional survey design was used. The study population ($N = 90$) consisted of managerial staff from various divisions of a national packaging manufacturing company in South Africa. The Maslach Burnout Inventory - General Survey, the Utrecht Work Engagement Scale, the Job-Demands-Resources Questionnaire and a biographical questionnaire were administered. The reliability of the measuring instruments was assessed with the use of Cronbach alpha coefficients. Descriptive statistics were used to analyse the data. Pearson correlations and multiple regression analyses were used to assess the relationships between burnout, job demands, job resources and work engagement.

The results showed that exhaustion was positively related to job demands (work overload). Both exhaustion and cynicism were negatively related to a lack of job resources such as *organisational support* and *growth opportunities*. Managers with low opportunities to learn, little work independence, poor relationship with colleagues, poor relationship with immediate supervisor, limited access to information, poor communication, insufficient participation,

lack of contact possibilities, poor remuneration and limited career possibilities were found to experience high burnout and less work engagement, presumably because stimuli from the environment did not promote growth, self-development, personal accomplishment and meaning for the manager. The results showed that both job demands and job resources contributed to burnout and work engagement.

Recommendations for future research have been made.

OPSOMMING

Titel: Uitbranding en werksbetrokkenheid by verpakkingsvervaardigingsbestuurders in Suid-Afrika.

Sleutelterm: Werksuitbranding, werksbegeesteringskaal, werksvereistes, verpakkingsvervaardiging, bestuurder.

Stres en uitbranding by werkers is besig om epidemiese vlakke te bereik, en dit lei tot die verlies van miljoene in terme van inkomste as gevolg van afwesigheid en 'n ooreenkomstige verlies aan produktiwiteit. Die vraag of die deelnemers aan hierdie studie lae vlakke van werkswelstand (d.i. lae uitbranding en hoë werksbetrokkenheid) ervaar aldan nie, is geensins maklik om te beantwoord nie. Daarom is navorsing nodig om tot 'n beter begrip te kom aangaande hoe uitbranding manifesteer, asook daardie onderliggende faktore wat bydra tot die werksbetrokkenheid van bestuurders en die verhouding daarvan met werksvereistes en -hulpbronne. Die oogmerk van hierdie studie was om 'n ondersoek te doen om vas te stel watter werksvereistes en werkhulpbronne uitbranding en werksbetrokkenheid van bestuurders in die verpakkingsvervaardigingssektor kan voorspel, en hoe verskillende werkseienskappe hulle vlakke van betrokkenheid sal raak.

'n Kruisdeursnee-ondersoek is gebruik. Die studiepulasie ($N = 90$) het bestaan uit bestuurspersoneel uit verskeie afdelings van 'n nasionale verpakkings-vervaardigingsfirma in Suid-Afrika. Die Maslach-Uitbrandingsinventaris – Algemene Onderzoek, die Utrechtse Werksbegeesteringskaal, die Werkvereisteshulpbronne-vraelys en 'n biografiese vraelys is toegepas. Die betroubaarheid van die meetinstrumente is gemeet deur die gebruik van Cronbach-alfa-koëffisiënte. Beskrywende statistiek is gebruik vir analise van die data. Pearson-korrelasies en veelvuldige regressie-analises is gebruik om die verhoudinge tussen uitbranding, werksvereistes, werkhulpbronne en werksbetrokkenheid te assesser.

Die resultate het getoon dat uitputting positief verbandhoudend staan tot werksvereistes (werkoorlaaiing). Beide uitputting en sinisme staan negatief verbandhoudend tot 'n gebrek aan werkhulpbronne soos *organisatoriese ondersteuning* en *groeimoontlikhede*. Bestuurders met min groeigeleenthede, lae vlakke van werksonafhanklikheid, swak verhoudings met kollegas, swak verhoudings met onmiddellike toesighouers, beperkte toegang tot inligting,

swak kommunikasie, ontoereikende deelname, 'n gebrek aan kontakgeleenthede, swak vergoeding en beperkte beroepsmoontlikhede het hoë uitbranding en minder werksbetrokkenheid getoon, waarskynlik aangesien stimuli uit die omgewing nie gunstig was ten opsigte van groei, selfontwikkeling, persoonlike sukses en betekenis vir die bestuurder nie. Die resultate het verder getoon dat werkseise en werks hulpbronne bygedra het tot uitbranding en werksbetrokkenheid.

Voorstelle vir verdere navorsing is gemaak.

CHAPTER 1

INTRODUCTION

This mini-dissertation is concerned with the manifestation of burnout and work engagement of managers in national divisions of a South African packaging manufacturing company.

This chapter presents the problem statement, objectives and basic hypothesis as well as the research method.

1.1 PROBLEM STATEMENT

South Africa has, over the last two decades, undergone significant change as local companies try to compete globally. Customer demands for high quality products, greater product variety and on-time delivery, have forced local South African companies/managers to reorganise jobs and their work processes to meet these demands (Appelbaum, Bailey, & Berg, 2000; Ichniowski, Shaw, & Prennushi, 1997; MacDuffie, 1995). For some, this has resulted in greater mismatches with huge job demands and fewer job resources.

According to Hamel (1996), organisations are under increasing pressure to improve productivity, while simultaneously reducing costs. This, according to Hamel (1996), has resulted in an epidemic of “corporate anorexia”, based on a new enterprise formula that is emerging, whereby half as many people are being paid twice as much to produce three times more (Handy, 1996). Quinn et al. (1996) and Reinhold (1997) advise that this “squeezing of the pips” trend is particularly evident in the case of managers, where the incidence of stress and burnout is increasingly common.

Conversely, Graham (1995), Godard (2001), Lewchuk, Steward, and Yates (2001) argue that, while the effect of high performance work practices in firms is well established, the effect of these practices on managers is much less studied and its outcomes are much less clear. According to the authors, some maintain that high performance work practices have a largely negative effect on workers, as per the pathogenic framework, while, on the other hand, Schaufeli and Bakker (2001) maintain that some individuals - even when exposed to high job demands and long working hours - do not show symptoms of burnout, but instead seem to

find pleasure in dealing with those stressors. Seligman and Csikszentmihalyi (2000), like Schaufeli and Bakker (2001), support the view that from a positive psychology (fortigenic) perspective, such individuals could be described as being engaged in their work.

Schaufeli and Enzmann (1998) define burnout (the opposite of engagement) as a persistent, negative, work-related state of mind in 'normal' individuals that is primarily characterised by exhaustion, decreased motivation, and the development of dysfunctional attitudes and behaviour at work. Maslach et al. (2001), on the other hand, maintains that the symptoms of job burnout, particularly cynicism (one of the subscales of burnout), have a way of spreading. She suggests that even employees who like their jobs and find them rewarding, may eventually perceive their co-worker's complaints about management and a lack of appreciation as valid. According to Maslach et al. (2001), it is an undeniable fact that burnout is non-discriminating and employees at all levels suffer.

Various theories could be used to understand and predict burnout and work engagement of packaging manufacturing managers in South Africa. Jones (1995) asserts that managers are pivotal to an organisation's productivity and effectiveness, since they have the ultimate responsibility for maximising the resources available for organisations to create value. Any decline in managers' performance inevitably results in foregone revenue, lost opportunities and increased costs (Williams, 1991).

Although it is important to understand the causes of burnout (a negative side effect of work) in organisations, it is also important to focus on the positive side effects of work. According to Maslach, Schaufeli, and Leiter (2001), in order to cover the entire continuum of work-related experiences, we must study the 'opposite of burnout' as well. Schaufeli and Enzmann (1998) state that while burnout is a metaphor that is commonly used to describe a state or process of mental exhaustion, engagement is defined as an **energetic state** in which the employee is dedicated to *excellent performance* at work and is confident of his or her effectiveness (Schutte, Toppinen, Kalimo, & Schaufeli, 2000). According to Schaufeli and Bakker (2001), rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual or behaviour. For instance, work engagement is positively related to social support from co-workers and superiors, performance feedback, coaching, job control, task variety and training facilities (Rothmann, Steyn, & Mostert, 2005; Schaufeli & Salanova, in

press); hence, the more job resources are available, the more likely it is that employees will feel engaged.

According to Hackman and Oldham (1980), such results on the positive relationship between job resources and engagement are in line with the Job Characteristics Theory. This theory assumes that particular job characteristics such as skill variety, autonomy and feedback contribute to intrinsic motivation (which is closely related to work engagement). Furthermore, work contexts that provide resources such as job control (autonomy), feedback (competence) and social support (relatedness) enhance well-being (e.g. vitality) and increase intrinsic motivation (Ryan & Frederick, 1997). For instance, in their study Schaufeli and Bakker (2003, 2004) found that managers, entrepreneurs and farmers scored high in terms of engagement as opposed to blue collar workers, police officers and home care staff.

In support of the Job Characteristics Theory, Maslach et al. (2001) maintain that good fits promote engagement while mismatches lead to burnout. She maintains that a mismatch will occur when any one of the six areas, namely workload, control, reward, recognition (from one's immediate work community), fairness and values is out of tune with the worker's expectations and capabilities. She also states that when an employee/manager feels that there is a lack of control over the job, such an individual interprets the situation as having little opportunity to use creativity and problem-solving abilities - "[t]here's no control over the process of achieving outcomes for which he or she is being held accountable". With regards to insufficient rewards, the individual will experience a devaluation of both work and workers around him or her. Likewise, she maintains that: "the breakdown of community will result in a loss of positive connections with others, and will produce chronic and unresolved conflict with others on the job".

Although positive states are not popular in psychology, the field of positive psychology is rapidly gaining momentum in industrial/organisational psychology (Snyder & Lopez, 2002). Erez and Isen (2002) have shown that inducing positive emotional states in people (in this context, managers) facilitates flexible, effective problem-solving, decision-making and evaluation of events. Frederikson's (1998) 'broaden-and-build' theory of positive emotions states that positive emotions, including, joy, interest, contentment and happiness all share the ability to 'broaden' an individual's momentary thought-action repertoires. In addition, these positive emotions assist in building the individual's enduring personal resources. The

tendency to experience the positive is proposed to be central to one's ability to flourish, prosper mentally and grow psychologically. Therefore, positive emotions have a potentially adaptive and interactive nature and might moderate the relationship between job satisfaction and job performance. In the same breath, results from the surveys of recent and upcoming generations of employees show that a majority of managers desire greater meaning and personal development from their work, and many see their work as a calling – enjoyable, fulfilling and socially useful (Avolio & Sosik, 1999; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). According to Nelson and Simmons (2003), meaningful work leads to eustress, which can promote engagement even in demanding conditions. Eustress reflects the extent to which cognitive appraisal of the situation is seen to benefit or enhance an individual's well-being.

In summary, according to Kelloway and Barling (1991), the positive psychology paradigm helps one to understand the relationship between work, and more specifically goal-directed, structured activity, and well-being. Maslach et al. (2001) concluded therefore that burnout and work engagement are specific areas for research and intervention. Rothmann (2003) in consensus argues that, as symptoms of exhaustion and cynicism (caused by burnout) are not only problematic for the individual but also for the organisation, burnout as a psychological phenomenon will be taken seriously by management of organisations only to the extent to which it demonstrably contributes to poor business performance, whilst Schaufeli and Bakker (2002) argue that feeling emotionally drained from one's work once a week does by no means exclude that in the same week, one might feel "bursting with energy".

According to Salovey, Rothman, Detweiler, and Steward (2000), therefore, the focus on engagement as the positive antithesis of burnout promises to yield new perspectives on interventions in order to promote healthy perceptions, beliefs, and physical well-being and to alleviate burnout (Maslach et al., 2001).

