Job-Stress Recovery: Core Findings, Future Research Topics, and Remaining Challenges

Sabine Sonnentag

School of Social Sciences
University of Mannheim Schloss Ehrenhof Ost
D-68131 Mannheim,
Germany Phone: +49 621 181 2118
Fax: +49 621 181 2119
Email: sonnentag@uni-mannheim.de

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Job-Stress Recovery:
Core Findings, Future Research Topics, and Remaining Challenges

People in the USA and in many other countries experience stress in their daily lives. Stress experiences, in turn, can lead to severe health consequences and may impede effective functioning on a broad range of important life areas. Work is one important factor that contributes to people's everyday stress experience (American Psychological Association, 2017). In many jobs, people are facing increasing workload, tight deadlines, interpersonal conflicts or even incidents of aggression. Often, such job stressors increase the likelihood of illnesses and poor well-being, particularly when such job stressors persist over longer periods of time.

Negative consequences of job stressors can be attenuated by recovery processes, i.e., rest and recuperation occurring during nonwork time. Vacations provide such opportunities for recovery. However, only addressing recovery needs during vacations falls short for two main reasons. First, vacations are relatively rare events and cannot satisfy all recovery needs as they occur across the year. This is particularly the case in countries such as the USA, where the number of vacation days is often limited. Second, the beneficial effects of vacations on affective well-being fade out relatively quickly. Studies show that a few weeks after the end of a vacation the improvements in well-being attained during the vacation have disappeared (De Bloom, Kompier, Geurts, De Weerth, & Sonnentag, 2009). Thus, although vacations can bring some relief, they are not sufficient for sustainably counteracting the detrimental effects of job stressors. Because the stress-attenuating power of vacations is limited, people need to integrate effective recovery periods into their daily lives during regular work weeks. In an optimal situation, people would allocate at least some time per day to their recovery needs.

The purpose of this paper is to give an overview of the research evidence on everyday recovery from job stress. I start with a brief description of the recovery concept. In the second part of the paper, I summarize the results from empirical studies and highlight the five most important findings. Although much progress has been made in recovery research during the past 15 to 20 years, there are still significant gaps in our knowledge on recovery. Accordingly, in the third part of the paper, I address five core areas to be addressed in future research. Finally, in the
fourth part I draw practical conclusions from the accumulated evidence and discuss five persisting challenges for individuals and organizations.

What is Recovery?

Recovery is an essential part of the stress process. When an organism encounters a stressor, it reacts with specific physiological and psychological responses such as increased heart rate and elevated levels of anger or anxiety. Recovery refers to the process during which the organism returns to the pre-stressor level of physiological and psychological arousal after having been exposed to a stressor (Craig & Cooper, 1992). Usually, successful recovery becomes evident in decreased strain levels, both with respect to the physiological and psychological indicators. For instance, heart rate returns to the baseline level and feelings of anger or anxiety disappear. Also, symptoms of fatigue that could have resulted from the stress response are reduced.

In everyday life, recovery is experienced as unwinding, the recuperation or restoration of physical or mental resources, and usually occurs during nonwork time in the evening or the weekend. Recovery can be understood from a process as well an outcome perspective (Sonntag, Venz, & Casper, 2017). Recovery as a process refers to leisure activities and nonwork experiences that lead to a change in physiological and psychological strain levels. Recovery as an outcome refers to reduced physiological and psychological strain levels after a recovery period. Recovery research has addressed two related questions: (1) Which recovery processes result in positive recovery outcomes? (2) Which factors promote or hinder beneficial recovery processes? Although recovery comprises both physiological and psychological processes, the majority of organizational studies addressing recovery put most emphasis on the psychological processes.

