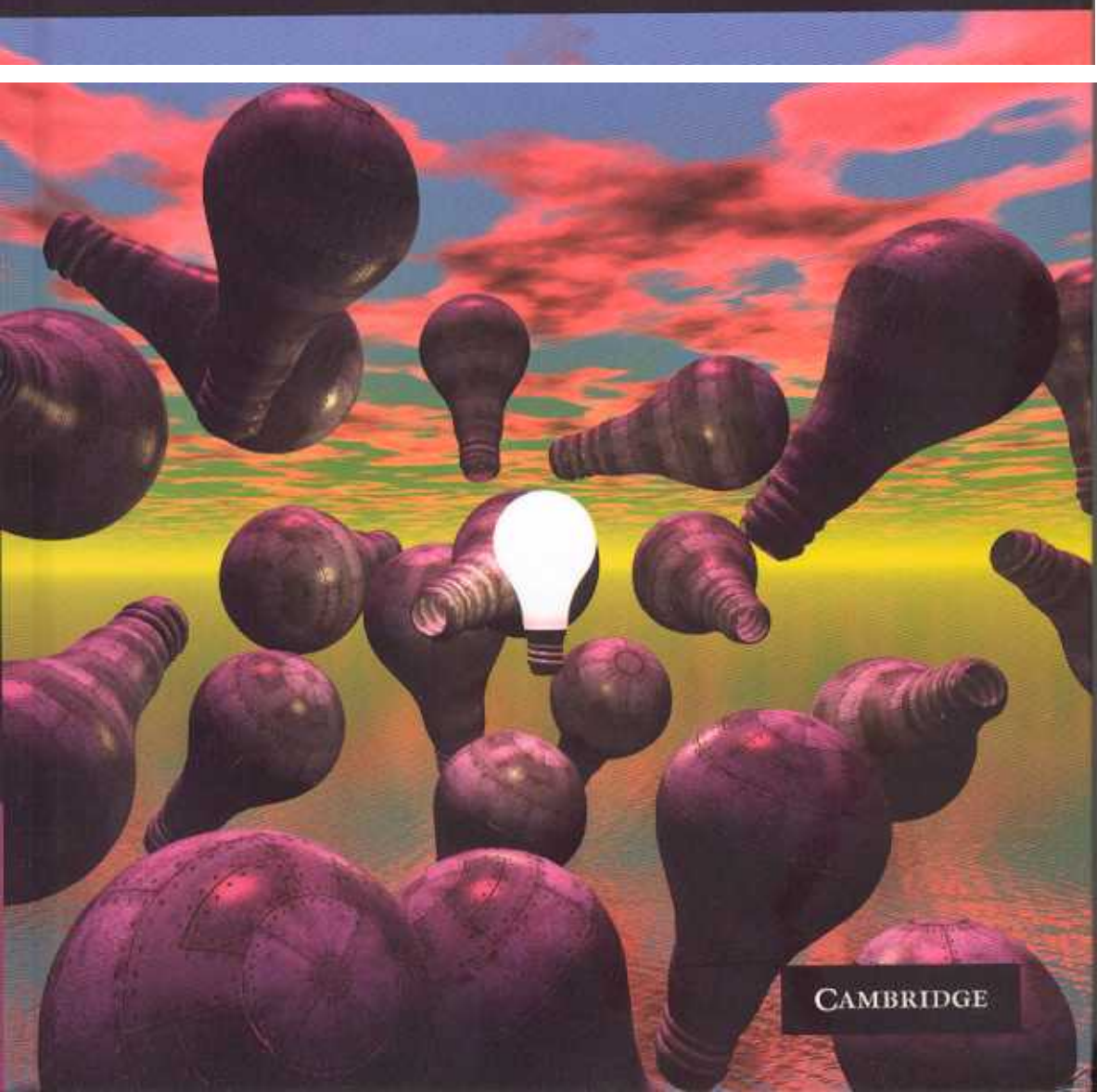


The Individual in the Changing Working Life

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18 Enhancing work engagement through the management of human resources

Wilmar B. Schaufeli and Marisa Salanova

This chapter introduces a recently emerged psychological concept – work engagement – and seeks to apply this notion to the management of human resources in organizations. Our point of departure is that in order to prosper and survive in today's continuously changing environment, rather than merely "healthy" employees, organizations need engaged employees. What we exactly mean by work engagement and how this term is used throughout the literature is explained next. Because we strongly feel that recommendations for using HRM strategies to increase levels of employee engagement should be based on sound empirical research, we present an overview thereof. More specifically, we focus on the relationship of work engagement with related concepts and on the antecedents and consequences of work engagement. The assessment of work engagement is addressed in a separate section. In addition, we discuss how employees' work engagement may be optimized by using HRM strategies. The chapter closes with some conclusions about work engagement research and about the usefulness of work engagement in the context of HRM. Our aim is to demonstrate the viability of the concept of work engagement for human resources practices in organizations.

The need for engaged workers in modern organizations

Table 18.1 illustrates what kinds of changes force today's organizations to rely more and more on the psychological knowledge and experience of their employees.

Essentially, the changes summarized in Table 18.1 boil down to a "psychologization" of organizations. Instead of traditional organizational structures (i.e. control mechanism, chain of command) and a strong emphasis on economic principles (i.e. cost reduction, efficiency, cash flow), the focus in modern organizations is on the management of human capital. Currently, organizations expect their employees to be proactive and show initiative, collaborate smoothly with others in teams, take responsibility for their own professional development, and

Table 18.1 *Changes in modern organizations*

From	To
Cost reduction	Customer satisfaction
Efficiency	Effectiveness
Employee satisfaction	Employee motivation
Control	Empowerment
Short-term focus on cash flow	Long-term focus on vision, planning, and growth
Vertical structure (chain of command)	Horizontal networks (collaboration in interdependent chains)
Dependence on company (e.g. company training)	Personal responsibility (e.g. employability)

be committed to high-quality performance. This means that – in the words of Dave Ulrich (1997: 125), a leading HRM expert – "Employee contribution becomes a critical business issue because in trying to produce more output with less employee input, companies have no choice but to try to engage not only the body but the mind and soul of every employee." Clearly, producing more output with less employee input cannot be achieved with a workforce that is "healthy" in the traditional sense, that is, with employees who are merely symptom free. Instead of just "doing one's job," employees are expected "to go the extra mile." Thus, employees are needed who feel energetic and dedicated, and who are absorbed by their work. In other words, organizations need engaged workers. Besides, as Wright (2003) has argued, instead of just considering employees as a means to the desired end of organizational productivity, the pursuit of employee happiness, health, and engagement creates valuable goals and ends in themselves. But what exactly is work engagement, and how can it be conceptualized?

