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# BURNOUT AND ENGAGEMENT: A FORTIGENIC PERSPECTIVE\*

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## ABSTRACT

Work leads to illness as well as health. Traditionally there is an inclination in work psychology to act on the assumption of deficits, working from a pathogenic paradigm. Accordingly, many studies were undertaken regarding the measurement, prevention and management of burnout. However, South African studies on burnout were less sophisticated, often using less than optimal research designs, measuring instruments and statistical analyses. Also, few studies were conducted regarding the factorial validity (employing confirmatory factor analysis), construct equivalence and item bias of measuring instruments of burnout. Furthermore, few studies in work psychology have been conducted from a fortigenic paradigm, including work engagements and psychological strengths. It is shown that research should be conducted to validate measuring instruments of engagement and psychological strengths in multicultural and cross-cultural contexts. Research is also needed regarding the effectiveness of interventions to stimulate psychological strengths and engagement and to manage burnout in diverse work settings.

Work often generates ambivalent feelings. On the one hand work requires effort and is associated with lack of freedom and negative feelings. On the other hand work gives energy, enables development and generates positive feelings. Because of this ambivalence the philosopher Hans Achterhuis (1984) referred to work as a strange medicine (“een eigenaardig medicijn”); it leads to illness as well as health.

One perspective is that work could cause illness. Research in the Netherlands showed that between 4% and 10% of the working population reported serious burnout complaints (Bakker, Schaufeli & Van Dierendonck, 2000). Therefore, the conclusion that work may result in illness seems to be legitimate. However, there is also another side of the coin. Work, and more specifically goal-directed, structured activity seems to be essential for psychological health. Even Freud referred to “*lieben und arbeiten*” as the two important principles on which healthy psychological development rests. Also, the Marxist ‘*angehäuchte*’ psychology from the 1970’s held that personality develops through work. In helping, work is used to promote psychological well-being, for example occupational therapy for psychiatric patients. In addition, studies regarding the effects of unemployment showed that a lack of work has detrimental effects, such as depression, alcoholism, psychological complaints and even suicide. Therefore, it can be concluded that work could either contribute to illness or could have a therapeutic effect.

Traditionally the health and social sciences have been characterised by a pathogenic paradigm, i.e. an orientation towards the abnormal, with the fundamental question being: “Why do people fall ill?” (Strümpfer, 2000). Knowledge gain by answering this question is then used to find ways of treating and preventing diseases. Diener, Suh, Lucas en Smith (1999) showed that 17 times more scientific articles were published on negative feelings compared with positive feelings. Myers (2000) found a more favourable ratio of 14:1. He mentions that since 1887, 8000 articles were published in Psychological Abstracts about anger, almost 57000 about anxiety and almost 70000 about depression. In comparison, 851 of

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the published articles were about joy, 2958 about happiness and 5701 about satisfaction. The focus of psychology was on detecting deficits, which Schaufeli and Bakker (2001) labelled “psychologie als een wetenschap van het gebrek” often without acknowledging strengths and resources. Since 1996 only 6% of the articles published in the *Journal of Occupational Health Psychology* focused on positive aspects of health and well-being. The other 96% were related to burnout, post-traumatic stress disorder, stress, conflict and psychosomatic complaints. Seligman (1992, p. 96) expressed his concern as follows: “My profession spends most of its time (and almost all of its money) trying to make the troubled less troubled. Helping troubled people is a worthy goal, but somehow psychology almost never gets around to the complementary goal of making the lives of well people even better”.

In contrast to the pathological interest in “what can go wrong”, there has been attempts to discover “what can go right” (Strümpfer, 2000). It is a radically different set of assumptions and attributions about health and potential. During 2000, a whole edition of the *American Psychologist* focused on what was called “positive psychology” (Ryan & Deci, 2000; Seligman & Csikszentmihalyi, 2000). Seligman and Csikszentmihalyi (2000, p. 5) wrote: “The field of positive psychology at the subjective level is about valued subjective experiences; well-being, contentment, and satisfaction (in the past); hope and optimism (for the future) and flow and happiness (in the present)”. Up to then, various internationally authors have proposed concepts referring to positive psychology. Examples of these concepts are striving for superiority (Adler, 1927), individuation (Jung, 1971), the mature personality (Allport, 1937), fully functioning personality (Rogers, 1951), internal-external locus of control (Rotter, 1966), will to meaning (Frankl, 1967), self-actualisation (Maslow, 1972), self-efficacy (Bandura, 1977), sense of coherence (Antonovsky, 1979), self-control (Rosenbaum, 1988) and intrinsic motivation (Ryan & Deci, 2000).

The humanistic psychology which manifested as a “third force” in psychology (next to the psychoanalysis and behaviourism) in the 1950s could be regarded as a precursor of the positive psychology. Antonovsky (1979) introduced the construct of *salutogenesis* (Latin *salus* = health, Greek *genesis* = *origin*) proposing that the origins of health rather than disease should be studied. Strümpfer (1995) argued that the construct of *salutogenesis* should be broadened from a focus on health only, to *fortigenesis* (Latin *fortis* = strong) referring to strength. Wissing and Van Eeden (1997) suggested a new sub-discipline of psychofortology and suggested that not only the origins of psychological well-being should be studied, but also the nature, manifestations and ways to enhance psychological well-being. According to Schaufeli and Bakker (2001), the concept of *eustress* (“healthy” stress) which is contrasted with *distress* (“unhealthy” stress) was up to now poorly researched. The concept was introduced almost 50 years ago, but up to now it was only referred to 13 times in Psychological Abstracts.

Also in the management of people in the workplace there is traditionally an inclination to act on the assumption of deficits – what McGregor (1960) called a “Theory X” view of employees (Strümpfer, 2000). The traditional assumption is that human beings dislike work and responsibility; because they are lazy and irresponsible, they need to be coerced, threatened with punishment and closely directed before they will work towards organisational objectives. According to Strümpfer (2000), Theory X beliefs are still with us. This can especially be seen when stress levels increase or when the economy starts pinching. Managers are then very likely to grab authority, play their cards close to their chests and trust levels hit rock bottom. This kind of a world view has its origin in Western culture that is “obsessed with, and fascinated by, psychopathology, victimisation, abnormality, and moral

and interpersonal aberrations” (Saleebey, 1997, p. 4). Therefore, it is no surprise to find no single chapter of the *Handbook of Work and Health Psychology* (Schabracq, Winnubst & Cooper, 1996) focussing on health and well-being at work. However, Schaufeli and Bakker (2001) point out that organisation psychology (in contrast with other fields in psychology) focus more on positive concepts such as job satisfaction, organisational commitment, organisational citizenship behaviour and intrinsic motivation. This could be attributed to the “happy-productive” worker thesis (Staw, 1986). On the other hand, studies have up to now fail to prove a positive relationship between job satisfaction and job performance. Iaffaldano en Muchinsky (1985, p. 270) refer to this as an “an illusory correlation between two variables that we logically think should be interrelate, but in fact do not”.

Strümpfer (2000) distinguishes between two characteristics of fortological thinking, namely benefit-finding and emphasis on agency or communion. Benefit-finding refers to the study of positive outcomes of adversity. The possibility that environmental changes initially perceived as negative can be associated with longer-term benefits for individuals and groups has received little attention in research. Agency consists of urges of individualisation, self-affirmation and self-efficacy, while communion refers to forming connections, co-operating and caring.

The fullest representations of humanity show people to be curious, vital, and self-motivated. That most people show considerable effort, agency, and commitment in their lives appears, in fact, to be more normative than exceptional, suggesting some very positive and persistent features of human nature. Yet, it is also clear that the human spirit can be diminished or crushed and that individuals sometimes reject growth and responsibility. Regardless of social strata or cultural origin, examples of individuals who are apathetic, alienated, and irresponsible are abundant. The persistent, proactive, and positive tendencies of human nature are clearly not invariantly apparent (Ryan & Deci, 2000).