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

- How is burnout conceptualised in literature, and what are the causes thereof in the packaging manufacturing sector?

- How is work engagement conceptualised in the literature, and what are the causes thereof in the packaging manufacturing sector?
- Which job demands and job resources predict burnout and work engagement of managers in the packaging manufacturing sector?

1.2 AIM OF THE RESEARCH

The research aim is divided into a general aim and specific objectives.

1.2.1 General aim

The aim of the current study is to investigate the relationship among job demands, job resources, burnout and work engagement of managers in national divisions of a packaging manufacturing company in South Africa.

1.2.2 Specific objectives

The specific objectives of this study are as follows:

- To research how burnout is conceptualised in literature and what its causes are within the packaging manufacturing sector;
- To research how work engagement is conceptualised in literature and what its causes are within the packaging manufacturing sector;
- To determine which job demands and job resources predict burnout and work engagement of managers in the packaging manufacturing sector.

1.3 RESEARCH METHOD

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

1.3.1 Literature review

A complete literature review is undertaken in accordance with the following steps:

- Step 1: Conceptualise burnout from the literature
- Step 2: Conceptualise work engagement from the literature
- Step 3: Conceptualise the relationship between burnout and work engagement on the one hand, and job demands and resources on the other.

1.3.2 Empirical study

The following steps in the empirical study can be mentioned:

1.3.2.1 The choice of a research design

A cross-sectional survey design, by means of which a sample is drawn from a population at a particular point in time (Shaugnessy & Zechmeister, 1997), is used to achieve the research objectives. Information collected is utilised to report on the population at that time. Cross-sectional designs are used to examine groups of subjects in various stages of development simultaneously, while the survey describes a technique of data collection in which questionnaires are used to gather data about an identified population (Burns & Grove, 1993). The design can also be used to assess interrelationships among variables in the population.

1.3.2.2 Choice of participants

The study sample consists of 90 managers employed by various divisions of a national packaging manufacturing industry in South Africa. The sample is drawn from executives, senior management, top management, and middle and junior management only. Of the 170 distributed questionnaires, only 90 participants responded.

1.3.2.3 Measuring instruments

The following research instruments are used in the research:

An Adapted version of the *Maslach Burnout Inventory – General Services Survey* (MBI-GS) (Maslach et al., 1996) is used to measure burnout. The following subscales of the MBI-GS are used: exhaustion (example of a question “I feel used up at the end of the workday”), and mental distance (example of a question “I have become less enthusiastic about my work”).

All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*daily*). A total of 13 items loaded significantly on two scales: exhaustion (5 items) and mental distance (8 items). The internal consistencies (Cronbach's alpha coefficients) reported by Schaufeli et al. (1996) varied from 0,87 to 0,89 for exhaustion and from 0,73 to 0,84 for cynicism. Test-retest reliabilities after one year were 0,65 (exhaustion), and 0,60 (cynicism). Storm and Rothmann (2003a) found support for the construct validity of the MBI-GS for employees of the South African Police Services.

The *Utrecht Work Engagement Scale* (UWES) (Schaufeli, Salanova, Gonzáles-Romá, & Bakker, 2002) is used to measure the levels of engagement of managers in national divisions of a packaging manufacturing company. The UWES measures levels of engagement on a 17-item 7-point frequency rating scale, ranging from 0 (*never*) to 6 (*every day*). Three dimensions can be distinguished, namely vigour, dedication, and absorption. Examples of statements relating to the three dimensions are the following: "I am bursting with energy in my work" (vigour); "I find my work full of meaning and purpose" (dedication); and: "When I am working, I forget everything around me" (absorption). Engaged individuals are characterised by high levels of vigour and dedication as well as elevated levels of absorption.

The *Job Demands-Resources Scale* (JD-RS), developed by Barkhuizen, Rothmann, and Tytherleigh (2004) is used to measure job demands and job resources for employees. The JD-RS consists of 48 items. The questions are rated on a four point scale 1 (*never*) and 4 (*always*). The dimensions of the JD-RS include pace and amount of work, mental load, variety in work, opportunities to learn, independence in work, relationships with colleagues, relationship with immediate supervisor, ambiguities about work, information, communications, participation, contact, uncertainty about the future, remuneration and career opportunities (Frey, Jonas, & Greitemeyer, 2003; Schaufeli & Enzmann, 1998). According to Strydom, Rothmann, and Mostert (in press) five factors were extracted from this measuring instrument. These factors are: growth opportunities, organisational support, advancement, overload and job insecurity. Strydom and Rothmann (in press) found that these factors show highly acceptable alpha coefficients, ranging from 0,76 to 0,92.

1.3.2.4 Data analysis

The SPSS-program is used to carry out statistical analysis regarding reliability and validity of the measuring instruments, descriptive statistics, correlation coefficients, and multiple regression analysis (SPSS Inc., 2003). Cronbach alpha coefficients are used to determine the internal consistency of the measuring instruments as discussed by Clark and Watson (1995). Coefficient alpha conveys important information regarding the proportion of error variance in a measuring instrument.

Descriptive statistics are used to analyse the data. Pearson product-moment correlation coefficients are used to assess the relationship between the variables. A cut-off point of 0,30 was set for the practical significance of correlation coefficients. The level of statistical significance is set at $p < 0,05$. Effect sizes are used to decide the significance of findings. Regression analysis is used to determine the proportion of variance in exhaustion, cynicism and professional efficacy that is attributable to job characteristics.

1.4 DIVISION OF CHAPTERS

The division of chapters in this mini-dissertation is as follows:

- Chapter 1 Introduction
- Chapter 2 Article
- Chapter 3 Conclusions, limitations and recommendations.

1.5 CHAPTER SUMMARY

In this chapter the problem statement, the aims of the research and the research method were discussed. A prospective chapter division was also indicated.

Chapter 2 contains the research article.

REFERENCES

- Appelbaum, E. T., Bailey, P., & Berg, P. (2000). *Manufacturing advantage: Why high performance work systems pay off*. Ithaca, Cornell University/ILR Press.
- Avolio, B. J., & Sosik, J. J. (1999). A life-span framework for assessing the impact of work on white-collar workers. In S. L. Willis & J. D. Reid (Eds.), *Life in the middle: Psychological and social development in middle age* (pp. 251-274). San Diego, CA: Academic Press.
- Barkhuizen, N., Rothmann, S., & Tytherleigh, M. Y. (2004, April). *Burnout and engagement of academic staff in higher education institutions in South Africa*. Poster presented at the Annual Conference of the British Psychological Society, London, UK.
- Burns, N., & Grove, S. K. (1993). *The practice of nursing research, conduct, critique, and utilization* (2nd ed.). Philadelphia, Pa.: W.B. Saunders
- Clark, L.A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7, 309-319.
- Erez, A., & Isen, A. M. (2002). The influence of positive affect on the components of expectancy motivation. *Journal of Applied Psychology*, 87, 1055-1067.
- Fredrickson, B.L. (1998). What good are positive emotions? *Review of General Psychology*, 2, 300-319.
- Frey, D., Jonas, E., & Greitemeyer, T. (2003). Intervention as a major tool of a psychology of human strengths: Examples from organisational change and innovation. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for positive psychology* (pp. 149-164). Washington, DC: American Psychological Association.
- Godard, J. (2001). High performance and the transformation of work. The implications for alternative work practices for the experience and outcomes of work. *Industrial and Labour Relations Review*, 54, 776-805.
- Graham, L. (1995). *On the line at Subaru-Isuzu*. Ithaca, ILR/Cornell University Press.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hamel, G. (1996). Strategy as revolution. *Harvard Business Review*, July-Aug, 69-82
- Handy, C. B. (1996). *Beyond certainty: The changing worlds of organizations*. Boston, MA: Harvard Business School Press.

- Ichniowski, C., Shaw, K., & Prennushi, G. (1997). The effects of human resource management practices on productivity: A study of steel finishing lines. *The American Economic Review*, 87, 291-313.
- Jones, G. R. (1995). *Organizational theory: Text and cases*. Reading, MA: Addison-Wesley.
- Kelloway, E. K., & Barling, J. (1991). Job characteristics, role stress and mental health. *Journal of Occupational Psychology*, 64, 291-304.
- Lewchuk, W., Steward, P., & Yates, C. (2001). Quality of working life in the automobile industry: A Canada-UK comparative study. *New Technology, Work and Employment*, 16(2), 72-87.
- MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organisational logic and flexible production systems in the world of auto industry. *Industrial and Labour Relations Review*, 48, 197-221.
- Maslach, C., & Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- Nelson, D. L., & Simmons, B. L. (2003). Health psychology and work stress: A more positive approach. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 97-119). Washington, DC: American Psychological Association.
- Quinn, R. E., Faerman, S. R., Thompson, M. P., & McGrath, M. R. (1996). *Becoming a master manager: A competency framework*. USA: John Wiley & Sons.
- Reinhold, B. R. (1997). *Toxic work: How to overcome stress, overload and burnout and revitalize your career*. New York: Plume Publishers.
- Rothmann, S. (2003). Burnout and engagement: A South African perspective. *South African Journal of Industrial Psychology*, 29(4), 16-25.
- Rothmann, S., & Storm, K. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African Police Service. *SA Journal of Industrial Psychology*, 29, 62-70.
- Rothmann, S., Steyn, L.J., & Mostert, K. (2005). Job stress, sense of coherence and work wellness in an electricity supply organisation. *South African Journal of Business Management*, 36(1), 1-9.
- Ryan, R. M., & Frederick, C. M. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529-565.

- Salovey, P., Rothman, A. J., Detweiler, J. B., & Steward, W. T. (2000). Emotional states and physical health. *American Psychologist*, 55, 110-121.
- Sanchez, R., & Heane, A. (1996). *Reinventing strategic management: new theory and practice or competency-based competition*. Discussion Paper, Graduate School of Management, The University of Western Australia.
- Schaufeli, W. B., & Bakker, A. B. (2001). Werk en welbevinden: Naar een positieve benadering in de Arbeids- en Gezondheidspsychologie (Work and wellbeing: Towards positive occupational health psychology). *Gedrag en Organizatie*, 14, 229-253.
- Schaufeli, W. B., & Bakker, A. B. (2002). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study of the COBE-model. Utrecht University: Psychology and Health.
- Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale: Preliminary manual*. Occupational Health Psychology Unit: Utrecht University.
- 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, 1-23.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Schaufeli, W. B., & Salanova, M. (in press). Work engagement: An emerging psychological concept and its implications for organizations.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A.B. (2002). The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W. B., Van Dierendonck, D., & Gorp, K. (1996). Burnout and reciprocity: Towards a dual-level social exchange model. *Work and Stress*, 10, 225-237.
- Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. B. (2000). The factorial validity of the Maslach Burnout Inventory - General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology*, 72, 53-66.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shaughnessy, J.J., & Zechmeister, E.B. (1997). *Research methods in psychology* (4th ed.). New York: McGraw-Hill.
- Snyder, C. R., & Lopez, S. J. (2002). *Handbook of positive psychology*. Oxford, UK: Oxford University Press.

SPSS Inc. (2003). *SPSS 12.0 for Windows*. Chicago, IL: Author.

Storm, K., & Rothmann, S. (2003a). A psychometric analysis of the Maslach Burnout Inventory – General Survey in the South African Police Service. *South African Journal of Psychology*, 33, 219-226.

