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Recovery from job stress: The stressor-detachment model as an integrative framework

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Summary This paper reviews empirical evidence on psychological detachment from work during nonwork time. Psychological detachment as a core recovery experience refers to refraining from job-related activities and thoughts during nonwork time; it implies to mentally disengage from one's job while being away from work. Using the stressor-detachment model as an organizing framework, we describe findings from between-person and within-person studies, relying on cross-sectional, longitudinal, and daily-diary designs. Overall, research shows that job stressors, particularly workload, predict low levels of psychological detachment. A lack of detachment in turn predicts high strain levels and poor individual well-being (e.g., burnout and lower life satisfaction). Psychological detachment seems to be both a mediator and a moderator in the relationship between job stressors on the one hand and strain and poor well-being on the other hand. We propose possible extensions of the stressor-detachment model by suggesting moderator variables grounded in the transactional stress model. We further discuss avenues for future research and offer practical implications. Copyright © 2014 John Wiley & Sons, Ltd.

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Work in modern organizations is very demanding. Employees face high levels of workload and increased job insecurity, often accompanied by high cognitive and emotional demands as well as continuous organizational change efforts (American Psychological Association, 2013; Casey, 2012; Eurofond, 2012). To successfully meet these demands and to stay healthy, it is not enough that employees are highly skilled, knowledgeable, and motivated (Ployhart & Moliterno, 2011). They also need to be in optimal physical and psychological states in order to maintain high levels of energy, focus, and engagement over time (Bakker, 2011). Research in organizational psychology and related fields has identified recovery from work as an important mechanism that explains how employees can stay energetic, engaged, and healthy, even when facing high job demands (Sonnentag, Binnewies, & Mojza, 2010; Trougakos, Beal, Green, & Weiss, 2008). Recovery from work refers to the process of reducing or eliminating physical and psychological strain symptoms that have been caused by job demands and stressful events at work (Craig & Cooper, 1992; Meijman & Mulder, 1998). In recent years, the number of empirical studies on recovery from work has increased substantially (e.g., Bakker, Demerouti, Oerlemans, & Sonnentag, 2013; Davidson et al., 2010; Fritz, Sonnentag, Spector, & McInroe, 2010). Overall, these studies demonstrated that recovery processes during leisure time predict employee strain reactions, well-being, and job-related behaviors. One particularly powerful recovery experience is psychological detachment from work during nonwork time. Psychological detachment means refraining from job-related activities and mentally disengaging from work during time off the job. Of course, psychological detachment is not the only experience that supports the recovery process. For instance, experiences such as relaxation, mastery, control, meaning, and affiliation are important as well (Newman, Tay, & Diener, in press; Sonnentag & Fritz, 2007). We focus on psychological detachment because it is a prototypical recovery experience and because it has been shown to have particularly strong associations with employee outcomes (Sonnentag & Fritz, 2007).

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A literature search in the PsycInfo database conducted in November 2013 identified 11 journal papers that addressed psychological detachment as a recovery experience in the years between 1998 and 2009 and 32 between 2010 and 2013, demonstrating a rapid growth of this research area. Most of these studies are based on rather broad conceptualizations of recovery processes and personal resources (e.g., effort recovery model, Meijman & Mulder, 1998; conservation of resources theory, Hobfoll, 1998) and lack a coherent framework that specifically focuses on the detachment experience. A comprehensive model on the role of psychological detachment in the job-stress context is missing. Such a model, however, is highly needed in order to explain how and when stressful work experiences translate into poor health and well-being. By specifically focusing on psychological detachment as a core recovery experience, such a model helps in better understanding the psychological mechanisms underlying the stressor–strain process.

In this review, we provide an overview of empirical research on psychological detachment from work during nonwork time by organizing the findings within a stressor-detachment model (Sonnentag, 2010). In essence, the stressor-detachment model proposes that job stressors impede psychological detachment from work during nonwork time, mainly because job stressors increase negative activation—a state that makes it difficult to psychologically detach from work. Thus, the model suggests that when employees are exposed to job stressors, they find it more difficult to psychologically detach from work—although they are in a particular need for detachment and recovery (deCroon, Sluiter, Blonk, Broersen, & Frings-Dresen, 2004). A lack of psychological detachment in turn will further increase strain reactions and impair affective states and well-being. Lack of psychological detachment is a partial mediator linking job stressors and strains. Moreover, the stressor-detachment model proposes that psychological detachment attenuates the association between job stressors and strains.

Our review goes beyond earlier review chapters and articles on job stress that have focused on coping processes (Dewe & Cooper, 2007), job-stress interventions (Bowling, Beehr, & Grebner, 2012), or agency and interpretation processes (Daniels, 2011). Specifically, it targets psychological detachment as one powerful mechanism in the stressor–strain process. Thereby, it is also more focused than previous reviews that covered recovery processes more widely (Demerouti, Bakker, Geurts, & Taris, 2009; Geurts & Sonnentag, 2006). At the same time, it broadens the scope by not only focusing on day-level studies (Demerouti et al., 2009) and by including the extensive research that has been published during very recent years.

Our review is organized as follows: after introducing the core concepts to be examined, we will describe the stressor-detachment model addressing various time perspectives. We will then review empirical research on the relationship between lack of psychological detachment from work on the one hand and strain and poor well-being on the other hand. Thereafter, we will summarize empirical evidence on the relationship between job stressors and lack of psychological detachment, including research on mediator and moderator effects. In the discussion section, we will suggest an extended stressor-detachment model and will describe avenues for future research as well as practical implications.

Core Concepts

In this section, we introduce the core constructs of the stressor-detachment model: (1) job stressors; (2) strain reactions and well-being; and (3) psychological detachment from work during nonwork time.

Job stressors

Job stressors refer to factors in the work environment that may lead to strain reactions such as negative arousal, physical symptoms, or psychological impairments (Kahn & Byosiere, 1992). Job stressors can be grouped in various categories, including physical stressors, task-related stressors, role stressors, social stressors, career-related stressors, traumatic events, and stressful change processes (Sonnentag & Frese, 2012). Among the job stressors that received extensive research attention are task-related stressors (e.g., time pressure and work overload, work complexity, interruptions, and situational constraints that potentially interfere with task performance), role stressors (role overload, role

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conflict, and role ambiguity), and social stressors (e.g., incivility, violence, harassment, and abusive supervision). Most types of stressors may occur as single events (i.e., acute stressors) but can also be present over extended periods of time (i.e., chronic stressors). If stressors actually have a negative impact on individuals largely depends on appraisal and coping processes (Lazarus & Folkman, 1984).

Strain reactions and well-being

Strain reactions can be described as an individual's reactions to stressors and include immediate physiological responses (e.g., elevated adrenaline or cortisol levels and increased heart rate and blood pressure), psychological reactions (e.g., increase in negative affect and fatigue), and behavior (e.g., argument with a co-worker). Strain reactions may still be present after the experienced stressor has been removed, for instance when being at home in the evening. If stressors persist over a long time, strain reactions might become chronic, resulting in impairments of physical and psychological health (e.g., cardiovascular disease and burnout). The experience of stressors may also be associated with a decrease in individual well-being (e.g., reduced life satisfaction or reduced vigor).

Research on psychological detachment has differentiated between short-term and longer-term strain symptoms and thereby has focused on psychological reactions. Until now, it has largely neglected physiological as well as behavioral reactions; from a research strategy perspective, it makes sense to capture the most obvious outcomes first and to address physiological processes as underlying mechanisms and behavioral responses as consequences of psychological reactions later. In terms of psychological reactions, the detachment literature has paid particular attention to negative affect as a short-term reaction and to exhaustion as a longer-term outcome. Research on psychological detachment has also addressed well-being indicators as potential psychological consequences. Accordingly, in this paper, we focus on psychological reactions. With respect to short-term reactions, we will focus on negative and positive affective states. With respect to long-term reactions, we will examine burnout and health complaints as strain indicators and life satisfaction as well as work engagement as indicators of well-being.

Psychological detachment

Etzion, Eden, and Lapidot (1998) coined the term detachment within respite research by describing it as "the individual's sense of being away from the work situation" (p. 579). It refers to a subjective experience and goes beyond the pure physical distance from one's workplace. To emphasize this experiential aspect, Sonnentag and Bayer (2005) introduced the concept *psychological* detachment into research on stress and recovery. Specifically, psychological detachment from work during nonwork time means to disengage oneself psychologically from work when being away from the workplace. First, it implies not being involved in work or work-related tasks. Second, it also implies not thinking about job-related issues (Sonnentag & Fritz, 2007). Thus, psychological detachment from work during nonwork time is a context-specific experience that may occur (or not) when one is away from the work setting. Mentally disengaging and distancing oneself from work during work hours would not be covered by this conceptualization of detachment. However, one may argue that psychological detachment can occur, for example, during lunch breaks at work. Since research has not examined this idea in detail yet, our review only presents findings regarding detachment outside the work setting.

Psychological detachment is mainly defined as the *absence* of something (i.e., *not* thinking about one's job during nonwork time) and implies "letting go" of work-related thoughts and activities. Framed as the *presence* of something, psychological detachment can be described as the experience of being mentally involved in any other content area (e.g., a hobby, one's children's school problems, or family activities). In some instances, psychological detachment might even manifest itself as a meditative state of thinking "nothing."