The environment in which employees in South Africa and elsewhere in the world currently function demands more of them than did any previous period. Employees have to cope with the demands that arise from fulfilling various roles, often with limited resources. Tracking and addressing their effectiveness in coping with new demands and stimulating their growth in areas that could possibly impact on individual well-being and organisational efficiency and effectiveness are therefore crucial. Burnout and engagement of employees are specific focus areas for research and intervention in this regard (Maslach et al., 2001). Burnout is a metaphor that is commonly used to describe a state or process of mental exhaustion (Schaufeli & Enzmann, 1998). Engagement is being 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).

Schaufeli and Bakker (2001) developed a model of well being at work which makes it possible to focus on burnout and engagement. The model is illustrated in Figure 1.

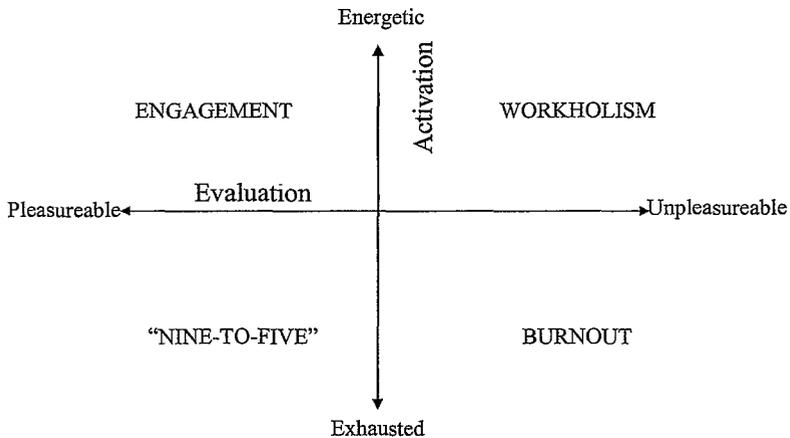


Figure 1. A taxonomy of well-being at work

Schaufeli and Bakker (2001) distinguish between two dimensions that could be used to classify four types of well-being at work. The horizontal axis represents the extent of pleasure at work (i.e. pleasurable versus unpleasurable). The vertical dimension relates to the mobilisation of energy. This taxonomy makes it possible to distinguish between engagement and burnout, but also workaholism and a type of work experience called “nine-to-five”.

According to Schaufeli and Bakker (2001), research on burnout showed that some employees, regardless of high job demands and long working hours were not burned out. Instead it seemed that they found pleasure in working hard and dealing with job demands. They may be seen as workaholics, but probably so if one has an eye on human deficiencies (rather than on strengths). Therefore, the question arises whether it is not possible that there are engaged employees who show energy, dedication and absorption in their work, i.e. employees who show behaviour opposite of burnout.

While a positive fortigenic perspective would probably require that concepts such as engagement and psychological strengths that could prevent burnout should be studied, harsh realities exist that contribute to burnout. For example, Pienaar and Rothmann (in press) investigated suicide ideation in the South African Police Services (SAPS) and found that almost 10% of a random, stratified sample of police members ( $N = 2432$ ) showed serious levels of suicide ideation, while 5% attempted suicide previously. Almost 15% of the sample reported serious stress problems. Rothmann and Van Rensburg (2002) argued that job demands and a lack of job resources in the SAPS contribute to the decline in psychological strengths of police members. Psychological strengths are probably insufficient to resist the detrimental effects of a harsh environment. The latter argument is supported by studies which

showed that dispositional factors explain not more than 30% of the variance in work-related outcomes (e.g. job satisfaction and burnout) (Malan & Rothmann, in press; Rothmann, 2001; Rothmann, Jackson, Kruger & Veldman, in press). Cherniss (1995, p. 166) also warns against overemphasising personal virtues: "Recognizing that certain individual characteristics help professionals avoid burnout shouldn't distract us from the powerful factors in the work environment that lead to burnout."

Therefore, the objective of this paper is to summarise research regarding burnout and engagement, as well as possible psychological strengths that could prevent burnout or facilitate engagement to determine important research themes regarding these aspects.

## **BURNOUT**

### **Definition and origin of the concept**

The term "burnout" was introduced in the mid-1970's by Herbert Freudenberger (1974). 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 (Freudenberger, 1974). Burnout first emerged as a social problem, not as a scholarly construct. Therefore, during the pioneering phase, the initial conception of burnout was shaped by pragmatic rather than academic concerns, the work was exploratory and the goal to articulate the burnout phenomenon (Maslach & Schaufeli, 1993; Maslach et al., 2001). In the second empirical phase, burnout research became more systematic and quantitative in nature. Larger study samples were used and the focus shifted to the assessment of burnout, utilising questionnaire and survey methodology (Maslach et al., 2001). Furthermore, the concept of burnout that was initially closely linked to the human services where people do 'people' work of some kind, has been expanded towards all other professions and occupational groups.

Probably the most frequently cited definition of burnout comes from Maslach and Jackson, (1986, p. 1). They defined 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) present more of a "working" definition of burnout. They agreed partially with Maslach and Jackson (1986) by also identifying 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".

Although Maslach and Jackson (1986, p. 1) defined burnout as "... a syndrome of emotional exhaustion and cynicism that occurs among individuals who do people work of some kind", researchers currently acknowledge that employees in almost any job can develop burnout (Schaufeli & Enzmann, 1998). In the third edition of the manual of the Maslach Burnout Inventory (Maslach, Jackson & Leiter, 1996), the concept of burnout is defined as a crisis in one's relationship with work in general and not necessarily as a crisis in one's relationship with people at work.

According to Schaufeli and Enzmann (1998), burnout can be considered as a particular kind of prolonged job stress. An individual experiences job stress when the demands of the workplace exceed his or her adaptive responses. Burnout is a particular, multidimensional, chronic stress reaction that goes beyond the experience of mere exhaustion. Burnout is seen as the final step in a progression of unsuccessful attempts to cope with a variety of negative stress conditions. Burnout also differs from depression. Burnout occurs in a context of anger rather than guilt and is situation-specific rather than pervasive. Depression is characterised by a generalisation of an individual's symptoms across all situations and spheres of life, whereas burnout is regarded as job-related. Individuals who are burned-out at work may function normally in respect of their private life (Schaufeli & Enzmann, 1998).

The dimensions of burnout are conceptualised differently, depending on the nature of the job concerned. In the helping professions (including education), three dimensions of burnout are distinguished, namely emotional exhaustion, depersonalisation and low personal accomplishment. Emotional exhaustion describes a reduction in the emotional resources of an individual, i.e. they feel drained or used up and physically fatigued. Depersonalisation refers to an increase in negative, cynical and insensitive attitudes towards colleagues, clients and/or patients. Low personal accomplishment refers to a feeling of being unable to meet clients' needs and to satisfy essential elements of job performance. In jobs other than the helping professions the dimensions of burnout is labelled as exhaustion, cynicism and low personal efficacy (Maslach et al., 1996). Exhaustion refers to feelings of being overextended and depleted of one's emotional and physical resources. Cynicism is described in terms of negative, callous or detached response to various aspects of the job. Professional efficacy relates to a feeling of competence, productivity and achievement at work.

The above-mentioned three dimensions of burnout are regarded as interrelated, but conceptually distinct (Maslach & Jackson, 1986). The exhaustion component of burnout is more predictive of stress-related health outcomes than the components of cynicism or personal efficacy. There is also a link between burnout and substance abuse (Maslach et al., 1996). As a consequence, the three original burnout dimensions are redefined. Exhaustion now refers to fatigue irrespective of its cause. Cynicism reflects an indifferent or distant attitude towards work instead of other people. Lastly, lack of professional efficacy encompasses both social and non-social aspects of occupational accomplishment.