Five Core Findings from Recovery Research

Research on recovery has made tremendous progress during the past two decades, providing important insights about how to protect employee health and well-being in demanding jobs. Table 1 summarizes the core findings.
Table 1

Findings from recovery research and sources of empirical evidence

<table>
<thead>
<tr>
<th>Core findings</th>
<th>Source of empirical evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful recovery from the previous day’s work is related to</td>
<td>Daily-survey studies</td>
</tr>
<tr>
<td>feelings of energy and effectiveness</td>
<td></td>
</tr>
<tr>
<td>Mentally detaching from work is important</td>
<td>Meta-analyses</td>
</tr>
<tr>
<td>Relaxation, experiencing mastery and control, and physical</td>
<td>Meta-analyses</td>
</tr>
<tr>
<td>activities help to recover</td>
<td></td>
</tr>
<tr>
<td>Stressful work makes recovery difficult</td>
<td>Meta-analyses</td>
</tr>
<tr>
<td>Good recovery practices can be learned</td>
<td>Intervention studies</td>
</tr>
</tbody>
</table>

People who experience recovery from their previous day’s work feel more energetic and effective the next day.

People benefit from getting sufficient recovery, both with respect to subjective experiences and behavior at work. Studies have captured recovery processes during people’s daily lives by administering short surveys several times during the day. For instance, researchers asked people about their recovery level in the morning and assessed how they felt and behaved at work later during the day. This research has shown that on days when people feel well rested in the morning and have recovered well during the night, they are more energetic at work, more dedicated to their jobs, and more absorbed than on days when they start with an already elevated depletion level (Lanaj, Johnson, & Barnes, 2014; Sonnentag, 2003). Importantly, when well recovered, people feel more effective during the workday, not only in performing their core job tasks but also in showing proactive behavior and helping coworkers at work (Binnewies, Sonnentag, & Mojza, 2009).

Mentally detaching from work is crucial for recovery – in most instances.

People use many different strategies to recover from the daily demands they encounter at work. One factor that is highly important across diverse groups of people and within many settings is psychological detachment from work during nonwork time. Psychological detachment does not only mean to refrain from actually working during leisure time, but also to refrain from job-related thoughts. In everyday terms, psychological detachment is experienced as “switching off” (Sonnentag & Bayer, 2005). When people detach from their work they do
not worry or ruminate about job-related issues, but are mentally occupied with other things such as leisure activities, connections to family and friends, or off-job duties (e.g., housework, volunteer work).

Numerous studies have examined how psychological detachment from work during nonwork time relates to people’s subsequent mood states and longer-term well-being. Two recent meta-analyses have identified psychological detachment from work as a strong predictor of favorable mood states and positive well-being (Bennett, Bakker, & Field, 2018; Wendsche & Lohmann-Haislah, 2017). Specifically, in these meta-analyses, high levels of psychological detachment from work were negatively related to burnout, fatigue, and physical discomfort, and positively related to vigor, good sleep, and overall well-being. Thus, people who psychologically detach from work during nonwork time generally feel better. Moreover, people react rather quickly to the experience of detaching from work and immediately feel better and maintain the affective benefits until the following day (Sonnentag, Binnewies, & Mojza, 2008; Spieler, Scheibe, Stamov-Roßnagel, & Kappas, 2017). Findings from longitudinal studies are still inconclusive (for a summary, Sonnentag et al., 2017). It seems that over time, psychological detachment from work might not only be beneficial in itself, but in buffering the negative consequences of high job demands (Sonnentag, Binnewies, & Mojza, 2010).

Meta-analytical evidence also showed a positive, albeit small, association between psychological detachment from work and task performance (Wendsche & Lohmann-Haislah, 2017). Possibly, there is a curvilinear relationship between psychological detachment from work during nonwork time and performance on the job. Specifically, although increasing detachment allows for restorative processes, beyond a certain level, detachment may no longer help recovery, and may even be detrimental for performance because it hinders motivational processes once employees are back at work (Fritz, Yankelevich, Zarubin, & Barger, 2010). For instance, when fully disengaging from all job-related matters in the evening, it might be difficult in the morning to mentally reconnect to work, to activate work-related goals and to pursue these goals with high priority.

Despite the clear findings that lack of detachment from work during nonwork time is associated with poor well-being, there are exceptions to this overall advantage of detaching from work. Empirical research points to factors that make not detaching less detrimental or even
beneficial for well-being. Whether not detaching from work during nonwork time is associated with more favorable outcomes appears to depend on the content of the job-related thoughts entertained during nonwork time. For instance, reflecting about one’s work in a positive way (Meier, Cho, & Dumani, 2016) or engaging in problem solving – as opposed to affective rumination – (Querstret & Cropley, 2012) are associated with positive well-being indicators. Thus, it seems that not all thinking about work is detrimental for well-being, but that the thought content matters, and positive thoughts about work during nonwork time may even provide an uplift.