Work engagement: an emerging concept

We defined work engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, and Bakker, 2002b: 74). Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior. *Vigor* is characterized by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties. *Dedication* refers to being strongly involved in one's work, and experiencing a sense of

significance, enthusiasm, inspiration, pride, and challenge. *Absorption* is characterized by being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Being fully absorbed in one's work comes close to what has been called "flow," a state of optimal experience that is characterized by focused attention, clear mind, mind and body unison, effortless concentration, complete control, loss of self-consciousness, distortion of time, and intrinsic enjoyment (Csikszentmihalyi, 1990). However, typically, flow is a more complex concept that includes many aspects and refers to rather particular, short-term "peak" experiences instead of a more pervasive and persistent state of mind, as is the case with engagement. The three dimensions of engagement can be assessed using the Utrecht Work Engagement Scale (UWES), which is discussed below.

Our conceptualization of engagement closely matches the one described by May, Gilson, and Harter (2004), who introduced a similar three-dimensional concept of engagement. Although they use slightly different labels, their operationalization is strikingly similar to our UWES. More specifically, May *et al.* (2004) distinguish between a physical component (e.g. "I exert a lot of energy performing my job"), an emotional component (e.g. "I really put my heart into my job"), and a cognitive component (e.g. "Performing my job is so absorbing that I forget about everything else"). It is easy to see that these dimensions correspond with vigor, dedication, and absorption, respectively. Shirom (2003) introduced a conceptualization of vigor that is defined as the employees' physical strength, emotional energy, and cognitive liveliness. The three-dimensional Shirom-Malemed Vigor Measure (SMVM) is used to assess the construct, whereby the physical fatigue scale (e.g. "I feel energetic," "I feel vigorous") is quite similar to the physical component of May *et al.* (2004) and to the vigor scale of the UWES, which is discussed in greater detail below. Recently, Peterson, Park, and Seligman (2005) considered engagement – which in their conceptualization is similar to absorption as assessed with the UWES (e.g. "I am always very absorbed in what I do") – together with meaning and pleasure as one of the basic orientations to happiness. Indeed, they showed that those who were most happy and satisfied with their lives scored high on each of these three orientations, with engagement being the strongest predictor. Finally, Harter, Schmidt, and Hayes (2002: 269) describe engaged employees in terms of cognitive vigilance and emotional connectedness; according to them engaged workers "know what is expected of them, have what they need to do their work, have opportunities to feel an impact and fulfillment in their work, perceive that they are part of something significant with co-workers they trust, and have chances to improve and develop." Harter *et al.*'s (2002) concept of engagement is

assessed with a twelve-item questionnaire. It is concluded that work engagement, as conceptualized in this chapter, closely resembles the way in which other authors have defined and operationalized the construct, although Harter *et al.* (2002) use a somewhat broader concept, while Shirom (2003) and Peterson *et al.* (2005) each focus on particular aspects: i.e. vigor and absorption, respectively.

How is work engagement experienced by employees? Structured qualitative interviews with a heterogeneous group of Dutch employees who scored high on the UWES showed that engaged employees were active agents, who took initiative at work, and generated their own positive feedback loops (Schaufeli, Taris, Le Blanc, Peeters, Bakker, and de Jonge, 2001). For instance, engaged employees kept looking for new challenges, and when they no longer felt challenged, they took action in order to enforce the desired changes. Eventually, they even changed their jobs. Also, because of their involvement, they were committed to performing on a high-quality level, which usually generated positive feedback from their supervisors (e.g. praise, promotion, salary raise, fringe benefits) as well as from their customers (e.g. appreciation, gratitude, satisfaction). Furthermore, the values of engaged employees seemed to match quite well with those of the organization they work for, and they also seemed to be engaged in other activities outside their work. Finally, the interviewed engaged employees did not seem to be addicted to their work, as they enjoyed other things outside work and, unlike workaholics, they did not work hard because of a strong and irresistible inner drive, but because of the fun of it. As we will see below, many of these qualitative results are confirmed by quantitative studies, using a psychometrically validated questionnaire to assess work engagement.

A brief overview of research findings

In this section, a summary is presented of the most important research findings on engagement that have been obtained so far. Most studies used the UWES, and only occasionally were other measures of work engagement employed. We start by examining the relationship of engagement to related concepts such as burnout, personality, workaholism, job involvement, and organizational commitment, and then we consider the antecedents and consequences of work engagement.

Work engagement and related concepts

Because work engagement is supposed to be the positive antithesis of burnout (Maslach, Schaufeli, and Leiter, 2001), negative correlations are

expected between both constructs. Indeed, the three aspects of burnout – exhaustion, cynicism, and reduced professional efficacy, as measured with the Maslach Burnout Inventory (MBI; Maslach, Jackson, and Leiter, 1996) – have been found to be negatively related to the three aspects of work engagement – vigor, dedication, and absorption (Demerouti, Bakker, Janssen, and Schaufeli, 2001; De Vries, Peters, and Hoogstraten, 2004; Durán, Extremera, and Rey, 2004; Llorens, Salanova, Bakker, and Schaufeli, in press; Montgomery, Peeters, Schaufeli, and den Duden, 2003; Salanova, Grau, Cifre, and Llorens, 2000; Salanova, Schaufeli, Llorens, Peiró, and Grau, 2000; Schaufeli and Bakker, 2003, 2004a, 2004b; Schaufeli, Salanova, González-Romá, and Bakker, 2002b; Schaufeli, Martínez, Marques Pinto, Salanova, and Bakker, 2002b; Xanthopoulou, Bakker, Kantas, and Demerouti, in press). However, the pattern of relationships slightly differs from what was expected; instead of positively relating to the MBI burnout factor, lack of professional efficacy related negatively to the UWES engagement factor. A possible explanation for the unexpected findings obtained by the just mentioned studies may be that lack of professional efficacy was measured with items that were positively formulated and then subsequently reversed in order to constitute a “negative” score that was supposed to be indicative of a lack of professional efficacy (Bresó, Salanova, and Schaufeli, 2007). Consistent with our theoretical expectations, vigor and exhaustion – as well as dedication and cynicism – appear to be each other’s direct opposites. Using a non-parametric scaling technique, González-Romá, Schaufeli, Bakker, and Lloret (2006) showed that two sets of items, exhaustion–vigor and cynicism–dedication, were scalable on two distinct underlying bipolar dimensions, labeled energy and identification, respectively. This indicates that burnout is characterized by low levels of energy and identification, whereas engagement is characterized by high levels of energy and identification.

