



Energy Loss After Daily Role Stress and Work Incivility: Caring for Oneself with Emotional Wellness

Eva Garrosa¹  · Luis Manuel Blanco-Donoso¹ · Jennifer E. Moreno-Jiménez² · Eugenia McGrath³ · Helena D. Cooper-Thomas⁴ · Felix Ladstätter⁵

Accepted: 27 August 2022 / Published online: 5 October 2022

© The Author(s) 2022

Abstract

The present study seeks to build on burnout research by examining daily fluctuations of role stress and work incivility, and their impact on employees' energy loss. Optimism and recovery (i.e., psychological detachment and relaxation), two mechanisms that allow workers' self-care and self-defence from these toxic conditions when faced by these job stressors, were included. In a daily study, 117 service sector workers completed surveys three times a day, over a period of one working week. Hierarchical linear modeling revealed work incivility as predictor of daily emotional exhaustion. Optimism and recovery play different roles in protecting workers from daily energy loss. Daily optimism increased employees' energy and decreased emotional exhaustion and negative affect at night. It also moderated the relationship between work incivility and positive affect at night. The results on psychological detachment supported the stressor-detachment model (Sonnentag, 2010), in which psychological detachment from work during nonworking time is not only a direct predictor of increased energy, but could similarly buffer the negative impact of role stress and work incivility. Relaxation basically showed main effects in predicting emotional exhaustion (inversely) and positive affect (directly). Our findings suggest two main implications: (1) the necessity for implementation of workplace policies to prevent role stress and work incivility in reducing daily loss of energy. (2) Training workers in self-care programmes focusing on optimism and recovery can provide early steps toward organizational change and employee daily well-being.

Keywords daily study · role stress · work incivility · optimism · recovery · energy

✉ Eva Garrosa
eva.garrosa@uam.es

✉ Luis Manuel Blanco-Donoso
luismanuel.blanco@uam.es

¹ Universidad Autónoma de Madrid, Madrid, Spain

² Francisco de Vitoria University, Madrid, Spain

³ Winstborough, Level 9, The Alberts, 1 Albert Street, Auckland, New Zealand

⁴ Auckland University of Technology (AUT), Mayoral Drive, Auckland, New Zealand

⁵ Camilo José Cela University, Madrid, Spain

1 Introduction

Psychosocial risks have important adverse consequences on the health of people, organisations and economies (Schaufeli & Enzmann, 1998). Employees are undergoing turbulent times at work not only because of the high levels of psychosocial stressors such as workload, role stress and workplace mistreatment but also because of the high job insecurity and burnout (Jiang & Probst, 2017; Karatepe et al., 2020). Paradoxically, we know more about the important benefits of occupational health and much research points out the importance of unceasing organizational efforts to resolve this problem, including more integrated perspectives to understand employees' experiences both in and outside of the work environment, as well as caring practices for employees, their families and organizations (Braganza et al., 2020; Tetrick & Winslow, 2015). From this perspective, it makes sense for the employees to identify proactive self-care behaviours, to effectively solve work problems and remain healthy, and to reduce the negative consequences in their personal lives. Workers also need to be physically and psychologically fit in order to maintain high levels of energy, effort, and engagement over time (Bakker, 2011; Casper & Sonnentag, 2020, Sonnentag, 2015) and to competently resolve daily work problems with a sense of commitment. However, little research has been carried out concerning the study of energy loss due to the combination of two relevant stressors in the field of burnout, such as role stress and work incivility, specifically taking into account personal resources and its mechanisms as workers' recovery experiences, controlling as well the effect of optimism. Surprisingly, despite its benefits, optimism has received little attention in work settings. Therefore, the current study explores the relationships between role stress, work incivility and energy loss—including emotional exhaustion and affect—using a diary design. This study also examines the underlying mechanisms of the association between these variables, including personal resources (i.e., optimism and recovery). From this perspective, we study the specific effect of the analyzed variables, i.e. whether the relationship of role stress and work incivility differs when the moment of the day is controlled and its predictive effect depends on the criteria variable (i.e. exhaustion and negative and positive affect at night). In addition to this, considering both positive and negative criteria variables allow us to deepen in the knowledge of preventative programs. Thus, taking into consideration optimism and recovery as protective factors provide us insight into how these variables could help to deal with negative situations by re-establishing energy levels. On the contrary, this allow us to study whether the analyzed job stressors may have a profound impact on workers' well-being. The knowledge about how role stress and work incivility affect at a daily level lead to determine how to prevent this within the workers' routine. These facts also boost the development of changes that organizations and workers need to put in practice. Working with the optimism as a trained skill help to protect the workers' well-being, facilitating healthy environments and positive expectations, similar to recovery experience and its role in the increase of energy levels. Hence, both constitute resources that could be used in a personal and organizational level and boost the understanding of how employees can become positive, energetic and engaged, even when facing undesirable work conditions.

2 Theoretical framework and hypotheses

Our study is built on the occupational well-being theory of the job demands–resources model (JD–R; Bakker & Demerouti 2007; 2017). According to this model, daily job stressors and workplace mistreatment (i.e., role stress and work incivility) explain the daily loss of energy through high exhaustion and negative affect, and low positive affect at night. Within the theories of organizational stress, exhaustion is described as a loss of energy and this loss is well-known derived from emotional process (Cooper, 1998). Exhaustion linked with negative emotions involve a loss of energy that could weaken the person. Such losses of energy are critical because they are associated with burnout (Maslach et al., 1997). Burnout is a syndrome consisting predominantly of chronic exhaustion and negative attitudes toward work and it predicts adverse functioning in the workplace (Bakker et al., 2014). Furthermore, personal resources are expected to buffer the undesirable impact of job demands on strain, and increase the desirable power of job demands on commitment. Research has provided only reduced support for this suggestion, which means that more research is needed to test the potential interactions of personal resources (Bakker & Demerouti, 2016; Bakker & van Wingerden 2020). From this perspective, our proposal aims to study how this composition of high job demands and low personal resources (JD-R model; Xanthopoulos et al., 2009) constitutes a work environment of high stress, possibly leading to a daily emotional exhaustion and lack of energy. This is a process where the workers' job stress may depend on the job demands and resources of the daily work routine (Bakker, 2014), being the work environment a critical factor to understand the workers' well-being (Cooper, 1998). However, workers do not linearly or simply react to the work environment (Bolger & Zuckerman, 1995). In this sense, the characteristics of the work and how these impact on them could actively intervene, for example, through self-regulation strategies, recovery experiences and their own personality (Prem, 2017).

2.1 Role stress and work incivility

Role stress is one of the most important job stressors predicting job-related exhaustion and negative affect (Garrosa et al., 2011; Jin et al., 2020; Lee & Ashforth, 1996; Schmidt et al., 2014; Schaufeli & Enzmann, 1998). Thus, from the perspective of the JD-R theory, this stressor is considered a job demand that involves continued emotional and cognitive effort (Demerouti et al., 2001), and its associated with physiological and psychological costs (e.g., fatigue, depression), and increases the probability of burnout (Alarcon, 2011; Bakker & Schaufeli, 2000). Emotional exhaustion is often cited as a consequence of role stress and energy loss, thus experiences of stress finally diminish emotional resources (Posig & Kickul, 2003). In addition, role stress in women is related to discrepancy strain (Gillespie & Eisler, 1992), which explains the relationship of role congruity with beliefs about expectations for women (Eagly & Karau, 2002). As such, altogether the evidence suggests the likelihood of a direct relation between these variables. This hypothesis help to understand the role of time concerning the drawbacks of daily role stress in the workers' well-being at bedtime. In this sense, we deepen understanding of how daily symptoms of exhaustion related to the daily role stress suffered could have a long-lasting and severe levels of exhaustion and energy loss through an accumulative process.

Hypothesis 1 Day-specific role stress will be positively related to: (H1a) exhaustion at bedtime and (H1b) negative affect (NA) at bedtime, and negatively related to (H1c) positive affect (PA) at bedtime.

Workplace mistreatment has received an increasing amount of attention from researchers (Aquino & Thau, 2009; Barling et al., 2009; Garrosa et al., 2015; Li et al., 2020; Yang et al., 2012). Workplace mistreatment comprises different forms, ranging from incivility to physical aggression. In this study, we are specifically interested in workplace incivility, a low-intensity mistreatment with an ambiguous intent to harm the target and violating norms for mutual respect at the workplace (Andersson & Pearson, 1999). Despite its vague intention, it has important consequences (e.g., burnout, dissatisfaction, lack of creativity and cooperation, psychological distress, negative affect) and, according to Cortina's theory, it involves selective incivility toward women and could be considered a "modern" expression of sexism in the workplace (Cortina et al., 2011). From the perspective of JD-R theory, workplace incivility is a job demand, an interpersonal stressor that most likely demands and depletes resources and energy at work (Rhee et al., 2017). Considering the previous arguments, we predict that when employees experience daily work incivility, they are exhausted at bedtime. This hypothesis provides information on how workers would use their resources to face the threatening situations and defend them from work incivility (e.g., disrespect). This daily work incivility is associated with negative emotions, including as well the time effect to know more about this mechanism among these variables. Specifically, work incivility may hurt psychological needs like the need to be both respected and appreciated by others (Baumeister & Leary, 1995) and, consequently, initiate different emotional and affective responses with daily consequences in energy loss (i.e., high exhaustion, high NA, and low PA, everyday). Studies where short-term effects are considered can help us to understand that daily consequences are not small and provide information about how everyday incidents disturb us.