**Relaxation, experiencing mastery and control, and physical activities also help to recover.**

In addition to psychological detachment from work during afterhours, other experiences and activities are important for recovery as well. First, experiencing relaxation – that is a positively toned state of low arousal – can benefit people in recuperating after a busy day at work. Meta-analytical evidence shows that relaxation in the evening is indeed positively related to vigor and negatively related to fatigue (Bennett et al., 2018). Recovery, however, does not only result from reduced activity or even passivity. Mastering challenges – such as engaging in a demanding hobby or learning a new skill – as well as experiencing control over how one spends nonwork time can have benefits for recovery because such experiences have the potential to satisfy basic human needs (Deci, Olafsen, & Ryan, 2017). Nonwork-based needs satisfaction is particularly important when work activities fail to satisfy needs. In addition, mastering challenges and exercising control are inherently positive experiences and contribute to positive affect. Again, meta-analytical evidence tends to support this idea of the benefits of mastery and control during leisure time (Bennett et al., 2018).

Moreover, research has looked at leisure-time activities that might support the psychological detachment and other recovery experiences, and that ultimately result in better well-being. Of course, people differ in their favorite leisure-time activities, however, for many, physical exercise seems to have substantial benefits in terms of recovery and improvement of well-being. For instance, the more time people spend on physical exercise during evening hours, the more vital and positive they feel afterwards and the lower their fatigue level at bedtime (for a summary, Sonnentag et al., 2017). In addition, meta-analytical evidence suggests
that leisure-time physical activity is related to better mental health and lower levels of ill health, particularly to lower levels of depression (White et al., 2017).

**Stressful work makes recovery difficult.**

When facing job stressors such as a high workload, time pressure or interpersonal conflict or acts of incivility, recovery is particularly important. After having been exposed to such stressors, physiological and psychological strain levels are high and need to be reduced to the organism’s regular level. Paradoxically, when experiencing such stressful situations at work, recovery is particularly difficult. Studies show that people who generally experience high demands at work find it more difficult to detach from work and to relax. Bennett and colleagues’ (2018) meta-analysis demonstrates that particularly so-called challenge stressors (e.g., time pressure, high workload) are negatively related to psychological detachment and relaxation during the evening. Possibly, after having worked hard to meet demanding goals during the day, it is highly difficult to unwind and to calm down in the evening. Relatedly, on days when having experienced negative events at work during the day, people are less likely to mentally detach from work in the evening (Bono, Glomb, Shen, Kim, & Koch, 2013). This association between high job stressors and impaired recovery processes can be explained by a high level of negative arousal (e.g., feeling tense) that triggers continued job-related thoughts and interferes with the relaxation process. Moreover, activities that are helpful for recovery, such as physical exercise, require some degree of self-control. Self-control, however, tends to become impaired after having been exposed to demanding situations (Häusser & Mojzisch, 2017). Thus, when having been exposed to job stressors, the self-control capacity that would be required to initiate or maintain effective recovery activities is depleted. For instance, after having dealt with work hassles and other job stressors throughout the day, many people feel that they do not have enough energy left to engage in physical exercise or a demanding but highly gratifying hobby.

These findings are highly relevant for organizational job design because they show that an emphasis on recovery processes is not an alternative to well-designed jobs. On the contrary, poorly designed and stressful jobs make recovery much more difficult and therefore compromise worker health and well-being, not only directly by harmful working conditions, but also by undermining recovery processes.
Good recovery practice can be learned.

