

4

WIND OF CHANGE

Promising Work Engagement Interventions

Arnold B. Bakker and Tom L. Junker

When employees are engaged, they feel active, full of energy, are dedicated toward their tasks, and are often completely immersed in their work activities (Schaufeli & Bakker, 2023). This motivational state prepares workers to invest considerable physical, emotional, and mental effort in their work. Indeed, reviews and meta-analyses indicate that work engagement is positively related to creativity, prosocial behavior, task performance, and productivity (Bakker et al., 2023; Christian et al., 2011). Moreover, work engagement is negatively related to safety incidents, medical mistakes, and absenteeism (Prins et al., 2009; Schaufeli et al., 2009; Wachter & Yorio, 2014). Since work engagement is such an important determinant of employee functioning, it is crucial that we try to promote engagement among employees who struggle and sustain engagement among those who flourish.

In the present chapter, we discuss promising work engagement interventions. While some of these interventions have received considerable empirical support, other interventions are potentially promising but need further validation. This is an emerging field, in which engagement scholars have just started to develop and evaluate theory-based interventions. We discuss five different levels of intervention: (a) organizational level, (b) team level, (c) job level, (d) person level, and (e) activity level. Next to top-down job design approaches, these interventions include agile work practices, and focus on job crafting, personal resources, strengths use, proactive vitality management, and playful work design. We position each of these approaches in Job Demands–Resources (JD-R) theory (Bakker et al., 2023; Demerouti & Bakker, 2023) and discuss how the interventions and their blends can blow a wind of organizational change.

Work Engagement in JD-R Theory

Work engagement was introduced in the organizational and management literatures at the turn of the century (Schaufeli & Bakker, 2023). Although various definitions of work engagement exist, most definitions include a physical component (vigor, energy), an affective-motivational component (dedication, enthusiasm), and a cognitive component (concentration, absorption) (e.g., Rothbard, 2001; May et al., 2004). The work engagement concept quickly became popular since it was found to be a better predictor of job performance than job satisfaction (Christian et al., 2011; MacKay et al., 2017). Scholars have used various frameworks to predict engagement, but the most popular framework is arguably JD-R theory. For recent overviews and extensions, we refer to Bakker et al. (2023) and Demerouti and Bakker (2023). JD-R theory can predict a range of well-being indicators (ranging from strain to motivation), but for the purpose of the present chapter we focus on work engagement. Accordingly, work engagement is most likely when employees face challenging job demands and have access to a large pool of job and personal resources.

Challenge job demands are all facets of the job that cost considerable effort, but also offer opportunities for mastery and performance. Examples are task complexity, high responsibility, and deadlines. On the days employees are challenged, they stretch their skills and invest themselves fully in their work – fostering work engagement. Whether job demands are challenging is often influenced by subjective interpretation (Bakker & Sanz-Vergel, 2013). Job resources are all facets of the job that have motivating potential, facilitate learning and help deal with job demands (Bakker et al., 2023). Examples are social support and skill variety. When employees can collaborate well with their colleagues and use a variety of their skills and talents, they are more likely to feel energized and enthusiastic about their work. Finally, personal resources refer to employees' own cognitions – subjective beliefs regarding how much control they have over their external environment. Examples are optimism and self-efficacy. JD-R theory predicts, for instance, that employees who face a deadline are most likely to be engaged when they have a strong sense of self-efficacy or when there is ample support from others (e.g., Hakonen et al., 2005). It is the combination of job demands and resources that is essential for employee work engagement.

JD-R theory also proposes that employees can proactively influence their job demands and (job and personal) resources (Bakker & Demerouti, 2014). Bindl and Parker (2011) argue that proactive behavior involves self-initiated, anticipatory action aimed at changing either the situation or oneself. Some examples are taking charge to improve work methods, proactive problem solving, and proactive feedback seeking. Employees may also proactively optimize their job design by actively seeking job challenges and job resources. They may commence a new project, start networking, or ask colleagues for feedback and support. Such proactive behaviors

are called job crafting – behaviors that can increase person-job fit and facilitate meaningfulness and work engagement (Demerouti & Bakker, 2024). Employees may also identify their personal strengths so that they can start to do what they are naturally good at (Van Woerkom et al., 2016). In this way, they can increase their personal resources, including their self-efficacy, resilience, and optimism (Virga et al., 2023). Personal resources, in turn, help to deal with job demands and foster work engagement (e.g., Bakker et al., 2023; Bakker & Sanz-Vergel, 2013).