The consequences of burnout are potentially serious for staff, clients, and the larger institutions in which they interact. Maslach and Jackson (1986) suggested that burnout could lead to deterioration in the quality of care or service that is provided by the staff. It correlates with various self-reported indices of personal dysfunction, increased use of alcohol and drugs, and marital and family problems (Maslach & Jackson, 1986). Managers suffering from burnout could hurt the organisation because they spread it to their subordinates (DuBrin, 1990). Burnout is a self-perpetuating process that affects the attainment of professional goals and depletes the resources of the individual to cope with the process and symptoms of burnout. Furthermore, it appears to be a factor in job turnover, absenteeism, low morale, and job dissatisfaction.

## **Measurement**

The importance of a reliable and valid instrument for the measurement of burnout is evident not only for the purpose of empirical research, but also ultimately for individual assessment. When determining factorial validity, confirmatory factor analysis (through structural equation

modeling) should be used, because exploratory factor analysis shows some weaknesses (Byrne, 1991). Also, when burnout measures are applied to different cultural groups, issues of measurement bias and equivalence become important (Van de Vijver & Tanzer, 1997). According to Van de Vijver and Leung (1997), equivalence and bias of measuring instruments should be reported in each study that takes place in a multicultural or cross-cultural context. Construct equivalence (also labelled structural equivalence) is the most frequently studied type of equivalence (Van de Vijver & Leung, 1997). It indicates the extent to which the same construct is measured across all cultural groups. Furthermore, item bias should be computed. An item is an unbiased measure of a theoretical construct, for example burnout, if persons from different cultural groups who are equally burned out have the same average score on the item (Van de Vijver & Leung, 1997). Persons with an equal standing on the theoretical construct underlying the instrument should have the same expected score on the item, irrespective of group membership. The definition of bias does not stipulate that the averages of cultural groups should be identical, but only that these averages should be identical across cultural groups for persons who are equally burned out. Item bias can be produced by sources such as incidental differences in appropriateness of the item content and inadequate item formulation. Two types of item bias are distinguished, namely uniform bias and nonuniform bias (Van de Vijver & Leung, 1997). Uniform bias refers to influences of bias on scores that are more or less the same for all score levels. Nonuniform bias refers to influences that are not identical for all score levels.

Three versions of the Maslach Burnout Indicator (MBI) were developed, namely the MBI-HSS (Human Services Survey), MBI-ED (Educators) and MBI-GS (General Survey) were developed (Maslach, Jackson & Leiter, 1997). The first and second version measures three dimensions, namely Emotional Exhaustion, Depersonalisation and Personal Accomplishment, while the third version measures Exhaustion, Cynicism and Professional Efficacy. Recently, Schaufeli, Martinez, Pinto, Salanova and Bakker (2002) developed a student version of the MBI.

Byrne (1991) studied the factorial validity of the MBI-ED for teachers at intermediate, secondary and university levels in Canada and found support for a three-factor model after the deletion of four scale items. Acceptable internal consistencies of the three scales, ranging from 0,76 to 0,90 were found for the MBI-ED.

The MBI-HSS (Maslach & Jackson, 1986) has evidenced relatively high internal consistency (Kalliath, O'Driscoll, Gillespie & Bluedorn, 2000; Schaufeli & Van Dierendonck, 1995). However, one psychometric characteristic that remains open to debate is the precise nature of the factor structure of the MBI. The factorial validity representing three factors is not completely beyond question, as there have been studies reporting fewer or more factors. However, the basic three-factor structure underlying the burnout syndrome has been repeatedly confirmed by exploratory and confirmatory factor analyses (Boles, Dean, Ricks, Short & Wang, 2000; Gorter, Albrecht, Hoogstraten & Eijkman, 1999; Schaufeli, Bakker, Hoogduin, Schaap & Kladler, 2001). Regarding the MBI-GS, internal consistencies are equally satisfactory, ranging from 0,73 (Cynicism) to 0,91 (Exhaustion) (Leiter & Schaufeli, 1996). Reliability analyses done by Schutte, Toppinen, Kalimo and Schaufeli (2000) showed that the Exhaustion and Professional Efficacy subscales were sufficiently internally consistent, but that one Cynicism item should be removed in order to increase the internal consistency beyond the criterion of 0,70. According to them, this might be caused by the ambivalence of the particular item: "I just want to do my job and not be bothered". In their

studies, Schaufeli, Leiter and Kalimo (1995) and Leiter and Schaufeli (1996) also found that this item had the lowest factor loadings of the three subscales.

Three studies that used the MBI-GS in South African samples were found. In a sample of senior managers in a manufacturing industry, Rothmann and Jansen van Vuuren (in press) found satisfactory alpha coefficients: Exhaustion = 0,79; Cynicism = 0,84 (after item 13 had been omitted); Professional Efficacy = 0,84). Rothmann and Malan (in press) found higher alphas (Exhaustion = 0,89; Cynicism = 0,76; Professional Efficacy = 0,85) while Rothmann et al. (in press) found lower alphas for Cynicism (0,72 after item 13 had been omitted) and Professional Efficacy (0,69). Storm and Rothmann (in press) found alpha coefficients of 0,88 (Exhaustion), 0,78 (Cynicism) and 0,79 (Professional Efficacy) on a sample of 2396 police officers in South Africa.

A large body of research has addressed the factor structure of the MBI-HSS (Maslach & Jackson, 1986), but it seems as if there is a paucity of research on the internal and external validity of the MBI-GS (Taris, Schreurs & Schaufeli, 1999). Confirmatory factor analysis done by Schutte et al. (2000) showed that the three-factor model was clearly superior to alternative one-factor and two-factor models. Schaufeli, Salanova, González-Romá and Bakker (2002) confirmed these findings. Leiter and Schaufeli (1996) employed confirmatory factor analysis using linear structural equation modelling and also confirmed a three-factor structure. Similar results were obtained by Taris et al. (1999). However, in a sample of Spanish workers who used computer-aided technologies at their jobs, Salanova and Schaufeli (2000) found a four-factor model of burnout where the Efficacy subscale split into two factors that were labelled "goal attainment" and "self-confidence". According to the authors, this divergent result might have been caused by translation problems or by the specific sample being studied. It seems reasonable to expect that a three-factor structure will be obtained in this study. Confirmatory factor analyses by Rothmann and Jansen van Vuuren (in press), Malan and Rothmann (in press) and Rothmann et al. (in press) consistently showed low loadings of item 13 on Cynicism.

Storm and Rothmann (in press) used structural equation modelling (SEM) methods as implemented by AMOS (Arbuckle, 1997) to test the factorial model for the MBI-GS on a random, stratified sample in the South African Police Services ( $N=2396$ ). Prior to testing the 3-factor model of burnout, a 1-factor model was tested. However, a statistically significant  $\chi^2$  value of 6 010,40 ( $df = 104$ ;  $p = 0,00$ ) and fit statistics revealed a very poor overall fit. Next, a 3-factor model consisting of all 16 items was tested, resulting in three models. The fit statistics of Models 1, 2 and 3 are presented in Table 1.

