

Running Head: BUILDING ENGAGEMENT

**BUILDING ENGAGEMENT IN THE WORKPLACE**

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## Abstract

This chapter gives an overview of the recently introduced concept of work engagement. I first define engagement as a state including vigor, dedication, and absorption, and describe the results of qualitative studies on the manifestation of engagement. Then I discuss the psychological role of job and personal resources as predictors of engagement, and their increased salience in the context of high job demands. Four reasons why engaged workers are more productive are discussed, as well as the available evidence. Since even engaged workers have their off-days, studies on daily changes in work engagement are reviewed as well. ‘All that glitters is not gold’, and therefore, I also discuss the possible downside of work engagement. The chapter closes with a discussion of what companies can do to build engagement in the workplace.

## BUILDING ENGAGEMENT IN THE WORKPLACE

Many of today's organizations compete and try to survive on the basis of cutting prices and costs through redesigning business processes and downsizing the number of employees. Since there is a limit to cutting prices and downsizing, "New thinking and new approaches have become necessary for organizations to survive and to create sustainable growth and development." (Luthans, Norman, Avolio & Avey, in press; see also, Bakker & Schaufeli, 2008). This chapter proposes such a new approach: building engagement. I will argue and show that engagement can make a true difference and offers competitive advantage to organizations.

I will first define work engagement, describe its measurement, and review studies on the 'drivers' of engagement. Then, I will outline why work engagement contributes to the bottom line – performance and client satisfaction. The findings of previous studies are integrated in an overall model that can be used to develop work engagement in today's workplace. The chapter ends with a description of a human resource tool – the Work Engagement Monitor – that can be used by managers to build employee engagement in the workplace.

## WORK ENGAGEMENT

### *Definition*

Interestingly, it is research on *burnout* that stimulated studies on its presumed opposite: work engagement. There are two different schools of thought. Maslach and Leiter (1997) assume that burnout and engagement are two opposite poles of one continuum. They rephrased burnout as an erosion of engagement with the job, whereby energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness. In their view, engagement is

characterized by energy, involvement and professional efficacy, which are the direct (perfectly inversely related) opposites of the three burnout dimensions. Maslach and Leiter use the Maslach Burnout Inventory (Maslach, Jackson & Leiter, (1996) to assess work engagement.

The second school of thought agrees with the assertion that engagement is the positive antithesis of burnout, but defines and operationalizes engagement in its own right (Schaufeli & Bakker, 2001, 2004). Specifically, work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá & Bakker, 2002). Vigor is characterized by high levels of energy and mental resilience while working. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, 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 (see also, Schaufeli & Bakker, 2004). In short, engaged employees have high levels of energy and are enthusiastic about their work. Moreover, they are often fully immersed in their work so that time flies (see also May, Gilson & Harter, 2004).

Structured qualitative interviews with a heterogeneous group of Dutch employees who scored high on the Utrecht Work Engagement Scale (Schaufeli et al., 2002) showed that engaged employees are highly energetic, self-efficacious individuals who exercise influence over events that affect their lives (Schaufeli, Taris, Le Blanc, Peeters, Bakker & De Jonge, 2001). For example, several of the interviewees indicated that they changed jobs once they were no longer challenged, and found meaning in other organizations or occupations. Because of

their positive attitude and activity level, engaged employees create their own positive feedback, in terms of appreciation, recognition, and success. Many interviewees indicated that their enthusiasm and energy also appears outside work, e.g. in sports, creative hobbies, and volunteer work. Engaged employees are no supermen – they do feel tired after a long day of hard work. However, they describe their tiredness as a rather pleasant state because it is associated with positive accomplishments. Finally, engaged employees are not addicted to their work. They enjoy other things outside work and, unlike workaholics, they do not work hard because of a strong and irresistible inner drive, but because for them working is fun.

Results of Engelbrecht's (2006) qualitative research among Danish midwives add significantly to these Dutch findings by showing how engagement translates into behavior. Engelbrecht asked participants to describe a highly engaged colleague. The interviews revealed that an engaged midwife is a person who radiates energy and keeps up the spirit at the ward, especially in situations where work morale is low and frustration spreads. An engaged midwife is ready to do whatever needs to be done, and is seen as a source of inspiration for herself and others. "She has a positive attitude towards her work and is happy for the things she is doing. The love (for her job) is expressed through the passion with which she fulfils her daily tasks. In addition to the normal tasks of a midwife, she is also engaged in other job-related but voluntary activities at the ward." (p. 154).

Work engagement differs from other well-known concepts such as satisfaction and organizational commitment from the point of view that it offers a more complex and thorough perspective on the relation between the individual and work (Maslach, Schaufeli & Leiter, 2001). Moreover, recent studies have

shown that engagement can be discriminated theoretically and empirically from related concepts like job involvement and organizational commitment (Hallberg & Schaufeli, 2006), Type-A behaviour (Hallberg, Johansson & Schaufeli, 2007), and workaholism (Schaufeli, Taris & Bakker, 2006).

