A THESIS ON FIRE:

STUDIES OF WORK ENGAGEMENT, TYPE A BEHAVIOR AND BURNOUT

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Abstract

The overall address of the present thesis is the association between being ‘on fire’ and burnout. More specifically, the thesis focused largely on two representations of involvement in work (work engagement and Type A behavior) and their respective relationships to burnout. Another pervasive theme was construct validity in assessing burnout and work engagement. These themes were addressed in four empirical studies, conducted in a sample of healthcare workers (Study I) and a sample of information communication technology consultants (Studies II, III, and IV). Study I aimed to extend the previously preliminary support for the construct validity of the Swedish version of the Maslach Burnout Inventory (MBI). The objective of Study II was the discriminant validity of the Utrecht Work engagement Scale (UWES) against the theoretically adjacent constructs of job involvement and organizational commitment. Another objective was the translation and evaluation of a Swedish version of the UWES. In Study III, the aim was to investigate the (cross-sectional) association between Type A behavior, work engagement and burnout. Study III had two foci: 1) whether global Type A behavior interacts with job factors to affect burnout and work engagement, and 2) the associations between the main components of Type A behavior (achievement-striving and irritability/impatience) and burnout as well as work engagement. Study IV concerned the longitudinal relationships between Type A behavior and burnout, and between work engagement and burnout. The results presented in this dissertation support the construct validity of Swedish versions of the MBI and UWES. It was further indicated that emotional exhaustion and depersonalization (or cynicism) constitute the core aspects of burnout, and that work engagement was more prominently associated with lack of health complaints than job involvement and organizational commitment. Global Type A behavior was positively related to work engagement in cross-sectional data but unrelated to burnout. When the dimensionality of Type A behavior was taken into account, it was indicated that the achievement-striving aspect of Type A behavior that was associated with work engagement, whereas irritability was associated with less engagement and more burnout complaints. No indications of an interaction between (global or the sub-dimensions of) Type A behavior and job stress were found. The most important finding of Study IV was that change in Type A behavior was unrelated to change in burnout across time (one-year interval). Furthermore, Study IV supported the notion that work engagement and burnout are bipolar opposites in a work well-being continuum. To conclude, the present thesis suggests that burnout be viewed as an erosion of intrinsic, affective engagement in work, occurring when intrinsic motivation is frustrated by job stress. To avoid conceptual confusion, burnout should be distinguished form exhaustion syndrome, however it should be acknowledged that burnout may have a negative impact on health. The present study indicated that Type A behavior is unrelated to the specific *burnout* reaction however it appeared to be related to *exhaustion*. This finding should be replicated before generalizability can be assumed. However, it was discussed whether Type A behavior represents a specific kind of instrumentality in approaching work, hence corroborating that burnout is refers to the draining of intrinsically oriented investment of energies and affection. This does *not* imply that Type A behavior is unrelated to health deterioration – most plausibly, Type A behavior generates exhaustion and fatigue from overexertion of energy. However, it implies that motivational orientations may play a differentiating role in the burnout process. A conclusive suggestion encourage both research and practice to explore how work engagement may best be enhanced using job redesign.

Key words: Work engagement, Type A behavior, burnout, construct validity, job stress, ‘on fire’.

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This thesis presents the results from my four-year doctoral project. Professionally, these years have been challenging, demanding, insightful, developmental – and in the end extremely rewarding. When compiling all my findings into this dissertation, the saying that "the whole is more than the sum of its parts" certainly came to mind.

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List of studies

This dissertation is based on the following four empirical studies:

Study I: Hallberg & Sverke (2004). Construct validity of the Swedish version of MBI –Two health care samples: *European Journal of Psychological Assessment, 20*, 320-338).

Study II: Hallberg, U.E & Schaufeli, W.B. (*in press*) "Same same but different"? Can work engagement be empirically separated from job involvement and organizational commitment? *Will appear in European Psychologist, 2006, vol. 11*.

Study III: Hallberg, U.E., Johansson, G., & Schaufeli, W.B. (*Manuscript submitted*). Individual behavior patterns, burnout and work engagement..

Study IV: Hallberg, U.E. & Schaufeli, W.B. (*Manuscript submitted*). On 'fire' and burnout: A longitudinal study of involvement in work among Information Communication Technology consultants.

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1.1 Introduction

"In order to burn out, one has first to be 'on fire' (Pines, 1993, p. 41). There is indeed a semantic logic to this assumption that appears in academic research as well as in popular circles. An immediate (and somewhat sad) implication is that being 'on fire' should be considered dangerous, even hazardous to one's health. Translated into human resources practice, this notion also conveys that employees should be advised to refrain from involvement in work due to the risk of burnout. However, a recent review (Schaufeli & Salanova, *in press)* of the research on 'work engagement' (Schaufeli, Salanova, González-Romá & Bakker, 2002) indicates that this variable is rather related to health (both mental and somatic), high performance, intrinsic motivation and acquisition of self-efficacy. Hence, the notion that being 'on fire' can lead to burnout needs to be further clarified if it is to make sense. Organizational and occupational health psychology presents a number of similar yet different concepts describing positive attachment to work that may all be interpreted as being 'on fire'. Some constructs are motivational while others are cognitive or affective, but they all refer to incentives for going the extra mile at work. The present dissertation does *not* claim to present an all-inclusive review of this area; rather, two kinds of involvement were chosen and their respective association with burnout was investigated theoretically and empirically.

A majority of the frameworks on burnout propose that initial motivation or involvement precedes burnout. After reviewing an extensive body of research on burnout, Schaufeli and Enzmann (1998) proposed an integrative model of burnout, suggesting that if working conditions fail to support and accommodate a strong motivation to help, stress will ensue. Depending on whether a functional or dysfunctional coping strategy is adopted, either professional efficacy will be fostered, spiraling into a positive cycle of well-being and prospering, or burnout will occur and spiral into a negative cycle of ill-being (at work).

In reviewing a selection of the frameworks that posit an initial motivation as preceding a burnout reaction, a common denominator emerges. Pine and colleagues (Pines, 1993; Pines, 2002; Pines & Yafe-Yanai, 2001; Pines & Keinan, 2005) take an existential approach, suggesting that burnout occurs when the quest for significance and meaning in life is unsuccessfully pursued in the work. Similarly, Maslach (1986) describes how highly idealistic and enthusiastic employees wishing to make a difference become exhausted and increasingly instrumental when the organization fails to provide adequate resources to perform well. Moreover, Hallsten (Hallsten, Bellaagh & Gustafsson, 2002; Hallsten, Josephson, & Torgén, 2005) propose that burnout is a progressive existential crisis that affects people with a high need to protect their self-esteem through achievements when subjected to frustrating situations that undermine this strive for reassurance.

Although Hallsten et al. (2005) argue that burnout does *not* occur when involvement is instrumental; a common denominator among the above-mentioned approaches is that involvement is neither purely intrinsic. All approaches suggest that involvement is invested with the expectancy of a return, and this return is of salient value to the individual. Hence, in a way work becomes the means to an end (enhancing self-worth or self-image, satisfying existential needs or personal aspirations). This notion is consistent with research from other areas of involvement (operationalized as 'achievement-striving') showing that it is not the involvement *per se* that is hazardous to a person's health. In its pure shape (cf. intrinsic motivation), achievement striving is not related to ill-health; it might rather even protect against health deterioration. It is only when a 'toxic' (destructive) component (i.e. contingent

self-worth) is added that achievement striving might have a detrimental effect on health (Birkes & Roger, 2000).

Although the aspect of being 'on fire' (described in the terms of 'involved', 'engaged', or 'committed') is commonly mentioned in literature on burnout (see e.g. Cherniss, 1980; Hallsten et al., 2005; Maslach, 1986; Maslach & Leiter, 1997, Pines & Aronson, 1988; Pines & Keinan, 2005), empirical studies are generally concerned with establishing the effects of organizational and work-related factors that may contribute to triggering and sustaining burnout reactions in individuals (De Vries & van Heck, 2001; Lee & Ashforth, 1996; Schaufeli & Enzmann, 1998). Maslach and Leiter (1997) argue strongly in their book *The truth about burnout* that burnout must be viewed as being of organizational origin and as an organizational problem, to avoid blame being shifted to the individual and burnout becoming a social stigma indicating 'weakness'. This argument is a very important one – and ample research indicates that burnout *is* a consequence of an untenable work situation (e.g. Maslach & Leiter, 1997; Peiró, González-Romá, Tordera & Mañas, 2001; Schaufeli & Enzmann, 1998) and thus should be duly recognized as such. Nevertheless, to empirically investigate the role of individual factors is crucial to understanding the psychological processes involved. The notion that those who are 'on fire' also burn out implies that the interaction between the individual approach to work and the work situation affects burnout. Hence, to better understand this interaction, both involvement and job factors should be studied empirically. Nevertheless, previous empirical research on burnout generally neglects such interaction effects (see Cooper et al., 2001; Shirom, Melamed, Toker, Berliner, & Shapira, 2005).

One explanation of why being 'on fire' has merited relatively little *empirical* attention in previous burnout research may be that there has been no well-known, consistently used operationalization of this notion. However, recent developments in the field have progressed the somewhat fuzzy conceptualization of involvement in work that has previously signified burnout literature (see e.g. Hallsten et al., 2005; Schaufeli et al., 2002). In line with Seligman and Csikszentmihalyi's (2000) call for systematic, 'good quality' research focusing on sustaining and nurturing *positive* aspects of human functioning, Schaufeli and colleagues (2002, p. 74) defined and operationalized the concept of 'work engagement' (the opposite state of burnout) as "a positive fulfilling work-related state of mind that is characterized by vigor, dedication and absorption". A significant advantage of this contribution to burnout literature is that it facilitates the meeting of the next great challenge for organizational and health psychology, namely adopting a more comprehensive 'job-person fit' approach in advancing our understanding of work-related health (see Cooper, Dewe & O'Driscoll, 2001; Maslach, et al., 2001). However, the conceptualization of 'work engagement' provided by Schaufeli and colleagues differs somewhat from the conceptualization suggested by Maslach (Maslach, Schaufeli & Leiter, 2001).

As concluded earlier in the introduction, most previous approaches to involvement in work (cf. being 'on fire') in relationship to burnout have been concerned with the conception that involvement is guided by a search for personal fulfillment, or that the outcome of one's work is closely related to feelings of worth or value. When the job situation becomes too stressful and frustrates goal achievement at work, personal fulfillment fails and feelings of worth and value are threatened. However, when 'work engagement' was defined and operationalized by Schaufeli and colleagues (2002), the conceptualization instead resembled the notion of 'intrinsic motivation' defined by Ryan and Deci (2000, p. 56) as 'the doing of an activity for its inherent satisfaction rather than for some separable outcome'. This conceptualization clearly contrasts the notion of involvement as *instrumental*. Hence the dilemma is that when a

clear, scientifically sound definition and operationalization of 'work engagement' is introduced and empirical investigation of how being 'on fire' is related to burnout may be facilitated, the conception and operationalization appear to be in conflict.

A pervasive topic of the present dissertation was the relationship between involvement in work and burnout, focusing on the construct of 'work engagement' (Schaufeli et al., 2002) as well as on Type A behavior (Friedman & Rosenman, 1974), being another alternative interpretation of involvement in work. However, a large focus of this thesis was also devoted to methodological issues such as construct validity. The dissertation comprises four empirical studies (for full-length studies, see appendices I-IV) that, taken together, may contribute to our understanding of involvement in work and how it is related to burnout.

1.1.a A context for the thesis

The present thesis was published in 2005, when hindsight (here represented by Seligman & Csikszentmihalyi, 2000) concluded that most of the 20th century psychology research has focused on pathological, malfunctioning symptoms and manifestations and a call was sounded for more positive aspects of psychology, such as optimal functioning and joy. In this crossroads of main trends, the present thesis comprehends aspects of both malfunctioning (burnout) and optimal functioning (work engagement) with the hope of understanding a little more on why (and how) the tables turn from good health to bad. Over the past 15 years, burnout has been commonly recognized in relation to the escalating trend of sick leave due to work-related psychological complaints (see Hallsten et al., 2001; Hart & Cooper, 2001; RFV, 2002:4). According to Cooper et al. (2001), the issue of work-related health deterioration has been most thoroughly penetrated from the perspective of somatic distress. However, they argue, emotional and behavioral responses to work stress should be the truly interesting outcomes for organizations to focus on, because the effects of a stressful work environment can be costly to the organizations in terms of decreased motivation and commitment. In line with Cooper et al.'s (2001) argument, it was well motivated to direct research attention to burnout, which can be described as a psychological (affective and cognitive) reaction to chronic work-related stress that is most recognizably manifested in extreme levels of exhaustion (e.g. Cordes & Dougherthy, 1993; Hallsten, 1993; Lee & Ashforth, 1996; Maslach, 1986; Maslach, Jackson & Leiter, 1996; Pines & Aronson, 1988; Schaufeli & Enzmann, 1998) and is related to decreased commitment to the organization as well as increased turnover (Maslach, Jackson & Leiter, 1996).