Some people find it more difficult to recover than others. However, the ability to recover is not a fixed entity that cannot be changed. Research demonstrated that people can learn how to recover in a better way. For instance, studies showed that training programs that focus on improving recovery processes by teaching participants how to psychologically detach from work or to relax resulted in improved well-being over time. Typically, such intervention programs are administered in face-to-face sessions or via the Internet and encourage participants to spend time on recreational activities and to increase boundaries between work and nonwork life. These measures, in turn, increase core recovery experiences such as relaxation and psychological detachment from work (for a summary Sonnentag et al., 2017). Moreover, interventions that focus more broadly on restoring personal resources that have been depleted at work have the potential to undo the negative effects of job stressors and thereby will contribute to recovery. These interventions include mindfulness trainings and exposure to nature (for a summary Gilbert, Foulk, & Bono, 2017).

Five Topics for Future Recovery Research

Research conducted during the past 15 to 20 years has demonstrated that attention to recovery processes is crucial to understand how impaired job-related well-being and health problems may develop. Despite this important insight, a number of issues need more research attention in the future. Table 2 provides an overview.

First, until now empirical studies on recovery have focused on employee well-being and health. Although there is evidence for a weak positive association between recovery indicators (e.g., psychological detachment from work, feeling recovered) and task performance, the pattern is more inconsistent for other performance components such as organizational citizenship behavior or creativity (Binnewies et al., 2009; Wendsche & Lohmann-Haislah, 2017). Thus, more research is needed that addresses the question of how recovery experiences and states resulting from recovery processes relate to various dimensions of job performance. Because studies have shown that recovery processes are associated with favorable affective states (i.e., high positive affect and low negative affect), and that favorable affective states are beneficial for job performance (Sonnentag, 2015), one may expect that recovery is reflected in performance benefits as well. Such benefits,
however, might not impact all performance dimensions in the same way. For instance, performance decrements might become obvious more quickly with respect to extra-role performance (e.g., proactive behavior) and might emerge less directly with respect to task performance because most employees might prioritize task performance over extra-role performance. Importantly, studies addressing the effect of recovery on performance should strive to assess objective performance indicators in order to rule out problems associated with self-report measures of performance.

Table 2

<table>
<thead>
<tr>
<th>Topics for future research</th>
<th>Study designs and measures</th>
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<tbody>
<tr>
<td>Examine performance indicators as outcomes of recovery processes</td>
<td>• Organization-based studies</td>
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<td></td>
<td>• Objective performance measures</td>
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<td></td>
<td>• Observations</td>
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<tr>
<td>Address the causality – possibility of reciprocal relationships, underlying processes</td>
<td>• Experiments</td>
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<td></td>
<td>• Randomized-control trails</td>
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<tr>
<td></td>
<td>• Assessment of physiological parameters</td>
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<tr>
<td>Temporal dynamics</td>
<td>• Experience-sampling studies</td>
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<tr>
<td>Contextual influences on recovery</td>
<td>• Cross-cultural studies</td>
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<td></td>
<td>• Multi-level studies within organizations</td>
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<td></td>
<td>• Actor-partner interdependence models within couples</td>
</tr>
<tr>
<td>Individual factors influencing recovery</td>
<td>• Large-scale studies</td>
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<td></td>
<td>• Examining cross-level interactions in daily-survey studies</td>
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</table>

Second, although there is clear evidence that recovery processes are positively associated with employee well-being (Bennett et al., 2018; Wendsche & Lohmann-Haislah, 2017), the causality driving this empirical relationship is not fully understood. Although some research found that recovery predicts change in well-being, these findings are not unequivocal (for a summary, Sonnentag et al., 2017). Moreover, well-being might help workers to engage in more effective recovery activities and might generally facilitate recovery. Thus, because
correlational designs cannot uncover the causality underlying empirical associations between variables, stronger research designs are needed, including experiments and intervention studies following the randomized-control approach. This research strategy should be open to the possibility that recovery and well-being might be interrelated in a reciprocal way with recovery influencing well-being and well-being, in turn, influencing recovery. Moreover, future research should address processes underlying the associations between recovery and well-being in greater detail. Here, researchers should address physiological processes as well as affective and cognitive processes. Probably, physiological, affective, and cognitive processes do not operate in isolation, but support each other in the case of beneficial processes, and may jointly result in a deterioration of the whole system in the case when recovery is not successful.