One of the most popular views on personality assumes that people differ systematically on two basic personality factors: neuroticism and extraversion (Costa and McCrae, 1980). The former refers to the general tendency to experience distressing emotions such as fear, depression, and frustration, whereas the latter refers to the disposition toward cheerfulness, sociability, and assertiveness. Using discriminant analysis, engaged and burned-out employees could be distinguished from their non-engaged and non-burned-out counterparts based on their personality profiles (Langelaan, Bakker, Van Doornen, and Schaufeli, 2006). Burned-out employees were characterized by high levels of neuroticism, whereas engaged employees were characterized by low levels of neuroticism in combination with high levels of extraversion. In addition, a high level of

mobility (i.e. the ability to respond adequately to changes in stimulus conditions, adapt quickly to new surroundings, and switch easily between activities) was typical for engaged employees but not for burned-out employees. Thus, it appeared that the personality profile of engaged and burned-out employees differed while neuroticism showed an opposite pattern: those who were engaged were low in neuroticism, whereas those who felt burned-out where high in neuroticism.

Work addiction or workaholism is the irresistible inner drive to work very hard; that is, workaholics work excessively and compulsively (Schaufeli, Taris, and Van Rhenen, in press). Engagement and workaholism seem to be hardly related to each other, with the exception of absorption, which correlates moderately positively with the workaholism scale that assessed excess work (Schaufeli *et al.*, in press). Although work engagement and workaholism seem to share the element of absorption, the underlying motivation to be completely engrossed in one’s work is different: engaged employees are absorbed because their work is intrinsically motivating, whereas workaholics are absorbed because of an inner drive they cannot resist.

For work engagement to be considered a valid contribution, its ability to discriminate not only against personality and employee well-being (burnout and workaholism), but also against other adjacent constructs, such as work involvement and organizational commitment, must be established. Work involvement refers to the psychological identification with work, including the notion that work may satisfy salient needs, whereas organizational commitment refers to the emotional attachment that employees form with their organization. Indeed, it was demonstrated that work engagement, job involvement, and organization commitment were empirically distinct constructs (Hallberg and Schaufeli, 2006). Not only did these three constructs constitute three different factors, they were also differentially related to health complaints, job and personal characteristics, and turnover intention. Work engagement was particularly related to good health, while job involvement and organizational commitment were particularly related to intrinsic motivation and low turnover intention, respectively.

Antecedents of work engagement

Work engagement is found to be positively associated with job resources; that is, to those aspects of the job that have the capacity to reduce job demands, are functional in achieving work goals, and may stimulate personal growth, learning, and development. For instance, work engagement tends to be positively related to social support from co-workers and

from one's superior, as well as to performance feedback, coaching, job control, task variety, and training facilities (Demerouti *et al.*, 2001; Salanova, Grau, Llorens, and Schaufeli, 2001; Salanova, Llorens, Cifre, Martínez, and Schaufeli, 2003; Schaufeli and Bakker, 2004b; Hakanen, Bakker, and Schaufeli, 2006). Hence, the more job resources are available, the more likely it is that employees feel engaged. This is in line with the Job Characteristics Theory (Hackman and Oldham, 1980), which assumes that particular job characteristics, such as skill variety, autonomy, and feedback, have motivating potential and predict positive outcomes, including intrinsic motivation, which is close to our concept of work engagement. Sonnentag (2003) showed that the level of experienced work engagement was positively associated with the extent to which employees recovered from their previous working day. Employees who felt that they sufficiently recovered during leisure time experienced higher levels of work engagement during the subsequent workday. Moreover, in this study, work engagement mediated the effects of recovery on proactive behavior, indicating not only that recovered employees felt more engaged the next day, but also that they showed more personal initiative at work. Recently, Salanova and Schaufeli (in press) found, in a Dutch and a Spanish employee sample, a similar mediating role of work engagement, but, in this case, with respect to the relationship between job resources (i.e. control, feedback, and variety) and proactive behavior. It appeared that the availability of resources increased work engagement, which, in turn, seemed to foster proactive organizational behavior.

Work engagement has also been found to be positively related to self-efficacy (Salanova *et al.*, 2001), which according to Social Cognitive Theory (SCT) is the "belief in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997: 3). Quite interestingly, it seems that self-efficacy may precede *as well as* follow engagement (Llorens, Schaufeli, Bakker, and Salanova, 2007; Salanova, Bresó, and Schaufeli, 2005b; Salanova *et al.*, 2000). This may point to the existence of an upward spiral: self-efficacy fuels engagement, which, in turn, increases efficacy beliefs, and so on. This is in line with SCT (Bandura, 2001), which holds that there are reciprocal relationships between self-efficacy and positive affective-cognitive outcomes such as work engagement. This reciprocal relationship is also compatible with the notion of so-called "gain spirals" as described by the Conservation of Resources (COR) theory (Hobfoll and Shirom, 2000). According to COR theory, people strive to obtain, retain, and protect their resources, including personal resources such as self-efficacy. Such resources are likely to be accumulated across time, in that self-efficacy

may breed self-efficacy, with engagement potentially playing an intermediate role.

In addition, it was observed that self-efficacy beliefs mediated the relationship between positive emotions (i.e. enthusiasm, satisfaction, and comfort) and work engagement (Salanova *et al.*, 2005b). This is compatible with the Broaden-and-Build theory of Frederickson (2001), which posits that experiencing positive emotions broadens people's momentary thought-action repertoires, which, in turn, fosters the accumulation of resources, such as levels of self-efficacy. Since the accumulation of these resources is associated with positive emotions, the broaden-and-build spiral is completed.

The possible causes of work engagement do not lie only in the work situation. For instance, it appeared that employees who took positive experiences home from work (or vice versa) exhibited higher levels of engagement compared to those for whom there was no positive transmission between the two different life domains (Montgomery *et al.*, 2003). In other words, a positive interplay between work and home seems to be associated with engagement. In a somewhat similar vein, in a study among working couples, it was shown that the wives' levels of vigor and dedication uniquely contributed to the husbands' levels of vigor and dedication, respectively, even when several work and home demands were controlled for (Bakker, Demerouti, and Schaufeli, 2005). The husbands' levels of engagement were likewise influenced by their wives' levels of engagement. This could indicate that engagement is "contagious," as it crosses over from one partner to the other, and vice versa. The transmission of engagement in this manner suggests that a process akin to that of emotional contagion is taking place (Hatfield, Cacioppo, and Rapson, 1994).

