



Series: HEALTH PSYCHOLOGY AND PSYCHOSOMATIC MEDICINE

Series Editor: ALEXANDER-STAMATIOU ANTONIOU

Promoting Work Well-being:
Professional Burnout &
Occupational Stress

Edited by: Alexander-Stamatios Antoniou

VOLUME C



Science is ever-changing

New research accomplishments and clinical experience has expanded the field of medical knowledge and represent an ongoing process. With this in mind, it is imperative that we make the appropriate changes as far as it concerns the course of action, in the treatment of our patients.

The content of this textbook reflects all the most recent knowledge and internationally accepted techniques as they are analyzed by experienced authors in the field, in each chapter.

Nevertheless, the authors and the editor acknowledge that every medical opinion is under the limitations of the time frame that this book was created, as well as possible mistakes that might have escaped their attention.

Readers of this textbook are encouraged to keep that in mind, while at the same time we hope that the information included will become a starting point for young colleagues or the more experienced ones, for new research projects, clinical trials or maybe an updated version of the book in the near future.

BROKEN HILL PUBLISHERS LTD

16 PRINCESS DE TYRA STR, KARANTOKIS BUILDING

1642 NICOSIA, CYPRUS

e-mail: info@brokenhill.com.cy

<http://www.brokenhill.com.cy>

ISBN: 978-9963-716-74-6



**Promoting Work Well-being:
Professional Burnout & Occupational Stress**

Copyright © 2015 by Broken Hill Publishers LTD. All rights reserved. Printed in Greece. Except as permitted under the Greek Laws, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

Professional Burnout Syndrome: An Overview

Chapter

1

Alexander-Stamatios Antoniou

Introduction and historical background

Contemporary constantly changing society and organisational environments have given rise to the emergence of a variety of stresses and stressors that have been placed upon the individual, and have very damaging effects. The extent to which individuals are satisfied by their work has recently drawn research efforts. Occupational stress has been recognized as a significant organisational hazard, which affects both the individual and the organisation he/she works in. It has been long recognised that occupational stress can result to a variety of unpleasant conditions and outcomes, such as absenteeism, lowered morale, lowered self esteem, ill health, turnover and, most importantly, burnout (Sauter & Murphy, 1995; Sutherland & Cooper, 1990). Burnout constitutes a common problem amongst employees (Maslach, Schaufeli, & Leiter, 2001; Warr, 1990; Warr, 1996) and there is an ever-increasing number of employees who report suffering from it (Schaufeli, 1995; Vandenberghe & Huberman, 1999).

Carson and Kuipers (1998) have argued that Occupational Health Psychology and, in particular, stress research must be based upon a theoretical model which should include the identification of external stressors, moderators and stress outcomes. External stressors constitute occupation specific stressors and stress which is associated with life events. On the other hand, moderators are a wide variety of personal protectors that can be helpful towards the reduction of occupational stress. These personal protectors include good coping skills, personal control, good social support networks,

etc. thus, stress outcomes can be either positive or negative. Positive outcomes are considered to be good physical and mental health and high levels of job satisfaction, while in contrast, negative outcomes include feelings of job dissatisfaction, poor physical and mental health and burnout (Hannigan, Edwards & Burnard, 2004).

Burnout must be distinguished from job stress and be considered as a kind of job stress. Schaufeli and Buunk (1996) and Innstrand, Espnes and Mykletton (2004), maintained that burnout is different from work stress as it refers to the results of prolonged stress, which are characterised by specific attitudes, symptomatology, and "it seems partly to be the result of a high initial level of motivation" (Innstrand, Espnes and Mykletton, 2004, p.119). Burnout has been long and widely acknowledged as an important issue amongst a wide variety of profession, principally the people helping professions, from teachers, doctors, nurses, social workers, to criminal justice professionals (Maslach & Goldberg, 1998; Maslach & Leiter, 1997, 1999). Antoniou (1999), in a review of personal traits and professional burnout in health professionals, has stressed that healthcare professionals have more often the tendency of devotion towards the client, are more individual-oriented people and have more idealistic views about their work.

Although research on burnout was first introduced as a result of the work conducted in the field of arousal, emotion and the way individuals cope with such conditions (Maslach & Jackson, 1987), the term burnout had already been introduced earlier by Freudenberger (1974). Primarily, research efforts focused on the healthcare professions, due to the realisation that there a certain and, furthermore, notable amount of emotional stress was inherent in these occupations, which resulted in very harmful effects. Nevertheless, extensive work conducted in the field of burnout suggested that the emotional strain experienced as burnout was anything but unique to these professions and, further, that there is something about "people work" (Cordes & Dougherty, 1993) that rises the possibilities of causing burnout.

During the early stages of research developments in the field of burnout, researchers focused on combining early acquired information into a working hypothesis and designed studies which were based on case studies, descriptive reports and narratives, that lacked substantial theoretical foundations and empirical support (Pines & Maslach, 1980). At that period, definitions of burnout included concepts of loss of commitment at work, loss of creativity, the response to chronic stress resulting from striving ones way to the top, and a syndrome which consists of inappropriate attitudes towards the self and the client, which was often associated with physical and emotional symptoms. Definitions also included the concepts of emotional exhaustion from chronic stress (Maslach & Jackson, 1981) and a stage of tension produced

by continuous frustration of personal needs at the work setting (Sassali, 1979). Despite the growing interest about burnout, there was still a great disagreement about what burnout really was.

Einsiedel and Tully (1981) maintained that conceptual and operational definitions of burnout were rare due to that there were no previous research to provide such information, because more attention had been drawn on the practical aspects of burnout. McGrath (1976) and later Schuler (1991) argued that work stress, that subsumed multiple work stress related problems including burnout, constitutes a situation when an individual is confronted "with an opportunity, constraint, or demand on being/having/doing what one desires and for which resolution is perceived to have uncertainty but which will lead to important outcomes" (Cordes & Dougherty, 1993, p. 625). All definitions of the burnout process (Bendow, 1998; Iacovides et al., 2003; Kuremyr et al., 1994; Lee & Ashforth, 1990; Farber, 1983; Pines, 1983), all stress the fact that experience burnout in organisational setting occurs when emotionally demanding situations arise, and that, further, it is especially common in human services employees who have to deal with demanding and troubled clients on a daily basis.

It was not before the late 1970's and early 1980's, when systematic empirical studies were conducted about burnout (Iwaninski & Schwab, 1981; Maslach & Jackson, 1981). Burnout was distinguished as a distinct type of stress due to the number of different work related stressors it included (Ganster & Schaubroeck, 1991; Shirom, 1989), and the concept of burnout was conceptualised and, finally, clearly defined, while sound psychometric measures and instruments were developed, the most widely used of which is known as the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981; 1987; Maslach et al., 2001). Today, the most well accepted definition of burnout is the one provided by Maslach and colleagues (2001):

"Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism and inefficacy" (p. 337).

Models of burnout

Meier's model of burnout

Social competence models (Harrison, 1983), Psychoanalytic models (Fischer, 1983) and Cybernetic models (Heifetz & Bersani, 1983) all have been applied in research in order to clarify the nature of burnout. In an attempt to overcome the disa-

greement of the early period of the theorisation of burnout and whether this resides in the individual or the organisation, Meier (1983) suggested a four-factor model, developed from empirically supported theories. Drawn upon interactionist positions, it emphasised both internal and external contexts of burnout, and furthermore, that burnout is a subject to both individual and environmental influences. This model emphasised the cognitive and behavioural aspects and complemented the emphasis given on affect by Maslach (1981), but furthermore, treats emotional exhaustion as one element signalling the onset of burnout and not as an element of definition.

In this model, burnout constitutes a state which is the result of work experiences, in which the individual has low expectations in relation to the presence of positive reinforcement, and high expectations regarding the presence of punishment (reinforcement expectations), low expectations in relation to particular ways of controlling the reinforces (outcome expectations), low expectations regarding his/her personal competence to control the reinforcement (efficacy expectations), and finally, the way the individual processes the information within contexts, which, in turn, determines how these expectations are learned and changed (contextual processing).

According to Meier, reinforcement expectations constitute descriptions of whether or not an individual's certain work outcomes will meet his/her implicit and explicit goals, which in turn, depend upon the meaning and value these have for the individual. Also a key feature to Dawis and Lofquist's (1978) theory of work adjustment, reinforcement expectations are important features to the following procedure: an individual attempts to achieve and, further, maintain correspondence with their work environment. This correspondence occurs when the individual's needs are met by the reinforcement in the work environment and when the work environment's demands are met by the individual's subsequent work performance. Thus, low expectations for reinforcement can lead to burnout. Client-centred professionals are susceptible to burnout because attention is primarily drawn upon the needs of the client, while the needs of the care-provider are largely ignored in the process (Pines et al., 1981).

The behaviours that are required in order to produce those outcomes are called outcome expectations and are based on two theories: on the one hand, the theory of locus of control (Rotter, 1966), which refers to generalised expectations about reinforcement and, on the other hand, the notion of learned helplessness (Seligman, 1975). In more detail, locus of control refers to an individual's expectations of rewards and punishments to be residing in one's personal control through his/her characteristics and abilities (internal locus of control) or in the control of external agents

(external locus of control). The notion of learned helplessness refers to the repeated learning experience that work outcomes are irrelevant and non-contingent from an individual's actions. Moreover, notion of learned helplessness has been identified in a number of studies to be connected with depression (Miller & Norman, 1979; Weiskopf, 1980) and burnout (Cherniss, 1980).

Self efficacy constitutes the individual's expectations of being competent enough to perform the productive behaviour assigned for, which will result, ultimately, to the desired outcomes (Bandura, 1977). Efficacy expectations strongly effect the activities chosen to be performed by the individual as well as for how long the individual will persist despite obstacles met in the way. Personal success and achievement have been identified as factors affecting coping with potential burnout (Pines et al., 1981), and the loss of self confidence has been identified in research as a characteristic of the burned-out individual (Casas, Furlong & Castillo, 1980). Cherniss (1980) found that amongst new professionals, self doubt about their personal competence to perform assigned tasks were on the top of their primary concerns.

Finally, contextual processing is an attempt to account for how individuals learn, change and maintain their expectations through information processing within particular contexts. This concept is heavily based on Bandura's notion that efficacy expectations are processed cognitively. The author suggested that efficacy of information, which is contained in environmental events, is filtered by the individual's cognitive processing of those events, and that is, subsequently the reason behind why two different individuals perceive the same situation of success differently. Memory constitutes an internal factor which influences cognitive processing. Styles of learning, personal beliefs and personal scripts and schemata (Pitz, 1982) all influence memory. Then, what people remember about their work affects what they notice and what they expect from their work. For instance, personal beliefs and memory enable us to reconstruct what has happened in the past and expect what will happen in the future.

Meier's burnout model predicts that the subjective experience of burnout is influenced by the reinforcement, outcome and efficacy expectations of the individual through the repeated learning experience of his/her work. Although, this is a model that comprises four different elements, it is still raising concerns about how these four elements interrelate. While the author maintains that reinforcement expectations, outcome expectations, and efficacy expectations are learned and maintained by the individual's cognitive processing of work events in internal and external contexts, there is little theoretical and empirical evidence to support whether and how these expectations influence each other.

Maslach and colleagues model of burnout

Today, the most wide and commonly accepted definition regarding burnout is the one based on the three-component model suggested by Maslach and colleagues (Maslach, 1982; Maslach & Jackson, 1981; Pines & Maslach, 1980). The three components of this model are emotional exhaustion, depersonalisation and personal accomplishment. The first component of this model, emotional exhaustion, is characterised by feelings of consumed emotional resources and by lack of energy, which very often coexist with tension and frustration, as workers feel emotionally unable to provide their clients and themselves as much as they have given in the past, or they feel that they are unable to be as responsible to their clients as they have previously been. Maslach (1982) originally suggested that feelings of emotional exhaustion appear primarily when the individual's emotional resources start to drain.

Depersonalisation, the second component of this model and the answer to emotional exhaustion, constitutes the shift from treating clients as people to treating clients as objects. Worker who experience feelings of depersonalisation become emotionally detached from co-workers, the organisation and their clients, and they are often cynical towards situations within the work place and towards people. The symptoms of depersonalisation include, among others, intellectualisation, withdrawal and abstract language. Authors have argued (Cordes & Dougherty, 1993), that depersonalisation is very likely to be used as a defence mechanism, so that the individual can distance his/herself and limit their involvement with others. The final component is diminished personal accomplishment, which is characterised by the individual's tendency to negatively evaluate him/herself. Feelings of successful achievements and work competence start to diminish, while lack of work progress perceptions gain ground.

However, it must be stated that there has been some scepticism too about whether depersonalisation is a valid construct of burnout. Garden (1987) argued that depersonalisation is not a valid dimension when non-human services occupations are under examination. The author argued that not only depersonalisation does not apply to non-human services occupations, but also that it is a human-service type specific construct, such as the Jungian psychological type. In conclusion, the author maintained that the concept of depersonalisation is both not applicable in all situations but also not applicable across all individuals.

Maslach (1978; 1982) maintained that the sequencing of the three-component model of burnout works in a very specific way. As chronic demands start to drain the individual's emotional energy and emotional resources, feelings of emotional exhaustion appear. Depersonalisation then comes as an answer, as a defence mecha-

nism that operates between the work demands and the individual's personal demands. The individual then makes the realisation that there has been a shift from his/her optimistic attitudes towards his/her work to his/her current attitudes to work, feeling that they are inadequate to relate both to people and to their performance at work. Support for this sequence has been provided from research finding from observations, interviews and surveys (Leiter & Maslach, 1988).

Golembiewski and Munzenrider (1984) also maintained that the process of burnout constitutes a sequence. The authors maintained that in order to have feelings of diminished personal accomplishment a significant amount of depersonalisation is needed and necessary. Furthermore, in order to have high levels of emotional exhaustion a significant amount of reduced personal accomplishment feelings are necessary. The authors divided the scale into high- and low- groups, and generated eight (8) phases, based on the conceptualisation that the effect of each component, hypothetically, depends on its place in the sequence.

This model has been used in a wide variety of studies, ranging from middle-managers in the private and public sector (Cahoon & Rowney, 1989), teachers (Burke & Greenglass, 1989), and police officers (Burke, Shearer & Deszca, 1984). Cordes and Dougherty (1993) argued that these studies face problems due to their cross-sectional research design to draw conclusions regarding the process of burnout. Nevertheless, other research findings (Lee & Ashforth, 1993) only found partial support for this sequence.

Intersubjectivity model of burnout (Lacanian perspective)

There is little research in literature to be found which attempts to systematically examine the connection between burnout and typical patterns of perceptions of interpersonal relationships. In this respect, an interesting model of burnout has been developed within the gulfs of the psychoanalytic theory; the Intersubjectivity model, by Lacan (1977). When Lacan was developing his theory of social relations, he often referred to the "master-slave" relationship, which constitutes a paradigm for mapping the reasoning of Intersubjectivity. Lacan argues that human beings do not have an inherent identity, but that we rather in order to acquire an identity we must appeal to someone else, through the entrance into a relationship with another person.

Thus, acquiring an identity involves a fundamental process; the recognition of the master-slave relationship. This relationship is primordially based on a mutual symbolic recognition (Vanheule, Lievrouw, & Verhaeghe, 2003). The master-slave relationship can only exist when two people mutually decide to accept one the position of the

"master" and the other the position of the "slave". This mutual recognition is of extreme importance, as it determines the identity of each party of the relationship, so that their relationship can be established and so that it can proceed. Such a symbolic recognition constitutes the foundation of Intersubjectivity.

The master/slave relationship is typified as a struggle for ultimate power. The "slave" will latter challenge the master's superiority and will rebel to the idea that the "master" unjustly takes advantage of his/her work. This results to a relationship between two individuals, who have opposing and, often, conflicting interests. Lacan (1988) calls this struggle an imaginary struggle, and it is based on the assumption that when the "slave" assumes that the "master" is the master and that he/she has something precious, the slave wants to have it. The creation of an image at this point is very essential; so essential as the realisation that this formation is coupled with misjudgement, as the relativity of each others' own assumption is not taken into account. The "slave" will then react in one of two ways: either he/she will submit to the "master", or he/she will choose to fight for freedom. In either case, the "slave" remains in a position in which the "master" is the dominant party. Thus, dreaming of or fighting for freedom, the "slave" once more reconfirms that he/she is oppressed by the "master", and therefore, maintains the existing balance of power from which he/she wants to escape (Lacan, 1993; 2001).

A possible way out from this vicious circle is by re-defining primordial symbolic position. This constitutes the return to the relation structure and opens more possibilities for testing different ways to relate with each other and to develop a meta-perspective of the structure of the relationship between the two. Interestingly, Lacan (2001) suggests that another position is possible; the "slave" can end his/her slavery by no longer defining the "master" as master. This redefinition then implies a redefinition of oneself. Applying Lacan's theory to the organisational theory and practice, it can be argued that similarly, as organisations are societies with network relations, each member acquires a position, and, consequently, an identity.

Vanheule, Lievrouw & Verhaeghe (2003), posed the question of whether people identify with the role outlined in the narrative scenario (imaginary reaction) or whether they establish their relationship according to what they want. The authors found that in a sample of 765 respondents who responded to a burnout questionnaire, Lacan's distinction allowed to identify and report the difference between high scorers of burnout, who mainly functioned in an imaginary way, and low scorers for burnout, who interacted both symbolically and imaginary, due to environmental factors which were found to have protective function.

Measures of burnout

Today, burnout is a concept well established in psychosocial research (Maslach & Leiter, 1997; Schaufeli & Enzmann, 1998) and is extremely well known metaphor across human services professionals. Since the term burnout was coined by Herbert Freudenberger in 1974, its measurement has been a controversial issue, basically, due to the vagueness of the concept (Schaufeli & van Dierendonck, 1993). Due to its inadequate measurement and poor definitions of the construct, burnout could not be empirically described. The vicious circle was broken by the growing academic and research acceptance of the Maslach Burnout Inventory (MBI).

The Maslach Burnout Inventory (MBI)

The most popular measurement of burnout, ever since it was first introduced in the academic and research circles are the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981). The scale was designed and administered to a wide range of human services professionals. The concept behind this measure was that human services professionals are frequently focused on their clients' current problems, and are, therefore, faced with emotionally charged situations. They have to deal with their clients' fears, anger and, often, despair.

Although well trained to manage such difficult situations, human service professionals do not always have the answer and the solution to such problems, fact which comes to add up to the frustration, despair and ambiguity of such situations. This produces chronic stress; as emotional resources start to drain, human services professional are no longer able to connect to their clients and their problems, as they feel emotionally exhausted. As they feel emotionally exhausted, they start developing negative and cynical attitudes towards their clients. Although, these two aspects of burnout seem to be related, a third aspect completes the model of burnout. Due to their emotional exhaustion and subsequent depersonalisation, human services professionals feel unhappy about themselves and the services they provide, while they negatively evaluate themselves in regards to their work.

Using the data collected from previous research using interviews and questionnaires (Jackson & Maslach, 1980; Maslach, 1976; 1979; Maslach & Jackson, 1981; 1984; Pines & Maslach, 1980), which were a valuable recourses of information about the attitudes and feelings which characterise the burned-out individual, numerous established scales were reviewed. The preliminary formation of the MBI, which included 47 items in a two-scale format, was administered to 605 health and human services professionals, from a wide variety of occupations, such as psychiatrists, psychologists, social workers, nurses, teachers, and more. A set of selection criteria

reduced the 47 items to 25 items. For the factor analysis, a 4 factor solution was used while three of them had eigenvalues greater than a unity, and were therefore considered as subscales of the MBI. The MBI was administered to a second, new sample of 420 individuals of the same professional background, in order to obtain confirmatory data for the actual pattern of factors. The two samples were combined, as the results of the factor analyses were very similar in both samples.

The Emotional Exhaustion subscale included nine (9) items describing feeling exhausted by one's work. The Depersonalisation subscale included five (5) items describing feelings of indifference and being unfeeling towards the recipients of one's service. The authors found moderate correlation between the two subscales, which was in accordance to theoretical expectations and, although separate entities, they were found to be related aspects of burnout. These findings were also supported by subsequent research findings (Lee & Ashforth, 1990; Wolpin et al., 1991). The Personal Accomplishment subscale included eight (8) items, which described personal feelings of achievement and competence. Lower mean scores in this subscale were related to higher degrees of burnout. The authors maintained that it is important to distinguish this subscale from the previous two and, furthermore, that it does not negatively affect the previous two. The factorial validity of the MBI has been confirmed in most samples. Some studies also suggest a two-dimensional structure of the MBI merging emotional exhaustion and depersonalisation into one-single factor (Green, Walkey & Taylor, 1991), called the "Core of Burnout Scale" (Green et al., 1991). Recent studies using confirmatory factor analysis with LISREL examining this scale's multidimensionality found that the three factor model is superior to alternative model.

Several recent studies using confirmatory factorial analysis have established that Maslach's three-component structure provides the best fit for understanding and measuring burnout (Enzmann, Schaufeli & Girault, 1995), even though items are loaded on more than one factor (Byrne, 1994; 2001). van Dierendonck, Schaufeli and Buunk (2001), in the Dutch version of the MBI, have removed items 12 and 16 and have reduced the MBI to 20 items, and found that the three component model was improved.

Although, burnout has been studied across different professions (Leiter & Schaufeli, 1996) and in different countries (Bakker, Demerouti & Schaufeli, 2002; Enzmann et al., 1995; Schutte et al., 2000) the MBI's psychometric properties and factorial structure was first investigated in Norway by Richardsen and Martinussen (2004). The authors administered the MBI to 1590 human service workers, working in seven different professional groups. They removed 12 and 16 and reduced the mo-

del to 20 items. They found that this three-factor structure of the MBI based on 20-items can be replicated across occupations and in the total sample of human services professionals in Norway.