### *Measurement*

Engagement can be measured with the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003; Schaufeli et al., 2002) that includes three subscales: vigor, dedication and absorption. The UWES has been validated in several countries, including China (Yi-Wen & Yi-Qun, 2005), Finland (Hakanen, 2002), Greece (Xanthopoulou, Bakker, Demerouti & Kantas, 2007a), South Africa (Storm & Rothmann, 2003), Spain (Schaufeli et al., 2002), and The Netherlands (Schaufeli & Bakker, 2003; Schaufeli et al., 2002). All investigations used confirmatory factor analyses and showed that the fit of the hypothesized three-factor structure to the data was superior to that of alternative factor models. In addition, the internal consistencies of the three subscales proved to be sufficient in each study. It should be noted, however, that some studies failed to find the three-factor structure of work engagement (e.g., Sonnentag, 2003). This may be partly attributed to translation problems when it comes to items that contain metaphors (e.g., “Time flies when I am working”). Furthermore, Schaufeli and Bakker (2003) have argued that the total score for work engagement may sometimes be more useful in empirical research. Schaufeli, Bakker and Salanova (2006) developed a nine-item version of the UWES, and provided evidence for its cross-national validity. They showed that the three engagement dimensions are moderately strong related.

Smulders (2006) conducted an interesting descriptive study on work engagement using the UWES among a random sample of the Dutch working population ( $N=2081$ ). Results indicated that employees whose jobs are characterized by task variety, autonomy, complexity, and supervisory support have highest levels of work engagement. Primary school teachers, artists, nurses, and managers experience the highest engagement levels, whereas printers, retail employees, and workers in the food processing industry experience the lowest levels of engagement. Moreover, the self-employed have the highest level of work engagement, followed by those with tenured contracts, temporary contracts and flexible contracts, respectively. Finally, older workers are more engaged than younger.

The UWES has one psychometric shortcoming, namely that the items in each subscale are all framed in the same direction. Accordingly, all vigor, dedication, and absorption items are phrased positively. From a psychometric point of view, such one-sided scales are inferior to scales that include both positively and negatively worded items (Price & Mueller, 1986). It can, for instance, lead to artificial factor solutions in which positively and negatively worded items are likely to cluster (cf., Doty & Glick, 1998). In addition, the item wording can be seen as problematic since it offers an alternative explanation for the strong associations of engagement with other positively worded organizational behavior constructs.

An alternative instrument for the assessment of work engagement is the Oldenburg Burnout Inventory (OLBI; Demerouti & Bakker, in press). This instrument has originally been developed to assess burnout, but includes both positively and negatively phrased items, and hence, it can be used to assess work

engagement as well (see also González-Romá, Schaufeli, Bakker, & Lloret, 2006). Researchers interested in assessing work engagement with the OLBI can recode the negatively framed items. The OLBI includes two dimensions: one ranging from exhaustion to vigor and a second ranging from cynicism to dedication. The factorial validity of the OLBI has been confirmed in studies conducted in Germany (Demerouti, Bakker, Nachreiner, & Ebbinghaus, 2002; Demerouti, Bakker, Nachreiner & Schaufeli, 2001), the United States (Halbesleben & Demerouti, 2005), and Greece (Demerouti, Bakker, Vardakou & Kantas, 2003). Results of these studies clearly showed that a two-factor structure with vigor and dedication (referred to as exhaustion and disengagement in these studies) as the underlying factors fitted better to the data of several occupational groups than alternative factor structures.

Additionally, the test-retest reliability of the OLBI has been confirmed for time lags of four months (Halbesleben & Demerouti, 2005). The exhaustion-vigor subscale was stable with the auto-correlation being .51, while the correlation between time 1 and time 2 cynicism-dedication (this is called disengagement in the original OLBI) was somewhat lower ( $r = .34$ ).

## MAIN DRIVERS OF WORK ENGAGEMENT

### *Job Resources*

Previous studies have consistently shown that job resources such as social support from colleagues and supervisors, performance feedback, skill variety, autonomy, and learning opportunities are positively associated with work engagement (Bakker & Demerouti, 2007; Schaufeli & Salanova, 2007). *Job resources* refer to those physical, social, or organizational aspects of the job that may: (a) reduce job demands and the associated physiological and psychological



costs; (b) be functional in achieving work goals; or (c) stimulate personal growth, learning, and development (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Hence, resources are not only necessary to deal with (high) job demands, but they also are important in their own right.

Job resources either play an intrinsic motivational role because they foster employees' growth, learning and development, or they play an extrinsic motivational role because they are instrumental in achieving work goals. In the former case, job resources fulfill basic human needs, such as the needs for autonomy, relatedness and competence (Deci & Ryan, 1985; Ryan & Frederick, 1997). For instance, proper feedback fosters learning, thereby increasing job competence, whereas decision latitude and social support satisfy the need for autonomy and the need to belong, respectively. This intrinsic motivational potential of job resources is also recognized by job characteristics theory (Hackman & Oldham, 1980).

Job resources may also play an *extrinsic* motivational role, because work environments that offer many resources foster the willingness to dedicate one's efforts and abilities to the work task (Meijman & Mulder, 1998). In such environments it is likely that the task will be completed successfully and that the work goal will be attained. For instance, supportive colleagues and performance feedback increase the likelihood of being successful in achieving one's work goals. In either case, be it through the satisfaction of basic needs or through the achievement of work goals, the outcome is positive and engagement is likely to occur (Schaufeli & Bakker, 2004; Schaufeli & Salanova, 2007).

