Key questions regarding work engagement

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This article discusses the concept of work engagement and summarizes
research on its most important antecedents. The authors formulate 10 key
questions and shape a research agenda for engagement. In addition to the
conceptual development and measurement of enduring work engagement, the
authors discuss the importance of state work engagement. Further, they argue
that the social context is crucial and may set the stage for a climate for
engagement with an important role for management. Engaged employees
conserve their own engagement through a process of job crafting. After
discussing possible dark sides of engagement and the relationship between
engagement and health, the article closes with a discussion of organizational
interventions to increase work engagement.

Keywords: Burnout; Commitment; Employee engagement; JD-R model;
Job resources; Vigour.

Employees' psychological connection with their work has gained critical
importance in the information/service economy of the twenty-first century.
In the contemporary world of work, to compete effectively, companies not
only must recruit the top talent, but must also inspire and enable employees

to apply their full capabilities to their work. Contemporary organizations need employees who are psychologically connected to their work; who are willing and able to invest themselves fully in their roles; who are proactive and committed to high quality performance standards. They need employees who feel energetic and dedicated, i.e., who are engaged with their work (Bakker & Leiter, 2010).

The past decade has witnessed a sharp increase in scientific studies on engagement (Albrecht, in press; Bakker, Schaufeli, Leiter, & Taris, 2008). This research has shown that engagement is related to bottom line outcomes such as job performance (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008), client satisfaction (Salanova, Agut, & Peiro, 2005), and financial returns (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b; for an overview, see Demerouti & Cropanzano, 2010). In the present article, we first define work engagement and briefly review what we do know from research on the causes of engagement. We then introduce 10 key questions that may illuminate new avenues for research on engagement. The central aim of this article is to help shape the research agenda for work engagement.

WORK ENGAGEMENT: WHAT WE ALREADY KNOW

Work engagement is most often defined as "... a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli & Bakker, 2010; Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). In essence, work engagement captures how workers experience their work: as stimulating and energetic and something to which they really want to devote time and effort (the *vigour* component); as a significant and meaningful pursuit (*dedication*); and as engrossing and something on which they are fully concentrated (*absorption*; Bakker et al., 2008).

Research has revealed that engaged employees are highly energetic, self-efficacious individuals who exercise influence over events that affect their lives (Bakker, 2009; Schaufeli et al., 2001). Because of their positive attitude and activity level, engaged employees create their own positive feedback, in terms of appreciation, recognition, and success. Although engaged employees do feel tired after a long day of hard work, they describe their tiredness as a rather pleasant state because it is associated with positive accomplishments. Finally, engaged employees enjoy other things outside work. Unlike workaholics, engaged employees do not work hard because of a strong and irresistible inner drive, but because for them working is fun (Gorgievski, Bakker, & Schaufeli, 2010).

DRIVERS OF ENGAGEMENT

Previous studies have consistently shown that job resources and personal resources facilitate work engagement (Bakker & Demerouti, 2008; Bakker & Leiter, 2010). Job resources refer to those physical, social, or organizational aspects of the job that may reduce job demands, be functional in achieving work goals, or stimulate personal growth (Bakker & Demerouti, 2007). Examples of job resources are autonomy, social support from colleagues, and skill variety.

Job resources are assumed to play an intrinsic motivational role because they fulfil basic human needs, such as the needs for autonomy, relatedness, and competence (van den Broeck, Vansteenkiste, de Witte, & Lens, 2008). For instance, skill variety fosters learning, thereby increasing job competence, whereas decision latitude and social support satisfy the need for autonomy and the need to belong, respectively. However, job resources may also play an *extrinsic* motivational role, because resourceful work environments 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, performance feedback and a supportive supervisor increase the likelihood of being successful in achieving one's work goals.

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 a meta-analysis, see Halbesleben, 2010). For example, in their longitudinal study among a representative sample of Finnish dentists, Hakanen, Schaufeli, and Ahola (2008) found that job resources including craftsmanship (the possibility to work with one's hands), professional contacts (interacting with colleagues), and long-term and immediate results of work (e.g., seeing the good results of treatment) influenced future work engagement, which, in turn, predicted organizational commitment. Further, in their study among managers and executives of a Dutch telecom company, Schaufeli, Bakker, and van Rhenen (2009) found that changes in job resources were predictive of work engagement over a period of 1 year. Specifically, results showed that increases in social support, autonomy, opportunities to learn and to develop, and performance feedback were positive predictors of Time 2 work engagement after controlling for baseline engagement.