Although the focus in this chapter is on work engagement and performance, it is important to also consider that employees may feel stressed and unwell. According to the health impairment hypothesis in JD-R theory (Demerouti & Bakker, 2011), repeated exposure to (severe) job demands will lead to increased levels of strain (e.g., exhaustion, anxiety), which may first lead to minor (e.g., neck pain, stomach aches), and then to more serious health complaints (e.g., Type-2 diabetes, cardiovascular disease). Moreover, based on the theory, employees may enter a loss cycle in which the strain caused by job demands leads to maladaptive and self-undermining behaviors (e.g., making mistakes, creating conflicts) that result in even higher job demands. It is under these unfavorable conditions that employees are most in need of but are least inclined to proactively mobilize their job and personal resources (Bakker & De Vries, 2021; Roczniowska & Bakker, 2021). This is a paradox with important implications for work engagement interventions – as will be discussed in more detail later.

Organizational Level Interventions

Since job design is so important for employee work engagement, several attempts have been made to use organization-level interventions to optimize job demands and resources. A top-down job redesign approach necessitates a collaborative effort from organizational leaders who advocate the intended change and human resources (HR) professionals who enable the change. The redesign project ideally starts with an organization-wide assessment of job characteristics and levels of work engagement (Bakker & Demerouti, 2014). Comparing the mean levels of specific job demands and resources in departments and teams will help identify specific targets for job redesign. HR professionals may discuss job demands and resources in workshops with department and team leaders, and facilitate a discussion of relatively low, medium, or high levels of workload, emotional demands, social support, autonomy, and other demands and resources (Bakker & Demerouti, 2024). In this way, leaders are supported in making an accurate diagnosis of their own teams' job design, which forms the basis for possible interventions.

Holman and Axtell (2016) investigated the impact of a participative job redesign intervention in a call center. Representatives identified the most important tasks and obstacles and generated ideas about how to optimize job demands and resources. Results showed that the experimental job redesign intervention influenced a range of important organizational outcomes (i.e., employee well-being,

psychological contract fulfillment, and supervisor-rated job performance) through a change in job characteristics. This study is one of 55 promising organization-led work redesign interventions that were included in the systematic review of Knight and Parker (2021). This review concluded that work design interventions can lead to improvements in job resources, with strong evidence for the effectiveness of participative work redesign interventions (e.g., Holman & Axtell, 2016) and relational interventions (e.g., increasing structural social support; Parker et al., 2013).

Another interesting observation in Knight and Parker's (2021) review is that almost none of the organization-led interventions aimed to reduce job demands. However, in line with JD-R theory, the review suggests that the effects of work redesign interventions are stronger when job demands are high. This was particularly the case for interventions that aimed to increase job autonomy. For example, Cordery and colleagues (2010) found that an intervention that provided teams with more autonomy was especially useful for teams working on tasks with high operational uncertainty. Thus, it appears that organizations can expect larger benefits from work redesign when these interventions consider both job demands and job resources.

Team Level Interventions

A handful of studies have offered support for JD-R theory at the team level. These studies show that higher levels of collective work engagement can be found in groups that provide access to various job resources such as psychological safety (Peeters et al., 2022), psychological contract fulfillment (Laulié et al., in press), or psychological ownership (Martinaityte et al., 2020). Yet, because these studies are correlational and relate team engagement to other emergent psychological states it is unclear whether they can inform interventions to increase work engagement in teams. What could be more useful is to examine collective practices that can be implemented in teams and transform members' shared work experiences in ways that promote energy, enthusiasm, and absorption at work.

To fill this void in the current body of knowledge, Junker et al. (in press) investigated how agile work practices (AWPs) relate to team engagement. They sampled 110 teams at different stages of an agile transformation program in the digital service division of a German railway company. Their findings indicate that when teams make use of AWPs by planning tasks in short "sprint" cycles and approaching goals iteratively, team members experience work engagement more frequently. Agile taskwork practices were particularly useful for teams working on complex assignments (e.g., software development or consulting). Approaching tasks in short iterative goal cycles helps to mobilize cognitive-attentional resources (Lieberum et al., 2022), encourage proactive work behavior (Junker et al., 2022), and establish learning routines within teams (Annosi et al., 2020).

The study of Junker and colleagues (in press) also found that agile teamwork practices such as daily stand-up meetings and retrospective meetings can promote

team engagement, albeit only when team role conflict is absent. In addition, the effects of such team reflexivity interventions may be conditional on whether they lead to improvements in resources such as colleague support and job control. This is what an intervention study among 73 manufacturing teams in a Chinese factory suggests. In their nine-week quasi-experimental study, Chen and colleagues (2018) demonstrated that team reflexivity interventions can help to reduce burnout via changes in job resources. Although the study of Chen et al. (2018) did not include work engagement as an outcome, JD-R theory suggests we may find similar effects (i.e., job resources predict work engagement). In sum, AWP and other reflexive team practices (Junker et al., 2023, 2025) represent promising team-based work engagement interventions, but more research is needed to validate the generalizability of their effects.