Consistent with these notions about the motivational role of job resources, several studies have shown a positive relationship between job resources and

work engagement. For example, Schaufeli and Bakker (2004) found evidence for a positive relationship between three job resources (performance feedback, social support, and supervisory coaching) and work engagement (vigor, dedication and absorption) among Dutch employees working in an insurance company, an occupational health and safety service company, a pension fund company, and a home care institution. More specifically, they used structural equation modeling to show that job resources (*not* job demands) exclusively predicted engagement, and that engagement is a mediator of the relationship between job resources and turnover intentions.

This study was replicated in a sample of over 2000 Finnish teachers (Hakanen, Bakker & Schaufeli, 2006). Results showed that job control, information, supervisory support, innovative climate and social climate were all positively related to work engagement. Conceptually similar findings were reported by Llorens, Bakker, Schaufeli, and Salanova (2006) in a Spanish context. In addition, Koyuncu, Burke and Fiksenbaum (2006) examined potential antecedents and consequences of work engagement in a sample of women managers and professionals ( $N=286$ ) employed by a large Turkish bank. Results showed that work life experiences, particularly control, rewards and recognition and value fit, were significant predictors of all three engagement measures.

Recent longitudinal research has generally confirmed the positive relationship between job resources and work engagement. Mauno, Kinnunen, and Ruokolainen (2007) utilized a two-year longitudinal design to investigate work engagement and its antecedents among Finnish health care personnel ( $N=409$ ). Job resources predicted work engagement better than job demands. Job control and organization-based self-esteem proved to be the best lagged predictors of the

three dimensions of work engagement. Further, in their study among managers and executives of a Dutch telecom company ( $N=201$ ), Schaufeli, Bakker and Van Rheeën (2007) found that *changes* in job resources were predictive of engagement over a one-year time period. Specifically, results showed that increases in social support, autonomy, opportunities to learn and to develop, and performance feedback were positive predictors of T2 work engagement after controlling for baseline engagement. In a similar vein, Bakker, Euwema, and Van Dieren (2007) in their study among 193 employees of a pension fund company showed that job resources (social support, autonomy, teamwork and supervisory coaching) predicted engagement two years later, after controlling for concurrent job demands and resources.

#### *Saliency of Job Resources*

According to conservation of resources (COR) theory (Hobfoll, 2001), people seek to obtain, retain, and protect that which they value, e.g., material, social, personal, or energetic resources. The theory proposes that stress experienced by individuals can be understood in relation to potential or actual loss of resources. More specifically, Hobfoll and Shirom (2000) have argued that: (a) individuals must bring in resources in order to prevent the loss of resources, (b) individuals with a greater pool of resources are less susceptible to resource loss, (c) those individuals who do not have access to strong resource pools are more likely to experience increased loss (“loss spiral”), and (d) strong resource pools lead to a greater likelihood that individuals will seek opportunities to risk resources for increased resource gains (“gain spiral”). Hobfoll (2002) has additionally argued that resource gain acquires its saliency in the context of resource loss. This implies that job resources become more salient and gain their

motivational potential when employees are confronted with high job demands (e.g., workload, emotional demands, and mental demands).

Hakanen, Bakker, and Demerouti (2005) tested this interaction hypothesis in a sample of Finnish dentists employed in the public sector. It was hypothesized that job resources (e.g., variability in the required professional skills, peer contacts) are most beneficial in maintaining work engagement under conditions of high job demands (e.g., workload, unfavorable physical environment). The dentists were split in two random groups in order to cross-validate the findings. A set of hierarchical regression analyses resulted in seventeen out of forty significant interactions (40%), showing, e.g., that variability in professional skills boosted work engagement when qualitative workload was high, and mitigated the negative effect of qualitative workload on work engagement.

Conceptually similar findings have been reported by Bakker, Hakanen, Demerouti and Xanthopoulou (2007). In their study among Finnish teachers working in elementary, secondary, and vocational schools, they found that job resources act as buffers and diminish the negative relationship between pupil misbehavior and work engagement. In addition, they found that job resources particularly influence work engagement when teachers are confronted with high levels of pupil misconduct. A series of moderated structural equation modeling analyses resulted in fourteen out of eighteen possible two-way interaction effects (78%). Particularly supervisor support, innovativeness, appreciation, and organizational climate were important job resources for teachers that helped them cope with demanding interactions with students.

*Personal Resources*

Since engaged workers also seem to be engaged outside work life, it makes sense to examine the relationship between personal characteristics and work engagement. Can engaged employees be characterized by specific individual profiles that are stable across situations? I located only two studies that examined the relationship between higher-order personality traits and work engagement.

In their study among 572 Dutch employees Langelaan, Bakker, Van Doornen, and Schaufeli (2006) related work engagement to temperament and the ‘Big Two’ personality factors—neuroticism and extraversion. Their findings revealed that engaged workers are characterized by high levels of mobility, low neuroticism, and high extraversion. This means that engaged workers are well able to respond adequately to changes in environmental demands; they adapt quickly to new surroundings and switch easily between activities. In addition, highly engaged employees do *not* have the general tendency to experience the distressing emotions such as fear, depression, and frustration that is characteristic of neurotics. In contrast, they seem to have a disposition towards cheerfulness, sociability, and high activity (extraversion).