According to the Job Demands–Resources model (JD-R; Bakker & Demerouti, 2007), job resources become salient and gain their motivational potential when employees are confronted with high job demands. Such conditions represent so-called "active jobs" (Karasek, 1979), in which employees become motivated to actively learn and develop their skills. 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 predictive of work engagement under conditions of high job demands (e.g., workload, unfavourable physical environment). The results largely confirmed the hypothesis by showing, for example, that variability in professional skills boosted work engagement when qualitative workload was high (see also Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

In addition to job resources, studies have shown that personal resources or psychological capital (PsyCap) can be important predictors of work engagement. PsyCap has been defined as "an individual's positive psychological state of development characterized by: (1) having confidence (self efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, & Avolio, 2007, p. 3).

In their study among highly skilled Dutch technicians, Xanthopoulou, Bakker, Demerouti, and Schaufeli (2007) examined the role of a slightly different operationalization of PsyCap (self-efficacy, self-esteem, and optimism—these elements are called personal resources) 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).

These findings were replicated and expanded in a 1.5-year follow-up study (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a). 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. Thus, engaged workers have psychological capital that helps them to control and impact upon their work environment successfully.

In sum, on the basis of extensive research, we know quite a lot about what engagement is and the conditions under which it emerges. Previous research has consistently shown that job resources and personal resources are important predictors of work engagement. These resources are instrumental for work-related goals and they satisfy basic psychological needs. Thus, work environments that are rich in resources foster work engagement, particularly when job demands are high. Also, personal

resources like self-esteem, optimism, and self-efficacy help employees to cope with the daily demands in organizational life.

WORK ENGAGEMENT: WHAT WE DON'T KNOW YET

Although research on work engagement is flourishing, there are still many things to be learned about engagement. Do researchers agree on the definition of engagement? Is work engagement an enduring state that hardly changes over time, or do we need to examine daily fluctuations in engagement? In this section, we introduce 10 key questions that may illuminate new avenues for research on engagement. The list is necessarily selective, but we believe we have chosen important topics for future research.

1. How should we conceptualize engagement?

Everyday connotations of engagement refer to involvement, commitment, passion, enthusiasm, absorption, focused effort, and energy (Schaufeli & Bakker, 2010). In a similar vein, the Merriam-Webster dictionary describes engagement as "emotional involvement or commitment" and as "the state of being in gear". However, no agreement exists among practitioners or scholars on a particular conceptualization of (work) engagement. Practitioners often define engagement in terms of (1) organizational commitment, more particularly affective commitment (i.e., the emotional attachment to the organization) and continuance commitment (i.e., the desire to stay with the organization), and (2) extrarole behaviour (i.e., discretionary behaviour that promotes the effective functioning of the organization). Hence, the way practitioners conceptualize engagement risks confusing different constructs and risks "putting old wine in new bottles" (Schaufeli & Bakker, 2010, p. 12).

In contrast, scientists usually define work engagement as "... a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption" (Schaufeli et al., 2002, p. 74). Despite no universal agreement on the meaning of work engagement, there is broad consensus on two core dimensions of work engagement—energy and involvement/identification, both of which are included in the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2010; Schaufeli et al., 2002), the Oldenburg Burnout Inventory (OLBI; Demerouti & Bakker, 2008), and the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996). As far as the dimensions of work engagement are concerned, further work is needed to consider whether absorption is a core aspect of work engagement or an outcome of energy and identification, and on the role of professional efficacy. Resolving these questions requires further development in theory

and measurement. However, from our perspective, there are clear categories of "what we now know" and ongoing issues that we believe can be "put to bed". For instance, we argue that it is time to put to bed the notion that engagement is nothing more that some "old wine—new bottle" conceptual cocktail consisting of commitment, job satisfaction, organizational citizenship behaviour, and turnover intentions. We contend that there is clear and sufficient theory (e.g., Inceoglu & Fleck, in press) and research (e.g., Hallberg & Schaufeli, 2006) demonstrating that engagement is an important standalone motivational construct that is independent of other such constructs which, in the main, are better conceptualized as outcomes of engagement. The ongoing challenge is to clarify the relations between these related, but not identical constructs, and to demonstrate the value-added association with the concept of work engagement. These arguments lead us to our first proposition:

> *Proposition 1:* Work engagement is a distinct psychological construct that consists of two core dimensions—energy and identification—and which deserves the same theoretical and practical attention as other more established organizational constructs.