1.1.b Differences in Swedish and American research traditions

When writing a Swedish thesis about burnout, the discrepancy between the American conceptualization (see Maslach, 1986; Maslach et al, 1996; Maslach & Leiter, 1997) and the Swedish conceptualization inevitably demands some attention. In Swedish, the word burned out (*utbränd*) means to be totally emptied, like a battery gone dead or an extinguished fire beyond rekindling (Åsberg, Nygren & Rylander, 2002). This is also manifested in how burnout has been conceptualized in practice. According to Hallsten et al. (2001), Swedish research tends to be more focused on burnout as a clinical phenomenon. A similar situation was noticed in The Netherlands (Schaufeli, Bakker, Hoogduin, Schaap & Kladler, 2001). However, in her commonly cited (American) definition, Maslach, clearly states that burnout is a non-clinical syndrome that occurs in 'normal' populations (1986), and most research based on Maslach's definition is conducted among people who are still working, and hence are not 'sick' in the traditional sense.

Paine (1982) suggests a differentiation between Burnout Stress Syndrome (BOSS) on the one hand and Burnout Mental Disability (BOMD) on the other. BOSS is described as a relatively mild, psychological reaction to workplace stress and frustration. Nevertheless, it does not qualify as a mental disorder according to Paine (1982), whose description of BOSS is consistent with the conceptualization by Maslach (1986). BOMD is described as a possible final state of the burnout process in which the distress has taken far more severe expressions and has become so disabling that it can be described as a mental illness. This description is more consistent with the recently introduced Swedish 'exhaustion syndrome' (*utmattningssyndrom*). Diagnostic criteria for exhaustion syndrome was recently published (Socialstyrelsen, 2003) to provide a helpful tool for general practitioners in sick listing people suffering from burnout symptoms.

A person fulfilling the following criteria can be diagnosed with exhaustion syndrome (*translated by the author*):

A. Physical and psychological symptoms of exhaustion during > two weeks, caused by identifiable stressors that have been prevalent > six months
B. A significant lack of energy, decreased initiative and prolonged need for recovery
C. At least four of the following symptoms:
    - Difficulties concentrating or memory perturbations
    - Significantly deteriorated ability to cope with demands
    - Emotional instability or irritability
    - Sleeping disturbances
    - Significant somatic weakness
    - Physical symptoms like pains, chest pains, palpitations, dizziness, audio sensibility, or digestive intestine disorders
D. The symptoms cause significant suffering or decreased ability to function at work, socially or in other contexts
E. The condition is not caused by substance abuse or bodily harm
F. To be used as complementary to a diagnosis of depression or generalized anxiety

It has been suggested that Burnout Stress Syndrome (BOSS) and Burnout Mental Disorder (BOMD) constitutes a kind of continuum, where the rather mild reaction comes first and may later – if no intervention occurs – develop into a more severe response (Paine, 1982; Shirom et al., 2005; Åsberg et al., 2002). There is some empirical evidence that supports the notion burnout (BOSS) overlaps more clinical manifestations of distress (Schaufeli et al., 2001; Ahola et al., 2005) supporting the idea that burnout is the beginning of a long process, or possibly that it has a very wide range of complaints (from very mild to extremely severe). However, this issue still merits more empirical attention (especially from longitudinally designed studies) before it can be considered solved (Paine, 1982; Shirom et al., 2005). Most likely, burnout (as conceptualized by Maslach, 1986) does not lead to somatic distress (or vice versa) but coincides with somatic complaints (Schaufeli & Enzmann, 1998).

The area of burnout research has previously been characterized by some fuzziness and lack of conceptual clarity (Hallsten, 1993; Rösing, 2003). The notion of 'exhaustion syndrome' and the publication of its diagnostic criteria (Socialstyrelsen, 2003) further add to this confusion by – to some extent – overlapping the notion of burnout (Maslach, 1986). For example, both conceptualizations include exhaustion and lack of energy, as well as emotional symptoms. However burnout (cf. BOSS; Paine, 1982) is commonly defined and treated as a demarcated psychological construct, although it might have somatic *concomitants* such as sleeping

disturbances, headaches, muscle pains and nausea (see e.g. Maslach, 1986; Pines & Aronson, 1988; Schaufeli & Enzmann, 1998). Moreover, the maslachian concept of burnout refers more clearly to a process of de-motivation and erosion of engagement (Maslach & Leiter, 1997) as well as a crisis in self-efficacy (Leiter, 1992) than 'exhaustion syndrome' (cf. BOMD; Paine, 1982), which has its focus more in clinical symptoms and malfunction.

Another approach is taken by Hallsten (2005), who proposes that the term burnout is valid only if there is a component of performance-based self-esteem involved. If strain ensues that is not "influenced by the exhausting attempts to create or maintain self-esteem" (Hallsten, 2005, p. 518), it should be referred to as 'wornout'. The diagnostic criteria of exhaustion syndrome (Socialstyrelsen, 2003) do not imply anything about self-esteem or contingent involvement; hence it could be argued that these criteria do not distinguish between burnout and wornout. The diagnostic criteria may serve their purpose as a tool for general practitioners in recommending sick-leave to exhausted people; however they are perhaps less helpful in the progressing of the conceptual demarcation of burnout. Nevertheless, the introduction of the defined term 'exhaustion syndrome', the differentiation against the somewhat 'milder' reaction burnout, is facilitated.

The possible differences and similarities between 'burnout' and 'exhaustion syndrome' comprise a research area that in its own right deserves thorough penetration. This topic has only been touched upon here, given the context in which the present dissertation was published. However, as the discrimination between burnout and exhaustion syndrome was not an objective of the present thesis, it was not pursued further in the empirical studies. With this differentiation in mind, the present thesis relies solely upon Maslach's conceptualization and definition (1986) of burnout and throughout this dissertation, only non-clinical aspects of burnout are acknowledged. To borrow Paine's (1982) terminology, in the present thesis the burnout stress syndrome was conceptualized and studied as a relatively mild, psychological reaction to work-related stress. While acknowledging that burnout is most likely accompanied by somatic concomitants, this dissertation delimited its focus to *psychological* symptoms of burnout, i.e. emotional exhaustion, indifference and a lack of feelings of accomplishment (Maslach, 1986).

1.1.c The construct of burnout

The first use of the term burnout in *scientific* contexts is usually credited to Herbert Freudenberger, a clinical psychologist who worked with drug addicts in the 1970's and noticed a particular syndrome of emotional weariness among his staff (in Schaufeli & Enzmann, 1998). However, Freudenberger's clinical observations soon became over-shadowed in academic literature by the work of a social psychologist, Christina Maslach. The social psychologist perspective pervades both the theoretical and empirical work of Maslach, who defines burnout as "a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach, 1986, p.12). Maslach was particularly interested in consequences of interpersonal demands (at work) and conducted qualitative interviews on the emotional and attitudinal reactions among human service workers (people who work in occupations that encompass intense client contact, e.g. nurses, policemen, social workers, teachers). From her interviews, three emotional/attitudinal aspects (emotional exhaustion, depersonalization and lack of personal accomplishment at work) were ultimately identified and labeled 'burnout'. Emotional exhaustion refers to a feeling of being drained of emotional energy, feeling like you have nothing left to give. Depersonalization (later revised and relabeled 'cynicism') refers

to an increasing indifference about clients (cynicism refers to indifference about one's *work*), manifested as a distancing from and de-humanizing of the clients as a means to protect oneself from emotionally overwhelming sensations. Lack of personal accomplishment refers to the (subjective) conception of not being able to perform one's work tasks adequately.

According to Maslach and her colleagues (e.g. 1986; 1996; 1997), burnout should be understood as a state of mind occurring when the organization in which one is employed fails to provide the necessary resources (e.g. a manageable workload, clarity in goals, feedback, rewards or necessary autonomy or decision latitude) to support the employee in their professional role, or fails to reciprocate the employee's involvement by providing justice, trust or integrity. The stress created by these circumstances will take its toll on emotional energy and hence result in exhaustion, and the disappointment from being let down by the employer will result in withdrawal attitudes and increasing indifference about one's work. In addition, when the organization fails to provide adequate support, the employee's work efficacy will decrease and produce a conception of personal failure at the job. Eventually, the overall situation will erode the initial engagement in the work that once was the employee's driving force, leaving him or her drained, consumed and burned out (Maslach & Leiter, 1997). Burnout has been differentiated from 'regular' strain reactions, both theoretically and empirically. Theoretically, burnout is a long-lasting response to work stress signified by emotional weariness as well as cognitive, behavioral and motivationally denoted symptoms (Schaufeli, 1999). Empirically, burnout has also been distinguished from more temporary and reversible strain reactions (Demerouti, Bakker, Nachreiner & Ebbinghaus, 2002; Pines & Keinan, 2005).

The issue of dimensionality has generated a substantial amount of empirical research aiming to replicate the suggested three dimensions in different contexts (e.g. Cordes, Dougherty & Blum, 1997; Lee & Ashforth, 1990; Taris, Schreurs & Schaufeli, 1999; Schutte, Toppinen, Kalimo & Schaufeli, 2000; Södefeldt, 1997). This aim was achieved – by and large – nevertheless, some exceptions exist (see the section on measuring burnout). With reference to her interviews, Maslach (1986) describes how employees starting out as idealistic, engaged and enthusiastic slowly turn into exhausted, disillusioned, cynical people struggling with feelings of personal failure and inadequacy. Initially, it was hypothesized (see Maslach, 1982; 1985) that the three dimensions of burnout appeared in the chronological sequence as they are listed starting with emotional exhaustion from the psychological wearing and tearing of having to deal with the anxiety of cancer patients, convicted criminals or troublesome students who drain energy and engagement from the caring helpers who perform such work. When someone feels drained of energy, not knowing how to cope anymore, a facade of cynical attitudes is adopted, and making callous jokes about one's clients becomes a way to distance oneself from an overwhelming situation. However, since people-work is essentially about being caring and warm, the cynical state of mind developed would result in a decreased sense of professional accomplishment, leaving the employee dissatisfied with his/her own contribution at work. This explanation of the burnout phenomenon is one of few theoretical, structured models (also referred to as the 'structural model', Leiter & Maslach, 1988; Leiter, 1993) that outline the relationship between the three dimensions. There are also others, for example the hip-hop model by Golembiewski & Munzenrider (1988), although this model is very complicated and difficult to test empirically. However, the structural model suggested by Maslach and Leiter (1988) has received limited empirical support (Leiter, 1993; Söderfeldt, 1997), eventually steering interpretations of burnout in other directions.

1.1.d The construct of work engagement

Various burnout researchers (e.g. Hallsten et al., 2005; Maslach, 1986; Maslach & Leiter, 1997; Pines, 1993) describe an initial 'engagement', 'involvement', 'idealism' or 'enthusiasm'. That is, a 'burning interest' for what someone is doing (e.g., his or her work) is often assumed, and the idea that burnout is the end product in a process in which this involvement a) constitutes a vulnerability factor and b) has gradually eroded, exists in most approaches to burnout (Pines, 1993; Schaufeli & Enzmann, 1998). Therefore, *conceptually* speaking, the notion of 'work engagement' has always been inherent in burnout research. However, engagement has not previously been an immediate focus of *empirical* attention (cf. Seligman & Csikzsentmihalyi, 2000 on the focus on disease and malfunction in 20th century research). Subsequently, there has been a lack of obtainable clear-cut definitions and operationalizations of involvement or engagement facilitating the empirical study of this concept. For example, Maslach and Leiter (1997) assume that 'engagement' is the same as lack of burnout. They argue that burnout and work engagement are the bipolar endpoints of a continuum of worker well-being, affected by circumstances at work. A well balanced job situation (i.e. characterized by sufficient workload, influence and autonomy, recognition, social support, justice and meaningfulness) will foster work engagement, whereas if this balance is overthrown by chronic overload, conflicts and ambiguity, or lack of recognition or justice, work engagement will erode and transform into a subjective experience of burnout. However, Seligman and Csikszentmihalyi (2000) stress the importance of 'true scientific principles', in the building of a body of empirical knowledge on positive aspects of human functioning, indicating that new, positive concepts should be properly defined on their own and not just as 'lack of distress'. More recently, work engagement was defined by Maslach as "a persistent, positive affective-motivational state of fulfillment" (Maslach et al., 2001, p.417) – a direct opposite of burnout manifested as being filled with energy, being involved with and dedicated to one's work and feeling efficacious in performing one's work tasks.