Taken together, these results suggest that there is a complex interplay amongst job resources, efficacy beliefs, positive outcomes, and engagement. It seems that these are all elements of a self-perpetuating motivational process in which work engagement plays a crucial role; it may act as both an antecedent (of proactivity and self-efficacy) and an outcome (of self-efficacy and positive emotions). From a slightly different perspective, this also means that efficacy beliefs play a role in boosting work engagement, thereby perpetuating a positive gain spiral. In addition, it seems that work engagement spills over from one domain (work) to another domain (home), and that it is passed from husband to wife, and vice versa.

Consequences of work engagement

The possible consequences of work engagement pertain to positive job-related attitudes, individual health, extra-role behaviors, and

performance. Compared to those who do not feel engaged, those who feel engaged seem to be more satisfied with their jobs, feel more committed to the organization, and do not intend to leave the organization (Demerouti *et al.*, 2001; Schaufeli and Bakker, 2003, 2004b). Also, engaged workers seem to enjoy good mental (Schaufeli *et al.*, in press) and psychosomatic health (Demerouti *et al.*, 2001). Furthermore, they exhibit personal initiative, proactive behavior, and learning motivation (Salanova and Schaufeli, in press; Sonnentag, 2003), and engagement seems to play a mediating role between the availability of job resources and these positive organizational behaviors. Taken together, the results concerning positive organizational behavior suggest that engaged workers seem to be able and willing to "go the extra mile." This is also illustrated by the finding in a representative Dutch sample where, compared to non-engaged employees, engaged employees worked more overtime (Beckers, Van der Linden, Smulders, Kompier, Van Veldhoven, and Van Yperen, 2004).

Most importantly for organizations, those who are engaged seem to perform better. Recently, Salanova, Agut, and Peiró (2005a) showed that the levels of work engagement of contact employees from hotels and restaurants were related to service quality, as perceived by customers. More specifically, it was found that the more engaged the employees were, the better the service climate was, and the more loyal the customers were. In another study, it was similarly shown that the more engaged students were, the more exams they had passed during the previous semester. This retrospective result was found in Spain, Portugal, and the Netherlands (Schaufeli *et al.*, 2002a). But what is more, levels of engagement also predicted future academic performance; the more engaged the students felt, the higher their next year's grade point average (Salanova *et al.*, 2005b). In addition, it seemed that past success increased students' efficacy beliefs and levels of engagement, which, in turn, increased future academic success – yet another illustration of a gain spiral. Finally, Harter *et al.* (2002) showed that levels of employee engagement were positively related to business-unit performance (i.e. customer satisfaction and loyalty, profitability, productivity, turnover, and safety) across almost 8,000 business units of thirty-six companies. The observed correlation of engagement with a composite performance measure was .22, and increased to .38 when corrected for measurement error and restriction of range. The authors concluded that engagement is "related to meaningful business outcomes at a magnitude that is important to many organizations" (2002: 276).

In sum, work engagement can be discriminated from job involvement, organizational commitment, burnout, and workaholism based on,

amongst other factors, the employee's personality profile. Moreover, it is not only the possible antecedents (i.e. job resources and positive home experiences) and possible consequences (i.e. positive attitudes, extra-role behaviors, health, and performance) of engagement that have been identified, but research has also found indications of underlying motivational processes. Results point to a complex reciprocal relationship existing between resources, engagement, and positive outcomes that may result in an upward gain spiral. More specifically, it seems that job resources and personal resources (efficacy beliefs) increase positive outcomes via work engagement, and that these positive outcomes and high levels of engagement have a positive impact on both types of resources.

Measuring work engagement with the Utrecht Work Engagement Scale (UWES)

Based on our previous definition of work engagement, a self-report questionnaire has been developed that includes the three constituting aspects of work engagement: vigor, dedication, and absorption (Schaufeli *et al.*, 2002b). The instrument was dubbed the Utrecht Work Engagement Scale (UWES; see appendix) and is now available in seventeen languages.¹ Meanwhile an international database exists that includes engagement records of about 30,000 employees. In addition to the original UWES that contains seventeen items, a shortened version of nine items is available that shows similar encouraging psychometric features (Schaufeli, Bakker, and Salanova, 2006).

The psychometric features of the UWES are encouraging. For instance, confirmatory factor analyses showed convincingly that the hypothesized three-factor structure of the UWES was (slightly) superior to the one-factor model (assuming an undifferentiated engagement factor) and that it fitted well to the data of various samples in different countries such as Greece (Xanthopoulou *et al.*, in press), Japan (Shimazu *et al.*, 2006), the Netherlands (Schaufeli *et al.*, 2002a, 2002b; Schaufeli and Bakker, 2003), Spain (Salanova *et al.*, 2000), Sweden (Hallberg and Bakker, 2006), and South Africa (Storm and Rothmann, 2003). However, it appears that the three dimensions of engagement are closely related. Usually correlations between the observed factors exceed .65, whereas correlations between the latent factors range from about .80 to about .90 (Hallberg and Schaufeli, 2006; Salanova *et al.*, 2000; Schaufeli

Afrikaans, Chinese, Czech, Dutch, English, Finnish, French, German, Greek, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Spanish, and Swedish. These language versions, as well as the test manual may be downloaded from www.schaufeli.com.

et al., 2002b; Schaufeli and Bakker, 2003, 2004a, 2004b). So it is not very surprising that Sonnentag (2003), using explorative factor analyses, did *not* find a clear three-factor structure and decided to use the total, composite score of the UWES as a measure for work engagement. Furthermore, the internal consistency of the three scales of the UWES is good with values of Cronbach's α for the UWES scales ranging between .80 and .90 (e.g. Demerouti *et al.*, 2001; Durán *et al.*, 2004; Salanova *et al.*, 2000; Salanova *et al.*, 2001; Schaufeli and Bakker, 2004a; 2004b; Xanthopoulou *et al.*, in press). Two longitudinal studies carried out in Australia and Norway showed one-year test-retest stability coefficients ranging between .50 and .60 for the UWES scales (Schaufeli and Bakker, 2003).

Work engagement as measured with the UWES correlates weakly and positively with age, indicating that older employees feel slightly more engaged than younger employees. Perhaps this reflects the so-called "healthy worker effect," when only those who are healthy "survive" and remain in their jobs, and unhealthy (i.e. not engaged) employees drop out. However, the strength of the relationship between engagement and age is very weak and usually does not exceed .15 (Schaufeli and Bakker, 2003, 2004a). Men score slightly higher on engagement than women, but again the differences are very small and hardly bear any practical significance (Schaufeli and Bakker, 2003, 2004a). As far as professional groups are concerned, managers, executives, entrepreneurs, and farmers score relatively high on engagement, whereas blue-collar workers, police officers, and homecare staff score relatively low (Schaufeli and Bakker, 2003, 2004a). Most likely, the jobs of managers, executives, entrepreneurs, and farmers are more challenging, complex, and resourceful as compared to those of blue-collar workers, police officers, and home care staff. Moreover, selection bias cannot be excluded, because, for instance, in order to be a successful executive or entrepreneur, a certain level of engagement is required.