Job Level Interventions

Job crafting refers to the proactive changes employees make in their tasks or social relationships at work (Wrzesniewski & Dutton, 2001). Task crafting refers to changing the content of one's tasks or the order in which tasks are carried out. Relational crafting refers to actively changing with whom one interacts at work, for example, spend more time with colleagues one gets along with well. According to Wrzesniewski and Dutton, employees may also change their perspective of their job (i.e., cognitive crafting). However, to date, most research has used the JD-R approach of job crafting, which proposes that employees can proactively optimize their job demands and resources (Tims & Bakker, 2010). Thus, employees who experience a misfit between their abilities or preferences and the requirements of work may optimize their job demands or try to seek new challenges (e.g., start a new project, take more responsibilities). In a similar vein, employees who want to satisfy their basic psychological needs of autonomy and relatedness may negotiate decision latitude and proactively ask for feedback and social support (Bakker & Oerlemans, 2019). Studies using the JD-R approach of job crafting have shown that job crafting is related to improved job demands and resources (Holman et al., 2024). By improving their job demands and resources, individuals increase their own work engagement, creativity, and performance (Demerouti & Bakker, 2024). Vogt et al. (2016) also found that job crafting is prospectively related to increases in personal resources (i.e., psychological capital).

Intervention studies have provided further evidence for these effects and indicate that job crafting has a causal impact on work design and work engagement. For example, Gordon et al. (2018) conducted two intervention studies in a Dutch hospital and found that nurses and medical specialists were more likely to use job crafting after the training intervention. Consequently, they increased their well-being (work engagement, health, reduced exhaustion), and job performance (i.e., adaptive, task, and contextual performance) relative to the control groups. In a similar vein, Van Wingerden et al. (2016, 2017a, 2017b) showed in a series of studies among teachers that job crafting interventions had a positive

impact on personal resources, basic need satisfaction, work engagement, and job performance. A recent meta-analysis of 14 job crafting intervention studies (Oprea et al., 2019) showed that employees can learn to proactively increase their own job challenges and resources and reduce their hindrance job demands. The job crafting behaviors, in turn, contributed to higher levels of work engagement and improved contextual performance.

Person Level Interventions

Personal Resources

Personal resources encompass the individual beliefs individuals hold regarding how much control they can exercise over their work environment (Hobfoll et al., 2003). These personal resources include optimism, self-efficacy, resilience, and self-esteem (Xanthopoulou et al., 2009). When employees are optimistic, they expect that the best will happen, and they are more likely to use an approach orientation to job demands. When employees feel resilient and self-efficacious, they feel that they can effectively handle complex work problems and requests of demanding clients – they have the psychological resources to turn these job demands into a challenge.

Several studies have shown that personal resources can be increased through training interventions. For example, while the effect size was modest, a study by Luthans et al. (2008) demonstrated that a brief two-hour web-based training could enhance personal resources like hope, self-efficacy, optimism, and resilience, collectively referred to as “psychological capital.” Employing a more intense approach, Demerouti et al. (2011) revealed that a personal effectiveness intervention involving four 3-hour group training sessions improved self- and other-assessments of psychological capital and assertiveness. In a comparable vein, Van Wingerden et al. (2017b) showed that a personal resources intervention comprising three 3-hour group training sessions enhanced employees’ psychological capital.

JD-R theory proposes that personal resources can be used to deal with job demands (e.g., Bakker & Sanz-Vergel, 2013). Personal resources can also generate new job resources and indirectly foster work engagement. Xanthopoulou et al. (2009) found that employees with higher levels of personal resources reported more job resources over time (e.g., social support and opportunities for growth). Employees who feel confident are more likely to seek job resources and negotiate with their supervisor regarding their training opportunities and the timing of their work. Resourceful employees are therefore more likely to be engaged at work (Knight et al., 2017).

Interventions that directly build personal resources foster work engagement, as individual self-evaluations become more positive. When individuals have a more positive view of themselves, they believe they are able to meet work demands and achieve their goals despite adversity (Bakker et al., 2023). Individuals who have developed a sense of self-efficacy and resilience will persevere and continue to invest themselves in work to achieve their goals (Xanthopoulou et al., 2009).

Moreover, personal resources training enables employees to leverage their strengths and better cope with emotional demands. In this way, they can maintain their work engagement over time (Bakker & Van Wingerden, 2021).

Strengths Use

JD-R theory proposes that employees can also try to discover and more often use their strengths at work (Bakker & Van Woerkom, 2018). Character strengths refer to all the things people are really good at – their natural talents (Wood et al., 2011), such as social skills, creativity, or bravery. When employees use their talent to be creative – also when there are no creativity requirements, they will be better able to solve complex work problems and deal with other demands. An employee who is highly skilled socially could try to more often engage in work tasks that involve interacting with others. In this way, employees can do what they are naturally good at. Strength use implies that one chooses tasks that are a good fit with personal strengths, in this way optimizing job demands and generating personal resources. Using a weekly diary study among engineers, Van Woerkom et al. (2016) found that when engineers used their signature strengths, they were more proactive and self-efficacious, and consequently experienced higher work engagement. Moore et al. (2024) found that when employees used their strengths in the morning, they generated more momentary personal resources (e.g., relatedness, competence) at noon, and consequently performed better in the afternoon.