Firth and colleagues (1986) differentiated between the three dimensions of the MBI and found weaker correlation between depersonalisation and personal accomplishment to depression than emotional exhaustion which was strongly correlated to depression. The discriminant validity of the scale was found to correlated with job satisfaction (Wolpin, Burke & Greenglass, 1991). Up to date research supports the discriminant validity between job satisfaction and burnout. Job satisfaction and burnout are both affective responses to an individual's work. Research which had employed an univariate approach (Bhana & Haffejee, 1996; Koeske & Kirk, 1994) have proven that burnout and job satisfaction have moderate association, although many researchers have stressed the need for using multivariate techniques in order to study this complex social situation.

Drawn upon Maslach and colleagues (2001) realisation that there is little empirical work focused on the discriminant validity of job satisfaction and burnout, Tsigilis, Koustelios and Togia (2004) maintained that there is a multivariate relationship between job satisfaction and burnout. The authors administered self-reported questionnaires to 135 academic librarians. In accordance with previous findings (Brewer & Clippard, 2002; Happel et al., 2003), found that job satisfaction was negatively associated with depersonalisation and emotional exhaustion, and positively associated with personal accomplishment. Furthermore, the authors established that burnout and job satisfaction represent distinct responses of individuals at work, even though they are highly correlated.

However, recently, Enzmann (2005) criticised the MBI arguing that there are problems of operationalisation to be considered. Drawn upon the fact that the MBI was not developed deductively by applying a validated theory of burnout, but instead the research was explanatory based on interviews, observations and previous questionnaire surveys, as stated previously, the author maintained that another line of items, apart from emotional exhaustion, depersonalisation and personal accomplishment, could actually result in the identification of different dimensions of burnout, fact which would have changed enormously the definition of burnout as well as the course of burnout research. The author argued that, firstly, the close relationship of the component of emotional exhaustion with time pressure indicates that emotional exhaustion is rather a general measure of general exhaustion or fatigue. The frequency of time pressure, as one of the strongest predictors of emotional exhaustion, constitutes a quantitative demand, whereas, the assumed primal

cause of burnout which is emotionally demanding situations constitute qualitative demands. Therefore, emotional exhaustion rather constitutes a symptom of prolonged fatigue rather than a symptom of burnout.

Moreover, secondly, problems do not concentrate on the emotional exhaustion component. The author went on and argued that the component of depersonalisation also faces problems. If the individual has developed a high degree of depersonalisation in its original sense, it is difficult then to assess cynical attitudes and emotional hardening. Furthermore, the fact that depersonalisation is in positive correlation with emotional exhaustion does not constitute a counter argument, as it is somehow obvious that a tired employee is more likely to treat clients in a callous way. The authors maintain that evaluating possible problems in the personal accomplishment component is more difficult, because on the one hand, this scale exhibits the weakest correlation with the other two subscales and other measures of stress used in stress and burnout research, and on the other hand, due to the fact that there are prepositions that personal accomplishment, as shown from research findings, is a valid and genuine dimension of burnout (Enzmann, 1995; Zapf et al., 2001).

The Burnout Measure (BM)

The second most widely used instrument to measure burnout is the originally denoted Tedium Measure, later called the Burnout Measure (Pines, Aronson & Kafry, 1981). Pines and Aronson (1988) have argued that burnout constitutes a "... state of physical, emotional and mental exhaustion caused by long term involvement in situations that are emotionally demanding" (p. 9). This definition of burnout resembles greatly the definition provided by Shirom (1989): "Burnout refers to a combination of physical fatigue, emotional exhaustion and cognitive weariness" (p.33). The BM is conceived as a one-dimension questionnaire, even though there are three types of exhaustion distinguished. Pines and Aronson's definition, contrary to Maslach's definition of burnout, does not restrict itself to the human services professions, but goes beyond to apply to a variety of professions.

It is indeed remarkable that there have only been a few studies carried out using both the MBI and the BM, with the exception of Schaufeli and van Dierendonck (1993), who carried out a research among a sample of 667 Dutch nurses in order to investigate the three aspects of the construct validity of the MBI and the BM. The authors concluded that the MBI constitutes a reliable scale and a multidimensional indicator of burnout, while the BM should be supplemented by further research in order to construct a scale that will measure the attitudinal component of burnout.

Nevertheless, burnout as measured by the BM is positively associated with the emotional exhaustion and the depersonalisation components of the MBI and somehow negatively correlated with the personal accomplishment component. Studies that have focused on the discriminant validity of burnout, using either of the two measures, have reported considerable relationship between burnout and depression in nurses (Firth et al., 1986).

The Copenhagen Burnout Inventory (CBI)

Kristensen and colleagues (2005), drawing upon the PUMA study (Danish acronym for Project on Burnout, Motivation and Job Satisfaction) (1997), a longitudinal study which aimed to study the prevalence, distribution, causes and consequences of burnout and the possible interventions that can be used to reduce it, chose not to use the MBI but instead developed a new scale for the measurement of burnout, the Copenhagen Burnout Inventory (CBI). The authors developed a number of arguments to prove that research calls for a more consistent type of measure. The authors maintained that Maslach and Jackson's definition restricts burnout to employees working in the human services sectors and that the MBI version can not be answered by an "unexposed group" (p.94).

Furthermore, the MBI manual proposes that the three dimensions of burnout should be measured independently as distinct and different dimensions, which means that there is one concept but three independent measures. Given each dimension has its own antecedents and consequences, fine correspondence between the concept and its measure cannot really exist. This is demonstrated by up to date research findings, which clearly demonstrate that the dimension of personal accomplishment largely develops independently from the other two dimensions of burnout (Schutte et al., 2000).

Moreover, the authors maintain that there is a mixture between a coping strategy, an individual state and an effect. Depersonalisation, as a coping strategy, should be analysed in line with other coping strategies and not as an independent entity. As regards to reduced personal accomplishment, the authors believe that it should be studied as one of the many consequences of work stress. Finally, another important argument posed by the authors, is that the MBI is "very American" and although it is translated in many languages and accurately, it cannot overcome the cultural and socio-economic differences found amongst cultures. The result of these arguments was the development of a new burnout questionnaire (CBI), which consisted of three sub-dimensions: personal burnout, work-related burnout and client-related burnout. The baseline study included 1914 participants from different types of work

places. The analysis indicated satisfactory reliability and validity for this instrument. The CBI has been translated in eight languages and research findings have indicated that it constitutes a valuable instrument in the study of burnout (Odagiri et al., 2004; Winnwood & Winefield, 2004).

Causes of burnout

Research indicates that burnout has important implications and dysfunctional consequences equally for the individual and the organisation. The wide variety of research conducted in the field of organisational burnout has shown that there are many factors which contribute and influence burnout in many different work settings (Burke & Greenglass, 1995; Lee & Ashforth, 1996). Following the grouping of Cordes & Dougherty (1993), the factors contributing to burnout will be grouped in three wide categories: job and role characteristics, organisational characteristics and personal characteristics.

Job and Role Characteristics

1. The role of interpersonal relationships

The role of interpersonal relationships and the role of the characteristics of the work have been systematically demonstrated in literature and research. Research efforts have focused on the helping professions such as health professions, teachers, social workers, specifically due to the frequency and the intensity of the direct interaction with the client, although Courmoyer (1988) suggested that the human services professionals have the tendency to underestimate the significance of distress which results from social work. Previous research have indicated that social work has an intrinsic risk and is susceptible to stress and burnout (Acker, 1999; Egan, 1993; Gilbar; 1998; Soderfeldt et al., 1995; Um & Harrison, 1998).

It has been suggested that social workers' motive behind their choice of profession, there is the need to be helpful, thus they can be easily led to extensive involvement with patients, which will, in turn, contribute to stress and burnout. Kurland & Salmon (1992) have argued that social workers have to deal with problems and pressures that reflect the very stresses of every day life. Reid and colleagues (1999), noted that such stresses were experienced by social workers undertaking Mental Health Act assessments. This was due to the conflict that arose for social workers between representing their patients' interests and acting as their advocates, and the responsibility of keeping and ensuring their patients' and others' safety.

van Yperen, Buunk and Schaufeli (1992) examined other important aspects of

such interactions in nurses. The authors found that the perceived imbalance in the patient-nurse relationship was responsible for producing high levels of burnout. The reasoning behind this imbalance was the perceived lowered levels of investment they received in return from their patients, which would be presented in the form of positive feedback, appreciation and health improvements; they reported higher levels of emotional exhaustion, as well as depersonalisation and diminished personal accomplishment. The effects of client interaction in nurse burnout has been widely researched in various areas such as AIDS and oncology (Catalan et al., 1996), child psychiatry (Hallberg, 1994), general nurses (Iacovides et al., 1997) and geriatrics (Duquette et al., 1995). Burnout is a field which has been under-researched (Sutherland & Cooper, 1991). Recently, Kilfedder, Power and Wells (2001), found that psychiatric nurses are more susceptible to burnout compared to other nursing groups, because they are constantly exposed to many of the known stresses, common to general nursing, as well as having to interact and deal with disturbed patients for long periods of time.

Health professional are regularly confronted who pose impossible demands, who resist change and who do not follow their advise (Cherniss, 1995). Being confronted with situations as such, the care-giver often feels that he/she put more into their relationships with patients than what they receive in return. Compared to other health care professionals, general practitioners experience high levels of burnout (Deckard, Melerko & Field, 1994; Kirwan & Armstrong, 1995; van Dierendonck et al., 1994; Hobbs, 1994), in a study which included 1100 general practitioners, found that 63% had suffered from at least some degree of aggression during the last year. The authors maintained that this is able to deplete general practitioners' emotional resources and that it will eventually lead to burnout. Rout, Cooper and Rout (1996) proved that the intensity of job demands was related to patient expectations and that patient contact had negative impact on general practitioners' mental health and job satisfaction.

Moreover, Baker et al. (2000) in a five year longitudinal study among a study of 207 participants, found that confrontation with demanding patient on daily basis over a long period of time, caused lack of reciprocity or inequity for general practitioners, and depleted emotional resources and caused burnout. These findings are consistent with previous research findings (Schaufeli et al., 1996; van Horn et al., 1999). However, Schaufeli and Enzmann (1998) reviewed 16 empirical studies that had employed the three burnout components as measured by the MBI-HSS (Maslach Burnout Inventory-Human Services Survey) as criteria and measures of client and job related stressors as predictors. The authors predicted that common job related stres-

sors should have a minor effect on burnout, in comparison with client interaction, dealing with difficult patients and confrontation with death. Contrary to their predictions, the authors found that job related stressors were more correlated with burnout in comparison to client related stressors. The authors concluded that:

"Hence, it seems that, on empirical grounds, the assertion that burnout is particularly related to emotionally charged interactions with clients has to be refuted" (p. 84).

2. Leadership styles

Duxbury et al. (1984) in a study of nursing staff, measured supervisory behaviour in relation to subordinate burnout. The authors found that there was significant correlation between burnout and consideration but they found no correlation with initiating structure. Burke, Shearer and Deszca (1984) found significant positive correlation between burnout and poor leadership. Golembiewski and colleagues (1986) found that people in higher organisational status presented lower levels of burnout compared to individuals of lower organisational status. The leadership style and the subordinate-superior interaction have also been investigated in literature as a source of occupational stress and burnout. Tyrannical management (petty tyranny) (Ashforth, 1994), can cause employees' low self esteem, frustration and high levels of work stress. A petty tyrant is the leader who imposes his/her power upon others. Petty tyranny is argued to be the product of individual propositions and situational facilitators.

Ashforth (1987) developed a measure in order to remedy shortcomings in literature on petty tyranny, conducting a study of 562 business students who rated their current or most recent manager on an 89-item scale. Forty-five (45) items were derived from already existing scales and forty-four (44) items were generated by the author, based on the responses of an earlier sample of respondents, who had indicated the qualities of a manager who "had lorded his/her power over them" (p. 757). The factor and item analysis suggested that the petty tyrant could be best described through six (6) components: (1) arbitrariness and self-aggrandizement, (2) belittling subordinates, (3) lack of consideration, (4) a forcing style of conflict resolution, (5) discouraging initiative and (6) non-contingent punishment. The author maintained that tyrannical leadership can cause low self esteem, high frustration, stress, helplessness and worker alienation to fellow worker.

There are three major styles of leadership: laissez-fair, transactional and transformational leadership. The most ineffective style of leadership is laissez-fair leadership, in which the leader is indifferent and is characterised by delays in action and absen-

ce. Transactional leadership is based on leader-subordinate exchanges; a more effective leadership style than laissez-fair, in which clarifies organisational goals, provides feedback for subordinates and exchanges rewards and punishments when needed. The transactional relationship between the leader and his/her followers entails an exchange, in which the subordinate acts in anticipation of or in response to leader rewards and leader support, and the leader is the one that compensates for any job deficiencies or when the organisation has failed to provide the subordinate with the necessary motivation or job satisfaction using rewards for exceptional performance (Hartog et al., 1997). Transformational leadership involves mutual elevation and stimulation by converting subordinates into leaders. Sosik and Godshalk (2000) in a study amongst 204 mentor-protégé dyads, found that transformational leaders' mentoring was positively related to mentoring functions, compared to transactional leaders', while laissez-fair leadership mentoring was negatively associated to mentoring received.

Nevertheless, there have been criticisms arguing that leadership and mentoring are two different constructs. Burke et al (1991) argued that while mentoring involves role model relationships in the long term, which are development oriented, leadership involves performance oriented influence. Moreover, Appelbaum, Ritchie and Shapiro (1994), maintained that leadership involves a leader and a subordinate, whose relationship is formal and direct, while mentoring involves a mentor and a protégé, whose relationship is more informal and subtle. Finally, and maybe most importantly, not all leaders can be effective mentors (Ragins & Cotton, 1993).

For many authors and researchers leadership should be considered as the process of change and transformation (Carnall, 1999; Higgs & Rowland, 2000; Higgs, 2003). There are many different leadership styles, nevertheless, research findings indicate that the most effective leadership style is transformational leadership. Transformational leadership or "superior leadership performance" (Seltzer & Bass, 1990) is observed when the leader is accepted among subordinates, when he/she broadens subordinates' interest on the job and job performance, and when he/she generates, on behalf of the subordinates, their interest of serving a common, group cause. As transformational leadership is closely related to organisational improvement, many authors, recently, have begun giving great emphasis on the leader's emotional intelligence (EQ) (Cooper, 1997; Harrison, 1997; Geyer & Steyer, 1998; Hesselbein et al., 1996). Emotional intelligence (EQ) is the term, which refers to those other, non-intellective factors that lead to healthy relationships and success in life and career within organisational gulfs (McMullen, 2003).

Dubinsky et al (1995) defined transformational leadership as raising the awareness

of the importance of organisational outcomes, increasing subordinate needs and transcending employees' self interest for the sake of the interests of the organisation. Findings indicate that transformational leadership can reduce employee stress levels and enhance employee self assurance and perceived meaning of work (Bass, 1999). Transformational leaders achieve better organisational outcomes, because they communicate organisational objectives in the best possible way, while they create such working environments which may foster employee motivation (Tracy & Hinkin, 1994).

Gill, Flaschner and Shachar (2006), in a study of customer-contact service employees, found that the degree of perceived burnout was related to the degree of their perceived stress levels, which were in turn related to the managers' leadership style. In support to Bass's (1985) suggestions, the authors have sustained that transformational leaders also possess certain weaknesses; they stressed the importance of clearly knowing the specific goals which are set by upper level management and that they must be willing to internalise and accept these goals. Goleman (2000), contrary to the one-effective leadership style theorisation, suggested that for the best organisational results the leaders should not rely on one leadership style. The Situational Leadership Theory suggests that leadership effectiveness is enhanced when leaders use leadership styles according to employee readiness, willingness and ability, which will subsequently lead to employee job satisfaction and best organisational performance.

Research findings have emphasised the relationship between situational leadership and job performance (Avery & Ryan, 2002; Montgomery et al., 1996). Hersey and colleagues (1996) argued that, in lower levels of employee readiness, the leader is to provide direction. In higher levels of employee readiness, employees become more task oriented. Vries et al (1998) found that the leadership style which is more human oriented increases employee job satisfaction. Moreover, Packard and Kauppi (1999) found that different leadership styles relate to different levels of job satisfaction, because when leaders demonstrated more supportive and considerate behaviour, employees' job satisfaction increased.

Nevertheless, Chen and Silverthorne (2004), who conducted a study in order to test the Situational Leadership Theory's effectiveness and its impact on the degree of match between leadership style and employee readiness, found that their results did not support the Situational Leadership Theory's predictions, that the leadership style and subordinate readiness would result in higher levels of job satisfaction and performance, and that there is a match between lower levels of job stress and employee intentions to leave. However, the authors sustained that the finding of this study apply to the Taiwan culture and that it may or may not actually apply to other Chinese and/or non-Chinese cultures.

3. Role conflict role ambiguity and role overload

Role conflict and role ambiguity as antecedents of burnout have also been stressed in theory and research. Role conflict occurs as a result of incongruity of expectations to a given organisational role. In the field of social work, Kadushin and Kuys (1995) found that the social workers who participated in their study felt that they were not being understood by other members of their team, that their accomplishments were not being appreciated and that they were experiencing conflicting role expectations. Reid et al (1999) performed a qualitative study and indicated that social workers, in the field of mental health, reported that other health services staff did not adequately understand nor valued their range of skills, and that they felt frustrated because their role was misunderstood by others. McLean and Andrew (2000), identified lack of recognition, role conflict and disagreement about what constitutes good practice, as factors which affected and resulted in social workers' occupational stress and burnout.

In a study of child welfare administrators, Jones (1993) found that the participants reported organisational and professional role conflict to the extent that their co-workers possessed conflicting role expectations of them. Role ambiguity has also been reported as a cause of burnout (Gmelch & Torelli, 1994). Being exposed to different and conflicting demands, being unable to do what is part of one's job description and being expected to perform duties, which are out of one's job description, are mentioned as sources of occupational stress. Balloch & colleagues (1998), consistent with previous research findings (Rabin & Zelnor, 1992) found that role ambiguity was reported as a significant source of job dissatisfaction, high rates of turnover and burnout. Balloch and colleagues (1998), in a survey of five (5) different local authorities in England, found that staff that experience role ambiguity had significant GHQ (General Health Questionnaire) scores than those who felt confident with what their work entailed.

Role overload is a factor that can cause burnout and, as such, has not been overlooked in literature. Burnout was originally conceptualised as resulting partially from quantitative and qualitative work overload. Quantitative work overload refers to the individual's perceptions that work is so excessive that can not be performed in the time assigned or given. Qualitative overload, on the other hand, refers to feelings of lack of the basic skills in order to perform the assigned work tasks effectively (Cordes & Dougherty, 1993). For instance, mental health care services managers have to face up to a number of core functions, when working in the public community services.

Meldrum and Yellowlees (1999) have identified nine (9) functions which can affect work overload for those working in the field of mental care: individual

psychotherapy and/or counselling, assessment, psycho-education, crisis intervention, monitoring daily living skills, and liaison with other care agencies. The World Health Organisation (WHO) (1996), identified work overload, amongst other factors such as lack of control or sense of impact over work situations and case loads, as important causes of organisational stress and burnout. Meldrum and Yellowlees (2000), in a pilot study, which aimed to develop an appropriate scale in order to assess the levels of clinical load carried by case managers at the Royal Brisbane Hospital Integrated Mental Health Service, found that the various aspects of clients' needs contributed to the work-load burden experienced by individual case workers.

There has been a growing body of research efforts which have explored the relationship between burnout and the teaching professions. Research on the field of principalship indicates that principal's job is comprised by role conflict, role ambiguity and overload. McCarthy (1993) indicated that restructuring learning environments and pressure from state legislatures to implement high standards for education for students are identified as sources of great occupational stress. Academic counselling psychologists have repeatedly indicated that the teaching professions are particularly stressful and that work overload, in parallel with role conflict and ambiguity, constitute principal causes of burnout (Boyle et al., 1995; Chan & Hui, 1995; Watkins, 1992).

The teacher-student relationship and contact is guided by both sides' ideas and conceptions about its context. Tatar (1998) argued that pupils' perceptions about teachers' attitudes are also crucial in order to understand their relationship, and, moreover, most importantly, to understand their interaction within classroom settings. A very interesting study conducted by Tatar and Yahow (1999), studied pupils' perceptions of teachers' burnout. The authors found that pupils reported work overload to be one of the major factors contributing to teachers' burnout, amongst other factors such as the teaching experience and the teachers' perceptions of the job, lack of trust in their professional ability and the decreasing educational resources, while class sizes increase.

Organisational characteristics

A growing body of empirical work and evidence indicate that specific work contexts and managerial related conditions (Baker et al., 1996) affect the incidence of occupational stress, mental health outcomes and burnout (Pretty, McCarthy, & Catano, 1992). Management related conditions that are linked directly to negative mental health include lack of influence, control, autonomy (Barnett & Brennan, 1995; Bourdonnais et al., 1996; Dyer & Quine, 1998), lack of supervisory support (Jones-Johnson & Johnson, 1992) and subjective under-employment (Kawakami et al., 1990).

Leiter and Maslach (2005) maintained that organisational conditions can influence employee experienced burnout, and will in turn determine how well the employee will performed duties assigned and how this employee will feel about the organisation. Leiter et al. (1998) demonstrated that assessments of employee experience burnout levels had predicted the client evaluation of the quality of the service received. The organisational context, especially in the human services sector, is attracting more and more attention as a cause of employee burnout (McLean & Andrew, 2000; Rachman, 1995). Cushman and colleagues (1995), in a study of social workers, identified a number of work-related stressors, such as lack of linkage to other work units, high rates of turnover, in a bureaucratic environment. These contexts are characterised by work shifts, bureaucracy and personnel shortage.

Job standardisation has not been extensively studied as a cause of burnout, nevertheless, up to date research identify it as a key factor. Hartline and colleagues (2000) have argued that job formalisation can facilitate job and role ambiguity, and cause burnout. On the one hand, if employees can gain more task control, their autonomy and empowerment will rise. In the same manner, standardisation promotes coordination within work settings. Researches indicate that high degrees of formalisation and standardisation have been positively correlated with job satisfaction, as they reduced role conflict, role ambiguity and burnout (Hsieh & Hsieh, 2001). Hsieh and Hsieh (2003), in a subsequent study, examined the relationship between job standardisation and burnout among employees of service and manufacturing industries in Taiwan. The authors found that job standardisation had no direct effect on employee burnout and that, further, burnout components would disappear as soon as role stress was controlled.