Hypothesis 2 Day-specific work incivility will be positively related to (H2a) exhaustion at bedtime and (H2b) NA at bedtime, and negatively related to (H2c) PA at bedtime.

In view of these undesirable job stressors, we wished to investigate mechanisms that assist workers' self-care and self-defence from these toxic conditions.

2.2 Emotional wellness: Optimism and recovering

In this study, we focused on two variables that are well known to have a positive influence on emotional wellness: Optimism and recovery. According to JD-R theory and its further developments and applications, these personal resources provide resilience and protection, as they positively moderate the relationship between the loss of energy, derived from daily job stressors, and negative consequences (Xanthopoulou et al., 2009; Kinnunen et al., 2011). As an example, Van Yperen and Snijders (2000) have observed the moderator role of self-efficacy and optimism in the relationship between job demands and psychological health symptoms. It seems that in situations of work overload and high job demands, personal resources diminish the workers' negative perception of the stressors suffered due to the effort of work (Buruck et al., 2016; Salminen et al., 2014). These studies suggest that workers with high levels of personal resources posit a great domain over themselves, and in turn, this helps them to effectively handle hazardous working conditions such high workload and work incivility, avoiding the negative outcomes. Thus, personal resources

such as optimism and recovery not only could contribute to achieve a positive environment, but also could determine the way that workers perceive, react and contribute to the work environment.

Optimism research reflects a broad view of self-regulation, planning and managing achievable goals, and positive expectancies when confronted with obstacles (Carver & Scheier, 2014; Neff & Geers, 2013) found that optimists engaged in more constructive problem solving than did pessimists. If a person, for instance, feels insecure and susceptible, problems are more difficult to resolve, and she or he may feel stress and disengagement (Carver & Scheier, 1998; Garrosa et al., 2011; Mappamiring & Putra, 2021). Additionally, optimists have a better profile of emotional responses to adversity and their coping responses are healthier. Interest in daily optimism at the workplace is increasing due to its positive relation with the dynamics of well-being (Casper et al., 2019; Littman-Ovadia & Nir, 2014; Sonnentag, 2015), however, there are few studies about it.

Therefore, optimism after work may also act as a buffer, reducing the consequences of daily job stressors, leading to protected levels of energy, and increasing PA, as we propose in the next hypotheses:

Hypothesis 3 Day-specific levels of optimism will be negatively related to (H3a) exhaustion at bedtime and (H3b) NA at bedtime, and positively related to (H3c) PA at bedtime.

Hypothesis 4 Optimism after working hours will moderate the within-person spillover of (H4a) exhaustion at bedtime and (H4b) NA at bedtime, and (H4c) it will increase PA at bedtime. The relation between job stressors and energy loss will be stronger when optimism is low than when optimism is high.

Lack of daily recovery leads to an accumulation of exhaustion and fatigue, and subsequently to chronic loss of energy and illness (Geurts & Sonnentag, 2006). In contrast, effective recovery increases energy, productive behaviours and well-being (Parker et al., 2020; Sonnentag, 2003; Xanthopoulou et al., 2014). Research about recovery from work can help to understand how employees can become energetic, engaged, and healthy, even when confronting poor work environments. In addition, recovery can moderate the daily effect of spillover from work to home (Sonnentag & Fritz, 2015; Trougakos et al., 2008). This mechanism refers to the process of decreasing or eliminating physical and psychological symptoms of strain produced by job demands and job stressors (Craig & Cooper, 1992; Meijman & Mulder, 1998), by distancing oneself from these negative emotions in one's personal life. Therefore, this process is important to keep an inner balance and energy in other personal areas, and also to distancing oneself from a problem to better understand it and choose the best actions to resolve a toxic situation. Sonnentag and Fritz (2015) consider psychological detachment as a core recovery experience. For example, in Spanish workers, experiences of relaxation have produced important benefits in the intensification of positive emotions (Garrosa et al., 2013). This may occur through the prolonged activation of the functional system, neutralizing the effects of negative affect (Parker et al., 2020; Sonnentag & Fritz, 2007; Xanthopoulou et al., 2014). Thus, recovery is understood as a way of energy activation. In this vein, the workers have the needed energy to healthfully handle job demands (Quinn et al., 2012). This fact of workers feeling recovered and rested may lead them to be more proactive and adaptatively face job demands (Lazarus & Folkman, 1991). In other words, workers with high punctuation in recovery are likely to face job demands as their energy levels allow them to make an effort in solving job problems. Also, energy activation could amplify the thoughts repertoire with innovative and creative ideas (Quinn

et al., 2012), resulting in a protector of the negative consequences of daily stress derived from high workload and work incivility. From the perspective of JD-R theory, recovery experiences constitute a personal resource by which the energy levels invested in the working day are recovered (Moreno-Jiménez et al., 2012). We propose the following hypotheses:

Hypothesis 5 Day-specific levels of psychological detachment after working hours will be negatively related to (H5a) exhaustion at bedtime and (H5b) NA at bedtime, and positively related to (H5c) PA at bedtime.

Hypothesis 6 Day-specific levels of relaxation after working hours will be negatively related to (H6a) exhaustion at bedtime and (H6b) NA at bedtime, and positively related to (H6c) PA at bedtime.

Hypothesis 7 Recovery from work will moderate the within-person spillover of (H7a) exhaustion at bedtime, (H7b) NA at bedtime, and (H7c) PA at bedtime. The relation between job stressors and energy loss will be stronger when recovery is low than when recovery is high.

To sum up, this study will contribute to the occupational health and personality literature in at least four ways. Firstly, by conducting a daily study, we will contribute to the burnout literature by shedding light on how employees through role stress and work incivility may affect personal resources and energy loss, with a day-to-day consequences. Secondly, since we utilize both an inter-individual and an intra-individual perspective, we will postulate insights on how frequency of emotional wellness actions impact the magnitude of change in levels of energy, thus increasing our understanding of how optimism and recovery (i.e., psychological detachment and relaxation) fluctuate, and if these variables could diminish the daily consequences of role stress and work incivility. Research on flexibility patterns of different types of resources is scarce and critical to further increase our understanding of dynamic processes that occur at work (Casper et al., 2019; Salanova et al., 2010; Prem 2017). The introduction of this intra-individual approach and diary design in the field of occupational health allows us to go deeper into workers' psychological processes (i.e. the sequence of their psychological states) and to identify antecedents and consequences of the central phenomena we are exploring, taking into account their temporal dimension (Navarro et al., 2015). It is important to note that when we approach the study of workers' psychological processes, as is the case with this study, the emphasis has to be on states rather than traits. In this sense, diary studies are one of the most appropriate methodologies to assess those states and their relationships over time, and in the workers' natural contexts (Navarro et al., 2015).

Thirdly, because we examine three variables for emotional wellness (i.e., optimism, psychological detachment and relaxation), we will elucidate their different processes in the workplace context. Fourthly, we expand the Job Demands-Resources theory (JD-R; Bakker & Demerouti, 2014; Bakker & Demerouti 2017) to develop a theoretical framework that allows us to explain how employees can improve daily energy at work through optimism and recovery, and to reduce job stressors. Figure 1 represents the proposed research model.

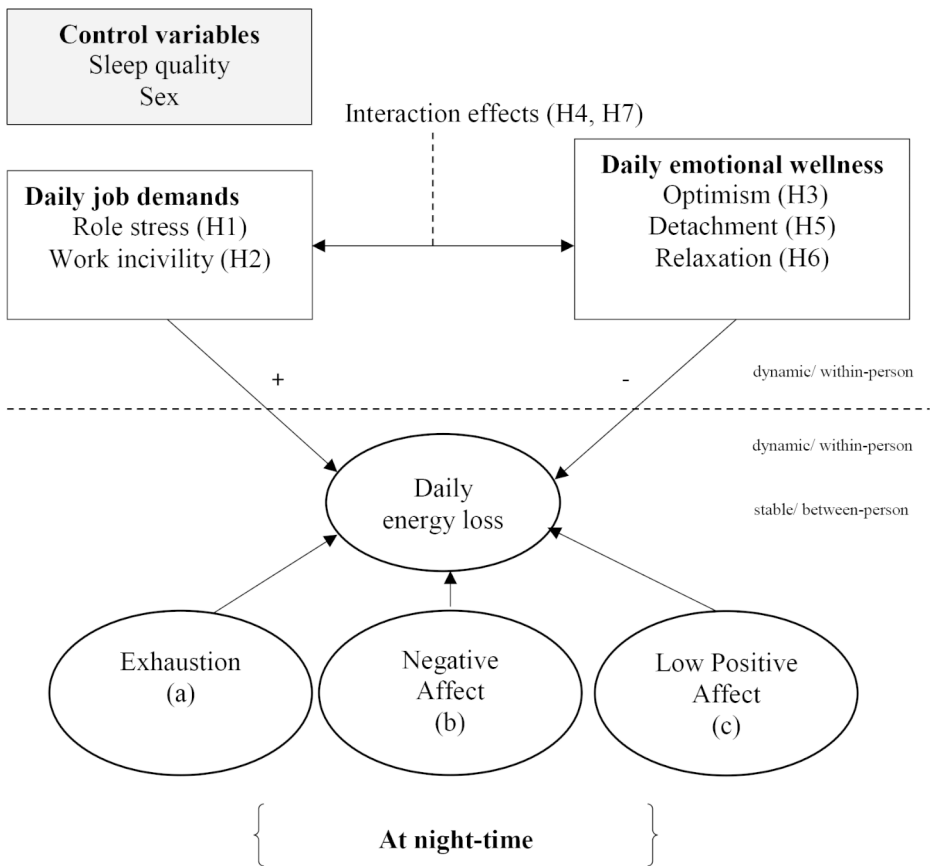


Fig. 1 Energy loss after daily role stress and work incivility. The role of daily emotional wellness