Many individuals lack self-awareness regarding their inherent strengths, consequently failing to fully realize their potential. Moore et al. (2022) found that employees were more likely to use their strengths when their organization supported strengths use and offered opportunities for professional development. Strengths use, in turn, was related to vitality and learning – particularly when colleagues recognized employees' strengths. Recent studies have shown that employees can learn to make better use of their strengths. Harzer and Ruch (2016) used a web-based intervention to instruct participants to use their four highest character strengths more often and in new ways at work for four weeks. Relative to a placebo control group, the intervention group reported increased levels of calling and life satisfaction. The participants started to see their work as a vocation and thus increased the purpose and meaning of their work. In a similar vein, Tobias et al. (2023) found that older (but not younger) employees who learned to use their strengths through an intervention training reported increased vitality and job performance (compared to a control group). Taken together, this literature suggests that strengths use generates personal resources with which employees can craft their tasks to stay engaged at work.

Proactive Vitality Management

Proactive vitality management is an individual strategy that employees use to proactively optimize their own energetic, affective, and cognitive resources

(Op den Kamp et al., 2018). Thus, a person may intentionally take a walk in the park to feel energized or take the initiative to meet inspiring others to test new ideas. Whereas job crafting is about changing the job, proactive vitality management is about changing aspects of the self. By taking anticipatory action to manage their psychological and physical energy, employees can become more capable and productive in their work. Proactive vitality management is different from work recovery in that the latter is *reactive*: in response to work-related strain, individuals may try to *rebuild* energetic and affective resources through psychological detachment, relaxation, or mastery experiences. In contrast, when using proactive vitality management, employees take preemptive measures to conserve and optimize their energetic, affective, and cognitive resources (e.g., their cognitive flexibility, physical energy) (Op den Kamp et al., 2023).

Op den Kamp and colleagues (2018) found that employees working in finance, health care, hospitality industry, and other sectors who proactively managed their vitality were more creative, particularly when they had good self-insight and when the organization supported creative ideas. Expanding this study, Bakker et al. (2020) argued and showed that weekly proactive vitality management was predictive of creativity through weekly work engagement, particularly for employees with a high (vs. low) learning goal orientation. Moreover, Op den Kamp et al. (2023) found that proactive vitality management facilitated a state of mindfulness, which, in turn, facilitated creativity (originality, and fluency). Thus, the proactive regulation of one's energy helps paying careful attention to work activities, which in turn fosters creative work performance.

Employees may trigger their own proactive attempts to be physically active by using *self-nudging*. According to nudge theory (Thaler & Sunstein, 2008), individuals often make their choices on the basis of heuristics. This suggests that by adjusting the choice architecture of their immediate work or home environment, individuals may influence their own physical activity (and other relevant behaviors). In an unpublished ten-day diary study among employees working at a real estate company, To and Bakker (2018) found that self-nudging was positively related to physical activity. Employees who reminded themselves to walk, use the stairs, or proactively talked about their fitness goals with others experienced higher levels of daily energy and reported better mental health. Interventions to increase proactive vitality management through training efforts have started but still need to be empirically evaluated.

Activity Level Interventions

Even with optimized job design, certain daily stressors or events can undermine employee work engagement. Consider Dr. Brandao, a pediatric surgeon, who found separating children from their parents before surgery emotionally taxing (The Sun, 2023). To alleviate distress, he introduced superhero costumes, empowering the young patients to embrace their inner heroes by “flying” into the operating room

carried by him. This playful approach positively impacted children's experiences while bringing joy to medical staff, demonstrating how a creative approach to work activities can enhance engagement despite challenging circumstances.

Playful work design involves employees proactively introducing elements of fun and competition into their work activities (Scharp et al., 2023). Through this strategy, employees intentionally alter how tasks are approached and executed, leveraging play to regulate cognitions and emotions and foster active learning (Celestine & Yeo, 2021). Essentially, playful work design is a proactive cognitive-behavioral strategy to enhance the interest and meaning derived from work itself. Playful work design differs from job crafting which operates at a higher-order level (considering the job as a whole and in relation to the organization; Bindl et al., 2019). In contrast, playful work design involves behaviors and thoughts that directly facilitate task execution (by making specific tasks more interesting, playful, challenging, and entertaining). Research has indeed shown that job crafting and playful work design have unique effects on performance (Bakker & Scharp, in press).

Scharp et al. (2021) showed that on the days employees designed their work-tasks to be more fun, they were better able to cope with emotionally demanding social interactions, and protect their level of work engagement. In addition, on the days employees playfully designed their work to be more challenging or competitive, they were better able to deal with monotonous, simple, or repetitive tasks. In another daily diary study, Scharp et al. (2019) showed that playful work design facilitated daily work engagement and creativity. Moreover, they found that trait openness and trait playfulness strengthened the impact of designing fun and competition on work engagement (and indirectly on creative performance), indicating that some individuals are better able to benefit from playful work design than others.