A lack of psychological detachment overlaps with concepts such as repetitive thought, worry, or rumination. Repetitive thought is a rather broad concept defined as "the process of thinking attentively, repetitively, or frequently

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about oneself and one's world" (Segerstrom, Stanton, Alden, & Shortridge, 2003, p. 909). Repetitive thought can take both adaptive and maladaptive forms. For example, worry refers to a chain of thoughts and images, "negatively affect-laden and relatively uncontrollable" (Borkovec, Robinson, Pruzinsky, & DePree, 1983, p. 10), and is mainly concerned with the future than with the present or the past (Borkovec et al., 1983). The term rumination subsumes "a class of conscious thoughts that revolve around a common instrumental theme and that recur in the absence of immediate environmental demands requiring the thoughts" (Martin & Tesser, 1996, p. 1) and occurs when experiencing discrepancies during goal pursuit. Rumination can be rather neutral—as used by Martin and Tesser—but it can also have a negative connotation, particularly when it is "a mode of responding to distress that involves repetitively and passively focusing on symptoms of distress and on the possible causes and consequences of these symptoms" (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008, p. 400). Psychological detachment occurs in the absence of worry, rumination, or other repetitive thoughts about work. However, it is important to note that psychological detachment is not just the opposite of repetitive thoughts. Rather, psychological detachment refers to a specific content (or the absence thereof) in a specific temporal context. Psychological detachment means to refrain from *job-related* thoughts during *nonwork* time. Repetitive thoughts about, for instance, one's health or family are compatible with psychologically detaching from work. Similarly, repetitive thoughts about work while on the job do not contradict psychological detachment from work during nonwork time. Empirical evidence supports the view that psychological detachment is not just the opposite of worry or rumination. For instance, Flaxman, Ménard, Bond, and Kinman (2012) reported a correlation of $r = -.46$ between psychological detachment and a combined measure of worry and rumination. Donahue et al. (2012) reported a correlation of $r = -.49$ between psychological detachment and rumination. These moderate correlations suggest that there is some overlap between worry and rumination on the one hand and lack of detachment on the other hand, but lack of detachment is not identical with worry or rumination.

Psychological detachment is also related to—albeit not identical to—engagement in leisure activities as well as to other recovery experiences. For instance, psychological detachment is predicted by engagement in exercise activities (Feuerhahn, Sonnentag, & Woll, 2014) or by absorption in joint activities with others (Hahn, Binnewies, & Haun, 2012). Importantly, while psychological detachment shows positive relationships with other recovery experiences such as relaxation, mastery, and control (Ragsdale, Beehr, Grebner, & Han, 2011; Siltaloppi, Kinnunen, & Feldt, 2009; Sonnentag & Fritz, 2007), it is a distinct construct and can be differentiated in confirmatory factor analyses (Shimazu, Sonnentag, Kubota, & Kawakami, 2012; Siltaloppi et al., 2009; Sonnentag, Binnewies, & Mojza, 2008; Sonnentag & Fritz, 2007).

Within-person and between-person variation

Stressors, strain reactions, and well-being vary within individuals (e.g., on some days, more intense stressors are present than on others) as well as between individuals (i.e., persons differ in the degree to which they face job stressors and experience strain). Similarly, psychological detachment may vary between and within individuals. Thus, all these constructs can be treated as within-person as well as between-person constructs. We will differentiate between within-person and between-person studies when summarizing empirical research on the stressor-detachment model.

Overview: Stressor-detachment Model

Sonnentag (2010) proposed a stressor-detachment model that emphasizes the important role of psychological detachment in the stressor–strain process. This model draws on cognitive activation theory of stress (Meurs & Perrewé, 2011; Ursin & Eriksen, 2010) and the allostatic load model (Ganster & Rosen, 2013; McEwen, 1998) emphasizing that it is not primarily the acute stress reaction that is detrimental for an organism but rather the sustained activation, even when the stressor is no longer present. As Figure 1 illustrates, psychological detachment can be conceptualized as a

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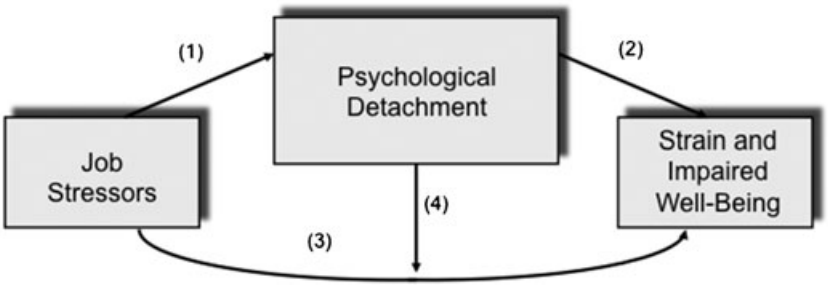

Figure 1. Basic stressor-detachment model

mediator and as a moderator in the stressor–strain process. Paths 1 and 2 show the mediating process; Path 4 shows the moderating process. The mediator part of the stressor-detachment model proposes that job stressors impair psychological detachment, and in turn, poor psychological detachment directly influences an employee's level of strain and well-being. Thus, low psychological detachment from work during nonwork time is seen as one mechanism that can explain why job stressors lead to elevated strain levels. The moderator part of the model proposes that psychological detachment influences the effects of job stressors on strain and poor well-being. More specifically, psychological detachment is proposed to attenuate the impact of job stressors on strain.

Following a cybernetic approach to job stress (Edwards, 1992), Griffin and Clarke (2011) suggested that short-term dynamics operate within longer-term dynamics, with short-term processes being nested within longer-term processes. Accordingly, we propose that psychological detachment from work can be described within different time frames such as days, weeks, or years.

Short-term dynamics refer to processes unfolding within a *workday*. Job stressors encountered during work lead to immediate strain reactions, including physiological and affective responses. For instance, when facing time pressure or negative events at work, heart rate—as well as negative affective states such as anxiety or anger—will increase (Ilies, Dimotakis, & de Pater, 2010; Rodell & Judge, 2009). These immediate reactions become evident briefly after the occurrence of the stressor while the employee is still at work. At the end of the workday, however, employee's physiological and psychological strain level still may be high (Ganster, Fox, & Dwyer, 2001; Ilies et al., 2010), often reflected in high levels of negative activation (Ilies et al., 2007; Zohar, Tzischinski, & Epstein, 2003). This high level of negative activation will make it more difficult for the employee to detach from work during after-work hours because it will stimulate the recall of negative events and experiences that occurred during the workday (cf., Bono, Glomb, Shen, Kim, & Koch, 2013). Moreover, because the workday had been stressful, the employee might anticipate that the next day will be stressful as well and might think about what can be done about the stressful situation. In addition, the employee might even work in the evening to get more work done. Continuously thinking about work during nonwork time and not detaching will keep the employee's strain level elevated. This high strain level might even continue until the next morning when the employee returns to work. If, however, the employee succeeds in detaching from work during nonwork time, for instance, because he or she engages in a highly absorbing leisure activity (Hahn et al., 2012), the stressors experienced during the day will lose their impact on employee strain. Psychological detachment from work during evening hours will attenuate the effects of job stressors on subsequent strain levels.

Of course, psychological detachment from work will not only be influenced by job stressors but also other factors such as family events or leisure time experiences. In addition, job stressors might not always impair psychological detachment. For instance, when job stressors are not appraised as relevant for one's goals or well-being or when they are overcome immediately through successful coping processes (cf. Lazarus & Folkman, 1984), they lose their relevance for the individual and may not hamper detachment from work during nonwork time. We will discuss the influence of nonwork experiences and the role of moderators on the association between job stressors and lack of detachment later in this paper.

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A somewhat longer-term cycle occurs at the *week level*. For most people, weekends—or other periods of one to three full days off work—provide more free time than workday evenings and therefore offer more opportunities for psychological detachment. Even when an employee does not fully detach during evening hours throughout the workweek, he or she might detach from work during one or more days off. This increased opportunity for detachment might be partly due to the larger amount of time that is available to unwind and recover. In addition, during off-work days, many people pursue other activities than during weekday evenings which by themselves may foster psychological detachment. Thus, in an optimal situation, an employee will detach from work during the nonwork days so that physiological strain levels and negative affective states are reduced and well-being increases. The more an employee detaches from work during the nonwork days, the more likely it is that job stressors experienced during the workweek lose their impact on employees' strain levels.

However, there might be nonwork days on which employees do not fully detach from work. The stressor-detachment model suggests that this will be the case when the preceding week was particularly stressful. In such a situation, employees will still be experiencing negative activation that makes detachment difficult, and they may have encountered severe hassles, negative social interactions, or moments when they felt overwhelmed so that they need some cognitive processing of the stressful experience in order to recover (Watkins, 2008). In addition, full detachment might be hampered when an employee often thinks about the upcoming workweek or when engaging in job-related activities during the nonwork days.

Over the course of a *year*, people will go through numerous cycles of stressor exposure and subsequent (partial) detachment, both at the day and week levels. Under optimal circumstances, sufficient detachment will occur during the evening or when having a few days off so that strain reactions that occurred during the day or that might have accumulated during the week (cf., McEwen, 1998; Theorell & Karasek, 1996) will be substantially reduced and will not build up over time. If, however, no sufficient detachment during the evenings and during off-work days occurs, strain levels will remain elevated and over time strain will build up and well-being will decrease.

If an employee tends not to detach from work over several weekday evenings or a few days off, this tendency of not detaching may develop into a habit (Ouellette & Wood, 1998) and may become the employee's usual way of spending evenings and weekends. This employee's overall level of psychological detachment will differ from that of an employee who successfully detaches from work during evenings or days off and who has developed leisure routines that help in detaching. Encountering job stressors day after day will reduce the likelihood of detachment so that over time, the lack of detachment turns into a chronic state. As a result, strain levels will remain chronically elevated. If this person, however, succeeds in detaching from work during evenings and off-work days despite high levels of stressors, strain levels will be relatively low and will not increase substantially over time.

Vacations are another time period during which employees' strain level may decrease. Spending a week or more off the job—often in a different environment—helps to break the vicious cycle between job stressors, lack of detachment, and strain (Westman & Eden, 1997). Accordingly, research reveals that strain is reduced and well-being increases after a vacation but returns to pre-vacation levels over time (Kühnel & Sonnentag, 2011).

In the following sections, we summarize the empirical evidence for the stressor-detachment model. We start with Path 2 (lack of psychological detachment as a predictor of strain and poor well-being) to emphasize the important role of psychological detachment for employee well-being. Then we will move to Path 1 (stressors as a predictor of poor detachment), before we address mediator and moderator effects. Finally, we will discuss how the stressor-detachment model may be extended.

Poor Psychological Detachment as a Predictor of Strain and Impaired Well-being

The stressor-detachment model proposes that poor psychological detachment from work during nonwork time predicts strain symptoms and poor well-being. During the past decade, researchers have tested this assumption in both between-person and within-person studies. Tables 1 and 2 summarize the relevant studies.