2. How should we best measure engagement?

Measures of engagement need to have a clear theoretical underpinning, should be clearly consistent with an associated definition, need to have published statistical evidence in support of their validity and reliability, and need to be of practical utility in organizational contexts (Macey & Schneider, 2008). Although many practitioner-developed measures of engagement exist in the commercial domain, relatively few measures of engagement have been "road-tested" in the peer-reviewed literature. The most often used scientifically derived measure of engagement is the UWES (Schaufeli & Bakker, 2010; Schaufeli et al., 2002). The UWES includes a subscale for each of the three engagement dimensions—vigour, dedication, and absorption—and has been validated in several countries in Europe, and also in North America, Africa, Asia, and Australia (Bakker, 2009). Confirmatory factor analyses have repeatedly shown that the fit of the hypothesized three-factor structure to the data is superior to that of alternative factor models. In addition, the internal consistencies of the three subscales are sufficient in each study.

Nevertheless, there are several questions that pertain to the measurement of work engagement. First, given recent questions about the potential negative consequences of having too much engagement (e.g., Halbesleben, Harvey, & Bolino, 2009), should measures of engagement cover experiences

which range from burnout on the negative pole to engagement on the positive pole? So, for example, should engagement therefore be assessed with wider spectrum measures such as the OLBI (Demerouti & Bakker, 2008)? Additionally, although Schaufeli and Bakker (2010) defined engagement as a positive psychological state best characterized by energy and identification, George (in press) has argued that it may be "especially important for employees to be engaged at work when there are real problems and the need for improvements and change". The experience of such problems and challenges may be accompanied by the experience of negative emotions and negative thoughts such as mild anxiety or frustration. Whichever way the definition and measurement of engagement might develop we would argue that the UWES, the OLBI, and the MBI will best provide the core foundation from which any additional items, elaborations, or refinements should proceed.

A second key measurement question centres on the way in which the response formats for engagement questions should be framed. Given the recent interest in the moment-to-moment and daily fluctuations in engagement (e.g., Sonnentag, Dormann, & Demerouti, 2010) the question arises as to whether the scales currently used to assess work engagement (see Schaufeli & Bakker, 2010) are valid for the measurement of more state-like and fluctuating experiences work engagement. Clearly, the time anchors on the UWES and the MBI–GS (e.g., "a few times a month") do not fit with a daily reporting schedule. The appropriateness of item wording to capture the day-to-day variations in energy and dedication therefore remains an open question. Alternative response formats on existing measures will help achieve a more robust assessment of engagement across differing timelines and contexts. This line of argument leads us to our second proposition:

> *Proposition 2:* Measures of work engagement should capture both positive and negative aspects of the psychological state and response anchors should be designed to accommodate both short term and longer term time frames.

3. Are there fluctuations in engagement across the working week?

Most previous studies on work engagement used a between-person design and cannot explain why even highly engaged employees may have an off-day and sometimes show below average or poor performance. Researchers have therefore begun to examine *daily changes* in work engagement. A within-person approach allows for a closer look at temporal patterns of work-related experiences and behaviours. Individuals are not equally engaged at work across all days. There are days on which employees feel more vigorous,

absorbed, and dedicated than on other days. Sonnentag et al. (2010) argued that averaging across these situations by assessing a general level of work engagement (i.e., by asking individuals to provide retrospective reports over the previous months and providing summary accounts of their psychological states), ignores the dynamic and configurational part of the work engagement phenomenon.

Sonnentag et al. (2010) summarized existing evidence that supports a state perspective. The authors discuss quantitative diary studies demonstrating that work engagement fluctuates substantially within individuals. In a typical diary study, 30–40% of the overall variance can be found at the day (i.e., within-individual) level and 60–70% of the overall variance is at the between-individual level. Sonnentag and her colleagues claim that in order to investigate the full phenomenological experience of work engagement, one has to focus on state work engagement as a momentary and transient experience that fluctuates within individuals within short periods of time (e.g., from hour to hour, or from day to day).

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 specific day. In addition, when daily changes in work engagement are temporarily separated from daily changes in outcomes like performance and job crafting, state work engagement could be causally related to such outcomes. Diary research may also reveal what the day-to-day triggers are of state engagement. Xanthopoulou and her colleagues found indeed evidence for unique effects of daily changes in social support on daily work engagement among fast-food restaurant employees (Xanthopoulou et al., 2009b) and among flight attendants (Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008).