Third, to gain a better understanding of recovery as a process, future research should address temporal dynamics in greater detail. More specifically, research should strive to find an answer to the question about the ideal length of a recovery period and the sequencing of recovery episodes and non-recovery episodes during the day. Most probably there is no one best length of recovery period that applies under all conditions and for everyone. For example, longer periods of recovery will be required after having been exposed to a high level of stressors – as opposed to a low level of stressors. Also individual differences related to age or psychological resilience most probably play a role, making it difficult to find an optimal length and pattern of recovery episodes that is applicable to everyone. Future studies should address potential fadeout processes occurring during the workday, possibly in interaction with the demanding nature of work tasks the person faces during the day and his or her circadian rhythm. Thus, it is important to know how long someone benefits from having recovered well and if being recovered protects against stressful experiences encountered during the day. For instance, being well recovered might be particularly relevant during evening or night shifts when usually the organism is not in the state to function in an optimal way.

Fourth, research on recovery has focused on individual-level processes. Obviously, this approach makes sense because recovery occurs at the individual level. This focus on individual-level processes, however, neglects potential contextual influences on recovery. Contextual influences may be culture-related, work-related, or related to a person’s personal life. With respect to the cultural context, it has to be noted that most research on recovery has
been conducted in Europe and North America (Wendsche & Lohmann-Haislah, 2017). Accordingly, the question of whether these research findings generalize to non-Western cultures has not been fully addressed. In addition, it needs to be seen if culture-specific perspectives on work-related achievements versus quality of life (i.e., masculinity versus femininity in Hofstede’s terms) play a role with respect to recovery issues. Importantly, the role of legislation around work time and nonwork time might exert an influence on the importance people attach to recovery processes.

With respect to work-related contextual influences on recovery, one may want to differentiate between the job, the team, and the organizational context. Research has shown that job demands and job resources are related to recovery experiences. Employees working in less demanding and more resourceful jobs enjoy better recovery experiences (Bennett et al., 2018). Future studies may want to examine the robustness of these findings because socio-economic factors may influence job demands and resources as well as recovery processes. For instance, education level is associated with better job conditions (e.g., more job resources), leading to more financial resources. Financial resources, in turn, allow employees to move into neighborhoods that provide a better environment for recovery (e.g., more parks or other recreational facilities) and help to spend more time on recovery, for instance by outsourcing some household duties. Contextual influences at the team and organizational level still await considerable research attention. There is first evidence that the relationship an employee has with his or her supervisor matters for recovery processes. A study by Bennett, Gabrial, Calderwood, Dahling, and Trougakos (2016) found that when supervisors demonstrate support for employee recovery, employees are better able to leave work behind which becomes evident in high scores in recovery experiences (psychological detachment, relaxation, mastery, and control) and low levels in problem-solving pondering. This beneficial recovery pattern, however, is counteracted when employees have a particularly good relationship with their supervisors (high leader-member exchange), possibly because in such a situation employees prefer to stay mentally connected to their work. Not only supervisors, but also other team members and stakeholders within the organization may influence an individual’s recovery processes by shaping norms and expectations about what is acceptable recovery behavior. Recovery research may gain from incorporating climate and culture perspectives used in team and organizational-level research.
Importantly, it may not only be that individuals’ recovery processes are influenced by the team, but the organizational context as well. Recovery (or the lack thereof) occurring at the individual level may impact team-level or organization-level processes. For instance, a high exhaustion level among team members due to insufficient recovery may reduce team cohesion and organizational identification. Thus, within team contexts, recovery is not only important for each team member, but might affect the whole team.

When it comes to people’s personal lives, context may matter as well. Most obviously, processes within the family will be important. Research, for instance, has shown that a person’s psychological detachment from work is closely intertwined with his or her partner’s orientations toward work-home segmentation and with both partners’ life satisfaction (Hahn & Dormann, 2013). However, there might also be contextual influences from friends, relatives, and the neighborhood in which a person in lives. For instance, specific environmental features may facilitate effective recovery processes, whereas other features may constrain recovery opportunities (Berman, Jonides, & Kaplan, 2008).