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Table 1. Between-person studies examining detachment as a predictor of strain and well-being.

Authors	Sample, design, and analyses	Measure of strain and well-being	Main findings
Burke, Koyuncu, and Fiksenbaum (2009)	$N = 650$ managers (Turkey) Cross-sectional OLS regression Control variables: demographic variables, work-situation variables	Exhaustion Psychosomatic symptoms Life satisfaction	Psychological detachment did not predict strain
Cheng and McCarthy (2013)	$N = 178$ persons with work and school responsibilities (Canada) Two measurement points OLS regression Control variables: demographic variables, coping	Work satisfaction Family satisfaction School satisfaction	Psychological detachment (overall measure for all responsibilities) did not predict satisfaction measures; psychological detachment moderated the negative relationship between workplace conflict and work satisfaction when cognitive avoidance was low
Davidson et al. (2010)	$N = 248$ faculty members (Israel, New Zealand, USA) Longitudinal ANCOVA	Burnout Positive affect Life satisfaction	Faculty members who detached more during the sabbatical showed less burnout and more positive affect and life satisfaction during and after the sabbatical
de Bloom, Geurts, and Kompier (2012)	$N = 67$ employees on short vacations (The Netherlands) Longitudinal Pre-measure: two weeks before vacation, post-measures: 1 to 10 days after vacation Partial correlations Control variables: demographic variables, health and well-being before vacation	Eight indicators of health and well-being	Detachment during vacation predicted increase in health and well-being after vacation
de Bloom, Geurts, and Kompier (2013)	$N = 54$ employees on vacations (The Netherlands) Longitudinal Pre-measure: two weeks before vacation, post-measures: one to four weeks after vacation Partial correlations Control variables: demographic variables, health and well-being before vacation	Six indicators of health and well-being	Detachment during vacation did not predict change in health and well-being after vacation
de Jonge, Spoor, Sonnentag, Dormann, and van den Tooren (2012)	$N = 399$ service workers (The Netherlands) Cross-sectional OLS regression Control variables: demographic variables, job demands and job resources	Emotional exhaustion Physical health complaints; Detachment measure differentiated between cognitive, emotional, and physical detachment	Emotional detachment predicted low emotional exhaustion, but not physical health complaints; physical detachment predicted low emotional exhaustion and low physical health complaints; cognitive detachment predicted

(*Continues*)

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Table 1. (Continued)

Authors	Sample, design, and analyses	Measure of strain and well-being	Main findings
			neither emotional exhaustion nor physical health complaints
Donahue et al. (2012)	$N = 118$ nurses (Canada) Cross-sectional Correlation	Emotional exhaustion	Detachment negatively correlated with emotional exhaustion
Etzion et al. (1998)	$N = 81$ reservists during military service (Israel) Longitudinal; time lag: four weeks and more (pre-measure: two weeks before respite, post-measure: one week after respite) Control variables: pre-respite burnout level, job stressors, quality of respite experience	Burnout	Detachment did not predict post-respite burnout; three-way interaction effect between detachment during respite, job stressors, and quality of respite experience
Flaxman et al. (2012)	$N = 77$ academic employees (UK) Short-term longitudinal study; time lag: one and two weeks after break, and four and five weeks after break; detachment assessed during the Easter bank holiday weekend (Time 2) OLS regression Control variables: age, job type, respite length, hours worked during break, well-being before break	Emotional exhaustion Anxiety Fatigue	Detachment showed significant negative concurrent and lagged correlations with emotional exhaustion, anxiety, and fatigue but did not predict change in these outcomes over time
Fritz et al. (2010)	$N = 229$ preschool teachers (Germany) Short-term longitudinal (time lag: five days for lagged analysis) OLS regression Control variables: demographic variables, working time, hassles during weekend, other recovery experiences (mastery, relaxation, control), pre-weekend affect	PANAS-X Joviality Self-assurance Serenity Fear Hostility Sadness Fatigue *At end of weekend and at end of following week*	Detachment concurrently related to joviality and serenity Detachment predicted increase in serenity Detachment did not predict other affective states
Fritz, Yankelevich, Zarubin, and Barger (2010)	$N = 107$ university employees (USA) Cross-sectional OLS regression Control variables: demographic variables, negative affect, workload, autonomy	Emotional exhaustion Life satisfaction *Assessed by significant other or close friend*	Detachment predicted low emotional exhaustion and high life satisfaction
Hahn et al. (2012)	$N = 269$ (Germany)	Vigor, joviality, serenity, negative activation, fatigue	Detachment during the weekend predicted low negative activation

(*Continues*)

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Table 1. (Continued)

Authors	Sample, design, and analyses	Measure of strain and well-being	Main findings
	Short-term longitudinal (time lag: several days) OLS regression Control variables: demographic variables, activities, other recovery experiences, and baseline scores of the outcome variables		and low fatigue; detachment did not predict vigor, joviality or serenity in regression analysis, but positive correlations
Hahn, Binnewies, Sonnentag, and Mojza (2011)	$N = 95$ (Germany) Intervention study Correlations	Emotional exhaustion State negative affect Sleep quality	Detachment was negatively related to emotional exhaustion and state negative affect, and positively to sleep quality
Hahn and Dormann (2013)	$N = 228$ managers and working partners (USA) Concurrent analysis OLS regression Control variables: demographic variables	Life satisfaction	Own detachment and partner's detachment predicted life satisfaction
Kühnel, Sonnentag, and Westman (2009)	$N = 156$ nurses (Germany and Switzerland) Concurrent analysis Structural equation modeling Control variables: work engagement before the respite	Work engagement	Detachment during a short respite was positively related to an increase in work engagement from before to after the respite
Moreno-Jiménez, Mayo, et al. (2009)	$N = 128$ emergency professionals (Spain) Cross-sectional OLS regression Control variables: demographic variables, numbers of hours worked, work-family-conflict, family-work conflict	Psychological strain (GHQ) Life satisfaction	Detachment predicted low psychological strain and high life satisfaction; detachment attenuated the effect of work-family conflict on psychological strain and the effect of family-work conflict on life satisfaction
Moreno-Jiménez, Rodrígez-Munoz, Pastor, Sanz-Vergel, and Garrosa (2009)	$N = 511$ employees of telecommunications companies (Spain) Predictors and outcome variables assessed at two points in time; time lag: 1 month OLS regression Control variables: demographic variables, negative affectivity	Psychological strain (GHQ)	Detachment did not predict psychological strain, but attenuated the effect of workplace bullying on psychological strain
Moreno-Jiménez, Rodrígez-Munoz, Sanz-Vergel, and Garrosa (2012)	$N = 990$ persons (Spain) Cross-sectional OLS regression Control variables: demographic	Somatic symptoms Anxiety	Detachment negatively related to somatic symptoms and anxiety Detachment attenuated the association between role conflict

(*Continues*)

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Table 1. (Continued)

Authors	Sample, design, and analyses	Measure of strain and well-being	Main findings
	variables, role conflict, other recovery experiences		and anxiety, but not the association between role conflict and somatic symptoms
Querstret and Cropley (2012)	$N = 719$ working adults (UK) Cross-sectional OLS regression Control variables: gender, negative affect, job demands, job control, recovery opportunities, affective rumination, problem-solving pondering	Acute fatigue ("After a typical work period, I have little energy left.") Chronic fatigue ("I often dread waking up to another day of my work")	Detachment predicted acute, but not chronic fatigue
Safstrom and Hartig (2013)	$N = 174$ full-time employees, enrolled as students (Sweden) Cross-sectional OLS regression Control variables: demographic variables, study demands, job demands	Perceived stress Life satisfaction	Detachment predicted low levels of perceived stress and high levels of life satisfaction No moderator effect of detachment
Sanz-Vergel et al. (2010)	$N = 941$ professionals from the security sector (Spain) Cross-sectional Correlations	Physical symptoms Anxiety Depression Negative affect	Detachment negatively correlated with physical symptoms, anxiety, depression, and negative affect
Shimazu et al. (2012)	$N = 2520$ (Japan) Cross-sectional Correlations	Psychological distress Physical complaints Work engagement	Detachment negatively correlated with psychological distress, physical complaints, and work engagement
Siltaloppi et al. (2009)	$N = 527$ employees (Finland) Cross-sectional OLS regression Control variables: demographic variables, job stressors, job control, and other recovery experiences	Emotional exhaustion Need for recovery Work engagement	Detachment predicted low emotional exhaustion, low need for recovery, and high work engagement
Sonnentag, Binnewies, et al. (2010)	$N = 309$ non-for profit employees (Germany, Switzerland) Longitudinal (time lag: 12 months) OLS regression Control variables: demographic variables, negative affectivity, job stressors, job control, and baseline level of exhaustion	Exhaustion, psychosomatic complaints, work engagement	Detachment predicted low emotional exhaustion and attenuated the relationship between high job demands and low psychosomatic complaints and work engagement
Sonnentag and Fritz (2007)	$N = 137$ (Germany) Cross-sectional Correlations	Health complaints (GHQ) Burnout Depressive symptoms Need for recovery	Detachment negatively related to health complaints, burnout, depressive symptoms, need for

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Table 1. (Continued)

Authors	Sample, design, and analyses	Measure of strain and well-being	Main findings
		Life satisfaction Sleep problems	recovery, sleep problems, and positively to life satisfaction
Sonnentag, Kuttler, and Fritz (2010)	$N = 136$ pastors (Switzerland) Cross-sectional OLS regression Control variables: demographic variables, job stressors and job control	Exhaustion Need for recovery *Detachment assessed by self and spouse reports*	Detachment predicted low emotional exhaustion and low need for recovery
Sonnentag, Unger, and Nägel (2013)	$N = 291$ employees (Germany) Cross-sectional OLS regression Control variables: demographic variables, job stressors, job control, and social conflicts	Health complaints (GHQ)	Detachment predicted low level of health complaints and attenuated the relationship between relationship conflicts and health complaints
von Thiele Schwarz (2011)	$N = 160$ working women (Sweden) Longitudinal (time lag: 6 months) OLS regression Control variables: occupation, children at home, job demands and job control (initial level of fatigue and next-day recovery not controlled)	Fatigue Next-day recovery (i.e., feeling refreshed at the start of the workday)	Inability to withdraw from work predicted fatigue and poor next-day recovery 6 months later

Between-person studies

Research using between-person designs has examined a broad range of nonwork settings during which psychological detachment from work might occur, including nonwork time during evenings (ten Brummelhuis & Bakker, 2012; Sonnentag et al., 2008), weekends (Fritz, Sonnentag, et al., 2010; Hahn et al., 2012), vacations (de Bloom et al., 2012), sabbaticals (Davidson et al., 2010), and even military service (Etzion et al., 1998). While most of these studies assessed psychological detachment with the measure developed by Sonnentag and Fritz (2007), other measures were used as well (e.g., Querstret & Cropley, 2012; von Thiele Schwarz, 2011). While many studies were cross-sectional in nature, some used longitudinal designs. In these longitudinal studies, time lags varied substantially, ranging from a few days (Hahn et al., 2012) to 12 months (Sonnentag, Binnewies, et al., 2010). In addition to separating measurement of predictor and outcome variables over time, several studies tried to reduce common method bias by assessing either psychological detachment (Sonnentag, Kuttler, et al., 2010) or strain reactions (Fritz, Yankelevich et al., 2010) using significant-other reports.