Sonnentag et al. (2010) suggested intensifying conceptual development on day-specific (or even momentary) work engagement in order to arrive at a better understanding of how day-specific engagement corresponds to enduring engagement in experienced quality and configuration. As noted earlier, such considerations have important implications for the design of scale anchors used in measures aimed at assessing both state and enduring work engagement. This line of argument leads us to our third proposition:

> *Proposition 3:* Conceptualizations and measures of work engagement will need to more closely consider the dynamic, temporal, and configurational dimensions of the construct.

4. What is a ''climate for engagement''?

The notion of organizational climate is fundamental to the study of organizations and is widely regarded as an important determinant of

attitudinal, behavioural and performance related outcomes. Despite the large number of different conceptualizations, taxonomies, and measures of climate, there is broad agreement that organizational climate refers to employees' shared perceptions about formal and informal organizational structures, events, practices, policies, and procedures that are rewarded, supported, and expected in their organizational context (Reichers & Schneider, 1990).

Nevertheless, and irrespective of the widespread practical application of climate surveys as diagnostic tools for organizational improvement and change (Parker et al., 2003), there is ongoing debate as to whether climate is best conceptualized as a broad, generalizable construct (i.e., as organizational climate) or as a more specifically focused construct (Schneider, 2000) such as service climate, climate for innovation, or climate for safety. Additionally, Patterson et al. (2005) drew attention to the lack of underpinning theory for much of the research and practice on organizational climate and argued in support of the development of well-validated and theoretically grounded models and measures. It is our contention that a comprehensive understanding of the relationship between climate and engagement will best be achieved if researchers and practitioners can reach broad agreement on a core set of engagement-related climate dimensions analogous to the way in which broad agreement has been reached about the "Big 5" dimensions of personality (van den Berg & Wilderom, 2004).

Fortunately, researchers have come up with a range of theoretically coherent and integrated "systems" of organizational resources, antecedents, or drivers that help circumscribe the notion of "climate for engagement". Example systems or taxonomies include Brown and Leigh's (1996) psychological climate dimensions (supportive management, clarity, contribution, recognition, self-expression, and challenge), Riordan, Vandenberg, and Richardson's (2005) "employee involvement climate" (participation, information sharing and training, reward), and Lawler's (1993) "high involvement work practices" (participation/power/control, information, rewards, training/development).

We propose that the six areas of worklife (Leiter & Maslach, 1999; Maslach & Leiter, 1997, 2008) potentially provide an immediately useful way to conceptualize "climate for engagement". The six areas—workload, control, reward, community, fairness, and values—are similar to dimensions of existing models and measures of organizational climate (e.g., Koys & de Cotiis, 1991; Riordan et al., 2005) and provide a cohesive set of dimensions that have been previously linked both theoretically and empirically to burnout and engagement (e.g., Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001; Laschinger, in press; Leiter, Laschinger, Day, & Gilin-Oore, 2009). Furthermore, when measured as climate constructs (at the level of the unit or organization), the six areas can sensibly be modelled to influence

employee perceptions of job demands and job resources (measured at the level of the individual), which in turn have been shown to influence engagement (see also Dollard & Bakker, in press).

In sum, and drawing from the JD-R model (Bakker & Demerouti, 2007) and needs theories such as Self Determination Theory (Deci, Connell, & Ryan, 1989), we argue that when employees perceive that their organization provides a supportive, involving, and challenging climate, and hence accommodates their psychological needs, they are more likely to respond by investing time and energy and by being psychologically involved in the work of their organization. In effect, we position engagement as a key mediating variable, or explanatory mechanism, which explains how contextual variables such as climate and job resources influence important organizational outcome variables. This line of argument leads us to our fourth proposition:

> *Proposition 4:* A "climate for engagement" representing six key areas of worklife will serve as key contextual variable and have direct and indirect effects on how employees experience job resources, job demands, and engagement.

5. Can leaders influence follower engagement?

The role of the leader in fostering work engagement has received limited research attention. Bass (2005) differentiated between three broad leadership styles that vary from individual consideration and support for the employee (transformational style) to a proportional exchange between the leader and the employee (transactional style), or to no interest at all for the employee (laissez-faire style). We do not expect that the latter two leadership styles contribute to employees' work engagement substantially, because they lack motivational power and inspirational appeal.