These findings were replicated and expanded by Mostert and Rothmann’s (2006) study on work engagement and the ‘Big Five’ personality factors—neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. Using a cross-sectional survey of 1,794 South African police officers, they found that conscientiousness, emotional stability, and extraversion each made an independent contribution to predicting work engagement. This is consistent with the Dutch findings, and additionally indicates that engaged

workers score high on conscientiousness; they have the tendency to be habitually careful, reliable, hard-working, well-organized, and purposeful.

One reason why there are only a limited number of studies linking personality to work engagement is that most researchers in the field of organizational psychology follow Luthans' (2002) advice that positive organizational behaviour constructs – like (predictors of) work engagement – must be *state-like* (and not stable like personality is supposed to be), which would make them open to development and manageable for performance improvement. Thus, in addition to job characteristics, several studies have focused on state-like personal resources as predictors of engagement. *Personal resources* are positive self-evaluations that are linked to resiliency and refer to individuals' sense of their ability to control and impact upon their environment successfully (Hobfoll, Johnson, Ennis & Jackson, 2003). It has been argued and shown that such positive self-evaluations predict goal-setting, motivation, performance, job and life satisfaction, and other desirable outcomes (for a review, Judge, Van Vianen, & De Pater, 2004). The reason for this is that the higher an individual's personal resources, the more positive the person's self-regard and the more goal self-concordance is expected to be experienced (Judge, Bono, Erez, & Locke, 2005). Individuals with goal self-concordance are intrinsically motivated to pursue their goals and as a result they trigger higher performance and satisfaction (see also Luthans & Youssef, 2007).

Several authors have investigated the relationships between personal resources and work engagement. For example, Rothmann and Storm (2003) conducted a cross-sectional study among 1,910 South African police officers, and found that engaged police-officers have an active coping style. They are problem-

focused, taking active steps to attempt to remove or rearrange stressors. Further, in their study among highly skilled Dutch technicians, Xanthopoulou, Bakker, Demerouti and Schaufeli (2007a) examined the role of three personal resources (self-efficacy, organizational-based self-esteem, and optimism) in predicting work engagement. Results showed that engaged employees are highly self-efficacious; they believe they are able to meet the demands they face in a broad array of contexts. In addition, engaged workers have the tendency to believe that they will generally experience good outcomes in life (optimistic), and believe they can satisfy their needs by participating in roles within the organization (organizational-based self-esteem; see also Mauno et al., 2007).

These findings were replicated and expanded in a two-year follow-up study (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007b). The findings indicated that self-efficacy, organizational-based self-esteem, and optimism make a unique contribution to explaining variance in work engagement over time, over and above the impact of job resources and previous levels of engagement. As a final example, Bakker, Gierveld and Van Rijswijk (2006) in their study among female school principals found that those with most personal resources scored highest on work engagement. Particularly resilience, self-efficacy and optimism contributed to work engagement, and were able to explain unique variance in engagement scores (in addition to social support from team members and colleague principals, opportunities for development, and social support from the intimate partner). Thus, resilience is another personal resource that facilitates work engagement, indicating that engaged workers are effective in adaptation to changing environments. Engaged workers are not only predisposed to an absence of susceptibility to anxiety, but also to a positive engagement with the world, as

manifested in positive affect and openness to experience (Block & Kremen, 1996). For example, a recent study by Bakker (2007) among 388 bank employees showed that resilience buffers the impact of high emotional demands on exhaustion, and particularly showed a positive relationship with work engagement under conditions of high job demands.

### *Conclusion*

In conclusion, the main drivers of work engagement are job and personal resources. Job resources reduce the impact of job demands on strain, are functional in achieving work goals, and stimulate personal growth, learning, and development. In addition, job resources particularly have motivational potential in the face of high job demands. Further, engaged employees do seem to differ from other employees in terms of their personal characteristics. They score higher on extraversion and conscientiousness, and lower on neuroticism. Future research is needed to overcome the problems associated with previous cross-sectional research (e.g., common-method bias), and to test the personality-engagement link using more rigorous designs (e.g., with other-ratings of personality or work engagement). Finally, engaged workers possess more personal resources, including optimism, self-efficacy, self-esteem, resilience, and an active coping style. These resources seem to help engaged workers to control and impact upon their work environment successfully (see also Luthans et al., in press).

### ENGAGEMENT – PERFORMANCE LINK

In her qualitative study among midwives, Engelbrecht (2006) noticed that a highly engaged midwife "... is service-minded and client-oriented in her work, which can be noticed in her quick, calm and patient reaction towards clients." (p. 156). Up till now, only a few quantitative studies have shown that work



engagement is positively related to job performance (see Demerouti & Bakker, 2006), and most of these studies are still unpublished. Nevertheless, the results look promising. Bakker, Demerouti and Verbeke (2004) showed that engaged employees received higher ratings from their colleagues on in-role and extra-role performance, indicating that engaged employees perform well and are willing to go the extra mile. Further, in their survey among Dutch employees from a wide range of occupations, Schaufeli, Taris and Bakker (2006) found that work engagement is positively related to in-role performance ( $\beta = .37$ ), whereas workaholism is not. These findings were expanded in another study among 327 secretaries. Gierveld and Bakker (2005) found that engaged secretaries scored higher on in-role and extra-role performance. In addition, results suggested that engaged secretaries had more influence on daily business. They were more often asked to carry out additional tasks, including personnel pre-selection, the organization of trade exhibitions and conventions, and website maintenance.

