

**WORK ENGAGEMENT OF ACADEMIC STAFF IN HIGHER EDUCATION
INSTITUTIONS IN SOUTH AFRICA**

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Mini-dissertation submitted in partial fulfilment of the requirements for the degree Magister
Artium in Industrial Psychology at the North-West University.

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2005

Potchefstroom

COMMENTS

The reader is reminded of the following:

- 1 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.
- 2 The mini-dissertation is submitted in the form of a research article. The name of the study leader appears on the manuscript as it was submitted for publication.

DEDICATION

During the writing of this mini-dissertation my mother became very ill. We nearly lost her three times. By the Grace of God and her belief in her miracle she survived. Mommy you are an inspiration to me. Thank you for your unconditional love, tremendous support, advice and friendship. I cannot even begin to imagine life without you. It gives me great pleasure to dedicate this research project to you.

"Jesus said unto him, if thou canst believe, all things are possible to him that believeth".....

Mark 9:23

ACKNOWLEDGEMENTS

I thank God in the name of Jesus Christ for giving me guidance when I had nowhere to go as well as the ability to write this mini-dissertation. I would also like to give a special word of appreciation to the following people:

- My father, Daantjie for the financial support, patience, and understanding of the value of education. I love you.
- Hansie and Daantjie, my two brothers, for your moral support. Remember a land that has only sunshine becomes a desert.
- Nicolene Barkhuizen. I have never met anyone who is as willing to help and support others as you are. I am privileged to be your friend.
- Vicky for the Wimpy coffees, comfort and friendship that will last for eternity.
- Professor Ian Rothmann I truly appreciate the time spent in your office. Your advice, especially on the statistics, made this mini-dissertation possible.
- The participants for your time and effort

The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at are those of the author and not necessarily to be attributed to the National Research Foundation.

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SUMMARY

Title: Work engagement of academic staff in South African higher institutions

Key terms: Work engagement, job demands, job resources, academic staff, universities

Academics in South Africa are being confronted with a work environment accumulated with job demands, often without corresponding increases in job resources. Job demands and job resources might affect the levels of work engagement of academics in higher education institutions. Therefore, research is needed regarding work engagement of academics and the relationship thereof with job demands and resources. The objectives of this study were to investigate whether the UWES is a reliable and valid measure of work engagement for academic staff in universities in South Africa and to assess the relationships between work engagement, job demands and job resources.

A cross-sectional survey design was used. The study population ($N = 471$) consisted of academic staff of the following universities: North-West University, University of Port Elizabeth and University of the Orange Free State. The UWES, Job-Demands-Resources Questionnaire and a biographical questionnaire was administered. The reliability and validity of the measuring instruments were assessed with the use of Cronbach alpha coefficients, and exploratory factor analysis. Descriptive statistics (e.g. means and standard deviations) were used to analyse the data. Pearson correlations and multiple regression analyses were used to assess the relationships between job demands, job resources and work engagement.

Principal component analysis resulted in a one-factor model of work engagement, consisting of Vigour/Engagement. This factor showed an acceptable alpha coefficient. Regarding the Job Demands-Resources Scale, five reliable factors were extracted, namely Organisational Support, Growth Opportunities, Communion, Overload and Job Insecurity. The correlation coefficients indicated that engagement is positively related to growth opportunities, organisational support and communion. A regression analysis with engagement as dependent variable indicated that organisational support and growth opportunities in the job were the best predictors of work engagement. Job resources predicted 46% of the variance in work engagement, but only two job resources, namely organisational support and growth opportunities showed statistically significant regression coefficients.

Recommendations for future research are made.

OPSOMMING

Titel: Werkbegeestering van akademiese personeel by Suid-Afrikaanse hoër opvoedkundige instellings.

Sleuteltermes: Werkbegeestering, werkeise, werkhulpbronne, akademiese personeel, universiteite

Akademici in Suid-Afrika word gekonfronteer met 'n werksomgewing met hoë werkeise, dikwels sonder die ooreenkomstige toename in werkhulpbronne. Poseise en poshulpbronne kan moontlik die vlakke van werksbegeestering van akademici in hoër opvoedkundige instellings beïnvloed. Navorsing ten opsigte van die werksbegeestering van akademici en die verwantskap daarvan met poseise en hulpbronne is dus noodsaaklik. Die doel van hierdie studie was om te bepaal of die Utrecht-werkbegeesteringskaal (UWES) 'n betroubare en geldige meetinstrument vir die meting van werkbegeestering van akademiese personeel in universiteite in Suid Afrika is en om die verbande tussen werkbegeestering, werkeise en werkhulpbronne te bepaal.