Strydom, M., Rothmann, S. & Mostert, K. (in press). A psychometric evaluation of the Job Demands-Resources Scale in South Africa.

Williams, R. (1991). Transformation or chaos? Human resources in the 1990s. *Human Resources Monthly*, Nov, 10.

CHAPTER 2

RESEARCH ARTICLE

BURNOUT AND WORK ENGAGEMENT OF SOUTH AFRICAN PACKAGING MANUFACTURING MANAGERS

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ABSTRACT

The objective of this study was to investigate the relationship between job demands, job resources, burnout, and work engagement among packaging manufacturing managers. A cross-sectional survey design was used. The sample consisted of 90 managers in national divisions of a South African packaging manufacturing company. Three questionnaires were used in the research, namely the Maslach Burnout Inventory – General Survey, the Utrecht Work Engagement Scale and the Job Demands-Resources Scale. The results showed that the highest levels of affective well-being (low burnout and high work engagement) arise under conditions of high organisational support and high growth opportunities, while well-being is poorest under conditions of low organisational support, low growth opportunities and high demands (high burnout and low work engagement).

OPSOMMING

Die oogmerk van hierdie studie was om vas te stel wat die verwantskap is tussen werkeise, werks hulpsbronne, uitbranding en werksbetrokkenheid by bestuurders in die verpakkings vervaardigingsonderneming. 'n Dwarssnee opname-ontwerp is gebruik. Die populasie het bestaan uit 90 bestuurders in nasionale afdelings in 'n Suid-Afrikaanse vervaardigingsmaatskappy. Drie vraelyste is gebruik vir die navorsing, naamlik die Maslach-Uitbrandingsvraelys-Algemene Opname, die Utrechtse Werksbegeesteringskaal en die Werkseise-hulpbronnenskaal. Die resultate het getoon dat die hoogste vlakke van affektiewe welstand (lae uitbranding en hoë werksbetrokkenheid) voorgekom het tydens toestande gekenmerk deur hoë vlakke van organisatoriese ondersteuning en groei-geleenthede, terwyl welstand swak was onder toestande van lae organisatoriese ondersteuning en hoë vereistes (hoë uitbranding en werksbetrokkenheid).

A long-standing issue in organisational psychology is the degree to which a happy worker is a good worker. Because early research suggested that the relationship between job satisfaction and productivity was relatively insignificant (Iaffaldano & Muchinsky, 1985; Vroom, 1964), many researchers lost interest in the question. During the past decade, however, organisational researchers have altered their conclusions. For one thing, they recognised certain errors in the early reviews, and also realised that seemingly small correlations (for example, Iaffaldano & Muchinsky reported an average of 0,17 across studies) could amount to huge productivity differences when applied to organisations and to nations. In addition, scientists have noticed that certain types of behaviours are consistently related to engagement at work. Job satisfaction is reliably related to organisational citizenship (helping other employees and the organisation in ways not specifically related to one's assigned tasks) and the absence of bad citizenship (e.g., stealing from the employer; see Borman, Penner, Allen, & Motowildo, 2001; Organ & Ryan, 1995). Bateman and Organ (1983) for instance report that the more satisfied employees are, the more practical, helpful and friendly they are, while Miles, Borman, Spector, and Fox (2002) found that the relationship between job satisfaction and organisational citizenship can be sizeable; with Spector's (1997) reviewed evidence showing that satisfied workers can have lower personnel turnover and absenteeism than non-satisfied workers, and are more punctual, cooperative as well as helpful to other workers as opposed to their non-satisfied counterparts.

Work must play either an intrinsic motivational role (by fostering self-growth, learning and development), or it must play an extrinsic motivational role (by being instrumental in achieving work goals). The strongest motivator for the employee, according to Maslow (1943), is self-actualisation, that is, the desire to fulfil oneself and use one's abilities to the fullest. Hertzberg et al. (1967) contends that it is the content of work, made up of achievement, responsibility, advancement, and growth, that satisfies and consequently motivates one.

There is an ethical and a moral case for the management of mental well-being within the organisational context. It has been argued (Jones & Lowndes, 1997) that organisations should implement a policy of good human relations which treats all employees with respect and trust, and supports their individual development needs. The benefit is said to accrue from the generation of the reciprocal commitment required for excellent performance and, hence, organisational success.

The bulk of evidence, according to Doherty & Tyson (1998), suggests that few organisations are, in practice, proactive and preventive in their approach to managing mental well-being. Most companies are entirely reactive to mental illness when it occurs, and even then, it usually features on the business agenda only when attempts are made to address issues such as sickness absence and the resultant costs to the business (Doherty & Tyson, 1998). According to Doherty & Tyson (1998), although it is difficult to estimate the cost of work-related stress, many studies report that it has an enormous impact in terms of both economic costs and human suffering.

According to Shirom (2003), burnout is likely to represent a pressing problem in the years to come. Competitive pressures in the manufacturing industry that originate in the global market, the continuing process of consumer empowerment in service industries, and the rise and decline of high-tech industry are among factors likely to affect employees' levels of burnout in different industries including packaging manufacturing organisations themselves.

Packaging manufacturing forms an integral part of the South African manufacturing industry's economy. During the past two decades, local packaging manufacturing industries have been confronted with a series of complex changes, challenging their mandates, traditional practices, authority and organisational structures (Doyle & Hind, 1998; Hugo, 1998; Nixon, Marks, Rowland, & Walker, 2001). In particular, packaging manufacturing industries in South Africa are currently undergoing a process of transformation in an attempt to move away from the ethos and struggles inherited from the Apartheid regime towards a more democratic society (Dlamini, 1995; Hugo, 1998). The challenge is to adapt to the structural changes and adjustments dictated by the realities of this alien called globalisation. To do that however requires a healthy organisation.

For packaging manufacturing managers in South Africa, the above developments present major challenges, and they bring with them a great deal of organisational and personal conflict. Organisations are flattening, calling for managers to work from a base of influence rather than control. Companies are becoming truly global, and this calls for management across borders; companies are, furthermore, becoming dependent on outsourcing and alliances, requiring managers to lead beyond the core organisation. Not only is the plethora of roles (e.g. advisor, facilitator, colleague, supervisor, tutor, mentor, coach, leader,

disciplinarian) increasing, but managers are also required to make paradigm shifts, adopt new policies and practices, and approach their professional endeavours in new and innovative ways (Fisher, 1994; Fourie, 1999; Fourie & Alt, 2000), whilst also up-skilling their competencies and skills.

The average manager spends much of his or her life working, and as much as a quarter or perhaps a third of his or her waking life at work. According to Campbell, Converse, and Rodgers (1976), as much as a fifth to a quarter of the variation in adult life satisfaction can be accounted for by satisfaction with work. Similarly, according to Avolio and Sosik (1999); Wrzesniewski, McCauley, Rozin, and Schwartz (1997), surveys of recent and upcoming generations of employees show that a majority of employees desire greater meaning and personal development from their work and many see their work as a calling-enjoyable, fulfilling, and socially useful.

Defining human health as more than the absence of illness has been a long-standing though elusive objective (World Health Organisation, 1948). Based on the electronic search of Psychological Abstracts, Myers (2000) calculated that negative emotions outnumber positive emotions by a ratio of 14 to 1. The same is true for occupational health psychology: a simple count of articles that appeared from 1996 onwards in the *Journal of Occupational Health Psychology* reveals that negative work-related outcomes outnumber the positive outcomes by a comparable ratio of 15 to 1. It is therefore not surprising that the emerging positive psychology proposes a shift from the traditional focus on weaknesses and malfunctioning towards human strengths and optimal functioning (Seligman & Csikszentmihalyi, 2000). A similar switch from burnout towards its opposite – engagement - has recently been put forward by Maslach, Schaufeli, and Leiter (2001). In the current article the authors propose a similar shift.

While research has pointed to both situational and individual factors as antecedents of job burnout, Maslach et al. (2001) have found that situational and organisational factors play “a more significant role in burnout than individual ones” (p. 418). It is thought that individual traits predispose individuals to burnout through interaction with organisational factors (Shirom, 2003). Other individual factors that have been found to be predictors of burnout: “include demographic variables (such as age or formal education), enduring personality traits, and work related attitudes” (Maslach et al., 2001, p. 409).

Shirom (2003) also highlights individual factors such as self-esteem, hardiness and optimism as important and suggests that there certainly seems to be an empirical case for internal factors acting as predictors of burnout. External factors, according to Maslach et al. (2001), include variables such as job characteristics (job demands, social support from peers, managerial support, feedback, participation in decision-making), occupational characteristics (care-giving or teaching roles), and organisational factors (fairness and equity, downsizing/mergers). Using a longitudinal design and external ratings of job conditions, for instance, Grebner et al. (2003) found that job control (i.e. feelings of control over one's work) correlated with greater well-being on the job, whereas job stressors (e.g. correlated with lower well-being on the job).

Job demands refer to those aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs. Conversely, job resources refer to those aspects of the job that may be functional in achieving work goals, reduce job demands at the associated physiological and psychological costs, and stimulate personal growth and development (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), as shown in Gebner's (2003) example above. Applied to the South African context, Jackson and Rothmann (2005) reported that job resources predicted work engagement. Coetzer and Rothmann (2005) also found that the availability of resources increased the levels of engagement.

According to Demerouti et al. (2001), the Job-Demands Resources model (JD-R) proposes that burnout as caused by job stressors follows two processes. In the first process, job demands lead to exhaustion, and in the second process a lack of resources leads to withdrawal, and eventually disengagement. In terms of this, job characteristics such as variety, independence, opportunities for learning and participation, opportunities to participate, role clarity, effective communication, advancement, remuneration and good relationships with supervisors and colleagues create *psychological meaningfulness* and *safety for employees*, needed for one to be engaged in their job (Frey, Jonas, & Greitemeyer, 2003; May, Gilson, & Harter, 2004). Equally, while these may alleviate a manager's reaction to job stress, the opposite will most certainly aggravate it.

Warr (1999), after reviewing the literature on work satisfaction, concluded that rewarding jobs tend to have the following characteristics: Opportunity for personal growth, opportunity for using skills, variety of tasks, physical security, supportive supervisor, respect and high status, interpersonal contact, good pay and fringe benefits, and clear requirements and information on how to meet them. Roberts and Davenport (2002), conclude that there are three areas that could be targeted to increase employees/managers' work engagement, namely career development, identification with the organisation and a rewarding work environment.

Burnout, work engagement, job demands and job resources

Burnout and work engagement are two distinct concepts that should be assessed independently (Schaufeli & Bakker, 2001). Herbert Freudenberger (1974) introduced the term "burnout" in the mid-1970s. He used it to describe the symptoms of emotional depletion and a loss of motivation and commitment amongst volunteers with whom he was working in an alternative care setting (Maslach & Schaufeli, 1993). Probably the most frequently cited definition of burnout comes from Maslach and Jackson (1986, p. 1). They define burnout as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur among individuals who do "people work" of some kind. Schaufeli and Enzmann (1998, p. 36) also identified exhaustion as a core indicator of burnout and a sense of reduced effectiveness as an accompanying symptom, but added three additional general symptoms, namely distress (affective, cognitive, physical and behavioural), decreased motivation, and dysfunctional attitudes and behaviours at work. They define burnout as: "a persistent, negative, work-related state of mind in 'normal' individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work".

According to Schaufeli (2003), burnout consists of the following three interrelated but conceptually distinct characteristics, namely exhaustion, mental distance (cynicism and/or depersonalisation) and low professional efficacy.