Gaines and Jermier (1983), in studying burnout amongst police officers, found that emotional exhaustion levels were different across different departments, and stressed that differences in status were an important factor leading to burnout. More recently, Pretty et al. (1992), studying the effect of the psychological environment, job level-status and gender in relation to burnout, among telecommunication employees (managerial as well as non-managerial), found that female non-managers participants experienced higher levels of emotional exhaustion and depersonalisation, whereas, male participants, when managers, experienced elevated levels of emotional exhaustion and depersonalisation.

Finally, in a study investigating whether job satisfaction constitutes an antecedent or a consequence of burnout, Wolpin, Burke and Greenglass (1991) found that psychological burnout appeared to have a causal relationship to job satisfaction but not vice versa, establishing job satisfaction as a vital factor predicting burnout.

Furthermore, the authors found that negative work settings and marital dissatisfaction were associated with higher work stress, which, in turn, increased burnout and lowered perceived levels of job satisfaction.

Deckard et al. (1994), in a study conducted in the United States, found that 58% of responder physicians reported high emotional exhaustion, indicating that the organisational measures were the strongest predictors for this exhaustion. The authors suggested that there is a need for organisations to examine impact of policies, procedures and structures, in order to modify organisational stress for physicians and to improve the quality of their working lives. Research findings point out that one of the most effected population from the damaging effects of burnout is psychiatrists (Livianos-Aldara et al., 1999; Hyphantis & Mavreas, 2005).

Similar results to the above study were found by Thomsen and colleagues (1999) who conducted a cross-sectional study in Sweden, which included 1051 psychiatrists and mental health nurses. The authors found that the organisational characteristics were more important in predicting professional fulfilment and exhaustion, compared to personal characteristics, indicating that the psychosocial work environment and well being of employees working in the mental health care sector can be improved by concentrating on goal quality, efficacy and personal development.

Korkeila et al. (2003), in a study of 3,133 licensed physicians, found that psychiatrists and child psychiatrists reported burnout, threat for burnout, mental disorder and depression, more commonly compared to their physician counterparts. Furthermore, the research findings indicated that psychiatrists and child psychiatrists' depressive symptoms were in moderate positive correlation with the overall MBI, which indicated that emotional exhaustion was common, especially amongst those psychiatrists and child psychiatrists that worked in the community. Ramirez et al (1996) in a study amongst four (4) specialists groups in the United Kingdom examined the relationship between mental health, job stress and job satisfaction as well as job and demographic characteristics. The research findings indicated that in regards to psychiatric morbidity, there were no significant differences between the four groups. Consultants' mental health was significantly protected by the positive effects of job satisfaction. When professional and self esteem, relationships with patients and their families and intellectual stimulation was taken into account, burnout was associated with low satisfaction. Psychiatric morbidity and burnout were associated with job related factors, which included overload, dealing with patients' suffering and the effects of overload upon their family lives.

However, it must also be stated that participative work environments have been associated with better mental health, because they include those that encourage

the development of problem-solving skills, they encourage participation in decision making (Burke, 1993) and foster personal as well as co-worker beliefs of competence (Hunnicuttt & MacMillan, 1983). Thus, recent research findings recommend the implementation of participative management practices among those identified key strategies used in order to prevent organisational stress (Peterson, 1997; Quick et al., 1997). Mackie, Holahan and Gottlieb (2001) in a study in order to examine work environment, depression and stress, found that perceived exposure to employee involvement management practices were related to perceived sense of coherence, depression and work stress. The results of the study indicated that increased exposure to employee related practices were directly related to lower levels of depressive symptoms, both perceived as a sense of coherence and perceived as work stress.

Personal characteristics

1. Personality characteristics

Research conducted amongst consultant psychiatrists have consistently and repeatedly shown that work related variables, such as high/low job satisfaction and trainee versus trained psychiatrists, and personality related variables, such as openness and agreeableness, are considered as factors which are connected to high risks of emotional exhaustion. Deary et al. (1996) compared a randomly selected group of surgeons and physicians on several stress related variables and found that psychiatrists did not differ in their perceived work related stress than physicians and surgeons, but reported fewer clinical practice work demands and that differed significantly from their physician and surgeon counterparts by being high in variables such as neuroticism, agreeableness and openness, and low in conscientiousness.

Moreover, this particular study suggests that there might be personality characteristics' dispositions for some people towards their choice of profession. In a similar study (Naisberg-Fenning et al., 1991), the authors found that in their investigation of the relationship between burnout and personality characteristics those psychiatrists who reported high trait anxiety were more likely to score high for burnout levels.

In addition, Amstutz et al. (2001) assessed potential burnout related variables, such as work, leisure activities, demographic variables and personality, for three (3) subgroups of psychiatrists, namely resident psychiatrists, psychiatrists in leading positions within psychiatric institutions, psychiatrists working as staff members and psychiatrists working in private practice, found that resident psychiatrists reported significantly higher emotional exhaustion, higher scores in neuroticism and lower

scores of frustration tolerance, as measured by the Munich Personality Test. Work related stress variables were found to have only slight significant importance.

2. Gender differences

The two fundamental societal changes that took place during the nineteenth century in the Western world influenced society, economy and organisations as vivid entities within society: the shift from industrial economy, rooted deeply in the human labour performance, to a post industrial economy, which is based on the performance of emotional labour, and the rise of rates of women in employment. Johnson and Hall (1996) noted that when the research's subject population consists of female subjects, the predictive power of the expanded demand-control-support model and the basic demand-control model's predictive power break down. The demand-control model, developed by Karasek and Theorell (1990), suggests that work creates the most psychological strain which involves high psychological demands and low levels of decision latitude

Gender is a significant risk factor for work related stress. Studies indicate that being female per se does not constitute a risk factor but being in particular kinds of jobs might be a risk factor for burnout (Borrill et al., 1996). Female doctors seem to have significantly higher levels of mortality than other professional groups (Rimplelae et al., 1987). Most studies have focused on gender differences and related issues such as traditional gender role conflict, prejudice against women doctors and the conflict deriving from the feeling of not being successful at both chosen roles: home and work (Bowman & Allen, 1985). Research evidence show that the working styles and, therefore, the sources of stress in female doctors differ from those of male doctors, while female seem to be over-presented in certain specialties (Richardson & Burke, 1991).

Emotional labour is a construct introduced by Hoshchild (1983), which indicates the "management of feelings to create a publicly observable facial and bodily display" (p7). There has been extensive research on the construct of emotional labour, equally qualitative (Rafaeli & Sutton, 1990; Tolich, 1993) and quantitative (Brotheridge & Lee, 1998; Mann, 1999; Morres & Feldman, 1996; Brotheridge & Grandey, 2002; Bono & Vey, 2004). Acker (1990) argued that organisations and work settings are gendered, and as such they should display patterns of emotional experience and emotional management distinct for male and female employees (Pierce, 1995; Sutton, 1991). Women excel in emotional labour, which calls for emotional suppression of negative emotions and their expression, while men are better able to do the exact opposite.

Research indicates that each individual's need to express his/her feelings and the way by which those feelings are subsequently expressed, are influenced by interpersonal dynamics which affect this person's emotional communication through systems such as the family, society and culture (Andersen & Guerrero, 1998). Applied in the workplace, the individual's adopted emotional responses are not a simple expression of emotional intelligence but a form of compliance to higher status individuals within the organization (Ackroyd & Thompson, 1999). This form of compliance, according to this approach, occasionally leads to the individual feeling alienated and is capable of causing burnout. Fineman and Gabriel (2000) have summed the following ideas, which are the most significant in the social constructionist approaches to emotion:

- Emotions reconcile social aspects of personal feelings.
- Emotions have practical use.
- Emotions constitute social phenomena.
- Emotions are situation specific.
- Emotions are described through the use of language and are enacted in the presence of an audience.

The important contribution of work related stress and burnout so much in job satisfaction as in psychological and physical complaints of health professionals is generally recognized (Agius et al., 1996; Deary et al., 1996). Bayrakdar-Garside (2002), tried to investigate the impact of negative feelings during an individual's socialisation, in relation to gender and stress. The findings, in accordance with other research findings (Levin & Safer, 2002) indicated that there are experiences during socialisations, which are indeed connected to perceived stress, and which are differently perceived according to gender. Therefore, it is not surprising why female and male research participants often report differences in experiences levels of burnout.

Emotional labour has been characterised as threatening because it requires the worker to enhance certain types of emotions on the expense of others, through suppression (Erickson & Wharton, 1997). Research indicates that feminised jobs require the skilful suppression of negative feelings by women employees and the display of more positive emotions (Pierce, 1995). Gibson (1997) took research a step further by studying the emotional experience of 159 MBA employed students. The author studied the work conditions that gave birth to evoked emotions, the emotions' intensity and type, and, finally, whether those emotions were externalised and displayed to others; female participants were more likely to externalise their feelings, even if those feelings were negative, in relation to the male participants. Sturby & Fineman (2001) argued that when employees are pressured to feel happy rather than

look happy, they experience a personal struggle to display certain emotions and at the same time they are inauthentic to themselves. Researchers have argued that leisure activities are increasingly taking place at inauthentic and controlled environments (Bryman, 1999; Ritzer & Stillman, 2001).

Erickson and Ritter (2001) conducted a survey study in order to explore whether individuals who manage to hide their feelings of anger at their work environment are more likely to experience feelings of inauthenticity, and whether hiding anger would be associated with burnout. Although the authors found that managing anger was associated with burnout and that inauthenticity was most pronounced by those who experienced the highest levels of agitation, these effects, according to the findings, did not differ gender-wise.

Doyle and Hind (1998), in a study of 582 academic staff members investigating perceived occupational stress, came up to contradictory findings. They found no gender differences in emotional exhaustion and personal accomplishment scales and that female participants had significantly lower levels of depersonalisation, which actually indicates overall lower levels of experienced burnout. The authors suggested that this may be due to the fact that men are less willing to report experienced pressure, in comparison to women, and that there could be other factors involved, such as that women are capable of coping better with work demands.

It has to be reported that psychological distress and burnout has, for a long time, been suspected to have an important effect on fertility rates for both sexes (Slade et al., 1992; Stolerore et al., 1993; Stolerore et al., 1996; Sheiner et al., 2003). Work has been found to increase vulnerability to stress, which has been found to be associated with poor outcomes of embryo transfer treatment and poor outcomes on in vitro fertilisation (Facchinetti et al., 1997). Sheiner et al (2003) investigated the association between occupational psychological stress and levels of female fertility. The authors found that patients admitted on the account of female infertility presented lower levels of listlessness scores than those patients that were admitted due to their partner's reproductive dysfunction. Moreover, the authors found that patients who felt guilty for their infertility status, experienced higher levels of burnout. The authors did not find any other association between other burnout or job dissatisfaction scores and female fertility status.

Finally, another variable which can affect an individual's experience of burnout is person-organisation fit. Person-organisation fit has been a consistent theme in research literature (French et al., 1982; Kahn & Byosiere, 1992), as it stresses the problematic relationship between the individual and the situation, which is often a relationship of great imbalance, as often enough, the demands of a given organisational

task goes beyond the individual's capacity and resources to cope with the situation effectively (Finnegan, 2000; Lauver & Kristof-Brown, 2001; Lazarus, 1995; O'Reilly et al., 1999; Schneider, 2001).

Considerable research has been conducted with this particular model, and further they have provided support that these dimensions can actually explain additional variables beyond those explained by environmental or personal factors alone (Caplan et al., 1985; Edwards, 1996). This model suggests two types of fit. On the one hand, supply-value fit, proposes that stress results when the values, motives and needs of the individual are not met by the environment. On the other hand, demand-ability fit, refers directly to the relationship between the abilities of the individual to meet organisational demands and the actual organisational demands themselves.

Posner (1992) argued that one form of person-organisation fit is congruence between personal beliefs and preferences and organisational values. Perceptions of organisational values have been found positive in predicting organisational commitment and person-organisation fit (Finnegan, 2000). In a study investigating fit across cultures (Robert et al., 2000), the authors found that between workers and the organisation, value congruence was predictive of employee job satisfaction. Siegall and McDonald (2004) investigated the person-organisation value congruence on the experience of burnout, and further, the mediating role of burnout in relation to person-organisation value congruence and organisational outcomes, in a study amongst 135 university faculties. The findings of this survey-based study indicated that burnout was closely associated with service and administrative tasks, less time spend on teaching and professional development activities. Person-organisation value congruence was closely associated with burnout, which also partially or fully, in cases, mediated the relationship between job satisfaction, professional development activities and less time of teaching.

2. *Work-Family interference*

The role of work and family interference in the occurrence of work stress and burnout has been extensively investigated during the last two decades. Grandey (2000) provided a comprehensive review of the theories that underlay the concept of emotional labour defined it as the process in which the individual has to manage both the experience and the expression of feelings in order to support organisational goals. Empirical support has been provided in relation to linking the concept of emotional labour and psychosomatic complaints, in which the concept of emotional labour has been conceptualised within emotional repression and inhibition theories. These studies have indicated that increased physiological complaints have been asso-

ciated with the inhibition of emotions, which consequently contribute to decreased health and well being (Gross & Levenson, 1997; Panagopoulos et al., 2002). Many research studies have suggested the role of work-family interference to be of great importance in relation to burnout (Geurts et al., 1999; Montgomery et al., 2003; Parasuraman et al., 1996; Stephens et al., 1997; Kinnunen & Mauno, 1998).

Wharton and Erickson (1995) have found that, on the job, women's well being was threatened more by their involvement with family emotion-work than their actual emotional labour performance. No systematic differences have been found between work-family interference and gender differences (Geurts & Demerouti, 2003), but Montgomery et al (2006) called for the need to control more demographic variables, such as age and gender in relation to psychosomatic complaints and burnout. In a study of the relationship between emotional display rules/job focused labour, work-family interference and burnout, amongst a sample of Dutch workers in governmental organisations, Montgomery and colleagues (2006) found that job focused labour and emotional display rules had been positively correlated to burnout. Work-family interference partially mediated the relationship between hiding negative emotions/surface acting and burnout/psychosomatic complaints.

Guerrier and Adib (2005) argued that the dichotomy leisure and work constitutes a product of the industrial society: there are certain times that we work, which are associated with routine, compulsion and restriction, and other times for leisure, which are associated with choice, freedom and release. The study of work has demonstrated how individuals find ways to combine work and leisure at the same time (du Gay, 1996), and leisure theory has demonstrated how people need to work at leisure (Laurier, 1999). Interestingly, Nickson and colleagues (2001) argued that front-line workers in the leisure industry are not only required to deliver emotional labour, but also aesthetic labour. By the term aesthetic labour, the authors referred the age and physical attractiveness of the employees (apart from the way they dress), in order for them to present the appropriate company image.

Korczynski (2002) introduced the term social embeddedness, in order to argue that the pleasure deriving from customer service work come from interactions which are person-to-person interaction rather than employee to customer interaction. However, the leisure sector's large organisations are bureaucracies which are customer oriented and in which customer services employees are required to deliver exemplary customer service, on the one hand, and on the other hand to serve the customer as quickly and as efficiently as possible (Korczynski, 2001; Korczynski et al., 2000).

Guerrier and Adib (2003) argued thus that the boundaries between work and leisure are quite often blurry. Using qualitative data and analysis to investigate the

nature of work of overseas tour representatives, the authors argued that the tour representatives seek spaces, where they will be able to live a life style, which they see as reflecting their aesthetic selves, and in this way they would be enabled to accept the negative aspects of their work and, therefore, become disciplined workers. The authors also found that the relative autonomy of the tour representatives allowed them to avoid the negative consequences of emotional labour.

Thus, it is now a commonplace, the porosity of a variety of boundaries that have traditionally separated work from the private domain, and, although, the notion of organisations having no boundary between work and private life is probably exaggerated, transformation in the job character and non-work boundaries is a fascinating feature of contemporary organisations. Fleming and Spicer (2004) maintained that the boundary separating work and non-work domains are equally important in controlling labour. The authors found that the manipulation of special boundaries was a significant aspect of the organisation's culture management programme, although other research findings have suggested that engineered cultural programmes are not always internalised by workers (Fortado, 2001), who even resist those boundary identities through dis-identification (Fleming & Sewell, 2002; Fleming & Spicer, 2003).

Crossover, the process that occurs when the experienced psychological strain of one individual affects the levels of psychological strain experienced by another person, is a dyadic transition of stress that occurs within a particular domain, such as the family or work. Researchers have proven that a number of stressors and stressor outcomes may crossover from one person to another, for instance depression (Katz et al., 1999; Vinokur et al., 1996), physical health (Jones & Fletcher, 1993), anxiety (Westman et al., 2004) and burnout (Bakker et al., 2001; 2003; Westman & Etzion, 1999). Bandura (1997) and other social learning theorists support this view and have explained that transmission of emotions constitutes a conscious processing of information. Emotions expressed by one partner, therefore, elicits an empathic reaction to the other. Researchers have also indicated that previous research on crossover have examined the transference of negative feeling ("the worst things in life", p.6), while they should be focusing on the "positive qualities" (Seligman & Csikszentmihalyi, 2000), and that the more positive work emotions should be further investigated (Bakker, 2005).

Baker, Demerouti and Schaufeli (2005), in a study of 323 working couples in a wide variety of occupations, investigated whether burnout and work engagement may crossover from one partner to the other, and vice versa, controlling for the impact of demands and work and home resources on the side of the receiver. The authors hypothesised that work engagement, like burnout, may crossover from husbands to

wives and vice versa, during their interpersonal communication, because, as other research indicates (Starcevic & Piontek, 1997), wives place themselves mentally and psychologically on their husband's circumstances. The authors found crossover of burnout and work engagement amongst partners. Peters and colleagues (2005) found that quantitative home demands, mental home demands and emotional home demands were positively related to burnout.

Organisational characteristics

1. Social support

The effects of social support in burnout have received considerable attention in academic research (Babakus et al., 1999; Constable & Russell, 1986; Cordes & Dougherty, 1993; Cordes et al., 1997; Zohar, 1997). House (1981) defined social support as "an interpersonal transaction involving one or more of the following: a) emotional concern (liking, love and empathy), b) instrumental aid (goods and services), c) information (about the environment) and 4) appraisal (information relevant to self evaluation)" (p. 39). This definition focuses on the qualitative characteristics of the relationship and is consistent with other definitions proposed in literature (Dunkel-Schelter et al., 1992; Terry, Rawle & Callan, 1995). Research has for long and broadly acknowledged that those individuals who receive high levels of support have better physical and mental health than those who do not (Collins et al., 1993; Corrigan et al., 1994).

Social support has been identified as a buffer to the pathogenic influences of work related stressful events, which occur either by enhancing the individual's beliefs that they can cope with the stressful situation they experience, by increasing their sense that others will be there for them with the necessary resources, or by helping the individual redefine the potential harm they come across. Thus, the buffering model proposes that social support will buffer all those negative effects of occupational stress on the individual's well being (Cohen & Wills, 1985; Terry, Rawle & Callan, 1995) and that its effects will be mostly marked at high levels of stress.

Whitaker (1996) in a qualitative follow-up study on the prevalence of principle burnout (Whitaker, 1992), found that amongst other variables, such as personal accomplishment and rewards, additional personnel, improving the role of the principals and more attractive salaries and benefits, the need for a support system was found to be an important effect to burnout. Almost all principals who participated in this study indicated the need of a support system. The participants maintained that, although they attend principal meeting, sharing their daily problems, reflecting on their experiences and time for talking is never offered or never enough. This leaves principals "feeling isolated and alone in a world of conflict" (p. 67). The need for

understanding and advice were also identified as elements of the support system. Mentoring was presented to be a necessity for beginner principals, who suggested that a co-mentor would be a useful mentor model. Principals stressed the need for a support system, so that they can manage the conflicts and the increasing pressures of their occupation.

Support systems were identified important, whereby principals will have formal as well as informal networks in order to reflect, brainstorm, think and problem-solve. Gmelch and Gates (1997) investigated the impact of personal, professional and organisational characteristics that can contribute to administrative burnout. The authors found that support from a supervisor had greater impact than other sources of support, as administrators' support from a supervisor appeared to be critical in reducing feelings of role conflict, role ambiguity and role related stress. Nevertheless, the study did not confirm that there are strong correlations between social support and burnout.

2. Personal, professional and organisational expectations

Another important contributor to employee burnout is personal, professional and organisational expectations, which represent a source of work demands (Jackson & Schuler, 1983; Maslach & Jackson, 1984). Jackson and colleagues (1984) introduced two different kinds of expectations: organisational expectations, which are the individual's expectations about his/her job and the nature of the organisation as a system, and achievement expectations, which are the individual's beliefs about what they can accomplish in relation to their clients. Besides organisational and achievement expectations, unmet expectations have also been identified as a source of burnout.

Jackson et al (1986) conducted a study in order to study the effects of unmet expectations amongst 248 teachers. The authors hypothesised that the three components of burnout, personal accomplishment, depersonalisation and personal achievement would be associated with high levels of burnout. They did not meet their hypothesis, thus they suggested that the reported lack of association between unmet expectations and burnout was due to the fact that the participants' unmet expectations were assessed without taking into account the tenure on the job performed. Expectation shifts have been investigated by O'Neil (1982), who found that expectation shifts were correlated with the three burnout components. Less experienced employees reported higher levels of burnout, as they focused on client-focused expectations, in contrast to the more experienced employees, who shifted client expectations to their own competencies. Higher levels of burnout were positively associated with employee negative expectation shifts.

3. Perceived control and social comparison

Research, which have used different research designs, have investigated the relationship between burnout and perceived control (Bandura, 1997; Chwalitz, Altmaier & Russell, 1992) burnout and social comparison (Buunk et al., 2001); and social comparison and perceived control (Major, Testa & Bylsma, 1991). Thus, it is today recognised that self comparison with others constitutes a social factor related to burnout, health complaints and job dissatisfaction (Buunk & Gibbons, 1997; Buunk & Ybema, 1997). Social comparison in organisations (upward and downward comparison) is generally determined and influenced by the individual's self motive (Helgeson and Mickelson, 1995). Recent experiments (Buunk et al., 2001; Collins, 1996; van der Zee, Buunk & Sanderma, 1998), in which participants were subjected to comparison groups, have demonstrated that upward comparison induced more positive effects than downward comparison, and that downward comparison induced more negative effects than upward comparison. Other research findings have also suggested that upward comparison can be regarded as a model for use by individuals in order to determine themselves and to improve a situation (Blanton et al., 1999; Huguet et al., 1999).