'n Dwarssnee opname-ontwerp is gebruik. Die studiepopulasie ($N = 471$) het bestaan uit akademiese personeel van die volgende universiteite: Noordwes-Universiteit, Universiteit van Port Elizabeth en Universiteit van die Oranje Vrystaat. Die UWES, Poseise-Hulpbronne-vraelys en biografiese vraelys is afgeneem. Die betroubaarheid en geldigheid van die meetinstrumente is bepaal deur die gebruik van Cronbach alfakoëffisiënte en verkennende faktoranalise. Beskrywende statistiek (rekenkundige gemiddeldes en standaardafwykings) is gebruik om die data te ontleed. Pearson korrelasies en meervoudige regressie-analise is bereken om te bepaal of werkeise en werkhulpbronne werkbegeestering kan voorspel.

Hoofkomponente analise het geresulteer in 'n een-faktormodel van werksbegeestering (energie/toewyding). Hierdie faktor het 'n aanvaarbare alfakoëffisiënt getoon. Betreffende poseise en hulpbronne is vyf betroubare faktore onttrek, naamlik Organisasie-ondersteuning, Groeigeleenthede, Sosiale Ondersteuning, Oorlading en Werksonsekerheid. Die korrelasiekoëffisiënte het aangedui dat werkbegeestering positief verband hou met groeigeleenthede, organisasie-ondersteuning en sosiale ondersteuning. 'n Regressie-analise met werkbegeestering as afhanklike veranderlike het aangedui dat organisasie-ondersteuning en

groei-eleenthede in die pos die beste voorspellers van werkbegeestering was. Werkhulpbronne het 46% van die variansie in werkbegeestering voorspel, maar slegs twee hulpbronne, naamlik organisasie-ondersteuning en groei-eleenthede het statisties betekenisvolle regressiekoëffisiënte getoon.

Aanbevelings vir toekomstige navorsing is aan die hand gedoen.

CHAPTER 1

INTRODUCTION

This mini-dissertation focuses on the relationships between work engagement, job demands and job resources of academic staff in South African higher education institutions.

In this chapter the problem statement and the research objectives (including the general and specific objectives) are discussed. Following this, the research method is discussed.

1.1 PROBLEM STATEMENT

Since the beginning of this century, more attention has been paid to what has been coined positive psychology: the scientific study of human strength and optimal functioning. This approach is considered to supplement the traditional focus of psychology on psychopathology, disease, illness, disturbance, and malfunctioning. The recent trend to concentrate on optimal functioning also arouses attention to occupational health psychology, as demonstrated in the recent plea for positive organisational behaviour, that is "...the study of positively orientated human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002).

It is evident that in recent years, work pressure has been constantly rising within academics, and the persistent demands of academic work could almost inevitably lead to adverse work consequences for academic staff (Singh & Bush, 1998). In fact, the incidences of stress and burnout, as well as the claim of "stress" have now achieved the prominence of social epidemic among academics (Kinman, 2001). However, despite the widespread complaints about stresses and strains, most academics know that there are also times when they operate "in the zone" at work (Barkhuizen & Rothmann, 2005). Time is suspended, there is an intense task focus and pleasurable emotions, accompanied by high levels of enthusiasm. Moreover, with the emergence of the positive psychological paradigm, now also evident in South Africa, it is not surprising that the concept of burnout has recently been supplemented with its positive antithesis: work engagement (Schaufeli, 2003; Rothmann, 2003; Strümpfer, 1990, 2002; Wissing & van Eden, 2002).

Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker 2002). 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. *Vigour* is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. *Dedication* refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. *Absorption* is characterised by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work.

When the concept of work engagement is measured, it is important to use a valid and reliable instrument. Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) developed the Utrecht Work Engagement Scale (UWES). The UWES is a self-report instrument that includes items such as: "I feel strong and vigorous in my job" (vigour); "I am enthusiastic about my job" (dedication); "I feel happy when I'm engrossed in my work" (absorption). In terms of this measuring instrument, work engagement is defined as a persistent, fulfilling, work-related state of mind that is not focused on any particular object, event, individual or behaviour. Schaufeli et al. (2002) found acceptable psychometric properties for the UWES. More specifically, two recent South African studies using confirmatory factor analysis demonstrated the factorial validity of the UWES (Naudé, 2003; Rothmann & Storm, 2003). Problem items were identified in these studies, but no studies regarding the suitability of the adapted items have been conducted. These authors also found acceptable internal consistencies for the UWES.