- **Exhaustion** describes a reduction in the emotional resources of an individual. When asked how they feel, burnt-out employees typically answer that they feel drained or used up and physically fatigued.

- **Mental distance** refers to the interpersonal dimension of burnout and is a negative, callous or detached response to various aspects of the job (cynicism) and/or cynical and insensitive attitudes towards work, colleagues, clients and/or patients.
- **Low professional efficacy** refers to a feeling of being unable to meet clients' needs and to satisfy essential elements of job performance.

The notion of exhaustion presupposes a prior state of high arousal or overload rather than one of low arousal or underload, which implies that burnout is not a response to tedious, boring or monotonous work. However, exhaustion fails to capture a critical aspect of the relationship people have with their work. Chronic exhaustion can lead people to distance themselves emotionally and cognitively from their work, so that they are less involved with, or less responsive to the needs of other people or the demands of the task. According to Maslach (1998), distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to depersonalisation or cynicism is consistently found in burnout research. Furthermore, a work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode an individual's sense of accomplishment or effectiveness. Also, it is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom one is hostile. In some situations, the lack of efficacy seems to arise more clearly from a lack of relevant resources, while exhaustion and cynicism emerge in the presence of work overload and social conflict.

Exhaustion and mental distance (cynicism and depersonalisation) constitute the two key aspects of burnout. *Exhaustion* refers to an incapability to perform because of drained energy, whereas mental distance indicates that the employee is no longer willing to perform because of an increased intolerance of any effort. *Mental distancing* or psychological withdrawal from the task can be seen as an adaptive mechanism to cope with excessive job demands and resultant feelings of exhaustion. However, when this coping strategy becomes a habitual pattern, as in cynicism or depersonalisation, the person becomes dysfunctional because it disrupts adequate task performance.

After analysing various case studies of individuals who recovered from burnout, Cherniss (1995) identified the following antidotes:

- ***Finding meaningful work.*** A meaningful job helps employees remain dedicated. It has several characteristics. Firstly, it must make a significant impact, for example, in other people's lives. However, the individual must be able to see the significant impact of the job. Secondly, the job should provide an intellectual challenge. Thirdly, the job must provide scope to experience change in order to prevent boredom. Fourthly, the individual should be able to cultivate his or her special interests in the job.
- ***Finding greater autonomy and support.*** Employees who recovered from burnout managed to avoid demoralising bureaucratic obstacles and organisational politics. In most cases they had to change jobs, but eventually they found work settings in which they had a high degree of autonomy. However, a supportive work setting is also necessary to recover from burnout. Employees need both tangible and emotional support, including trust and confidence, recognition and feedback, and active interest on the side of the immediate manager. Furthermore, support for continued learning and stimulating colleagues are also valuable.
- ***Individual factors contributing to resilience.*** Such factors include challenging experiences prior to entering an occupation, developing career insight early in the career, developing organisational negotiation skills, setting realistic goals and expectations, actively pursuing personal development and striking a balance between work, family and leisure. All these contribute to recovery from burnout.

Promisingly in the same vein many preventive organisational-based strategies exist to address high job demands, such as job redesign, flexible work schedules and goal setting. And Increasing job resources (e.g. through participative management, increasing social support and team building), on the other hand, would eventually lead to more engagement at the job.

Work engagement is the assumed opposite of burnout. Contrary to those who suffer from burnout, engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their job. Two schools of thought exist on the relationship between work engagement and burnout. The first approach of Maslach and Leiter (1997) assumes that engagement and burnout constitute the opposite poles of a continuum of work-related well-being, with burnout representing the negative pole and engagement the positive pole.

Because Maslach and Leiter (1997) define burnout in terms of exhaustion, cynicism and reduced professional efficacy, it follows that engagement constitutes the opposite of the three corresponding aspects of burnout. In other words, according to Maslach and Leiter (1997), the opposite scoring pattern on the three aspects of burnout – as measured with the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996) – implies work engagement. This means that low scores on the exhaustion and cynicism scales and high scores on the professional efficacy scale of the MBI are indicative of engagement.

Another related school of thought is found in Schaufeli and Bakker (2003), who define engagement as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual or behaviour.

Engagement is often confused with other constructs such as organisational commitment, job satisfaction or job involvement. *Organisational commitment* refers to an employee's allegiance to the organisation that provides employment. The focus is on the organisation, where engagement focuses on the work itself. *Job satisfaction* is the extent to which work is a source of need fulfilment and contentment, or a means of freeing employees from hassles or things causing dissatisfaction; it does not encompass the person's relationship with the work itself. *Job involvement* is similar to the involvement aspect of engagement with work, but does not include the energy and effectiveness dimensions (Maslach et al., 2001). Work engagement consists of the following dimensions (Schaufeli & Bakker, 2003):

- **Vigour** is characterised by high levels of energy and mental resilience while working, and also includes the willingness to invest effort in one's work, not being easily fatigued, and persistence even in the face of difficulties.
- **Dedication** is characterised by deriving a sense of significance from one's work, by feeling enthusiastic and proud of one's job, and by feeling inspired and challenged by it.
- **Absorption** is characterised by being totally and happily immersed in one's work and having difficulties detaching oneself from it. Time passes quickly and one forgets everything else that is around.

According to Schaufeli and Bakker (2003), two dimensions of engagement are logically related to burnout, namely vigour (exhaustion) and dedication (cynicism). Vigour refers to the activation dimension of well-being, while dedication refers to identification with work. However, absorption and professional efficacy seem to be less related than the other dimensions, but both dimensions might also be regarded as components of engagement.

Schaufeli and Bakker (2004) found that burnout and engagement are negatively related, sharing between 10% and 25% of their variance. Storm and Rothmann (2003b) found a canonical correlation of 0,51 between burnout and engagement. A moderately negative correlation ($r = -0,42$) was found between cynicism and dedication, while vigour correlated negatively with exhaustion ($r = -0,28$).

Building on the ethnographic work of Kahn (1990), who conceptualised engagement at work as “...the harnessing of organisational members' selves to their work roles” (p. 694), May, Gilson, and Harter (2004) introduced a three-dimensional concept of engagement consisting of a physical component, an emotional and a cognitive component.

Work engagement is positively associated with job resources; that is, with those aspects of the job that have the capacity to reduce job demands, are functional in achieving work goals, and may stimulate personal growth, learning and development. For instance, work engagement is positively related to social support from co-workers and superiors, performance feedback, coaching, job control, task variety and training facilities (Rothmann, Steyn, & Mostert, 2005; Schaufeli & Salanova, in press). Hence, the more job resources are available, the more likely employees are to feel engaged.

Schaufeli and Bakker (2001) describe the following characteristics of engaged employees:

- **Engaged employees take initiative and give direction to their lives.** They do not submit passively to the influence of the environment, but rather give form to it, as well as direction to their lives. If they always have to perform the same functions with the same clients they may look for challenges outside their current environment.

- **They generate their own positive feedback.** They create "rewards" in the form of recognition, success, administration and appreciation through their attitudes and activities. Thereby a positive spiral is maintained
- **Engaged employees also show engagement outside their work environment.** Characterised by energy and enthusiasm, both in their work and their private lives, they have a type of energy that never seems to fade. Their norms and values correspond with those of their employing organisation.
- **Engaged employees experience exhaustion because their energy reserves are also limited.** However, the exhaustion they experience can be described as "exhausted but satisfied".
- **Engaged employees might have been burnt out, and burnt out employees might have shown strong engagement previously.** Edelwich and Brodsky (1980) describe burnout as a process of: "progressive disillusionment, whereby initial enthusiasm gradually makes place for frustration, which ends up in apathy. However, the reverse is also true: employees, who previously suffered from burnout, show high levels of engagement later in their lives".
- **Engaged employees are not workaholics.** They experience pleasure in their work and also enjoy hobbies and voluntary work in the community. In contrast, workaholics give the impression of being stressed and compulsive.

These results regarding the positive relationship between job resources and engagement are in line with the Job Characteristics Theory (Hackman & Oldham, 1980). This theory assumes that particular job characteristics such as skill variety, autonomy and feedback contribute to intrinsic motivation (which is closely related to work engagement). Furthermore, work contexts that provide resources such as job control (autonomy), feedback (competence), and social support (relatedness) enhance well-being (for example vitality) and increase intrinsic motivation (Ryan & Frederick, 1997).

In expansion to the Job Characteristics Theory, the dual-process model (also referred to as the Comprehensive Model of Burnout and Work Engagement) was developed by Schaufeli and Bakker (2004). This model combines research findings on burnout and work engagement with situational causes (based on the Job Demand-Resources model; in Demerouti et al., 2001) and the outcomes thereof.

Demerouti et al. (2001) developed the Job Demand-Resources (JD-R) model. One central assumption of the JD-R model is that, although every occupation may have its own specific work characteristics associated with well-being, it is still possible to divide these characteristics into two broad categories, namely job demands and job resources. *Job demands* refer to those physical, psychological, social or organisational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort and are therefore associated with certain physiological and/or psychological costs. Examples are a high work pressure, role overload, emotional demands and poor environmental conditions. *Job resources* are those physical, psychological, social or organisational aspects of the job that may be functional in achieving work goals, reducing job demands (with the associated physiological and psychological costs), and stimulating personal growth and development. Resources may be located at the level of the organisation (e.g., salary, career opportunities or job security), interpersonal and social relations (e.g., supervisor and co-worker support or team climate), the organisation of work (e.g., role clarity or participation in decision-making), and the level of the task (e.g., performance feedback, skill variety, task significance, task identity and autonomy). Job resources may play either an intrinsic motivational role (by fostering the employee's growth, learning and development), or they may play an extrinsic motivational role (by being instrumental in achieving work goals). In general, job demands and resources are negatively related, since job demands such as high work pressure and emotionally demanding interactions with clients may preclude the mobilisation of job resources. Also, high job resources such as social support and feedback may reduce job demands.

A second assumption in the JD-R model is that working characteristics may evoke two psychologically different processes, namely an *energetic* process of wearing out in which high job demands exhaust the employee's energy, as well as a *motivational* process in which lacking resources preclude dealing effectively with job demands and foster mental withdrawal (Demerouti et al., 2001).

The energetic process. Mental fatigue is a response of the mind and body to a reduction of resources due to mental task execution. It warns of the increasing risk of performance failure. Under normal circumstances, people become tired by their everyday work activities, but their energy resources are sufficient to meet the task demands. However, when a person is working under high levels of (mental) workload and is already fatigued (for example at the end of a

work day), extra energy to compensate for fatigue has to be mobilised through mental effort in order to maintain task performance. The mobilisation of extra energy may result in acute fatigue. A subsequent return to physiological and emotional baseline levels is crucial. Incomplete recovery from workload demands disrupts the energetic homeostasis, which in turn may lead to chronic effects on health and well-being. When incomplete recovery takes place, the effects of high workload demands can accumulate gradually, carrying over from one day to the next.

Sonnentag (2003) studied the work-related outcomes of recovery during leisure time. She found that day-level recovery was positively related to day-level work engagement and day-level proactive behaviour. The results of her study showed that experiences outside work are crucial for feelings and behaviour at work. However, it is not clear what the preconditions of recovery on a specific day are. It is also not clear which factors mediate or moderate the relationship between recovery and work engagement.