Transformational leadership is defined as leadership behaviour that transforms the norms and values of the employees, motivating them to perform beyond their own expectations (Yukl, 1989). A central aspect of this leadership style is the inspiring vision of the supervisor. The transformational leadership style enhances employees' feelings of involvement, cohesiveness, commitment, potency, and performance (Shamir, House, & Arthur, 1993). An employee who receives support, inspiration, and quality coaching from the supervisor is likely to experience work as more challenging, involving, and satisfying, and, consequently, to become highly engaged with the job tasks.

We are aware of one diary study investigating whether supervisors' leadership style influences followers' daily work engagement. Tims, Bakker,

and Xanthopoulou (in press) predicted that transformational leadership would enhance employees' work engagement through the mediation of self-efficacy and optimism, on a day-to-day level. Forty-two employees first filled in a general questionnaire, and then a diary survey for 5 consecutive workdays. The results of multilevel analyses showed that optimism (but not self-efficacy) partially mediated the relationship between transformational leadership and work engagement. Thus, transformational leaders fostered followers' optimism, and indirectly contributed to followers' levels of vigour, dedication, and absorption. Future research should examine whether transformational leaders also influence followers' work environment, and indirectly their work engagement.

Perhaps alternative models of leadership can also be helpful in understanding when, how, and what kinds of leadership behaviour influence engagement. Empowering leadership, drawing as it does from high-involvement management research (e.g., Lawler, 1993), emphasizes the importance of leaders actively encouraging and enabling followers to lead themselves (Manz & Sims, 1987). Empowering leaders, by definition, empower their employees through autonomy, discretion, control, or decision latitude. Examples of empowering leader behaviours include encouraging participative decision making, leading by example, sharing information, coaching, and demonstrating concern for employees (Pearce & Sims, 2002; Srivastava, Bartol, & Locke, 2006). In response to these behaviours, and consistent with Self Determination Theory (Deci et al., 1989), employees can be expected to have enhanced role-related feelings of contribution, control, competence, connectedness, and meaningfulness. In effect, to feel and be more engaged.

More generally, Avolio, Zhu, Koh, and Bhatia (2004) argued that while leadership has been shown to be "positively associated with work attitudes and behaviours at both an individual and organizational level (Dumdum, Lowe, & Avolio, 2002; Lowe, Kroeck, & Sivasubramaniam, 1996), . . . the mechanisms and processes by which . . . leaders exert their influence on their followers' motivation and performance have not been adequately addressed in the literature" (p. 951). We here argue that leadership, and more specifically transformational and empowering leadership, will have a direct and positive influence on motivational constructs such as employee engagement. This influence can result, for example, from the communication of an inspirational vision and individualized consideration (Bass & Riggio, 2006), helping employees construe meaningfulness in their work (Arnold, Turner, Barling, Kelloway & McKee, 2007), or the experience of group positive emotions and mood (Bono & Ilies, 2006). More importantly, and consistent with arguments developed by Houghton and Yoho (2005), research needs to be conducted to determine the contingencies around which specific kinds of leadership style will result in different motivational,

attitudinal, behavioural, and performance outcomes. This line of argument leads us to our fifth proposition:

> *Proposition 5:* Transformational and empowering leadership will both lead to employee engagement albeit in different degrees under different conditions, and meta-analyses need to be conducted to more confidently establish the effect sizes.

6. Is engagement contagious?

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 (Bakker, Westman, & van Emmerik, 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 2229 officers working in one of 85 teams found that team-level work engagement was related to individual team members' engagement (vigour, dedication, and absorption), after controlling for individual members' job demands and resources. Thus, engaged workers who communicated their optimism, positive attitudes, and proactive behaviours 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 (vigour, 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. Hence, our sixth proposition:

> *Proposition 6:* Team engagement influences individual employee performance through individual level engagement.

7. Do engaged employees conserve their own work engagement?

According to Grant and Ashford (2008), "Employees do not just let life happen to them. Rather, they try to affect, shape, curtail, expand, and temper what happens in their lives" (p. 3). Employees may actively change the design of their jobs by choosing tasks, negotiating different job content, and assigning meaning to their tasks or jobs (Parker & Ohly, 2008). It is our view that particularly engaged employees will engage in such behaviour.

Wrzesniewski and Dutton (2001) call the process of employees shaping their own jobs as "job crafting". These authors assume that employees may make physical and cognitive changes in their tasks or relational boundaries. Physical changes refer to the form, scope, or number of job tasks, whereas cognitive changes refer to perception of the job. Relational boundaries include employees' discretion over their social interactions while doing the job.