Building upon Maslach and Leiter's (1997) conceptualization of engagement, Schaufeli and his colleagues (2002) approached work engagement as a phenomenon on its own and defined it as "a positive fulfilling work-related state of mind that is characterized by vigor, dedication and absorption" (p. 74). They first argued that work engagement and burnout should be viewed as conceptual opposites – but not bipolar twins – that they are each functions of different circumstances at work. More recent findings (González-Romá, Schaufeli, Bakker & Lloret, 2005) have identified two bipolar dimensions (vigor-exhaustion; dedication-cynicism) that underlie the constructs of work engagement and burnout. It appears as Maslach and Leiter's (1997) and Schaufeli et al.'s (2002) perspectives are approaching, at least theoretically. However, it is obvious that Schaufeli and colleagues have put more effort into developing an instrument for empirical assessment of work engagement, facilitating empirical research for testing theoretical assumptions of 1) what causes work engagement (in contrast to what causes burnout), and 2) how work engagement and burnout are interrelated as constructs.

In her more recent writings (e.g. Maslach & Leiter, 1997), Maslach appears to have deserted her previous approach on initial idealism and involvement, and discusses 'engagement' only in terms of an opposite state of burnout. Engagement is said to *precede* burnout, however there is no assumption in this approach that engagement *predicts* burnout. Schaufeli and Bakker (2004) have a similar approach, although they make their case on predictors of work engagement and burnout *respectively*, arguing that different work conditions lead to different outcomes. According to their model (Schaufeli & Bakker, 2004), adequate and stimulating

job resources will foster work engagement, which in turn inspires commitment to work and increased efficacy (see also Schaufeli & Salanova, *in press*). However, if job resources are failing and job demands pile up, burnout will occur and in turn eventually result in health complaints. More research is needed to replicate these proposed relationships over time. What permeates both Maslach and Leiter (1997) and Schaufeli and Bakker (2004) is that the idea of initial involvement is lacking. Engagement in work is present, but not as a predictor of future burnout. A negative correlation between the constructs is assumed (because they are seen as bipolar opposites; a decrease in one should accompany an increase in the other). However, very few studies have investigated this relationship over time, or tested whether work engagement may constitute a possible *predictor* of burnout in its own right as a manifestation of involvement.

1.1.e "Same same but different"? Positive attachment in occupational psychology

The previous section indicates some of the confusion surrounding the concept of 'engagement' (or 'involvement') in work, similar to the previously discussed conceptual confusion that marks the research on burnout. Some of this confusion may be credited to semantics – used in lay language, the terms 'engagement' 'involvement' and 'commitment' can be used to describe relatively similar states of positive attachment to work. For instance, Maslach and Leiter (1997) use some of these terms interchangeably to reflect the all-embracing notion of affective and/or attitudinal investment in work. However, there is also previous research within organizational psychology using the terms (job) 'involvement' (see Kanungo, 1979; Lawler & Hall, 1970; Lohdahl & Kejner, 1965) and (organizational) 'commitment' (see Meyer& Allen, 1991). In this sense, the words become conceptual terms that denote a particular, psychological construct.

Job involvement is usually used to denote a cognitive identification with work, including the notion that work may satisfy salient needs and expectations (Kanungo, 1979), whereas (organizational) commitment refers to an affective identification with the organization (Meyer & Allen, 1991). The risk for concept redundancy has been pointed out by Morrow (1996), who strongly argues that organizational psychology needs to look out for the 'old wine in new bottles' phenomenon, that is – before introducing new concepts, we need to be sure that they truly add to our understanding of psychology and do not simply replicate previous conceptions. At first glance, work engagement (Maslach et al., 2001; Schaufeli et al, 2002) shares connotations with both the more cognitively oriented constructs like job involvement, as well as the more affectively oriented organizational commitment (Meyer & Allen, 1991). However, work engagement has a clear association with health and vigor, emphasizing a core component of energy and drive and Maslach et al. (2001) argue that both work engagement and burnout go beyond already existing constructs. Nevertheless, empirical research is needed to investigate whether the conceptualization of work engagement overlaps some of the previously established concepts of job involvement and/or organizational commitment to the extent of concept redundancy.

Throughout this thesis, 'involvement' is used to denote the commonly assumed component of individual motivation that may precede – and in combination with detrimental job factors – also predict burnout. Work engagement is used to denote the specific construct defined by Maslach et al. (2001) and Schaufeli et al. (2002) and 'job involvement' is used with reference to the cognitive, motivational construct defined by Kanungo (1979). 'Organizational commitment' is used to indicate the construct defined by Meyer and Allen (1991), namely an

emotional attachment that employees form with their organization, based on shared values and interests.

1.2 Operationalizations of burnout and work engagement

The Structural Equation Modeling (SEM; see Bollen, 1989) technique that recently has become popular is based upon the theoretical assumption that attitudes and feelings are abstract psychological phenomena that cannot be directly observed. Therefore, to obtain knowledge about people's attitudes and feelings, we must find proxies, or manifest indicators, of human attitudes and feelings. This line of reasoning seems highly inferable to the manifestation of the burnout construct (including the notion of work engagement) which, according to Söderfeldt (1997), is not a tangible disease in the traditional sense, but is only observable though subjective witness. Hence, 'burnout' was viewed as a latent psychological construct that can be observed through employees self-report ratings of how emotionally exhausted and cynical they feel, as well as if believe they lack professional efficacy.

There are several ways to collect empirical data manifesting the psychological phenomenon of interest, e.g. interviewing subjects on how they think and feel, asking them to complete self-report questionnaires, observing their behavior or asking them to participate in experiments. Among the many different ways of empirically assessing (manifestations of) psychological phenomena, the use of self-report questionnaires is unsurpassed in assessing burnout and work engagement (Schaufeli & Enzmann, 1998; Söderfeldt, 1997).

A prerequisite for sound scientific knowledge then becomes validity and reliability of these self-report instruments that are used to capture manifestations of the abstract phenomena in which we are interested. The empirical instruments that are used constitute the ramifications of our knowledge in the sense that they dictate which questions are being posed to the subjects, and in turn what answers underlie the ensuing analyses and conclusions (cf. Schwab, 1980). Because the construct of burnout has been so intimately associated with what is captured by its most commonly used empirical instrument (the MBI), it is crucial to evaluate what it is that this instrument captures (Schaufeli, 1999). The same can be adduced for work engagement, as the empirical instrument for capturing this construct (the Utrecht Work Engagement Scale; UWES, Schaufeli et al., 2002) was developed to reflect the opposite of burnout; hence it is indirectly afflicted with the same conceptual strengths and weaknesses.

Moreover, it is necessary to establish construct validity of an instrument every time it is used in a different context (Carmines & Zeller, 1979; Cook & Campbell, 1979; Messick, 1975). In accordance with SEM theory, the match between (e.g. factorial) representations of the abstract phenomena we wish to investigate and their empirical manifestations can be estimated and tested using Confirmatory Factor Analysis (CFA; Bollen, 1988). A CFA has an advantage over an Exploratory Factor Analyses (EFA) in that it not only 'sorts' items by common variance, but it also specifies which items should load together based on theoretical assumptions and then tests if this theoretical representation of reality is consistent with the actual reality (i.e., the observed data) (Bollen, 1989). A CFA is a good way to test whether an instrument is reliable and captures dimensionality of a construct, however to achieve a more certain establishment of construct validity it should also be accounted for whether the construct of attention relates to other variables according to theoretical assumptions (Bollen, 1989).

1.2 a Assessing burnout

When reviewing the body of burnout research, Schaufeli and Enzmann (1998) found that the most commonly used instrument for assessment of burnout was the Maslach Burnout Inventory (MBI; Maslach et al., 1996), employed in > 90% of all studies. This consistency has both advantages and disadvantages. For instance, generalizability and comparability of results are facilitated; however, the MBI has also been subject to massive criticism, for matters such as having psychometric deficiencies and being inductively rather than deductively developed (Schaufeli, 1999). Hence, more recent research has included developments of other empirical instruments to assess burnout. For example, the Oldenburg Burnout Inventory (OLBI; Demerouti, Bakker, Vardakou & Kantas, 2003) captures exhaustion and disengagement from work, and the Shirom Melamed Burnout Questionnaire (SMBQ; Melamed, Kushnir & Shirom, 1992) assesses four facets of burnout (mental and physical exhaustion, tension, listlessness and cognitive weariness). The present thesis employed the MBI because it facilitated comparison with other studies, but primarily because it is linked to the theoretical definition of burnout that has been adopted here.

It is recommended that the introduction of new empirical instrument always be accompanied by rigorous validation procedures to ensure that it effectively captures the construct it is supposed to tap (Cook & Campbell, 1979), however when the MBI was introduced most studies paid little attention to construct validity of the instrument (Schaufeli, 1999). This situation has changed, as a result of several coincidences that, during the second part of the 1990s, asserted an upswing for the construct validity of the MBI. For one thing, the Structural Equation Modeling (SEM) technique became increasingly widespread, facilitating the conduct of Confirmatory Factor Analyses (CFA), which in turn contributed to a massive (e.g. Cordes, Dougherty & Blum, 1997; Green, Walkey & Taylor, 1991; Holland, Michael & Kim, 1994; Lee & Ashforth, 1990; Schaufeli & van Dierendonck, 1993; Schutte, Toppinen, Kalimo & Schaufeli, 2000; Söderfeldt, Söderfeldt, Warg & Ohlson, Taris, Schreurs & Schaufeli, 1999; 1996; Walkey & Green, 1992) investigation of construct validity of the MBI. The bulk of research supports the three-factor representation of the MBI as well as convergent and discriminant validity of the instrument (see Maslach & Jackson, 1981; Meier, 1984; Schaufeli & Enzmann, 1998), however some ambiguity with respect to the factor structure and reliabilities of mainly the depersonalization subscale remain. This calls for careful examination of psychometric qualities before using the instrument in research, especially when translated to different languages or employed in different cultural contexts (cf. Schaufeli & van Dierendonck, 1993).

Furthermore, during this period, the MBI was also supplemented with a more general version designed to assess burnout in contexts outside the human services as well. This version was named the Maslach Burnout Inventory – General Survey (MBI-GS; Maslach et al., 1996) and is similar to the original version with a few exceptions. The wording of the items in the MBI-GS is formulated more generally, and the items in MBI-HSS referring to the relationship with ‘recipients’, or ‘clients’ have been exchanged for items referring to the relationship with ‘work’ in the GS version. Additionally, the second subscale – previously called ‘depersonalization’ was renamed and is referred to as ‘cynicism’ in the MBI-GS. The items of this subscale reflect a cognitive detachment from work rather than from other people (the clients, as in the original version of the MBI). The third subscale (previously ‘personal accomplishment’) was also renamed and is called ‘professional efficacy’ in the MBI-GS, referring to feelings of accomplishment or efficacy generally related to work tasks, rather than succeeding in specific relationships at work.

1.2.b Assessing work engagement

As mentioned, developments of theoretical definitions, operationalizations and empirical instruments to assess work engagement have been developed only recently. The Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002) captures the three dimensions *vigor* (being fully charged with energy and resilient in one's work even during a regular 'dull' day when nothing particular happens), *dedication* (being proud of one's work and convinced that what one performs is significant) and *absorption* (being carried away by work, forgetting everything in one's surroundings, looking at your watch and finding that you have missed your coffee break without even noticing). Perhaps wise from the harsh lessons derived from the history of the MBI (Maslach et al., 1996), the construct validity of the UWES was thoroughly established at an early point, and the instrument appears to be internally consistent and show good factorial validity across both occupational groups and different countries and cultures (Schaufeli, Martínez, Marques Pinto, Salanova & Bakker, 2002). Regarding the relationship between work engagement and empirical overlap with other adjacent constructs (discriminant validity of the UWES), it has been shown that work engagement can be empirically separated from burnout and workaholism (Schaufeli, Taris & van Rhenen, *manuscript submitted*). However, more research is needed to investigate whether work engagement can be empirically separated from other *positively* denoted concepts of worker well-being as well.