Table 1

*Goodness-of-Fit Statistics for the Hypothesised MBI-GS Models*

Model	$\chi^2$	$\chi^2/df$	GFI	AGFI	PGFI	NFI	TLI	CFI	RMSEA
Model 1	1 478,04	14,63	0,92	0,90	0,69	0,90	0,89	0,91	0,075
Model 2	901,455	10,36	0,95	0,93	0,69	0,94	0,93	0,94	0,06
Model 3	620,53	7,3	0,97	0,95	0,69	0,96	0,95	0,96	0,05

The statistically significant  $\chi^2$  value of 1 478,04 ( $df = 101$ ;  $p = 0,00$ ) revealed a poor overall fit of the originally hypothesised MBI model 1. However, both the sensitivity of the

likelihood ratio test to sample size and its basis on the central  $\chi^2$  distribution, which assumes that the model fits perfectly in the population, have been reported to lead to problems of fit. Jöreskog and Sörbom (1993) pointed out that the use of  $\chi^2$  is based on the assumption that the model holds exactly in the population, which is a stringent assumption. A consequence of this assumption is that models that hold approximately in the population will be rejected in a large sample. Furthermore, the hypothesised model (Model 1) was also not that good from a practical perspective. The PGFI value lower than 0,80, NFI, TLI and CFI values lower than 0,95 and RMSEA value higher than 0,05 are indicative of failure to confirm the hypothesised model. To pinpoint possible areas of misfit, modification indexes were examined. Looking at the regression weights, one parameter, which represents the cross-loading of Item 13 on the Efficacy factor, stood apart from the rest and accounts for substantial misspecification of the hypothesised factor loading.

Although the various fit indexes for model 2 substantially improved compared to those for the initial model, there was still some evidence of misfit in the model. For example, the  $\chi^2$  (df = 87;  $p = 0,00$ ), PGFI and RMSEA values were only marginally adequate. Modification indexes (MI) were considered to pinpoint areas of misspecification in the model. The constrained parameters exhibiting the highest degree of misfit lay in the error covariance matrix and represent a correlated error between Item 1 and Item 2 (MI = 116,37) as well as between Item 9 and Item 10 (MI = 142,42). Compared with MI values for all other error covariance parameters, these values are exceptionally high and clearly in need of re-specification. Based on the modification indices and on theoretical considerations, Model 2 was re-specified, with these parameters freely estimated. Following Byrne (2001), errors of two item pairs (i.e. EX1- EX2; CY9-CY10) were allowed to correlate.

Model 3 was based on 15 of the original 16 items and included a correlated error between Item 1 and Item 2 and between Item 9 and Item 10. The fit statistics for this model (see Table 1) indicate a good fit for the re-specified model. Although the  $\chi^2$  value (df = 85;  $p = 0,00$ ) is still high, it is considerably lower than in Model 1. All the other fit statistics indicate excellent fit of the measurement model to the data. Since this model fit was satisfactory and the results agreed with the theoretical assumptions underlying the structure of the MBI-GS, no further modifications of the model were deemed necessary.

Storm and Rothmann (in press) also conducted an exploratory factor analysis and target (Procrustean) rotation were used to determine construct equivalence of the MBI-GS. The factor loadings of race groups were rotated to one target group. After target rotation had been carried out, factorial agreement was estimated using Tucker's coefficient of agreement (Tucker's phi). The Tucker's phi-coefficients for the four race groups on the 3-factor structure were all higher than the cut-off score of 0,95. Therefore, it was deduced that the three factors of the MBI-GS were equivalent for the four race groups. Subsequently bias analyses were carried out on the 15 items of the MBI-GS. No significant eta square values were obtained, indicating that the means of the race groups for the different score levels did not differ from zero in a systematic way. It is clear that the MBI-GS shows no uniform or non-uniform bias for different race groups in the SAPS.

The three dimensions of the MBI-GS are interrelated: Cynicism is highly related to Exhaustion ( $0,44 < r < 0,61$ ), and also strongly related to Professional Efficacy ( $-0,38 < r < -0,57$ ) (Maslach et al., 1996). Storm and Rothmann (in press) found that the correlations between the three burnout dimensions were as follows: Exhaustion and Cynicism showed the highest correlation of 0,73, followed by Exhaustion and Professional Efficacy with a

correlation of 0,05, and Cynicism and Professional Efficacy with a correlation of  $-0,09$ , respectively.

## Causes

Most of the approaches to burnout emphasise the key role that a strong sense of motivation initially plays in the process that leads to burnout. This strong sense of motivation is seen in the emphasis placed on the expectations, goals, intentions, involvement and commitment of the individual. However, it is the most valuable and successful employees who run the biggest risk of burning out (Schaufeli & Enzmann, 1998).

- Organisational factors that contribute to burnout include job demands and a lack of job resources. Job demands refer to work overload, role conflict, role ambiguity, deadlines, being assigned more responsibility, having to make critical and immediate decisions. Job demands include both quantitative (work overload) and qualitative (emotional) demands. Job resources, refer to those physical, psychological, social, or organisational aspects that either/or (1) reduce job demands and the associated physiological and psychological costs; (2) are functional in achieving work goals; (3) stimulate personal growth learning and development. A lack of job resources include staff shortages, inadequate equipment, lack of recognition, lack of supervisory support, lacking opportunities for advancement, inadequate salary and poor collegial support.
- Biographical characteristics that could explain burnout include age, work experience and sex. Burnout is observed more often among younger employees compared with those older than 30 or 40 years. Burnout is negatively related to work experience. Women tend to score higher on emotional exhaustion, whereas men score higher on depersonalisation.
- Personality traits could affect employees' burnout. In most studies it was found that neuroticism was positively related to exhaustion. Exhaustion also correlates significantly with extraversion, agreeableness, and conscientiousness. Depersonalisation is negatively related to agreeableness. Reduced personal accomplishment is related to extraversion. In a South African study, Storm and Rothmann (in press) found that Emotional Stability, Extraversion, Openness to Experience, Agreeableness and Conscientiousness were associated with lower emotional exhaustion and depersonalisation and higher personal accomplishment. Psychological strengths could also act as buffer against burnout.

Research conducted in the SAPS ( $N = 2000$ ), a canonical analysis showed that job demands (high loading), lack of job resources (moderate loading) and avoidance as coping strategy (high loading) were associated with exhaustion (high loading), cynicism (moderate loading) and low professional efficacy (moderate loading) (Storm & Rothmann, in press).

In a study at a South Africa university, Verhage and Jordaan (2001) found that burnout was attributed to inadequate leadership, inefficient and dictatorial management, nepotism, lack of transparency and poor interpersonal relations. Furthermore, spending time doing work that should be done by administrators, organisational transformation, poor incentives and lack of recognition as well as the absence of a professional support system were mentioned as causes of burnout.

## **Burnout research**

There are still many unanswered questions regarding burnout. According to Rothmann (2002), an analysis of burnout research in South Africa showed a lack of empirical research systematically investigating burnout as well as serious limitations including poorly designed studies, small sample sizes, a lack of sophisticated statistical analyses and poorly controlled studies. For example, only one study in South Africa (Storm & Rothmann, in press) utilised SEM to analyse the factorial validity of the MBI-GS. The factorial validity of all the versions of the MBI, which are regarded as the best measures of burnout (Schaufeli & Enzmann, 1998) as well as factorial invariance for different occupational groups in South Africa should be researched (Byrne, 1991). Furthermore, multiculturalism, globalisation (which lead to an increasing number of expatriates) demand that research be conducted regarding the equivalence of factors and item bias of the MBI in multicultural and cross-cultural work settings.

Because the focus of burnout broadened to professions and occupational groups other than the helping professions, research is needed regarding burnout and causes thereof in helping professions in South Africa as well as other professions and occupations. A major problem with the MBI is the lack of clinically validated cut-off points (Schaufeli et al., 2001). Schaufeli and Van Dierendonck (1995) and Schaufeli et al. (1995) found that levels of burnout differed among national samples, therefore comparisons with norms in other countries are impossible.

Elsewhere in the world, burnout has been studied from various paradigms and theories. Schaufeli and Enzmann (1998) give a comprehensive overview of these paradigms and theories. One paradigm that has seldom been used in the study of burnout, is the psychodynamic approach, probably because this approach addresses group and/or organisational behaviour. Although this approach is not part of the mainstream theories about burnout, Cilliers (2001) showed how various systems in organisations could lead to burnout. However, more research employing this approach is needed.