In summary, most studies reported negative relationships between psychological detachment from work during nonwork time and strain indicators such as emotional exhaustion, need for recovery, and health complaints (e.g., Donahue et al., 2012; Sanz-Vergel et al., 2010; Sonnentag & Fritz, 2007). After controlling for potentially confounding variables (e.g., demographic variables, work-situation variables, and negative affectivity), psychological detachment was still negatively related to strain indicators in many studies (e.g., Fritz et al., 2010; Moreno-Jiménez, Mayo, et al., 2009; Siltaloppi et al., 2009), albeit not in all (de Bloom et al., 2013; Flaxman et al., 2012). Several studies found significant results for some strain indicators, but not for others (de Jonge et al., 2012; Querstret & Cropley, 2012). In some of the analyses, lack of detachment

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Table 2. Within-person studies examining detachment as a predictor of strain and well-being.

Authors	Sample, design, and analysis	Measure of strain and well-being	Main findings
Demerouti, Bakker, Sonnentag, and Fullagar (2012)	$N = 83$ employees (Germany, The Netherlands), 332 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variables general level of outcome variables, flow at work	Exhaustion at bedtime, vigor at bedtime	Detachment during the evening predicted low levels of exhaustion and high levels of vigor at bedtime
Derks and Bakker (in press)	$N = 69$ employees (The Netherlands), 293 days Within-person analysis, person-mean centering of day-level predictor variables	Work home interference, emotional exhaustion, cynicism	Detachment after work negatively related to work-home interference, particularly in intensive smartphone users; work-home interference in turn related to elevated levels of emotional exhaustion (but not cynicism), also only in intensive smartphone users
Feuerhahn et al. (2014)	$N = 126$ persons (Germany), 580 days Within-person analysis, person-mean centering of day-level predictor variables	Positive affect and negative affect at bedtime	Detachment during the evening predicted high positive affect and low negative affect at bedtime
Korunka, Kubicek, Prem, and Cvitan (2012)	$N = 64$ railway controllers (Central Europe), 626 days Within-person analysis, grand-mean centering of day-level variables Control variables: demographic variables, fatigue at shift onset, workload, time control during shift	Fatigue during night shift and day shift	Detachment prior to shift predicted low levels of fatigue 4 hours after start of night shift and after 12 hours of day shift, but not at other time intervals; detachment attenuated the effect of high workload on fatigue during the first 4 hours of a night shift, but not at other time intervals
Mojza, Sonnentag, and Bornemann (2011)	$N = 105$ employees working as volunteers (Germany), 476 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variables, day-specific job stressors, leisure activities on the preceding evening, need satisfaction, mastery during the evening	Positive and negative affect at work on the next day	Detachment during the evening did not predict positive and negative affect at work on the next day
Sanz-Vergel, Demerouti, Bakker, and Moreno-Jiménez (2011)	$N = 49$ employees (Spain), 5 days over one week Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variables, home-role salience,	Work-home interference in the evening, cognitive liveliness at bedtime	Detachment during the evening predicted low levels of work-home interference, but not cognitive liveliness

(*Continues*)

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Table 2. (Continued)

Authors	Sample, design, and analysis	Measure of strain and well-being	Main findings
	morning vitality, general level of outcome variable		
Sonnentag and Bayer (2005)	$N = 87$ employees and free-lancers (Germany), 221 days Detachment assessed for each activity Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variables, day-specific time pressure and work hours, mood and fatigue after work, activities	Positive mood at bedtime, fatigue at bedtime	Detachment during the evening predicted positive mood and low fatigue; effect of detachment on low fatigue was particularly strong after days with high time pressure
Sonnentag and Binnewies (2013)	$N = 96$ health care professionals (Germany and Switzerland), $N = 289$ days Within-person analysis, person-mean centering of day-level predictor variables Control variables: general level of affect, weekday	Negative state affect, positive state affect, both at bedtime and in the next morning	Detachment during the evening predicted low negative affect at bedtime, but not in the next morning; no relationship between detachment and positive affect; detachment attenuated the effect of negative affect at work on negative affect at bedtime and in the next morning; detachment attenuated the effect of positive affect at work on positive affect at bedtime (but not in the next morning)
Sonnentag et al. (2008)	$N = 166$ public-service employees (Germany and Switzerland), 441 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variables, general level of affect sleep, other recovery experiences	Negative state affect, fatigue, positive state affect, serenity in the morning	Detachment in the evening predicted low morning negative affect and low morning fatigue, but not positive affect or serenity
Sonnentag, Mojza, Binnewies, and Scholl (2008)	$N = 159$ employees (Germany), 432 weeks Week-level study with within-person analysis, person-mean centering of week-level predictor variables Control variables: demographic variables, positive affect on Monday, time pressure, weekend anticipation	Positive affect on Friday afternoon	Detachment during the week predicted positive affect on Friday; effect particularly strong for highly engaged employees
Volman, Bakker, and Xanthopoulou (2013)	$N = 65$ employees (The Netherlands), 325 days Within-person analysis, person-mean centering of day-level predictor variables	State of being recovered in the morning	Detachment during the evening predicted state of being recovered in the morning

(*Continues*)

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Table 2. (Continued)

Authors	Sample, design, and analysis	Measure of strain and well-being	Main findings
	Control variables: family status, general well-being, self-family facilitation		
ten Brummelhuis and Bakker (2012)	$N = 74$ nurses (The Netherlands), 282 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographic variable, general level of work engagement, previous level of exhaustion, off-job activities, relaxation during off-job time	Vigor (part of context-free engagement measure) in the morning	Detachment during the evening predicted morning vigor, above and beyond relaxation and activities as predictors

predicted strain indicators only under specific circumstances (Moreno-Jiménez, Rodrígez-Munoz, et al., 2009; Sonnentag, Binnewies, et al., 2010).

Importantly, negative relationships between psychological detachment and strain indicators were observed not only in cross-sectional but also in longitudinal studies. For instance, Sonnentag, Binnewies, et al. (2010) found that lack of psychological detachment from work during nonwork time predicted an increase in emotional exhaustion over the course of one year. Hahn et al. (2012) reported an increase in negative affective states over a weekend when psychological detachment from work during the weekend was low.

Findings regarding well-being indicators seem less consistent. Specifically, while psychological detachment was positively related to work engagement in some research (Kühnel et al., 2009; Siltaloppi et al., 2009), a study by Shimazu et al. (2012) reported a negative correlation in a Japanese sample. Some studies found positive relationships between psychological detachment and life satisfaction (Davidson et al., 2010; Fritz et al., 2010; Moreno-Jiménez, Mayo, et al., 2009), while in Hahn et al.'s (2012) weekend study, psychological detachment was unrelated to vigor, joviality, and serenity. One may speculate that psychological detachment is more important for an overall positive assessment of one's life than for specific momentary positive affective states.

Overall, between-person studies so far suggest that low levels of psychological detachment are related to increased strain and decreased well-being, even when using longitudinal designs and when including spouse or peer reports of key study variables. However, some studies failed to find significant relationships. Several factors might have contributed to these inconsistent results. First, detachment seems to show differential patterns with various outcome variables. Whereas findings are relatively consistent for strain indicators (e.g., exhaustion), as well as for work engagement and life satisfaction, they are less uniform for positive affective states, particularly when measuring short-term changes (Fritz, Sonnentag, et al., 2010; Hahn et al., 2012). It might be that these positive affective states are more strongly influenced by positive events that happened immediately before the assessment of the affective state, rather than by a lack of detachment several days ago. Second, findings become less consistent when taking worrying and rumination into account (Flaxman et al., 2012; Querstret & Cropley, 2012), suggesting that a lack of detachment often goes hand in hand with worrying and rumination, which in turn accounts for the detrimental effects. This interpretation is in line with other studies reporting that positively reflecting about one's work is associated with a decrease in exhaustion and an improvement of positive affective states (Fritz & Sonnentag, 2005; Sonnentag & Grant, 2012). Thus, it might be that especially negative thoughts about work contribute to the detrimental effects of poor detachment. Third, the lack of significant results in some instances suggests that poor

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detachment might be only detrimental under certain circumstances, for instance when work is particularly stressful and a predominantly negative experience (Moreno-Jiménez, Rodrígez-Munoz, et al., 2009; Sonnentag, Binnewies, et al., 2010). We will discuss such moderator effects later in this review. Fourth, it is always imperative to examine if inconsistent findings might be caused by methodological factors. Research evidence so far, however, suggests that methodological factors play a minor role when explaining the overall pattern of results: psychological detachment was related to strain indicators not only when using relatively weak research designs (cross-sectional designs and all variables assessed through self-reports) but also when using stronger methodological approaches (longitudinal designs and reports by others; e.g., Fritz et al., 2010; Hahn, et al., 2012). One factor that might play a role is the time lag used in studies that examine detachment during a specific respite period. The effects of poor detachment during a few days off might be relatively short-lived because they are overshadowed by subsequence work and nonwork periods. Chronic levels of poor detachment, however, may have longer-term effects (Sonnentag, Binnewies et al., 2010). With the exception of the study by Shimazu et al. (2012), lack of detachment had no main effect on positive outcomes in any study so far. We will discuss the possibility that lack of detachment might be positive later in this paper.