1.3. A theoretical framework

It has been said that there is nothing more practical than a good theory. Nevertheless, burnout research has been criticized for lacking just that (see e.g. Hallsten, 1993; Hallsten et al., 2001; Rösing, 2003; Schaufeli, 1999). Because the scientific construct 'burnout' emerged from empirical observations rather than being deduced from theory, it can be argued that the construct has a strong ecological validity. However, the theoretical understanding of the concepts (in terms of how the different aspects are related to each other as well as how burnout relates to contextual factors) is complicated. Generally, books and book chapters on burnout outline some kind of motivational framework describing how involved people gradually burn out when faced with a frustrating and non-supportive work environment. Empirical studies, on the other hand, often employ stress theories as a framework for testing the association between job demands and burnout in accordance with the suggestion that demands (e.g., at work) require emotional and/or cognitive compensatory efforts. If the demands are prevailing, sustained compensatory efforts will eventually result in exhaustion accompanied by psychological and physiological complaints (Hockey, 1983). Because burnout is a construct with both motivational and health connotations, it seems appropriate to acknowledge both stress *and* motivation in explaining how burnout occurs.

The following sections outline a number of theories relevant in understanding the development of burnout and work engagement, as well as the relationship between 1) involvement and burnout and 2) work engagement and burnout.

1.3 a The Conservation of Resources Theory (COR)

Drawing upon the essential assumption of the transactional stress paradigm – that the imbalance between demands and resources causes stress, and that ill-being ensues in the individual perception of and approach to this stress (cf. Lazarus & Folkman, 1984) – the Conservation of Resources (COR) theory (Hobfoll, 1989, 1998) sets out to explain

psychological mechanism that regulates how the balance (or imbalance) between demands and resource is perceived by the individual.

The COR theory is claimed to be a 'general theory of stress' (Hobfoll & Freedy, 1993, p. 115), as well as a 'basic motivational theory' (Hobfoll & Freedy, 1993, p. 115). It is a theory of stress because it explains how strain ensues and proliferates, and it is motivational because it is grounded in the assumption that need satisfaction/frustration basically determines whether well-being or frustration will occur. The COR theory can be applied to broad perspectives of stress as well as more narrow issues (Hobfoll, 1998). The groundwork of COR theory ultimately builds upon the principles of loss aversion and the endowment effect (see Rabin, 1998). The *loss aversion principle* states that the subjective value of something is reinforced after acquisition; that is, with the joy of acquiring something of value to us follows the fear of losing it. This disproportion is colloquially illustrated by the saying 'you don't miss the water until the well runs dry'. However, the saliency of loss to our well-being will differ depending on the value we ascribe to the item we might lose (*the endowment effect*). According to COR, the more salient the need that the specific resources correspond to, the more threatening or distressing the loss becomes.

The COR theory proposes that we strive to accumulate resources that each correspond to certain needs. For example, we might strive to attain material resources (money, a house) to satisfy basic physical needs for food and shelter, as well as immaterial resources (social support, esteem and recognition) to satisfy the psychological needs for belonging and status. Furthermore, we might strive to attain a job, to make friends and mobilize energy to satisfy our need for love as well as higher order needs like social status and self-realization (see Hobfoll, 1998). The resources function as a buffer, as well as a reinforcement and prerequisite for additional resource attainment. Hence, a positive gain spiral will account for the acquisition of protective factors, which in turn generate even more well-being. As long as the desired resources can be accumulated, people are assumed to be reasonably happy. However, when resources (and thus also our need satisfaction) are threatened or lost, we try to maintain the status quo by launching counter-actions designed to keep the resource account in surplus. For example, when a certain resource is threatened, we invest whatever other resources are at hand in order to avoid a total net loss. However, when faced with a chronic stressor, the resource account will sooner or later be exhausted and end up on a negative balance. At this point, demands may be perceived as overwhelming and no longer possible to combat, and one might find oneself spiraling down a slide leading to strain and ill-health.

1.3 b The Job Demand-Resources model (JD-R)

Because the COR theory (Hobfoll, 1989) is a *general* theory of stress, it needs to be adjusted and made situation-specific for use in different applications. In burnout research, this was accomplished by the Job Demands-Resources (JD-R) model (Demerouti, Nachreiner, Bakker & Schaufeli, 2001; Schaufeli & Bakker, 2001), which parsimoniously illustrates the basic tenets of COR and places them within the specific framework of work characteristics, burnout and work engagement. In its initial version (Demerouti et al., 2001), the JD-R model described how job demands result in exhaustion whereas lack of job resources results in disengagement from work. Schaufeli and Bakker (2004) extended these principles to comprise two processes, the a) *energy depletion process* and the b) *motivation enhancement process*. The initial JD-R model depicted two parallel processes; however Schaufeli and Bakker (2004) concluded that these processes should be regarded as intertwined. For

example, they found that resources are also (negatively) associated with burnout, and burnout is (negatively) associated with commitment (the 'end-point' in their motivational processes). However, Schaufeli and Bakker (2004) make a point of viewing burnout and work engagement as functions of different sets of working conditions. The energy depletion process (sometimes referred to as the health impairment process) draws upon the assumption that demanding situations, e.g. at work, require emotional and/or cognitive compensatory efforts (e.g. Hockey, 1983). If the demands prevail for extended periods, sustaining compensatory efforts will result in exhaustion. It has also been repeatedly established that job demand is related to an increase in burnout, especially the exhaustion component (Lee & Ashforth, 1996; Maslach et al., 2001; Schaufeli & Enzmann, 1998). The motivation enhancement process draws upon the work of, e.g., Hackman and Oldham (1980), and posits that the availability of 'job resources' contributes to increased motivation and engagement in one's work. Job resources are factors that stimulate personal development, contribute to the achievement of work goals and alleviate the impact of job demands.

The JD-R model has received ample empirical support (e.g. Demerouti et al., 2001; Llorens, Salanova, Schaufeli & Bakker, 2004; Schaufeli & Bakker, 2004). Further to its advantage, it elaborates not only on the negative effects of the work environment but extends the assumptions to also include more positive aspects of work. The holistic approach is an advantage of the JD-R model (cf. Seligman & Csikzsentmihalyi, 2000). However, the JD-R model also has a number of shortcomings. For example, it does not acknowledge individual factors and the part they play in the processes of motivation and health. Furthermore, the model only recognizes factors that initiate (and perpetuate) motivation and health. It does not elaborate much on the relationship *between* motivation and health, other than stating that they are negatively related (i.e. if you are engaged in your work, you are not likely to feel burned out and vice versa).

Whereas the JD-R model (Demerouti et al., 2001; Schaufeli & Bakker, 2004) constitutes a parsimonious framework applicable in understanding the role of organizational climate in the development of burnout and work engagement specifically, the COR theory (Hobfoll, 1989; 1998) constitutes a wider, more comprehensive heuristic framework that also recognizes the role of need satisfaction for well-being. The need-satisfaction approach was also adopted as a general framework by Kanungo (1979), who reviewed the literature on job involvement and alienation. Karl Marx suggested that workers who are given autonomy, power (or efficacy, cf. Roberts, 1987) and feedback at work will gain a sense of control and pride regarding the outcome of one's work experience and enjoy a feeling of fulfillment from working (a notion that reappears in Ryan & Deci's Self-Determination Theory, 2000). However, Marx also suggests that if these resources are threatened or lost, the worker will experience a profound loss of motivation to work, including feelings of exhaustion and meaninglessness – i.e. become *alienated* (see Kanungo, 1979; Ryan & Deci, 2000; Schacht, 1971).

1.3.c. The Self-Determination Theory (SDT)

Another, general, framework based on the basic tenet that satisfaction of (psychological) needs results in well-being and fulfillment, whereas frustration of (psychological needs) results in ill-being and alienation is the Self-Determination Theory (SDT, Ryan & Deci, 2000a, 2000b). The SDT defines several categories of self-regulation (the degree to which our motivation towards action has been internalized), moving beyond the traditional dichotomization of 'intrinsic' and 'extrinsic' motivation. Intrinsic motivation refers to "doing an activity for the inherent satisfaction of the activity itself" (Ryan & Deci, 2000a, p. 71) and

is facilitated by a supportive environment, e.g. factors such as feedback and autonomy (*job resources*). If these resources are provided, they will intertwine with the intrinsic enjoyment and evolve into a reciprocal spiral of energetic involvement in work (Schaufeli & Salanova, *in press*). However, factors such as competitive pressure, deadlines or factors that might threaten the feeling of competence (*job demands*) might diminish intrinsic motivation (Ryan & Deci, 2000b). Ryan and Deci (2000b) compare intrinsic motivation to child's play, whose only purpose is learning and exploring. They argue that pure intrinsic motivation is very rare in adults as the obligations of society play an increasingly important role as a determinant of our action. Most adult activities are guided by extrinsic motivation – doing something for the purpose of attaining a separable outcome (e.g. working in order to receive a paycheck to make a living or to fulfill social or ego-driven needs). However, a basic tenet of SDT is the differentiation of degrees of extrinsic motivation, ranging from fully instrumental to fully internalized, bordering on purely intrinsic.

These differentiations are illustrated in four subcategories: *external regulation* (purely instrumental motives for action), *introjected regulation* (motives guided by the wish to enhance pride or self-worth - so called ego-involvement - or motives related to the avoidance of shame or guilt, acting as a kind of intrapersonal control); *identified regulation* (being motivated to perform a task (e.g., to work) because this task has been consciously ascribed some personal importance to the individual – i.e. the individual performs a certain behavior because he or she considers it salient to his or her identity); and *integrated regulation* (fully integrated motives for acting, that is although the motivation is external, it has assimilated to the self). Basically, research guided by the SDT framework has shown that the more integrated the values and goals of a certain activity are, the stronger the association with joy and satisfaction, however activities associated with less integrated (thus more instrumental) values and goals are related to poorer health outcomes (see Ryan & Deci, 2000a for summary).

The 'toxic' involvement assumed to be a risk factor for burnout would translate to work motivation guided by *introjected regulation*, borrowing from the terminology of SDT. Hence, involvement in work is not truly intrinsic (although it might appear so from the outside) but is upheld in order to attain a separable outcome, namely approval of self or others, enhance pride or self-worth, guilt or shame avoidance - to achieve some 'feel-good', put in colloquial terms, or to satisfy ego needs, put in motivational terms. In a similar approach to explaining the continuum from job involvement toward the more sociologically oriented concept alienation, Kanungo (1979) suggests a motivational framework for embracing how the job might play a role in satisfying individually salient ego needs. Hence, in adopting the framework of SDT to support theoretical explanations of how involvement should be differentiated into categories (toxic and non-toxic), the theory on burnout can be placed compatibly within a broader framework of health and motivation (need satisfaction).

Following this reasoning, employees who are *not* driven by introjected regulations (e.g., more intrinsically motivated) would be less dependent on work for personal fulfillment. They would still be vulnerable to an unfavorable work situation because being subject to conflict or overload conveys an additional load to the organism, however the threat of losing empowering resources at work would not be interpreted as threatening salient ego needs. Similarly, Hallsten (2005) distinguishes between 'burnout' and 'wornout' in suggesting that the term burnout only applies to individuals with contingent self-esteem, whereas wornout applies to strain in individuals whose self-esteem in unaffected by stress. Further support for this assumption is provided by a recent, qualitative study on twelve individuals who had taken

long-term sick-leave for burnout (Ekstedt & Fagerberg, 2003). Several themes emerged from the in-depth interviews conducted, supporting the notion that these individuals had – previous to their burnout – experienced strong inner incentives and a threatened self-image.

In conclusion, it appears that the notion that employees who are 'on fire' also risk burning out is too broad to render justice to this process. This dissertation asserts that being 'on fire' at work might serve as a positive, motivational force whereas carrying a torch for your job, expecting it to fulfill you and provide existential fulfillment, may very well set you up for burnout. The essential key is the nature of the involvement – whereas 'toxic' involvement (e.g. involvement guided by introjected regulation, Ryan & Deci, 2000) may be detrimental to psychological well-being at work, and 'non-toxic', or intrinsic involvement (fully self-determined) would not be regarded as a *predictor* of burnout. However, in accordance with the theories and findings by, e.g., Maslach and Leiter (1997), non-toxic involvement may very well *precede* burnout.

1.3.d Type A behavior

Based on previous literature, it was concluded that toxic involvement would pose the most serious threat to well-being at work. As cited previously, there are several variables that could be considered toxic involvement. One example is the Type A behavior pattern. The term 'Type A behavior' was introduced by Friedman and Rosenman (1974), two medical doctors who – by accident (and with the help of an observant woman) – were subjected to the notion that psychological stress could be a predictor of coronary incidents. Intrigued by this suggestion, they pursued systematic observations on their cardio patients and managed to identify several, common behavioral characteristics among them. Type A behavior should not be confused with a personality trait, but constitutes a relatively stable pattern of behavior that is induced by early socialization and contextual contingencies (Krantz, Lundberg & Frankenheuser, 1987). This behavior pattern characteristically manifests itself in the constant battle against time frames and deadlines, excessive competitiveness, irritability and hostility. Type A behavior is particularly interesting in relation to burnout and work engagement because of its main components (see Day & Jreige, 2000; Spence, Helmreich & Pred, 1996): achievement striving (relevant to the aspect of being 'on fire', *author's note*) and irritability/impatience (relevant to energy depletion, *author's note*). Individuals displaying frequent Type A behavior have been shown to outperform individuals displaying little Type A behavior, as they have been shown to exert themselves regardless of the task or situation. Non-Type A individuals, on the other hand, appear to better economize with their resources and exert effort only when called on to, e.g., meet a deadline (see Perez-García & Sanuán, 1996). That Type A individuals are signified by their poor economizing of energetic resources and excessive competitive behavior is also reported by Grossi (2004), whose practice includes stress management among Type A individuals.