## **ENGAGEMENT**

### **Definition and origin of the concept**

As mentioned above, Occupational Health Psychology focused on the negative effects of work that contributed to burnout. But the question asked is why certain workers can accomplish large amounts of work with enthusiasm and pleasure, without becoming sick or being burned out. Research on job engagement could answer this question.

Research on the engagement concept has taken two different but related paths. Maslach and Leiter (1997, p. 23) rephrased burnout as “an erosion of engagement with the job”. Work that started out as important, meaningful and challenging, becomes unpleasant, unfulfilling and meaningless. In the view of these authors, engagement is characterised by energy, involvement and efficacy, which are considered the direct opposites of the three burnout dimensions, namely exhaustion, cynicism and lack of professional efficacy respectively. Therefore, they also assess engagement by the opposite pattern of scores on the three Maslach Burnout Inventory (MBI) dimensions – low scores on exhaustion and cynicism, and high scores on efficacy are indicative for engagement.

Schaufeli and his colleagues partly agree with Maslach and Leiter's (1997) description, but take a different perspective and define and operationalise engagement in its own right. Schaufeli et al. (2002) consider burnout and engagement to be opposite concepts that should be measured independently with different instruments. Furthermore, burnout and engagement may be considered two prototypes of employee well-being that are part of a more comprehensive taxonomy constituted by the two independent dimensions of pleasure and activation (Watson & Tellegen, 1985). Activation range from exhaustion to vigour, while identification range from cynicism to dedication. According to this framework, burnout is characterised by a combination of exhaustion (low activation) and cynicism (low identification), whereas engagement is characterised by vigour (high activation) and dedication (high identification).

Maslach and Leiter (1997) suggest that the three dimensions of burnout have a bipolar character and that burnout and engagement will show strong negative correlations. However, it is noted that a positive concept is measured by negative items (i.e. regarding exhaustion and cynicism). Although Schaufeli and Bakker (2001) also regard burnout and engagement as opposites, they believe that the two concepts should be measured independently. This makes it possible to investigate the relationship between burnout and engagement empirically. Schaufeli and Bakker (2002) state 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 Schaufeli and Bakker (2001), 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 (2002) found that burnout and engagement are negatively related, sharing between 10% and 25% of their variance. Storm and Rothmann (in press) found a canonical correlation of 0,51 between burnout and engagement. A moderate negative correlation ( $r = -0,42$ ) was found between cynicism and dedication. Vigour correlated negatively with exhaustion ( $r = -0,28$ ).

Based on this theoretical reasoning and after in-depth interviews were carried out with engaged employees, Schaufeli and his colleagues have defined 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 consists of the following dimensions (Schaufeli & Bakker, 2001):

- Vigour is characterised by high levels of energy and mental resilience while working, 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 about one's job, and by feeling inspired and challenged by it. Dedication could be described quantitatively as well as qualitatively. In a quantitative sense, dedication refers to a particularly strong involvement that goes one step further than the usual level of identification.

- 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.

Engagement is also distinct from other established constructs in organisational psychology, such as organisational commitment, job satisfaction or job involvement (Maslach et al., 2001). *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). Lastly, engagement (especially absorption) comes close to what has been called "flow", a term used by Csikszentmihalyi (1990) that represents a state of optimal experience that is characterised by focused attention, a clear mind, mind and body unison, effortless concentration, complete control, loss of self-consciousness, distortion of time and intrinsic enjoyment. However, flow is a more complex concept that includes many aspects and refers to rather particular, short-term "peak" experiences instead of a more pervasive and persistent state of mind, as is the case with engagement (Schaufeli & Bakker, 2001).

Schaufeli and Bakker (2001) summarise the characteristics of engaged workers as follows:

- Engaged employees take initiative and give direction to their lives. They give form to their environment and direction to their lives and do not submit passively to the influence of the environment. They will probably look for challenges outside their current environment if they always have to perform the same functions with the same clients. Engaged individuals are optimistic and trust themselves, characteristics which seem to overlap with what other researchers called "personal initiative" (Frese, Fay, Hilburger, Leng & Tag, 1997) or the "proactive personality" (Crant, 2000).
- Engaged employees generate their own positive feedback. Through their attitudes and activities, engaged employees create their "rewards" in the form of recognition, success, admiration and appreciation. Hereby a positive spiral is maintained.
- Engaged employees also show engagement outside their work environment. These individuals will mention frequently that they have a type of energy which never seems to fade. Therefore, engaged employees are characterised by energy and enthusiasm both in their work and in their private lives.
- Engaged employees show values and norms which corresponds with their organisations. In the case of burnout, there tend to be a growing discrepancy between an employee's values and norms and those of the organisation he or she is employed by. This links with the view of Pines (1993) that burnout is a result of not being able to realise personal, existential goals. If these goals are reached, employees experience meaning in and through their work.
- Compared with burned out employees, engaged employees experience a different type of exhaustion. 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 burned out. Burned out employees might have shown strong engagement previously. For example, Pines (1993, p. 41), writing about burnout, said “In order to burn out one has first to be ‘on fire’”. Also Edelwich en Brodsky (1980) describe burnout as a process of “progressive disillusionment”, whereby initial enthusiasm gradually makes place for frustration, which ends in apathy. However, the reverse is seems also true, because Schaufeli and Bakker (2001) found that employees who previously suffered from burnout, showed 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.

According to Schaufeli and Bakker (2001), it is possible that burnout and engagement are both characterised by underlying personality traits. For example, engaged individuals may have an underlying personality trait characterised by an inborn high energy level. Burnout, on the other hand, may be related to another personality trait (e.g. neuroticism) (see Schaufeli & Enzmann, 1998, pp. 79-80).

## Measurement

It is important to use a valid and reliable instrument when engagement is measured. Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) developed the Utrecht Work Engagement Scale (UWES) and found acceptable reliability for it. Two recent studies using confirmative factor analysis demonstrated the factorial validity of the UWES (Schaufeli et al., 2002; Schaufeli et al., 2001).

Regarding the measurement of engagement, Schaufeli et al. (2002) disagree with Maslach and Leiter (1997), who stated that engagement is adequately measured by the opposite profile of MBI scores. Schaufeli et al. (2002) reason that, by using the MBI for measuring engagement, it is impossible to study its relationship with burnout empirically since both concepts are considered to be opposite poles of a continuum that is covered by one single instrument (the MBI). Although they agree that engagement is the positive antithesis of burnout, they acknowledge that the measurement and the structures of both concepts differ.

Regarding the psychometric qualities of the UWES, preliminary, unpublished results show that the three engagement scales have sufficient internal consistencies. For samples one (314 undergraduate students) and two (619 employees) respectively, the Cronbach  $\alpha$ 's were as follows: Vigor (9 items),  $\alpha = 0,68$  and  $0,80$ ; Dedication (8 items),  $\alpha = 0,91$  (both samples); Absorption (7 items),  $\alpha = 0,73$  and  $0,75$ . In the student's sample, the value of  $\alpha$  could be improved for Vigour when three items were eliminated ( $\alpha = 0,78$ ). The three scales are moderately to strongly related (mean  $r = 0,63$  in Sample 1 and mean  $r = 0,70$  in Sample 2). Also, the fit of the hypothesised three-factor model to the data is superior to a one-factor solution (Maslach et al., 2001; Schaufeli et al., 2002).

Only one study (Storm & Rothmann, in press) regarding the internal consistency, factorial validity, structural equivalence and bias of the UWES was found in South Africa. Storm and

Rothmann (in press) tested the full hypothesised 3-factor model consisting of all 17 items. Subsequently the model was modified, followed by a test of a 1-factor model of engagement. Table 2 presents fit statistics for the various models.