Playful work design is a strategy that can be used to increase work engagement during work episodes, and can be used at the activity level. Consistent with JD-R theory, recent research has indicated that employees are most engaged and least exhausted on the days they *combine* the strategies of designing fun and designing competition (see, Bakker & Scharp, in press). The reason for this is that one these days, employees optimize their episodic demands and resources.

Discussion

In this chapter, we presented several possible strategies to increase work engagement. While some of these strategies have received considerable empirical support, other strategies are promising but need further testing in experimental intervention research. We distinguished five levels of intervention: (a) organizational level, primarily top-down job design; (b) team level – use of agile work practices; (c) job level – job crafting, (d) person level – including personal resources, strengths use, and proactive vitality management; and (e) activity level – playful word design. We positioned these approaches in JD-R theory (Bakker et al., 2023; Demerouti &

Bakker, 2023) and described how the various interventions contribute to work engagement, performance, and other individual and organizational outcomes. We will now use this section to discuss how a tailored approach and *blends* of interventions from different levels may facilitate work engagement.

An important starting point for our discussion is that employees who work in the same organization usually have different abilities, needs, personalities, and (starting) levels of work engagement. In most interventions, such differences are largely ignored. Top-down job redesign interventions ideally start with assessing the overall levels of job demands and resources to make an adequate diagnosis of the work design of teams, departments, and the organization at large (Bakker & Demerouti, 2014, 2018). On the basis of such an assessment, it can be determined which job demands and resources in different parts of the organization need to be optimized. The top-down intervention could take the form of participative job redesign, in which employees, leaders, and experts identify the most important events, tasks, and obstacles and generate ideas about how to optimize job demands and resources in the organization. Research has shown that such an intervention can be effective (Holman & Axtell, 2016). However, this approach overlooks possible differences *within* teams and departments. It is well conceivable that in the same department some employees are highly engaged and have access to an abundance of job resources such as social support, feedback, and skill variety, whereas others are less engaged because they hardly have access to these resources. By looking at team averages, such differences cannot be observed. Differences within teams and departments could be due to the existence of subgroups of workers in the same team. There may be low vs. high interdependency between team members, low vs. high frequency of contact (e.g., depending on agile teamwork), or differential treatment by the team leader, to name only a few possible reasons. Thus, even when a top-down intervention is based on a robust diagnosis (validated questionnaires, reliable indicators), a one-size-fits-all approach may only be effective to a limited extent. We argue that top-down interventions should always be combined with bottom-up interventions to maximize their effectiveness in improving work engagement (cf. Kompier et al., 2000).

Blends Are Better

Although bottom-up interventions such as job crafting are typically tailored to individual participants' needs, abilities, and preferences (Demerouti & Bakker, 2024), individual participants' levels of work engagement are usually not taken into account when designing the intervention. Thus, an employee who participates in a job crafting training may learn how to identify the personally most important job demands and resources, and then set personal goals regarding how to optimize those demands and resources through job crafting. As another example, a participant in a strengths use intervention may learn to recognize and actively use their character strengths, for example frequently use their creativity and social

skills in new ways in order to feel self-efficacious and be engaged. However, when considering the starting level of work engagement, one will find out that some employees are highly engaged, others show average levels of work engagement, and a third group may be low on engagement. Accounting for baseline levels of work engagement is crucial, because job crafting and strengths use do cost effort and energy (Bakker & Oerlemans, 2019). Moreover, disengaged employees are less likely to benefit from the proactive work behaviors they learn in a training (Bakker, 2018; Bakker & De Vries, 2021).

Some previous studies have suggested that combining multiple proactive work behaviors can produce synergistic benefits for well-being. For example, Seppälä et al. (2020) discovered that while decreasing hindrance job demands alone led to decreased engagement over time, this negative impact was counterbalanced when employees simultaneously increased their challenge job demands. This finding suggests that a blend of proactive strategies, such as minimizing hindrances while actively seeking challenges, can have a complementary effect on sustaining high levels of work engagement. In a similar vein, Zacher et al. (2014) found that prioritizing important work goals (selection) was especially predictive of daily work engagement when employees simultaneously invested resources to attain those goals (optimization). Additionally, Dysvik et al. (2013) found that simultaneously satisfying multiple basic psychological needs yielded the highest level of intrinsic motivation. These findings further highlight how integrating complementary proactive strategies can amplify positive outcomes like engagement through their mutually reinforcing effects.

Conclusion

In this chapter, we discussed various strategies to improve work engagement. We argued that organizational scholars and practitioners should use a combination of top-down and bottom-up interventions, and may use a blend of interventions to foster work engagement and reap other benefits. We have theory and validated instruments to find out which interventions will be most beneficial for which employees. Now it is time to use this knowledge to effectively foster engagement in the workplace.