Sturman (1999) suggests that Type A behavior can be described as extrinsic work motivation (borrowing the term 'introjected regulation' from Ryan & Deci, 2000a), arguing that this behavior is a result of a wish to attain approval, from either others or oneself. Although Type A individuals may appear to an observer as intrinsically motivated because of this tendency to constant over-exertion, their main reason for doing so is based on competitiveness and comparison with others. It appears though as Type A individuals feel less distressed and more satisfied if their individual abilities can be matched with environmental demands, and models including both the individual and the environment appear to be more appropriate for research on Type A behavior and workplace health (Krantz et al., 1987).

Whether or not it is the result of a person-environment misfit, ample research indicates that Type A individuals are subject to poorer health. Besides being related to physical complaints such as cardiovascular disease (Miller et al., 1996), Type A individuals also report high levels of psychosomatic complaints (Barling & Charbonneau, 1992; Jamal, 1990), vital exhaustion (Appels, Falger & Schouten, 1993), chronic fatigue (Michielsen, De Vries & Van Heck, 2003), and burnout (Jamal & Vishwanath, 2001; Maslach, 1985; Maslach et al, 2001; Nowack, 1987).

Although Type A behavior was first introduced as a *pattern of behaviors* (indicating that the whole is more than the sum of its parts), empirical evidence struggled with inconsistent results when the notion of a two-dimensional conceptualization was introduced (Spence, Helmreich & Pred, 1987). Recent research (Barling & Charbonneau, 1992; Day & Jreige, 2002) recognizes two independent underlying dimensions of Type A behavior: achievement striving and irritability/impatience. These dimensions not only appear to show different bi-variate correlations with strain outcomes, they also appear to be differently involved in the stressor-strain processes (Edwards, Baglioni & Cooper, 1990; Kivimäki, Kalimo & Julkunen, 1996), which is why it has been recommended that they replace the global construct of Type A behavior for theoretical and scholarly purposes (Barling & Charbonneau, 1992). Some studies (see Spence et al., 1987) indicate that the achievement striving dimension is related primarily to performance and positive job attitudes, whereas the irritability/impatience dimension appears to be related to strain and ill health. Another study (Mellam & Espnes, 2003) reports that Type A job involvement positively correlated with depressed moods and job tension, whereas more achievement striving aspects were unrelated to health deterioration.

Previous studies on burnout and Type A behavior have generally employed neither solid theoretical framework to explore the role of this behavior in the burnout process, nor recognized to any extent the underlying main dimensions of Type A behavior, nor their respective influences on burnout (including its positive pole of work engagement). Therefore, more research is needed to investigate the effects of the various aspects on the burnout process, including the concept of work engagement.

1.4 Research objectives

The overall address of the present thesis was the relationship between being ‘on fire’ and burnout. More specifically, the thesis focused largely on two representations of involvement in work (work engagement and Type A behavior) and their respective relationships with burnout. However, another large theme was also pervasive, namely that of construct validity. Previous research on the construct validity of the MBI on Swedish data is limited, and although a previous thesis (Söderfeldt, 1997) thoroughly investigated this instrument across two Swedish human service organizations, more research in other settings is needed. Moreover, regarding the recent publication of the diagnostic criteria for exhaustion syndrome (Socialstyrelsen, 2003), the MBI and Maslach’s conceptualization of burnout merit greater attention and similarities and differences between these different approaches to burnout should be welcomed.

Study I: “Construct validity of the Maslach Burnout Inventory: Two Swedish healthcare samples” (Hallberg & Sverke, 2004) aimed to thoroughly investigate the construct validity of a Swedish version of the MBI. In her dissertation, Söderfeldt (1997) examined the factor structure of the MBI using exploratory principal component analyses. In order to replicate and

advance her results, we applied a more rigorous statistical approach (confirmatory factor analyses) in testing the factorial representation of the MBI. Moreover, the internal consistency, stability and generalizability across two organizations as well as associations between the three dimensions and work-related demands, resources and attitudes were investigated.

Study II: "Same, same but different? Can work engagement be empirically separated from job involvement and organizational commitment?" (Hallberg & Schaufeli, *in press*) aimed to test the discriminant validity of the UWES as well as the factorial representation and internal consistency of the Swedish translation of the work engagement scale (the UWES; Schaufeli et al., 2002). The construct 'work engagement' had not been previously translated to Swedish language or Swedish contexts. The overriding research question was whether work engagement as an empirical construct could be discriminated from the theoretically, and operationally adjacent, constructs of job involvement and organizational commitment? Previous research had established that work engagement can be empirically discriminated from workaholism (the inner drive to work excessively) and burnout (Schaufeli, Taris & van Rhenen, *manuscript submitted*). However, it still remained to determine whether work engagement could be discriminated from other operationalizations of involvement and positive work attachment constructs.

Study III: "Individual behavior patterns, burnout and work engagement" (Hallberg, Johansson & Schaufeli, *manuscript submitted*) aimed to investigate interaction effects between Type A behavior and work conditions (workload, autonomy and reciprocity) and their potential associations with work engagement and burnout. Moreover, we aimed to investigate how different dimensions of Type A behavior (achievement striving and irritability/impatience) were related to work engagement and burnout, respectively.

The specific aim of *Study IV*: "Do employees burn out from being on fire? A longitudinal study of three kinds of motivation and burnout" (Hallberg & Schaufeli) was to explore the longitudinal associations between involvement in work and burnout. A one-year time lag design was used to test the relationships between Type A behavior and burnout, as well as work engagement and burnout.

1.5. Samples

The present dissertation was based on empirical data from two projects: "Hospital privatization: Consequences for work organization, well-being and organizational profit" and "Health and motivation in the Swedish Information Communication Technology trade".

Study I was conducted using samples from two Swedish emergency hospitals (N=544, response rate 58% in hospital 1; and N=583, response rate 65% in hospital 2). The data for this study were collected as part of a larger project on two Swedish emergency hospitals (Sverke, Hellgren & Öhrming, 1999; Öhrming & Sverke, 2001). In this thesis, only questionnaires from the healthcare workers in these two organizations (i.e., employees working in direct contact with the patients) were used. Questionnaires and cover letters explaining the general aim of the project and a letter from the hospital management were mailed to employees' homes during the fall of 1998. Participants were asked to return their questionnaires directly to the research team in provided postage-paid envelopes. Three follow-up mailings were administered to increase the response rate, and all participation in the study was voluntary. In hospital 1, the sample consisted of 90 physicians (20%), 229 nurses (51%)

and 129 nursing auxiliaries (29%). Mean age was 41 years (SD=10), average organizational tenure 9 years (SD=8) and proportion of women 78%. In hospital 2, the sample consisted of 60 physicians (13%), 210 nurses (45%) and 192 nursing auxiliaries (42%). Mean age was 43 years (SD=10), average organizational tenure 14 years (SD=9) and proportion of women 84%.

Studies II, III and IV were conducted using data from a scientific project on employee health and motivation among the Swedish section of an international Information Communication Technology (ICT) and management consultancy company (Capgemini). The data collection was designed in cooperation with the company's management and personnel department. Preparatory pilot interviews were conducted with representatives for different occupational roles held within the company in order to understand the nature of the work and identify occupation-specific stressors and motivators. Based on the interviews, relevant theories and previous empirical findings, a questionnaire was designed to capture variables reflecting work situation, motivation and well-being among the sample. Then, every third employee at the company (N=521) was targeted to participate in a two-wave data collection. A baseline measure was attempted in May 2004 (N= 329, response rate 36%) and the follow-up was administered a year later, in May 2005 (a total of 124 persons - 24% - returned usable questionnaire responses at both waves and were thus included in Study IV). The questionnaires including a cover letter explaining the general aim, as well as emphasizing volition and confidentiality of the project, were mailed to the home address of the targeted employees. Participants were asked to return their questionnaires directly to the university affiliation of the research team in provided postage-paid envelopes, and four reminders were sent. The sample was composed of consultants (IT software developers, IT support, IT programmers, project managers, management consultants and administrative personnel). Mean age was 41 years (SD=9), and average organizational tenure 8 years (SD=7). Proportion of women was 37%.

2.1 Summary of the empirical results

2.1.a Study I

- *Study aims*

The overall objective of Study I was to test the construct validity of a Swedish translation of the Maslach Burnout Inventory – Human Service Survey (MBI-HSS; translated by Hallsten 1985). Construct validity of empirical instruments should always be considered, especially when transferred to different cultures or settings (Bollen, 1989; Schaufeli & van Dierendonck, 1993). Although most studies have supported the notion that the MBI captures a three-dimensional representation of burnout, a number of studies have indicated that a two-factor representation was superior to the three-factor representation (e.g. Green, Walkey & Taylor, 1991; Holland, Michael & Kim, 1994; Schaufeli & van Dierendonck, 1993, Walkey & Green, 1992). Previous exploratory factor analysis of a Swedish version of the MBI-HSS (Söderfeldt, 1997) concluded that burnout was best represented by only two of Maslach's dimensions – emotional exhaustion and depersonalization. The purpose of Study I was to test the construct validity of the MBI using confirmatory factor analyses in two hospitals, an organizational surrounding in which the Swedish translation of this instrument had not previously been tested. Construct validity was tested rigorously in four steps, including tests of 1) internal validity, 2) factor structure, including stability across the organizations, and 3) how the dimensions related to other work-related variables.

- *Main findings and implications*

Our analyses indicated that the three-factor representation of burnout operationalized by the MBI could indeed be replicated across two Swedish hospitals. All three dimensions attained Cronbach's alpha values above .70 (Nunally, 1978), which is usually referred to as the cut-off value for adequate reliability. The second part of the study concerned how the three dimensions of burnout (emotional exhaustion, depersonalization and personal accomplishment) relate to different organizational variables (a selection of demands, social support, job enhancement opportunities, and outcome variables). Role conflict emerged as most consistently associated with burnout, but workload also showed strong and consistent associations. Relationships with social support variables were less consistent. As indicated by the general pattern of associations, support was negatively related to burnout, especially supervisor support, but the findings were less consistent than those attained on job demands and burnout. Among the set of job enhancement opportunities, autonomy was clearly and negatively related to burnout.

Lastly, we also tested the relationships between burnout and 'outcomes' (however, the data were cross-sectional concerning why the directions of the relationships were only theoretically guided), namely turnover intention, organizational commitment and job involvement. Emotional exhaustion was related to increased turnover intention and decreased organizational commitment, whereas personal accomplishment was related to increased organizational commitment and job involvement.

Taken together with the previous existing evidence of the three-factor structure of the MBI, results from Study I added to the growing body of research supporting the internal validity of the MBI-HSS. Hence it was suggested that this Swedish translation of the instrument is psychometrically sound and can be recommended for use in studies on burnout. However, support for the external validity was somewhat more inconsistent. The main conclusion from the analyses was that personal accomplishment appears to be different from the other components of burnout (emotional exhaustion and depersonalization). Previous researchers have suggested that personal accomplishment be excluded from the conceptualization of burnout on the grounds that it is a methodological artifact, the items being positively worded in contrast to the negatively worded items designed to capture emotional exhaustion and depersonalization (Demerouti et al., 2001). It has also been suggested that personal accomplishment is reflective of personality rather than a stress response (Cherniss, 1993; Cordes & Dougherthy, 1993; Demerouti et al., 2001; Lee & Ashforth, 1990; Leiter, 1993). Therefore, it was concluded that although the MBI captures three dimensions, burnout is best represented (and should be conceptualized) as reflected by the core dimensions emotional exhaustion and depersonalization.

Note: Since studies II, III and IV were conducted among ICT consultants, a Swedish translation of the MBI-General Survey (GS) was employed in the remaining studies. Table 1 shows – inserted under the fit statistics received in Study I (MBI-HSS) – fit statistics from a CFA conducted on the MBI-GS. Although the RMSEA and the SRMR were higher for the MBI-GS than for the MBI-HSS, all fit measures spoke in favor of the three-dimensional representation of burnout (emotional exhaustion, cynicism, and lack of professional efficacy). This indicates (preliminary) factorial validity also for the MBI-GS. Consistent with the findings from Study I, emotional exhaustion and cynicism appeared to constitute core factors of burnout as professional efficacy was more weakly correlated with the other dimensions.