Table 2  
*Goodness-of-Fit Statistics for the Hypothesised UWES Models*

Model	$\chi^2$	$\chi^2/df$	GFI	AGFI	PGFI	NFI	TLI	CFI	RMSEA
Model 1 (3-factor)	1978,79	17,06	0,90	0,87	0,68	0,92	0,91	0,92	0,08
Model 2 (3-factor)	1130,28	13,30	0,94	0,91	0,66	0,94	0,93	0,95	0,07
Model 1 (1-factor)	2250,37	18,91	0,87	0,85	0,68	0,90	0,90	0,91	0,09
Model 2 (Factor 2)	777,52	12,34	0,95	0,93	0,66	0,96	0,95	0,96	0,06

The SEM analyses showed that the 3-factor solution was not admissible. Furthermore, the statistically significant  $\chi^2$  value of 1978,79 ( $df = 116$ ;  $p = 0,00$ ) revealed a poor overall fit of the originally hypothesised 3-factor UWES model. The hypothesised model (Model 1) was also not that good from a practical perspective. The PGFI value of lower than 0,80, NFI, TLI and CFI values of lower than 0,95 and the RMSEA value of higher than 0,05 indicated failure to confirm the hypothesised model. To pinpoint possible areas of misfit, modification indexes were examined. Standardised residual values were interpreted. In essence, these values represent estimates of the number of standard deviations the observed residuals are from the zero residuals that would exist if model fit were perfect (Byrne, 2001).

Given rejection of the initially postulated 3-factor model, the focus shifted from model test to model development (exploratory factor analysis). Considering the high standardised residuals of two items, it was decided to re-specify the model with Item 4 and Item 14 deleted. Modification indexes (MI) were also considered to pinpoint areas of misspecification in the model. The constrained parameters exhibiting the highest degree of misfit lay in the error covariance matrix and represent a correlated error between Item 8 and Item 9 ( $MI = 117,10$ ), as well as between Item 15 and Item 16 ( $MI = 125,23$ ). Compared with MI values for all other error covariance parameters, these values were exceptionally high and clearly in need of re-specification. Based on the modification indexes and on theoretical considerations, Model 1 was re-specified with these parameters freely estimated. Following Byrne (2001), errors of two item pairs (i.e. VI8-AB9; VI15-AB16) were allowed to correlate. All subsequent analyses are now based on the 15-item revision, which is labelled here as 'Model 2'. The fit statistics in Table 2 indicate a better fit for the re-specified model. Although the  $\chi^2$  value ( $df = 85$ ;  $p = 0,00$ ) is still high, it is considerably lower than those in Model 1. All the other fit statistics indicate acceptable fit of the measurement model to the data, although the RMSEA value was still a bit high. Since this model fit was satisfactory and the results agreed with the theoretical assumptions underlying the structure of the UWES according to Schaufeli et al. (2002), no further modifications of the model were deemed necessary. The correlations between the three engagement dimensions were high. VI and DE show the highest correlation of 0,97, followed by VI and AB with a correlation of 0,96, and DE and AB with a correlation of 0,90.

Following Schaufeli et al. (2002), a unidimensional model was assessed as well. This model assumes that all 17 UWES items load on one single factor. Table 2 presents fit statistics for the test of the original one-factor model. The statistically significant  $\chi^2$  value of 2250,37 ( $df = 119$ ;  $p = 0,00$ ) revealed a poor overall fit of the originally hypothesised UWES model.

Furthermore, the PGFI value of lower than 0,80, NFI, TLI and CFI values of lower than 0,95 and a high RMSEA value of 0,09 are indicative of failure to confirm the hypothesised model. Based on the high standardised residuals, it was decided to re-specify the 1-factor model with four items deleted (Items 3, 11, 15 and 16). After reviewing the modification indexes, it was decided that the model fit might be further improved by allowing error terms to correlate between Item 4 and Item 5 and between Item 8 and Item 9. In summary, this model was based on 13 of the original 17 items and included correlated errors. The fit statistics in Table 2 indicate a good fit for the re-specified model. Although the  $\chi^2$  value ( $df = 63; p = 0,00$ ) is still high, it is considerably lower than those in Model 1. All the other fit statistics indicate excellent fit of the measurement model to the data. Since this model fit was satisfactory, no further modifications of the model were considered.

Cronbach alpha coefficients of the scales were acceptable compared to the guideline of  $\alpha > 0,70$  (Nunnally & Bernstein, 1994). Alpha coefficients of 0,78 (Vigour), 0,89 (Dedication) and 0,78 (Absorption) were found for the UWES.

Next, exploratory factor analysis and target (Procrustean) rotation were used to determine the construct equivalence of the UWES. They also conducted an exploratory factor analysis and target (Procrustean) rotation were used to determine construct equivalence of the UWES. The factor loadings of race groups were rotated to one target group. After target rotation had been carried out, factorial agreement was estimated using Tucker's coefficient of agreement (Tucker's phi). The Tucker's phi-coefficients for the four race groups on the 3-factor structure were all higher than the cut-off score of 0,95. Therefore, it was deduced that the three factors of the UWES were equivalent for the four race groups. Subsequently bias analyses were carried out on the items of the UWES. No significant eta square values were obtained, indicating that the means of the race groups for the different score levels did not differ from zero in a systematic way. It is clear that the UWES shows no uniform or non-uniform bias for different race groups in the SAPS.

## Causes

Based on the work of Ryan and Deci (2000) it could be argued that social-contextual events (e.g., feedback, communications, and rewards) would affect engagement. Ryan and Deci found that optimal challenges, effectance-promoting feedback, and freedom from demeaning evaluations facilitate intrinsic motivation (which seems to be related to engagement). Positive performance feedback enhances intrinsic motivation, whereas negative performance feedback diminishes it, although it seems that these effects are mediated by perceived competence. Furthermore, feelings of competence will not enhance intrinsic motivation unless accompanied by a sense of autonomy or, in attributional terms, by an internal perceived locus of control. Therefore, people must not only experience competence or efficacy, they must also experience their behaviour as self-determined for intrinsic motivation to be in evidence. This requires either immediate contextual supports for autonomy and competence or abiding inner resources that are typically the result of prior developmental supports for perceived autonomy and competence.

According to Schaufeli and Bakker (2002), job demands (e.g. physical demands, time pressure and shift work) are associated with exhaustion, whereas lacking job resources (e.g. feedback, control, participation in decision making and supervisory support) are associated with disengagement.

In a study in the SAPS, Storm and Rothmann (in press) found that low job demands, active coping strategies, a tendency not to cope through avoidance, coping by seeking emotional support and by turning to religion correlated with work engagement ( $r_{\text{canon}} = 0,44$ ). Schaufeli and Bakker (2002) found that job resources exclusively predict work engagement, while both job demands and a lack of job resources predicted burnout.

### **Engagement research**

As is the case with burnout, there are also many unanswered questions regarding burnout. Only one empirical study was up to now conducted in South Africa (Storm & Rothmann, in press), Storm and Rothmann (in press) utilised SEM to analyse the factorial validity of the UWES. The factorial validity of the UWES as well as factorial invariance for different occupational groups in South Africa should be researched (Byrne, 1991). Furthermore, multiculturalism, globalisation (which lead to an increasing number of expatriates) demand that research be conducted regarding the equivalence of factors and item bias of the UWES in multicultural and cross-cultural work settings. Research is needed regarding work engagement and causes thereof in all professions and occupational groups in South Africa. Research should also be conducted regarding the factors that facilitate work engagement.