Bakker, Gierveld and Van Rijkswijk (2006) conducted a study on engagement and performance among 105 school principals and 232 teachers. The results of their study showed significant and positive associations between school principals' work engagement scores and teacher-ratings of performance and leadership. More specifically, results of structural equation modeling showed that engaged principals scored higher on in-role and extra-role performance. In addition, engagement was strongly related to creativity; the higher school principals' levels of work engagement, the better they were able to come up with a variety of ways to deal with work-related problems. Finally, engaged school principals were seen as transformational leaders – being able to inspire, stimulate and coach their co-workers.

Finally, Salanova, Agut and Peiró (2005) conducted an important study among personnel working in Spanish restaurants and hotels. Contact employees ( $N=342$ ) from 114 service units (58 hotel front desks and 56 restaurants) provided information about organizational resources, engagement, and service climate. Furthermore, customers ( $N=1,140$ ) from these units provided information on employee performance and customer loyalty. Structural equation modeling analyses were consistent with a full mediation model in which organizational resources and work engagement predicted service climate, which in turn predicted employee performance and then customer loyalty.

Taken together, five empirical studies suggest a positive relationship between work engagement and performance. Although some studies used more than one source of information (e.g., employee- and customer-ratings) and thus circumvented problems with common-method bias, the design of the studies is cross-sectional. Therefore, we have recently begun to explore the engagement-performance link in diary research. But before I turn to the findings of these studies, I will discuss the reasons why engaged employees are better performers.

#### WHY ENGAGED WORKERS PERFORM BETTER

There are at least four reasons why engaged workers perform better than non-engaged workers. Engaged employees (1) often experience positive emotions, including happiness, joy, and enthusiasm; (2) experience better health; (3) create their own job and personal resources; and (4) transfer their engagement to others.

##### *Positive Emotions*

Recent research has shown that engaged employees often experience positive emotions (Salanova & Schaufeli, 2007; Schaufeli & Van Rhenen, 2006), and this may be the reason why they are more productive. Happy people are more

sensitive to opportunities at work, more outgoing and helpful to others, and more confident and optimistic (Cropanzano & Wright, 2001). According to the broaden-and-build theory of positive emotions (Fredrickson, 2001), certain positive emotions including joy, interest and contentment, all share the capacity to broaden people's momentary thought–action repertoires and build their personal resources (ranging from physical and intellectual resources to social and psychological) through widening the array of thoughts and actions that come to mind. For instance, joy broadens resources by creating the urge to play and be creative. Interest, another positive emotion, fosters the desire to explore, assimilate new information and experiences and grow.

Evidence for the broadening hypothesis has been reported by Fredrickson and Branigan (2005) and by Isen (2000). Accordingly, positive affect produces a broad and flexible cognitive organization as well as the ability to integrate diverse material. The question is now whether this “broaden-and-build” effect will manifest itself in enhanced job performance, as one would assume because of the accumulation of personal resources. Fredrickson (2001) has argued that we need to investigate how (and whether) broadened thought-action repertoires are translated into decisions and actions. In an organizational context, Fredrickson and Losada (2005) showed that when the ratio of managers' positive to negative emotions is relatively high during business meetings, they ask more questions, and their range between questioning and advocacy is broader, resulting in better performance.

### *Good Health*

Research suggests that engagement is positively related to health, and this would imply that engaged workers are better *able* to perform well. Schaufeli,

Taris and Van Rhenen (in press) have shown that engaged workers report less psychosomatic complaints than their non-engaged counterparts. Similarly, Demerouti, Bakker, De Jonge, Janssen and Schaufeli (2001) found moderate negative correlations between engagement (particularly vigor) and psychosomatic health complaints (e.g., headaches, chest pain). In addition, Hakanen et al. (2006), in their study among Finnish teachers showed that work engagement is positively related to self-rated health and workability.

Further, Schaufeli and Bakker (2004) found in their study among four different Dutch service organizations that engaged workers suffer less from, for example, self-reported headaches, cardiovascular problems, and stomach aches. Shirom (2003) has also argued that vigor is positively related to mental and physical health. However, note that recent research has generally failed to find evidence for a link between engagement and *physiological* indicators, including allostatic load (Langelaan, Bakker, Schaufeli, Van Rhenen & Van Doornen, in press), and the stress hormone cortisol (Langelaan, Bakker, Schaufeli, Van Rhenen & Van Doornen, 2006).

#### *Ability to Mobilize Resources*

One important reason why engaged workers are more productive may be their ability to create their own resources. Research with Fredrickson's (2001) broaden-and-build theory has shown that momentary experiences of positive emotions can build enduring psychological resources and trigger upward spirals toward emotional well-being. Positive emotions not only make people feel good at the moment, but also feel good in the future (Fredrickson & Joiner, 2002).