Table 1: Fit statistics of the MBI-HSS (Study I) and the MBI-GS (Studies II, III and IV).

Model	df	□	RMSEA	SRMR	CFI	NFI	AGFI
MBI-Human Service Survey (Study I)							
Sample 1							
One dimension	170	1228.61	0.15	0.12	0.84	0.82	0.63
Two dimensional (EE+DE, PA)	169	734.04	0.10	0.08	0.91	0.89	0.78
Three dimensional	167	396.46	0.06	0.06	0.96	0.94	0.89
Sample 2							
One dimension	170	1247.24	0.15	0.12	0.80	0.78	0.63
Two dimensional (EE+DE, PA)	169	746.96	0.10	0.08	0.89	0.87	0.78
Three dimensional	167	436.36	0.06	0.06	0.95	0.92	0.89
MBI-General Survey (Studies III, IV)							
One dimension	104	1424.73	0.20	0.13	0.73	0.71	0.54
Two dimensional (EE+DE, PA)	103	734.54	0.14	0.10	0.85	0.83	0.71
Three dimensional	101	395.99	0.09	0.10	0.92	0.90	0.82

Levels of significance:
ns = non-significant, p< 0.001 = ***, p< 0.01 = ** , p< 0.05 = *

2.1.b Study II:

- *Study aims*

In Study II, the focus of attention was directed at the 'positive opposite' of burnout, namely work engagement, and the Utrecht Work Engagement Scale (UWES; Schaufeli et al., 2002). The UWES has been translated into several languages (including Swedish), and cross-cultural studies have indicated that its construct validity is generally satisfactory and that the construct is transferable to other cultures (Schaufeli, Bakker & Salanova, *manuscript submitted*). However, the Swedish version of the UWES had not been previously tested and although Schaufeli, Taris and van Rhenen (*manuscript submitted*) found that work engagement can be successfully discriminated from workaholism and burnout, no previous research had established whether it can be empirically discriminated from other positively denoted organizational psychological constructs. Study II aimed to investigate whether work engagement (as operationalized by the UWES) could be empirically separated from job involvement and organizational commitment, two constructs that have been established within research on organizational behavior (see Allen & Meyer, 1990; Kanungo, 1979; Lawler & Hall, 1970; Lodahl & Kejner, 1965; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Morrow, 1996). It is always important when introducing new constructs, and empirical operationalizations thereof, to ensure that it is not merely 'old wine in new bottles' (Morrow, 1996; Schwab, 1980). In other words, we must always strive to avoid concept redundancy. A confirmatory factor analyses (CFA) was performed to test whether work engagement, job involvement and organizational commitment constituted three different constructs or if work engagement would overlap one or two of the previously introduced constructs. Furthermore, inter-correlations between the constructs were inspected to evaluate this issue, and correlations with several health complaints, job factors and personal factors were inspected for the same purpose.

- Main findings and implications

The results from a CFA favored the model positing work engagement, job involvement and organizational commitment as separate constructs above the model positing the three constructs as one, single work attachment factor. This result indicated that the three constructs indeed appeared to be empirically differentiable. Moreover, the constructs shared *some*, although not completely overlapping variance. Thus, any suspicions that work engagement would constitute a case of conceptual redundancy were ruled out. The three constructs also appeared to be correlated differently to health complaints, job factors and personal factors. Work engagement was not only strongly and negatively correlated with burnout (defined as emotional exhaustion and cynicism) but also correlated strongly and negatively with a range of health-related variables (e.g. sleep disturbances, mental and somatic distress). Furthermore, work engagement was strongly and positively correlated with job resources, inspiring the authors to conclude that it can be defined in terms of 'optimal functioning' at work and include both health and motivational aspects. It should be noted that work engagement and organizational commitment between them showed a similar pattern of relationships with other variables, whereas job involvement appeared to deviate more from the other two in terms of associations with health-related, job-related and personal variables.

The most important conclusion from Study II was that work engagement is not 'same same' but different from job involvement and organizational commitment, and hence deserves research attention as a construct on its own. Another important implication of the study results was that work engagement is culturally transferable to Swedish contexts (at least to ICT-consultants) and that the translation appears to be psychometrically sound.

2.1.c. Study III:

- Study aims

The third study aimed to test the associations between Type A behavior, work engagement and burnout. It has been suggested (Hallsten, et al., 2005; Sturman, 1999) that Type A behavior constitutes a kind of 'contingent motivation' guided by a motivation to enhance self-worth and gain approval. From previous research, it appears that Type A individuals are overly involved in work in comparison to non-Type A individuals. However, a successful person-environment fit may decrease the risk of ill health among Type A individuals (Krantz et al., 1987), hence it could be expected that adequate resources (e.g., autonomy and reciprocity) would decrease the risk of burnout and instead enhance work engagement. However, because it is proposed that Type A individuals are overly involved in work due to their need for self-worth enhancement through performance and success (Hallsten et al., 2005), it could also be expected that a frustrating work situation obstructing goal achievement at work would constitute an extra liability for Type A individuals in terms of burnout.

Although Type A behavior was introduced as a global construct, more recent research (Barling & Charbonneau, 1992; Day & Jreige, 2002; Spence, Helmreich & Pred, 1987) has recommended the recognition of two main dimensions: 1) achievement striving and 2) irritability/impatience. The achievement striving dimension has been related primarily to performance and positive job attitudes in empirical research but unrelated to health deterioration (Day & Jreige, 2002; Mellam & Espnes, 2003; Spence et al., 1987), whereas the irritability/impatience dimension appears to be related to mental distress and ill-health (Barling & Charbonneau, 1992; Bluen, Barling & Burns, 1990; Day & Jreige, 2002;

Kivimäki, Kalimo & Julkunen, 1996; Spence et al., 1987). The present study aimed to further extend previous empirical research on burnout by also investigating how the achievement striving and irritability/impatience dimensions of Type A behavior are associated with burnout and work engagement. Four hypotheses were tested:

- Employees reporting frequent Type A behavior were expected to express more work engagement than employees reporting less frequent Type A behavior, when provided adequate resources (autonomy and reciprocity) (*Hypothesis 1*).
- Employees reporting frequent Type A behavior were expected to express more burnout than employees reporting less frequent Type A behavior, when facing a high workload (*Hypothesis 2*).
- The achievement striving dimension of Type A behavior was expected to be associated with higher levels of work engagement, but unrelated to burnout (*Hypothesis 3*).
- The irritability/impatience dimension of Type A behavior was expected to be associated with higher levels of burnout, but unrelated to work engagement (*Hypothesis 4*).

- *Main findings and implications*

Contrary to expectations, the results suggested that Type A individuals (in this sample) are *not* more vulnerable to job stress in the aspect of developing burnout than are employees displaying less frequent Type A behavior.

Neither Hypothesis 1 nor Hypothesis 2 received empirical support from the hierarchical regression analyses. Global Type A behavior evidenced an association (main effect) with work engagement but was unrelated to burnout. Job factors, however, were related to both work engagement and burnout. The interaction between Type A behavior and job factors was found to be unrelated to both work engagement and burnout, failing to support the hypothesis that those who are highly involved in work (i.e. displaying Type A behavior) are more vulnerable to burnout when job stress is high.

In Hypotheses 3 and 4, the dimensionality of Type A behavior was explored. Achievement striving was most strongly related to work engagement, however a weak association with burnout was also found (after controlling for the effect of irritability/impatience on burnout). Similarly, irritability/impatience evidenced a significant association with *both* work engagement and burnout. Due to the cross-sectional nature of the study, no inference about causality was possible.

Although not consistent with expectations, the results indicated that there is an association between Type A behavior, burnout and work engagement. However, this association would be best explored using longitudinal data as the question remains whether a) Type A behavior enhance work engagement or burnout, b) whether work engagement and burnout may enhance Type A behavior, or c) whether Type A behavior should be considered behavioral manifestations of work engagement and burnout and included in their respective definitions.

2.1.d Study IV:

- Study aims

The overriding purpose of Study IV was to explore the relationships between two different kinds of involvement (Type A behavior pattern and work engagement) and burnout across time in a sample of Information Communication Technology (ICT) consultants. Two specific aims were expressed:

- Aim one was to explore the relationship between Type A behavior and burnout. A positive association between Type A behavior and burnout, implying that Type A behavior is related to an increase in burnout, has been previously established. However, it is equally possible that burnout enhances Type A behavior, or that Type A behavior is a behavioral manifestation of burnout. In general, assumptions are based on theory and propose that Type A behavior predicts burnout (or other kinds of ill health), however most research has been conducted on cross-sectional data or has used inadequate analyses to illuminate this predicament.

- Aim two concerned the relationships between work engagement and burnout. It is proposed that work engagement is the bipolar opposite of burnout, hence it may *precede* although not necessarily *predict* burnout. Most research on work engagement to date is cross sectional, and most studies focus on associations with organizational predictors (or outcomes). The present study aimed to explore the longitudinal associations between work engagement and burnout to illuminate how they are interrelated across time.

- Main findings and implications

Longitudinal analyses of Type A behavior and burnout indicated that these variables were associated in cross-sectional data. However, no association between change in Type A behavior and burnout (or vice versa) was established to indicate that Type A behavior predicted an increase in burnout (at least not over the one-year interval that the present study comprised). Possibly, this result indicates that the association between Type A behavior and burnout is more complicated than can be surmised from the relatively sparse approach in the present study. Future research should investigate whether Type A behavior and burnout share a common association through workload. Moreover, the results suggested that Type A behavior was related only to the emotional exhaustion component of burnout, something that has been noted elsewhere as well (see Maslach et al., 2001). It could be that Type A behavior predicts *exhaustion*, although not the particular response of burnout. Future research should investigate Type A behavior, burnout and exhaustion from a motivational perspective to shed more light on the psychological mechanisms involved.

The longitudinal analyses of work engagement and burnout supported the notion that these constructs are bipolar opposites, as they appeared to be interdependently (and negatively) related. Hence, the present study supported the notion that burnout is an erosion of engagement. Additionally, this result indicated that motivational frameworks may add to the understanding of the associations between involvement in work and negative outcomes. If burnout is to be understood as an erosion of *work engagement*, but is unrelated to Type A behavior (which also constitutes a kind of involvement in work), this implies that burnout occurs only as a result of certain kinds of involvement. However, other kinds of involvement

(e.g., Type A behavior) may still have negative effects (e.g., fatigue) on health. Through viewing work engagement as a manifestation of intrinsic motivation, the motivational component in burnout (see Schaufeli, 1999) is further underscored, something that may facilitate the differentiation between burnout as operationalized by the MBI and other kinds of work-related exhaustion, e.g. exhaustion syndrome (Socialstyrelsen, 2003).

3.1. General discussion and conclusions

The overall address of this thesis was the notions of being 'on fire' and of burnout, including the relationship between these two conditions. Four more specific aims were comprised within the ambition to advance research on the relationship between involvement in work and burnout. The first two aims concerned the construct validity of the MBI (Maslach et al., 1996) and the UWES (Schaufeli et al., 2002). Systematic, scientific knowledge that underlies efficient diagnoses, preventative interventions and rehabilitation always starts with stringent and clear conceptualizations, constructs and operationalizations (cf. Cooper et al., 2001; Kanungo, 1979), which is why these aims deserved careful attention. Given that the term 'burnout' appears to stir different associations in different settings, construct validity of the instruments used may help to clarify what the specific constructs that underlie our discussion are. Should burnout be conceptualized as a psychological construct, or used with reference to a more holistic perspective also including somatic and physical symptoms?

3.1.a What do we refer to with the concept of burnout?

The results from Study I confirmed what previous research has indicated, namely that emotional exhaustion, depersonalization and personal accomplishment can be reliably captured by the MBI but that personal accomplishment is differently related to work factors and more weakly correlated with the other two aspects of burnout (Lee & Ashforth, 1996; Leiter, 1993; Söderfeldt, 1997). Consistent with previous research, it was concluded that the MBI – at least in Swedish settings – is most identifiably manifested as emotional exhaustion and depersonalization (or cynicism, which is what this component is called in the General Survey version of the MBI). Hence, the other studies in this dissertation (II, III and IV) operationalized burnout using only the core components (emotional exhaustion and depersonalization/cynicism).