Taken together, although there is first evidence that the context matters for recovery processes, we lack an exhaustive understanding of the specific contextual features that are important and why. Here, we need more theoretical and empirical work that integrates the still scattered research findings and develops a comprehensive model of the cultural, organizational, social, and environmental embeddedness of recovery processes.

Fifth, empirical studies have shown that some personal characteristics are related to recovery processes. For instance, neuroticism was found to be negatively related to psychological detachment from work during nonwork time, whereas characteristics such as age and gender were unrelated to psychological detachment (Wendsche & Lohmann-Haislah, 2017). To arrive at a deeper understanding of who recovers easily and who might need more support in achieving recovery, more research on personal characteristics and their link with recovery processes is necessary. For instance, self-control capacity (i.e., the ability to regulate one’s thoughts and actions) might be helpful for quickly turning from a working mode into a recovery mode. Most probably, people differ in the degree to which they need recovery. Need for recovery has been conceptualized as a reaction to demanding work situations (Sluiter, Van der Beek, & Frings-Dresen, 1999). There might be other factors that influence a person’s
propensity to long for recovery. For instance, seeing one’s work as a calling might reduce a person’s need for recovery – and at the same time might make it difficult to actually achieve recovery (Clinton, Conway, & Sturges, 2017). Future research is needed to explore individual differences related to recovery processes. This research might not only look at characteristics of the focal person, but also of close others (e.g., the spouse).

**Five Recovery Challenges**

Based on evidence accumulated in empirical studies with more than 35,000 persons (Wensche & Lohmann-Haislah, 2017), it seems clear that recovery must take an important role in people’s daily life. After work, people should devote some time to activities that have nothing to do with their jobs and during which they can detach from work, relax, and experience some mastery and control. Despite the research evidence about the importance of recovery, there are obstacles that may make it difficult for people to get sufficient recovery during their daily lives (Table 3).

**Table 3**

*Recovery challenges and possible solutions*

<table>
<thead>
<tr>
<th>Factors that hamper recovery</th>
<th>Possible solutions</th>
</tr>
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<tbody>
<tr>
<td>Long work hours, second jobs, non-job obligations</td>
<td>• Making time for recovery, even for a few minutes</td>
</tr>
<tr>
<td></td>
<td>• Using effective recovery practices (mindfulness, physical activity)</td>
</tr>
<tr>
<td>Always-on life (i.e., staying technically connected to the job)</td>
<td>• Organizational policies</td>
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<tr>
<td></td>
<td>• Self-regulation skills that help to quickly disconnect mentally</td>
</tr>
<tr>
<td>Difficulty to initiate and maintain recovery activities and to</td>
<td>• Identifying recovery activities that fit personal needs and preferences</td>
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<tr>
<td>benefit from them</td>
<td>• Recovery routines</td>
</tr>
<tr>
<td></td>
<td>• Reminders</td>
</tr>
<tr>
<td>Excessive work demands and job-related intrusions</td>
<td>• Limiting intrusions into private life</td>
</tr>
<tr>
<td></td>
<td>• Compensation of overtime with free time</td>
</tr>
<tr>
<td></td>
<td>• On-site recovery facilities</td>
</tr>
<tr>
<td>Preferring work over leisure</td>
<td>• Finding an enjoyable leisure activity</td>
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</table>
First, many people work long hours and may have even two jobs that make it difficult to find time for recovery. In addition, having non-job duties such as childcare and care for ill or elderly family members intensifies this problem, not only in terms of time, but also in terms of feeling entitled to enjoy a recovery period within a setting where others need care and support. In such demanding situations – caused by job-related and non-job factors – it is important for people to carve out some time for recovery, even when the single time periods are short. In such instances, it is particularly important to engage in recovery activities that are highly effective and that allow for some restoration during a limited time. For instance, mindfulness practice, some type of physical exercise (e.g., running, yoga) or exposure to a natural environment (e.g., a park, a balcony with plants) can provide some degree of recovery rather quickly.