Vrugt and Koenis (2002) have demonstrated that higher personal goals produced upward comparison and predicted future productivity for academic staff members, and thus self improvement, which requires that one has minimal control over the situation subjected. Therefore, social comparison is in accordance with the Social Cognitive Theory (Bandura, 1986; 1997), which proposes that vicarious experience refers to the ability held by human beings to improve by model observation. Michinov (2005) assumed that a subtle vicarious experience, through the comparison with successful models, will produce lower levels of burnout as it produces greater perceived control over an individual's self improvement. The author predicted that individuals who compare upwards will develop higher levels of perceived control and information, which will subsequently enhance their self improvement. The author found that the results of his study partially supported these predictions, and demonstrated that the only component of burnout that was affected by social comparison was emotional exhaustion, which was mediated by perceived control.

4. Self employment

The link between self-employment, job satisfaction and burnout has recently been researched systematically. Blanchflower, Oswald & Stutzer (2001), in a cross-national survey, have suggested that a large proportion (60%) of the Americans that participated in their study reported a preference to self employment than to employ-

ment. And, although, most individuals might prefer self employment, because it promises greater challenges and autonomy (Vivarelli, 1991), self employment can also be stressful, requires hard work, long working hours, high job stress and a lot of emotional energy to put into work (Buttner, 1992; Kaufmann, 1999; Min, 1990).

Bradley and Roberts (2004), in a study using data gathered from the National Survey of Families and Households (NSFH) Wave I (1987-1988) and Wave II (1992-1994), examined the relationship between self employment and job satisfaction. The authors expected that self employed individuals would enjoy more satisfaction than employed individuals, that the association between job satisfaction and self employment would be explained in terms of higher levels of self efficacy and lower levels of depression for self employed individuals, and that seniority would play a significant role in the experience of job satisfaction in comparison to the newly self employed individuals. The authors found that the first two arguments were supported by the findings, but the third argument did not find support; the post-hoc analysis revealed that the association between job satisfaction and self employment for the newly self employed individuals depended upon other variables, such as the quality and the quantity of time invested in their business.

Consequences of burnout

The importance of burnout is best illustrated by its association with various consequences to personal dysfunctions and organisational outcomes. The variety of personal and organisational consequence of burnout demonstrate how potentially costly and damaging it is. When the individual can no longer tolerate organisational and occupational stressors imposed to him/her, they become totally overwhelmed by occupational stress, which can lead them to burnout and consequently, change their personal, as well as occupational attitudes and behaviours.

Mental and physical health consequences

Burnout has been linked to a wide variety of mental and physical problems; mental health problems identified in literature include depression, decreased self esteem and depression, while physical problems include fatigue, insomnia and gastrointestinal disturbances (Kahil, 1988). Burke and Deszca (1986), assessing how correspondents experienced eighteen (18) different physical symptoms, found that they were positively related to all three burnout components, while Lee and Ashforth (1990), in a study of supervisors and managers working in a public welfare agency, found that feelings of helplessness and psycho-physiological strain were associated

with higher levels of emotional exhaustion and depersonalisation. The field of social work seems to suffer the most from the damaging consequences of burnout. Gibson et al (1986) found that 37% of the study participants described symptoms that could be classified as mild psychiatric morbidity. In a more recent study, Bennett et al (1993) studied three groups of social workers, working in the area of child psychiatry, adult mental health and adult physical dysfunction, in order to examine their stress sources, their coping strategies and subsequent stress outcomes. They found that when social workers were compared to normative population and other workers within their professional umbrella, social workers experienced higher levels of work related anxiety and stress, and depression.

Prosser et al (1999), in a sophisticated longitudinal research study in the United Kingdom, demonstrated that although time did not play a significant role in the burnout experience, based in the community indicated poorer mental health over a five (5) year period for employees compared to staff working in general hospital's psychiatric wards. In general, staff exhibited poor psychological well being and high levels of emotional exhaustion, while overload was particularly important when working in the community, and moreover, social workers and nurses were found to be significantly more stressed and significantly less satisfied with their work.

Thompson et al (1996), in a study of social work staff in the United Kingdom, found high levels of emotional distress and borderline or pathological levels of experienced anxiety. Recently, Collins and Parry-Jones (2000) found that even in the field of education for social workers, especially lectures were suffering from depression and borderline levels of anxiety. Demerouti et al (2002), in a study examining the relationship between the short-term consequences of mental strain and burnout, amongst 294 German participants in the human services sector and in industrial production, including two different groups, found that burnout, as a long-term consequence of mental strain, was reported as distinct from specific, short-term, impairing consequences of mental strain, attributed to inadequate design of work. The authors used the Oldenburg Burnout Inventory (OLBI) (Demerouti, 1999; Demerouti et al., 2003) and four scales designed to measure the short-term consequences of mental strain. The OLBI conceives burnout as a syndrome, which is affected by negative work related experiences, which includes feelings of exhaustion and disengagement from work. In their study, they found that feelings of exhaustion were primarily related to mental fatigue, and disengagement from work was related to monotony and satiation.

Consequences of burnout in physical health were reported in a study by Bradley

and Sutherland (1995), who found higher levels of ill health for social and home-care workers, compared to a normative group. The symptoms of distress indicated that the most important symptoms experienced were physical exhaustion and emotional exhaustion. Finally, amongst the damaging physical health consequences, Schwartz et al (1996) found significant evidence to support the morbidity of men, and not women, for high blood pressure and work stress and burnout. Studies have indicated certain work and organisation related behaviours, such as turnover, absenteeism and consumption behaviours, such as smoking, alcohol and drug use, are linked to burnout. A line of research findings report individual police officers who reported high levels of burnout, which was in turn associated with high levels of alcohol, tobacco and drug use (Burke & Deszca, 1986; Jackson & Maslach, 1982).

Social and family consequences

Deterioration between social and family relationships has been linked to the damaging consequences of burnout. Jackson & Maslach (1982), in a study of 142 couples, where one of the spouses was a police officer, found that the individuals who were experiencing burnout had the tendency to withdraw from socialising and friends, while they reported to have great difficulty to leave their professional role at work. Their spouses reported that when the officers were spending time with their children they behaved as they would have behaved in a professional situation.

In a study of the effects of burnout and work stress on family relations, Jayarante et al (1986) found that social workers who experienced burnout in extensive intensity tended to be more depressed, demonstrated more anxiety and irritableness and experienced lower levels of marital satisfaction. Burke et al (1984) studied the relationship of burnout and non-work conflict among police officers. The authors assessed the impact of the work of the police officers and job demands on nine (9) areas of home, family and personal life, and combined them into a single measure of non-work conflict. The research findings demonstrated that those police officers who reported higher levels of burnout also reported the negative impact of job demands on their home, family and personal lives.

Job dissatisfaction and life dissatisfaction have been correlated in literature and have been found as variables, that when combined, can contribute to burnout. Loscocco and Roschelle (1991) have proposed three theoretical models that might explain the linkage between life and job satisfaction: the spill-over model, the compensatory model and the segmentation model. The spill-over model suggests that experienced satisfaction extends into other areas of the individual's life. This model proposes a positive relationship between job and life satisfaction; an employee who is

satisfied with his/her work will experience satisfaction in non-work activities and vice versa (Adams et al., 1996; Judge & Locke, 1993; Judge et al., 1998; Tait et al., 1989). The compensatory model suggests that, in contrast to the spill-over model, employees who are dissatisfied with their work are more likely to try to compensate their experienced dissatisfaction by engaging to satisfactory activities outside their work domain (George & Brief, 1990). Finally, the segmentation model suggests that there is no linkage between job and life satisfaction, and that the individual is able to keep work and non-work domains and activities separate.

Iverson and Maguire (2000), in a study of 286 male employees working in an open-cut coal mine in a remote in central Queensland, Australia, expected to find a non-recursive relationship between job and life satisfaction. The findings indicated that the community variables such as kinship support and family isolation had equally direct and indirect effects on life satisfaction. Job satisfaction was found to mediate the impact of variables such as industrial relations, routinisation, work overload and family isolation. The authors also observed that job satisfaction had stronger effects on life satisfaction but not vice versa.

Organisational consequences

Job satisfaction is of particular importance, as it is an important element upon which people depend on and tend to apply for a job and/or stay in a satisfying job (Lloyd, King & Chenoweth, 2002). Firth and Britton (1989) investigated perceived burnout and turnover and absenteeism amongst nurses. They found that turnover in nurses was associated only moderately with depersonalisation, while there was no significant correlation between turnover and emotional exhaustion or feelings of reduced personal accomplishment. Himle et al (1986), in a cross cultural comparison of social workers in Norway and the United States of America, in order to compare perceptions of job satisfaction, burnout and turnover, pointed out that the Norwegian sample reported higher levels of burnout compared to the American sample. Weisberg (1994), in a study of 28 secondary school teachers in Tel-Aviv, found that burnout and tenure had a significant impact on teachers' intention to leave.

Most research studies have focused their attention and investigations on actual quitting behaviours. Nevertheless, the intention to quit one's job constitutes an important indicator for turnover, affected by factors such as job stress and job dissatisfaction (Moore, 2002). Intention has been conceptualised as an important and immediate determinant of actual behaviour (Igbaria & Greenhaus, 1992). Numerous research attempts by scholars have tried to identify determinants of individual behav-

hours and intentions to quit their job (Kalliath & Beck, 2001; Kramer et al., 1995; Saks, 1996) and have identified job stress, job dissatisfaction and lack of commitment to the organisation as variables, which relate to intentions to quit. These specific variables can be mediated by personal variables such as personal agency (Turner & Roszell, 1994) and self esteem (Rahim & Psenicko, 1996; Watlers & Moore, 2002), and environmental factors such as social support (Kalliath & Beck, 2001; Munn et al., 1996), job satisfaction and organisational commitment (Armstrong-Stassen et al., 1994; Tinker & Moor, 1993).

Firth et al (2004), in a study conducted in order to investigate the variables that can be predictive of the intention to leave amongst 173 retail salespeople, found that emotional support from supervisors and self esteem mediated the impact of stress reactions, commitment to the organisation, job satisfaction and the intention to leave. Furthermore, the authors suggested that managers need to equally monitor workloads and the relationship between employees and supervisors, in order to manage or even reduce work related stress and burnout.

Organisational commitment

One of the important mechanisms that have been assumed to play an important role in burnout is individual related personal goals and motives (Pines, 1993). Motivation is important indicator in exhibiting how and in what way individuals direct their behaviours in different situations (Austin & Vancouver, 1996; Karniol & Ross, 1996). Personal goals have been conceptualised in literature in various ways (Brunstein, 1993; Roberts & Robin, 2000), such as possible selves (Markus & Nurius, 1986) and personal strivings (Emmons, 1986). These conceptualisations thus describe individuals who are self motivated beings, capable of determining their own destinies by constructing means for goal achievement.

A number of scholars (Elliot & Sheldom, 1998; Ford, 1987; Emmons, 1986) have argued that the individual's perceptions of progress towards valued personal goals constitute an important determinant of job satisfaction and well being. Meyer and Allen (1997) suggested that high levels of job satisfaction and organisational commitment are reached through individual motivations and high valued goals. Furthermore, individual motivation has been conceptualised in terms of personal, self articulated goals, which have proved to be particularly important, in the way they provide the prosperous ground for an on going regulation of behaviour, forming the criteria for the evaluation of behavioural outcomes, activate emotions and enhance the contribution for a variety of coping strategies with situational demands (Kardy & Leci, 1993; Nurmi, 1991). It has been suggested that motivations play a significant role in

the way by which individuals direct their behaviour and change their attitudes in different situations within organisational settings (Austin & Vancouver, 1996; Karniol & Ross, 1996; Locke & Latham, 2002).

For instance, Harris, Daniels and Bruner (2003), in a two week diary study among 22 call-centre employees found that personal goals in a given work day were positively associated with affective well being at the end of that day, especially when these goals were highly valued. Similarly, Christiansen and colleagues (1999), in a cross-sectional study among 120 employees found that individuals' perceived progress towards personal goals were positively associated with subsequent well being. Nevertheless, Pomaki, Maes and ter Doest (2004) have noted that research in relation to organisational-personal goal attainment have been almost solely based on the Self Regulation Theory, thus, offering little integration with existing organisation research efforts.

Integrating insights from the literature on Self Regulation Theory, Edwards (1992) developed the Cybernetic Theory, according to which stress in organisations can be best conceptualised in terms of the relationship between employees' individual characteristics and the work environment. In this theory, goals, values and interests are all specific employee desires, distinct from needs, as needs refer to unconscious, universal and inner motives that "impel" actions, whereas, desires, goals, values and interests are learned conscious personal motives, which "entice" actions (Covington, 2000, p. 173). Deci and Ryan (1985) and Ryan and Deci (2000) introduced the Self Determination Theory, which has inspired new interest and directions as far as the need satisfaction is concerned. This theory is based on the assumption that what promotes psychological well being and work engagement are three (3) psychological needs, which are universal: competence, autonomy and relatedness. Several research findings provide support for this theory (Baard, Deci & Ryan, 2000; Deci et al., 2001; Ilardi et al., 1993), demonstrating that the satisfaction of these three universal needs has been linked to various organisational outcomes relative to performance at work, well being and attitudes towards work.

ter Doest et al (2006) using the Self Regulation Theory and Edward's (1992) cybernetic model of organisational stress, predicted that personal goal facilitation through work would be positively associated with employee well being and job attitudes. The authors investigated their predictions in a questionnaire study of 1039 employees working in the health care sector. The finding of the research indicated that personal goal facilitation through work offers a source of insight into employee well being and attitudes to work. Nevertheless, and by contrast, there have been studies that demonstrate that individual who focus on self-oriented goals have the tendency to ex-

perience low levels of well beings and high levels of experienced depressive symptomatology (Salmela-Aro et al., 2001a; Salmela-Aro et al., 2001b), in accordance with up to date research findings which suggest that self-focus, overall, is in positive association with rumination and negative affects (Mor & Winquist, 2002).

Interestingly, Carver and Scheier (1998) and Bateman, O'Neil & Kenworthy-U'Ren (2002) have demonstrated how personal goals can be represented in a variety of hierarchical levels, in which abstract higher order goals are capable of providing meaning to more concrete behavioural goals, which are actually placed lower in an individual's personal goal hierarchy. Personal goal research can also be distinguished from two prior research lines, which emphasise goals and job related preferences. Locke & Lutham's (1990; 2002) Goal Setting Theory has demonstrated that both characteristics of work related goals and other cognitions about work related goals are associated with a wide variety of outcomes, including satisfaction, work performance and well being. On the other hand, person-environment fit models (Edwards, 1996) deal with employee well being and perceived strain in terms of perceived degree of congruence between job related characteristics and employee job related preferences and employee skills. ter Doest et al (2006) argued that although goal setting theories refer to individuals' personal goals, they are defined in such restricted way that they refer only to self-set goals that individuals choose in order to respond to externally imposed tasks.

Burke (2000) maintained that other types of goal orientation may be associated with low levels of well being, such as the strong work orientation and related goals. Work related goals are likely to be associated with low interest to other types of goals and life's realms, such as the family, close relationships and leisure activities, which in may turn have a negative impact on employee well being. Salmela-Aro and Nurmi (2004), in a study which included 286 white-collar workers (study 1) and 186 IT workers (study 2), found four motivational orientations amongst participants: work orientation, self orientation, hobby orientation and health orientation. Consistent in both studies, the authors found that work orientation was related to low working ability and burnout, while self orientation was again related to burnout and depression. Family – and hobby – orientations were associated to high life satisfaction and low levels of burnout.

Research has proved the importance of the attitudinal variables of organisational commitment's importance (Chiu & Kosinski, 1995; Ford, Weissbein & Plamondon, 2003; Herscovitch & Meyer, 2002; Miller, Johnson & Grau, 1994; Sommer, Bae, & Luthans, 1996; Wright & Bonnett, 2002) in relation to absenteeism and employee tardiness (Cohen, 1993) and higher levels of productivity and willingness to assume re-

sponsibility (Chow, 1990). For instance, Begley and Cazjka (1993) found that organisational commitment constitutes an important moderator to work stress for employees, probably because it promotes positive attitudes, which results in lower distress due to organisational stress and burnout, and therefore perceived less organisational stress. Siu (2002) in a study which examined occupational stressors and well being for Chinese and Hong Kong blue and white-collar workers, found that occupational stressors play an important role in determining mental and physical well being and job satisfaction. The authors also found that organisational commitment and subsequent employee well being were positively related.

In a study of human services professionals Cherniss (1991) demonstrated the importance of organisational-career commitment. While new health service professionals enter their occupational field with great enthusiasm, they often become burned out and either leave the field, or they remain with lower or even minimal levels of organisational commitment. Low career commitment can cost the loss of many skilful individual workers. Cherniss, in the quantitative analysis of the research findings, found that career commitment was positively related to job satisfaction, age and attitudes towards life. Married individuals were significantly more committed to the organisation compared to career changers and singles. In the qualitative analysis of the findings, the author found that there were several other factors, such as positive organisational climate, interesting work and positive professional development experiences that significantly enhanced organisational commitment.

The effects of organisational changes on employee organisational commitment has also received a lot of research attention (Becker et al., 1996; Maertz, Mosley & Alford, 2002; Randall, Fedor & Longnecker, 1990). The organisational justice literature indicates that both change processes and outcomes can influence employee reactions to organisational events (Brockner et al., 1992). Attitudinal reactions to organisational change has been proven to be partly driven by loss of control, feelings of uncertainty and fear of failure (Oreg, 2003). Caldwell, Herold & Fedor (2004) have argued that due to the above findings, the magnitude of a particular change provides the appropriate context, in which favourableness and fairness are evaluated as shaping employee responses to change.

Furthermore, organisational change has been conceived as having different impact in different organisational levels and work groups (Goodman & Rousseau, 2004). And although the literature on organisational change includes constructs such as readiness for change (Armenakis et al., 1993) and openness to change (Wanberg & Banas, 2000), organisational commitment constitutes a different construct, as it represents a behavioural intention towards the success of the change. Ford et

al (2003) found that commitment to organisational change and organisational commitment are distinct and different entities, and that commitment to the organisational change can produce better predictions to change related behaviours than organisational commitment.

The negative impact of organisational change has been found in research to be affecting generated disorder due to organisational demands (Nadler, 1982), threats to the individual's sense of control (Ashford et al., 1989), effects of increased work demands, role conflict and organisational uncertainty (Spector, 2002), and threats to the individual's sense making (Ledford et al., 1990). Novelli et al (1995) & Wanous et al (2000) have maintained that there are significant asymmetries of motivation and benefits to change, which have subsequent results for both individual members and the organisation.

Fedor, Caldwell and Herold (2006), in a study of 32 organisations, investigated how organisational changes affected individual employee commitment, equally in relation to specific organisational changes and the individuals' broader commitment to the organisation. Their research findings suggested that both commitment to organisational change and the commitment to the organisation should be understood in a three (3)-way interaction: the overall favourableness of the change for the employees, the extent of change for the work unit and the impact of the organisational change to the individual's work. Finally, the authors suggested that the assessment of change can be an important explanatory mechanism for responses to change and that long-term benefits only occur when employees actively support these changes.

Coping with burnout

Given its deleterious effects on a wide variety of areas of the human conduct, burnout and the ways people cope with burnout have been given a lot of attention. Social support has been identified as of significant importance in coping with burnout. Terry (1994) argued that the individuals who receive high levels of social support have the tendency to make fewer attempts to minimise a problem's importance than individuals who are involved in less supportive relationships with others. In order to test Troit's (1986) proposal that coping is a mediator in the relationship between stress and social support, Terry, Rawle and Callan (1995) conducted two studies, one among 137 large retail organisation employees and the other among 197 expectant mothers. The authors found that, in the first study, while the effects of colleague support on the levels of adjustment were mediated

through the participants' coping responses, the effects of supervisor support on adjustment were direct. In the second study, the effects of partners' support to women adjustment to parenthood were mediated through coping, and, contrary, levels of family support exhibited direct effect on external and self-reported measures of adjustment.

Other researchers have suggested that the effects of social support may be explained as a coping process; supportive interpersonal relationships help individuals to engage into more adaptive coping processes and responses. Lazarus and Folkman (1984) and Lazarus (1990) called this model the Cognitive Phenomenological Model of stress and coping. This model indicates that when an individual is dealing with an event which is considered to be and is perceived as stressful for him/her, the resources which are available to this individual have an impact on his/her adjustment process, through the effects of the individual's coping responses (Terry, Rawle & Callan, 1995). And while efforts to manage problems in a direct manner has proved to have positive effects on well being, in contrast, high levels of emotional-focused coping has been associated with poor adaptation to stress (Terry, 1991).

Research also indicates gender differences in coping with burnout and organisational stress. Research findings indicate that male employees are more supported within their organisational settings in comparison to women (Piltch et al., 1994; Wolfgang, 1995), or at least social support within the organisational environment has been identified as an important source of coping to male experienced organisational stress. And while support networks are based within the organisational settings for male employees, female employees cope with burnout within their family environment, which actually has been reported to elevate levels of experienced stress, as this enhances the conflict between family and job obligations (Cummins, 1990; Giannakos, 2000; Spielberger & Reheiser, 1995). Research findings indicate that female doctors demonstrate higher levels of morbidity in comparison to male doctors (Ripplae et al., 1987). Burnout and job satisfaction have also been correlated and have been identified as contributing to low rates of female nurses in hospitals (Haddad, 2002). Furthermore, coping strategies also differ by gender, according to research findings.