3 Method

3.1 Procedure and sample

The participants of this study were employees in the service sector from a broad range of professional backgrounds, including trade retail, health, social work, consulting and education. We recruited study participants by contacting them through different associations from this sector in Madrid. After the associations had expressed interest in the study, information packages describing the study procedure were sent to the employees. As an incentive for participation, we offered feedback about the study results. Study participants filled in the general questionnaire and subsequently, they completed daily questionnaires three times a day, for five consecutive working days (Monday–Friday): (1) a morning item of sleep quality (to be completed after waking up in the morning, before going to work), (2) an afternoon questionnaire (to be completed after work), and (3) a night time questionnaire (to be completed before bedtime). Participants received clear instructions on how to complete the questionnaires at these three times, and the researchers emphasized the importance of

following this procedure, encouraging the use of reminder alarms (e.g., watch and phone alarms) and maintaining regular contact (Green et al., 2006).

Of the 135 survey packages distributed, 121 were returned (86.6% response rate). In 4 of these diaries, the participants did not fill in all the days, so finally, 117 general questionnaires and diaries were used for the current study.

The final sample comprised 117 workers (74% female and 26% male). Mean age was 33.7 years ($SD=9.1$), and mean professional experience was 18.0 years ($SD=39.6$). Mean working time was 40.2 h per week ($SD=8.1$), 51.3% reported having contact with people more than 80% of their working day, and 62% had a university degree.

3.2 Measures

We collected the data with the same general and daily pencil-and-paper questionnaires. Specifically, we assessed (1) daily sleep quality in the morning, (2) role stress and work incivility at work in the afternoon, and (3) optimism and recovery from work after working hours with the bedtime survey. Exhaustion, negative and positive affect were also reported at night. Daily measures of all the variables used modifications of items from the corresponding general-scale, which were reworded for daily administration. Moreover, for daily measures, we used the same response categories as for the general measure. This method of developing state-level analogues of general measures has been used successfully in the past (Blanco-Donoso et al., 2015; Nezlak, 2012; Parker et al., 2020). Table 1 shows means, standard deviations, zero-order correlations between study variables, as well as the means of Cronbach's alphas averaged across the days of data collection.

3.2.1 Daily role stress at work

We measured role stress at work with the end-of workday survey, using scale items from the Role Stress Scale developed by Rizzo et al., (1970). Participants had to report how they had experienced role stress “today, during work” by responding to the items on 4-point Likert scales from 1 (*not true at all*) to 4 (*totally true*). In order to limit participant burden, we used 8 items to assess role stress (e.g., “I have had to work under vague directives or orders.”, “I think I have had many tasks in the same time.”).

3.2.2 Daily incivility at work

We used 6-items from the Workplace Incivility Scale (WIS; Cortina et al., 2001) to measure personal experiences of uncivil behavior. Participants responded on a 5-point scale from 1 (*not true at all*) to 5 (*totally true*), describing whether they had experienced each behavior by a coworker or supervisor (e.g., “Today you have been in situations in which one of your superiors or coworkers doubted your judgment on a matter over which you had responsibility. Gave you hostile looks, stares, or sneers”).

3.2.3 Optimism

We assessed optimism with the bedtime survey, using the 10-item Life Orientation Test-Revised (LOT-R; Scheier et al., 1994). This time, we instructed our participants to report

Table 1 ICCs, means, standard deviations, Cronbach's alphas and correlations (N=117 individuals, N=585)

	ICC	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Sex ^a	-	1.74	0.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Sleep quality ^b	-	4.10	0.95	-	-0.12**	-	-	-	-	-	-	-	-	-	-	-	-
3. General Exhaustion ^a	-	2.01	1.40	0.89	0.02	-0.08	-	-	-	-	-	-	-	-	-	-	-
4. General NA ^a	-	1.66	0.55	0.89	0.18**	0.01	0.33**	-	-	-	-	-	-	-	-	-	-
5. General PA ^a	-	3.92	0.66	0.78	-0.03	-0.01	-0.25**	-0.18**	-	-	-	-	-	-	-	-	-
6. Role stress at work ^b	0.75	2.08	0.64	0.76	0.19**	-0.06	0.47**	0.33**	-0.01	-	-	-	-	-	-	-	-
7. Incivility at work ^b	0.70	1.19	0.44	0.79	-0.04	-0.02	0.35**	0.40**	0.02	0.15**	-	-	-	-	-	-	-
8. Optimism ^b	0.73	4.95	1.14	0.77	-0.10*	0.06	-0.13**	-0.10*	0.07	-0.16**	-0.18**	-	-	-	-	-	-
9. Detachment ^b	0.61	3.66	1.05	0.83	-0.19**	0.12**	-0.07	-0.20**	-0.16**	-0.10*	-0.11**	0.14**	-	-	-	-	-
10. Relaxation ^b	0.69	3.73	0.93	0.70	-0.13**	0.15**	-0.01	-0.10*	-0.13**	-0.13**	-0.05	0.19**	0.67**	-	-	-	-
11. Exhaustion at night-time ^b	0.74	1.76	1.49	0.87	0.14**	0.03	0.58**	0.35**	-0.22**	0.26**	0.25**	-0.09*	-0.11**	-0.07	-	-	-
12. NA at night-time ^b	0.66	1.40	0.58	0.90	0.15**	-0.16*	0.18**	0.21**	0.01	0.16**	0.19**	-0.15**	-0.18**	-0.11**	0.21**	-	-
13. PA at night-time ^b	0.72	2.61	1.02	0.81	-0.26**	0.06	-0.10*	-0.16**	0.14**	0.01	-0.06	-0.01	0.04	-0.02	-0.20**	-0.01	-

Notes: Sex is coded as 1 - man; 2 - woman. ^a Person-level variables; ^b Day-level variables
 *ICC = intra-class correlation.
 * p < .05. ** p < .01.

how they felt at this moment. Each item is rated on a 7-point Likert scale ranging from 1 (*not true at all*) to 7 (*totally true*). A sample item is: “I don’t get upset too easily”.

3.2.4 Recovery from work

We measured psychological detachment and relaxation from work after working hours with the bedtime survey, using the 6-item Recovery Experience Questionnaire (Sonnentag & Fritz, 2007) in its Spanish version (Sanz-Vergel et al., 2010), rated on 8-point Likert items from 1 (*not true at all*) to 8 (*totally true*). A sample item is: “Tonight, I forgot about work”.

3.2.5 General and daily exhaustion

The Job-Related Exhaustion Scale (Wharton, 1993) provided a measure of emotional exhaustion, the primary dimension of job burnout (Lee & Ashforth, 1996; Wright & Cropanzano, 1998). The 6-item scale refers to the frequency of feeling “emotionally drained” and “burnt out”, and ranges from 1 (*never felt this way*) to 6 (*felt this way every day*). The scale was modified so that the items refer to nighttime. An example item is: “At this moment, I feel burnt out”.

3.2.6 General and daily affect

Positive and negative affect were measured using the 10-item International Positive and Negative Affect Schedule Short-Form (I-PANAS-SF; Thompson 2007) with five items measuring PA and five items measuring NA. Participants rated the extent to which they generally experience each of the 10 emotions on a 5-point scale ranging from 1 (*never*) to 5 (*always*). The scale was modified so that PA and NA referred to nighttime. An example item is: “At this moment, I feel inspired”.

For all these expected relationships, we took into account the potential effects of different control variables: Sex, the trait aspect of the corresponding criterion variable and sleep quality. Sleep quality was evaluated in the morning with the item “How do you evaluate your last night’s sleep?” derived from the Pittsburgh Sleep Quality Index (Buysse et al., 1989), rated on a 6-point Likert scale ranging from 1 (very bad) to 6 (very good). This measure correlates highly with the full Pittsburgh Sleep Quality Index (Sonnentag & Binnewies, 2013). Since working conditions are currently different depending on sex, it is necessary to control this variable, the general measure of the criterion variable is used to carry out multilevel analysis, and sleep quality is the typical control variable in burnout studies as it affects to daily energy levels.