There is indeed evidence for an upward spiral of work engagement and resources. Xanthopoulou et al. (2007b) showed in their research among highly

skilled Dutch technicians that T1 job and personal resources resulted in higher levels of work engagement one year later (T2). Simultaneously, work engagement resulted in more personal resources (optimism, self-efficacy, and organization-based self-esteem) and more job resources (social support from colleagues, autonomy, coaching, and feedback) over time. Conceptually similar results have been found in a Spanish context (Llorens, Schaufeli, Bakker & Salanova, 2007; see also Salanova, Bakker & Llorens, 2006), suggesting that engagement triggers an upward spiral and leads to higher levels of self-efficacy over time. Furthermore, Schaufeli et al.'s (2007) study among managers showed that engagement was predictive of increases in next year's job resources, including social support, autonomy, learning opportunities, and performance feedback. This all suggests that in comparison with non-engaged employees, engaged employees are better able to mobilize their own job and personal resources that, in turn, fuel future engagement and so forth.

#### *Crossover of Engagement*

In most organizations, performance is the result of the combined effort of individual employees. It is therefore conceivable that the crossover of engagement among members of the same work team increases performance. Crossover or emotional contagion can be defined as the transfer of positive (or negative) experiences from one person to the other (Westman, 2001). If colleagues influence each other with their work engagement, they may perform better as a team.

There is indeed some experimental evidence for such a process of emotional contagion. Barsade (2002) conducted an innovative laboratory study in which the transfer of moods among people in a group, and its influence on

performance was examined. Using a trained confederate enacting mood, she showed that the pleasant mood of the confederate influenced (video coders' ratings of) the mood of the other team members during a simulated managerial exercise (leaderless group discussion). The positive mood contagion consequently resulted in more cooperative behaviour and better task performance. In a similar vein, Sy, Cote and Saavedra (2005) found that when leaders were in a positive (vs. negative) mood, individual team members experienced more positive and less negative mood. The researchers also found that groups with leaders in a positive mood exhibited more coordination and expended less effort than did groups with leaders in a negative mood.

In another experiment, Damen (2007) asked a professional actor to show high arousal, positively valenced emotions (e.g., enthusiasm) to followers (business students). Participants were encouraged by the actor (a presumed leader) to work on a task that asked them to process as many orders as possible relating to personal computers (including software, printers, and other hardware). Results showed that those who were exposed to engaged leaders were more effective and produced more. One of the reasons for this is that the emotions of the leader conveyed action readiness. In addition, the effect only worked when followers' emotions were similarly positive, suggesting that a contagion effect may have been responsible for the enthusiasm – performance link (see also Barsade, 2002).

Other researchers focused on emotional contagion in the workplace viewing contagion as a reciprocal emotional reaction among employees who closely collaborate. Thus, in a field setting, Totterdell, Kellet, Teuchmann and Briner (1998) found evidence that the moods of teams of nurses and accountants were related to each other even after controlling for shared work problems. In

addition, Bakker, Van Emmerik and Euwema (2006) in their study among 2,229 officers working in one of 85 teams found that team-level work engagement was related to individual team members' engagement (vigor, dedication, and absorption), after controlling for individual members' job demands and resources. Thus, engaged workers who communicated their optimism, positive attitudes and pro-active behaviors to their colleagues, created a positive team climate, independent of the demands and resources they were exposed to. The authors also discovered that team engagement (vigor, dedication, and absorption) partly countered individual members' experience of strain. This all suggests that engaged workers influence their colleagues, and consequently, they perform better as a team.

#### DAILY WORK ENGAGEMENT

The studies discussed so far used a between-person design and cannot explain why engaged employees sometimes show below average or poor performance. Even engaged employees may have their off-days, and researchers have therefore begun to examine daily changes in work engagement. An important advantage of diary research is that it relies less on retrospective recall than regular surveys, since the questions relate to individuals' perceptions and feelings on a certain day. Additionally, daily changes in work engagement within persons can be causally related to daily changes in performance.

Every working day, employees are exposed to a certain amount of job demands. Imagine the work of a scientist, like myself. On a busy and stressful workday, I may be confronted with several demands at once, including teaching obligations, dozens of e-mails, the marking of exams, and meeting a deadline for resubmitting a journal article. Such a working day is often characterized by low

job resources as well, since there is hardly time to mobilize resources in the work environment (to interact with and receive support from colleagues, utilize job control, and develop professionally).

In contrast, on a workday with more job resources, I may feel engaged and start the creative process of writing a new article. In other words, working conditions may vary from day to day (Butler, Grzywacz, Bass, & Linney, 2005), and determine our daily mood or affect (Zohar, Tzischinski, & Epstein, 2003). Studies using a within-person design have indeed shown that periods of high workload deplete employees' energy resources; they coincide with impaired well-being (Teuchmann, Totterdell, & Parker, 1999; Totterdell, Wood, & Wall, 2006).

Researchers who study daily engagement argue that levels of vigor, dedication and absorption may also change constantly as a result of external cues in the work environment. This means for instance that employees, who feel vigorous and dedicated on a certain day, may feel less so on the next day, because of what happens around them. Xanthopoulou et al. (2007c) investigated whether daily social support fosters day-levels of self-efficacy beliefs and work engagement among flight attendants flying to three intercontinental destinations. Results of multi-level analyses showed that the social support built up with the new crew during the outbound flight fostered individual employees' sense of self-efficacy before the inbound flight, which, in turn, determined their levels of work engagement and performance during the inbound flight.