In conclusion, the empirical results confirm the factorial validity, internal consistency, and stability of the UWES. Although, psychometrically speaking, three factors of engagement (i.e. vigor, dedication, and absorption) can be distinguished, for practical purposes the total score of the UWES can be used since the three aspects are highly interrelated. Hardly any systematic differences in work engagement were observed between men and women, or across age groups. In some occupational groups, engagement levels were found to be higher than in other groups (e.g. executives versus blue-collar workers). The fact that similar psychometric results were observed among different samples from various countries confirms the robustness of the findings.

How can work engagement be optimized using HRM strategies?

By building engagement, synergy is created between individual employees and the organization as a whole, leading to optimal outcomes for them both. As we have seen above, for engaged employees, these outcomes might include: (1) positive job-related attitudes and a strong identification with one's work; (2) good mental health, including positive emotions and a lower risk of burning out; (3) good performance; (4) increased intrinsic motivation; and (5) the acquisition of job resources and personal resources, particularly self-efficacy. Most of these individual outcomes are – directly or indirectly – beneficial for the organization as well. In addition, for organizations, high levels of employee engagement may result in: (1) the retention of valued and talented employees; (2) a positive corporate image (see www.eu100best.org); (3) a healthy, competitive, and effective organization; and (4) positive business-unit performance.

In order to increase engagement, it is essential to initiate and maintain so-called gain spirals. As we have seen above, these are upward spirals that are set into motion by job resources and personal resources (self-efficacy beliefs), and may result in various positive outcomes via work engagement. In turn, these positive outcomes may increase resources and foster high levels of engagement, and so on. Following the logic of these gain spirals, work engagement may be increased by stimulating either link of the spiral, be it resources or positive outcomes. Below it is outlined how this can be achieved using various HRM strategies.

Assessment and evaluation of employees

Personnel assessment and evaluation is about increasing identification, motivation, and commitment – from the perspective of the organization – as well as about personal and professional development – from the perspective of the employee. Work engagement may play a crucial role because it fosters employee identification, motivation, and commitment, but it also increases levels of self-efficacy, which is an important prerequisite for learning and development (Bandura, 1997). The following three strategies can be distinguished that may enhance work engagement.

The Employee Development Agreement An optimal fit between employee and organization may be achieved by following three steps: (1) assessing the employee's values, preferences, and personal and professional goals; (2) negotiating and drafting a written contract ("Employee Development Agreement") that acknowledges (some of)

these goals and provides the necessary resources to be supplemented by the organization (e.g. training, coaching, equipment, budget); and (3) monitoring this written agreement periodically in terms of goal achievement, including the readjustment of goals and the provision of additional resources. Essentially, we propose that a goal-setting system (Locke, 1968) be implemented that could be integrated into existing systems of performance appraisal and evaluation. However, instead of addressing organizational goals (e.g. productivity, quality, efficiency) our Employee Development Agreement is to entail *personal* goals (e.g. development of skills and competences, promotion, mastery of particular tasks or duties) as well as the necessary *resources* to achieve these personal goals. This Employee Development Agreement is expected to be successful because it is job resources that drive the motivational process that increases work engagement and eventually leads to positive outcomes. By providing the necessary resources to meet valued individual goals, an upward gain cycle is set in motion, where high levels of engagement and success tend to accumulate resources, and so on.

Wellness audit The aim of wellness audits is to inform employees as well as the organizations they work for about the levels of employee wellness, including engagement. This information is important for making decisions about what improvement measures should be taken, either by the employee or by the organization. Such wellness audits are currently being used in Spain and in the Netherlands,² and they examine job stressors (e.g. work overload, conflicts, role problems, emotional demands, work-home interference), job resources (e.g. variety, feedback, social support, job control, career development), burnout, engagement, negative personal and organizational outcomes (e.g. depression, distress, absenteeism, turnover intention), and positive personal and organizational outcomes (e.g. job satisfaction, organizational commitment, extra-role performance). In addition, personal and job information is included as well as personal resources such as self-efficacy, and mental and emotional competences.

Workshops The aim of the workshops is to promote work engagement by augmenting personal resources. Traditionally, workshops have been used to prevent or reduce job stress (Van der Klink, Blonk, Schene, and Van Dijk, 2001), but, in order to build engagement, a shift in focus from decreasing stress symptoms toward optimizing the quality of work

and the level of employee functioning is needed. In that sense, workshops that aim at increasing engagement are similar to so-called Quality Circles, except that they focus on the enhancement of *personal* resources, such as cognitive, behavioral, and social skills (e.g. positive thinking, goal setting, time management, and lifestyle improvement).

Job (re)design and work changes

As we have seen above, in order to increase engagement, the motivating potential of job resources should be exploited. Resources not only are necessary in order to deal with job demands and “get things done,” but also are important in their own right because they stimulate the personal growth, learning, and development of employees. Moreover, job resources may set in motion gain spirals that increase work engagement. Job Characteristics Theory (Hackman and Oldham, 1980) acknowledges the motivating potential of job resources and predicts that particular job redesigning strategies, such as job enrichment, job enlargement, and job rotation, have positive effects on employee well-being, motivation, and performance. Which resources are most important for increasing engagement depends not only on the nature of the job, but also on the values, preferences, and goals of the individual employee. With the use of a wellness audit, it is possible to pinpoint which resources are lacking and, if feasible, to incorporate them into an Employee Development Agreement.

Another related strategy is to implement *work changes*. In doing so, job resources are not additionally provided or increased, but are merely changed, as, for example, when jobs are rotated, or employees are temporarily assigned to carry out special projects, or are reassigned to completely different jobs. As argued by Schabracq (2003), work changes challenge employees, increase their motivation, flexibility, and employability, and stimulate learning and professional development. Based on qualitative research on engagement (Schaufeli *et al.*, 2001), we may add that, most likely, changing work also increases work engagement. This is particularly the case when employees are highly challenged in their new jobs and at the same time possess the necessary competences to meet these challenges (Salanova *et al.*, 2001). However, the positive effects of changing work are only to be expected when the change is carefully planned and in accordance with the preferences, goals, and personal resources (knowledge, skills, competences) of the employee. If this is not the case and work changes are exclusively used as a means to solve organizational problems, it will do employees more harm than good. Ideally, work changes should be agreed upon in the Employee Development Agreement.