### **FACTORS THAT ADVANCE FORTIGENESIS**

From a fortigenic paradigm (Strümpfer, 1995) psychological strengths create tendencies contrary to those that produce burnout or favourable to work engagement. These strengths include as sense of coherence (Antonovsky, 1987), self-efficacy (Bandura, 1977), locus of control (Rotter, 1966) and positive affect.

### **Meaningfulness**

According to Strümpfer (2001), employees need to experience meaningfulness at work. Cherniss (1995, p. 185) also links burnout to the quest for meaning: "Burnout is a response to stress, but the root cause isn't stress (or suffering). It's the lack of meaning for suffering, the loss of moral purpose." Therefore, burnout is not regarded as a disease of overcommitment. For those prone to burnout, commitment to their work is egoistic. The commitment of employees who do not get burnout (regardless of detrimental circumstances) is based on a belief in something greater than themselves. Our energy becomes fully available for anything to which we are highly committed, and we often feel more energetic for having done it. According to Frankl (1967), we can find meaning in activities done for the sake of a cause, for the sake of a loved one or for the sake of a higher being. Maslach and Leiter (1997, p. 17) regard burnout as an "index of dislocation between what people are and what they have to do. It represents an erosion of values, dignity, spirit and will." Strümpfer (2001) argues that meaningfulness relates to dedication as dimension of work engagement. Various job content experiences can act as "meaning-destroying" variables. "Meaning-providing" variables include intrinsic goals.

Sense of coherence is an important concept in this regard. Antonovsky (1991) defined the concept of sense of coherence as "A global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and

engagement". The definition of sense of coherence includes three dimensions which represent the concept, namely comprehensibility, manageability and meaningfulness (Antonovsky, 1987).

- Comprehensibility refers to the extent to which one perceives stimuli from the internal and external environment as information that is ordered, structured and consistent. The stimuli are perceived as comprehensible and make sense on a cognitive level.
- Manageability refers to the extent to which individuals experience events in life as situations that are endurable or manageable and can even be seen as new challenges.
- Meaningfulness refers to the extent to which one feels that life is making sense on an emotional and not just on a cognitive level.

Individuals with a high level of burnout would be expected to have a weak sense of coherence. Basson and Rothmann (2002) and Levert, Lucas and Ortlepp (2000) showed that sense of coherence is significantly related to emotional exhaustion, depersonalisation and personal accomplishment. In two studies on university staff and on university students, Wissing, de Waal and de Beer (1992) reported correlations of -0,50 to -0,64 between the Pines, Aronson and Kafry (1981) Tedium Measure of burnout and the three subscales of the SOC scale. Rothmann and Jansen Van Vuuren (in press) conducted a study with 64 senior managers in a manufacturing industry. Senior managers who had a strong sense of coherence, high generalised self-efficacy and an internal locus of control tended to experience lower levels of burnout compared with those who lack psychological strengths. Turning-to-Religion was coping strategy was associated with emotional exhaustion and cynicism. They found that psychological strengths (sense of coherence, self-efficacy and an internal locus of control) were related to constructive coping-strategies such as problem-solving and positive reinterpretation.

Rothmann, Jackson, Kruger and Veldman (in press) showed that a combination of a weak sense of coherence, high job demands and a lack of organisational support were associated with all three components of burnout. It seems likely that a strong sense of coherence could provide protection against burnout because it starts developing early in life outside the work environment, and burnout (if it does occur) only after an individual has been employed for some length of time (Strümpfer, 2001). According to Hobfoll (2001), burnout results when individuals fail to acquire sufficient resources. Two interpretations of the relation between a weak sense of coherence and burnout could be made. Firstly, individuals with better and more resources are less vulnerable to resource loss and more inclined to gain better resources. Conversely, those with fewer resources are more vulnerable to resource loss and are less able to resource gain. Sense of coherence is regarded as a broad-band resource, while burnout could be the result of a lack of resources. Secondly, it is possible that the sense of coherence of individuals weakens because of burnout. A tentative conclusion is that sense of coherence, which is regarded as a "meaning-providing variable" (Strümpfer, 2001), may assist in the warding-off of burnout, in recovering from it, as well as probably to strengthen engagement inclinations. Individuals with a strong sense of coherence could also experience burnout but will, in the long-term, probably benefit from even that. They are likely to use the temporary condition of anguish as an opportunity for growth: for resolving pre-existing and present problems, for reorganising their life and work circumstances, and for going forward with newly discovered skills and perspectives on self and life (Strümpfer, 2001).

## **Generalised self-efficacy**

Generalised self-efficacy is described as a general, stable cognition (trait) that individuals hold and carry with them and that reflects the expectation that they possess the ability to perform tasks successfully in a variety of achievement situations. The concept of self-efficacy was formulated and developed by Albert Bandura (Antonovsky 1991). According to Wood, Bandura and Bailey (1990) and Judge, Locke and Durham (1997) self-efficacy is an individual's belief or confidence in his or her abilities to deal with specific demands through applying his or her own motivation, cognitive resources and specific actions. Self-efficacy does not have anything to do with an individual's real abilities or skills to deal with challenges, but rather with an individual's perception of his ability to deal successfully with any challenge.

Bandura (1977) is of the opinion that an individual's perception of his or her ability to cope with the demands of a specific challenge the determining factor is for instituting coping behaviour. Therefore, it is generally accepted that individuals with a strong self-efficacy experience lower levels of stress as they approach any challenge with the belief that they will be able to cope successfully with it. People with a strong developed self-efficacy are therefore less susceptible to stress and consequently to burnout (Eden & Zuk, 1995). Frequent situation-specific experiences of personal success across time and situations give rise to generalised self-efficacy (Gardner & Pierce, 1998). Malan and Rothmann (in press) found 'n practical significant relationship between generalised self-efficacy and personal accomplishment ( $r > 0,50$ ) and generalised self-efficacy and cynicism. Therefore, it seems that low self-efficacy could be related to high levels of burnout.

## **Locus of control**

Rotter (1966) proposed the concept of locus of control as the perception by the individual of his or her ability to exercise control over the environment. Those characterised by an internal locus of control believe they have control over their environment and their personal successes, whereas those with an external locus of control view their lives as controlled by external factors such as chance or powerful others. There is some preliminary evidence that an external locus of control is associated with burnout among females working in human services (Brookings, Bolton, Brown & McEvoy, 1985). Compared with internals, externals are more emotionally exhausted, depersonalised and experience reduced feelings of personal accomplishment (Schaufeli & Enzmann, 1998). In a recent review of eleven studies, Glass and McKnight (1996) showed that external locus of control explains about 10% of the variance of emotional exhaustion and about 5% of depersonalisation and reduced personal accomplishment.

## **Positive affect**

Russel en Carroll (1999, p. 4) define affect as "...genuine subjective feelings and moods, rather than thoughts about specific objects or events". Two types of affect are distinguished: (1) emotions or feelings which change quickly, which are intense and are related to a specific event; (2) moods, which change slowly, have a low or moderate intensity and which are not necessarily related to specific events (Parkinson, Totterdell, Briner & Reynolds, 1996). A third type could be added, namely affective dispositions in the sense of stable personality traits (Tellegen, 1985). The focus is here on positive moods related to the global work situation. Mood at work refers to affective states that are encountered on the job. Mood at

work is pervasive in that it is not focused on any particular object, event, individual or behavior. Moods do not demand complete attentions nor do they necessarily interrupt ongoing thought processes and behaviors. Rather, moods provide the affective coloring for day-to-day events (George & Brief, 1992, p. 314). Russell en Barrett (1999) showed two dimensions in structural models of self-reported affect, namely pleasure-displeasure and mobilisation of energy.