Within-person studies

Within-person studies focused on within-person day-to-day fluctuations in detachment and associations with day-level affect and strain. The core question addressed in this research is whether an individual's affective state and level of strain on days high in detachment differs from those on days low in detachment. Studies examined a variety of time lags between detachment and affect or strain (Table 2). Specifically, studies examined how detachment during evening hours relates to affect and strain at bedtime (Demerouti et al., 2012; Feuerhahn et al., 2014; Sonnentag & Bayer, 2005), the following morning (ten Brummelhuis & Bakker, 2012; Sonnentag et al., 2008), and during work the following day (Korunka et al., 2012; Mojza et al., 2011).

Most within-person studies focused on rather immediate benefits of detachment by examining detachment during evening hours as a predictor of affect and strain at bedtime. With very few exceptions (e.g., Sanz-Vergel et al., 2011), detachment during the evening was a significant predictor of state affect and strain at bedtime (Demerouti et al., 2012; Feuerhahn et al., 2014; Sonnentag & Bayer, 2005). The more employees detached from their work during the evening, the better they felt at bedtime: they reported lower levels of negative affect, exhaustion, and fatigue and higher levels of positive affect and vigor.

Studies examining the potential benefits of detachment in the evening on morning affect and strain found a similar—albeit less consistent—pattern. Detaching from work in the evening predicted low levels of negative affect as well as low levels of fatigue (Sonnentag et al., 2008), high levels of vigor (ten Brummelhuis & Bakker, 2012), and feelings of recovery (Volman et al., 2013) the following morning. However, not all studies reported significant results (Sonnentag & Binnewies, 2013) or failed to find effects on positive affective states (Sonnentag et al., 2008).

So far, few studies looked at the potential effects of detachment on states during the following work period. ten Brummelhuis and Bakker (2012) found that detachment during the evening predicted high work engagement during the following day. Korunka et al. (2012) reported negative relationships between between-shift detachment and fatigue during the following shift for some measurement intervals, but not for all. Mojza et al. (2011) found no evidence for evening detachment predicting positive or negative affect during work the following day.

Overall, evidence from within-person studies suggests that the immediate gains that result from detachment are stronger than gains occurring later in time. Benefits until the next morning were observed in several studies, even when controlling for indicators of restorative sleep (Sonnentag, Binnewies, et al., 2008). However, it seems that benefits of detachment rarely persist after people go back to work (Korunka et al., 2012; Mojza et al., 2011). Probably, job demands and events unfolding at work have a strong immediate impact on state affect and strain (Gross et al., 2011; Rodell & Judge, 2009), thereby largely overriding the effects of detachment. However, a study by Sonnentag,

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Mojza, et al. (2008) suggests that the benefits of regularly detaching from work during after-work hours may accumulate over the workweek: In this study using a week-level design, psychological detachment during evenings predicted positive affect at the end of the workweek. Taken together, within-person studies suggest that employees' affective states benefit from detaching from work during the evening. Obviously, the immediate gains are stronger than delayed gains. In addition, preliminary evidence suggests that the effects of poor detachment may accumulate over the course of a workweek.

Stressors as Predictors of Poor Psychological Detachment

As mentioned above, the stressor-detachment model suggests that job stressors can hinder psychological detachment from work during nonwork time. More specifically, job stressors are associated with an increase in negative activation such as negative affect (Volmer, Binnewies, Sonnentag, & Niessen, 2012), increase in stress hormones (Sonnentag & Fritz, 2006), or worry and rumination about the stressor (Cropley & Purvis, 2003). Negative activation in turn makes it difficult for employees to mentally disengage from work even after they physically leave the workplace. Specifically, they may stay occupied with work-related tasks, try to engage in problem solving and to deal with the stressor, or continue to worry or vent about the stressor. Accordingly, research shows that a variety of job stressors is associated with lower psychological detachment from work. Below, we will describe empirical findings relating to job stressors and detachment, again differentiating them into between-person and within-person studies (see also Tables 3 and 4).

Between-person studies

Most between-person studies so far have focused on workload and other job demands as a predictor of low psychological detachment using cross-sectional research designs. Several studies show a negative relationship between time pressure or workload on the one hand and psychological detachment on the other hand (e.g., Burke et al., 2009; Potok & Littman-Ovadia, 2014; Safstrom & Hartig, 2013; Shimazu et al., 2012; Sonnentag & Fritz, 2007). Similarly, studies found negative relationships between number of work hours or hours of overtime and psychological detachment (e.g., Burke et al., 2009; Kinnunen et al., 2011; Oosthuizen et al., 2011). Additionally, decision-making demands and other cognitive demands (similar to job complexity) have been found to be associated with a lack of psychological detachment (Kinnunen et al., 2011; Oosthuizen et al., 2011).

Researchers have further examined relationships between a variety of other jobs stressors and psychological detachment. Examining between-person relationships, research revealed negative relationships for situational constraints (Sonnentag & Fritz, 2007), emotional dissonance (i.e. displaying emotions other than the ones one actually feels; Sonnentag, Kuttler, et al., 2010), and emotional demands (Oosthuizen et al., 2011). Sonnentag and Fritz (2007) further found that role ambiguity—a lack of clear role assignments—was negatively associated with psychological detachment from work during nonwork time. Potok and Littman-Ovadia (2014) found negative relationships between role ambiguity and psychological detachment when using significant-other reports but not when using self-reports of detachment. In addition, they found negative relationships between role conflict—the incompatibility of different work roles—and psychological detachment from work (cf. Moreno-Jiménez et al., 2012, for a similar finding). However, Sonnentag and Kruel (2006) found no relationship between either role ambiguity or role conflict and psychological detachment. So far, only a few between-person studies have explored the role of social stressors in psychological detachment from work. For instance, Demsky et al. (in press) found that (co-worker and self-reports of) workplace aggression was negatively associated with employee-reported detachment.

Research on psychological detachment from work has further started exploring the impact of work-related activities during nonwork time. For example, Park et al. (2011) found that the amount of work-related technology use at home (i.e., email or phone)—possibly resulting from high workload—was associated with lower levels of

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Table 3. Between-person studies examining stressors as predictors of detachment.

Authors	Sample, design, and analyses	Measure of stressors	Main findings
Barber and Jenkins (in press)	$N = 315$ workers (>30 hours per week; USA) Cross-sectional Moderated mediation Control variables: work-to-home segmentation, workload, age	Information and Communication Technology (ICT) Boundary crossing	Boundary crossing was negatively associated with psychological detachment; this relationship was attenuated by boundary creation
Burke et al. (2009)	$N = 650$ managers (Turkey) Cross-sectional Correlations Control variables: Demographics, work-situation variables	Work hours Work intensity	Hours worked and work intensity had low, negative associations with detachment
Cropley and Purvis (2003)	$N = 94$ teachers (UK) Diary study during one workday evening, hourly intervals ANOVA Control variables: demographic variables, occupational grade, teaching experience, number of hours worked at home	High work demands and low job control (= high strain group)	High strain group reported higher levels of ruminative thought in the evening
Demsky, Ellis, and Fritz (in press)	$N = 107$ college and university employees (USA) Cross-sectional OLS regression Control variables: Age, gender, marital status, living with children	Workplace aggression *self- and coworker reports*	Workplace aggression was negatively associated with detachment
Kinnunen and Feldt (2013)	$N = 274$ employees from various jobs (Finland), subsample of Kinnunen et al. (2011) Longitudinal; time lag: 1 year Structural equation modeling	Time pressure Demands in decision making Weekly working hours	Time pressure, demand in decision making, and weekly working hours at Time 1 were negatively associated with detachment at Time 2 Detachment at Time 1 was negatively associated with the stressors at Time 2
Kinnunen, Feldt, Siltaloppi, and Sonnentag (2011)	$N = 527$ employees from various jobs (Finland) Cross-sectional Structural equation modeling	Time pressure Demands in decision-making Weekly working hours	Job demands (time pressures, demands in decision making, weekly working hours) were associated with lower detachment Detachment mediated the relationships between job demands and fatigue
Oosthuizen, Mostert, and Koekemoer (2011)	$N = 366$ university employees (South Africa) Cross-sectional Correlations	Work pressure Emotional demands Cognitive demands	Work pressure, emotional demands, and cognitive demands were negatively associated with detachment
Park, Fritz, and Jex (2011)	$N = 269$ university alumni (USA) Cross-sectional OLS regression Control variables: demographics, job involvement	Work-related technology use at home	Technology use was associated with lower detachment

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Table 3. (Continued)