3.3 Data analysis

Day-level data were nested within persons. We then analyzed the data with a random-coefficient modeling approach (Bryk & Raudenbush, 1992) using the software package MLwiN (Rasbash et al., 2000). To guarantee that the analyses reflected our concern about within-person variation and used unbiased estimates of the day-level variables (Enders & Tofghi, 2007), we centered day-level predictor and moderator variables at the person mean. We tested the proposed hypotheses in a sequence of multilevel models, with the first ones

including the control variables (Model 1), then, the main effects of role stress and incivility at work (Model 2), then, the main effects of the moderator variables of optimism (Model 3) and recovery (Model 4), and then the interaction effects (Model 5). We compared these models with Chi-square tests, using the difference of the $-2 \times \log$ likelihoods of the nested models (with degrees of freedom corresponding to the number of new parameters added).

4 Results

4.1 Preliminary analyses

Prior to testing our hypotheses, we scanned the degree of within-person and between-person variations of our day-level variables. Table 1 shows the percentage of within-person variance ($1 - ICC = 1 - (\text{between-person variance} / [\text{between-person variance} + \text{within-person variance}])$) derived from intercept-only models. All predictor variables showed an ICC above 25% (Hox & Roberts, 2011) with the exception of exhaustion at night (20%). Largely, these findings suggest that a substantial portion of the variance in our variables can be attributed to within-person variation across the five days. We have also considered exhaustion at night in a multilevel approach because, according to Nezlek (2008), even when the ICC approaches 0, multilevel modeling might still be essential, and this circumstance was coherent at the theoretical level.

4.2 Hypotheses testing

Exhaustion at bedtime.

For exhaustion at bedtime as an outcome measure (see Table 2), Model 1, with sleep quality, sex, and general exhaustion as control variables, improved the null model (difference $-2XLog=98.58$, $df=3$, $p<.001$) with sex and general exhaustion as positive predictor variables ($t=2.23$, $p<.01$, and $t=8.36$, $p<.001$, respectively). By adding daily role stress and incivility at work (Model 2), the fit improved (difference $-2XLog=28.38$, $df=2$, $p<.01$), with positive relationships with exhaustion at bedtime, role stress ($t=3.16$, $p<.01$) and work incivility ($t=3.88$, $p<.01$). Model 3, which included optimism, improved the fit, and showed a negative association with exhaustion at bedtime ($t = -2.33$, $p < .01$). Model 4 significantly improved the fit (difference $-2XLog=36.24$, $df=2$, $p < .001$), also showing a negative relationship between relaxation and exhaustion at night ($t = -4.46$, $p < .001$). In Model 5, the effect of interaction term between role stress and psychological detachment increased the fit ($t = -2.09$, $p < .05$). To gain more insight into the nature of this interaction effect, we conducted simple slope tests, using the multilevel tool developed by Preacher et al., (2006). These simple slope tests showed that role stress was more positively related to exhaustion at night on days when people experienced less psychological detachment ($\gamma=0.457$, $SE=0.118$, $z=3.84$, $p<.001$), whereas they were unrelated on days when psychological detachment was high ($\gamma = -0.136$, $SE=0.180$, $z=-0.75$, *ns*) (see Fig. 1). The hypothesis about the interaction between role stress and psychological detachment was also supported. In addition, when this interaction is significant, role stress lost its significance as predictor.

NA at bedtime.

When NA at bedtime was included as an outcome variable (see Table 3), Model 1 showed a better fit than the null model, with sleep quality and general NA as predictors ($t = -2.39, p < .05$ and $t = 2.94, p < .01$, respectively). Model 2 improved the previous models, but role stress and work incivility had no significant influence on NA at bedtime. Model 3 increased the variance ($-2XLog$ difference = 8.24, $df = 1, p < .01$) through optimism as a negative predictor of NA at night ($t = -2.91, p < .01$). Model 4 included recovery experiences, but there were no significant predictors. Finally, Model 5 increased the fit, with psychological detachment as a moderator of the relationship between work incivility and NA at night ($t = -2.17, p < .01$). Simple slope tests showed that workplace incivility was more positively related to NA at night on days when people experienced less psychological detachment ($\gamma = 0.670, SE = 0.254, z = 2.64, p < .01$), whereas they were unrelated on days when psychological detachment was high ($\gamma = -0.362, SE = 0.242, z = -1.49, ns$) (see Fig. 2). Overall, the results supported the hypothesis about the interaction, because psychological detachment is a negative predictor of NA at bedtime, with an interaction between incivility and psychological detachment.

PA at bedtime.

Lastly, with PA at bedtime as an outcome measure (see Table 4), Model 1 fit the data better than the null model, and again, sex was a strong negative predictor of PA at bedtime ($t = -3.17, p < .01$), and general level of PA was a predictor of PA at bedtime ($t = 2.16, p < .05$). Role stress, work incivility, optimism included in Models 2 and 3 sequentially, were non-significant. Model 4 showed a highly significant improvement over the previous models (difference $-2XLog = 30.26, df = 2, p < .001$), with relaxation as a robust predictor of PA at bedtime ($t = 4.94, p < .001$). Model 5 also increased the fit, and there was a significant effect of the interaction between work incivility and optimism ($t = 2.00, p < .05$). Simple slope tests (see Fig. 3) indicated that workplace incivility was more positively related to PA at night on days when people experienced more optimism ($\gamma = 0.666, SE = 0.318, z = 2.09, p < .05$), whereas they were unrelated on days when optimism was low ($\gamma = -0.573, SE = 0.341, z = -1.67, ns$). These results only supported the moderator effect between optimism and work incivility.

5 Discussion

Our day-level study showed that predictor variables that are implicated in daily energy have different components in relation to variability, affect symmetry that involve the reactions to positive events and experiences are reflected mainly in positive affective states and reactions to negative events and experiences are reflected mainly in negative affective states (Sonnetag, 2015) and the involved mechanism. These findings show that exhaustion is more stable and does not undergo so many fluctuations at the daily level as NA and PA. Daily exhaustion depends to a great extent on the general levels of chronic exhaustion. Exhausted workers are probably already burnt out (Bakker et al., 2014), disengaged and are lacking energy (Casper & Sonnetag, 2020; Demerouti et al., 2001). Our study provides new insights, showing that daily work incivility presented a significant effect in daily exhaustion, even more than role stress, and could have negative consequences for workers' emotional health. An intensification of physiological dysregulation is likely to accelerate the development of disease (McEwen & Wingfield, 2003), especially when workers are already exhausted in a general

Table 2 Multilevel estimates for models predicting exhaustion at night-time

Variables	Null Model		Model 1		Model 2		Model 3		Model 4		Model 5	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	1.761	0.130	1.758	0.102	1.758	0.102	1.758	0.102	1.758	0.102	1.744	0.102
Sleep			-0.004	0.033	-0.12	0.032	-0.09	0.032	-0.03	0.030	-0.001	0.030
Sex ^a			0.515	0.231	2.23**	0.231	2.23**	0.231	2.23**	0.231	0.513	0.232
Gender			0.602	0.072		0.072	0.602	0.072	0.602	0.072	0.595	0.072
Role stress ^b					0.237	0.075	3.16**	0.075	3.20**	0.073	0.136	0.074
Work					0.403	0.104	3.88**	0.103	3.88**	0.099	0.391	0.102
							-0.098	0.042	-2.33**	0.041	-0.107	0.041
									-0.071	0.049	-0.066	0.049
									-0.205	0.046	-0.205	0.045
Role stress X											-0.060	0.161
Optimism											-0.006	0.240
Work incivility X												-0.03
Optimism X												
Role stress X												
Detachment											-0.287	0.137
												-2.09*

Table 2 (continued)

	Null Model	Model 1	Model 2	Model 3	Model 4	Model 5
Work incivility X Detachment						-0.438
Role stress X Relaxation						-0.099
Work incivility X Relaxation						-0.169
-2 X Log (lh)				5.327		
Difference of -2 X Log		3	2	1	2	6
<i>df</i>						

Table 2 (continued)

	Null Model	Model 1	Model 2	Model 3	Model 4	Model 5
Level 1 intercept	1.908 (0.258)	1.108 (0.156)	1.112 (0.156)	1.112 (0.156)	1.118 (0.156)	1.127 (0.157)
Level 2 intercept	0.322 (0.021)	0.327 (0.022)	0.307 (0.020)	0.304 (0.020)	0.280 (0.019)	0.271 (0.018)
variance (SE)						
Level 1 variance						
Level 2 variance						

Note: ^a Person-level variables; ^b Day-level variables; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3 Multilevel estimates for models predicting NA at night-time