Second, more and more people live an always-on life, implying that they keep technologically connected with their jobs even during evenings, weekends, and vacations. Such constant connectivity makes it difficult to detach from work and to recover (Lanaj et al., 2014). Although some organizations might develop explicit policies and technical solutions that prevent employees from being online 24/7, such an approach will not solve the problem because it does not prevent employees from finding other ways to stay mentally connected with their jobs. Accordingly, it seems unrealistic to advise employees not to check email or other incoming messages while at home. Quickly responding to a message can even provide some relief and may help to avoid rumination about unresolved issues. Therefore, instead of technically disabling job-related technology use, it seems more important that people learn to mentally disconnect from job-related issues very quickly after having been involved in some kind of online communication. Such a skill allows one to swiftly re-direct attention to non-job issues, but requires a certain degree of awareness about one’s own thoughts.

Third, although it is straightforward to advise making time for recovery, some people may find it nevertheless difficult to actually engage in promising recovery activities and to arrive at a state of recovery – even when they have time. Here, it can be useful to encourage people find out which recovery activities are most effective for them personally. Although there are general features of an activity that help recovery – for instance, the activity should have an absorbing character (Hahn, Binnewies, & Haun, 2012), the specific activities that people find useful for
achieving recovery can be very diverse. Therefore, it is important that people reflect and explore the activities that are most personally helpful.

In addition, people may want to develop recovery routines, i.e., affective, cognitive or behavioral routines to use in specific nonwork situations that help them to recover from work (and other demands). For instance, a person may want to have the routine to read a few pages in a novel before going to sleep every night or to meet with friends for a hiking tour every second weekend. As with other habitual behaviors, people may want to use context cues as triggers for the engaging in the routine recovery behavior. For instance, after having worked particularly long hours during a day (the trigger), a person may want to watch a short relaxing movie in the evening or do some stretching exercises (the recovery behavior). People may even want to use technical support, for instance smartphone apps that remind them to relax after a high-intense workday.

Fourth, high job demands may interfere with employees’ recovery processes. First-line supervisors and higher-level managers need to be aware that people need recovery to remain healthy and effective workers. Accordingly they should aim at not obstructing employees’ recovery time. This implies that intrusions into employees’ nonwork life that occur by sending text messages or expecting quick responses to emails sent at night should be minimized. Moreover, supervisors and managers should find ways to compensate for working-time arrangements (e.g., excessive overtime, on-call work) that limit recovery opportunities. Importantly, these efforts should focus on providing compensation in terms of time – as opposed to monetary compensation – that helps employees to “catch up” with recovery. In addition to these approaches that aim at preventing interference with recovery, some organizations may even want to go a step further and support recovery in a more active way. For instance, providing recuperation facilities on-site (e.g., sport centers, family areas) may be one option. However, it remains to be seen if such settings provide real mental detachment from work because contact with co-workers and the overall work setting remains present and most likely does not allow for full detachment. Furthermore, there are ethical issues in how far organizations should actually try to influence their employees’ life outside the job.

Fifth, not everyone may even want to spend time on recovery. People who are highly involved in their jobs and find their work highly satisfying might be reluctant to spend time on
what they might see as a “less preferable” activity. Of course, choice and control over one’s activities is an important feature of a successful recovery process (Sonnentag & Fritz, 2007) and therefore, it may not be useful to “force” people into recovery. Here, one method of promoting recovery might be to encourage employees who are reluctant to spend time on traditional leisure-time activities to engage in some type of work activity they find most enjoyable to buffer the more negative aspects of their work.

**Conclusion**

The quickening pace and growing demands of 21st century work has spurred academics, organizational personnel, and public policy makers to focus greater attention on how the experience of work may compromise health and well-being of workers and their families. Two decades of theorizing and empirical research show the importance and potential of recovery as a central process by which to mitigate the detrimental effects of stressful jobs. Research findings in this area show a variety of strategies for achieving recovery during nonwork life, and the beneficial effects of recovery during leisure time for individual workers. Accordingly, in addition to organizational efforts of providing well-designed jobs that enable employees to be productive without compromising health and well-being, recovery can be a powerful strategy to protect worker health and well-being. Yet research is still needed to better understand the dynamics of recovery, the effects of a changing workplace context on recovery, and the affordances and constraints on recovery associated with how people live and experience their nonwork life.
References


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