Even though, Havlovic and Keenan (1995) have argued that there are no significant differences to be noted in relation to coping strategies employed by men and women in burnout, other researchers argue that male employees tend to use problem-solve styles of coping (Lee & Duxbury, 1998), while female employees tend to use emotion-focused strategies of coping (Pugliesi & Shook, 1998; Trocki & Orioli, 1994). Folkman (1984) has argued that employees who believe that their control over their work domain is not significant, they are more likely to employ emotion-focused coping instead

of more active problem-solve coping. Armstrong-Stassen (1994) also found that problem-solve coping and mastery were positively associated with decreased distress and positive organisational outcomes than other more passive forms of coping.

Individuals vary in the ways they choose to cope with organisational stress and burnout. Except from using social support systems in order to cope with the deteriorating effects of burnout, individuals also use personal resources; for instance, an individual who is generally optimistic, affluent and consider his/herself as capable, will be more resourceful and will then be less vulnerable to the negative effects of burnout. Optimism is the perceived sense of control and the ability of an individual to perceive life's experiences as useful, and has for long been associated with high levels of good mental health (Seligman, 1998). Personal resources such as self efficacy reflect the individual's beliefs of being able to use adaptive reactions in order to deal with the critical demand.

Perceived self efficacy and optimism both constitute crucial elements in coping with burnout. While research findings suggest that low self efficacy constitutes one of the most important elements of the aetiology of burnout (Cherniss, 1990), other research findings suggest that self efficacy and burnout are inconsistent in the sense that burnout has the ability to diminish the potential for effectiveness (Leiter, 1991). Greenglass and Burke (2000), in a study of nurses who experience hospital downsizing, found that individuals' coping ability was related to the nurses' feelings of personal accomplishments, depression and anxiety. Aspinwall and Taylor (1997) have argued that those individuals who have developed good sense of personal control, high self esteem and optimism, are more likely to cope proactively.

A multidimensional and forward looking coping strategy, proactive coping is a combination of self-regulatory goal-achievement oriented cognitions together with autonomous goal setting (Greenglass et al., 1999; Greenglass, Schwarzer & Tauber, 1999). Proactive coping's differences with more traditional coping strategies is that while in reactive coping the individual is concerned with dealing with the stressful event he/she encounters, proactive coping is more future oriented, individuals who engage in such coping are more optimistic and have a vision, but most importantly, the individuals who use proactive coping see work demands as opportunities rather than stressful experiences which cause strain (Schwarzer, 2000). One of the many advantages of proactive coping is that it involves such processes, which enable the individual to identify potential stressors and act in advance in order to prevent them, a fact which can eliminate a great amount of stress off the individual, even before it actually occur, by skills such as goal setting and planning (Aspinwall & Taylor, 1997).

A survey study which included 316 German teachers was conducted by Schwarzer

and Taubert (2002), in order to examine the relationship between experienced burnout and proactive coping. In order to demonstrate the relationship between burnout and proactive coping, the authors subdivided the research sample into low, medium and high proactive subjects. Proactive teachers experienced lower levels of burnout, perceived more challenges and less threat compared to reactive teachers. The authors expected that low proactive coping would be associated with higher loss appraisals, whereas high proactive coping would be associated with higher challenge appraisals. The data confirmed their hypothesis and, further, illustrated that there was a consistent pattern of decreased experienced burnout with increased levels of proactive coping. Teachers who were found to be highly proactive reported less emotional exhaustion, less depersonalisation and high personal accomplishment compared to less proactive teachers. Moreover, proactive teachers experienced less burnout, perceived more challenges and less threats compared to their reactive counterparts.

Greenglass (2005) maintained that, since the individual who uses proactive coping is able to reduce or even eliminate the damaging effects of occupational stress and burnout by using effective resources, social support and effective coping strategies, high proactive coping should be associated with lower levels of experienced burnout. The author conducted two studies in order to examine the relationship between proactive coping and burnout. The study participants were 178 respondents, mainly employees in white-collar occupations in a large Canadian city. The first study examined the relationship between work stress and burnout between proactive coping and distress. The second study investigated the relationship between perceptions of proactive coping, fair treatment, anger and depression in the same sample of adults. Proactive coping was assessed by the 14-items proactive coping subscale of the Proactive Coping Inventory (PCI) (Greenglass, Schwarzer, & Tauber, 1999).

The findings indicated that proactive coping positively contributed to professional efficacy, because it focuses on setting goals and accumulating resources for improvement. Thus, individuals who used proactive coping are more likely to experience higher professional efficacy from their work. Moreover, the results demonstrated that individuals who use proactive coping are more likely to perceive fair treatment at work, and thus experience less anger, element which is directly contributed to depression. The author concluded that by integrating coping theory with research examining occupational stress and burnout suggestions can be brought forward towards improving life at work and reducing occupational stress, and subsequent experienced burnout.

Implications for future research

Research on the field of burnout has been extensive and has a long tradition that goes back in the early 20th century Britain and the Health and Munitions Workers Committee which was founded in 1915 (Barling & Griffith, 2003). Maslach (2003) argued that "...the trajectory of burnout research began with a real social problem rather than with deprivations from scholarly theory" (p. 189). Schaufeli (2004) distinguished five different types of organisational psychology research, based on past research efforts and at the same time reflecting on future perspective. Explanatory research constitutes a theory guided approach to research, focusing on understanding mechanisms and psychological processes. Occupational Health Psychology (OHP) has been traditionally focused on such models that study the effects of job demands and resources on employee health and well being (Cooper, 1998).

Other approaches are inspired by the mechanisms of social change in order to explain physical symptoms (e.g. cardiovascular disease) and burnout (Siegrist, 1998) amongst employees, while other use the notion of psychological contract and organisational justice (Folger & Cropanzano, 1998; Rousseau, 1995). Finally, research focused on motives and cognitions stem from the fields of physiological and experimental psychology (Frese & Zapf, 1994; Hockey, 1997), which focus on occupational accidents, human errors and occupational fatigue. Schaufeli (2004) suggests that such research models lack theoretical underpinning and that research efforts should focus on conceptual development, and that future explanatory research should also focus on variables such as the personality and personal resources, in order to investigate the ways by which employees handle psychosocial risks and the health protective role which personal resources play in the process of coping (Semmer, 2003).

Payne and Cooper (2001) maintained that since emotions depend upon the existence of social relationships, they are open to investigation using concepts such as "emotional contagion", which can explain why emotions are contagious from worker to worker, and emotional labour, as previously described. Drawing upon this realisation, research can also benefit from studies which do not focus on individuals alone, but instead they should focus on the collective dimension, which is in accordance with other suggestions made from scholars (Coady et al., 1990; Collins & Murray, 1996; Um & Harrison, 1998). Furthermore, it would be beneficial to use laboratory experiments in stimulated work environments, which have demonstrated contrary results, namely the negative effects of received social support, as this was experienced as a potential threat to employee self esteem (Deelstra et al., 2003).

Enzmann (2005) suggested that the emotional components of emotional exhaus-

tion deserve more attention. With regard to the three-dimensions of the MBI, meta-analysis has shown that emotional exhaustion is best predicted by job demands (Lee & Ashforth, 1996). An objection, poses by the author, is that nearly all studies cannot distinguish between causes and consequences. Furthermore, because burnout is likely to be a long-term rather than a short-term reaction, cross-sectional studies are incapable of providing an insight to the factors that help the development of burnout.

Moreover, validation-studies have shown that individual employees' assessment of burnout either measured independently by others or by self-measures validate the emotional exhaustion scale of the MBI only. The author thought it was noteworthy that emotional exhaustion especially, was related to quantitative workload rather than qualitative demands. It was then maintained that there are two possible alternative ways in order to interpret this result: on the one hand, it is possible that the MBI does not measure burnout but rather something else, and on the other hand, that emotional demands have not been properly investigated. The author suggested, in conclusion, that individual processing of demands, such a emotion regulation and coping processes, deserve closer attention towards a thorough study of burnout.

Schaufeli (2004) argued that there are two future issues concerning descriptive research, which basically seeks to identify risk factors and groups at risk descriptively, not going beyond, in order to produce frequencies and percentages. On the one hand, cross national comparative research studies and large scale epidemiological studies are lacking in research. Recently, the Maastricht Cohort Study (Kant et al., 2003) constitutes an exception, as the study participants were over 10,000 workers; this study lasted five (5), with 4-month intervals, using validated instruments such as the Maslach Burnout Inventory (MBI) and the General Health Questionnaire (GHQ). On the other hand, the authors maintained that research on occupational health psychology would also benefit from studies that will demonstrate the relationship between well being, health and occupational safety in parallel to objective parameters.

Tool development for occupational health psychology also faces up problems. The author argued that since tools are designed for the use of professionals of the field, results are published in academic and research journals and not scientific journals. A more serious problem is that there is a lack of reference data across different professions and occupational sectors, with the exception of the Occupational Stress Indicator (OSI) (Cooper, Sloan & Williams, 1988) and the Maslach Burnout Inventory (MBI) (Schaufeli et al., 2001). Other researchers have also stressed the importance for the creation of a system that would allow calculation of the financial costs of absenteeism, burnout, job satisfaction and other important variables (DeRango & Franzini, 2003).

A wide variety of intervention programmes have been developed in order to respond to this major problem, burnout, which is met in organisational settings and its severe effects (Schaufeli, 1995; van Dierendonck, Schaufeli & Bruunk, 1998). In addition, two new research developments have been suggested. The first development is suggested by Maslach and Leiter (1999), who indicated that intervention studies should focus on the specific psychological processes which are involved in burnout interventions, rather than concentrating on the effects of burnout. The second suggestion comes from Karoly and Anderson (2000) and Boufard (2000), who have suggested that goal-based approaches are of great importance to the interventions of burnout.

Salmela-Aro, Näätänen and Nurmi (2004) examined the role of personal goals and projects in diminishing burnout symptoms, by observing the effects of two intervention programmes: a psychoanalytic programme and an experimental programme of group therapy, in which the experiment's participants were different groups. The results of the study indicated that both the therapeutic interventions that were used were able to decrease the levels of severe burnout symptoms. Nevertheless, the authors identified their studies limitations indicating that the size of the sample was relatively small, therefore the results of the study cannot be generalised.

Moreover, the two interventions focused on burnout from the individuals' point of view, however it would be important to take into account the interpersonal as well as the organisational perspectives. Finally, the authors argued that another limitation of their study is that they used a not so widely used measurement for burnout (Bergen Burnout Indicator) and that the randomisation into intervention and control groups was not very successful in all respects. The authors concluded that personal projects offer an interesting framework in order to examine psychological processes that take place in the course of intervention programmes for burnout.

The same problem applies to intervention research and findings, which are published in professional journals, and, even though, stress management training has gained a lot of ground recently, evidence on its effectiveness are under investigated. van der Kink et al (2001), who were able to identify 43 individual or group-based interventions and only five (5) of which were organisation-based quasi experimental studies. Moreover, those five (5) interventions, which were organisation-based, had no significant effect. An exception was a recent study by Innstrand, Espnes and Mykletun (2004) conducted an intervention study, which aimed to evaluate possible changes in stress, burnout and job satisfaction that may occur between pre- and post-measurement after stress reducing interventions, both on individual and orga-

nisational level. The authors concluded that despite the problem of separating each intervention's effect, they were able to use both an individual and an organisational approach in the preparation of the intervention.

Finally, although well documented in literature, there are only few studies publicly documented on organisational change and its effects. Future organisational change research could well benefit from the key factors which were identified by Kompier and Cooper (1999) as being very successful: the use of a combination of work-worker directed measure; a participative approach for middle managers and workers; and, finally, top management support.

Conclusion

Organisational stress has for long been described as stress which results due to demands and constraints, which are presented to each individual employee in his/her organisational setting. Burnout constitutes a form of organisational stress, especially distinguished from other stresses, because it represents a whole set of responses, which are intensified by feelings of emotional exhaustion, after being repeatedly exposed to these job demands, by diminished sense of personal accomplishment and by using depersonalisation as coping strategy in order to deal with demands and clients. A line of research findings has given substantial evidence to support this three-component model. Gibson et al (1989), in a study among 176 field social workers in Northern Ireland measuring occupational stress, found that 47% of social workers fell into the category of moderate intensity of experienced burnout of the emotional exhaustion scale and 42% on the depersonalisation scale. Feelings of lack of personal accomplishment were made evident as the main manifestation of burnout.

Cordes and Dougherty (1993) argued that the key determinants of emotional exhaustion reflects equally personal and organisational demands; each individual employee's attempt to maintain performance standards set by the organisation, regardless of whether there is sufficient or insufficient time, staff and resources, may subsequently lead to emotional exhaustion due to excessive expenditure of emotional energy. Amongst the job demands that can contribute to emotional exhaustion are role conflict (Fisher & Gitelson, 1983; Saxton, Phillips & Blakency, 1991) and work overload (Friesen & Sarros, 1989; Shirom, 1989). Furthermore, depersonalisation is a unique response to burnout, which the authors suggest that is used as a coping strategy to emotional exhaustion, when other coping strategies and resources are not available. This study is consistent with other research finding (Lee & Ashforth, 1990; Leiter, 1990).

At least partly responsible for the use of depersonalisation as a coping strategy, is

professional socialisation (Leiter, 1990; Lemkau et al., 1987), gender differences (Gold, 1985) and the lack of participation (Savicki & Cooley, 1983). Consequently, when individual employees dehumanise and depersonalise a situation, towards a fellow employee or a client, they find themselves no longer willing to perform their jobs effectively. Thus, variables that cause an individual to doubt their competence, will consequently lead to the last component of burnout, which is diminished personal accomplishment. Self efficacy is lowered by the interference of a number of variables, such as role ambiguity (Brookings et al., 1985), lack of performance and lack of contingent rewards (Gist & Mitchell, 1992), unmet organisational expectations and achievements (Stephens & O'Neil, 1989), availability of personal resources (Leiter, 1990) and social support (Eden & Kinnar, 1991).

In conclusion, it must be taken into account that similarly to society, organisations change rapidly and that their impact is evident both on organisational level as well as individual-work-health-well being level. The United States National Institute of Occupational Safety and Health (NIOSH) (2002), due to the changing society, organisation and job, were led to formulate a three-level hierarchical model which contributes to our understanding of the dynamics of modern organisational environments. The external context of an organisation includes legislations, technological innovations, global economic developments and generally those factors which can be effective on a societal level. Secondly, the organisational context, which includes factors such as work-family programmes, psychological climate of the organisation and amongst employees, organisational restructures. Finally, work context refers to the job context, career development, work roles and all those work designs which are determined by the organisational context. It is of great importance for contemporary occupational health psychology and for the study of burnout, in particular, to focus on a genuine health model for research theorisation and study, rather than on the predominant widely used disease models.

References

- Acker, G. (1999). The impact of client's mental illness on social workers' job satisfaction and burnout. *Health and Social Work, 24*, 112-119.
- Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society, 4*, 139-158.
- Ackroyd, S., & Thomson, P. (1999). *Organizational misbehavior*. London: Sage.
- Adams, G. A., King, L. A., & King, D. W. (1996). Relationships of job and family involvement, family social support and work-family conflict with job and life satisfaction. *Journal of Applied Psychology, 81*, 411-420.
- Agius, R. M., Blenkin, H., Deary, I. J., Zealley, H. E., & Wood, R. A. (1996). Survey of perceived stress and work demands of consultant doctors. *Journal of Occupational and Environmental Medicine, 53*, 217-224.

- Amstutz, M. C., Neuenschwander, M., & Modestin, J. (2001). Burnout in psychiatric physicians. Results of an empirical study. *Psychiatrische Praxis, 28*(4), 163-167.
- Andersen, P. A., & Guerrero, L. K. (1998) (Eds.). Principles of communication and emotion in social interaction. *Handbook of communication and emotion: research, theory, applications and contexts*. San Diego: Academic Press.
- Antoniou, A.-S. (1999). Personal traits and professional burnout in health professionals. *Archives of Hellenic Medicine, 16*(1), 20-28.
- Appelbaum, S. H., Ritchie, S., & Shapiro, B. T. (1994). Mentoring revised: An organizational behavior construct. *International Journal of Career Management, 6*, 3-10.
- Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for change. *Human Relations, 46*, 681-703.
- Armstrong-Stassen, M., al-Ma'Aitah, R., Cameron, S., & Horsburgh, M. (1994). Determinants and consequences of burnout: A cross cultural comparison of Canadian and Jordanian nurses. *Health Care for Women International, 15*, 413-421.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal, 32*, 803-829.
- Ashforth, B. E. (1987). *Organizations and the Petty Tyrant: An Exploratory Study*. Paper presented at the Annual Meeting of the Academy of Management. New Orleans: Louisiana.
- Ashforth, B. E. (1994). Petty tyranny in organizations. *Human Relations, 47*(7), 755-778.
- Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin, 121*, 417-436.
- Austin, J., & Vancouver, J. (1996). Goal constructs in psychology: Process and content. *Psychological Bulletin, 120*, 338-375.
- Avery, G. C., & Ryan, J. (2002). Applying situational leadership in Australia. *Journal of Management Development, 21*(4), 242-262.
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2000). *Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings*. Unpublished manuscript, Fordham University.
- Babakus, E., Cravens, D. W., Johnston, M., & Moncrief, W. C. (1999). The role of emotional exhaustion in sales force attitudes and behavior relationships. *Journal of Academy of Marketing Science, 27*(1), 58-70.
- Baker, E., Israel, B., & Schurman, S. (1996). Role of control and support in occupational stress: An integrated model. *Social Science and Medicine, 43*(7), 1145-1159.
- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. *Journal of Vocational Behavior, 66*, 26-44.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). The socially induced burnout model. In S. P. Shohov (Ed.), *Advances in psychology research*, (Vol. 25, pp. 13-30). New York, NY: Nova Science Publishers.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations, 58*(5), 661-689.
- Bakker, A. B., Schaufeli, W. B., Sixma, H., & Bosveld, W. (2001). Burnout contagion among general practitioners. *Journal of Social and Clinical Psychology, 20*, 82-98.
- Bakker, A. B., Schaufeli, W. B., Sixma, H., Bosveld, W., & van Dierendonck, D. (2000). Patient de-

- mands, lack of reciprocity and burnout: A five-year longitudinal study among general practitioners. *Journal of Organizational Behavior*, 21, 425-441.
- Balloch, S., Pahl, J., & McLean, J. (1998). Working in the social services: Job satisfaction, stress and violence. *British Journal of Social Work*, 28, 329-350.
- Bandura, A. (1977). Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy*. The exercise of control. New York: Freeman.
- Barling, J., & Griffiths, A. (2003). A history of occupational health psychology. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology*. Washington, DC: American Psychological Association.
- Barnett, R. C., & Brennan, R. T. (1995). The relationship between job experience and psychological distress: A structural equation approach. *Journal of Organizational Behavior*, 16, 259-276.
- Bass, B. M. (1985). *Leadership and Performance beyond Expectations*. New York, NY: Free Press.
- Bass, B. M. (1999). Stress and transactional-transformational leadership. *Transformational Leadership: Industrial, Military and Educational Impact*, (vol. 79, pp. 28-33). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bateman, T. S., O'Neill, H., & Kenworthy-U'Ren, A. (2002). A hierarchical taxonomy of top managers' goals. *Journal of Applied Psychology*, 87, 1134-1148.
- Bayrakdar-Garside, R. (2002). Socialization of discrete negative emotions: gender differences and links with psychological distress. *Sex Roles*, 47(3-4), 115-128.
- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of Management Journal*, 39, 464-482.
- Begley, T. M., & Czajka, J. M. (1993). Panel analysis of the moderating effects of commitment on job satisfaction, intent to quit and health following organizational change. *Journal of Applied Psychology*, 78(4), 552-556.
- Bendow, S. (1998). Burnout: Current knowledge and relevance to old age psychiatry. *International Journal of Geriatric Psychiatry*, 13, 520-526.
- Bennet, P., Evans, R., & Tattersall, A. (1993). Stress and coping in social workers: A preliminary investigation. *British Journal of Social Work*, 23, 31-44.
- Bhana, A., & Haffejee, N. (1996). Relation among measures of burnout, job satisfaction and role dynamics for a sample of South African child-care social workers. *Psychological Reports*, 79(2), 431-434.
- Blanchflower, D. G., Oswald, A. J., & Stutzer, A. (2001). Latent Entrepreneurship across Nations. *European Economic Review*, 45(4-6), 680-691.
- Blanton, H., Buunk, B. P., Gibbons, F. X., & Kuyper, H. (1999). When better-than-others compare upward: Choice of comparison and comparative evaluation as independent predictors of academic performance. *Journal of Personality and Social Psychology*, 76, 420-430.
- Bono, J. E., & Vey, M. A. (2004). Toward understanding emotional management at work: A quantitative review of emotional labor research. In N. Ashkanasy & C. Hartel (Eds.), *Understanding emotions in organizational behavior*. Erlbaum, NJ: Mahwah.
- Borrill, C., Wall, T., West, M. et al. (1996). *Mental health of the workforce in NHS Trusts*. Phase 1.