A great deal of research has been devoted to the understanding of the factors that contribute to work engagement. Several theories and models have been developed to explain the effects of job demands and job resources on work engagement. These include the Job-Demands-Resources (JDR) model, Comprehensive Burnout and Engagement (COBE) model and The Conservation of Resources (COR) theory.

Demerouti, Bakker, Nachreiner, and Schaufeli (2001) developed the Job-Demand-Resources (JD-R) model and confirmed that job demands are associated with exhaustion, whereas lacking job resources are associated with disengagement. Job resources refer to those

physical, psychological, social, or organisational aspects of the job that either/or (1) reduce job demands and the associated physiological costs; (2) are functional in achieving work goals; (3) stimulate personal growth, learning and development (Hobfoll, 2002), for example receiving feedback, participation in decision making and supervisory support (Schaufeli & Salanova, 2005). Jones and Fletcher (1996, p. 36) define demands as the degree to which the environment contains stimuli that peremptorily require attention and response.

Schaufeli and Bakker (2002) extended the JD-R model by including engagement and adding indicators for health impairment and organisational withdrawal in the Comprehensive Burnout and Engagement (COBE) Model. The COBE-model (also known as the dual-process model) assumes two psychological processes, namely the energetic and motivational process. The energetic process links job demands with health problems via burnout. The motivational process links job resources via engagement with organisational outcomes. Job resources may play either an intrinsic motivational role (by fostering the employee's growth, learning and development), or they may play an extrinsic motivational role (by being instrumental in achieving work goals). Schaufeli and Bakker (2002) confirmed the model in an empirical study in the Netherlands. Job demands were associated with exhaustion, whereas job resources were associated with engagement. Applied within the South African context, similar trends were observed. Jackson, Rothmann, and Van de Vijver (in press) reported that job demands and a lack of job resources contributed to burnout, whereas job resources predicted work engagement. Coetzer and Rothmann (2004) found that job demands and a lack of resources increased the levels of burnout, while the availability of resources increased the levels of engagement.

The COR theory's central tenets are that people have a basic motivation to obtain, retain and protect what they value. The things that people value are called resources, of which there are several types, including material, social and energetic resources. In general, resources are those personal energies and characteristics, objects and conditions that are valued by individuals or that serve as means for the attainment of other objects, personal characteristics, conditions or energies. Examples of internal resources are optimism, self-esteem and self-efficacy. Examples of external resources are employment, social support and economic status. The concept of vigour, as part of engagement, relates to energetic resources only, namely physical, emotional and cognitive energies. It carries with it the connotation of these resources being augmented over time. Vigour represents an effective state that individuals

attribute to their job and workplace when asked about it and do so spontaneously, in contrast with emotional traits like positive affectivity that refers to the tendency to experience positive affect across situations and time (Shirom, 2005). Feeling vigorous is probably directly related to one's appraisal of relevant job demands and available coping resources, as proposed by Lazarus appraisal theory (Lazarus, 1999).

A longitudinal study of Bakker, Euwema, and Van Dieren (2004) among employees from a pension fund company showed indeed that job resources such as social support from one's colleagues and job autonomy were positively related to levels of engagement that were measured two years later. Also, a reversed causal link was observed in this study, indicating that engaged employees were successful over time.

Historically academic work has been seen as highly satisfying and, in comparison with other occupations, relatively stress free (Willie & Stecklein, 1982). It was generally believed that autonomy, role clarity, tenure, and a collegiate culture protected academics from stressors and strains (French, Caplan, & Van Harrison, 1984). However, recent research suggests that working conditions have changed considerably. Thorsen (1996) argues that academics now experience similar pressures to professionals in any large organisation. Research regarding work engagement of academics and the relationship thereof with job demands and job resources, is therefore necessary.

The following research questions arise, based on the above mentioned description of the research problem:

- Is the Utrecht Work Engagement Scale (UWES) a reliable and valid measurement instrument for work engagement for academic staff in South African higher education institutions?
- What are the relationships between work engagement, job demands and job resources among academic staff of South African higher education institutions?
- Which job demands and job resources predict the work engagement of academic staff in South African higher education institutions?

1.2 RESEARCH OBJECTIVES

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

1.2.1 General objective

The general objective of this study was to investigate the relationships between work engagement, job demands and job resources of academic staff in South African higher education institutions.