References

- Annosi, M. C., Martini, A., Brunetta, F., & Marchegiani, L. (2020). Learning in an agile setting: A multilevel research study on the evolution of organizational routines. *Journal of Business Research*, *110*, 554–566.
- Bakker, A. B. (2018). Job crafting among health care professionals: The role of work engagement. *Journal of Nursing Management*, *26*, 321–331.
- Bakker, A. B., & Demerouti, E. (2014). Job demands-resource theory. In P. Y. Chen & C. L. Cooper (Eds.), *Wellbeing: A complete reference guide* (Volume III: pp. 37–64). Hoboken, New Jersey: Wiley-Blackwell.

- Bakker, A. B., & Demerouti, E. (2018). Multiple levels in job demands-resources theory: Implications for employee well-being and performance. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City: DEF Publishers. DOI:nobascholar.com
- Bakker, A. B., & Demerouti, E. (2024). Job demands–resources theory: Frequently-asked questions. *Journal of Occupational Health Psychology*, 29(3), 188–200. <https://doi.org/10.1037/ocp0000376>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 25–53.
- Bakker, A. B., & Oerlemans, W. G. M. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior*, 112, 417–430.
- Bakker, A. B., Petrou, P., Op den Kamp, E. M., & Tims, M. (2020). Proactive vitality management, work engagement, and creativity: The role of goal orientation. *Applied Psychology: An International Review*, 69, 351–378.
- Bakker, A. B., & Sanz-Vergel, A. I. (2013). Weekly work engagement and flourishing: The role of hindrance and challenge demands. *Journal of Vocational Behavior*, 83, 397–409.
- Bakker, A. B., & Scharp, Y. S. (in press). It pays to play: Playful work design. In S. Parker, F. Klonek, C. Knight, & F. Zhang (Eds.), *Transformative work design: Synthesis and new directions*. SIOP Frontier Series.
- Bakker, A. B., & van Wingerden, J. (2021). Do personal resources and strengths use increase work engagement? The effects of a training intervention. *Journal of Occupational Health Psychology*, 26(1), 20–30.
- Bakker, A. B., & Van Woerkom, M. (2018). Strengths use in organizations: A positive approach of occupational health. *Canadian Psychology*, 59, 38–46.
- Bindl, U. K., & Parker, S. K. (2011). Proactive work behavior: Forward-thinking and change-oriented action in organizations. In S. Zedeck (Ed.), *APA handbook of industrial and organizational psychology, Vol. 2. Selecting and developing members for the organization* (pp. 567–598). American Psychological Association.
- Bindl, U. K., Unsworth, K. L., Gibson, C. B., & Stride, C. B. (2019). Job crafting revisited: Implications of an extended framework for active changes at work. *Journal of Applied Psychology*, 104(5), 605–628.
- Celestine, N. A., & Yeo, G. (2021). Having some fun with it: A theoretical review and typology of activity-based play-at-work. *Journal of Organizational Behavior*, 42(2), 252–268.
- Chen, J., Bamberger, P. A., Song, Y., & Vashdi, D. R. (2018). The effects of team reflexivity on psychological well-being in manufacturing teams. *Journal of Applied Psychology*, 103(4), 443–462.
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64, 89–136.
- Cordery, J., Morrison, D., Wright, B., & Wall, T. (2010). The impact of autonomy and task uncertainty on team performance: A longitudinal field study. *Journal of Organizational Behavior*, 31, 240–258.
- Demerouti, E., & Bakker, A. B. (2011). The Job demands–resources model: Challenges for future research. *South African Journal of Industrial Psychology*, 37, 1–9.
- Demerouti, E., & Bakker, A. B. (2023). Job demands-resources theory in times of crises: New propositions. *Organizational Psychology Review*, 13, 209–236.