Variables	Null Model			Model 1			Model 2			Model 3			Model 4			Model 5		
	Esti- mate	SE	t	Esti- mate	SE	t	Esti- mate	SE	t	Esti- mate	SE	t	Esti- mate	SE	t	Esti- mate	SE	t
Intercept	1.402	0.040	35.05	1.404	0.038	36.95	1.404	0.038	36.95	1.404	0.038	36.95	1.404	0.038	36.95	1.398	0.038	36.79
Sleep quality ^b	-	0.023	-2.39*	-	0.023	-2.39*	-	0.023	-2.30*	-	0.023	-2.30*	-	0.023	-2.35*	-	0.023	-2.22*
Sex ^a	0.055			0.055			0.053			0.054			0.054			0.051		
General NA ^a	0.127	0.087	1.46	0.127	0.087	1.46	0.128	0.087	1.47	0.128	0.087	1.47	0.128	0.087	1.47	0.122	0.087	1.40
Role stress ^b	0.203	0.069	2.94**	0.203	0.069	2.94**	0.203	0.069	2.94**	0.203	0.069	2.94**	0.203	0.069	2.94**	0.189	0.069	2.74**
Work incivility ^b	-	0.059	-0.17	-	0.059	-0.17	-	0.058	-0.14	-	0.059	-0.14	-	0.059	-0.46	-	0.060	-0.67
Optimism ^b	0.010			0.010			0.008			0.027			0.027			0.040		
Detachment ^b	0.084	0.081	1.04	0.084	0.081	1.04	0.082	0.081	1.01	0.073	0.080	0.91	0.102	0.082	1.24	0.102	0.082	1.24
Relaxation ^b	-	0.033	-	-	0.033	-	-	0.033	-	-	0.033	-	-	0.033	-	-	0.033	-
Role stress X Optimism	0.096			0.096			0.096		2.91**	0.103		3.12**	0.098		2.97**	0.098		2.97**
Work incivility X Optimism	-	0.040	-	-	0.040	-	-	0.040	-	-	0.040	-	-	0.040	-	-	0.039	-
Role stress X Detachment	0.033			0.033			0.033		-	0.033		-	0.033		-	0.029		-
Work incivility X Detachment	-	0.037	-	-	0.037	-	-	0.037	-	-	0.037	-	-	0.037	-	-	0.037	-
Role stress X Detachment	0.071			0.071			0.071		-	0.071		-	0.071		-	0.070		-
Work incivility X Detachment	-	0.127	-	-	0.127	-	-	0.127	-	-	0.127	-	-	0.127	-	-	0.127	-
Role stress X Detachment	0.031			0.031			0.031		-	0.031		-	0.031		-	0.052		-
Work incivility X Detachment	-	0.188	-	-	0.188	-	-	0.188	-	-	0.188	-	-	0.188	-	-	0.188	-
Role stress X Detachment	0.041			0.041			0.041		-	0.041		-	0.041		-	0.107		-
Work incivility X Detachment	-	0.230	-	-	0.230	-	-	0.230	-	-	0.230	-	-	0.230	-	-	0.230	-
Role stress X Detachment	0.499			0.499			0.499		-	0.499		-	0.499		-	0.499		2.17**

Table 3 (continued)

	Null Model	Model 1	Model 2	Model 3	Model 4	Model 5
Role stress X Relaxation						-0.116 0.136
Work incivility X Relaxation						0.167 0.177
-2 X Log (lh)	867.460	825.920	824.850	816.609	808.832	799.292
Difference of -2 X Log <i>df</i>		41.540***	1.070**	8.241**	7.777***	9.54***
Level 1 intercept variance (SE)	0.150 (0.025)	3 0.121 (0.021)	2 0.121 (0.021)	1 0.122 (0.021)	2 0.123 (0.021)	6 0.124 (0.021)
Level 2 intercept variance (SE)	0.187 (0.012)	0.190 (0.013)	0.189 (0.013)	0.186 (0.012)	0.182 (0.012)	0.178 (0.012)

Note: ^a Person-level variables; ^b Day-level variables; * $p < .05$; ** $p < .01$; *** $p < .001$.

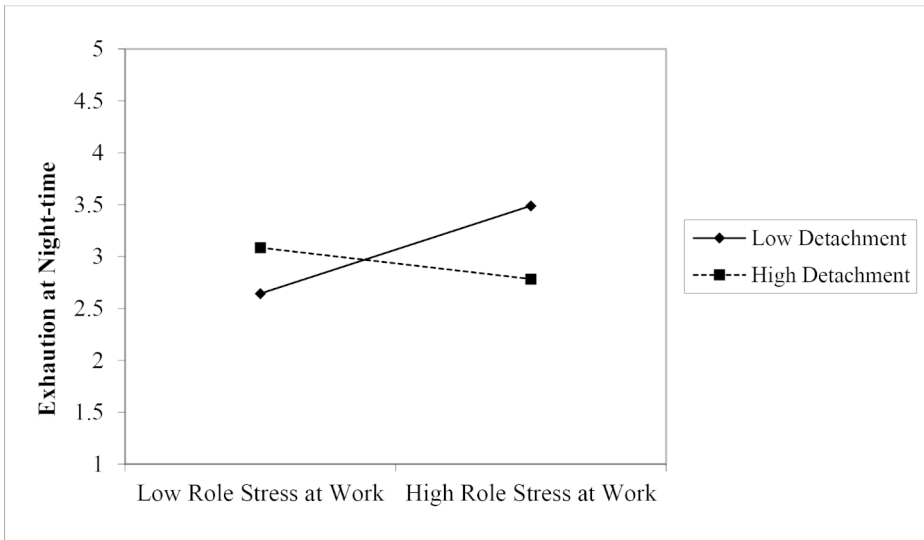


Fig. 2 Interaction effects of role stress at work and psychological detachment on job related exhaustion at night-time

way and the effect of work incivility adds up (e.g., disrespect among other elements), producing consequences for daily exhaustion at night time. Exhaustion fluctuates within shorter periods of time in the week and can increase over longer periods of time. In this sense, this accumulative increase of exhaustion may clarify the relation between burnout and depressive symptoms and life dissatisfaction (Hakanen & Schaufeli, 2012).

Exhaustion compounds sad affect and, according to Teasdale's (1988) work, these feelings can lead to a self-defeating cycle of escalating negative thoughts and emotions, which, in turn, can increase the risk of an eventual major depressive episode (Beevers & Carver, 2003; Lau et al., 2004). It has been confirmed that burnout predicted antidepressant treatment, with a stronger association in men than women (Madsen et al., 2015). This study extends earlier burnout research and shows that, to prevent exhaustion at the day level, zero tolerance of work incivility and respect for both the self and others in everyday tasks are needed as, once workers experience loss of energy, the recovery is complex. Daily work incivility activates a stress reaction (exhaustion at night-time) that remains persistent, even after working hours have ended and the initial stressor is no longer present (Sonnentag, 2015).

Concerning the included variables, only daily relaxation and optimism contribute to the mitigation of this adverse cycle in workers' everyday life, for example, by facilitating positive expectation, effective mood repair, adaptive self-regulation strategies, as well as enhanced psychological functioning (Bakker & van Wingerden, 2020; Carver & Connor-Smith, 2010; Casper et al., 2019; McHale et al., 2015; Scheier & Carver, 1992). Relaxation facilitates recovery because it limits the prolonged activation of the functional system and counteracts the effects of emotional exhaustion (Parker et al., 2020; Sonnentag & Fritz, 2007). These results contribute to the notions that asymmetry is not persistent, and that personal resources can also contribute to offset the negative strain process (Sonnentag, 2015). Thus, daily emotional wellness had direct effects on daily exhaustion at bedtime, specifi-

Table 4 (continued)

	Null Model	Model 1	Model 2	Model 3	Model 4	Model 5
Work incivility X Detachment						-0.139
Role stress X Relaxation						0.090
Work incivility X Relaxation						0.174
-2 X Log (lh)				0.518		0.263
Difference of -2 X Log						-1.63
<i>df</i>		3	2	1	2	6
						-0.41

Table 4 (continued)

	Null Model	Model 1	Model 2	Model 3	Model 4	Model 5
Level 1 intercept	0.613 (0.091)	0.529 (0.082)	0.529 (0.082)	0.529 (0.082)	0.535 (0.082)	0.539 (0.082)
Level 2 intercept						
Level 1 variance (SE)		0.420 (0.028)	0.417 (0.028)	0.417 (0.028)	0.390 (0.026)	0.384 (0.026)
Level 2 variance (SE)						

Note: ^a Person-level variables; ^b Day-level variables; * $p < .05$; ** $p < .01$; *** $p < .001$.