Authors	Sample, design, and analyses	Measure of stressors	Main findings
Potok and Littman-Ovadia (2014)	$N = 210$ employees from various occupations and 109 significant others (Israel) Cross-sectional OLS regression Control variables: work hours	Role ambiguity Role conflict Workload	Role ambiguity was associated with significant-other-reported detachment, but was not associated with self-reported detachment. Role conflict and workload were associated with detachment
Safstrom and Hartig (2013)	$N = 174$ full-time employees, enrolled as students (Sweden) Cross-sectional OLS regression Control variables: demographic variables, study demands	Job demands	High job demands predicted low levels of detachment Detachment mediated relationships between 1) job demands and perceived stress, and 2) job demands and life satisfaction
Shimazu et al. (2012)	$N = 2{,}520$ (Japan) Cross-sectional Correlations	Job demands	Job demands were negatively associated with detachment
Sonnentag and Fritz (2007)	$N = 271$ employees from various occupations (Germany) Cross-sectional Correlations	Time pressure Role ambiguity Situational constraints Hours of overtime	Time pressure, role ambiguity, situational constraints, and hours of overtime were negatively associated with detachment
Sonnentag and Kruel (2006)	$N = 148$ school teachers (Germany) Detachment assessed with self-report measure and by family member Cross-sectional OLS Control variables: demographics, action-state orientation, teaching load	Workload Role ambiguity Role conflict	Workload was associated with lower self-reported and family-reported detachment
Sonnentag, Kuttler, et al. (2010)	$N = 136$ pastors and 97 spouses (Switzerland) Cross-sectional OLS regression, dyadic-data analysis Control variables: demographics, actual work hours, job control	Workload Emotional dissonance	Workload and emotional dissonance were related to low detachment Self-reported detachment was a partial mediator between 1) workload/emotional dissonance and emotional exhaustion, and 2) workload/emotional dissonance and need for recovery Spouse-reported detachment was a partial mediator between 1) workload and emotional exhaustion, and 2) workload and need for recovery
von Thiele Schwarz (2011)	$N = 160$ working women (Sweden) Longitudinal; time lag: 6 months OLS regression Control variables: demographics	Job demands	Job demands (Time 1)predicted inability to withdraw from work (Time 1); inability to withdraw partially mediated the relationship between 1) job demands and poor next-day recovery (Time 2) and 2) job demands and fatigue (Time 2).

detachment. In addition, their findings show that a strong workgroup norm for segmenting work and nonwork domains was associated with higher levels of detachment during nonwork time. Furthermore, a recent study by Barber and Jenkins (in press) found that information and communication technology (ICT) boundary crossing

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Table 4. Within-person studies examining stressors as predictors of detachment.

Authors	Sample, design, and analyses	Measure of stressors	Main findings
Bono et al. (2013)	$N = 61$ women working in outpatient family practice clinics (USA), 915 days Within-person analysis, person-mean centering of momentary and workday predictor variables	Negative events (during the workday)	Negative events during the workday predicted lower detachment during evening hours
Sonnentag and Bayer (2005)*	$N = 87$ employees from various occupations (Germany), 221 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographics, action-state orientation, off-job activities	Chronic and day-level workload (time pressure, hours of work)	High chronic time pressure and long daily work hours predicted lower detachment during evening hours
ten Brummelhuis and Bakker (2012)	$N = 74$ nurses (The Netherlands), 282 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographics, weekly working hours, general level of work engagement, previous level of exhaustion, off-job activities, relaxation during off-job time	Work activities at home	Work activities predicted lower detachment Detachment mediated the relationship between work activities and next-morning vigor
Volman et al. (2013)	$N = 65$ employees from various occupations (The Netherlands), 325 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: family status, general well-being, self-family facilitation	Work-related activities	Work-related activities predicted lower detachment
Volmer et al. (2012)	$N = 98$ civil service employees (Germany), 482 days Within-person analysis, person-mean centering of day-level predictor variables Control variables: demographics, weekly working hours	Social conflicts with customers	Social conflicts with customers predicted lower detachment and higher negative work reflection during evening hours

Note. *Study included between-person job stressors as predictor variables, in addition to within-person predictor variables.

(i.e., performing work tasks at home) was associated with lower levels of detachment from work. However, this relationship was attenuated by boundary creation around ICTs.

In addition to the above-mentioned studies, some research has examined relationships between job stressors and outcomes similar to psychological detachment such as rumination (Cropley & Purvis, 2003) or the inability to withdraw from work (von Thiele Schwarz, 2011). For example, using a between-person design, Cropley and Purvis found that employees in a high-strain group (high demands and low job control) reported more ruminative thoughts than employees in a low-strain group. Similarly, von Thiele Schwarz (2011) showed that job demands were associated with the inability to withdraw from work.

In summary, between-person studies suggest that a variety of job stressors are associated with lower psychological detachment during nonwork time, with so far the strongest support for workload and related variables (overtime, work-related technology use at home, etc.).

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Within-person studies

Studies focusing on within-person relationships between job stressors and psychological detachment confirm and expand findings from between-person studies. For example, with regard to workload, Sonnentag and Bayer (2005) found that high chronic time pressure and long daily work hours predicted lower levels of detachment during the evening. Furthermore, Volmer et al. (2012) reported that conflicts with costumers during the workday were associated with lower levels of detachment as well as with higher negative work reflection (i.e., negatively thinking about one's work during nonwork time) during the evening. A recent study by Bono et al. (2013) suggests that negative events during the workday were related to lower levels of detachment during evening hours. Furthermore, ten Brummelhuis and Bakker (2012) as well as Volman et al. (2013) found that work activities in the evening were associated with lower detachment reported at bedtime. In summary, findings from within-person studies, while still limited, support findings from between-person studies demonstrating a negative relationship between job stressors or negative events at work and psychological detachment from work during nonwork time.

Psychological Detachment as a Mediator between Job Stressors and Strains

Research has started exploring the possible mediating role of psychological detachment in the relationship between job stressors and strain outcomes. Job stressors deplete individual resources, which becomes apparent in increased levels of strain and reduced well-being. Recovery from work stressors can occur when work-related demands and stressors are removed, as for example indicated by high levels of detachment. Under high levels of job stressors, employees have a harder time mentally disengaging from work during nonwork time due to increased negative activation (e.g., negative affect and elevated physiological stress responses). This negative activation can result in worry and rumination about the stressor, attempts to deal with the work-related problems, or engagement in additional work tasks during nonwork time, all of which by definition imply a lack of detachment from work. For example, high workload may require employees to engage in work-related tasks and conversations after hours, or interpersonal conflict at work may increase attempts for problem solving and conflict resolution during nonwork time. Because to date, so few studies have examined this meditational process, it is premature to differentiate findings for between-person versus within-person studies. Using a cross-sectional survey design, Sonnentag, Kuttler, et al. (2010) found that detachment partially mediated the relationships between workload and emotional dissonance on the one hand and exhaustion and need for recovery on the other hand. Similarly, Kinnunen et al. (2011) found that job demands (time pressure, decision-making demands, and work hours) were negatively related to psychological detachment, which in turn was negatively related to fatigue at work. Using structural equation modeling, they found support for a full mediation. Similarly, Safstrom and Hartig (2013) reported that detachment mediated the relationship between job demands and perceived stress as well as between job demands and life satisfaction.

While findings from these studies need to be interpreted taking their cross-sectional design into account, several other studies used longitudinal research designs to examine the question of mediation. von Thiele Schwarz (2011), using a six-month time lag, found that a lack of withdrawal from work partially mediated the relationship between job demands on the one hand and a decreased sense of recovery and increased fatigue on the other hand. A daily-diary within-person study identified psychological detachment as a mediator between work activities in the evening after work and lower vigor the following morning (ten Brummelhuis & Bakker, 2012).

In summary, there is some support for the hypothesis that psychological detachment acts as a mediator between job stressors and employee well-being. However, due to the small number of studies so far, the diverse research designs (e.g. cross-sectional vs. longitudinal) and the diverse set of stressors examined, we hope that future research will deepen our understanding of these meditational processes.

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Psychological Detachment as a Moderator between Stressors and Strains

The stressor-detachment model proposes that psychological detachment from work during nonwork time is not only a direct predictor of strain and impaired well-being but may also buffer the negative impact of job stressors. This proposition is in line with the view that job stressors affect the employee not only at work but also when the stressor is no longer present in a physical sense (Meurs & Perrewé, 2011), for instance, when remembering or anticipating a stressful work situation while at home at night. When not detaching from work while at home, job stressors remain mentally present and therefore may elicit strain reactions, such as fatigue, anxiety, physical symptoms, or impaired sleep. Psychological detachment, however, entails letting go of work-related thoughts and mental representations of the job stressors, allowing the employee to recover from them and to rebuild psychological resources, thereby increasing well-being and reducing strain. As a result, psychological detachment should attenuate the negative relationship between job stressors and strain. Thus, under high levels of detachment, the relationship between job stressors and strain should be weaker than under low levels of detachment.

Some studies examined if psychological detachment indeed acts as a moderator in the relationship between job stressors and strains or poor well-being. For example, Moreno-Jiménez, Rodrígez-Munoz, et al. (2009) found that psychological detachment attenuated the relationship between workplace bullying and psychological strain. Similarly, Sonnentag et al. (2013) reported that psychological detachment attenuated the relationship between emotional conflicts at work and poor well-being. Moreno-Jiménez et al. (2012) found that psychological detachment attenuated the relationship between role conflict and anxiety (but not between role conflict and somatic complaints). In a longitudinal study, psychological detachment moderated the relationship between quantitative job demands and psychosomatic complaints as well as low work engagement (Sonnentag, Binnewies, et al., 2010). In most of these studies, stressors were more strongly related to indicators of strain and poor well-being when psychological detachment was low. These findings suggest that psychological detachment can provide a mental break from job stressors to reduce their negative impact.

A day-level study further showed that psychological detachment can act as a preventative measure (Korunka et al., 2012). Specifically, when railway controllers experienced high levels of psychological detachment from work before a night shift, high workload during the first four hours of the shift was not related to an increase in fatigue, while low levels of detachment before the shift were associated with an increase of fatigue. Derks and Bakker (in press) found an interaction effect between frequency of employer-provided smartphone use and detachment: employees who frequently used their smartphones experienced a high level of work–home interference on days when their detachment level was low, but not when it was high. Thus, detachment attenuated the impact of frequent smartphone use on work–home interference. In addition, research has shown that detachment from work during evening hours attenuates the spillover from immediate strain reactions at work (e.g., negative affect) to strain reactions experienced later at home or even the following morning (Sonnentag & Binnewies, 2013).

Etzion et al. (1998) studied military service as a time period away from employees' regular job and reported a complex interaction between job stressors, detachment, and burnout. Specifically, they found that the relationship between job stressors and burnout was weaker when detachment from the regular job was low and when the time away from the regular job was experienced as positive. Thus, the combination between low detachment and experiencing time off the regular job as positive acted as a moderator, suggesting that under certain circumstances, not detaching might be beneficial. Cheng and McCarthy (2013) reported that psychological detachment buffered the relationship between workplace conflicts and poor work satisfaction only when in addition overall cognitive avoidance of conflicts was high. These two studies illustrate that under certain circumstances, psychological detachment may interact with other variables in a rather complex way.