The affective dimension of well-being consists of three aspects, namely positive affect (positive feelings that employees experience during work), job satisfaction (positive feelings that are experienced regarding work) and the level of energy. Schaufeli and Bakker (2001) regard Job satisfaction as a component of mood at work. Jayaratne (1993, p. 112) states that "Virtually all theories subscribe to the notion that 'satisfaction' is an affective state which is a function of an interaction between a person and his or her environment". Locke (1976, p. 1300) define job satisfaction as follows: "... a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". However, George and Brief (1992, p. 310) concluded that "...mood at work and job satisfaction are conceptually distinct and sufficiently non-overlapping to be considered distinct constructs, each worthy of investigation in its own right". George and Brief (1992, p. 310) states that: "...mood at work is distinguishable from the affective component of job satisfaction in that mood is concerned with affect at work rather than affect about or toward work, which probably has more cognitive underpinnings".

### **Coping**

One of the basic issues in the burnout domain concerns coping, or ways in which an individual can attempt to deal with job stressors to ward off aversive strains. Lazarus and Folkman (1984, p. 141) defined coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". In the literature (Rowe, 1997) high levels of burnout are associated with ineffective or withdrawal coping strategies and low degrees of burnout with constructive coping strategies (Schaufeli & Enzmann, 1998). Rowe (1997) also demonstrated the importance of teaching individuals with limited coping skills to alter the way in which they address problems. Individuals who are burned-out cope with stressful events in a rather passive, defensive way, whereas individuals who use confronting coping strategies experience less burnout (Schaufeli & Enzmann, 1998). Both confronting and avoiding coping share about 5-10% of the variance of emotional exhaustion and depersonalisation. With respect to personal accomplishment, confronting coping explains 15% of variance, whereas the relationship with avoiding coping is weaker. The use of a problem-focused strategy may trigger feelings of personal accomplishment, which could explain the relationship of confronting coping with personal accomplishment (Lee & Ashforth, 1996). According to Folkman and Moskowitz (2000), specific coping strategies could generate positive affect. These coping strategies include positive appraisal and problem-focused coping.

### **INTERVENTIONS**

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

- Finding meaningful work. A meaningful job helps professionals remain dedicated. It has several characteristics. Firstly, it must make a significant impact, e.g. in other people's lives. However, the individual must be able to see the significant impact of the job. Secondly, the job should provide intellectual challenge. Thirdly, the job must provide scope to experience change to prevent boredom. Fourthly, the individual should be able to cultivate his or her special interests in the job.
- Finding greater professional autonomy and support. Professionals 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. Professionals need both tangible and emotional support, including trust and confidence, recognition and feedback and active interest of the immediate manager. Furthermore, support for continued learning and stimulating colleagues are also valuable.
- Individual factors contributing to resilience. Challenging experiences prior to entering the profession, developing career insight early in the career, developing of organisational negotiation skills, realistic goals and expectations, actively pursuing personal development and striking a balance between work, family and leisure contribute to recovery from burnout.

Organisational development interventions in general and interventions to influence culture and values should be implemented to contribute to healthier work places. Furthermore, psycho-educational programmes should be developed and presented to combat burnout and to promote work engagement.

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 organisational-based strategies exist to tackle high job demands, such as job redesign, flexible work schedules, and goal setting. 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, but its direct effect on burnout is small. Hence, from a preventive point of view, decreasing job demands is to be preferred above increasing job resources.

If burnout exists, individual-based interventions to reduce burnout symptoms might be an avenue to proceed (see Schaufeli & Enzmann, 1998, pp. 146-168). Stress-management programmes that use a cognitive-behavioural approach are effective in reducing stress reactions, including burnout. Organisation-based programs should supplement such individual-based programmes in order to be effective in the long run (Schaufeli & Bakker, 2002).

The following aspects need to be considered in conducting intervention research in South Africa:

- The effects of individual and organisational interventions should be researched.
- Appropriate designs and acceptable sample sizes should be used when conducting research.
- Practical significance of findings should be computed in addition to statistical significance.

- Methods for defining and determining the clinical significance of treatment effects should be employed (Jacobson, Roberts, Berns & McGlinchey, 1999).
- Intervention mapping (Bartholomew, Parcel & Kok, 1998) should be used in planning, implementing and researching the effects of interventions.
- Different types of change (alpha, beta and gamma) should be considered when researching the effect of interventions (Vandenberg & Self, 1993).
- Both etiologic and prevention effectiveness studies should be conducted (Skov & Kristensen, 1996).

## CONCLUSION

The objective of this paper was to make a positive contribution to the work and health psychology. Until recently little research has been done regarding positive aspects of human behaviour in work context, while much attention has been paid to unhealthy and dysfunctional aspects. It is clear that the focus should change towards the strengths of human beings in the work context. Consequently, well-being should not just be regarded as the absence of illness or dysfunctional behaviour. Various coping resources and strategies could act as buffers against burnout and may promote work engagement.

Recently, the focus of burnout research expanded toward all types of professions and occupational groups. However, research regarding burnout and work engagement should be conducted in a range of professions and occupational groups. Examples of professions and occupational groups in South Africa that should be targeted include educators (on primary, secondary and tertiary levels), health personnel (medical practitioners, pharmacists, nurses and other health personnel), information technology practitioners, engineers, managers, civil service personnel, employees in local governments, counsellors (professional and non-professional). Norms for professions, occupational groups and organisations could be developed and comparisons of these groups could be made. Target groups for intervention research should be identified from these studies.

One of the problems in assessing the burnout and work engagement levels of employees is the lack of validated cut-off points. Because of a lack of South African norms for the MBI and UWES, it is difficult to identify burnout and work engagement at an early stage. A major problem with the MBI is the lack of clinically validated cut-off points. One solution for this problem is to administer the MBI on individuals who show the clinical profile of burnout to validate the inventory. Because burnout is not included in the DSM IV classification, individuals who suffer from neurasthenia could be used to determine the cut-off points. Neurasthenia is a neurosis characterised by chronic exhaustion, physical complaints and a lack of concentration.

From a fortigenic perspective research is needed to standardise measuring instruments which could be used for measuring burnout (including all the versions of the MBI) as well as work engagement (including the UWES). Furthermore, measuring instruments of psychological strengths on cognitive, affective and behavioural levels should be developed and validated. Studies are also necessary to determine the psychometric properties of the above-mentioned measuring instruments. Because of the inherent problems associated with measurement in multi-cultural contexts analyses should not only focus on internal consistency, test-retest reliability and construct validity, but also on bias and equivalence. Large samples which are taken randomly from the relevant strata should be used to enable researchers to use advance statistics such as exploratory factor analyses with target rotations, analysis of variance to

detect item bias, confirmatory factor analyses and structural equation modeling. More research is needed regarding the conceptualisation and measurement of work engagement. Various problems are experienced with the current items of the UWES, such as difficult item wording and positive response sets.

The dynamics underlying psychological strengths which could create tendencies contrary to those that produce burnout or favourable to work engagement should be conducted. Causal models utilising longitudinal research designs should be used for this purpose. Research is also needed regarding the causes, effects and underlying processes of burnout and work engagement. For example, the Job Demand – Control Model (Karasek & Theorell, 1990) could be used to predict that burnout is related to the strain-axis and work engagement to the active learning-axis (Demerouti, Bakker, Janssen Schaufeli, in press). Also, the Job-Demand - Resources Model could be used to test to which extent job demands are related to the affective dimension of well-being (burnout) and job resources to the cognitive dimension (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). This could then indicate two types of processes:

- High job demands lead to a negative evaluation of work, which results in health complaints because the employee is exhausted.
- The presence of material and immaterial resources lead to stronger identification with work, and better performance because the employee is motivated.

In studying work engagement, researchers should consider using positively phrased rather than negatively phrased items to measure job resources. Furthermore, research is needed to determine whether psychological strengths and work engagement contribute to fewer sick leaves, productivity, job satisfaction and quality of goods and services.

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