However, Schaufeli (1999) points out an important aspect – that the construct validity of the MBI should *not* be confused with the conceptualization of burnout, although this has been the case throughout most burnout research. That is – although Study I (in good company with other construct validity studies of the MBI) indicates some important aspects, namely that *the MBI* captures a latent representation that appears to be generalizable across a wide range of cultures, occupations and time (since construct validity of the MBI has been an issue in research for 20 years) – it does not automatically convey that *burnout* is a theoretically valid construct. However, I would like to argue that the construct validity of the MBI may contribute to our understanding of what burnout is – and is not.

Given the lack of theory that characterizes burnout research (Hallsten, 1993; Schaufeli & Enzmann, 1998), during this thesis project I have come across several complications that I would like to address from the standpoint of the empirical results attained here. First of all, research on burnout appears to have moved away from its initial motivational perspective toward a more physical approach (see e.g. Shirom et al., 2005). Following the research, the problem arises concerning how to differentiate burnout from other kinds of work-related

fatigue. In the introduction of the present thesis, exhaustion syndrome (Socialstyrelsen, 2003) was discussed briefly, to clarify that this thesis does *not* address this more physically denoted (somatic) reaction to work-related stress. Unfortunately, there was no room within the limited frames of this dissertation to empirically investigate whether burnout could be discriminated from exhaustion syndrome. However, based on the summarized findings here, it is suggested that *burnout* be conceptualized as a motivational construct in future research so that it may be differentiated from, e.g., exhaustion syndrome. Primarily, the two standpoints that underlie my approach to this particular address are as follows: 1) burnout (as assessed by the MBI) represents the negative bipolar end of a well-being continuum (engagement representing the other end), and 2) over-involvement may, in general, result in exhaustion and fatigue (from an imbalance in energy expenditure and recovery), whereas only over-involvement due to intrinsic motivation may result in burnout.

- Burnout and work engagement – a well-being continuum?

Results from Study IV empirically addressed the longitudinal relationships between work engagement and burnout. Consistent with previous findings (González-Romá et al., 2005) Study IV supported the notion of bipolar associations between work engagement and burnout as the constructs appear to fluctuate interdependently over time. However, only part of the variance in burnout change was explained by change in work engagement corroborating the findings of González-Romá et al. (2005). This indicates that work engagement and burnout are only partially bipolar but may also contain construct specific aspects (absorption and lack of professional efficacy).

A bipolar approach to well-being at work is not new and can also be found in e.g., Kanungo's (1979) model of a continuum ranging between *job involvement* at one end and *alienation* at the other. Kanungo (1979) aspired to merge sociological research with organizational psychology and drew upon e.g., Karl Marx in suggesting that frustration of the needs for autonomy, power (or efficacy, cf. Roberts, 1987) will result in alienation of the worker from his work, whereas a supportive and constructive work environment will instead satisfy needs for autonomy and growth and thus induce motivation and commitment. Although alienation and burnout are usually approached as different constructs, Marx's definition of alienation shares some significant conceptual traits with burnout[1] why I argue that it is valid to draw upon the research of one construct in interpreting the other. Although work engagement and burnout are separate constructs from job involvement and alienation (for example, work engagement was empirically distinguished from job involvement in Study II), they appear to share a similar underlying structure corroborating a bipolar nature of work well-being. Especially the construct of burnout as well as the construct of alienation both stress exhaustion (of energy, manifested as a loss of motivation) and lack of significance in work. As these particular aspects of burnout have been replicated among a wide range of settings in a wide range of studies across a wide range of years, it is implied that they certainly represent a latent construct in the mind of different individuals.

[1] "What constitutes alienation of workers? First, that work is external to the worker, that it is not a part of his nature; and that, consequently, he does not fulfill himself in his work but denies himself, has a feeling of misery rather than well-being, *does not develop freely his mental and physical energies but is physically exhausted and mentally debased.* The worker feels himself at home only during his leisure time, whereas at work he feels homeless. *His work is not voluntary but imposed, forced labor*. It is not the satisfaction of need, but only a means for satisfying other needs". [Marx, 1833 re-cited in Kanungo, 1979, *italics added*]

Study I indicated that burnout was primarily related to role conflict followed by workload and lack of autonomy. Study III also indicated that reciprocity in professional relationships with the client (i.e., a perceived balance between give and take) was negatively related to burnout. These particular stressors can be made equivalent to autonomy, power/efficacy and feedback (all important ego needs) that must be satisfied unless involvement in work (or work engagement) shall erode into a-motivation (Ryan & Deci, 2000a), alienation (Kanungo, 1979) or burnout (Maslach & Leiter, 1997).

The notion of a well-being continuum is stressed in general frameworks and theoretic approaches to human stress and motivation in (Hobfoll, 1989; 1998; Ryan & Deci, 2000a, 2000b). Although burnout and work engagement are *specific representations* of well-being in their own (see Maslach et al., 2001) I believe it would still be fruitful to consider them as parts in a larger framework and to explore how they relate to other cognitive, behavioral, affective concepts in order to gain a greater (more holistic) understanding on human functioning (at work).

- Do you burn out from being 'on fire'?

Several frameworks on burnout include a motivational component (Schaufeli & Enzmann, 1998), and in the quote "In order to burn out, one has first to be 'on fire'", Pines (1993, p. 41) clearly indicates that burnout is somehow related to deep commitment. Whereas burnout research has a prominent focus on stress and ill health, the implied motivational perspective has been more clearly stated in research on work engagement, which appears to be moving *towards* a motivational frame (see Schaufeli & Salanova, *in press*). The construct of work engagement strongly resembles the conceptualization of intrinsic motivation (to work) as described by Ryan and Deci (2000a, 2000b), who propose that 'intrinsic motivation exists in the relation between individuals and activity' (p. 56) associated with interest, enjoyment and inherent satisfaction. According to their theoretical framework (the SDT), intrinsic motivation is a state of satisfaction and energy that occurs when the needs for competence, autonomy and relatedness are satisfied. Similar descriptions are used to describe work engagement (Schaufeli et al., 2002; Schaufeli & Bakker, 2004; Schaufeli & Salanova, *in press*). However, although the conceptual kinship between work engagement and intrinsic motivation holds the promise of a clarification and theoretical understanding of how being 'on fire' might be related to burnout, empirical research addressing this issue has been relatively scarce.

In the present dissertation, two different kinds of involvement in work were empirically investigated. In previous research it has been learned that Type A individuals have a tendency toward over involvement in work, and both Hallsten et al. (2005) and Sturman (1999) have suggested that Type A individuals are driven by the need to enhance self-worth. Consistent with what Ryan and Deci (2000a, 2000b) refer to as *introjected regulation*, an ad hoc assumption of this thesis was that Type A behavior would be associated with more burnout. However, the longitudinal analyses from Study IV indicated that Type A behavior did *not* predict burnout as expected, at least not within the time frame that the current project comprised (one year). It was speculated as to whether Type A was instead related to burnout via a third variable – e.g. workload – and it was suggested that future research pursue more sophisticated models of how Type A behavior may interact with the context in predicting burnout or other kinds of fatigue related ill health. For example, Krantz et al. (1986) suggested that the harmful effects of Type A behavior may be masked by a successful person-job fit. Type A individuals appear to have a low tolerance for awaiting reinforcement or

feedback (Nakano, Mochizuki & Sato, 1996). Perhaps the fast and changing environment described in preparatory pilot interviews with some of the ICT consultants who participated in our project successfully counterbalances the achievement striving, competitive aspects of Type A behavior that might – in another setting – predispose Type A individuals to burnout? This suggestion is only speculative and needs to be tested in future studies. It was also suggested that Type A behavior might not – necessarily – be associated with the particular construct of burnout (as assessed by the MBI). Since the data appeared to indicate that the associations that did appear concerned Type A behavior and emotional exhaustion, it was suggested that Type A behavior may constitute a kind of involvement that, due to overexertion of energy, results in exhaustion and fatigue (cf. Appels et al., 1993, Michielsen et al., 2003) however *not* in burnout.

Although Hallsten suggested that Type A behavior constitutes an 'anxious engagement', he also points out that burnout does not result from instrumental involvement. Perhaps – again, speculating – it was wrong to assume that Type A individuals are more vulnerable to burnout? Given the result of Study IV, it appears more likely that burnout does occur as an erosion of intrinsic motivation whereas Type A behavior might be a reflection of instrumental involvement. Sturman (1999) suggested that Type A behavior is a representation of introjected regulation – a motivation described by Ryan and Deci (2000a, 2000b) – as guided by the need for approval and self-enhancement. In their model Ryan and Deci depict this motivational approach as more internalized than purely instrumental, however it comes closer to instrumental motivation than to intrinsic ditto. More research is needed to clarify the mechanisms behind Type A behavior and exhaustion and/or burnout, however it is possible that Type A behavior does not result in burnout because it is not a representation of intrinsic involvement.

In her early writings, Maslach (1985) describes how idealism, a wish to make a difference in working with clients and students, was frustrated by organizational obstacles. Later, Maslach and Leiter (1997) describe how initial engagement is eroded by a lack of supportive and constructive organizational resources. This view implies that burnout (at work) occurs only if work is the only possible outlet for satisfying personally salient ego needs. Fernet, Guay and Senécal (2004) tested whether levels of self-determination interacted with job demands and/or job resources (control) to affect levels of burnout. They found that control over one's work situation moderated harmful effects of job demands on burnout, but only for employees with a high level of self-determination. This result can be taken as an indication that intrinsically involved employees (e.g., those expressing high work engagement) benefit more from job resources, but interpreted the other way around it also implies that they would be more vulnerable to *lack of* resources (as it would make them more prone to burnout).

A speculative interpretation is that Type A individuals are anxiously engaged in work to enhance self-esteem, however if their goals are frustrated at work they might pursue this self-enhancement elsewhere. Hence, they do not suffer the specific reaction of burnout (erosion of intrinsic motivation) because they are not intrinsically and inherently interested in the work *per se*. As mentioned, this interpretation is speculative and should be explored in future research. It is, however, consistent with the notion that burnout is an erosion of intrinsic motivation (cf. Study IV; Maslach & Leiter, 1997; Ryan & Deci, 2000a) as well as the notion that burnout does not occur when initial involvement is instrumental (Hallsten, 2005).

The present dissertation focused on two representations of involvement in work. However, another representation – job involvement – was included both in Study I (where it was studied

as an ‘outcome’ of burnout) and in Study II (where it was discriminated against work engagement). Job involvement (as defined by Kanungo, 1979) is a more cognitively denoted construct than is work engagement (which is primarily energetic and affective) and Type A behavior (behavioral). The present dissertation showed no indication of an association between job involvement and burnout. In Study II, it was also evident that job involvement was unrelated to all health indicators, whereas a positive association was established with job factors. Work engagement, however, was related to both health and job factors. In an inspection of the items, it is also evident that work engagement appears to capture a more energetically denoted, affective attachment to work.

Table 2: Items of the job involvement and the work engagement scales

Items: Job involvement (Kanungo, 1982)	**Items: Work engagement (Schaufeli et al., 2004)**
Several of the important things in my life are related to my current job	I am bursting with energy in my work
I live for my work	I feel strong and vigorous in my job
Most of my interests in life are associated with my current job	I am enthusiastic about my work
I’m strongly attached to my current job, and it would be difficult to detach from it	My job inspires me
Most of my personal goals are related to my current job	When I get up in the morning, I feel like going to work
I believe that my current job occupies a central position in my life	I feel happy when I am engrossed in my work
	I am proud of the work I do
	I am immersed in my work
	I get carried away by my work

Given that work engagement was related to burnout but not job involvement, it appears that you might burn out from being ‘on fire’ but not from being ‘delighted’ at work. This underscores that burnout results from a broader involvement in work, where not only cognitive resources are invested (and threatened) but also something more – perhaps the investment of heart and soul? Hence burnout is viewed as the erosion of an intrinsic, affective *embracing* engagement in work.

Employing motivational theories (e.g., the SDT), future studies should explore how different kinds of motivation are related to different conceptualizations of burnout (and other strain reactions that are characterized by exhaustion and fatigue). From the gathered experience of this thesis project (and suggested by the findings in Study IV), it is my tentative hypothesis that burnout – *as assessed by the MBI* – primarily captures an erosion of intrinsic motivation (cf. Ryan & Deci, 2000a, 2000b). However, this suggestion conveys that burnout should be recognized as consisting of *both* emotional exhaustion and cynicism; however, the term ‘cynicism’ could be exchanged for a term that better corresponds to what the items of this subscale capture (i.e., withdrawal of intrinsic interest in work and lack of significance).