Motivational process. When organisations do not provide or reward employees with job resources, the long-term consequences are withdrawal from work, and reduced motivation and commitment. In such a situation, a reduction of motivation or withdrawal from work can be an important self-protection mechanism that may prevent the future frustration of not obtaining work-related goals. When the external environment lacks resources, individuals cannot reduce the potentially negative influence of high job demands and they cannot achieve their work goals. Additionally, they cannot develop themselves further in their job and organisation. The Conservation of Resources Theory predicts that in such a situation, employees will experience a loss of resources or failure to gain an investment (Hobfoll, 1989; Hobfoll & Freedy, 1993). Moreover, in order to reduce this discomfort or job stress, employees will attempt to minimise losses. With the intention of achieving equity without suffering further negative personal consequences, they will most probably reduce their discretionary inputs.

Demerouti et al. (2001) confirm that job demands (such as physical demands, time pressure and shift work) are associated with exhaustion, whereas lacking job resources (for example feedback, participation in decision-making and supervisory support) are associated with disengagement. Studies in South Africa (such as Levert et al., 2000; Pretorius, 1994; Jackson & Rothmann, 2005b) confirm that burnout is related to job demands. In a sample of educators

in South Africa, Pretorius (1994) found that role conflict and the number of students explained 25% of the variance in emotional exhaustion. The number of students and role ambiguity explained 15% of the variance in depersonalisation, while participation in decision-making explained 8% of the variance in personal accomplishment. Levert et al. (2000) reported that emotional exhaustion and depersonalisation of psychiatric nurses were predicted by workload, lack of collegial support, role conflict and role ambiguity.

In a sample of South African educators, Jackson, Rothmann, and Van de Vijver (in press) found a good fit for a model in which burnout mediated the relationship between job demands and lack of job resources and ill health, while work engagement mediated the relationship between job resources and organisational commitment of educators. Burnout had a small negative impact on organisational commitment. However, many questions remain regarding the effectiveness of the dual-process model, because studies typically relied only on self-report measures and cross-sectional data. In a study of academics at higher education institutions in South Africa, Barkhuizen and Rothmann (2004) found that job demands contributed to burnout, while job resources contributed to work wellness (low burnout and high work engagement). Work wellness and health contributed to life satisfaction.

Based on the above discussion, the following hypotheses are formulated regarding South African packaging manufacturing management:

H1: Job demands and lack of resources predict burnout.

H2: Job resources predict work engagement

METHOD

Research design

A cross-sectional survey design, by means of which a sample is drawn from a population at a particular point in time (Shaughnessy & Zechmeister, 1997), was used to reach the objectives of this study. The design can also be used to assess interrelationships among variables within the populations. According to Shaughnessy and Zechmeister (1997), this design is ideal to address the descriptive functions affiliated with correlational research.

Participants

Ninety managers from national divisions of a packaging manufacturing company participated in this study. Subjects worked in executive, managerial, supervisory, and junior management occupational categories. Out of 170 potential respondents, 90 returned questionnaires resulting in a response rate of 53%. Demographic analysis of the sample revealed a predominantly male composition (63 males and 27 females) and a relatively high response rate at senior management P7 level (33,3%). About 53,3 % reported to work 41-50 hours per week. The predominant language spoken by respondents is English at 45,6%. About 77,88 % of the population are married. The mean age was about 42 years. About 33,3 % of the population had four-year degrees while 31,1 % had three-year degrees.

Table 1

Characteristics of the Participants (N= 90)

Item	Category	Frequency	Percentage
Gender	Male	63	70,00
	Female	27	30,00
Marital status	Single	13	14,4
	Engaged	1	1,1
	Married	70	77,8
	Divorced	6	6,7
Language	Afrikaans	21	23,3
	English	41	45,6
	Sepedi	3	3,3
	Sesotho	5	5,6
	Setswana	3	3,3
	Siswati	2	2,2
	SisZulu	9	10,0
	ISiXhosa	5	5,6
	Other	1	1,1
Education	Grade 12	17	18,9
	3 Year degree	28	31,1
	4 Year degree	30	33,3
	5 Year degree	6	6,7
	Master's	7	7,8
	Missing	2	2,2
Level	3	6	6,7
	4	8	8,9
	5	6	6,7
	6	25	27,8
	7	30	33,3
	8	10	11,1
	Missing	5	5,6

Procedure

Surveys were distributed to managers in various occupations and business units (departments). For the purpose of the present study, only employees at occupational levels 1 - 9 were included. In order to maintain confidentiality and anonymity, company and participants' names were not revealed. Completed surveys were returned directly to the researcher in sealed envelopes and e-mails. Summary reports were provided to participating companies.

Instruments

The *Maslach Burnout Inventory – General Survey (MBI-GS)* (Maslach et al., 1996) was used to measure burnout. The following subscales of the MBI-GS were used: exhaustion (e.g.: “I feel used up at the end of the workday”), and mental distance (e.g.: “I have become less enthusiastic about my work”). All items are scored on a seven-point frequency rating scale ranging from 0 (*never*) to 6 (*daily*). A total of 13 items loaded significantly on two scales: exhaustion (5 items) and mental distance (8 items). The internal consistencies (Cronbach’s alpha coefficients) reported by Schaufeli et al. (1996) varied from 0,87 to 0,89 for exhaustion and between 0,73 to 0,84 for cynicism. Test-retest reliabilities after one year were 0,65 (exhaustion), and 0,60 (cynicism). Storm and Rothmann (2003a) found support for the construct validity of the MBI-GS for employees of the South African Police Service.

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli, Salanova, Gonzàles-Romà & Bakker, 2002) was used to measure the levels of engagement of managers. The UWES measures levels of engagement on a 17-item 7-point frequency rating scale, ranging from 0 (*never*) to 6 (*every day*). Three dimensions can be distinguished, namely vigour, dedication and absorption. Examples of statements relating to three dimensions are the following: “I am bursting with energy in my work” (vigour); “I find my work full of meaning and purpose” (dedication); and “When I am working, I forget everything around me” (absorption). Engaged individuals are characterised by high levels of vigour and dedication as well as elevated levels of absorption.

The *Job Demands-Resources Scale (JD-RS)*, developed by Barkhuizen, Rothmann, and Tytherleigh (2004) is used to measure job demands and job resources for employees. The JD-RS consists of 48 items. The questions are rated on a four point scale 1 (*never*) and 4 (*always*). The dimensions of the JD-RS include pace and amount of work, mental load, variety in work, opportunities to learn, independence in work, relationships with colleagues, relationship with immediate supervisor, ambiguities about work, information, communications, participation, contact, uncertainty about the future, remuneration and career opportunities. According to Strydom, Rothmann, and Mostert (in press) five factors were extracted from this measuring instrument. These factors are: growth opportunities, organisational support, advancement, overload and job insecurity. Strydom and Rothmann (in

press) found that these factors show highly acceptable alpha coefficients, ranging from 0,76 to 0,92.

Statistical analysis

The SPSS-program was used to carry out statistical analysis regarding reliability and validity of the measuring instruments, descriptive statistics, correlation coefficients, and multiple regression analysis (SPSS Inc., 2003). Cronbach alpha coefficients are used to determine the internal consistency of the measuring instruments as discussed by Clark and Watson (1995). Coefficient alpha conveys important information regarding the proportion of error variance in a measuring instrument.

Descriptive statistics were used to analyse the data. Pearson product-moment correlation coefficients were used to assess the relationship between the variables. A cut-off point of 0,30 was set for the practical significance of correlation coefficients. The level of statistical significance is set at $p < 0,05$. Effect sizes are used to decide the significance of findings. Regression analysis is used to determine the proportion of variance in exhaustion, cynicism and professional efficacy that is attributable to job characteristics (Tabachnick & Fidell, 2001).

RESULTS

In order to test the hypothesis, the fit of the MBI-GS, UWES and JDRS models was compared. See Table 2 below.

Descriptive statistics and correlations

Table 2 shows the descriptive statistics and the Cronbach alpha coefficients as well as the Pearson correlation coefficients of the MBI-GS, UWES, and JDRS.

The scores on the MBI-GS; UWES and JDRS are normally distributed. The Cronbach alpha coefficients of all the measuring instruments, except for two factors, namely work overload and social support of the JDRS, are considered to be acceptable compared to the guideline of

$\alpha > 0,70$ (Nunnally & Bernstein, 1994). It appears that the MBI-GS, UWES and JDRS have acceptable levels of internal consistency.

As can be seen in Table 2, exhaustion is positively related to work overload and negatively related to organisational support and growth opportunities. Cynicism is negatively related to vigour, dedication, organisational support and growth opportunities. Vigour is positively related to organisational support and growth opportunities.

The first factor, *exhaustion* is positively related to cynicism and work overload. The second factor, *cynicism* is positively related to exhaustion and negatively related to vigour, dedication, organisational support and growth opportunities, with a large effect on all of them.

The third factor, *vigour* is positively related with dedication, organisational support and growth opportunities, and negatively correlated with exhaustion and cynicism, with a large effect on cynicism and dedication.

The fourth factor, *dedication* is positively related to vigour, organisational support and growth opportunities, and negatively correlated with exhaustion and cynicism, with a large effect on cynicism, vigour, organisational support and growth opportunities.

The results in Table 2 shows that the levels of exhaustion and cynicism of the participants are average compared to a national norm. Vigour and dedication are above-average compared to the norm. Although overload is high average, the other job resources also have high average sten scores.

Table 2

Descriptive Statistics and Pearson Correlation Coefficients between MBI, UWES and JDRS

Scale	Mean	SD	Sten	α	1	2	3	4	5	6	7	8	9
1. Exhaustion	12,28	6,69	5,53	0,85	-	-	-	-	-	-	-	-	-
2. Cynicism	5,36	5,31	4,16	0,81	0,66 ^{*++}	-	-	-	-	-	-	-	-
3. Vigour	23,78	4,41	7,11	0,71	-0,47 ^{*+}	-0,53 ^{*++}	-	-	-	-	-	-	-
4. Dedication	24,68	5,45	6,49	0,88	-0,49 ^{*+}	-0,79 ^{*++}	0,63 ^{*++}	-	-	-	-	-	-
5. Organisational support	46,47	8,46	6,99	0,92	-0,57 ^{*++}	-0,68 ^{*++}	0,44 ^{*+}	0,56 ^{*++}	-	-	-	-	-
6. Growth opportunities	28,18	4,44	6,99	0,81	-0,44 ^{*+}	-0,61 ^{*++}	0,46 ^{*+}	0,69 ^{*++}	0,69 ^{*++}	-	-	-	-
7. Overload	26,02	3,43	6,20	0,68	0,47 ^{*+}	0,27 [*]	-0,04	-0,13	-0,24 [*]	-0,44	-	-	-
8. Social support	19,17	2,78	6,74	0,64	-0,26 [*]	-0,12	0,13	0,12	0,43 ^{*+}	0,26 [*]	-0,23 [*]	-	-
9. Job insecurity	6,37	2,65	3,98	0,88	-0,00	-0,24 [*]	-0,15	-0,17	-0,20	-0,22 [*]	-0,14	0,06	-
10. Advancement	14,82	4,27	7,80	0,70	-0,37 ^{*+}	-0,46 ^{*+}	0,321 ^{*+}	0,44 ^{*+}	0,67 ^{*+}	0,51 ^{*+}	-0,17	0,34 ^{*+}	-0,17 ^{*+}

* $p < 0,01$ Statistically significant

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

++ $r > 0,50$ Practically significant (large effect)

Multiple regression analyses

Next, a series of multiple regression analyses was carried out. In these analyses insecurity and overload, support, growth, advance and organisational support were entered as constant predictors. The results of a multiple regression analysis with dependent variables, exhaustion and cynicism (as measured by MBI-GS) are reported in Table 3.