- Demerouti, E., & Bakker, A. B. (2024). Job crafting: A powerful job redesign approach. In M. C. W. Peeters, J. de Jonge, & T. Taris (Eds.), *An introduction to contemporary work psychology*. (pp. 524–543). Hoboken, New Jersey: Wiley.
- Demerouti, E., Van Eeuwijk, E., Snelder, M., & Wild, U. (2011). Assessing the effects of a “personal effectiveness” training on psychological capital, assertiveness and self-awareness using self-other agreement. *The Career Development International*, *16*, 60–81.
- Dysvik, A., Kuvaas, B., & Gagné, M. (2013). An investigation of the unique, synergistic and balanced relationships between basic psychological needs and intrinsic motivation. *Journal of Applied Social Psychology*, *43*, 1050–1064.
- Gordon, H. J., Demerouti, E., LeBlanc, P. M., Bakker, A. B., Bipp, T., & Verhagen, M. A. (2018). Individual job redesign: Job crafting interventions in health care. *Journal of Vocational Behavior*, *104*, 98–114.
- Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences*, *113*, 479–487.
- Harzer, C., & Ruch, W. (2016). Your strengths are calling: Preliminary results of a web-based strengths intervention to increase calling. *Journal of Happiness Studies*, *17*, 2237–2256.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, *84*(3), 632.
- Holman, D., & Axtell, C. (2016). Can job redesign interventions influence a broad range of employee outcomes by changing multiple job characteristics? A quasi-experimental study. *Journal of Occupational Health Psychology*, *21*(3), 284.
- Holman, D., Escaffi-Schwarz, M., Vasquez, C. A., Irmer, J. P., & Zapf, D. (2024). Does job crafting affect employee outcomes via job characteristics? A meta-analytic test of a key job crafting mechanism. *Journal of Occupational and Organizational Psychology*, *97*(1), 47–73.
- Junker, T. L., Bakker, A. B., Derks, D., & Pletzer, J. L. (in press). Work engagement in agile teams: Extending multilevel JD-R theory. *Journal of Organizational Behavior*; DOI: 10.1002/job.2860
- Junker, T. L., Bakker, A., & Derks, D. (2024). Toward a theory of team resource mobilization: A systematic review and model of sustained agile team effectiveness. *Human Resource Management Review*, *2021*(1), 15727.
- Junker, T. L., Bakker, A. B., Derks, D., & Molenaar, D. (2023). Agile work practices: Measurement and mechanisms. *European Journal of Work and Organizational Psychology*, *32*(1), 1–22.
- Junker, T. L., Bakker, A. B., Gorgievski, M. J., & Derks, D. (2022). Agile work practices and employee proactivity: A multilevel study. *Human Relations*, *75*(2), 2189–2217.
- Knight, C., & Parker, S. K. (2021). How work redesign interventions affect performance: An evidence-based model from a systematic review. *Human Relations*, *74*(1), 69–104.
- Knight, C., Patterson, M., & Dawson, J. (2017). Building work engagement: A systematic review and meta-analysis investigating the effectiveness of work engagement interventions. *Journal of Organizational Behavior*, *38*(6), 792–812.
- Kompier, M. A. J., Cooper, C. L., & Geurts, S. A. E. (2000). A multiple case study approach to work stress prevention in Europe. *European Journal of Work & Organizational Psychology*, *9*, 371–400.
- Laulié, L., Tekleab, A. G., & Rousseau, D. M. (in press). Psychological contracts at different levels: The cross-level and comparative multilevel effects of team psychological contract fulfillment. *Group & Organization Management*, 10596011231203365.

- Lieberum, T., Schiffels, S., & Kolisch, R. (2022). Should we all work in Sprints? How Agile Project Management improves performance. *Manufacturing & Service Operations Management*, 24(4), 2293–2309.
- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning and Education*, 7, 209–221.
- Mackay, M. M., Allen, J. A., & Landis, R. S. (2017). Investigating the incremental validity of employee engagement in the prediction of employee effectiveness: A meta-analytic path analysis. *Human Resource Management Review*, 27, 108–120.
- Martinaityte, I., Unsworth, K. L., & Sacramento, C. A. (2020). Is the project ‘mine’ or ‘ours’? A multilevel investigation of the effects of individual and collective psychological ownership. *Journal of Occupational and Organizational Psychology*, 93(2), 302–327.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.
- Moore, H. L., Bakker, A. B., & van Mierlo, H. (2022). Using strengths and thriving at work: The role of colleague strengths recognition and organizational context. *European Journal of Work and Organizational Psychology*, 31(2), 260–272.
- Moore, H. L., Bakker, A. B., Van Mierlo, H., & Van Woerkom, M. (2024). Daily strengths use and work performance: A self-determination perspective. *Journal of Organizational and Occupational Psychology*, 97, 190–208.
- Op den Kamp, E., Tims, M., Bakker, A. B., & Demerouti, E. (2018). Proactive vitality management in the work context: Development and validation of a new instrument. *European Journal of Work and Organizational Psychology*, 27, 493–505.
- Op den Kamp, E., Tims, M., Bakker, A. B., & Demerouti, E. (2023). Creating a creative state of mind: Promoting creativity through proactive vitality management and mindfulness. *Applied Psychology: An International Review*, 72, 743–768.
- Oprea, B. T., Barzin, L., Virgă, D., Iliescu, D., & Rusu, A. (2019). Effectiveness of job crafting interventions: A meta-analysis and utility analysis. *European Journal of Work and Organizational Psychology*, 28, 723–741.
- Parker, S. K., Johnson, A., Collins, C., & Nguyen, H. (2013). Making the most of structural support: Moderating influence of employees’ clarity and negative affect. *Academy of Management Journal*, 56(3), 867–892.
- Peeters, T., Van De Voorde, K., & Paauwe, J. (2022). The effects of working agile on team performance and engagement. *Team Performance Management: An International Journal*, 28(1), 61–78.
- Prins, J. T., van der Heijden, F. M., Hoekstra-Weebers, J. E., Bakker, A. B., van de Wiel, H. B., Jacobs, B., & Gazendam-Donofrio, S. M. (2009). Burnout, engagement and resident physicians’ self-reported errors. *Psychology, Health & Medicine*, 14, 654–666.
- Roczniewska, M., & Bakker, A. B. (2021). Burnout and self-regulation failure: A diary study of self-undermining and job crafting among nurses. *Journal of Advanced Nursing*, 77, 3424–3435.
- Rothbard, N. P. (2001). “Enriching or depleting?” The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46, 655–684.
- Scharp, Y., Bakker, A. B., Breevaart, K., Kruup, K., & Uusberg, A. (2023). Playful work design: Conceptualization, measurement, and validity. *Human Relations*, 76, 509–550.
- Scharp, Y. S., Breevaart, K., & Bakker, A. B. (2021). Using playful work design to deal with hindrance job demands: A quantitative diary study. *Journal of Occupational Health Psychology*, 26, 175–188.