3.1.b Limitations and methodological discussion

There are boundaries to every thesis, and this one is no exception. First of all, the present thesis relies solely on self-reported data. Although Cooper et al. (2001) defend the use of self-report based on the notion that transactional stress theory emphasizes the *perception* of stress as critical for strain reactions rather than objectively captured indicators, future research would benefit from using other assessments of burnout; for instance, by interviewing those who suffer from burnout and exhaustion syndrome about their early childhood experiences, spiritual beliefs and attitudes toward work, it could be further clarified whether the extrinsic approach adopted from SDT (Ryan & Deci, 2000a) constitutes a fruitful framework for identifying factors that might be involved in proneness to burnout. Given the somewhat inconsistent approaches toward involvement, inner incentives, self-esteem and its relationship with burnout (or wornout?), the area of burnout would benefit from more qualitative data to produce a more elaborate understanding of why 'fire' sometimes can become self-consuming. However, as argued previously, it is of utter value to employ stringent and concise theoretical definitions and models when conducting research on burnout. Hence, a deductive, thematic analysis approach is suggested for future exploration of how stress affects work well-being (including erosion of engagement and development of burnout).

The present thesis also used only self-report measures of Type A behavior. Some aspects of Type A behavior (e.g. hostility, or irritability) may be sensitive to social desirability (see Blumenthal et al., 1986). Hence, since it can not be considered as socially acceptable (especially in client oriented work as ICT and management consulting) to be overtly irritable – the true associations between this aspect and work engagement and/or burnout may be underestimated. Similarly, achievement-striving is more positively connoted and also showed an overall higher mean rating in the sample in which we conducted our study (and similarly, this might be an inflated finding due to social desirability). Future researchers are recommended to use structured interviews or observational ratings in addition to self-report data.

Furthermore, the present dissertation was delimited to the psychological manifestations of burnout. In future research, however, somatic and physical manifestations should be explored, for both the purpose of proper diagnosis and the theoretical development of psycho-physiological mechanisms (the link between emotion and health) that occur when work engagement turns into burnout.

In including a study on longitudinal data, the present thesis has overcome part of the problems that accompany cross-sectional research but instead came across the problem of concept stability. Longitudinal studies on burnout (e.g. Mills & Huebner, 1998) usually report that burnout scores are very stable across time, leaving very little room for other variables in regression-based models. In the present thesis, the emotional exhaustion component of burnout, as well as work engagement, was rather stable across time (see Table 3) whereas the cynicism component evidenced weaker autocorrelations.

One interpretation is that burnout, being so stable, should be conceptualized as a trait rather than a state. Kanungo (1979) suggests in his approach to alienation that the conception of needs (for autonomy, power/efficacy and feedback) is rooted in the early socialization history of the individual (protestant work ethic) and intrinsically situated variables therefore play a part in determining alienation.

Table 3: Descriptive statistics (means and standard deviations) and autocorrelations (T1-T2) for burnout and work engagement.

	Emotional exhaustion		Cynicism		Work engagement	
	T1	**T2**	**T1**	**T2**	**T1**	**T2**
Mean	2.31	2.29	2.38	2.31	3.76	3.64
Std.	1.12	1.05	1.13	1.70	.87	1.05
Correlation T1-T2	.70***		.55**		.70***	

Levels of significance:
ns = non-significant, p< 0.001 = ***, p< 0.01 = ** , p< 0.05 = *

Hobfoll (1998) elaborates similar ideas. According to this approach, a large amount of variance in burnout could be explained by individual values and hence only a small part of the variance would be left for contextual variables (e.g., job stress) to alter the experience of burnout. Internalization of values from early socialization is not exactly the same as what is traditionally referred to as 'personality', however when we are raised we are taught social norms and values that are bound to have an effect on the way we relate to work as adults. Work ethic is an example of this, and although it might be considered more of a social cultural construct, people's sense of duty is most likely related to conscientiousness, which in turn is generally approached as a personality trait in research. This approach would be consistent with the notion that burnout is a 'good girl' syndrome. Given the preliminary evidence from the interviews conducted by Ekstedt and Fagerberg (2005), this approach does merit some attention in future research.

Another possible interpretation to the stability of burnout scores is that burnout does not occur as a gradual, linear response to work stress. Zapf, Dormann and Frese (1996) suggest several possible models outlining the mechanisms that underlie a strain reaction. They outline, for example, an accumulation model suggesting that strain occurs after accumulated exposure to the stressor, possibly also including an inner dynamic that leads to further increase of the stress response even after the stressor has been removed. These suggestions imply that you could suffer from increasing work-related stress for a year but not experience a correspondingly increasing feeling of burnout. Instead, the expression of 'hitting the wall', used anecdotally by some people who have burned out, would be consistent with this model. For future research, this indicates the need for more imaginative designs, including closer follow-ups to distinguish lingering predictors from more acute stressors that might 'tip you over the edge', as well as interview studies to clarify the onset of a burnout reaction, in line with those conducted by Ekstedt and Fagerberg (2005).

The present thesis constituted a group-level approach to burnout and work engagement and focused on mean values and what was perceived as the most salient job stressors (and resources) for the group. However, in the interest of advancing research conducted on a more individual level, future research should focus on how individual differences influence the perception of job stress. Do individuals start out on different position in the well-being continuum? And if so, what factors influence their starting points? How long (i.e., how much stress) does it take to move towards one of the end-points? Are certain demands more threatening than others (as posited by the COR theory, Hobfoll, 1989; 1998) and in that case – do the saliency of demands fluctuate by occupation, by gender, by occupational experience or – by personality or early socialization? To what extent does resource gain (climbing up the ladder) buffer against demands and hinder the development toward burnout?

The specific sample of ICT consultants constitutes another delimitation of the present thesis. Future research needs to explore and replicate these findings in other occupational samples before any conclusion about generalizability of the findings can be made. However, with respect to organizational factors and burnout, the findings were similar between the hospital sample and the ICT consultants (the comparison is strengthened by the fact that the same operationalizations were used to assess many of the organizational factors in the hospital sample as well as the ICT consultancy sample).

With respect to the generalizability of work engagement, Study II established that work engagement, assessed by the UWES, can be successfully captured in Swedish ICT consultants. More research is needed to investigate whether work engagement can be culturally transferred to other Swedish occupational settings as well, however there is no reason to doubt this given that the results of previous cross-cultural research on work engagement (see Schaufeli et al., 2004) indicate that the concept of work engagement is transferable across countries as well as occupational settings (both blue and white collar). However, in line with a German study that was not able to replicate the three-factor structure of the work engagement construct using the UWES (Sonnentag, 2003), our data also indicated that a uni-dimensional solution was equally preferable to a three-dimensional one. The inter-correlations between the dimensions were also extremely high (ranging between .88 and .99). Since this instrument has not previously been translated or validated in Sweden, it is difficult to say whether the results are a function of cultural differences or if the current, Swedish translation of the UWES could use some fine adjustments. However, it should be noted that Study II employed the short version of the UWES in which the sub-dimensions appear to be more highly correlated than in the long version (see Schaufeli et al., *manuscript submitted*).

3.1.c Contributions to previous research

Regardless of the delimitations, the present thesis made several contributions to previous research on burnout and work engagement. The main advancements of previous knowledge can be summarized as follows. This dissertation accomplished to:

- Broadened the scope of contexts in which burnout and work engagement can be reliably and validly assessed.
- Corroborated previous findings (e.g. Cordes & Dougherthy, 1993; Lee & Ashforts meta-analysis, 1996) indicating that emotional exhaustion and depersonalization/cynicism are the core components of burnout.
- Translated and evaluated an instrument that appeared to reliably and validly capture work engagement in Swedish settings (at least among ICT consultants).
- Shown that work engagement can be empirically discriminated from other adjacent constructs (job involvement and organizational commitment).
- Contributed to the understanding of the work situation for ICT consultants.
- Added to the growing body of empirical studies, recognizing interaction effects between both individual and organizational outcomes.
- Indicated that work engagement and burnout are indeed bipolar ends of a well-being continuum by investigating longitudinal associations between the constructs.
- Rigorously tested longitudinal associations between Type A behavior and burnout, suggesting that their previously established association might be due to a confounding variable, or possibly, conceptual (fatigue/exhaustion/burnout) overlap.

3.1.d Implications and directions for the future

A salient finding of the present dissertation was the (negative) interdependent relationship between work engagement and burnout across time, implying that burnout should be conceptualized as an erosion of engagement (that occurs when one is subjected to job stress; primarily work overload, lack of autonomy and lack of feedback or reciprocity). In turn, this implies that you cannot be *both* work engaged (cf. intrinsically motivated) and burned out simultaneously. Given the many conceptualizations of (work-related) fatigue or exhaustion that exists in stress literature, a recommendation for future research is to recognize stringency in theoretical definitions and continue to explore associations between extrinsic, instrumental approaches to work and health. Another important implication regards the instruments used. When burnout is being assessed by the MBI, a non-clinical state of emotional exhaustion, depersonalization (or cynicism) and lack of professional efficacy is being captured. This latent construct partly represents the 'opposite' of what is being assessed when the UWES is administered. However, it must be remembered that the present dissertation has *not* shown whether exhaustion, tension and cognitive weariness (see Melamed et al., 1992) represents the erosion of work engagement (conceptualized as affective, intrinsic motivation). Practically, this implication suggests being aware of what instrument is being used because hypothetically an employee might be both work engaged and physically exhausted. Hallsten's (2005) notion of wornout suggests that exhaustion may strike employees although they are not vulnerable to burnout, and the present dissertation indicated that Type A behavior might be positively related to work engagement (and also to exhaustion, but not *burnout*). Hence, especially in practical settings (e.g., HRM practice, or clinical work with patients suffering from exhaustion and burnout) awareness of the concept of construct validity is recommended. With respect to the health insurance system in Sweden, Swedish organizations should especially take into consideration the distinction between burnout and exhaustion syndrome. Although the two concepts might have similar predictors, they may have different consequences regarding rehabilitation and sick leave. Furthermore, given the finding that Type A behavior did not predict burnout (but perhaps exhaustion syndrome or fatigue?), organizations could benefit from knowledge about which behaviors are most likely to result in sick leave and which behaviors or attitudes are more likely to result in de-motivation. This kind of knowledge would constitute valuable strategic assets; hence, the recruitment of psychological competence in management positions and executive boards is highly recommended.

Moreover, the findings from this dissertation suggest that HRM strategies should focus on enhancement of organizational resources. As no indications were found that work engagement (cf. intrinsic motivation) affected employee well-being or health negatively, it should be perfectly 'safe' to encourage this affective state in employees. By investing in a customized system for effective feedback and work organizing, the employer stands to gain more motivated, more positive and better performing employees (cf. Schaufeli & Salanova, *in press*) while simultaneously decreasing burnout that in turn might otherwise spread a negative, demoralizing attitude featuring increased turnover as well as have a negative effect on employee health (cf. Bakker, Le Blanc, & Schaufeli, 2005; Maslach et al., 1996; Schaufeli & Bakker, 2004). Based on the empirical findings of this thesis, as well as other research (e.g. Hackman & Oldham, 1980; Lee & Ashforth, 1996; Maslach & Leiter, 1997), it is recommended that role conflict, workload, autonomy, feedback (including reciprocity) be acknowledged as salient factors – at least in the ICT and similar trades – that may move an employee's position within a well-being continuum. An important implication that arises from this conclusion connects back to Maslach and Leiter (1997), who argue that burnout must be combated from an organizational outlook. The most effective weapon against burnout is likely

job redesign although Schaufeli and Enzmann (1998) state that organizational intervention measures are very rare when it comes to combat burnout.

Pfeffer (1997) predicted that future research would move away from rationalistic *models* (italics added) that suggest that people basically respond only to extrinsic rewards or incentives, toward more optimistic models of intrinsic motivation that propose that people actually wish to work, as work may satisfy their need for self-actualization and personal growth.

The present dissertation stepped into the shoes of this prediction and approached the well-known phenomena of burnout from a motivational perspective. However, although it must be agreed that intrinsic motivation is a far more optimistic *model* in guiding our view of work, the *reality* – given the changes in the labor market that characterizes the past decade (see Hart & Cooper, 2001) – may point in the directions of increased burnout. Considering the cut-backs and slimming of organizations which undoubtedly affect the balance between resources and demands at work, intrinsic work engagement may easily erode into burnout instead.

For organizations, it appears that much ground can be gained from enhancing employee engagement. Empowering resources and efficient organizational structures may enhance motivation, performance and positive attitudes among the employees and automatically resulting in diminished burnout complaints (including low morale and health deterioration). Hence, a concluding advice to organizations would be – make work fun! However, it is also up to the employees to manage this challenge – and to make fun work!! [2]

TO BE CONTINUED?

[2] I would like to thank Wilmar Schaufeli for lending me this particular word game for personal use, and also for inspiring me to pass it on!

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