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## Energizing respites from work: A randomised controlled study on respite interventions.

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### Synopsis

Increasing work demands drain employee's energy for work. In this 4-week longitudinal study, we investigated the energizing potential of a respite intervention conducted in the workplace (either a simulated savouring nature intervention or a progressive muscle relaxation intervention). Our results demonstrated that individual daily energy increased across the days of the intervention and daily fatigue decreased. Furthermore, repeatedly engaging in the daily respite intervention also influenced more stable changes in energy levels after the intervention. We conclude that respite interventions can be a useful tool to replenish and build energy at work.

### Introduction and Background

Due to increasing and new work demands, more and more employees feel exhausted, stressed, and burned out, which endangers not only employee health and well-being but also an organization's productivity and innovation (e.g., Fritz, Lam, & Spreitzer, 2011; Pfeffer, 2010). This link between employees' energy and organizational outcomes becomes increasingly relevant because knowledge workers' performance depends on their ability and willingness to produce knowledge, which is closely related to individual's mood, motivation, and perseverance (Newell, Robertson, Scarbrough, & Swan, 2009). As a result, protecting, replenishing, and managing energy resources (i.e., promoting the human dimension of sustainability; Pfeffer, 2010) have become a crucial goal for individuals and organizations.

A self-initiated work break can help to restore energy and boost daily work engagement (Kühnel, Zacher, De Bloom, & Bledow, 2016). Only recently, studies have suggested that micro-activities, which can be performed across the workday, can support sustainable daily energy management at work (Clauss et al., 2018; Kinnunen, Feldt, De Bloom, & Korpela, 2015). To the best of our knowledge, no other research has evaluated whether micro-intervention can also be designed to promote respite from work. Thus, the aim of this study was to design two short daily respite interventions and to examine the extent to which these impact energy in the form of vigour and fatigue.

### Issues and Questions Considered

A respite intervention is a micro-intervention with a length of 5–10 minutes that can be completed at the workplace and gives an employee a reprieve from work, during which employees shift their attention away from work tasks (Hunter & Wu, 2015; Kühnel et al., 2016). We focused on two types of respite intervention: savouring nature and progressive muscle relaxation (PMR). We expected that respite interventions will unfold their energising effect over time leading to a cumulative effect. Although single events may lead to a dramatic loss of energy (Zohar, Tzischinski, & Epstein, 2003), energy levels, like other resources, generally change over time (Halbesleben et al., 2014; Hülsheger, 2016; Sonnentag, 2003). A stable increase in resources requires repetition, in a similar way that exercise needs to be repeated in order to translate into stable increases in fitness

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levels. Thus, we expect that the more times participants engage in a respite activity, the more energetic they will feel.

Thus, the aim of the study was to explore the potential of brief daily respite interventions for employees' energy resources. We expected that engaging in a daily savouring nature or relaxation intervention would increase daily energy (i.e. vigour) and decrease daily fatigue compared to a control condition. We further expected that these daily effects would indirectly lead to more stable benefits for energy resources.

## Methodology

Participants were 36 women and 46 men with a mean age of 36.94 years (SD = 11.40) from different companies in and around Stuttgart, Germany. Most participants were permanently employed (87.8.2%) full-time employees (89.0%).

The study lasted 4 weeks overall: In week 1, participants had the first meeting where they completed the baseline survey and were subsequently trained in one of the two interventions (if in the intervention group). In weeks 2 and 3, participants completed the daily measures and the interventions (for the intervention group). In week 4, participants completed the post-questionnaire.

Participants completed daily surveys on 10 consecutive workdays. Each day, they were asked to assess their current well-being in the morning before starting work (morning survey) and in the evenings after at least 2 hours of leisure time (evening survey). Additionally, participants in the intervention group were instructed to do their respective intervention during their lunch break as previous research has shown that relaxing interventions during lunch breaks are more effective than interventions at other times (Krajewski et al., 2010).

Respite intervention. Participants executed one of two respite interventions: savouring nature (SNI) or progress muscle relaxation (PMRI). The SNI combined the presentation of auditory stimuli of a natural environment with a guided imagination technique (Gierra & Klinkenberg, 2005), using positive imagination and visualization processes to provide relaxation and detachment. To facilitate the savouring of a natural environment, participants listened to a natural soundscape while completing the interventions (Alvarsson, Wiens, & Nilsson, 2010; Ratcliffe, Gatersleben, & Sowden, 2013). Participants were instructed to fully immerse themselves in the situation and enjoy it in order to promote the savouring component of the intervention and to help participants to focus on the positive experience.

The PMRI started with a first short mindfulness component followed by the muscle relaxation intervention and ended

with the described savouring intervention and second mindfulness section. Participants could choose to do the PMRI either by following verbal instructions and listening to relaxing music or by instructing themselves while listening to the same music file or by not using any audio file. PMR is an established and widely applied relaxation technique, which uses tension and relaxation of different muscle groups. Participants progressed through a series of seven muscle contraction-relaxation sequences starting with the dominant arm followed by the non-dominant arm, the facial muscles, the neck muscles, the muscles of the torso, the dominant leg and ending with the non-dominant leg. Each group of muscles was contracted for 5–7 s followed by relaxation of the muscles for 20 s in each sequence. Crucial for the positive impact was that participants experienced and savoured the difference between the tension and the relaxation.

## Outcomes and Findings

Growth modelling showed that afternoon vigour (i.e. energy) levels increased during the intervention period in the intervention groups, while afternoon vigour levels remained stable in the control group. We saw a similar pattern of decline in evening fatigue for the intervention group but not for the control group. This indicates that the intervention had cumulative effects over time. Our mediation analyses indicated that the effects of the intervention first occurred immediately and then translated into more stable post-intervention changes.

This research has practical implications for the introduction of respite interventions to combat the energy drain among knowledge and office workers. First, respite interventions promote energy resources among employees by accumulating energy and fighting exhaustion on a daily basis through repeated practice. Hence, HR officers should facilitate and monitor regular execution of respite interventions and offer this information to strained employees. Second, it is also important to note that the versions of SNI and PMRI used in this study present rather "light" (less intensive) and office-compatible forms of nature contact and relaxation. Stronger effects could be expected through direct exposure to real nature (e.g., Kjellgren & Buhrkall, 2010) or sessions conducted by a relaxation trainer.

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