Leadership

An important task of leaders is to optimize the emotional climate within their team. A good leader is able to enhance motivation and engagement. Results from research suggest that engagement is "contagious," and its tendency to spread should apply well to workteams. Team members feel engaged as they converge emotionally with the engagement of other members in the workteam. Moreover, it appears that engagement is a collective phenomenon, as teams may feel "engaged" when their members closely collaborate to accomplish particular tasks (Salanova *et al.*, 2003). This implies that team leaders are in a position where they can have a positive impact on the levels of individual and collective engagement, depending on the way they manage the social-psychological processes involved. For example, Aguilar and Salanova (2005) found that "selling" leaders (who are high in task behavior and support behavior) were particularly effective at increasing individual work engagement compared to those displaying other patterns of leadership behavior. Generally speaking, transformational leadership (Bass, 1985) is particularly suitable for fostering engagement since transformational leaders are inspiring and visionary. They display conviction, take stands, challenge group members with high standards, communicate optimism about future goal attainment, stimulate and encourage creativity and innovation, and listen to the members' concerns and needs. Not surprisingly, transformational leadership has a positive impact on members' health and well-being (Howell and Hall-Merenda, 1999) as well as on job satisfaction, performance, and motivation (Judge and Piccolo, 2004).

Training and career development

The objective of work training is to modify those behaviors that are relevant for job performance via changes in attitudes, beliefs, and values. A powerful method of achieving this is to increase employees' efficacy beliefs, or "the power to believe that you can." According to Social Cognitive Theory (SCT), self-efficacy lies at the core of human agency, influencing employees' behavior, thinking, motivation, and feelings (Bandura, 2001). Research on engagement has shown that an upward gain spiral seems to exist in which self-efficacy boosts engagement, which, in turn, increases efficacy beliefs, and so on (e.g. Llorens *et al.*, 2007; Salanova *et al.*, 2005b). But how may self-efficacy – and therefore work engagement – be enhanced? According to SCT, efficacy beliefs may be enhanced by mastery experiences, vicarious experience, verbal persuasion, and positive emotional states (Bandura, 1997, 2001). Training

programs should therefore include these elements, which can take the form of, for instance, practical exercises to provide experiences of vocational success (mastery experiences), and the use of role models of good performance (vicarious experiences), as well as methods of coaching and encouragement (verbal persuasion) and reducing fear of rejection or failure (managing emotional states).

Finally, we would like to address the relevance of *career development* as a strategy to optimize employee engagement. Although most employees favor life-long job stability and vertical, upward mobility, this perspective is no longer self-evident in current organizational life. For instance, organizations are now frequently assigning employees to projects rather than jobs. In such cases, regular working hours may not exist, and employees are accountable to their project team, which is, in turn, accountable to the larger project. When the project ends, employees move on to another project. In this type of environment, individual employees need to continuously develop their knowledge, competences, and skills in order to remain competitive in the labor market. In other words, they have to increase their employability (see Table 18.1), and, more than before, employees have to rely on their own initiative if they are to continuously develop themselves professionally and personally. In our view, employability also includes a high level of engagement since it makes employees better fit and more successful at their jobs. However, with the upward gain spiral of engagement, the reverse may also be true: by carefully planning one's career, that is, by successively selecting those jobs that provide many opportunities for professional and personal development, it is likely that engagement levels will remain high. In order to monitor levels of engagement, an online career monitor for the members of the Dutch Medical Association has been developed (Bakker, Schaufeli, Bulters, Van Rooijen, and Ten Broek, 2002). Based on the feedback, measures can be taken when levels of engagement drop markedly. The key issue for employees to remain engaged in their jobs is to keep developing themselves throughout their careers.

Summary and conclusions

In order to survive and prosper in a continuously changing environment, modern organizations do not merely need "healthy" employees – that is, employees who are free of symptoms – but employees who are vigorous, dedicated, and absorbed in their work. In short: they need *engaged* employees. After introducing the recently emerged concept of work engagement and discussing its empirical underpinnings, six conclusions can be drawn from the brief overview of empirical studies presented in this area.

1. Work engagement is positively associated with various job resources, such as social support, performance feedback, job autonomy, coaching, and task variety. Also, a positive interplay between work and home is associated with work engagement (and vice versa).
2. Work engagement is associated with positive organizational outcomes at the attitudinal and behavioral level, including job satisfaction, organizational commitment, extra-role behavior, and high performance. In addition, work engagement is associated with good mental health.
3. As hypothesized, work engagement is negatively related to burnout. Although engagement and workaholism seem to share the element of absorption, the underlying motivation to be completely engrossed in one's work differs between these two psychological states.
4. A process of emotional contagion seems to be responsible for transmitting work engagement among spouses and co-workers.
5. A positive upward spiral seems to exist involving resources, self-efficacy, work engagement, and success. The availability of resources and high levels of self-efficacy increase employee engagement and boost performance. Because of the successes, resources are accumulated, and self-efficacy and engagement are further enhanced.
6. Work engagement can be reliably and validly assessed by a self-report instrument – the Utrecht Work Engagement Scale (UWES).

In the second part of this chapter, we considered the practical implications of work engagement for current organizations. The main objective was to explore what organizations could do to increase work engagement among their employees, using particular HRM strategies. Based on this overview, the following five conclusions can be drawn.

1. Wellness audits inform employees (online) about their current levels of engagement and other associated factors so that they can take action when necessary. By drafting and monitoring a so-called Employee Development Agreement, that states personal goals for future development as well as what organizational resources are necessary to accomplish these goals, employee engagement is likely to be increased. Also, participative workshops may be helpful in increasing engagement and organizational effectiveness.
2. Job (re)designing may enhance work engagement by making use of the motivating potential of job resources. (Re)designing in order to promote engagement boils down to increasing job resources. Also, job rotation and the changing of jobs can result in higher engagement levels as this challenges employees, increases their motivation, and stimulates learning and professional development.
3. Since engagement seems to be contagious and may spread across members of workteams, leaders play a special role when it comes to

fostering work engagement. It is to be expected that transformational leadership, in particular, can be successful in accomplishing this. Moreover, research suggests that leaders are key social resources for the development of employee engagement, for instance in their role as coach.

4. Training programs in organizations that aim to increase work engagement should focus on enhancing efficacy beliefs. High levels of self-efficacy set in motion an upward gain spiral that increases engagement and subsequent performance, which, in turn, increases efficacy beliefs, and so on.
5. Career planning and development in modern organizations basically boils down to increasing employability. This is achieved by ensuring continuous personal and professional development, with employees having to rely more and more on their own initiative. To the extent that employees are able to keep developing themselves throughout their careers, their levels of engagement are likely to remain high.