- Final report. Institute of Work Psychology, University of Sheffield & Department of Psychology, University of Leeds, Leeds.
- Bouffard, L. (2000). Presentation. Nouvelles interventions basées sur l'approche des buts personnels. (Special issue concerning goals in clinical interventions). *Revue Québécoise de Psychologie*, 21, 101-114.
- Bourbonnais, R., Brisson, C., Moisan, J., & Vezina, M. (1996). Job strain and psychological distress in white-collar workers. *Scandinavian Journal of Work Environment and Health*, 22, 139-145.
- Bowman, M. A., & Allen, D. I. (1985). *Stress and women physicians*. New York, NY: Springer Verlag.
- Boyle, G. J., Borg, M. G., Falzon, J. M., & Baglioni, A. J. (1995). A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology*, 65, 49-67.
- Bradley, D. E., & Roberts, J. A. (2004). Self-employment and job satisfaction: Investigating the role of self-efficacy, depression and seniority. *Journal of Small Business Management*, 42(1), 37-58.
- Bradley, J., & Sutherland, V. (1995). Occupational stress in social services: A comparison of social workers and home help staff. *British Journal of social work*, 25, 313-331.
- Brewer, E., & Clippard, L. F. (2002). Burnout and job satisfaction among student support services personnel. *Human Resource Development Quarterly*, 13(2), 169-186.
- Brockner, J., Tyler, T. R., & Cooper-Schneider, R. (1992). The influence of prior commitment to an institution on reactions to perceived unfairness: The higher they are, the harder they fall. *Administrative Science Quarterly*, 37, 241-261.
- Brookings, J. B., Bolton, B., Brown, C. E., & McEvoy, A. (1985). Self-reported job burnout among female human service professionals. *Journal of Occupational Behavior*, 6, 143-150.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior*, 60, 17-39.
- Brotheridge, C. M., & Lee, R. T. (1998). *On the dimensionality of emotional labor: Development and validation of the emotional labor scale*. Paper presented at the 1st conference on Emotions in Organizational Life, San Francisco, CA.
- Brunstein, J. (1993). Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, 65, 1061-1070.
- Bryman, A. (1999). The disneyization of society. *The Sociological Review*, 47, 25-47.
- Burke, R. J. (1993). Organizational-level interventions to reduce occupational stressors. *Work and Stress*, 7(1), 77-87.
- Burke, R. J. (2000). Workaholicism in organizations: Psychological and physical well-being consequences. *Stress Medicine*, 16, 11-16.
- Burke, R. J., & Deszca, E. (1986). Correlates of psychological burnout phases among police officers. *Human Relations*, 39, 487-502.
- Burke, R. J., & Greenglass, E. R. (1989). Psychological burnout among men and women in teaching: An examination of the Cherniss model. *Human Relations*, 3, 261-273.
- Burke, R. J., & Greenglass, E. R. (1995). A longitudinal study of psychological burnout in teachers. *Human Relations*, 48(2), 187-202.
- Burke, R. J., McKenna, C. S., & McKeen, C. A. (1991). How do mentorships differ from typical supervisory relationships? *Psychological Reports*, 68, 459-466.
- Burke, R. J., Shearer, J., & Deszca, G. (1984). Burnout among men and women in police work: An examination of the Cherniss model. *Journal of Health and Human Resources Administration*, 7, 162-188.

- Buttner, H. E. (1992). Entrepreneurial stress: Is it hazardous to your health? *Journal of Managerial Issues*, 4(2), 223-240.
- Buunk, B. P., & Ybema, J. F. (1997). Social comparison and occupational stress: The identification-contrast model. In B. Buunk & F.X. Gibbons (Eds.), *Health, coping and well-being: Perspectives from social comparison theory*. Mahwah, NJ: Lawrence Erlbaum and Associates.
- Buunk, B. P., Ybema, J. F., Gibbons, F. X., & Ipenburg, M. (2001). The affective consequences of social comparison as related to professional burnout and social comparison orientation. *European Journal of Social Psychology*, 31, 337-351.
- Buunk, B., & Gibbons, F. X. (1997). *Health, coping and well-being: Perspectives from social comparison theory*. Mahwah, NJ: Lawrence Erlbaum and Associates.
- Byrne, B. M. (1994). Burnout: Testing for the validity, replication and invariance of causal structure across elementary, intermediate and secondary teachers. *American Educational Research Journal*, 31, 645-673.
- Byrne, B. M. (2001). *Structural equation modeling with Amos: Basic concepts, applications and programming*. Mahwah, NJ: Erlbaum.
- Cahoon, A. R., & Roney, J. I. A. (1989). A comparison of burnout across public/private sector managers. *Journal of Health and Human Resources Administration*, 12, 79-94.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Towards an understanding of the relationships between organizational change, individual differences and changes in person-environment fit: A cross-level study. *Journal of Applied Psychology*, 89, 868-882.
- Caplan, R. D., Tripathi, R. C., & Naisu, R. K. (1985). Subjective past, present and future fit: Effects on anxiety, depression and other indicators of well-being. *Journal of Personality and Social Psychology*, 48(1), 180-197.
- Carnall, C. (1999). *Managing change in organizations*. London: Prentice-Hall.
- Carson, J., & Kuipers, E. (1998). Stress management interventions". In S. Hardy, J. Carson and B. Thomas (Eds.), *Occupational stress: personal and professional approaches*. Cheltenham: Stanley Thornes.
- Carver, C. S., & Scheier, M. F. (1998). *On the self regulation of behavior*. New York: Cambridge University Press.
- Casas, J., Furlong, M., & Castillo, S. (1980). Stress and coping among university counselors: A minority perspective. *Journal of Counseling Psychology*, 27, 364-373.
- Catalan, J., Burgess, A., Pergami, A., Humle, N., Gazzard, B., & Phillips, R. (1996). The psychological impact on staff of caring for people with serious disease: The case of HIV infection and oncology. *Journal of Psychosomatic Research*, 40, 425-435.
- Chan, D. W., & Hui, E. K. P. (1995). Burnout and coping among Chinese secondary school teachers in Hong Kong. *British Journal of Educational Psychology*, 65, 15-25.
- Chen, J. C., & Silverthorne, C. (2005). Leadership effectiveness, leadership style and employee readiness. *Leadership and Organization Development Journal*, 26(4), 280-288.
- Cherniss, C. (1980). *Professional burnout in human service organizations*. New York, NY: Praeger.
- Cherniss, C. (1990). The human side of corporate competitiveness. In D.B. Fishman & C. Cherniss (Eds.), *The human side of corporate competitiveness*. Newbury Park, CA: Sage.
- Cherniss, C. (1991). Career commitment in human service professionals: A biographical study. *Human Relations*, 44(5), 419-437.
- Cherniss, C. (1995). *Beyond burnout: Helping teachers, nurses, therapists and lawyers recover from stress and disillusionment*. New York, NY: Routledge

- Chiu, R. K., & Kosinski, F. A. Jr. (1995). Chinese cultural collectivism and work-related stress: Implications for employment counselors. *Journal of Employment Counseling, 32*, 98-110.
- Chow, I. H. S. (1990). An empirical assessment of organizational commitment among local employees. *Human Resources Journal, 6*(1), 32-38.
- Christiansen, C., Backman, C., Little, B., & Nguyen, A. (1999). Occupations and well-being: A study of personal projects. *American Journal of Occupational Therapy, 53*, 91-100.
- Chwalisz, K. D., Altmaier, E. M., & Russell, D. W. (1992). Causal attribution, self-efficacy cognitions and coping with stress. *Journal of Social and Clinical Psychology, 11*, 377-400.
- Coady, C., Kent, V., & Davis, P. (1990). Burnout among social workers working with patients with cystic fibrosis. *Health and Social Work, 15*(2), 116-124.
- Cohen, A. (1993). Organizational commitment and turnover: A meta-analysis. *Academy of Management Journal, 36*, 1140-1157.
- Cohen, S., & Wills, T. A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin, 98*, 310-357.
- Collings, J., & Murray, P. (1996). Predictors of stress amongst social workers: An empirical study. *British Journal of Social Work, 26*, 375-387.
- Collins N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. M. (1993). Social support in pregnancy: Social correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology, 65*, 1243-1258.
- Collins, R. L. (1996). For better or worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin, 119*(1), 51-69.
- Collins, S., & Parry-Jones, B. (2000). Stress: The perceptions of social work lectures in Britain. *British Journal of Social Work, 30*, 769-794.
- Constable, J. F., & Russell, D. W. (1986). The effect of social support and the work environment upon burnout among nurses. *Journal of Human Stress, 12*(1), 20-26.
- Cooper, C. L. (1998). Theories of organizational stress. Oxford: Oxford University Press.
- Cooper, C. L., Sloan, G., & Williams, S. (1988). *The Occupational Stress Indicator: Management guide*. Windsor: NFER-Nelson.
- Cooper, R. K. (1997). Applying emotional intelligence in the workplace. *Training and Development, 51*, 31-38.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *The Academy of Management Review, 18*(4), 621-656.
- Cordes, C. L., Dougherty, T. W., & Blum, M. (1997). Patterns of burnout among managers and professionals: A comparison of models. *Journal of Organizational Behavior, 18*, 685-701.
- Corrigan, P. W., Holmes, P., Luchins, D., Bulcan, B., Basit, A., & Parks, J. J. (1994). Staff burnout in a psychiatric hospital: A cross-lagged panel design. *Journal of Organizational Behavior, 15*, 65-74.
- Cournoyer, B. (1988, May). Personal and professional distress among social case workers. *Social Casework: The Journal of Contemporary Social Work, 259-264*.
- Covington, M. V. (2000). Goal theory, motivation and school achievement: An integrated review. *Annual Review of Psychology, 51*, 171-200.
- Cummins, R. (1990). Job stress and the buffering effect of supervisory support. *Group and Organizational Studies, 15*, 92-104.
- Cushman, L., Evans, P., & Namerow, P. (1995). Occupational stress among AIDS social service providers. *Social Work in Health Care, 21*, 115-131.

- Dawis, R. V., & Lofquist, L. H. (1978). Values as second-order needs in the Theory of Work Adjustment. *Journal of Vocational Behavior*, 12, 12-19.
- Deary, I. J., Agius, R. M., & Sadler, A. (1996). Personality and stress in consultant psychiatrists. *International Journal of Social Psychiatry*, 42(2), 112-123.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation and well-being in the work organizations of a former Eastern Bloc country: A cross-cultural study of self determination. *Personality and Social Psychology Bulletin*, 27, 930-942.
- Deckard, G., Meterko, M., & Field, D. (1994). Physician burnout: An examination of personal, professional and organizational relationships. *Medical Care*, 32, 745-754.
- Deelstra, J. T., Peeters, M. C. W., Schaufeli, W. B., Stroebe, W., Zijlstra, F., & van Doornen, L. (2003). Receiving social support at work: When help is not welcome. *Journal of Applied Psychology*, 88, 324-331.
- Demerouti, E. (1999). Burnout: Eine Folge konkreter Arbeitsbedingungen bei Dienstleistungs- und Produktionstätigkeiten [Burnout: A consequence of specific working conditions in human services and production work]. Frankfurt, Germany: Peter Lang.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Ebbinghaus, M. (2002). From mental strain to burnout. *European Journal of Work and Organizational Psychology*, 11(4), 423-441.
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment*, 9, 12-23.
- DeRango, K., & Franzini, L. (2003). Economic evaluations of workplace health interventions: Theory and literature review. In J.C. Quick and L.E. Tetrick (Eds.), *Handbook of occupational health psychology*, Washington, DC: American Psychological Association.
- Doest, L. T., Maes, S., Gebhardt, W. A., & Koelewijn, H. (2006). Personal goal facilitation through work: Implications for employees' satisfaction and well-being. *Applied Psychology: An International Review*, 55(2), 192-219.
- Doyle, C., & Hind, P. (1998). Occupational stress, burnout and job status in female academics. *Gender, Work and Organization*, 5(2), 67-82.
- Du Gay, P. (1996). *Consumption and identity at work*. London: Sage.
- Dubinsky, A. J., Yammarino, F. J., Jolson, M. A., & Spangler, W. D. (1995). Transformational leadership: An initial investigation in sales context. *The Journal of Personal Selling & Sales Management*, 5(2), 15-31.
- Dunkel-Schetter, C., Blasband, D. E., Feinstein, L. G., & Herbert, T. B. (1992). Elements of supportive interaction: When are attempts to help effective? In S. Spacapan & S. Oskamp (Eds.), *Helping and being helped in the real world*. Newbury Park, CA: Sage.
- Duquette, A., Kerouac, S., Sandhu, B. K., Ducharme, F., & Saulnier, P. (1995). Psychosocial determinants of burnout in geriatric nursing. *International Journal of Nursing Studies*, 32, 443-456.
- Duxbury, M. L., Armstrong, G. D., Drew, D. J., & Henly, S. J. (1984). Head nurses leadership style with staff nurse burnout and job satisfaction in neonatal intensive care units. *Nursing Research*, 33(2), 97-101.

- Dyer, S., & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct care staff of a community learning disability service. *Journal of Applied Research in Intellectual Disabilities*, 11(4), 320-332.
- Eden, D., & Kinnar, J. (1991). Modeling galatea: Boosting self-efficacy to increase volunteering. *Journal of Applied Psychology*, 76, 759-780.
- Edwards, J. R. (1992). A cybernetic theory of stress, coping and well-being in organizations. *Academy of Management Review*, 17, 238-274.
- Edwards, J. R. (1996). An examination of competing versions of the person-environment fit approach to stress. *Academy of Management Journal*, 39, 292-339.
- Egan, M. (1993). Resilience at the front lines: Hospital social work with AIDS patients and burnout. *Social Work in Health Care*, 18, 109-125.
- Einsiedel, L., & Tully, J. (1981). Methodological considerations in studying the burnout phenomenon. In J. Jones (Ed.), *The burnout syndrome: Current research, theory and interventions*. Park Ridge Ill. : London House.
- Elliot, A. J., & Sheldon, K. M. (1998). Avoidance personal goals and the personality-illness relationship. *Journal of Personality and Social Psychology*, 75, 1282-1299.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058-1068.
- Enzmann, D. (1995). Gestresst, erschöpft oder ausgebrannt? *Einflüsse von arbeitssituation, Empathie und coping auf den burnoutprozess (Stressed, exhausted or burned out? Effects of working conditions, empathy and coping on the development of burnout)*. Munich: Profil.
- Enzmann, D. (2005). Burnout and emotions: An underresearched issue in search of a theory. In A.-S. Antoniou & C. L. Cooper (Eds.), *Research companion to organizational health psychology*. Northampton, MA, USA: Edward Elgar.
- Enzmann, D., Schaufeli, W. B., & Girault, N. (1995). The validity of the Maslach Burnout Inventory in three national samples. In L. Bennet, D. Miller, & M. Ross (Eds.), *Health workers and AIDS: Research, intervention and current issues in burnout and response*. London: Harwood.
- Erickson, R. J., & Ritter, C. (2001). Emotional labor, burnout and inauthenticity: Does gender matter? *Social Psychology Quarterly*, 64(2), 146-163.
- Erickson, R. J., & Wharton, A. S. (1997). Inauthenticity and depression: Asserting the consequences of interactive service work. *Work and Occupations*, 24(2), 188-213.
- Facchinetti, F., Matteo, M. L., Artini, G. P., Volpe, A., & Genazzani, A. R. (1997). An increased vulnerability to stress is associated with a poor outcome of in vitro fertilization-embryo transfer treatment. *Fertil Steril*, 67, 309-314.
- Farber, B. A. (1983). Introduction: A critical perspective on burnout. In B. A. Farber (Ed.), *Stress and burnout in human service professionals*. Oxford: Pergamon.
- Fedor, D. B., Caldwell, S., & Herold, D. M. (2006). The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59, 1-29.
- Finegan, J. E. (2000). The impact of person and organization values on organizational commitment. *Journal of Occupational and Organizational Psychology*, 73(2), 149-169.
- Fineman, S., & Gabriel, Y. (2000). *The study of organizational emotions: psychoanalytic and social constructionist perspectives*. Paper presented at the Annual Symposium of the International Society for the Psychoanalytic Study of Organizations, London.
- Firth, H., & Britton, P. (1989). Burnout, absence and turnover amongst British nursing staff. *Journal of Occupational Psychology*, 62, 55-59.

- Firth, H., McIntee, J., McKeown, P., & Britton, P. (1986). Burnout and professional depression: Related concepts? *Journal of Advanced Nursing*, 11, 633-641.
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of Managerial Psychology*, 19(2), 170-187.
- Fischer, H. J. (1983). A psychoanalytic view of burnout. In B. A. Farber (Ed.), *Stress and burnout in the human service professions*. Oxford: Pergamon.
- Fisher, C. D., & Citelson, R. (1983). A meta-analysis of the correlates of role conflict and ambiguity. *Journal of Applied Psychology*, 68, 320-333.
- Fleming, P., & Sewell, G. (2002). Looking for "The good soldier, Svejk": Alternative modalities of resistance in the contemporary workplace. *Sociology*, 36, 857-873.
- Fleming, P., & Spicer, A. (2003). Working at a cynical distance: Implications for power, subjectivity and resistance. *Organization*, 10(1), 157-179.
- Fleming, P., & Spicer, A. (2004). "You can checkout anytime, but you can never leave": Spatial boundaries in a high commitment organization. *Human Relations*, 57(1), 75-94.
- Folger, R., & Cropanzano, R. (1998). *Organizational justice and human resource management*. Thousand Oaks, CA: Sage.
- Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839-852.
- Ford, D. H. (1987). *Humans as self-constructing living systems: A developmental perspective on behavior and personality*. Hillsdale, NJ: Lawrence Erlbaum.
- Ford, J. K., Weissbein, D. A., & Plamondon, K. E. (2003). Distinguishing organizational from strategy commitment: Linking officers' commitment to community policing to job behaviors and satisfaction. *Justice Quarterly*, 20, 159-185.
- Fortado, B. (2001). The metamorphosis of grievance conflict. *Human Relations*, 54, 1189-1221.
- French, J. R. P., Caplan, R. D., & Harrison, R. V. (1982). *The mechanisms of job stress and strain*. New York: Wiley.
- Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. In H. Triandis & L. Hough (Eds.), *Handbook of industrial and organizational psychology*. Palo Alto, CA: Consulting Psychologists Press.
- Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30, 159-165.
- Friesen, D., & Sarros, J. C. (1989). Sources of burnout among educators. *Journal of Organizational Behavior*, 10, 179-188.
- Gaines, J., & Jermier, J. M. (1983). Emotional exhaustion in a high stress organization. *Academy of Management Journal*, 26, 4.
- Ganster, D. C., & Schaubroeck, J. (1991). Work stress and employee health. *Journal of Management*, 17, 235-271.
- Garden, A. M. (1987). Depersonalization: A valid dimension of burnout? *Human Relations*, 40(9), 545-560.
- George, J. M., & Brief, A. P. (1990). The economic instrumentality of work: An examination of the moderating effects of financial requirements and sex on the pay-life satisfaction relationship. *Journal of Vocational Behavior*, 37, 357-368.
- Geurts, S., & Demerouti, E. (2003). Work/non work interface: A review of theories and findings. In M.J. Schabraq, J.A.M. Winnbust & C.L. Cooper (Eds.), *The handbook of work and health psychology*. New York, NY: John Wiley & Sons Ltd.
- Geurts, S., Rutte, C., & Peeters, M. (1999). Antecedents and consequences of work-home interface among medical residents. *Social Science & Medicine*, 48, 1135-1148.

- Geyer, A. L. J., & Streyrer, J. M. (1998). "Transformational leadership and objective performance in banks", *Applied Psychology: An International Review*, 47, 397 - 420.
- Gianakos, I. (2000). Gender roles and coping with work stress. *Sex Roles*, 42(11-12), 1059-1079.
- Gibson, D. A. (1997). The struggle for reason: The sociology of emotions in organizations. In R.J. Erickson & B. Cuthbertson-Johnson (Eds.), *Social perspectives on emotion*, (Vol. 4, pp. 221-256). Greenwich, CT: JAI.
- Gibson, F., McGrath, A., & Reid, N. (1989). Occupational stress in social work. *British Journal of Social Work*, 19, 1-6.
- Gilbar, O. (1998). Relationship between burnout and sense of coherence in health social workers. *Social Work in Health Care*, 26, 39-49.
- Gill, A. S., Flaschner, A. B., & Shachar, M. (2006). Mitigating stress and burnout by implementing transformational leadership. *International Journal of Contemporary Hospitality Management*, 18(6), 469-481.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183-211.
- Gmelch, W. H., & Gates, G. (1998). The impact of personal, professional and organizational characteristics on administrator burnout. *Journal of Educational Administration*, 36(2), 146-159.
- Gmelch, W. H., & Torelli, J. A. (1994). The association of role conflict and ambiguity with administrator stress and burnout. *Journal of School Leadership*, 4, 341-356.
- Gold, Y. (1985). Does teacher burnout begin with student teaching? *Education*, 105, 254-257.
- Coleman, D. (2000). Leadership that gets results. *Harvard Business Review*, 78(2), 78-90.
- Golembiewski, R. T., & Munzenrider, R. (1981). Efficacy of three versions of one burn-out measure: MBI as a total score, sub-scale scores or phases? *Journal of Health and Human Resources Administration*, 4(2), 228-246.
- Golembiewski, R. T., & Munzenrider, R. (1984). Phases of psychological burn-out and organizational co-variants: A replication using norms from a large population. *Journal of Health and Human Resources Administration*, 7, 290-323.
- Goodman, P. S., & Rousseau, D. M. (2004). Organizational change that produces results: The linkage approach. *Academy of Management Executive*, 18, 7-19.
- Grandey, A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5, 95-110.
- Green, D. E., Walkey, F. H., & Taylor, A. J. W. (1991). The three-factor structure of the Maslach Burnout Inventory. *The Journal of Social Behavior and Personality*, 6, 453-472.
- Greenglass, E. R. (2005). Proactive coping, resources and burnout: implications for occupational stress. In A.S. Antoniou & C.L. Cooper (Eds.), *Research companion to organizational health psychology*. Northampton, MA, USA: Edward Elgar.
- Greenglass, E. R., & Burke, R. J. (2000). Hospital downsizing, individual resources and occupational stressors in nurses. *Anxiety, Stress and Coping*, 13, 371-390.
- Greenglass, E. R., Schwarzer, R., & Taubert, S. (1999). *The Proactive Coping Inventory (PCI): A multidimensional research instrument* (on-line publication, available at www.psych.yorku.ca/greenglass/)
- Greenglass, E. R., Schwarzer, R., Jakubiec, D., Fiksenbaum, L., & Taubert, S. (1999, July). *The Proactive Coping Inventory (PCI): A multidimensional research instrument*. Paper presented at the 20th International Conference of the Stress and Anxiety Research Society (STAR), Cracow, Poland.