While the number of studies that have examined the moderating role of detachment is still limited, evidence so far suggests that detachment has the potential to buffer the effects of job stressors on strains and poor well-being. As is the case with other moderators in the stressor–strain process (e.g., Häusser, Mojzisch, Niesel, & Schulz-Hardt, 2010), interaction effects are often hard to detect. de Jonge and Dormann (2006) have argued that resources must

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match the specific stressors in order to be effective. Accordingly, de Jonge et al. (2012) have suggested that the specific way of detaching from work must match the specific stressors with cognitive demands requiring cognitive detachment (i.e., putting thoughts about work aside) and emotional demands requiring emotional detachment (i.e., distancing oneself from work-related emotions). This idea, for instance, also implies that psychological detachment should not help to reduce the effects of physical stressors because such stressors should impact on the organism irrespective if one continues to think about them during nonwork time or not.

Moreover, the proposed buffering effect of psychological detachment partially contradicts the buffering effect of social support. In order to receive social support from nonwork sources (e.g., family and friends), one needs to talk about work-related topics during nonwork time. While talking about work—by definition—detachment cannot occur. Future studies may aim at better understanding the possibly combined effects of psychological detachment and social support on strain reactions and well-being. Possibly, experiencing social support (i.e., not detaching from work) immediately after work may help detaching from work later on.

Discussion

Over the past decade, researchers have identified psychological detachment from work during nonwork time as an important recovery experience. Using the stressor-detachment model as an organizing framework, this literature review shows that job stressors are related to poor psychological detachment from work. Lack of psychological detachment in turn is related to strain reactions and poor well-being—both between and within persons. Associations with life satisfaction and work engagement were rather consistent across between-person studies, whereas associations with more transient positive affective states fluctuating within shorter time periods were relatively scarce. Psychological detachment from work further seems to partially mediate the relationship between job stressors on one hand and strain and well-being indicators on the other hand. In other studies, psychological detachment was found to be a moderator in the stressor–strain relationship.

The finding that job stressors make psychological detachment more unlikely is not trivial because when facing job stressors, employees will experience a higher need for recovery (De Croon, Sluiter, & Blonk, 2004). Thus, although need for recovery increases when stressor levels are high, the most likely response to these stressors is not detachment from work but keeping up a mental connection to work, possibly triggered by high levels of negative activation. In the following section, we will discuss how the stressor-detachment model could be further extended. We will suggest directions for future research and will elaborate on possible practical implications.

Expanding the stressor-detachment model

In this review, we have presented empirical evidence that job stressors predict poor psychological detachment, which in turn predicts strain and poor well-being. Although, overall, empirical evidence supports this model, the associations between the model's core constructs might differ between individuals and situations. We now discuss moderator variables that should be incorporated into an extended stressor-detachment model (see Figure 2). We base our suggestions on conceptual arguments based on transactional stress theory (Lazarus & Folkman, 1984). Empirical research on such moderator effects, however, is still scarce.

Based on transactional stress theory, we propose that the negative effects of job stressors on detachment are moderated by (1) the attention a person directs to his or her job and associated stressors and (2) the resources that help in dealing with the stressors (see arrow 5 in Figure 2). According to transactional stress theory, primary and secondary appraisals are crucial in the stress process. During primary appraisal, an individual evaluates if an event potentially threatens or harms his or her well-being. During secondary appraisal, an individual evaluates if anything can be done to cope with the stressor. An implicit prerequisite for evaluating an event as threatening or harmful during primary appraisal is that the individual directs at least some attention to this event and the context in which

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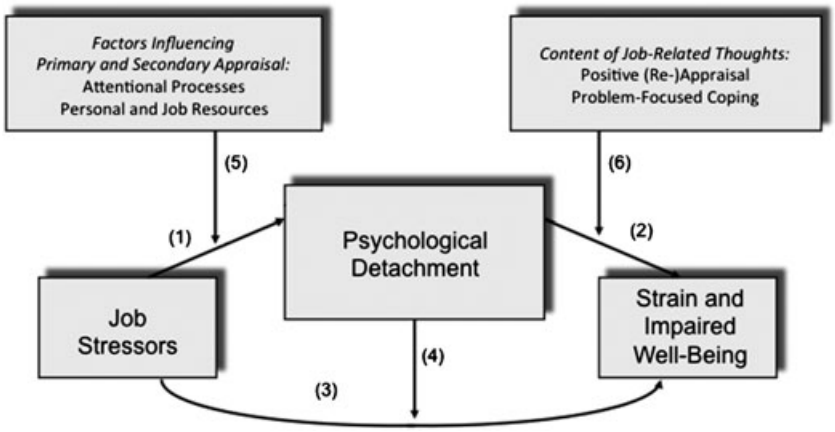

Figure 2. Extended stressor-detachment model

it occurs. When an individual does not pay attention to the event and its context, the event cannot become relevant for the individual's well-being. Accordingly, we propose that directing attention toward work as a core life domain will enhance the relationship between job stressors and lack of detachment, whereas directing attention toward life domains outside of work will attenuate the relationship. Specifically, employees high in job involvement or work-role salience (Kanungo, 1982) will experience a stronger relationship between job stressors and poor detachment than employees low in job involvement or work-role salience. When employees, however, direct attention toward other life domains, job stressors lose their impact on detachment. In everyday life, both negative events (e.g., an argument with one's spouse) and positive events outside of work (e.g., engaging in one's favorite hobby) that pull attention away from work will reduce the impact of job stressors on poor detachment.

Moreover, an employee's capability and willingness to shift attention from one life domain to another whenever needed will attenuate the impact of job stressors on poor psychological detachment. Specifically, mindfulness (i.e., "a state of consciousness characterized by receptive attention to and awareness of present events and experiences, without evaluation, judgment, and cognitive filters", Glomb, Duffy, Bono, & Yang, 2011, p. 119), acceptance (i.e., "the willingness to experience thoughts, feelings, and physiological sensations without having to control them or let them determine one's actions", Bond & Bunce, 2003, p. 1057), and capacity for self-regulation (i.e., "high personal capacity for self-control" Tangney, Baumeister, & Boone, 2004, p. 272) will play a role here.

Furthermore, boundary management between work and other domains is relevant. For instance, a high segmentation preference (Kreiner, 2006)—implying not to pay attention to work-related matters when being at home—should attenuate the effect of job stressors on detachment. However, not everyone may want to fully detach from work during nonwork time. Employees who are fascinated and positively activated by their work may enjoy directing their attention to their work and thinking about it when being at home. For these employees, a lack of detachment might be a pleasant experience and may occur even when no stressors are present.

In addition to attentional processes, an employee's personal and job resources—as evaluated during secondary appraisal—should moderate the effect of job stressors on psychological detachment. For instance, employees who have a high level of self-efficacy and are confident that they are able to cope with the stressors (Jex & Bliese, 1999) will be less likely to continue thinking about the stressors during nonwork time. Similarly, employees who experience high levels of social support at work (Halbesleben, 2006) will be more inclined to detach from work during nonwork time because they know that others will help when needed. Lack of resources, however, will strengthen the negative effect of job stressors on detachment because it is more likely that employees will feel overwhelmed by the stressors when resources are lacking. In addition, negative affect will play a role here. When experiencing negative affect, one views oneself in a more negative light (Watson & Clark, 1984), which makes it

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difficult to perceive available resources and to find new resources that can help deal with the stressor. As a consequence, the influence of job stressors on poor detachment will be stronger when negative affect is high.

Overall, research summarized in this review shows that lack of psychological detachment is associated with strain symptoms, low life satisfaction, and low work engagement. However, not all studies have provided evidence that lack of detachment is associated with these outcomes, suggesting that there might be circumstances under which lack of detachment is less harmful—or even positive. We propose that the content of one's job-related thoughts during nonwork time moderate the effect of detachment on strain and well-being outcomes (see arrow 6 in Figure 2). Specifically, in line with transactional stress theory (Lazarus & Folkman, 1984), we suggest that lack of detachment can lose or lessen its negative impact when—while staying mentally connected with one's job during nonwork time—job-related events are (re)appraised in a positive way and when job-related thoughts during nonwork time are used in order to successfully cope with stressful events encountered at work.

Empirical studies show that thinking or talking about one's job during nonwork time can have beneficial effects, given that the content is positive. For example, research on savoring and capitalization—defined as "beneficially interpreting positive events" (Langston, 1994, p. 1112)—showed that disclosing positive job events to one's spouse is associated with positive affective states (Hicks & Diamond, 2008; Ilies, Keeney, & Scott, 2011). A related line of research suggests that positively reflecting about one's job during nonwork time predicts a decrease in exhaustion (Fritz & Sonnentag, 2005) and an increase in positive affect (Sonnentag & Grant, 2012). Capitalizing on positive work events or positively reflecting about work is incompatible with full psychological detachment from work. Thus, when the content of work-related thought is positive, not detaching from work during nonwork time should be associated with positive outcomes.

Staying mentally connected to one's job and refraining from detachment may enable problem-focused coping. Research on coping has demonstrated that cognitively avoiding stressful topics can have detrimental long-term effects (Eliot, Thrash, & Murayama, 2011), suggesting that detaching from work might have its downside, for instance when mainly used as an avoidance strategy. Staying mentally connected to one's job might offer avenues for solving the problem and alleviating the stressful situation. In addition, fully detaching from work during nonwork time also implies not talking about work at home. As a result, employees may miss the opportunity to receive social support—a coping resource that is known to have beneficial effects on health and well-being (Halbesleben, 2006).

Research implications

Although past research clearly shows relationships between job stressors, psychological detachment from work, and strain and well-being, many questions still remain unanswered. Therefore, in the following paragraphs, we will highlight avenues for future research.