In their recent study among Greek employees working in a fast-food restaurant, Xanthopoulou et al. (2007d) expanded this research, and made a compelling case of the relevance of daily resources for work engagement. Participants were asked to fill in a survey and a diary booklet for five consecutive



days. Consistent with the hypotheses, results showed that employees were more engaged on days that were characterized by many job resources. Daily job resources, like supervisor coaching and team atmosphere contributed to employees' personal resources (day-levels of optimism, self-efficacy, and self-esteem), which, in turn, explained daily engagement. Importantly, this study clearly showed that engaged employees perform better on a daily basis. The higher employees' levels of daily engagement, the higher their objective financial turnover.

Sonnentag (2003) examined the relationship between *recovery* during leisure time and work engagement. A total of 147 employees completed a questionnaire and a daily survey over a period of five consecutive work days. Multilevel analyses showed that day-level recovery was positively related to day-level work engagement and day-level proactive behavior (personal initiative, pursuit of learning) during the subsequent work day. Building on this work, Bakker, Van Emmerik, Demerouti and Geurts (2007), in their study among assembly line workers showed that daily work engagement is related to daily performance, but only if employees recovered from the efforts during the preceding work day. This suggests that work engagement is an important determinant of performance, and that the energy invested in performance needs to be replenished during off-job time.

#### ALL THAT GLITTERS IS NOT GOLD

Fineman (2006) has argued that our positive and negative feelings are formed interdependently and are mutually connected: "Positive scholars' quest for positive change and learning is likely to be a truncated, single loop mission if the stress, anxiety, anger, pessimism, and unhappiness of life and work are silenced or

marginalized.” (p. 281). I agree with Fineman that much can be gained from utilizing approaches that help scholars and practitioners gain insights into both the positive strengths and the negative weaknesses and their interactions and limitations (see also Luthans & Youssef, 2007).

Previous research on positive organizational behavior constructs has indeed shown that “All that glitters is not gold” (Shakespeare, 1596). For example, high self-esteem can lead to an underestimation of the time that is necessary for goal achievement (Buehler, Griffin & Ross, 1994), and unrealistic optimism can harm individuals and organizations by promoting inappropriate persistence (Armor & Taylor, 1998). Furthermore, overconfidence has been found to hinder subsequent performance (Vancouver, Thompson, Tischner, & Putka, 2002; Vancouver, Thompson, & Williams, 2001), and creativity may lead to frustration given the unfocused effort and diminished productivity that creative individuals may experience (Ford & Sullivan, 2004).

Since we have identified several of the abovementioned qualities (e.g., self-esteem, optimism) as potential predictors of work engagement, it seems evident that “over-engagement” can also have negative consequences. For example, although engaged employees are not workaholics, they may become so engaged in their work that they take work home. The work-life balance literature has shown that work-home interference undermines recovery, and may lead to health problems (Geurts & Demerouti, 2003).

Furthermore, one may wonder whether work engagement may create workaholics, i.e. employees who have an inner drive to work hard, even when they no longer like working overtime. Indeed, some scholars have noted that “In order to burn out, a person needs to have been on fire at one time.” (Pines,

Aronson, & Kafry, 1981, p. 4). This would imply that, over time, the high arousal, positive affect (e.g., enthusiasm) of engaged workers turns into negative affect and strain. Future research is needed to examine the possible long-term negative effects of high work engagement.

Particularly the absorption component of work engagement seems a conceivable candidate for evoking unhealthy behavior. Employees who are so immersed in their work that they forget to rest and recover, may develop health problems since the bodily system does not stabilize. Indeed, Schaufeli et al. (in press) found positive relationships between absorption and workaholism, and several unpublished studies indicate that absorption does have a weak positive relationship with psychosomatic health problems.

#### OVERALL MODEL OF WORK ENGAGEMENT

The evidence regarding the antecedents and consequences of work engagement can be organized in an overall model of work engagement. In building this model, I draw on two assumptions from the Job Demands – Resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner & Schaufeli, 2001). The first assumption is that job resources such as social support from colleagues and supervisors, performance feedback, skill variety, and autonomy, start a motivational process that leads to work engagement, and consequently to higher performance. The second assumption is that job resources become more salient and gain their motivational potential when employees are confronted with high job demands (e.g., workload, emotional demands, and mental demands). Further, I draw on the work of Xanthopoulou et al. (2007a, 2007b), who expanded the JD-R model and showed that job and personal resources are mutually related, and that personal resources can be

independent predictors of work engagement. Thus employees who score high on optimism, self-efficacy, resilience and self-esteem are well able to mobilize their job resources, and generally are more engaged in their work.

The JD-R model of work engagement is graphically depicted in Figure 1. As can be seen, I assume that job resources and personal resources independently or combined predict work engagement. Further, job and personal resources particularly have a positive impact on engagement when job demands are high. Work engagement, in turn, has a positive impact on job performance. Finally, employees who are engaged and perform well are able to create their own resources, which then foster engagement again over time.