- Gross, J., & Levenson, R. (1997). Hiding feelings: The acute effect on inhibiting negative and positive emotions. *Journal of Abnormal Psychology, 106*, 95-103.
- Guerrier, Y., & Adib, A. (2003). Work at leisure and leisure at work: A study of the emotional labor of tour reps. *Human Relations, 56*(11), 1399-1417.
- Hallberg, I. R. (1994). Systematic clinical supervision in a child psychiatric ward: Satisfaction with nursing care, tedium, burnout and the nurses own report on the effects of it. *Archives of Psychiatric Nursing, 8*, 44-52.
- Hannigan, B., Edwards, D., & Burnard, P. (2004). Stress and stress management in clinical psychology: Findings from a systematic review. *Journal of Mental Health, 13*(3), 235-245.
- Happel, B., Martin, T., & Pinikahana, J. (2003). Burnout and job satisfaction: A comparative study of psychiatric nurses from forensic and mainstream mental health service. *International Journal of Mental Health Nursing, 12*(1), 39-47.
- Harris, C., Daniels, K., & Briner, R. B. (2003). A daily diary study of goals and affective well-being at work. *Journal of Occupational and Organizational Psychology, 76*, 401-410.
- Harrison, W. D. (1983). A social competence model of burnout. In B.A. Farber (Ed.), *Stress and burnout in the human service professions*. Oxford: Pergamon.
- Hartline, M. D., Maxham, J. C. III, & McKee, D. O. (2000). Corridors of influence in the dissemination of customer-oriented strategy to customer contact service employees. *Journal of Marketing, 54*, 35-50.
- Hartog, D. N, Van Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: an analysis of the MLQ. *Journal of Occupational and Organisational Psychology, 70*, 19-34.
- Havlovic, S. J., & Keenan, J. P. (1995). Coping with stress: the influence of individual differences. In R. Crandall & P. L. Perrewe (ed.), *Occupational stress: a handbook*. Washington, D. C: Taylor & Francis.
- Heifetz, L. J., & Bersani, H. A. (1983). Disrupting the cybernetics of personal growth: Toward a unified theory of burnout in the human services. In B. A. Farber (Ed.), *Stress and burnout in the human service professions*. Oxford: Pergamon.
- Helgeson, V. S., & Mickelson, K. D. (1995). Motives for social comparison. *Personality and Social Psychology Bulletin, 21*(11), 1200-1209.
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of the three-component model. *Journal of Applied Psychology, 87*, 474-487.
- Hersey, P., Blanchard, K., & Johnson, D. E. (1996). *Management of organizational behavior: Utilizing human resources* (7th Edn). Englewood Cliffs, NJ: Prentice-Hall.
- Hesselbein, F., Goldsmith, M., & Beckhard, R. (1996). *The leader of the future: new visions, strategies and practices for the next era*. San Francisco: Jossey-Bass.
- Higgs, M. J. (2003). Do leaders need emotional intelligence? A study of the relationship between emotional intelligence and leadership of change. *International Journal of Organizational Behaviour, 5*(6), 195 - 212.
- Higgs, M. J., & Rowland, D. (2000). Building change leadership capability: the quest for competence. *Journal of Change Management, 1*(2), 116 - 131.
- Himle, D., Jayaratne, S., & Thyness, P. (1986). Predictions of job satisfaction, burnout and turnover among social workers in Norway and the USA: A cross-cultural study. *International Social Work, 29*, 323-334.
- Hobbs, F. D. (1994). Fear of aggression at work among general practitioners who have suffered a previous episode of aggression. *British Journal of General Practice, 44*, 390-394.

- Hockey, G. R. J. (1997). Compensatory control in the regulation of human performance under stress and high overload: A cognitive-energetical framework. *Biological Psychology*, 45, 73-93.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.
- Hsieh, Y. M., & Hsieh, A. T. (2001). Enhancement of service quality with job standardization. *The Service Industries Journal*, 21(3), 147-166.
- Hsieh, Y. M., & Hsieh, A. T. (2003). Does job standardization increase job burnout? *International Journal of Manpower*, 24(5), 590-614.
- Huguet, P., Galvaing, M. P., Montell, J. M., & Dumas, F. (1999). Social presence effects in the Stroop task: Further evidence for an attentional view of social facilitation. *Journal of Personality and Social Psychology*, 77, 1011-1025.
- Hunnicut, A. W., & MacMillan, T. F. (1983). Beating burn-out: Findings from a three-year study. *Association of Mental Health Administrators Journal*, 10, 7-9.
- Hyphantis, T., & Mavreas, V. (2005). "Burning in"- "burning out" in public: Aspects of the burnout process in community-based psychiatric services. In A.S. Antoniou & C.L. Cooper (Eds.), *Research companion to organizational health psychology*. Northampton, MA, USA: Edward Elgar.
- Iakovides, A., Fountoulakis, K. N., Kaprinis, S., & Kaprinis, G. (2003). The relationship between job stress, burnout and clinical depression. *Journal of Affective Disorders*, 75(3), 209-221.
- Iakovides, A., Fountoulakis, K. N., Moysidou, C., & Ierodiakonou, C. (1997). Burnout in nursing staff: A clinical syndrome rather than a psychological reaction? *General Hospital Psychiatry*, 19, 419-428.
- Igbaria, M., & Greenhaus, J. H. (1992). Determinants of MIS employees' turnover intentions: A structural equation model. *Communication of the ACM*, 35(2), 35-49.
- Illardi, B. C., Leone, D., Kasser, T., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Psychology*, 23, 1789-1805.
- Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2004). Job stress, burnout and job satisfaction: An intervention study for staff working with people with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 17, 119-126.
- Iverson, R. D., & Maquire, C. (2000). The relationship between job and life satisfaction: Evidence from a remote mining community. *Human Relations*, 53(6), 807-839.
- Iwanicki, E. F., & Schwab, R. L. (1981). A cross-validation study of the Maslach Burnout Inventory. *Educational and Psychological Measurement*, 41, 1167-1174.
- Jackson, S. E. & Maslach, C. (1980). Job stress among helping professionals: The effects on workers and their families. Conference on Current Issues in Occupational Stress: Theory, Research, and Intervention, Toronto.
- Jackson, S. E., & Maslach, C. (1982). After-effects of job-related stress: Families as victims. *Journal of Occupational Behavior*, 3, 63-77.
- Jackson, S. E., & Schuler, R. S. (1983). Preventing employee burnout. *Personnel*, 60(2), 58-68.
- Jackson, S. E., Schwab, R. L., & Schuler, R. S. (1986). Toward an understanding of the burnout phenomenon. *Journal of Applied Psychology*, 71, 630-640.
- Jayarathne, S., Chess, W., & Kunkel, D. (1986). Burnout: Its impact on child welfare workers and their spouses. *Health and Social Work*, 31, 53-59.
- Johnson, J. V., & Hall, E. M. (1996). Social support in the work environment and cardiovascular disease. In S. Shumaker & S. Czajkowski (Eds.), *Social support and cardiovascular disease*. New York: Plenum.

- Jones, F., & Fletcher, B. (1993). Transmission of occupational stress: A study of daily fluctuations in work stress and strain and their impact on marital partners. In H. Schroder, K. Rescke, M. Johnston & S. Maes (Eds.), *Health psychology: Potential indiversity*. Regensburg: Roderer Verlag.
- Jones, M. (1993). Role conflict: Cause of burnout or energizer? *Social Work, 38*, 136-141.
- Jones-Johnson, G., & Johnson, W. R. (1992). Subjective underemployment and psychological stress: The role of perceived social and supervisory support, *Journal of Social Psychology, 132*(1), 11-21.
- Judge, T. A., & Locke, E. A. (1993). Effect of dysfunctional thought processes on subjective well-being and job satisfaction. *Journal of Applied Psychology, 78*, 475-490.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*(1), 17-34.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology, 84*, 107-122.
- Kadushin, G., & Kulys, R. (1995). Job satisfaction among social work discharge planners. *Health and Social Work, 20*, 174-186.
- Kahil, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology, 29*, 284-297.
- Kahn, R. L., & Boysiére, P. (1992). Stress in organizations. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology*, (Vol. 3, pp. 571-650). Palo Alto, CA: Consulting Psychologists Press.
- Kalliath, T. J., & Beck, A. (2001). Is the path to burnout and turnover paved by a lack of supervisory support: A structural equation test. *New Zealand Journal of Psychology, 30*, 72-78.
- Kant, I. J., Bueltmann, U., Schröer, K. A. P., Beurskens, A. J. H. M., van Amelsvoort, L. G. P. M., & Swean, G. M. H. (2003). An epidemiological approach to study fatigue in the working population: the Maastricht Cohort Study. *Occupational and Environmental Medicine, 60* (supplement 1): i32-i39.
- Karasek, R., & Theorell, T. (1990). *Stress, productivity and the reconstruction of working life*. New York: Basic Books.
- Karniol, R., & Ross, M. (1996). The motivational impact of temporal focus: Thinking about the future and the past. *Annual Review of Psychology, 47*, 593-620.
- Karoly, P., & Anderson, C.W. (2000). The long and short of psychological change: Toward a goal-centred understanding of treatment durability and adaptive success. In C.R. Snyder & R.E. Ingram (Eds.), *Handbook of psychological change: Psychotherapy processes and practices for the 21st century*. New York, NY: Wiley.
- Karoly, P., & Lecci, L. (1993). Hypochondriasis and somatisation in college women: A personal project approach. *Health Psychology, 12*, 103-109.
- Katz, J., Beach, S., & Joiner, T. (1999). Contagious depression in dating couples. *Journal of Social and Clinical Psychology, 18*, 1-13.
- Kaufman P. J. (1999). Franchising and choice of self employment. *Journal of Business Venturing, 14*(4), 345-361.
- Kawakami, N., Araki, S., & Kawashima, M. (1990). Effects of job stress on occurrence of major depression in Japanese industry: A case-control study nested in a cohort study. *Journal of Occupational Medicine, 32*(8), 722-725.

- Kilfedder, C. J., Power, K. G., & Wells, T. J. (2001). Burnout in psychiatric nursing. *Journal of Advanced Nursing*, 34(3), 383-396.
- Kinnunen, U., & Mauno, S. (1998). Antecedents and outcomes of work-family conflict among employed women and men in Finland. *Human Relations*, 51, 157-177.
- Kirwan, M., & Armstrong, D. (1995). Investigation of burnout in a sample of British general practitioners. *British Journal of General Practice*, 45, 259-260.
- Koeske, G. F., & Kirk, S. A. (1994). Measuring the monday blues: Validation of a job satisfaction scale for the human services. *Social Work Research*, 18(1), 27-35.
- Kompier, M., & Cooper, C. L. (1999). *Preventing stress, improving productivity: European case studies in the workplace*. London: Routledge.
- Korczynski, M. (2001). The predictions of service work: Call centre as customer-oriented bureaucracy. In A. Sturdy, I. Grugulis & H. Willmott (Eds.), *Customer service: Empowerment and entrapment*. Basingstoke: Palgrave.
- Korczynski, M. (2002). *Human resource management in service work*. Basingstoke: Palgrave.
- Korczynski, M., Shire, K., Frenkel, S., & Tam, M. (2000). Service work in customer capitalism: Customer, control and contradictions. *Work, Employment and Society*, 14, 669-688.
- Korkkela, J. A., Toyry, S., Kumpulainen, K., & Toivola, J. M. (2003). Burnout and self-perceived health among Finnish psychiatrists and child psychiatrists: A national survey. *Scandinavian Journal of Public Health*, 31(2), 85-91.
- Kramer, M. W., Callister, R. R., & Turban, D. B. (1995). Information-receiving and information-giving during job transitions. *Western Journal of Communication*, 59, 151-170.
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, July-September, 19(3), 192-207.
- Kuremyr, D., Kihlgren, M., Norberg, A., Astrom, S., & Kalrsson, I. (1994). Emotional experiences, empathy and burnout among staff caring for demented patients at a collective living unit and a nursing home. *Journal of Advanced Nursing*, 19, 670-679.
- Kurland, R., & Salmon, R. (1992). When problems seem overwhelming: Emphases in teaching, supervision and consultation. *Social Work*, 37, 240-244.
- Lacan, J. (1977). *Ecrits. A selection*. London: Routledge.
- Lacan, J. (1988). *The seminar of Jacques Lacan, Book II, The ego in Freud's theory and in the technique of psychoanalysis, 1954-1955*. Cambridge: Cambridge University Press.
- Lacan, J. (1993). *The seminar of Jacques Lacan, Book III, The psychoses, 1955-1956*. New York and London: W.W. Norton.
- Lacan, J. (2001). *Autres ecrits*. Paris: Seuil.
- Laurier, E. (1999). That sinking feeling: Elitism, working leisure and yachting. In D. Crouch (Ed.), *Leisure/tourism geographies: Practices and geographical knowledge*. London: Routledge.
- Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior*, 59, 454-470.
- Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological Inquiry*, 1, 3-13.
- Lazarus, R. S. (1995). Psychological stress in the workplace. In R. Crandall and P.L. Perrewe (Eds.), *Occupational Stress: A handbook*, Washington, DC: Taylor and Francis.
- Lazarus, R. S., & Folkman, S. (1984). *Stress appraisal and coping*. New York: Springer.
- Ledford, G. E. Jr., Mohrman, S. A., Mohrman, A. M., & Lawler, E. E. (1990). The phenomenon of lar-

- ge scale organizational change. In A. M. Mohrman et al. (Eds.), *Large scale organizational change*. San Francisco: Jossey-Bass.
- Lee, C. M., & Duxbury, L. (1998). Employed parent's support from partners, employers and friends. *Journal of Social Psychology, 138*, 303 - 322.
- Lee, R. T., & Ashforth, B. E. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology, 75*, 743-747.
- Lee, R. T., & Ashforth, B. E. (1993). A further examination of managerial burnout: Toward an integrated model. *Journal of Organizational Behavior, 14*, 3-20.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*(2), 123-133.
- Leiter, M. P. (1990). The impact of family resources, control coping and skill utilization on the development of burnout: A longitudinal study. *Human Relations, 43*, 1067-1083.
- Leiter, M. P. (1991). Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *Journal of Organizational Behavior, 12*, 123-144.
- Leiter, M. P., & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior, 9*, 297-308.
- Leiter, M. P., & Maslach, C. (2005). A mediation model. In A.S. Antoniou & C.L. Cooper (Eds.), *Research companion to organizational health psychology*. Northampton, MA, USA: Edward Elgar.
- Leiter, M. P., & Schaufeli, W. B. (1996). Consistency of the burnout construct across occupations. *Anxiety, Stress and Coping, 9*, 229-243.
- Leiter, M. P., Harvie, P., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine, 47*, 1611-1117.
- Lemkau, J. P., Rafferty, J. P., Purdy, R. R., & Rudisill, J. R. (1987). Sex role stress and job burnout among family practice physicians. *Journal of Vocational Behavior, 31*, 81-90.
- Livianos-Aldana, L., De Las Cuevas Castresana, C., & Rojo Moreno, L. (1999). Psychiatrist's burnout: A survey. *Actas Espanolas Psiquiatria, 27*(5), 305-309.
- Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health, 11*(3), 255-265.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Upper Saddle Ridge, NJ: Prentice Hall.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation. *American Psychologist, 57*, 705-717.
- Loscocco, K. A., & Roschelle, A. R. (1991). Influences of the quality of work and nonwork life: Two decades in review. *Journal of Vocational Behavior, 39*, 182-225.
- MacCarthy, M. M. (1993). Challenges to the public school curriculum: New targets and strategies. *Phi Delta Kappan, 75*(1), 55-60.
- Mackie, K. S., Holahan, C. K., & Gottlieb, N. H. (2001). Employee involvement management practices, work stress and depression in employees of human services residential care facility. *Human Relations, 54*(8), 1065-1092.
- Maertz, C. P., Mosley, D. C., & Alford, B. L. (2002). Does organizational commitment fully mediate constituent effects? A reassessment and clarification. *Journal of Applied Social Psychology, 32*, 1300-1313.
- Major, B., Testa, M., & Bylsma, W. H. (1991). Responses to upward and downward social comparison: The impact of esteem relevance and perceived control. In J. Suls & T.A. Wills (Eds.), *Social*

- comparison. *Contemporary theory and research*, Hillsdale, NJ: Lawrence Erlbaum and Associates.
- Mann, S. (1999). Emotion at work: To what extent are we expressing, suppressing or faking it? *European Journal of Work and Organizational Psychology*, 8, 347-369.
- Markus, K. H., & Nurius, P. (1986). Possible selves. *American Psychologists*, 41, 954-969.
- Maslach, C. (1976). Burned-out. *Human Behavior*, 10(9), 16-22.
- Maslach, C. (1978). Job burnout: How people cope. *Public Welfare*, 36, 36-38.
- Maslach, C. (1979). The burn out syndrome and patient care. In C. Garfield (Ed.), *Stress and survival: The emotional realities of life threatening illness*. St Luis: Mosby.
- Maslach, C. (1981). Burnout: A social psychological analysis. In J. Jones (Ed.), *The burnout syndrome: Current research, theory and interventions*. Park Ridge Ill. : London House.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12(5), 189-192.
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology*, 7, 63-74.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. In S. Oskamp (Eds.), *Applied social psychology annual: Applications in organization settings*, 5, 133-153. Beverly Hills, CA: Sage.
- Maslach, C., & Jackson, S.E. (1987). *The Maslach Burnout Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Leiter, M. (1997). *The truth about burnout. How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.
- Maslach, C., & Leiter, M. (1999). Burnout and engagement in the workplace. A contextual analysis. *Advances in Motivation and Achievement*, 11, 275-302.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422.
- McGrath, J. E. (1976). Stress and behavior in organizations. In M. D. Dunnett (Ed.), *Handbook of industrial and organizational psychology* (pp. 959-964). Chicago: Rand McNally.
- McLean, J., & Andrew, T. (2000). Commitment, satisfaction, stress and control among social services managers and social workers in the UK. *Administration in Social Work*, 23, 93-117.
- McMullen, B. (2003). *Spiritual intelligence*. British Medical Journal, 326, S51.
- Meier, S. T. (1983). Toward a theory of burnout. *Human Relations*, 36(10), 899-910.
- Meldrum, L., & Yellowlees, P. (1999). How heavy is a case manager's workload? How is it measured? In *Whose dreams? Whose realities?* Proceedings of the MHS Ninth Annual Mental Health Service Conference. Melbourne, Australia, 21-24 September.
- Meldrum, L., & Yellowlees, P. (2000). The measurement of a case manager's workload burden. *Australian and New Zealand Journal of Psychiatry*, 34, 658-663.
- Meyer, J., & Allen, N. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, CA: Sage.
- Michinov, N. (2005). Social comparison, perceived control and occupational burnout. *Applied Psychology: An International Review*, 54(1), 99-118.

- Miller, I., & Norman, W. (1979). Learned helplessness in humans: A review and contribution-theory model. *Psychological Bulletin*, 86, 93-118.
- Miller, V. D., Johnson, J. R., & Grau, J. (1994). Antecedents to willingness to participate in a planned organizational change. *Journal of Applied Communication Research*, 22, 59-80.
- Montgomery, A. J., Panagopoulou, E., de Wildt, M., & Meenks, E. (2006). Work-family interference, emotional labor and burnout. *Journal of Managerial Psychology*, 21(1), 36-51.
- Montgomery, A. J., Peeters, M. C. W., Schaufeli, W. B., & Den Ouden, M. (2003). Work-home interference among newspaper managers: Its relationship with burnout and engagement. *Anxiety, Stress & Coping*, 16, 195-211.
- Montgomery, D. C., Blodget, J. G., & Barnes, J. H. (1996). A model of financial securities sales persons' job stress. *The Journal of Services Marketing*, 10(3), 21-38.
- Moore, K. A. (2002). Hospital restructuring: Impact on nurses mediated by social support and a perception of challenge. *Journal of Health and Human Services Administration*.
- Mor, N., & Winquist, J. (2002). Self-focuses attention and negative affect: A meta-analysis. *Psychological Bulletin*, 128, 638-662.
- Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents and consequences of emotional labor. *Academy of Management Review*, 21, 986-1010.
- Munn, E. K., Barber, C. E., & Fritz, J. J. (1996). Factors affecting the professional well-being of child life specialists. *Children's Health Care*, 25, 71-91.
- Nadler, D. A. (1982, Summer). Managing transitions to uncertain future states. *Organizational Dynamics*, 11, 37-45.
- Naisberg - Fenning S., Fenning, S., Keinman, G., & Eliuzur, A. (1991). Personality characteristics and proneness to burnout: a study among psychiatrists. *Stress Medicine*, 7, 201-205.
- National Institute for Occupational Safety and Health (NIOSH) (2002). *The changing organization of work and the safety and health of working people: Knowledge gaps and research directions* (DHHS Publication No. 2002-116). Washington, DC: US Government Printing Office.
- Nickson, D., Warhurst, C., Witz, A., & Cullen, A.M. (2001). The importance of being aesthetic: Work, employment and service organization. In A. Sturdy, I. Grugulis & H. Wilmott (Eds.), *Customer service: Empowerment and entrapment*. Basingstoke: Palgrave.
- Novelli, L. Jr., Kirkman, B. L., & Shapiro, D. L. (1995). Effective implementation of organizational change: an organizational justice perspective. In C.L. Cooper & M.D. Rousseau (Eds.), *Trends in organizational behavior*, (Vol. 2, pp15-36). New York, NY: Wiley.
- Nurmi, J. E. (1991). How do adolescents see the future? A review of the development of future orientation and planning. *Developmental Review*, 11, 1-59.
- O'Reilly, C. A., Chatman, J. A., & Caldwell, D. F. (1999). Managerial personality and performance: A semi-idiographic approach. *Journal of Research and Personality*, 33, 514-545.
- Odagiri, Y., Shimomitsu, T., Ohya, Y., & Kristensen, T. S. (2004). Overcommitment and high effort are strongly associated with burnout among Japanese nurses. *International Journal of Behavioral Medicine*, suppl., 11, 214.
- Oreg, S. (2003). Resistance to change: Developing an individual difference measure. *Journal of Applied Psychology*, 88, 680-706.
- Packard, S. H., & Kauppi, D. R. (1999). Rehabilitation agency leadership style: Impact on subordinates' job satisfaction. *Rehabilitation Counselling Bulletin*, 43(1), 5-11.