Table 3

Multiple Regression Analyses with Exhaustion and Cynicism as Dependent Variables

Model		Unstandardised coefficients		Standardised coefficients	t	p	F	R ²	ΔR ²
		B	SE	Beta					
Exhaustion							12,41*	0,22	0,22*
1	(Constant)	-13,58	5,46		-2,49	0,01			
	Overload	0,95	0,19	0,48	4,98	0,00*			
	Job insecurity	0,17	0,24	0,07	0,69	0,49			
2							11,87*	0,46	0,24*
	(Constant)	14,68	7,43		1,98	0,05			
	Overload	0,73	0,17	0,36	4,20	0,00*			
	Job insecurity	-0,18	0,22	-0,07	-0,83	0,41			
	Organisational support	-0,33	0,11	-0,41	-2,96	0,00*			
	Growth opportunities	-0,28	0,17	-0,18	-1,60	0,11			
	Advancement	0,07	0,17	0,04	0,39	0,69			
	Social support	0,09	0,22	0,41	0,45	0,65			
Cynicism							24,09*	0,53	0,53*
1	(Constant)	23,92	3,35		7,14	0,00			
	Organisational support	-0,37	0,08	-0,58	-4,64	0,00*			
	Growth opportunities	-0,31	0,12	-0,26	-2,49	0,01*			
	Advancement	0,37	0,16	0,19	2,37	0,02*			
	Social support	0,00	0,12	0,00	0,03	0,98			
2							18,08*	0,57	0,04*
	(Constant)	13,11	5,29		2,48	0,01			
	Organisational support	-0,32	0,08	-0,50	-4,00	0,00*			
	Growth opportunities	-0,35	0,12	-0,29	-2,85	0,00*			
	Advancement	0,39	0,16	0,20	2,51	0,01*			
	Social support	0,01	0,12	0,01	0,12	0,90			
	Overload	0,31	0,12	0,19	2,48	0,01*			
	Job insecurity	0,18	0,15	0,09	1,18	0,24			

* $p < 0,05$

Table 3 shows that 46% of the variance in exhaustion (as measured by the MBI-GS) of packaging manufacturing managers is predicted by job demands and job resources ($F = 11,87, p < 0,05$). More specifically, it seems that the regression coefficients of overload and lack of organisational support are statistically significant. A total of 53,1 % of the variance in cynicism (as measured by the MBI-GS) is predicted by job demands and job resources ($F = 24,09, p < 0,05$). Four factors, namely lack of organisational support, lack of growth opportunities, lack of advancement and overload obtained statistically significant regression coefficients.

In Table 4, the regression analysis of dependent variables vigour and dedication (as measured by the UWES) is presented.

Table 4

Multiple Regression Analysis with Vigour and Dedication as Dependent Variables

Model		Unstandardised coefficients		Standardised coefficients	T	p	F	R ²	ΔR ²
		B	SE	Beta					
Vigour							6,82*	0,24	0,24*
1	Constant	11,28	3,53		3,19	0,00			
	Organisational support	0,14	0,08	0,26	1,64	0,10			
	Growth opportunities	0,27	0,13	0,28	2,09	0,04*			
	Social support	0,10	0,17	-0,06	-0,62	0,53			
	Advancement	0,03	0,13	0,02	0,19	0,84			
2	Constant	10,49	5,79		1,81	0,07	4,48*	0,24	0,00
	Organisational support	0,14	0,09	0,27	1,61	0,11			
	Growth opportunities	0,26	0,13	0,27	1,95	0,05*			
	Social support	-0,09	0,17	-0,06	-0,52	0,61			
	Advancement	0,02	0,13	0,02	0,18	0,85			
	Overload	0,04	0,13	0,03	0,28	0,78			
	Insecurity	-0,05	0,17	-0,03	-0,29	0,77			
Dedication							21,86*	0,51	0,51*
1	Constant	2,99	3,53		0,85	0,39			
	Organisational support	0,09	0,08	0,15	1,19	0,23			
	Growth opportunities	0,71	0,13	0,58	5,40	0,00*			
	Social support	-0,23	0,17	-0,12	-1,37	0,17			
	Advancement	0,10	0,13	0,08	0,75	0,45			
2	Constant	7,85	5,75		1,37	0,18	14,67*	0,51	0,01
	Organisational support	0,08	0,09	0,12	0,91	0,37			
	Growth opportunities	0,73	0,13	0,59	5,47	0,00*			
	Social support	-0,25	0,17	-0,13	-1,47	0,15			
	Advancement	0,09	0,13	0,78	0,73	0,47			
	Overload	-0,15	0,13	-0,09	-1,14	0,26			
	Insecurity	-0,02	0,17	-0,01	-0,14	0,89			

* $p < 0,05$

Table 4 shows that 24% of the variance in vigour (as measured by the UWES) is predicted by job resources ($F = 6,82$; $p < 0,05$). Only one job resource, namely growth opportunities showed a statistically significant regression coefficient. Furthermore, 51% of the variance in dedication (as measured by the UWES) is predicted by job resources (F

= 21,86, $p < 0,05$). Again only one factor, namely growth opportunities obtained a statistically significant regression coefficient.

DISCUSSION

The aim of the study was to investigate the relationship among job demands, job resources, burnout and work engagement. In doing so, we sought to contribute to what is currently known as positive psychology (Seligman & Csikszentmihalyi, 2000); that is, in addition to a negative psychological state such as burnout, which is commonly researched in occupational health psychology, we also explored the role of its positive antipode, namely job engagement, by basing it on energetically-driven and motivational-driven processes respectively.

Based on the study results, the Pearson correlation coefficients showed that exhaustion (one of the subscales of burnout), is positively related to work overload and negatively related to lack of organisational support and lack of growth opportunities. Work overload refers to a situation when a person is expected to do more than the time available permits him/her to do. There are different types of work overload, namely working long hours, meeting deadlines and responding to time pressures, qualitative overload, and having many separate, essentially unrelated tasks to perform, while lack of organisational support refers to lack of supervisor and co-worker support or non-supportive team climate, and lack of growth opportunities to lack of stimulating personal growth and development. This would often be evident in fewer career opportunities, lack of promotional opportunities, and training.

Cynicism (another subscale of burnout) was found to be negatively related to vigour, dedication and lack of organisational support as well as lack of growth opportunities, while vigour (a subscale of engagement) was found to be positively related to high organisational support and high growth opportunities. According to Schaufeli and Bakker (2003), two dimensions of engagement are logically related to burnout, namely vigour (exhaustion) and dedication (cynicism).

From the Pearson correlation coefficients it can be deduced, therefore, that work overload, lack of organisational support and lack of growth opportunities, will lead to job burnout among packaging manufacturing managers in South Africa; whilst vigour (energy) will be demonstrable by packaging manufacturing managers under conditions of high organisational support and high growth opportunities.

From the multiple regression analysis conducted, the model of exhaustion and cynicism (burnout) showed that 46% of the variance in exhaustion was predicted by work overload and lack of organisational support, whilst 53,1% of the variance in cynicism was predicted by lack of organisational support, lack of growth opportunities, lack of advancement and overload. Furthermore, in the model of vigour and dedication (work engagement), 24,3% of the variance of vigour was predicted by lack of growth opportunities, and 50,7% of the variance of dedication was predicted by growth opportunities.

The results confirmed Hypothesis 1, namely that job demands (overload) and a lack of job resources (lack of organisational support, lack of growth opportunities, and lack of advancement) will lead to exhaustion and cynicism (burnout). About 43,3 % of managers responded that they work up to 10 hours overtime in a week and about 25,6% said that they worked 11-20 hours overtime per week. According to Maslach (1998), distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to depersonalisation or cynicism is consistently found in burnout research. Furthermore, a work situation with chronic overwhelming demands that contribute to exhaustion or cynicism is likely to erode an individual's sense of accomplishment or effectiveness.

Secondly, to answer the hypothesis 2, namely that certain job resources will predict levels of engagement, it can be said that certain job resources do indeed influence levels of engagement. From the study conducted, it was confirmed that growth opportunities will be those job resources that influence the subjects' levels of engagement with their work. The levels of engagement, respectively, are vigour and dedication, the subscales of engagement.

Factors determined as preventing managers' levels of engagement were attributed to things such as: lack of communication, lack of a clear strategic plan, poor respect, minimal resources, lack of interest from the supply chain, lack of involvement, unclear roles, lack of manpower, centralisation, lack of tools, lack of long-term career planning, too many structural changes, too much pressure, resources constraints, too much to do in too little time, uncertainty regarding the company's strategy, slow decision-making, no opportunities for growth, and so forth. These are commonly known as job demands and low job resources, which do lead to job burnout.

To summarise, it can be said that burnout in packaging manufacturing managers is positively related to job demands and negatively related to job resources, whilst engagement is positively related to job resources. Demerouti et al. (2001) confirm that job demands (such as physical demands, time pressure and shift work) are associated with exhaustion, whereas lacking job resources (including feedback, participation in decision-making and supervisory support) as seen above, are associated with disengagement. Studies in South Africa (such as Jackson & Rothmann, 2005b; Levert et al., 2000; Pretorius, 1994) confirm that burnout is related to job demands. Schaufeli and Bakker (2004) confirmed the model in an empirical study in the Netherlands whereby job demands were associated with exhaustion, and job resources were associated with engagement.

Schaufeli and Bakker (2004) also found that burnout and engagement are negatively related, sharing between 10% and 25% of their variance, whilst Storm and Rothmann (2003b) found a canonical correlation of 0,51 between burnout and engagement. A moderately negative correlation ($r = -0,42$) was also found between cynicism and dedication, whilst vigour correlated negatively with exhaustion ($r = -0,28$).

The prediction can be made, therefore, that the presence of organisational support and growth opportunities in packaging manufacturing industries in South Africa could lead to engaged managerial staff and a lack thereof, to burnt-out managers.

This study had several limitations. Firstly, a cross-sectional survey design was used, which makes it impossible to prove the causality of the obtained relationships. It is necessary to study the relationships between job demands, job resources, burnout and work engagement in a longitudinal design. Secondly, this study did not consider the role of health and organisational commitment. Therefore, it was not possible to test the comprehensive model of burnout and work engagement.

RECOMMENDATIONS

According to Roberts and Davenport (2002), there are three aspects that could be targeted with a view to increase employee's work engagement, namely career development, identification within the organisation and a rewarding work environment. Career development includes providing opportunities for employees to learn new skills and to develop themselves, as well as opportunities to advance in the organisation and helping them to manage their careers.

Since job demands play a central role in the process that might lead to burnout and health problems, reducing those demands seems to be warranted. Many preventive organisation-based strategies exist to address high job demands, such as job design, flexible work schedules and goal-setting. Increasing resources (e.g., through participative management, increasing social support and team-building), on the other hand, would eventually lead to more engagement (Rothmann, 2003).