Wrzesniewski, McCauley, Rozin, and Schwartz (1997) suggest that employees who view their work as a calling (i.e., focus on enjoyment or fulfilment) are more likely to engage in job crafting, because work is more central to their lives. In a similar vein, engaged employees may be more inclined to proactively change their job demands and resources so that their performance is optimal. It would be interesting to examine the strategies

employees use to increase their work engagement. Are engaged workers better able to mobilize their job resources? Do they search actively for feedback about their performance? Studies on engagement and job crafting may answer the question whether engaged employees really create virtuous circles (Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010).

There is some preliminary evidence for a relationship between engagement and job crafting. In a longitudinal study among Finnish dentists, Hakanen, Perhoniemi, and Toppinen-Tammer (2008) found a positive relationship between engagement on the one hand, and personal initiative and innovation on the other hand. They found that engaged dentists constantly made improvements in their work and gathered feedback and ideas for improvements from clients. Furthermore, a recent study among almost 750 young Finnish managers (Hyvönen, Feldt, Salmela-Aro, Kinnunen & Mäkikangas, 2009) showed that engaged managers were most eager to develop themselves in their job and increase their occupational knowledge. They were also most likely to have positive attitudes towards modernization and increased productivity. They tried to get their teams function better towards achieving jointly agreed goals, and endorsed the strongest drive to strive.

Taken together, these findings imply that engaged employees are not passive actors in work environments, but instead actively change their work environment if needed. Future research should investigate the extent to which engaged employees increase their job resources, for example, ask for feedback from their supervisor and mobilize their social network (Tims, Bakker, & Derks, 2010). Additionally, it is conceivable that engaged workers increase their job demands in order to create a challenging work environment. This line of argument leads us to our seventh proposition:

> *Proposition 7:* Engaged employees craft their own jobs—they increase their job challenges and job resources—in order to stay engaged.

8. Is there a dark side of engagement?

Virtually all studies on work engagement offer evidence for the benefits of the experience. Engaged employees have psychological capital, seem to create their own resources, perform better, and have happier clients. This raises the question whether there is also a dark side of work engagement. Previous research on positive organizational behaviour (POB) constructs has indeed shown that there can be a dark side of POB. 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).

Whereas previous research has identified several of the abovementioned qualities (e.g., self-esteem, optimism) as potential positive predictors of work engagement (Bakker & Leiter, 2010), it seems evident that "overengagement" 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. Indeed, Beckers et al. (2004) conducted a survey-study among a representative sample of the Dutch workforce and found that work engagement was positively related to working overtime. The work–life balance literature has consistently shown that work–home interference undermines recovery, and may consequently lead to health problems (Geurts & Demerouti, 2003).

In addition, there may be specific conditions under which work engagement is linked to worse performance. First, if those high in work engagement are highly aroused, then the levels of arousal might be distracting for cognitive performance (Beal, Weiss, Barros, & MacDermid, 2005). Second, high positive affect (which is related to engagement) is known to promote heuristic processing that might impede performance where detailed, controlled information processing is needed (see, for example, Martin & Clore, 2001). Future research should test these hypotheses.

Furthermore, one may wonder whether enduring 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. The design of future research should include ways of assessing potential long-term negative effects of high work engagement. The absorption component of work engagement seems a likely candidate for evoking unhealthy behaviour. Employees may become so immersed in their work that they forget to rest or to maintain their personal relationships. Consistent with this view, Halbesleben et al. (2009) found that engaged employees were most inclined to show extrarole work behaviours such as organizational citizenship behaviours. As a consequence, engaged employees were most likely to experience work–family conflict. These findings form the basis for our eighth proposition:

> *Proposition 8:* There is a limit to engagement. Particularly if engaged workers get overly involved in work activities, they may experience work–family conflict and other negative consequences.

9. Is engagement related to health?

To date, only few studies have addressed the relationship between work engagement and health. Demerouti et al. (2001) found moderate negative correlations between engagement (particularly vigour) and psychosomatic health complaints (e.g., headaches, chest pain). Hakanen, Bakker, and Schaufeli (2006) showed that work engagement was positively related to self-rated health and workability. Further, Peterson et al. (2008) found that engaged health care workers reported less back- and neck pain problems, and lower anxiety and depression. Finally, Shirom (2010) showed that vigour (physical strength, cognitive liveliness, and emotional energy) is positively related to mental and physical health. Since Wefald (2008) has shown positive relationships between the Shirom-Melamed vigour measure and work engagement, Shirom's findings can also be taken as evidence for a link between engagement and health.