We believe that the emerging concept of work engagement, which has resulted from a recent shift in occupational health psychology from a negative disease-oriented approach to a positive wellness approach, is a viable construct that is firmly rooted in empirical research. What is more, it may play a crucial role in the development of organizations' human capital. As an essential, positive element of employee health and well-being, work engagement may help to create synergy between positive outcomes for individual employees and for the organization as a whole.

Appendix: Utrecht Work Engagement Scale (UWES)SM

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way

	Almost never	Rarely	Sometimes	Often	Very often	Always
0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

1. ____ At my work, I feel bursting with energy* (V11)
2. ____ I find the work that I do full of meaning and purpose (DE1)
3. ____ Time flies when I'm working (AB1)
4. ____ At my job, I feel strong and vigorous (V12)*
5. ____ I am enthusiastic about my job (DE2)*

6. ____ When I am working, I forget everything else around me (AB2)
7. ____ My job inspires me (DE3)*
8. ____ When I get up in the morning, I feel like going to work (VI3)*
9. ____ I feel happy when I am working intensely (AB3)*
10. ____ I am proud of the work that I do (DE4)*
11. ____ I am immersed in my work (AB4)*
12. ____ I can continue working for very long periods at a time (VI4)
13. ____ To me, my job is challenging (DE5)
14. ____ I get carried away when I'm working (AB5)*
15. ____ At my job, I am very resilient, mentally (VI5)
16. ____ It is difficult to detach myself from my job (AB6)
17. ____ At my work I always persevere, even when things do not go well (VI6)

* Shortened version (UBES-9); VI = Vigor; DE = Dedication; AB = Absorption

© Schaufeli and Bakker (2003) The Utrecht Work Engagement Scale is free for use for non-commercial scientific research. Commercial and/or non-scientific use is prohibited, unless previous written permission is granted by the authors.

References

- Aguilar, A. and Salanova, M. (2005). Leadership style and its relationship with subordinate well-being (manuscript submitted for publication).
- Bakker, A. B., Demerouti, E., and Schaufeli, W. B. (2005). The cross-over of burnout and work engagement among working couples. *Human Relations* 58: 661–89.
- Bakker, A. B., Schaufeli, W. B., Bulters, A. J., Van Rooijen, A., and Ten Broek, E. (2002). Carrière-counseling voor artsen via internet [Career counseling for physicians using the internet]. *Medisch Contact* 57: 454–6.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman.
- _____. (2001). Social cognitive theory: an agentic perspective. *Annual Review of Psychology* 52: 1–26.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Beckers, D. G. J., Van der Linden, D., Smulders, P. G. W., Kompier, M. A. J., Van Veldhoven, M. J. P. M., and Van Yperen, N. W. (2004). Working overtime hours: relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine* 46: 1282–9.
- Bresó, E., Salanova, M., and Schaufeli, W. (2007). In search of the “third dimension” of burnout: a cross-national study among university students. *Applied Psychology: An International Review* 56: 460–78.
- Costa, P. T., Jr. and McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: happy and unhappy people. *Journal of Personality and Social Psychology* 38: 668–78.
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper and Row.
- Demerouti, E., Bakker, A. B., Janssen, P. P. M., and Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health* 27: 279–86.
- De Vries, T. A., Peters, L., and Hoogstraten, J. (2004). Burnout en bevlogenheid bij fysiotherapeuten [Burnout and work engagement among physiotherapists]. *Gedrag & Gezondheid* 32: 241–50.
- Durán, A., Extremera, N., and Rey, L. (2004). Engagement and burnout: analyzing their association patterns. *Psychological Reports* 94: 1048–50.
- Frederickson, B. L. (2001). The role of positive emotions in positive psychology: the broaden-and-build theory of positive emotions. *American Psychologist* 56: 218–26.
- González-Romá, V., Schaufeli, W. B., Bakker, A., and Lloret, S. (2006). Burnout and engagement: independent factors or opposite poles? *Journal of Vocational Behavior* 68: 165–74.
- Hackman, J. R. and Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison Wesley.
- Hakanen, J. J., Bakker, A. B., and Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology* 43: 495–513.
- Hallberg, U. and Schaufeli, W. B. (2006). “Same same” but different: can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist* 11: 119–27.
- Harter, J. K., Schmidt, F. L., and Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *Journal of Applied Psychology* 87: 268–79.
- Hatfield, E., Cacioppo, J. T., and Rapson, R. L. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Hobfoll, S. E. and Shirom, A. (2000). Conservation of resources theory: applications to stress and management in the workplace. In R. T. Golembiewski (ed.), *Handbook of organizational behavior* (2nd edn, pp. 57–81). New York: Marcel Dekker.
- Howell, J. M. and Hall-Merenda, K. E. (1999). The ties that bind: the impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology* 84: 680–94.
- Judge, T. A. and Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology* 89: 755–86.
- Langelaan, S., Bakker, A. B., Van Doornen, L. J. P., and Schaufeli, W. B. (2006). Burnout and work engagement: do individual differences make a difference? *Personality and Individual Differences* 40: 521–32.
- Llorens, S., Schaufeli, W. B., Bakker, A., and Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior* 23: 825–41.
- Llorens, S., Salanova, M., Bakker, A., and Schaufeli, W. B. (in press). Burnout and engagement among information technology workers: a cross-cultural study. *Anxiety, Stress & Coping*.
- Locke, E. A. (1968). Towards a theory of task performance and incentives. *Organizational Behavior and Human Performance* 3: 157–89.