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REFERENCES

- Avolio, B. J., & Sosik, J. J. (1999). A life-span framework for assessing the impact of work on white-collar workers. In S. L. Willis & J. D. Reid (Eds.), *Life in the middle: Psychological and social development in middle age* (pp. 251-274). San Diego, CA: Academic Press.
- Barkhuizen, N., & Rothmann, S. (2004, March). *Burnout of academic staff in a higher education institution*. Paper presented at the 2nd South African Work Wellness Conference, Potchefstroom, South Africa.
- Barkhuizen, N., Rothmann, S., & Tytherleigh, M. Y. (2004, April). *Burnout and engagement of academic staff in higher education institutions in South Africa*. Poster presented at the Annual Conference of the British Psychological Society, London, UK.
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relation between affect and employee "citizenship". *Academy of Management Journal*, 261, 587-595.
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowildo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, 9, 52-69.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life: Perceptions, evaluations, and satisfactions*. New York: Russel Sage.
- Cherniss, C. (1995). *Beyond burnout: Helping teachers, nurses, therapists and lawyers recover from stress and disillusionment*. New York: Routledge.
- Clark, L. A., & Watson, D. (1995). Constructing validity: basic issues in objective scale development. *Psychological Assessment*, 7, 309-319.
- Coetzee, S.E. & Rothmann, S. (2005). Occupational stress in a higher education institution in South Africa. *South African Journal of Industrial Psychology*, 31(1), 47–54.
- Demerouti E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources model of burnout. *Journal of Applied Psychology*, 86, 499-512.

- Dlamini, C. R. M. (1995). The transformation of South African universities. *South African Journal of Higher Education*, 9(1), 39-46.
- Doherty, N., & Tyson, S. (1998). *Mental well-being in the workplace. A resource pack for management training and development*. Sudbury: HSE Books.
- Doyle, C., & Hind, P. (1998). Occupational stress, burnout and job status in female academics. *Gender, Work and Organization*, 5(2), 67-82, April.
- Fisher, S. (1994). *Stress in academic life: the mental assembly line*. Buckingham, UK: Open University Press.
- Fourie, M. (1999). Institutional transformation at South African Universities: Implications for academic staff. *Higher Education*, 38, 275-290.
- Fourie, M., & Alt, H. (2000). Challenges to sustaining and enhancing quality of teaching and learning in South African Universities. *Quality in Higher Education*, 6(2), 115-124.
- Frey, D., Jonas, E., & Greitemeyer, T. (2003). Intervention as a major tool of a psychology of human strengths: Examples from organisational change and innovation. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for positive psychology* (pp. 149-164). Washington: American Psychological Association.
- Freudenberger, H. J. (1974). Staff burnout. *Journal of Social Issues*, 30, 159-165.
- Grebner, S., Semmer, N. K., & Elfering, A. (2003). *Working conditions and three types of well-being: A longitudinal study with self-report and rating data*. Manuscript submitted for publication.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- Hertzberg, F., Mausner, B., & Synderman, B. (1967). *The motivation to work*. New York: John Wiley and Sons.
- Hobfoll, S. E. (1989). Conservation of resources: a new approach at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: a general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional*

- burnout: recent developments in theory and research* (pp. 115–129). Washington, DC: Taylor & Francis.
- Hugo, P. (1998). Transformation: The changing context of academia in post-apartheid South Africa. *African Affairs*, 97, 5-27.
- Iaffaldano, M., & Muchinsky, P. (1985). Job satisfaction and performance: A meta-analysis. *Journal of Applied Psychology*, 97, 251-273.
- Jackson, L. T. B., & Rothmann, S. (2005, June). *Occupational stress, ill-health and organisational commitment of educators in the North West Province*. Paper presented at the 8th Annual Conference of the Society for Industrial and Organisational Psychology, Pretoria.
- Jones, N., & Lowndes, S. N. (1997). *The business case for occupational health services*. London: Kogan Page.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692-724.
- Levert, T., Lucas, M., & Ortlepp, K. (2000). Burnout in psychiatric nurses: contributions of the work environment and a sense of coherence. *South African Journal of Psychology*, 30, 36-43.
- Maslach, C. (1998). A multidimensional view of burnout. In C.L. Cooper (Ed.) *Theories of organizational stress*. (pp. 68–85). Oxford, UK: Oxford University Press.
- Maslach, C., & Jackson, S. E. (1986). *The Maslach Burnout Inventory* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Jackson, S. E. & Leiter, M. (1996). *Maslach Burnout Inventory. Manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco, CA: Jossey-Bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- Maslow, A. (1943). A theory of human motivation. *Psychological Review* 50, 370-396.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77, 11-37.

- Miles, D. E., Borman, W. E., Spector, P. E., & Fox, S. (2002). Building an integrative model of extra role work behaviours: A comparison of counterproductive work behaviour with organisational citizenship behaviour. *International Journal of Selection and Assessment*, 10, 51-57.
- Myers, D. G. (2000). The funds, friends, and faith of happy people. *American Psychologist*, 55, 56-67.
- Nixon, J., Marks, A., Rowland, S., & Walker, M. (2001). Towards a new academic professionalism: a manifesto of hope. *British Journal of Sociology of Education*, 22, 227-244.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw Hill.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organisational citizenship behaviour. *Personnel Psychology*, 48, 775-802.
- Pretorius, T. B. (1994). Using the Maslach Burnout Inventory to assess educators' burnout at a university in South Africa. *Psychological Reports*, 75, 771-777.
- Roberts, D. R., & Davenport, T. O. (2002). Job engagement: why it's important and how to improve it. *Employment Relations Today*, 21-29, Autumn.
- Rothmann, S. (2003). Burnout and engagement: a South African perspective. *South African Journal of Industrial Psychology*, 29(4), 16-25.
- Rothmann, S., Steyn, L. J. & Mostert, K. (2005). Job stress, sense of coherence and work wellness in an electricity supply organisation. *South African Journal of Business Management*, 36(1), 1-9.
- Ryan, R. M., & Frederick, C. M. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, 65, 529-565.
- Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *South African Journal of Industrial Psychology*, 29(4), 1-15.
- Schaufeli, W.B., & Bakker, A.B. (2001). Werk en welbevinden: Naar een positieve benadering in de Arbeids- en Gezondheidspsychologie (Work and wellbeing: Towards positive occupational health psychology). *Gedrag en Organizatie*, 14, 229-253.

- Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale: preliminary manual*. Utrecht University: Occupational Health Psychology Unit.
- 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., Enzmann, D., & Girault, N. (1993). Measurement of burnout: A review. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 199-215). Washington, DC: Taylor & Francis.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: a critical analysis*. London: Taylor & Francis.
- Schaufeli, W. B., Leiter, M. P., Maslach, C. & Jackson, S. E. (1996). Maslach Burnout Inventory - General Survey. In C. Maslach, S. E. Jackson & M. P. Leiter (Eds.), *The Maslach Burnout Inventory: Test Manual*. Palo Alto: Consulting Psychologists Press.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002b). The measurement of engagement and burnout: a confirmative analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W. B., & Salanova, M. (in press). Work engagement: An emerging psychological concept and its implications for organizations.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shaughnessy, J. J., & Zechmeister, E. B. (1997). *Research methods in psychology* (4th ed.). New York: McGraw-Hill.
- Shirom, A. (2003). *Job-related burnout*. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health and psychology*. Washington, DC: American Psychological Association.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88, 518-528.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, cause, and consequences*. Thousand Oaks, CA: Sage.

- SPSS Inc. (2003). *SPSS 12.0 for Windows*. Chicago, IL: Author.
- Storm, K., & Rothmann, S. (2003a). A psychometric analysis of the Maslach Burnout Inventory – General Survey in the South African Police Service. *South African Journal of Psychology*, 33, 219-226.
- Storm, K., & Rothmann, S. (2003b). The validation of the Utrecht Work Engagement Scale in the South African Police Services. *South African Journal of Industrial Psychology*, 29(4), 62-70.
- Strydom, M., Rothmann, S., & Mostert, K. (in press). A psychometric evaluation of the Job Demands-Resources Scale in South Africa.
- Tabachnick B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston, MA: Allyn & Bacon.
- Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.
- Warr, P. B. (1999). Well-being in the workplace. In D. Kahneman, E. Diener, & N. Schwartz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 392-412). New York: Russel Sage Foundation.
- World Health Organisation. *International classification of diseases –9th revision*. Geneva: WHO, 1948.
- Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, 31, 21-33.

CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter discusses conclusions attained from the research objectives. Limitations to the study are expounded upon and recommendations for further studies are put forward.

3.1 CONCLUSIONS

The subsequent section serves to delineate the conclusions drawn on the basis of the research objectives.

The aim of the study was to investigate the relationship among job demands, job resources, burnout and work engagement. Based on the study results, the Pearson correlation coefficients showed that exhaustion (one of the subscales of burnout), is positively related to work overload and negatively related to lack of organisational support and lack of growth opportunities. Work overload refers to a situation when a person is expected to do more than the time available permits him/her to do. There are different types of work overload, namely working long hours, meeting deadlines and responding to time pressures, qualitative overload, and having many separate, essentially unrelated tasks to perform, while lack of organisational support refers to lack of supervisor and co-worker support or non-supportive team climate, and lack of growth opportunities to lack of stimulating personal growth and development. This would often be evident in fewer career opportunities, lack of promotional opportunities, and training.

Cynicism (another subscale of burnout) was found to be negatively related to vigour, dedication and lack of organisational support as well as lack of growth opportunities, while vigour (a subscale of engagement) was found to be positively related to high organisational support and high growth opportunities. According to Schaufeli and Bakker (2003), two dimensions of engagement are logically related to burnout, namely vigour (exhaustion) and dedication (cynicism).

From the Pearson correlation coefficients it can be deduced, therefore, that work overload, lack of organisational support and lack of growth opportunities, will lead to job burnout among packaging manufacturing managers in South Africa; whilst vigour (energy) will be demonstrable by packaging manufacturing managers under conditions of high organisational support and high growth opportunities.

From the multiple regression analysis conducted, the model of exhaustion and cynicism (burnout) showed that 46% of the variance in exhaustion was predicted by work overload and lack of organisational support, whilst 53,1% of the variance in cynicism was predicted by lack of organisational support, lack of growth opportunities, lack of advancement and overload. Furthermore, in the model of vigour and dedication (work engagement), 24,3% of the variance of vigour was predicted by lack of growth opportunities, and 50,7% of the variance of dedication was predicted by growth opportunities.

The results confirmed Hypothesis 1, namely that job demands (overload) and a lack of job resources (lack of organisational support, lack of growth opportunities, and lack of advancement) will lead to exhaustion and cynicism (burnout). Secondly, to answer Hypothesis 2, namely that job resources predict levels of engagement, it can be said that certain job resources do indeed influence levels of engagement. From the study conducted, it was confirmed that growth opportunities will be those job resources that influence the subjects' levels of engagement with their work. The levels of engagement, respectively, are vigour and dedication, the subscales of engagement.

Burnout and work engagement were found to be related. It is important to also note, according to Schaufeli and Bakker (2001), that although employees may experience work engagement and burnout as being opposite psychological states, whereby the former has a positive quality and the latter a negative quality, both need to be considered as principally independent of each other. This means that, at least theoretically, an employee who is not burned-out may score high or low on engagement, whereas an engaged employee may score high or low on burnout. Furthermore, according to Schaufeli and

Bakker (2001) however, in practice it is likely that burnout and work engagement are substantively negatively correlated.

3.2 LIMITATIONS

The main limitations of the current study were its cross-sectional nature and its relatively small sample size. The study's cross-sectional nature makes it difficult to prove causal relationships; hence the use of other designs such as longitudinal designs can aid in establishing causality. A further limitation was the fact that the research relied exclusively on self-reporting. This could lead to "method variance" or "nuisance" (Schaufeli, Enzmann & Girault, 1993). Similarly, going forward a larger sample size should be used to provide for a much wider research study.

3.3 RECOMMENDATIONS

Effects of burnout or engagement are not only important for the organisation, but for the individual manager as well. This means that, South African packaging manufacturing industries should attend to the stressors of their managers in a much smarter way.