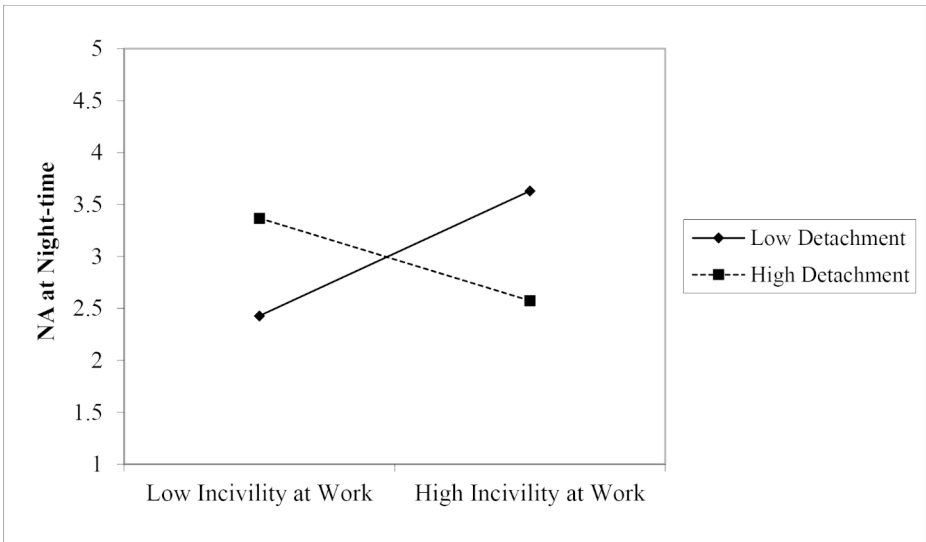


Fig. 3 Interaction effects of incivility at work and psychological detachment on NA at night-time

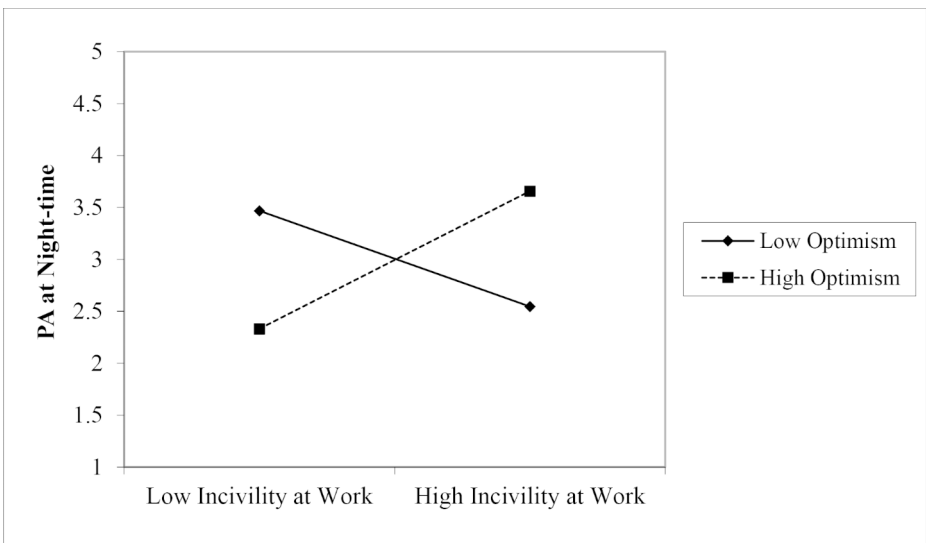


Fig. 4 Interaction effects of incivility at work and optimism on PA at night-time

cally with optimism and relaxation. Also, a moderator effect of recovery through detachment in the relationship between role stress and exhaustion at bedtime was found.

Unexpected results revealed that job stressors had no direct effect on NA and PA at bedtime. According to Friedman and Kern (2014), NA would be more related to individual dispositions. These results, especially those non-significant, support that emotional exhaustion is a consequence more related to stressful job situations such as work incivility, whereas NA

and PA are more related to workers' capacity of self-regulation and their recovery possibilities. Our findings support this idea and extend the power of daily optimism to its negative association with NA at night. An explanation for this could be that optimists work determinedly to counteract these negative moods and achieve mood repair, which contributes to enriched emotional functioning and prevents burnout (Garrosa et al., 2011; Mappamiring & Putra, 2021; McHale et al., 2015). This study extends previous research showing that these mechanisms occur at the daily level and are essential to maintain energy during the working week and not allow NA to affect one's personal life. Furthermore, daily optimism is more likely to develop positive evaluations, such as the belief that their problems will have solution, which in turn reduce the impact of NA.

Regarding PA, we observed a major effect of symmetry due to the positive valence of the predictor variables and a valuable relationship with proactive behaviors such as relaxation, which has also been shown to predict an increase in work engagement (Simbula et al., 2011; Sonnentag, 2003). Furthermore, our results show that relaxation is an important resistance factor against energy loss. However, the result of no direct relationship between optimism and PA was unexpected. This may be partially due to the multilevel study methodology employed, in which multicollinearity is diminished. However, optimism resulted in being a positive predictor in the interaction with work incivility, observing its protective effect as an emotional equilibrium. This protective effect maintaining PA could be explained because optimistic workers see negative events (i.e., work incivility) as not being their fault. They also see them as being flukes that have nothing to do with other areas of their lives or future events, linked with the use of better regulation strategies and effective coping skills against job stressors.

The moderating effect of psychological detachment as a recovery experience from adverse conditions is confirmed, as it buffers the negative effects of role stress in the face of exhaustion, and of incivility and NA. However, it had no effect on the increase of energy through PA. On the days when workers did not achieve psychological detachment, role stress was more positively related to exhaustion at night. Equivalently, workplace incivility was more strongly associated with NA at night on days when people experienced less psychological detachment. These results support the stressor-detachment model (Sonnentag, 2010), which states that psychological detachment from work during nonworking time is not only a direct predictor of increased well-being and energy but could also buffer the negative impact of job stressors (Sonnentag & Fritz, 2015). Thus, our study extends previous research by revealing that the effect of psychological detachment can moderate the daily effect of role stress and work incivility. This may occur through an attentional process, for example, by focusing thoughts toward other more beneficial life areas which in turn increases self-confidence to cope with job stressors and decreases negative thoughts during nonworking time. This is particularly important in the face of work incivility, such as low-intensity mistreatment, which undeniably has consequences on self-esteem (Andersson & Pearson, 1999) and which may be a precursor of other forms of aggression of greater intensity, such as bullying (Cortina & Magley, 2003). By disconnecting, a worker's self-esteem does not suffer as much, and he or she may be capable to stop being mistreated at the workplace.

This study provides more evidence about relaxation as a positive experience at the emotional and energy level. In our study, relaxation had a main effect, contributing to avoiding exhaustion. After general exhaustion, relaxation is the most significant predictor, as well as

the most significant at the level of direct effects of PA at night, but it does not have moderator effects. Our study shows that psychological detachment and relaxation are predictors of daily energy, even after controlling for daily optimism, but they play different roles in this process because they intervene with different mechanisms. Relaxation would have a direct effect of reducing activation and increasing PA, perhaps contributing to, or ameliorating physiological dysregulation and thereby playing a key role in exacerbating or counteracting allostatic load/overload (McEwen, 2007). Therefore, processes that reduce this prolonged activation are crucial in order to restore an organism's pre-stress state, whereas psychological detachment would be a buffer. Relaxation probably generates the prior emotional state necessary to distance oneself psychologically, thereby contributing to breaking ruminative thoughts associated with depression (Nolen-Hoeksema et al., 1994). Some people have trouble disconnecting, probably because it requires a prior state of calmness and vitality that can be achieved through relaxation. This process would facilitate distancing and could be considered a precedent in future studies. It would be interesting to explore this relationship to include practical resources to help workers to distance themselves from their work in stress prevention programs.

Sex is a significant predictor of exhaustion, and PA. Our results show higher scores on exhaustion and lower PA scores for female workers at the daily level. This is in line with results found in similar studies (Marinaccio et al., 2013). Future studies should investigate whether the cause is women's worse working conditions and/or that more difficulties to practice recovery. In addition to this, gender perspective – based program for women would take a relevant place in order to prevent these work stress-related issues. In this sense, the promotion of optimism as self-efficacy beliefs is related to important cognitions that may protect women from negative outcomes of job stress (Brown & Harris, 2012; Mappamiring & Putra, 2021). Women with a positive viewpoint have less stress, better creative problem-solving skills, and better health outcomes than less optimistic women. Similarly, the uses of time and work-life balance for women still have more barriers (Clercq & Brieger, 2021). In the same vein, poor quality sleep also explains NA, because sleep helps to preserve emotional well-being (Sonnentag & Binnewies, 2013) and could promote physiological balance and resilience (McEwen, 2006). In short, enhancing women's skills to better deal with time to boost recovery and co-responsibility in men are necessary aspects.

Finally, daily optimism has been shown to be an important variable as a driver of energy, both at the level of main effect, decreasing exhaustion and NA, as well as moderating the relation between work incivility and PA. It has been observed that workers with high optimism maintain a high level of PA at nighttime, even with high work incivility. Nevertheless, it would be interesting to confirm the long-term effect of this interaction and determine whether it is related to actions such as denouncing these toxic situations at work, or whether the prolonged strain could end up exhausting the worker. Ultimately, whether it is an expression of active resource to achieving positive outcomes in the face of adversity, like coping mechanisms that operate at the time of trauma (Karatsoreos & McEwen, 2011). Concretely, studies have supported optimism's protective mechanisms against stress and its associations with skills to connect and obtain social support in stressful situations (Andersson, 2012). Thus, social support can both help define the extent to which the event is appraised as stressful and mitigate negative outcomes. We understand that feeling socially supported can protect individuals' well-being from the stress associated with incivility.