First, until now, past research has seen lack of detachment primarily in a negative light. Also in this review, we have argued that lack of psychological detachment can explain how job stressors translate into strain and poor well-being. However, people do not only encounter stressors at work. They may enjoy praise and success (e.g., securing a huge sale or winning an important grant); when in a resourceful environment, they generally tend to be highly engaged and enthusiastic about their work (Schaufeli & Bakker, 2004). Positive affective states resulting from such positive experiences spill over into the nonwork domain and can enrich nonwork life (Greenhaus & Powell, 2006). Thus, not only job stressors but also highly activating positive events may make psychological detachment from work difficult, and after a positive day at work, employees may still think about it at night. Most likely, the effects of detaching from such positive work events and experiences differ from the effects of detaching from a stressful situation. Whereas detaching from a stressful experience should reduce strain, detaching from a positive experience implies to miss the opportunity to savor these experiences even further. Findings from a diary study (Sonnentag & Binnewies, 2013) support this view: *low* levels of detachment were related to higher levels of positive affect on days when positive affect at work was high than were high levels of detachment. Future studies should shed more light on the link between positive events or experiences at work and subsequent lack of psychological detachment as well as on the link between lack of detachment and subsequent well-being when the work experience is a highly positive one. Importantly, in many people's lives,

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work is a combination of positive and negative events and experiences. Future studies may want to inform us how people can capitalize on the positive events and experiences and detach from the more negative ones.

Second, future research should pay more attention to issues of causality. Although some studies overcame the obvious shortcomings of cross-sectional designs by temporally separating the measurement of psychological detachment and employee outcomes (e.g., ten Brummelhuis & Bakker, 2012; Sonnentag et al., 2008), causal evidence remains tentative. Therefore, studies with stronger designs are needed. A first set of studies could use a quasi-experimental repeated-measurement approach comparing highly stressful periods with less stressful periods, such as done in classical studies by Eden (1982, 1990). Psychological detachment would be the outcome variable in these studies. A second set of studies could manipulate psychological detachment and assess strain and well-being as outcome variables. Such studies could be designed as laboratory experiments or as randomized control trials, for instance, within an intervention approach. In such intervention studies, it will be important to separate the effect of detachment from the effects of other recovery experiences. In addition, future research should explore the possibility of reverse causation. For example, it is possible that employees higher in burnout have a harder time detaching from work (cf. Sonnentag, Arbeus, Mahn, & Fritz, in press), which in turn may lead to a higher level perceived job stressors. Possibly, both causal processes occur simultaneously.

Third, future research should take a more differentiated perspective by systematically taking moderator variables into account, addressing temporal issues, and examining the content of the detachment experiences in more detail. As outlined above, assuming that job stressors impede psychological detachment for all individuals under all circumstances might be too simplistic. In addition, lack of detachment might not always be related to strain and poor well-being. Thus, it is an imperative to examine moderators to identify the boundary conditions of the stressor-detachment model. Here, individual as well as situational characteristics—both their stable and their more dynamic, fluctuating aspects—should be addressed. Moreover, researchers should examine temporal dynamics in more detail. An obvious question to be answered refers to the optimal length of a detachment period. How long does it take for psychological detachment from work to unfold its benefits? In addition, research attention should be given to the temporal order of detachment periods versus periods of mental connection with one's job. It might be that detachment is easier to achieve after having brought work matters to a cognitive closure. Finally, future studies should have a closer look at the cognitions and emotions while staying mentally connected to one's job. Positively reflecting about work might have benefits that are even stronger than fully refraining from work-related thoughts. The positive effects of detachment, however, may be compromised when detachment is achieved by an absorbing, predominantly negative experience such as conflicts in the family or thinking about financial problems.

Fourth, future research on psychological detachment should pay more attention to the social, organizational, and technological contexts. First studies suggest that psychological detachment may not occur in isolation and may not only have an effect on the employee himself or herself (Hahn & Dormann, 2013; Park et al., 2011). Thus, researchers may want to investigate how organizational norms and expectations about boundaries between work and nonwork life impact on employees' psychological detachment from work during nonwork time. In addition, researchers may address the family environment more explicitly, both as a potential facilitator of detachment from work and a setting that is heavily affected when an employee does not successfully detach from work. We suggest that future research on detachment take into account new developments in technology and employees' general connectivity with work during off-job hours. Recent research, for example, shows that technology use for work purposes during nonwork time is associated with lower levels of detachment (Park et al., 2011). Richardson and Thompson (2012) found that levels of mobile technology use during evenings, weekends, and vacations were negatively associated with detachment from work. A study by Barber and Jenkins (in press) supports these findings but also emphasizes that this relationship is moderated by boundary creation around technology use.

In this paper, we have focused on psychological detachment from work during time episodes such as free evenings or weekends. Future research may want to examine the effects of psychological detachment during breaks at work. Studies suggest that engaging in work-related activities during lunch breaks is associated with impaired affect during work and higher levels of fatigue at the end of the workday, particularly when having little autonomy about how to spend the break (Trougakos et al., 2008; Trougakos, Hideg, Cheng, & Beal, in press). Research

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in the field of environmental psychology suggests that spending time in a natural environment that provides the experience of "being away" is associated with increased psychological and physiological recovery (Hartig, Evans, Jamner, Davis, & Gärling, 2003). Thus, environmental settings may partially determine if psychological detachment actually occurs during a break. Without doubt, much more research is needed on work breaks, particularly because organizations may have more influence on how employees spend their work breaks than on how they spend their leisure time. When addressing work breaks, researchers should also consider the role of micro breaks, that is, short periods of time during which the process of task accomplishment is halted (Fritz, Lam, & Spreitzer, 2011).

Practical implications

As described in this review, studies showed positive relationships between psychological detachment from work during nonwork time and reduced strain and increased well-being. Therefore, establishing ways for employees to routinely detach from work is important. Developing and implementing interventions that train employees in detaching from work could thus be a low-cost, easy-to-implement way to improve employee well-being. Probably, the impact of a detachment intervention will be most effective when a person's initial level of detachment will be low. Interventions could, for example, teach employees to develop clear physical or mental boundaries between work and nonwork domains that will facilitate detachment (Ashforth, Kreiner, & Fugate, 2000). More specifically, such interventions could include ideas from goal-setting theory (Locke & Latham, 1990), enabling employees to set goals for segmenting work and nonwork domains. This could include the goal to avoid personal phone calls at work unless they are emergencies or the goal to not check work-related emails until Monday morning at 7 AM.

Because research shows that being involved in work-related tasks during nonwork hours hinders psychological detachment (Sonnentag & Bayer, 2005), employees may take steps to detach themselves from work each evening by engaging in activities that are different from one's work and by spending time with others that do not belong to one's work context. This step can reduce the number of contextual cues outside of work that may prime workers to think about their work, thereby compromising full psychological detachment.

While interventions that help employees to better detach from work during nonwork time would be beneficial, organizations can take an active role in facilitating employee detachment, too. Specifically, supervisors may role model specific detachment-related behaviors and create a climate that allows employees to develop and implement individual strategies for detachment. Supervisors should further be trained to encourage employee detachment by avoiding assigning nonessential work tasks during nonwork time and by avoiding less direct obstacles to detachment (e.g., "why don't you think about that proposal tonight and get back to me in the morning?").

Our review clearly shows that job stressors—particularly workload, time pressure, and overtime—can impair psychological detachment from work during nonwork time. Unfortunately, high workload and overtime are common in a vast variety of occupations and may not be changed easily (Smith, Folkard, Tucker, & Evans, 2011). Therefore, prioritizing job tasks and goal setting strategies are essential to help employees find opportunities for detachment even in situations of high workload. Again, supervisors play a crucial role in this process.

Thus, to ensure successful detachment from work, employees may develop specific routines that allow them to transition from work to nonwork. For instance, they may make a to-do list for the next workday before they leave the office in the evening and use the commuting time to "emotionally let go" of the workday. Organizations as well as employees should also be made aware that extremely stressful events in the workplace may call for additional time to detach (e.g., a vacation).

Research suggests that a lack of detachment can partially explain the relationship between job stressor and employee strain reactions. Given the potential causal chain between stressors, detachment, and strain, it is important for organizations and employees to realize that increased stressors can result in a negative spiral especially over an extended period of time (Westman, Hobfoll, Chen, Davidson, & Laski, 2005). Thus, breaking the spiral through increased psychological detachment during nonwork time is important to sustain long-term employee health and well-being. Employees that focus on routinely detaching from work during nonwork time may be able to avoid an increase in strain when job stressors are high.

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Research on role of detachment provides information on how to interrupt or thwart the stressor–burnout relationship. This is of practical importance to organizations because of the high cost of employee burnout in terms of job performance and job attitudes (e.g., intentions to remain with the organization). In addition, organizations need to consider the health-related costs associated with burnout (e.g., health insurance claims, premiums, and productivity loss due to absence and lateness). Thus, by providing employees with opportunities to detach from work during nonwork time, organizations not only can help avoid and reduce burnout but can enhance employee involvement at work through, for example, increased work engagement.

In terms of policy implications, research summarized in this paper suggests that it is important to limit the number of work hours—as proposed, for instance, in the European Working Time Directive; but this is not enough. It is crucial that other efforts to improve working conditions and reduce stressors are continued. In addition, at both organizational and societal levels, an exclusive focus on work as the most important life domain should be questioned. Employees should be encouraged to enjoy not thinking about work and to immerse themselves fully in other activities during nonwork time.

Overall conclusion

Overall, research summarized in this review suggests that lack of detachment is a core mechanism by which job stressors translate into poor health and well-being. Therefore, it is crucial that employees exposed to a high level of job stressors detach from work during nonwork time. Psychological detachment is a powerful process that helps to stay healthy and productive during turbulent times. Paradoxically, employees detach less from work when facing a highly stressful job situation in which detachment and effective recovery processes would be particularly needed. This finding illustrates that detachment may not happen by itself but may require some self-regulatory effort. At the same time, it emphasizes that organizations as well as employees need to take deliberate steps to facilitate detachment. From the organizational side, the focus may lie on developing norms for detachment and work–nonwork segmentation, organizing and prioritizing workload, and offering supervisor and employee training. Employees should become more aware of their needs for detachment and develop and implement specific strategies that help them detach from work on a regular basis in order to effectively recover from work-related stress during nonwork time.

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