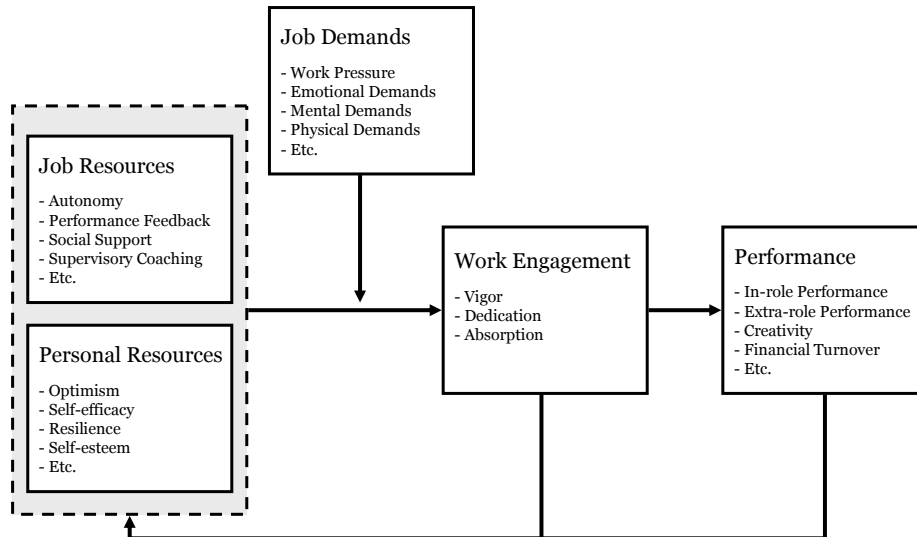


Figure 1. The JD-R Model of Work Engagement (based on Bakker & Demerouti, 2007).

## BUILDING ENGAGEMENT

Human resource managers can do several things to facilitate work engagement among their employees. Important starting point for any active policy is the measurement of engagement and its drivers among all employees, using the JD-R model (see Figure 1). On the basis of this assessment, it can be determined whether individual employees, teams, job positions, or departments score low, average, or high on work engagement and its antecedents. Following Kompier's (2003) advice, interventions should then focus on both individuals (in the context of the organization), and the organization.

### *The Work Engagement Monitor*

Because every occupation may have its own unique job demands and resources that may predict work engagement, I use a two-stage procedure in applied organizational research. The first *qualitative* phase of the research includes explorative interviews with job incumbents from different layers of an organization (e.g., representatives from management, staff, and shop floor). The interviews, which last approximately 45 minutes, include open questions about the jobs of the interviewees, and refer to its positive and negative aspects. The incorporation of a qualitative phase in the study is valuable because it potentially generates knowledge about unexpected, organization-specific job demands and job resources that will be overlooked by highly standardized approaches. For example, it is conceivable that in one organization (e.g., a production company) employees are exposed to high physical job demands, whereas in another organization (e.g., an insurance company) employees are not exposed to such demands at all. In addition, in certain companies, employees are confronted with mergers, which may cause job insecurity and role ambiguity. Such organization-

specific job demands (and resources) can be traced in the exploratory qualitative phase.

In the second phase of the research, the job demands and job resources potentially associated with engagement are operationalized through validated scales and incorporated in a tailor-made online Work Engagement Monitor. All employees from the organization under study are then invited to fill in this questionnaire. This enables a *quantitative* analysis of the job demands and job resources that have been identified qualitatively, and potentially play a role in the development of work engagement.

At the organizational level, the analysis focuses on differences between teams, departments and/or job positions, in terms of job demands, resources, work engagement, and its consequences. In some projects, managers participate in work engagement workshops before the start of the study, so that they learn how to use the information that becomes available. The subgroup analyses can provide clear indications for interventions, since they highlight the strengths and the weaknesses of subgroups. Tailor-made interventions are then possible, aimed at reducing the identified job demands, and increasing the most important job resources which, in turn, may increase the likelihood of work engagement and good performance. At the organizational level, such interventions may include job redesign, and the training of managers. Importantly, the employees are always actively involved in the change process to increase their willingness to change.

Additionally, all employees who fill in the Work Engagement Monitor receive online, personal feedback on their computer screen about their most important job demands and resources. The feedback includes histograms of the specific demands and resources included in the study, in which the participant's

score is compared with that of a benchmark (comparison group). In addition, the feedback mode is interactive, such that participants can click on the histograms and receive written feedback about the meaning of their scores on the job demands and resources. In a similar way, feedback about work engagement is included in this internet tool. The final PDF-report that can be generated at the end of the program is used as input for individualized interventions. For example, in some projects the personal feedback is used to make a plan of action with company coaches to see how work engagement can be sustained. In other projects, organizational consultants discuss the findings with the participants with the aim to redesign the job at the individual level. Thus, in line with Kompier (2003), I simultaneously intervene at the individual level and the organizational level to build engagement.

#### CONCLUDING REMARKS

I hope that this overview encourages researchers to examine the validity of the work engagement model in various occupational groups and in different countries. In addition, future research should test whether the Work Engagement Monitor is effective in helping employees to cope with their demands, mobilize their resources, stay healthy, and perform well. More than just considering employees as a means to the desired end of higher performance, positive organizational behavior approaches must also include the pursuit of employee happiness, health, and engagement as viable goals or ends in themselves (cf. Wright, 2003).

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