In conclusion, this study contributes to the research on burnout and recovery, revealing the daily and undesirable loss of energy in workers due to work incivility and role stress, perhaps with chronic consequences. Conversely, the combination of optimism, relaxation and psychological detachment can contribute to reducing stressful circumstances and to improving daily energy. Likewise, the moderator resources help to reduce the consequences of negative emotions, daily spillover from work to home. For example, daily psychological detachment helps in the process of decreasing exhaustion and NA related to work incivility and role stress. This role is relevant even after controlling for optimism. Daily optimism could also increase energy through the increase in PA. In sum, these mechanisms are relevant to maintain an adequate energy balance and more healthy lifestyles in our personal life, and to distance oneself from work stress and improve active responses to adverse situations, such as workplace mistreatment and role stress, thereby avoiding energy loss, which predicts depressive symptoms and life dissatisfaction.

5.1 Limitations and implications for future research

The current study has some limitations: Firstly, we assessed all the data with self-reports because they are suitable to assess private experiences (Conway & Lance, 2010), but they involve the problem of common-method variance. However, collecting data with general and daily surveys and using person-centered scores in the analyses ensured the measurement of predictor and criterion variables at different time points each day (morning, afternoon, and night) and included control variables according to previous research. Although the temporality dimensions we focused in this article are limited, they provide us a valuable field to explicitly consider the role of time in work settings and health of workers. Future research should collect an in-depth analysis of time more extensively with the incorporation of the multiple dimensions of temporality (George & Jones, 2000), data from several sources (i.e., colleagues, family, and clients), more objective variables (e.g., biomarkers) and the extension of research findings from a study conducted on a sample to the population at large. Secondly, we used survey packages, following previous daily studies, which have the advantage of being low-cost, easy to administer, and being psychometrically equivalent to data obtained through electronic assessment, but they also have some disadvantages. For this reason, the participants received clear instructions to complete the questionnaire in the specified three moments and, for each moment, they had to indicate the exact time they finished. They were also encouraged to use reminder alarms (e.g., watch and phone alarms) and to maintain regular contact (Green et al., 2006). Although all participants reported a completion time within the corresponding hours, future research could use more creative procedures and a longer assessment period (i.e., two weeks or more) to determine how consistent these processes are over time (Schwarz, 2012). Thirdly, we explored the moderating role of daily optimism and recovery. Future research should also explore mediation within the multilevel context, for example, the sequential relation between relaxation, psychological detachment, and energy. Finally, like most researchers, we assumed that the relationships between the within-person variables are linear. However, many psychological variables do not follow a linear pattern (Burke et al., 2007). It is possible, for example, that the effect of work incivility is nonlinear because different uncivil behaviors are not equivalent. Further research on modeling nonlinear effects is necessary (Deboeck, 2011; Ladstätter et al., 2015).

5.2 Practical implications

Primary interventions may be more operative and effective in the workplace because, when loss of energy occurs, there are negative consequences on daily well-being, which can become chronic. In this case, recapturing initial motivation is more difficult. Therapeutic assistance may be required in this situation, revealing unsuccessful prevention of psychosocial risks. In addition to creating a healthy workplace with a suitable adaptation between demands and resources in the workers and the organization, a clear commitment to ethical values (i.e., zero tolerance of workplace mistreatment and discrimination) and supportive relationships in organizations will help workers to feel healthier (Morrison & Cooper-Thomas, 2013). The implementation of workplace wellness programs including learning skills to develop psychological detachment, personal resources such as optimism, and the use of relaxation techniques could be a self-care practice. Such a wellness program should necessarily include a better adaptation of working time to contribute to an optimal balance of work and life. Organizations can also generate principles for respectful and caring interpersonal interactions, growth in cooperating work and collective goals among employees, and build social support and commitment.

Funding This research was supported by a project from the Spanish Ministry of Economy and Competitiveness (PSI2015-68011-R).

Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature.

Declarations

Conflict of interest The authors declare no conflict of interest.

Ethical Statement We followed the Code of Ethics of the American Psychological Association and the standards established by the Ethical Committee from Universidad Autónoma de Madrid (Spain) (CEI-83-1545). The participants provided their written informed consent to participate in this study. The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Alarcon, G. M. (2011). A meta-analysis of burnout with job demands, resources, and attitudes. *Journal of Vocational Behavior*, 79(2), 549–562. doi:<https://doi.org/10.1016/j.jvb.2011.03.007>
- Andersson, M. A. (2012). Dispositional optimism and the emergence of social network diversity. *The sociological quarterly*, 53(1), 92–115. <https://doi.org/10.1111/j.1533-8525.2011.01227.x>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24, 452–471. doi:<https://doi.org/10.5465/AMR.1999.2202131>
- Aquino, K., & Thau, S. (2009). Workplace victimization: Aggression from the target's perspective. *Annual Review of Psychology*, 60, 717–741. doi:<https://doi.org/10.1146/annurev.psych.60.110707.163703>

- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20, 265–269. doi: <https://doi.org/10.1177/0963721411414534>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328. doi: <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2017). Job Demands–Resources Theory: Taking Stock and Looking Forward. *Journal of Occupational Health Psychology*. doi: <https://doi.org/10.1037/ocp0000056>. Advance online publication
- Bakker, A. B., & Schaufeli, W. B. (2000). Burnout contagion processes among teachers. *Journal of Applied Social Psychology*, 30, 2289–2308. doi: <https://doi.org/10.1111/j.1559-1816.2000.tb02437>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. doi: <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Bakker, A. B., & van Wingerden, J. (2020). Do personal resources and strengths use increase work engagement? The effects of a training intervention. *Journal of Occupational Health Psychology* doi: <https://doi.org/10.1037/ocp0000266>
- Barling, J., Dupre, K. E., & Kelloway, E. K. (2009). Predicting workplace aggression and violence. *Annual Review of Psychology*, 60, 671–692. doi: <https://doi.org/10.1146/annurev.psych.60.110707.163629>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Beevers, C. G., & Carver, C. S. (2003). Attentional bias and mood persistence as prospective predictors of dysphoria. *Cognitive Therapy and Research*, 27(6), 619–637. doi: <https://doi.org/10.1023/A:1026347610928>
- Blanco-Donoso, L. M., Demerouti, E., Garrosa Hernández, E., Moreno-Jiménez, B., & Carmona Cobo, I. (2015). Positive benefits of caring on nurses' motivation and well-being: A diary study about the role of emotional regulation abilities at work. *International Journal of Nursing Studies*, 52(4), 804–816. doi: <https://doi.org/10.1016/j.ijnurstu.2015.01.002>
- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process. *Journal of Personality and Social Psychology*, 69(5), 890–902. <https://doi.org/10.1037/0022-3514.69.5.890>
- Braganza, A., Chen, W., Canhoto, A., & Sap, S. (2020). Productive employment and decent work: The impact of AI adoption on psychological contracts, job engagement and employee trust. *Journal of Business Research*. doi: <https://doi.org/10.1016/j.jbusres.2020.08.018>
- Brown, G. W., & Harris, T. (Eds.). (2012). *Social origins of depression: A study of psychiatric disorder in women*. New York: Routledge
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Application and data analysis methods*. Newbury Park, CA: Sage
- Burke, C. T., Shrout, P. E., & Bolger, N. (2007). Individual differences in adjustment to spousal loss: A nonlinear mixed model analysis. *International Journal of Behavioral Development*, 31(4), 405–415. doi: <https://doi.org/10.1177/0165025407077758>
- Buruck, G., Dörfel, D., Kugler, J., & Brom, S. S. (2016). Enhancing well-being at work: The role of emotion regulation skills as personal resources. *Journal of occupational health psychology*, 21(4), 480. doi: <https://doi.org/10.1037/ocp0000023>
- Buyse, D. J., Reynolds, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Psychiatry Research*, 28(2), 193–213. doi: [https://doi.org/10.1016/0165-1781\(89\)90047-4](https://doi.org/10.1016/0165-1781(89)90047-4)
- Casper, A., & Sonnentag, S. (2020). Feeling exhausted or vigorous in anticipation of high workload? The role of worry and planning during the evening. *Journal of Occupational and Organizational Psychology*, 93(1), 215–242. <https://doi.org/10.1111/joop.12290>
- Casper, A., Tremmel, S., & Sonnentag, S. (2019). The power of affect: A three-wave panel study on reciprocal relationships between work events and affect at work. *Journal of Occupational and Organizational Psychology*, 92(2), 436–460. doi: <https://doi.org/10.1080/02678373.2018.1496158>
- Carver, C. S., & Connor-Smith, J. (2010). Personality and coping. *Annual Review of Psychology*, 61, 679–704. doi: <https://doi.org/10.1146/annurev.psych.093008.100352>
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press
- Carver, C. S., & Scheier, M. F. (2014). Dispositional optimism. *Trends in Cognitive Sciences*, 18, 293–299. doi: <https://doi.org/10.1016/j.tics.2014.02.003>
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25(3), 325–334. doi: <https://doi.org/10.1007/s10869-010-9181-6>