However, recent research has generally failed to find evidence for a link between engagement and *physiological* indicators of health. Langelaan, Bakker, Schaufeli, van Rhenen, and van Doornen (2006, 2007) examined the relationship between burnout and work engagement on the one hand, and two physiological stress systems on the other hand, namely the Hypothalamic Pituitary Adrenal axis (HPA-axis) and the cardiac autonomic system. The HPA-axis is the central mechanism in the long-term adaptation of an individual to his or her environment. The cardiac autonomic system consists of two different branches, the sympathetic system and the parasympathetic (vagal) system. The sympathetic system is involved in activity and arousal (e.g., leading to elevated blood pressure and heart rate), whereas the parasympathetic system has a prominent role in recovery and restoration (e.g., leading to a reduction in heart rate).

With respect to the HPA-axis, Langelaan et al. (2006) found that their burned-out and engaged study groups differed neither from each other, nor from a control group, with respect to morning cortisol levels, the cortisol awakening response (CAR), DHEAS levels, and the cortisol/DHEAS ratio. Engaged employees only showed slightly better cortisol suppression than the burned-out and control group in response to dexamethasone, indicating a higher feedback sensitivity of their HPA-axis. Furthermore, burned-out and engaged employees did not differ either from each other or from a control group with regard to cardiac autonomic (sympathetic and parasympathetic) functioning, as ambulatory measured in their daily life (Langelaan et al., 2007). These findings were also not in line with predictions. It was hypothesized that burnout would be associated with increased sympathetic and/or reduced vagal control, whereas work engagement was expected to be associated with reduced sympathetic and/ or increased vagal control.

Taken together, previous studies suggest that engagement is related to better subjectively reported health. However, engagement is not accompanied by deviances in (stress) physiological functioning. Even using a sensitive design including extreme groups (burnout vs. engaged employees) did not produce the expected findings. The HPA-axis and the sympathetic and parasympathetic cardiac systems did not function more optimal in engaged employees than in "normal", healthy individuals. Future studies should try to illuminate physiological processes that explain the relationship between engagement and health. What is needed is sensitive in-depth research on the psychophysiological indicators of engagement, as well as longitudinal studies on the relationship between engagement and health. This line of argument leads us to our ninth proposition:

> *Proposition 9:* Engagement is related to self-reported health, but unrelated to known objective psychophysiological indicators of health. Future research needs to illuminate physiological processes that explain the relationship between engagement and health.

10. What are effective interventions for engagement?

Organizations have become increasingly interested in how to develop engagement in employees. Although to date "only very few interventions to improve work engagement exist and have been tested" (Schaufeli & Salanova, in press), it will be useful to classify engagement interventions in terms of organizational-, job-, and individual-level interventions. Some combination of interventions across the various levels will probably be needed to develop, embed, and sustain engagement in organizational settings.

Early evidence indicates that interventions to promote engagement require a sustained effort. Statements of good intentions, lofty values, and brief periods of cheerleading will not have a sustainable impact on employees' energy and identification with their work.

An example of a sustained intervention is the Civility Respect and Engagement at Work (CREW) programme that builds upon a 6-month sequence of group sessions following principles of organizational development to improve civility among colleagues (Osatuke et al., 2009). Leiter et al. (2009) determined that by increasing civility and decreasing incivility among colleagues, the process improved work engagement as indicated by more positive scores on the exhaustion and cynicism subscales of the MBI as well as on the short version of the UWES. They contend that a key to the effectiveness of this approach is its sustained implementation that permits employees to identify new ways of interacting with one another, opportunities to practise these new behaviours, and responsibility to the workgroup to make best efforts for improving their collegiality.

Organizational commitment to work engagement requires senior leadership endorsement that is ideally realized by acknowledging engagement as a core value. Regular employee surveys provide a means of monitoring engagement and its variations across units. An open, effective communication strategy will send that information to leaders who can use it to guide their development of employees.

In addition to workgroup programmes, such as CREW or other organizational development strategies, instituting engagement requires well thought-through policies that integrate engagement into decisions regarding performance management and career development. On an operational level, information about engagement successes and shortfalls across the organization would inform decisions on resource allocation. Also, engagement shortfalls may provide critical information to leadership about where the organization is failing to realize its espoused values. That is, employees' work engagement may provide a valuable, indirect signal regarding the quality of products and services.

Whereas engagement seems to be contagious and may spread across members of work teams (Bakker et al., 2006), leaders have a special role in fostering work engagement among their followers. It is to be expected that considerate leadership, and more particularly transformational leadership, is well suited for inspiring the open collaboration among employees that supports engagement. Indeed, research suggests that transformational leaders are key social resources for the development of employee engagement (Tims et al., in press).