- Maslach, C., Jackson, S. E., and Leiter, M. P. (1996). *Maslach Burnout Inventory: manual* (3rd revised edn). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., and Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology* 52: 397-422.
- May, D. R., Gilson, R. L., and Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology* 77: 11-37.
- Montgomery, A., Peeters, M. C. W., Schaufeli, W. B., and Den Ouden, M. (2003). Work-home interference among newspaper managers: its relationship with burnout and engagement. *Anxiety, Stress & Coping* 16: 195-211.
- Peterson, C., Park, N., and Seligman, M. E. P. (2005). Orientations to happiness and life satisfaction: the full life versus the empty life. *Journal of Happiness Studies* 6: 25-41.
- Salanova, M., Agut, S., and Peiró, J. M. (2005a). Linking organizational resources and work engagement to employee performance and customer loyalty: the mediating role of service climate. *Journal of Applied Psychology* 90: 1217-27.
- Salanova, M., Bresó, E., and Schaufeli, W. B. (2005b). Hacia un modelo espiral de la autoeficacia en el estudio del burnout y engagement [Towards a spiral model of self-efficacy in burnout and engagement research]. *Ansiedad y Estrés* 11: 215-31.
- Salanova, M., Grau, R., Cifre, E., and Llorens, S. (2000). Computer training, frequency of use and burnout: the moderating role of computer self-efficacy. *Computers in Human Behavior* 16: 575-90.
- Salanova, M., Grau, R., Llorens, S., and Schaufeli, W. B. (2001). Exposición a las tecnologías de la información, burnout y engagement: el rol modulador de la autoeficacia profesional [Exposure to information and communication technology, burnout and engagement: the moderating role of professional self-efficacy]. *Revista de Psicología Social Aplicada* 11: 69-89.
- Salanova, M., Llorens, S., Cifre, E., Martínez, I., and Schaufeli, W. B. (2003). Perceived collective efficacy, subjective well-being and task performance among electronic work groups: an experimental study. *Small Groups Research* 34: 43-73.
- Salanova, M. and Schaufeli, W. (in press). Work engagement as a mediator between job resources and proactive behaviour: a cross-national study. *International Journal of Human Resources Management*.
- Salanova, M., Schaufeli, W. B., Llorens, S., Peiró, J. M., and Grau, R. (2000). Desde el "burnout" al "engagement": una nueva perspectiva [From burnout to engagement: a new perspective]. *Revista de Psicología del Trabajo y de las Organizaciones* 16: 117-34.
- Schabracq, M. J. (2003). Organisational culture, stress and change. In M. J. Schabracq, J. A. M. Winnubst and C. L. Cooper (eds.), *Handbook of work and health psychology* (pp. 37-62). Chichester: Wiley.
- Schabracq, M. J. and Cooper, C. L. (2000). The changing nature of work and stress. *Journal of Management Psychology* 15: 227-41.
- Schaufeli, W. B. (2005). The future of occupational health psychology. *Applied Psychology: An International Review* 53: 502-17.
- Schaufeli, W. B. and Bakker, A. B. (2001). Werk en welbevinden: naar een positieve benadering in de arbeids- en gezondheidspsychologie [Work and well-being: towards a positive approach in occupational health psychology]. *Gedrag & Organisatie* 14: 229-53.
- (2003). UWES - Utrecht Work Engagement Scale: test manual. Unpublished manuscript, Department of Psychology, Utrecht University (www.schaufeli.com).
- (2004a). Bevoegenheid: een begrip gemeten [Work engagement: the measurement of a concept]. *Gedrag & Organisatie* 17: 89-112.
- (2004b). Job demands, job resources and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior* 25: 293-315.
- Schaufeli, W. B., Bakker, A. B., and Salanova, M. (2006). The measurement of work engagement with a short questionnaire: a cross-national study. *Educational and Psychological Measurement* 66: 701-16.
- Schaufeli, W. B., Martínez, I., Marques Pinto, A., Salanova, M., and Bakker, A. B. (2002a). Burnout and engagement in university students: a cross national study. *Journal of Cross-Cultural Psychology* 33: 464-81.
- Schaufeli, W. B., Salanova, M., González-Romá, V., and Bakker, A. B. (2002b). The measurement of engagement and burnout: a confirmative analytic approach. *Journal of Happiness Studies* 3: 71-92.
- Schaufeli, W. B., Taris, T. W., Le Blanc, P., Peeters, M., Bakker, A., and de Jonge, J. (2001). Maakt arbeid gezond? Op zoek naar de bevoegen werknemer [Does work make happy? In search of the engaged worker]. *De Psycholoog* 36: 422-8.
- Schaufeli, W. B., Taris, T. W., and Van Rhenen, W. (in press). Workaholism, burnout and engagement: three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*.
- Shimazu, A., Schaufeli, W. B., Kosugi, S., Suzuki, A., Nashiwa, H., Kato, A., Sakamoto, M., Irimajiri, H., Amano, S., Hirohata, K., Goto, R., and Kitaoka-Higashiguchi, K. (2006). Work engagement in Japan: development and validation of the Japanese version of the Utrecht Work Engagement Scale (manuscript submitted for publication).
- Shirom, A. (2003). Feeling vigorous at work? The construct of vigor and the study of positive affect in organizations. In D. Ganster and P. L. Perrewé (eds.), *Research in organizational stress and well-being* (vol. 3, pp. 135-65). Greenwich, CT: JAI Press.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: a new look at the interface between non-work and work. *Journal of Applied Psychology* 88: 518-28.
- Storm, K. and Rothmann, I. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology* 29: 62-70.
- Ulrich, D. (1997). *Human resource champions*. Boston, MA: Harvard Business School Press.
- Van der Klink, J., Blonk, R., Schene, A., and Van Dijk, F. (2001). The benefits of interventions for work-related stress. *American Journal of Public Health* 91: 270-6.

- Verhoff, J., Douvan, E., and Kulka, R. A. (1981). *The inner American*. New York: Basic Books.
- Wright, T. A. (2003). Positive organizational behavior: an idea whose time has truly come. *Journal of Organizational Behavior* 24: 437-42.
- Xanthopoulou, D., Bakker, A. B., Kantas, A., and Demerouti, E. (in press). The measurement of burnout and work engagement: a comparison of Greece and the Netherlands. *New Review of Social Psychology*.

19 Prevention: integrating health protection and health promotion perspectives

Lois E. Tetrick

Health protection and health promotion activities in organizations have been approached from different disciplines and perspectives, and the work environment has become safer and healthier. However, today's organizations continue to struggle with threats to both the safety and the health of workers and their families. Health protection has taken a preventive approach to eliminating and reducing accidents and occupational injuries in the workplace, as has health promotion. But health promotion has taken more of a public health perspective, using the workplace as a "convenient" location for contacting adults (Rantanen, 2003). Both perspectives have provided valuable insights into risk factors in the workplace and for workers' lives outside of work. However, it is apparent that these different perspectives and streams of knowledge need to be integrated to reflect the system in which workers and their families exist. If we are to have a full understanding of the health and safety of the workforce, then we need to understand the facilitators and barriers to the integration of health protection and health promotion. The purpose of this chapter is to review and integrate the health protection and health promotion literature in developing a framework for understanding prevention activities and needs in the workplace.

Health protection

Health protection has historically focused on providing workers with a safe and healthy work environment. The primary focus of health protection has been on preventing occupational injuries and diseases arising from risks that are involuntary and outside the scope of individual employees' control and that may be undetectable by individual workers (Sorensen, Stoddard, Ockene, Hunt, and Youngstrom, 1996). Prevention is accomplished by removing the hazard, such as substituting a hazardous chemical with a non-hazardous chemical in the production process, providing engineering controls to reduce exposure to the hazard, such as cover guards to prevent access to cutting edges, and providing personal