3.3.1 Recommendations to solve the research problem

In a combined employer and employee approach that builds interventions, fostering engagement should be adopted in packaging manufacturing industries, as this will enhance work life and should successfully promote the well-being of employees.

Secondly, more programmes that could address burnout are required, whilst more seminars on management conferences should begin to focus not only on company performance, but also on topics affecting individuals and their well-being. Managers should be encouraged to share their own and similar experiences openly without feeling embarrassed and stigmatised as being "weak" and "not cutting it". Most importantly, however, organisational perceptions of the employer and employee regarding burnout

must be seriously altered. Organisations must be educated, made aware and sensitised to symptoms and signs of burnout, and should be provided with tools to manage the situation. This means that a more robust and proactive approach will need to be followed if companies want more engaged workers. The beginning however will be a change in mindset.

For job-specific interventions, *the manager should have the freedom to participate in decision-making, choose his/her work variety and have more freedom for learning opportunities*. Participation in decision-making will enhance the manager's feeling of membership and will contribute to the engagement of the manager, whilst work variety will keep them interested; learning opportunities will, furthermore, create interest in work and future career possibilities. A more balanced and reasonable allocation of work with more specific goals and expectations, as well as increased resources to support are lacking and will have to be revisited significantly in order to accommodate the mental and emotional load of the manager.

Whilst interventions are expensive, and cost time and effort, companies should make more use of their internal experienced human resources practitioners who are qualified Industrial Psychologists and also have knowledge of the company to assist in counselling and in providing therapy. Benefits of such actions are that the individual manager will be able to follow up more regularly, and monitoring of the individual will become easier. The other benefit is that, if other managers witness more managers attending to such help, they will most likely ask for assistance themselves and the environment will change since seeking help will be deemed to be the natural thing to do. The trick, however, will be to keep the engaged managers engaged; hence the authors' next recommendation that companies should buy in and adopt employee wellness as part of the company strategy.

Work engagement may also be increased in the following ways (see Schaufeli & Salanova, in press).

- ***Assessment and evaluation of employees.*** The ultimate purpose of personnel assessment and evaluation is to have the right person in the right job. This means that an optimal fit must exist between the values and goals of the employee and those of the organisation. A psychological contract which reflects an optimal fit between the employee and organisation in terms of mutual expectations should be formed. The psychological contract can be drafted by (a) assessing the employee's values, preferences, and personal and professional goals; (b) negotiating and drafting a written contract that acknowledges these goals and provides the necessary resources to be supplemented by the organisation (for example training, coaching, equipment, budget); (c) monitoring this written agreement in terms of goal achievement, including the readjustment of goals and the provision of additional resources. A process of goal-setting, which might be integrated into existing systems of performance appraisal and evaluation, could be used. The focus should be on *personal* goals (such as the development of skills and competences, promotion, mastery of particular tasks or duties) and the necessary *resources* to achieve these personal goals. *Wellness audits*, which focus on both positive and negative aspects of work-related well-being, should be implemented and feedback should be provided on individual, group and organisational levels.
- ***Job redesign and work changes.*** The redesigning of jobs could reduce the exposure to psychosocial risks and could increase employee motivation. From the perspective of the dual-process model, burnout and strain could be decreased by reducing exposure to stressors such as work overload, role problems and conflicts. In addition, lacking job resources such as job control and support from co-workers and supervisors should be supplemented. On the other hand, work engagement could be stimulated by increasing resources to facilitate attainment of organisational objectives and to stimulate personal growth, learning and development of employees. The Vitamin Model of Warr (1987) lists nine types of job resources ('vitamins') that are

related to employee health and well-being: (1) opportunity for control; (2) opportunity for skill use; (3) externally generated goals; (4) variety; (5) environmental clarity; (6) availability of money; (7) physical security; (8) opportunity for interpersonal contact, and (9) valued social position. Redesigning work and management processes aimed at reducing and removing sources of stress as the prime means of protecting and improving staff well-being is important; however, it must be acknowledged that some sources of stress in the workplace cannot simply be reduced or removed, and that non-work sources of stress can have detrimental effects on well-being and, thus, on work performance.

- **Leadership.** An important task of leaders is to optimise the emotional climate in their team. A 'good' leader is able not only to prevent job stress and burnout among his or her followers, but also to enhance motivation and engagement. Results from research suggest that engagement is 'contagious'; it crosses over not only from partner to spouse, but also from one employee to another. In order to stimulate a positive socio-emotional climate and therefore to enhance engagement leaders should, according to Schabracq (2003): (a) acknowledge and reward good performance instead of exclusively correcting substandard performance; (b) be fair towards employees, because this will strengthen the psychological contract; (c) put problems on the agenda and discuss these in an open, constructive and problem-solving way, both in work meetings and in individual talks; (d) inform employees on a regular basis and as early and comprehensively as possible in face-to-face meetings about important issues; (e) coach employees by helping them with setting goals, planning their work, pointing out pitfalls, and giving advice as necessary; (f) interview employees on a regular basis about their personal functioning, professional development and career development.
- **Training.** Warr (1987) has argued that in addition to be purely directed at the job content, training programmes that promote employee health and well-being should also be directed at personal growth and development. For instance, such programmes should address time management, stress management, personal effectiveness and self-

management. *Work training* is a learning process across the entire life-span that is ultimately related to the employee's job performance. A powerful tool to achieve this is to increase employees' efficacy beliefs. Efficacy beliefs may be enhanced by mastery experiences, vicarious experience, verbal persuasion and positive emotional states (Bandura, 2001). Hence, training programmes should include these elements, for instance, practical exercises to provide experiences of vocational success (mastery experiences), role models of good performance (vicarious experiences), coaching and encouragement (verbal persuasion), and reducing fear of rejection or failure (managing emotional states).

It is important to provide stress management training for employees in order to provide them with increased levels of *self-awareness* and skills necessary for them to look after their own well-being. According to Murphy (1996), most stress management training includes cognitive behavioural elements; reviews of research in this area have suggested that a combination of cognitive behavioural techniques (for example relaxation plus cognitive behavioural skills) is the most common and most effective form of this kind of stress management intervention.

- ***Career development.*** Although most employees still favour life-long job stability and vertical upward mobility, current changes in organisational life make this perspective no longer a self-evident one. Although career development is still a fit process that involves human resource planning, organisational strategic needs and employee's future career planning (Schein, 1976), over the years, the emphasis has shifted more towards the latter. That is, more than before, employees continuously have to rely on their own initiative to develop themselves professionally and personally in order to remain 'employable'. By carefully planning one's career - that is, by successively selecting those jobs that provide many opportunities for professional and personal development - it is likely that levels of engagement will remain high.
- ***Promoting growth opportunities.*** Many people work to express themselves through their work activities. This means that work should be structured in such a way that a

person needs to apply his/her abilities and skills to his/her job. People must be given the opportunity to act on their own, without constantly having someone peering over their shoulders to see whether they are carrying out their tasks in the correct manner or not. Whilst other interventions such as career development, and training have been mentioned, employees also need to be given room for varied and challenging opportunities and these could come through project work, secondments to overseas and national assignments, and in-house study programmes.

- ***Providing organisational support.*** All people need approval, recognition and support from time to time. Thus no man can operate as an island. Jobs demand a great deal of contact with other people at work. As the systems theory suggests, “We are but all parts of one sum”. Poor or unsupportive relationships with colleagues and/or superiors, isolation (a perceived lack of adequate relationships) and unfair treatment can all be a potential source of stress. Conversely, good relationships can help individuals to cope with stress.

Furthermore, according to Hayes et al. (2003), the concomitant significance of acceptance for workplace well-being is only just being recognised, and recent research suggests that it could be key to improving staff well-being and effectiveness. Defined as a person’s willingness to accept their undesirable thoughts and feelings while still pursuing the goals that they wish to achieve, acceptance describes a strategy for well-being and productivity that encourages people to experience fully any unwarranted thoughts and emotions (Bond & Bunce, 2000). This prevents emotional distress and liberates the attentional resources needed to identify and fulfil goals, which, in turn, can lead to greater well-being and improved performance (Bond & Hayes, 2002).

According to Buckingham and Coffman (2001), employees who feel engaged, are less stressed and fully involved in their work contribute more as a whole to the efficiency of the organisation, are more likely to rate higher levels of satisfaction with their personal lives (work/life balance), foster and nurture better relationships and understanding between team members and managers, empower individuals to have greater control and

flexibility over working lives and help to retain valued staff (sustainability). Whilst according to Thomas (2000), the development and implementation of an integrated mental well-being approach goes beyond simple good change and practice, in that development is a matter of changes occurring at the social (organisational) level and at the level of the (individual) human level at one and the same time.

3.3.2 Future research

By analytically, constructively and systematically addressing the key health issues confronting all people, the sciences must collectively - rather than separately - advance health and well-being, because well-being represents a favourable collective state of body, mind or social situation, even when any one of these may be dysfunctional.

Furthermore, lesser studies should be focused on burnout and more work should be directed towards engagement in literature. For engagement of managers within the packaging manufacturing industries, literature is very limited in South Africa and will require a great deal of attention as far as future research is concerned. Focus should also be directed to the validity and structural equivalence of the measuring instruments for different cultural groups in packaging manufacturing industries in South Africa.

Finally, more research should be conducted on psychological acceptance as the recent concept in occupational health psychology and its impact on work engagement.

REFERENCES

- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26.
- Bond, F.W., & Bunce, D. (2000). Mediators of change in emotion-focused and problem-focused worksite stress management interventions. *Journal of Occupational Health Psychology*, 5(1), 156-163.
- Bond, F. W., & Hayes, S. C. (2002). ACT at work.
- Buckingham, M., & Coffman, C. (1999). *First break all the rules*. London: Free Press Publishing..
- Hayes, S. C., Batten, S. V., Bissert, R. J., Pistorello, J., Toarmino, D., Wilson, K. G., Bergan, J., Bond, F. W., Dykstra, T. A., Polusny, M. A., Steward, S. H., Stronsahl, K., Zvolensky, M. J., & Eifert, G. H. (2003). Psychometric properties of the acceptance and action questionnaire (AAQ). *Occupational Health Review*, 101, 31-33.
- Murphy, L. R. (1996). Stress management in work settings: a critical review of the health effects. *American Journal of Health Promotion*, 11, 112-135.
- Schabracq, M. J. (2003). What an organization can do about its employees' well-being and health: an overview. In M. J. Schabracq, J. A. M. Winnubst & C. L. Cooper (Eds.) (2003). *The handbook of work and health psychology* (2nd revised edition; pp. 585–600). Chichester, UK: Wiley.
- Schaufeli, W.B., & Bakker, A.B. (2001). Werk en welbevinden: Naar een positieve benadering in de Arbeids- en Gezondheidspsychologie (Work and wellbeing: Towards positive occupational health psychology). *Gedrag en Organizatie*, 14, 229-253.
- Schaufeli, W.B. & Bakker, A.B. (2003). *Utrecht Work Engagement Scale: Preliminary Manual*. Occupational Health Psychology Unit: Utrecht University.
- Schaufeli, W. B., & Salanova, M. (in press). Work engagement: An emerging psychological concept and its implications for organizations.
- Schein, E. H. (1976). *Career planning and development*. Geneva: International Labour Office.

- Thomas, L. (2000). Development as practice in a liberal capitalist world. *Journal of International Development*, 12, 773-787.
- Warr, P. B. (1987). *Work, unemployment and mental health*. Oxford, UK: Clarendon Press.