If we next think of job level interventions, Bakker and Demerouti's (2008) model of work engagement holds straightforward and valuable implications for practice. It suggests that job and personal resources play an important role in engagement. Redesigning jobs in order to promote engagement boils down to increasing job resources. Developing social support and changing work procedures to enhance feedback and autonomy may create a structural basis for work engagement. Also, job rotation and changing jobs might result in higher engagement levels because they challenge employees, increase their motivation, and stimulate learning and professional development.

Finally, in terms of individual level intervention, programmes aimed at increasing work engagement could focus on building personal resources such as psychological capital (e.g., efficacy beliefs, optimism, hope, and resiliency) for employees. Additionally training, coaching, and developmental supports may aim, for example, at building positive affect, emotional intelligence, and positive adaptive behavioural strategies. Schaufeli and Salanova (in press), for example, provided an interesting overview of how positive psychology interventions, classified by behavioural, cognitive, and volitional strategies, might be deployed in organizational contexts. Example

behavioural strategies include developing signature strengths, expressing gratitude, and nurturing social relationships. Schaufeli and Salanova overview evidence in support of the effectiveness of each of these positive psychological intervention strategies. Ongoing research aimed at determining how best to adapt these individual-based strategies to different organizational contexts will of course be necessary.

Importantly, which ever strategies we implement in our attempts to enhance engagement in organizational contexts, there is a clear and ongoing need to systematically evaluate the effectiveness of such interventions across a range of different contexts. Conventional evaluation taxonomies (Kirkpatrick & Kirkpatrick, 2006) assessing the impact of engagement interventions at the level of reaction, learning, behaviour, outcomes, and return on investments might usefully be employed. On the basis of this overview, we formulated our last proposition:

> *Proposition 10:*   There is a strong theoretical case for interventions being able to influence engagement. Researchers need to line up with practitioners to show that engagement interventions work.

CONCLUSION

Despite the proliferation in engagement related research, and despite enormous advances having been made about how best to understand and manage engagement, we believe that the notion of work engagement is at something of a crossroads. Although one path might involve the ongoing proliferation of relatively disconnected research and practice using a diversity of models and measures, we believe the time is now ripe to agree some common ground, consolidate what we know, and leverage from this firm foundation additional research, which will redress fundamental issues that still require resolution. We have noted clear categories of "what we know" and clear categories of "what we don't know" and where we should focus our research and practice.

In terms of what we know, we argue there is a growing consensus that engagement can be defined in terms of high levels of energy and high levels of involvement in work (Bakker et al., 2008) and that the JD-R model (Bakker & Demerouti, 2007, 2008) provides a useful unifying theoretical platform to examine the causes and consequences of engagement. Ongoing research that acknowledges and builds on this consensus will help the study of engagement advance in a way that is coherent, systematic, and integrated. We also argue that the question "is engagement old wine in a new bottle?" is done and dusted. There is enough empirical evidence to debunk the notion that work engagement is nothing more than a repackaging of related constructs.

In terms of what we don't know about work engagement and the work that still needs to be conducted, we argue there is a need to develop existing measures to better capture both positive and negative aspects of engagement and adapt response anchors to accommodate both short-term and longer term time frames. We also argue that we need to pay more attention to the broader contextual organizational factors that impact on engagement. We propose that a "climate for engagement", represented by Maslach and Leiter's (1997) six areas of worklife, serves as a useful organizing framework for understanding how organizational context influences the downstream employees experience job resources, job demands, and engagement. Furthermore, we argue that we need to more fully understand the influence that transformational and empowering leadership has on engagement, and we need to more fully understand the crossover or emotional contagion dimensions of engagement in team contexts. In terms of outcomes, we argue in support of the need to illuminate physiological processes that explain the relationship between engagement and health.

Finally, we argue that, as we progress our understanding of the importance of work engagement in organizational contexts, the study of engagement needs to proceed from well-established psychological theories. We have proposed that through a focus on tried and tested theories and models such as the JD-R, six areas of worklife, and transformational leadership theory, we will no doubt derive a clearer understanding of how to intervene to improve engagement at the level of the individual, the team, the business unit, and the organization. Engagement researchers and practitioners need to be seen to be making a positive difference in organizational contexts, and the ongoing challenge is to continue to merge good science and good practice in the pursuit of this worthy objective.

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