1.2.2 Specific objectives

The specific objectives of this study were the following:

- To investigate whether the Utrecht Work Engagement Scale (UWES) could be regarded as a reliable and valid measurement of work engagement for academic staff in South African higher education institutions.
- To assess the relationships between work engagement, job demands and job resources among academic staff of South African higher education institutions.
- To identify which job demands and job resources could be used to predict work engagement of academic staff in South African higher education institutions.

1.3 RESEARCH METHOD

The research method consisted of a literature review and an empirical study.

1.3.1 Literature review

The literature review focused on previous research on work engagement, job demands and job resources and the measurement of these constructs. An overview is given of the conceptualisation of these constructs in literature, and on the findings in terms of measuring work engagement and job characteristics.

1.3.2 Empirical study

The empirical study entailed that the specifically stated objectives could be achieved as follows:

1.3.2.1 Research design

A cross-sectional survey design was used to collect the data and attain the research goals. One group of people was observed at one point of time (Neuman, 2000). A sample was drawn from a population at a specific time (Shaughnessy & Zechmeister, 1997). This design was also used to assess interrelationships among variables within a population. According to Shaughnessy and Zechmeister (1997), this design is ideally suited to the descriptive and predictive functions associated with correlation research.

1.3.2.2 Participants

The participants were 471 academic staff members from three South African universities. The universities include North-West University, The University of Port Elizabeth and the University of the Orange Freestate.

1.3.2.3 Measuring instruments

The Utrecht Work Engagement Scale, the Job Demands-Resources Scale and a biographical questionnaire were used in this study.

The *Utrecht Work Engagement Scale (UWES)* (Schaufeli et al., 2002) is used to measure the levels of engagement. Four items in which the language is simplified are added to the 17-item UWES. Three dimensions of engagement can be distinguished, namely Vigour (6 items; e.g. "I am bursting with energy in my work"), Dedication (5 items; e.g. "I find my work full of meaning and purpose") and Absorption (6 items; e.g. "When I am working, I forget everything else around me"). Reliability coefficients for the three subscales have been determined between 0,68 and 0,91. In a South African sample of police officers, Rothmann and Storm (2003) obtained the following alpha coefficients for the three sub-scales: Vigour: 0,78; Dedication: 0,89 and Absorption: 0,78. Other South African studies obtained Cronbach

alpha coefficients varying from 0,70 for Vigour and 0,81 for Dedication to 0,87 (Vigour/Dedication) and 0,57 to 0,61 for Absorption (Jackson & Rothmann, in press; Naudé & Rothmann, 2004). In light of the fact that most items on the UWES are framed in a positive manner it was decided to include and mix the items of an adapted version of the MBI-GS (including the Depersonalisation scale of the MBI-ES) in one questionnaire. The latter is predominantly phrased in a negative manner and should guard against the possibility of response sets.

The *Job Demands-Resources Scale* (JDRS) was developed by the authors to measure job demands and job resources for employees. The JDRS consists of 41 items. The questions are rated on a four-point scale ranging from 1 (*never*) to 4 (*always*). The dimensions of the JDRS include pace and amount of work, mental load, emotional load, work variety, opportunities to learn, work independence, relationships with colleagues, relationship with immediate supervisor, ambiguities of work, information, communications, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities.

A *questionnaire* was developed to gather information about the demographic characteristics of the participants. Information that was gathered included the following: city and university, gender, marital status, language, age, educational qualifications, job category, job title, main educational focus, years in current institution and years in current job.

1.3.2.4 Statistical 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). The reliability and validity of the measuring instruments are assessed with the use of Cronbach alpha coefficients and exploratory factor analysis (Clark & Watson, 1995). Descriptive statistics (e.g. means, and standard deviations) are used to analyse the data. Exploratory factor analysis is used to assess the structure of the measuring instruments.

Pearson product-moment correlation coefficients are used to specify the relationships between the variables. The level of statistical significance is set at $p < 0,05$. Effect sizes are used to decide on the significance of the findings. A cut-off point of 0,30 (medium effect,

Cohen, 1988) is set for the practical significance of correlation coefficients.

A standard multiple regression analysis is used to assess whether job demands and job resources can predict work engagement.

1.4 DIVISION OF CHAPTERS

The chapters are presented as follows in the mini-dissertation:

Chapter 1: Introduction

Chapter 2: Research article

Chapter 3: Conclusions, limitations and recommendations.

1.5 CHAPTER SUMMARY

Chapter 1 focused on the problem statement, objectives and research method in this study.

Chapter 2 focuses on the research article.