- Scharp, Y. S., Breevaart, K., Bakker, A. B., & Van der Linden, D. (2019). Daily playful work design: A trait activation perspective. *Journal of Research in Personality, 82*, 103850.
- Schaufeli, W. B., & Bakker, A. B. (2023). Work engagement: A critical assessment of the concept and its measurement. In W. Ruch, A. B. Bakker, L. Tay, & F. Gander (Eds.), *Handbook of positive psychology assessment* (pp. 273–295). Amsterdam, The Netherlands: Hogrefe.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement and sickness absenteeism. *Journal of Organizational Behavior, 30*, 893–917.
- Seppälä, P., Harju, L., & Hakanen, J. J. (2020). Interactions of approach and avoidance job crafting and work engagement: A comparison between employees affected and not affected by organizational changes. *International Journal of Environmental Research and Public Health, 17*, 9084.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- The Sun (2023). Brazilian doctor dresses children in superhero costumes to ease surgical anxiety. Retrieved on 13 May 2024 from <https://thesun.my/style-life/going-viral/brazilian-doctor-dresses-children-in-superhero-costumes-to-ease-surgical-anxiety-BN11499811>.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *South African Journal of Industrial Psychology, 36*, 1–9.
- To, F., & Bakker, A. B. (2018). *Self-initiated nudging for physical activity: A diary study*. Internal report. Center of Excellence for Positive Organizational Psychology. Erasmus University Rotterdam.
- Tobias, V. Y., van Woerkom, M., Meyers, M. C., Runhaar, P., & Bakker, A. B. (2023). Thriving on strengths: Effects of a strengths intervention for younger and older teachers. *Journal of Happiness Studies, 24*(3), 1121–1144.
- Van Wingerden, J., Bakker, A. B., & Derks, D. (2016). A test of a job demands–resources intervention. *Journal of Managerial Psychology, 31*, 686–701.
- Van Wingerden, J., Bakker, A. B., & Derks, D. (2017a). The longitudinal impact of a job crafting intervention. *European Journal of Work and Organizational Psychology, 26*, 107–119.
- Van Wingerden, J., Derks, D., & Bakker, A. B. (2017b). The impact of personal resources and job crafting interventions on work engagement and performance. *Human Resources Management, 56*, 51–67.
- Van Woerkom, M., Oerlemans, W., & Bakker, A. B. (2016). Strengths use and work engagement: A weekly diary study. *European Journal of Work and Organizational Psychology, 25*, 384–397.
- Virga, D., Rusu, A., Pap, Z., Maricuțoiu, L., & Tisu, L. (2023). Effectiveness of strengths use interventions in organizations: A pre-registered meta-analysis of controlled trials. *Applied Psychology, 72*, 1653–1693.
- Vogt, K., Hakanen, J. J., Brauchli, R., Jenny, G. J., & Bauer, G. F. (2016). The consequences of job crafting: A three-wave study. *European Journal of Work and Organizational Psychology, 25*(3), 353–362.
- Wachter, J. K., & Yorlino, P. L. (2014). A system of safety management practices and worker engagement for reducing and preventing accidents: An empirical and theoretical investigation. *Accident Analysis and Prevention, 68*, 117–130.
- Wood, A. M., Linley, P. A., Maltby, J., Kashdan, T. B., & Hurling, R. (2011). Using personal and psychological strengths leads to increases in well-being over time: A longitudinal

- study and the development of the strengths use questionnaire. *Personality and Individual Differences*, 50, 15–19.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, 26(2), 179–201.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235–244.
- Zacher, H., Chan, F., Bakker, A. B., & Demerouti, E. (2014). Selection, optimization, and compensation strategies: Interactive effects on daily work engagement. *Journal of Vocational Behavior*, 87, 101–107.