- Panagopoulou, E., Kersbergen, B., & Maes, S. (2002). The effects of emotional (non-) expression in (chronic) disease: A meta-analytic review. *Psychology & Health, 17*, 529-545.
- Parasuraman, S., Purohit, Y. S., & Godshalk, V. M. (1996). Work and family variables, entrepreneurial career success and psychological well-being. *Journal of Vocational Behavior, 48*, 275-300.
- Payne, R. L., & Cooper, C. L. (Eds.) (2001). *Emotions at work: Theory, research and applications for management*. Chichester: Wiley.
- Peeters, M. C. W., Montgomery, A., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management, 12*, 43-61.
- Peterson, M. (1997). Work, corporate culture and stress: Implications for worksite health promotion. *American Journal of Health Behavior, 21*(4), 243-252.
- Pierce, J. L. (1995). *Gender trials: Emotional lives in contemporary law firms*. Berkeley: University of California Press.
- Pitlch, C. A., Walsh, D. C., Mangione, T. W., & Jennings, S. E. (1994). Gender, work and mental distress in an industrial labor force: an expansion of Karasek's job strain model. In G. P. Keita & J. J. Hurrell (Eds.), *Job stress in a changing workforce: investigating gender, diversity and family issues*. Washington, D. C: American Psychological Association.
- Pines, A. P. (1983). On burnout and the buffering effects of social support. In B.A. Faber (Ed.), *Stress and burnout in human service professions*. Oxford: Pergamon.
- Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures*. New York, NY: Free Press.
- Pines, A., & Maslach, C. (1980). Combating staff burn-out in a day care centre: A case study. *Child Care Quarterly, 9*, 5-16.
- Pines, A., Aronson, E., & Kafry, D. (1981). *Burnout*. New York, NY: Free Press.
- Pitz, A. (1982). Human engineering of decision aids. In P. Humphreys & A. Vari (Eds.), *Analyzing and aiding decision processes*. Amsterdam: North Holland.
- Pomaki, G., Maes, S., & ter Doest, L. (2004). Work conditions and employees' self-set goals: Goal processes enhance prediction of psychological distress and well-being. *Personal and Social Psychology Bulletin, 30*, 685-694.
- Posner, B. Z. (1992). Person-organization value congruence: no support for individual differences as a moderating variable. *Human Relations, 45*(4), 351-361.
- Pretty, G. M. H., McCarthy, M. E., & Catana, V. M. (1992). Psychological environments and burnout: Gender considerations within the corporation. *Journal of Organizational Behavior, 13*, 701-711.
- Prosser, D., Johnson, S., Kuipers, E., Dunn, G., Szmulker, G., Reid, Y., Bebbington, P., & Thornicroft, G. (1999). Mental health, "burnout" and job satisfaction in a longitudinal study of mental health staff. *Social Psychiatry and Psychiatric Epidemiology, 34*(6), 295-300.
- Pugliesi, K., & Shook, S. (1997). Gender, jobs and emotional labor in complex organizations. *Social Perspectives on Emotion, 4*, 283-316.
- Quick, J. C., Quick, J. D., Nelson, D. L., & Hurrell, J. J. (1997). *Preventive stress management in organizations*. Washington, DC: American Psychological Press.
- Rabin, C., & Zelnor, D. (1992). The role of assertiveness in clarifying roles and strengthening job satisfaction of social workers in multidisciplinary mental health settings. *British Journal of Social Work, 22*, 17-32.
- Rachman, R. (1995). Community care: Changing the role of hospital social work. *Health and Social Care in the Community, 3*, 163-172.

- Rafaelli, A., & Sutton, R. I. (1990). Busy stores and demanding customers: How do they affect the display of positive emotions? *Academy of Management Journal*, *33*, 623-637.
- Ragins, B. R., & Cotton, J. L. (1993). Gender and willingness to mentor in organizations. *Journal of Management*, *19*, 97-111.
- Rahim, M., & Psenicka, C. (1996). A structural equation model of stress, locus of control, social support, psychiatric symptoms and propensity to leave a job. *Journal of Social Psychology*, *136*, 69-84.
- Ramirez, A. J., Graham, J., Richards, M. A., Cull, A., & Gregory, W. M. (1996). Mental health of hospital consultants: The effects of stress and satisfaction at work. *Lancet*, *16*, 347 (9003), 17-32.
- Randall, D. M., Fedor, D. B., & Longnecker, C. O. (1990). The behavioral expression of organizational commitment. *Journal of Vocational Behavior*, *36*, 210-224.
- Reid, Y., Johnson, S., Morant, N., Kuipers, E., Szmukler, G., Thornicroft, G., Beddington, P., & Prosser, D. (1999). Explanations for stress and satisfaction in mental health professionals: A qualitative study. *Social Psychiatry and Psychiatric Epidemiology*, *34*, 301-308.
- Richardson, A. M., & Burke R. J. (1991). Occupational stress and job satisfaction among physicians: sex differences. *Social Science and Medicine*, *33*(10), 1179-1187.
- Richardson, A. M., & Martinussen, M. (2004). The Maslach Burnout Inventory: Factorial validity and consistency across occupational groups in Norway. *Journal of Occupational and Organizational Psychology*, *77*, 377-384.
- Rimplelae, K. M., Pulkkinen, P. O., Valconen, T., & Nurminen, M. M. (1987). Mortality of doctors: Do doctors benefit from their medical knowledge? *Lancet*, *1*, 84-86.
- Ritzer, G., & Stillman, T. (2001). From person- to system-oriented service. In A. Sturdy, I. Grugulis & H. Wilmott (Eds.), *Customer service: Empowerment and entrapment*. Basingstoke: Palgrave.
- Robert, C., Probst, T. M., Martocchio, J. J., Drasgow, F., & Lawler, J. J. (2000). Empowerment and continuous improvement in the United States, Mexico, Poland and India: Predicting fit on the basis of dimensions of power distance and individualism. *Journal of Applied Psychology*, *85*(5), 643-658.
- Roberts, B. W., & Robins, R. W. (2000). Broad dispositions, broad aspirations: The intersection of personality traits and major life goals. *Personality and Social Psychology Bulletin*, *26*, 1284-1296.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external locus of control for reinforcement. *Psychological Monographs*, *80* (1, whole No. 609).
- Rousseau, D. M. (1995). *Psychological contracts in organizations*. Thousand Oaks, CA: Sage.
- Rout, U., Cooper, C. L., & Rout, J. K. (1996). Job stress among British GP's: Predictors of job dissatisfaction and mental-ill health. *Stress Medicine*, *12*, 155-166.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, *55*, 68-78.
- Saks, A. M. (1996). The relationship between the amount of helpfulness of entry training and work outcomes. *Human Relations*, *49*, 429-451.
- Salmela-Aro, K., & Nurmi, J. E. (2004). Employees' motivational orientation and well-being at work: A person oriented approach. *Journal of Organizational Change Management*, *17*(5), 471-489.
- Salmela-Aro, K., & Nurmi, J. E., Saisto, T., & Halmesmaki, E. (2001). Goal construction and depressive symptoms during transition to motherhood: Evidence from two longitudinal studies. *Journal of Personal and Social Psychology*, *81*, 1144-1159.

- Salmela-Aro, K., Näätänen, P., & Nurmi, J. E. (2004). The role of work-related personal projects during two burnout interventions: a longitudinal study. *Work and Stress, 18*(3), 208-230.
- Salmela-Aro, K., Pennanen, R., & Nurmi, J. E. (2001). Self-focuses goals: what they are, how they function and how they relate to well-being. In P. Schmuck & K. Sheldon (Eds.), *Life goals and well-being* (pp. 148-166). Lengerich.
- Sassali, M. (1979). *Burn-out in the social services: A literature review*. DeKalb Ill.: Human Service Consultants.
- Sauter, S. L., & Murphy, L. R. (1995) (Eds.). *Organizational risk factors for job stress*. Washington, DC: American Psychological Association.
- Savicki, R., & Cooley, E. (1983). *The relationship of work environment and client contact to burnout in mental health professionals*. Paper presented at the annual meeting of the American Psychological Association, San Francisco.
- Saxton, M. J., Phillips, J. S., & Blakeney, R. N. (1991). Antecedents and consequences of emotional exhaustion in the airline reservations service sector. *Human Relations, 44*, 583-595.
- Schaufeli, W. B. (2004). The future of occupational health psychology. *Applied Psychology: An International Review, 53*(4), 502-517.
- Schaufeli, W. B. (1995). The evaluation of burnout workshop for community nurses. *Journal of Health and Human Resources Administration, 18*, 11-40.
- Schaufeli, W. B., & Buunk, B. P. (1996). Professional burnout. In M.J. Schabracq, J.A.M. Winnubst & C.L. Cooper (Eds.), *Handbook of work and health psychology*. Chichester: John Wiley & Sons Ltd.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.
- Schaufeli, W. B., & van Dierendonck, D. (1993). The construct validity of two burnout measures. *Journal of Organizational Behavior, 14*(7), 631-647.
- Schaufeli, W. B., Baker, A., Schaap, C., Kladler, A., & Hoogduin, C. A. L. (2001). On the clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychology and Health, 16*, 565-582.
- Schaufeli, W. B., van Dierendonck, D., & van Gorp, K. (1996). Burnout and reciprocity: toward a dual-level social exchange model. *Work & Stress, 10*, 225-237.
- Schneider, B. (2001). Fits about fit. *Applied Psychology: An International Review, 50*, 141-152.
- Schuler, R. S. (1980). Definition and conceptualization of stress in organizations. *Organization Behavior and Human Performance, 25*, 184-215.
- Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. B. (2000). The factorial validity of the Maslach Burnout Inventory-General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology, 73*, 53-66.
- Schwartz, J. E., Pickering, T. G., & Landsbergis, P. A. (1996). Work-related stress and blood pressure: Current theoretical models and considerations from a behavioral medicine perspective. *Journal of Occupational Health Psychology, 1*, 287-310.
- Schwarzer, R. (2000). Manage stress at work through preventive and proactive coping. In E.A. Locke (Ed.), *The Blackwell Handbook of principles of organizational behavior*. Oxford: Blackwell.
- Schwarzer, R., & Taubert, S. (2002). Tenacious goal pursuits and striving toward personal growth: Proactive coping. In E. Frydenberg (Ed.), *Beyond coping: Meeting goals, visions and challenges*. London: Oxford University Press.
- Seligman, M. (1975). *Helplessness*. San Francisco: W.H. Freeman.

- Seligman, M. E. P. (1998). *Positive social science*. APA Monitor, 29(2), 5.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: Special issue on happiness, excellence and optimal human functioning. *American Psychologist*, 55, 5-14.
- Seltzer, J., & Bass, B. M. (1990). Transformational leadership: beyond initiation and structure. *Journal of Management*, 16, 693 - 704.
- Semmer, N. K. (2003). Individual differences, work stress and health. In M. J. Schabracq, J. A. M. Winnubst and C. L. Cooper (Eds.), *The handbook of work and health psychology* (2nd ed.). Chichester: Wiley.
- Sheiner, E., Sheiner, E. K., Potashnik, G., Carel, R., & Shoham-Vardi, I. (2003). The relationship between occupational psychological stress and female fertility. *Occupational Medicine*, 53, 265-269.
- Shirom, A. (1989). Burnout in organizations. In C.L. Cooper & I. Robertson (Eds.), *International review of industrial and work psychology* (pp. 25-48). Chichester: Wiley.
- Siegal, M., & McDonald, T. (2004). Person-organization value congruence, burnout and diversion of resources. *Personnel Review*, 33(3), 291-301.
- Siegrist, J. (1998). Adverse health effects of effort-reward imbalance at work. In C. L. Cooper (Ed.), *Theories of Organizational stress*. Oxford: Oxford University Press.
- Siu, O. (2002). Occupational stressors and well-being among Chinese employees: The role of organizational commitment. *Applied Psychology: An International Review*, 51(4), 527-544.
- Slade, P., Raval, H., Buck, P., & Lieberman, B. E. (1992). A 3-year follow-up of emotional, marital and sexual functioning in couples who were infertile. *J Reprod Inf Psychol*, 10, 233-243.
- Soderfeldt, M., Soderfeldt, B., & Warg, L. (1995). Burnout in social work. *Social Work*, 40, 638-646.
- Sommer, S. M., Bae, S. H., & Luthans, F. (1996). Organizational commitment across cultures: The impact of antecedents on Korean employees. *Human Relations*, 49, 977-993.
- Sosik, J. J., & Dogshalk, V. M. (2000). Leadership styles, mentoring functions received and job-related stress: A conceptual model and preliminary study. *Journal of Organizational Behavior*, 21(4), 365-390.
- Spector, P. E. (2002). Employee control and occupational stress. *American Psychological Society*, 11, 153-156.
- Spielberger, C. D., & Reheiser, E. C. (1995). Measuring occupational stress: the job stress survey. In H. Grandall & P. L. Perrewe (ed.), *Occupational stress: a handbook*. Washington, D. C.: Taylor Francis.
- Starcevic, V., & Plontek, C. M. (1997). Empathic understanding revisited: Conceptualization, controversies and limitations. *American Journal of Psychotherapy*, 51, 317-328.
- Stephens, M. A. P., Franks, M. M., & Atienza, A. A. (1997). Where two roles intersect: Spillover between parent care and employment. *Psychology and Aging*, 12, 30-37.
- Stevens, G. B., & O'Neill, P. (1983). Expectations and burnout in the developmental disabilities field. *American Journal of Community Psychology*, 11, 615-627.
- Stoleru, S., Teglas, J. P., Fermanian, J., & Spira, A. (1993). Psychological factors in the aetiology of infertility: A prospective cohort study. *Human Reprod*, 8, 1039-1049.
- Stoleru, S., Teglas, J. P., Spira, A., Magnin, F., & Fermanian, J. (1996). Psychological characteristics of the infertile patients: discriminating aetiological factors from reactive changes. *Journal of Psychosomatic Obstetrics and Gynaecology*, 17, 103-118.
- Sturdy, A., & Fineman, S. (2001). Struggles for the control of affect - Resistance as politics and

- emotion. In A. Sturdy, I. Grugulis & H. Wilmott (Eds.), *Customer service: Empowerment and entrapment*. Basingstoke: Palgrave.
- Sutherland, V. J., & Cooper, C. L. (1990). *Understanding stress: a psychological perspective for health professionals*. London: Chapman and Hall.
- Sutton, R. I. (1991). Maintaining norms about expressed emotions: The case of bill collectors. *Administrative Science Quarterly*, 36, 145-268.
- Tait, M., Padgett, M. Y., & Baldwin, T. T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology*, 74, 502-507.
- Tatar, M. (1998). Primary and secondary-school teachers' perceptions and actions regarding their pupils' emotional lives. *School Psychology International*, 19, 151-168.
- Tatar, M., & Yahav, V. (1999). Secondary school pupils' perceptions of burnout among teachers. *British Journal of Educational Psychology*, 69, 457-468.
- Terry, D. J. (1991). Coping resources and situational appraisals as predictors of coping behavior. *Personality and Individual Differences*, 12, 1031-1047.
- Terry, D. J. (1994). The determinants of coping: The role of stable and situational factors. *Journal of Personality and Social Psychology*, 66, 895-910.
- Terry, D. J., Rawle, R., & Callan, V. J. (1995). The effects of social support on adjustment to stress: The mediating role of coping. *Personal Relationships*, 2, 97-124.
- Thoits, P. A. (1986). Social support as coping assistance. *Journal of Consulting and Clinical Psychology*, 54, 416-423.
- Thompson, N., Stradling, S., Murphy, M., & O'Neill, P. (1996). Stress and organizational culture. *Journal of Social Work*, 26, 647-665.
- Thomsen, S., Soares, J., Nolan, P., Dallender, J., & Arnetz, B. (1999). Feelings of professional fulfillment and exhaustion in mental health personnel: the importance of organizational and individual factors. *Psychotherapy Psychosomatic*, 68(3), 157-164.
- Tinker, S., & Moore, K. A. (2001, November). *The impact of long work hours on the family-work relationship and health*. Paper presented at the Inaugural Conference of APS Relationships Interest Group, Melbourne.
- Tolich, M. B. (1993). Alienating and liberating emotions at work: supermarket clerks' performance of customer service. *Journal of Contemporary Ethnography*, 22, 361-381.
- Tracy, J. B., & Hinkin, T. R. (1994). Transformational leaders in the hospitality industry. *Journal of Cornell Hotel & Restaurant Administration Quarterly*, 35(2), 18-24.
- Trocki, K. F., & Orioli, E. M. (1994). Gender differences in stress symptoms, stress producing contexts and coping strategies. In G. P. Keita & J. J. Jr. Hurrell, (Eds.), *Job stress in a changing workforce: investigating gender, diversity and family issues*. Washington, D. C.: American Psychological Association.
- Tsigilis, N., Koustelios, A., & Togia, A. (2004). Multivariate relationship and discriminant validity between job satisfaction and burnout. *Journal of Managerial Psychology*, 19(7), 666-675.
- Turner, R. J., & Roszell, P. (1994). Psychosocial resources and the stress process. In R. Avison & I.H. Gotlib (Eds.), *Stress and Mental Health: Contemporary issues and prospects for the future*. New York, NY: Plenum.
- Um, M. Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators and job satisfaction: A stress-strain-outcome model and an empirical test. *Social Work Research*, 22, 100-115.

- Van der Klink, J., Blonk, R., Schene, A., & Van Dijk, F. (2001). The benefits of intervention for work-related stress. *American Journal of Public Health, 91*, 270-276.
- Van Dierendonck, D., Schaufeli, W. B., & Buunk, B. P. (1998). The evaluation of an individual burnout program: The role of inequity and social support. *Journal of Applied Psychology, 83*, 392-407.
- Van Dierendonck, D., Schaufeli, W. B., & Sixma, H. J. (1994). Burnout among general practitioners: A perspective of equity theory. *Journal of Social and Clinical Psychology, 13*, 91-108.
- Van Horn, J., Schaufeli, W. B., & Enzmann, D. (1999). Teacher burnout and lack of reciprocity. *Journal of Applied Social Psychology, 29*, 91-108.
- Van Yperen, N. W., Buunk, B. P., & Schaufeli, W. B. (1992). Imbalance, communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology, 22*, 173-189.
- Vandenberger, R., & Huberman, M. (1999). *Understanding and preventing teacher burnout: A sourcebook of international research and practice*. Cambridge: Cambridge University Press.
- VanderZee, K., Buunk, B., & Sanderman, R. (1998). Neuroticism and reactions to social comparison information among cancer patients. *Journal of Personality, 66*(2), 175-194.
- Vanheule, S. (2001). Burnout: Literatuurexploratie vanuit een klinisch psychologisch perspectief. *Tijdschrift voor Klinische Psychologie, 31*, 132-154.
- Vanheule, S., Lievrouw, A., & Verhaeghe, P. (2003). Burnout and Intersubjectivity: A psychoanalytical study from a Lacanian perspective. *Human Relations, 56*(3), 321-338.
- Vinokur, A., Price, R. H., & Caplan, R. D. (1996). Hard times and hurtful partners: How financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology, 71*, 166-179.
- Vivarelli, M. (1991). The birth of new enterprises. *Small Business Economics, 3*, 215-223.
- Vries, R. E., Roe, R. A., & Taillieu, T. C. B. (1998, December). Need of supervision: Its impact on leadership effectiveness. *The Journal of Applied Behavioral Science, 486*-501.
- Vrugt, A., & Koenis, S. (2002). Perceived self-efficacy, personal goals, social comparison and scientific productivity. *Applied Psychology: An International Review, 51*(4), 593-607.
- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to change in a reorganizing workplace. *Journal of Applied Psychology, 85*, 132-142.
- Wanous, J. P., Reichers, A. E., & Austin, J. T. (2000). Cynicism about organizational change: Measuring antecedents and correlates. *Group & Organizational Management, 25*, 132-153.
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63*, 193-210.
- Warr, P. (Ed.), (1996). *Employee well-being. Psychology at Work, 4th Edition*. Harmondsworth: Penguin.
- Waters, L. E., & Moore, K. A. (2002). Self-esteem and coping: A comparison of unemployed and re-employed people. *Journal of Organizational Behavior, 23*, 1-12.
- Watkins, C. E. (1992). Early professionals in counseling psychology: The academic setting. *The Counseling Psychologist, 20*(1), 47-52.
- Weisberg, J. (1994). Measuring workers' burnout and intention to leave. *International Journal of Manpower, 15*(1), 4-14.
- Weiskopf, P. (1980). Burnout among teachers of exceptional children. *Exceptional Children, 47*, 18-23.
- Westman, M. (2001). Stress and strain crossover. *Human Relations, 54*(6), 717-751.

- Wharton, A. S., & Erickson, R. J. (1995). The consequences of caring: Women's work and family life. *Sociological Quarterly, 36*, 273-296.
- Whitaker, K. S. (1992). Principal burnout and personality type: Do relationships exist? *The Record in Educational Administration and Supervision, 14*(1), 87-95.
- Whitaker, K. S. (1996). Exploring causes of principal burnout. *Journal of Educational Administration, 34*, 60-71.
- Winwood, P., & Winefield, A. H. (2004). Comparing two measures of burnout among dentists in Australia. *International Journal of Stress Management, 11*, 282-289.
- Wolfgang, A. P. (1995). Job stress, co-worker social support and career commitment: a comparison of female and male pharmacists. *Journal of Social Behaviour and Personality, 10*(6), 149-160.
- Wolpin, J., Burke, R. J., & Greenglass, E. R. (1991). Is job satisfaction an antecedent or a consequence of psychological burnout? *Human Relations, 44*, 193-209.
- World Health Organization (WHO) (1996). Guidelines for the primary prevention of mental, neurological and psychosocial disorders: Staff burnout. www.who.org/msa/mnh/mnd/prev.htm
- Wright, T. A., & Bonnet, D. G. (2002). The moderating effects of employee tenure on the relationship between organizational commitment and job performance: A meta-analysis. *Journal of Applied Psychology, 87*, 1183-1190.
- Zapf, D., Seifert, C., Schmutte, B., Mertini, H., & Holz, M. (2001). Emotion work and work stressors and their effects on burnout. *Psychology and Health, 16*, 527-545.
- Zohar, D. (1997). Predicting burnout with a hassle-base measure of role demands. *Journal of Organizational Behavior, 18*, 101-115.