- Cooper, J. R. (1998). *A multidimensional approach to the adoption of innovation. Management decision*. <https://doi.org/10.1108/00251749810232565>
- Cortina, L. M., & Magley, V. J. (2003). Raising voice, risking retaliation: Events following interpersonal mistreatment in the workplace. *Journal of Occupational Health Psychology, 8*(4), 247–265. doi:<https://doi.org/10.1037/1076-8998.8.4.247>
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2011). Selective incivility as modern discrimination in organizations: Evidence and impact. *Journal of Management, 39*(6), 1579–1605. doi:<https://doi.org/10.1177/0149206311418835>
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology, 6*, 64–80. doi:<https://doi.org/10.1037/1076-8998.6.1.64>
- Craig, A., & Cooper, R. E. (1992). Symptoms of acute and chronic fatigue. In A. P. Smith, & D. M. Jones (Eds.), *Handbook of human performance* (3 vol., pp. 289–339). London: Academic Press
- De Clercq, D., & Brieger, S. A. (2021). When Discrimination is Worse, Autonomy is Key: How Women Entrepreneurs Leverage Job Autonomy Resources to Find Work–Life Balance. *Journal of Business Ethics, 1*–18. doi: <https://doi.org/10.1111/j.1540-6520.2011.00470>
- Deboeck, P. R. (2011). Modeling nonlinear dynamics. *The handbook of research methods for studying daily life* (pp. 440–458). New York, NY: Guildford Press
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573–598. doi:<https://doi.org/10.1037/0033-295X.109.3.573>
- Enders, C. K., & Tofghi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods, 12*, 121–138. doi:<https://doi.org/10.1037/1082-989X.12.2.121>
- Friedman, H. S., & Kern, M. L. (2014). Personality, well-being, and health. *Psychology, 65*(1), 719. doi:<https://doi.org/10.1146/annurev-psych-010213-115123>
- Garrosa, E., Carmona-Cobo, I., Moreno-Jiménez, B., & Sanz-Vergel, A. (2015). Emotional impact of workplace incivility and verbal abuse at work: Daily recovery influence. *Annals of Psychology, 31*(1), 190–198. doi:<https://doi.org/10.6018/analesps.31.1.161494>
- Garrosa, E., Carmona-Cobo, I., Blanco, L., Ladstätter, F., & Cooper-Thomas, H. (2013). The relationships between family-work interaction, job-related exhaustion, detachment, and meaning in life: A day-level study of emotional well-being. *Revista de Psicología del Trabajo y de las Organizaciones, 29*(3), 169–177. doi:<https://doi.org/10.5093/tr2013a23>
- Garrosa, E., Moreno-Jiménez, B., Rodríguez-Muñoz, A., & Rodríguez-Carvajal, R. (2011). Role stress and personal resources in nursing: A cross-sectional study of burnout and engagement. *International Journal of Nursing Studies, 48*(4), 479–489. doi:<https://doi.org/10.1016/j.ijnurstu.2010.08.004>
- Geurts, S. A. E., & Sonnentag, S. (2006). Recovery as an explanatory mechanism in the relation between acute stress reactions and chronic health impairment. *Scandinavian Journal of Work Environment and Health, 32*, 482–492. doi:<https://doi.org/10.5271/sjweh.1053>
- Gillespie, B. L., & Eisler, R. M. (1992). Development of the Feminine Gender Role Stress Scale: A cognitive-behavioral measure of stress, appraisal, and coping for women. *Behavior Modification, 16*, 426–438. doi:<https://doi.org/10.1177/01454455920163008>
- Green, A., Bolger, N., Shrout, P., Rafaeli, E., & Reis, H. (2006). Paper or plastic? Data equivalence in paper and electronic diaries. *Psychological Methods, 1*, 87–105. doi:<https://doi.org/10.1037/1082-989X.11.1.87>
- Hakanen, J. J., & Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. *Journal of Affective Disorders, 141*(2), 415–424. doi:<https://doi.org/10.1016/j.jad.2012.02.043>
- Hox, J. J., & Roberts, J. K. (2011). Multilevel analysis: Where we were and where we are. In J. J. Hox, & J. K. Roberts (Eds.), *Handbook of advanced multilevel analysis* (pp. 1–11). New York: Routledge. doi:<https://doi.org/10.1007/s11336-013-9351-3>
- Jin, C. L., Chen, T., Wu, S. Y., & Yang, Y. L. (2020). Exploring the Impact of Stress on Burnout: A Mathematical Model and Empirical Research. *Discrete Dynamics in Nature and Society, 2020*. doi:<https://doi.org/10.1155/2020/3475324>
- Jiang, L., & Probst, T. M. (2017). The rich get richer and the poor get poorer: Country- and state-level income inequality moderates the job insecurity-burnout relationship. *Journal Of Applied Psychology, 102*(4), 672–681. doi:<https://doi.org/10.1037/apl0000179>
- George, J. M., & Jones, G. R. (2000). The role of time in theory and theory building. *Journal of management, 26*(4), 657–684. doi: [https://doi.org/10.1016/S0149-2063\(00\)00051-9](https://doi.org/10.1016/S0149-2063(00)00051-9)
- Karatsoreos, I. N., & McEwen, B. S. (2011). Psychobiological allostasis: Resistance, resilience and vulnerability. *Trends in Cognitive Sciences, 15*(12), 576–584. doi:<https://doi.org/10.1016/j.tics.2011.10.005>

- Karatepe, O. M., Rezapouraghdam, H., & Hassannia, R. (2020). Job insecurity, work engagement and their effects on hotel employees' non-green and nonattendance behaviors. *International Journal of Hospitality Management*, 87, 102472. [10.1016/j.ijhm.2020.102472](https://doi.org/10.1016/j.ijhm.2020.102472)
- Kinnunen, U., Feldt, T., Siltaloppi, M., & Sonnentag, S. (2011). Job demands–resources model in the context of recovery: Testing recovery experiences as mediators. *European Journal of Work and Organizational Psychology*, 20(6), 805–832. <https://doi.org/10.1080/1359432X.2010.524411>
- Ladstätter, F., Garrosa, E., Moreno-Jiménez, B., Ponsoda, V., Reales Aviles, J. M., & Dai, J. (2015). Expanding the occupational health methodology: A concatenated artificial neural network approach to model the burnout process in Chinese nurses. *Ergonomics*, 1–15. doi:<https://doi.org/10.1080/00140139.2015.1061141>
- Lau, M. A., Segal, Z. V., & Williams, J. M. G. (2004). Teasdale's differential activation hypothesis: Implications for mechanisms of depressive relapse and suicidal behaviour. *Behaviour Research and Therapy*, 42(9), 1001–1017. doi:<https://doi.org/10.1016/j.brat.2004.03.003>
- Lazarus, R. S., & Folkman, S. (1991). 9. *The Concept of Coping*. In *Stress and coping: An anthology* (pp. 189–206). Columbia University Press. <https://doi.org/10.7312/mona92982-017>
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123–133. doi:<https://doi.org/10.1037/0021-9010.81.2.123>
- Li, V., Jiang, L., & Xu, X. (2020). From workplace mistreatment to job insecurity: The moderating effect of work centrality. *Stress and Health*, 36(3), 249–263. doi: <https://doi.org/10.1002/smi.2915>
- Littman-Ovadia, H., & Nir, D. (2014). Looking forward to tomorrow: The buffering effect of a daily optimism intervention. *The Journal of Positive Psychology*, 9(2), 122–136. doi:<https://doi.org/10.1080/17439760.2013.853202>
- Madsen, I. E., Lange, T., Borritz, M., & Rugulies, R. (2015). Burnout as a risk factor for antidepressant treatment—a repeated measures time-to-event analysis of 2936 Danish human service workers. *Journal of Psychiatric Research*, 65, 47–52. doi:<https://doi.org/10.1016/j.jpsychires.2015.04.004>
- Marinaccio, A., Ferrante, P., Corfiati, M., Di Tecco, C., Rondinone, B. M., Bonafede, M., & Iavicoli, S. (2013). The relevance of socio-demographic and occupational variables for the assessment of work-related stress risk. *Bmc Public Health*, 13(1), 1157. doi:<https://doi.org/10.1186/1471-2458-13-1157>
- Mappamiring, M., & Putra, A. H. P. K. (2021). Understanding Career Optimism on Employee Engagement: Broaden-Built and Organizational Theory Perspective. *The Journal of Asian Finance Economics and Business*, 8(2), 605–616. doi:<https://doi.org/10.13106/jafeb.2021>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). *Maslach burnout inventory*. Scarecrow Education
- McEwen, B. S. (2006). Protective and damaging effects of stress mediators: Central role of the brain. *Dialogues in Clinical Neuroscience*, 8(4), 367–381
- McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. *Physiological Reviews*, 87(3), 873–904. doi:<https://doi.org/10.1152/physrev.00041.2006>
- McEwen, B. S., & Wingfield, J. C. (2003). The concept of allostasis in biology and biomedicine. *Hormones and Behavior*, 43(1), 2–15. doi:[https://doi.org/10.1016/S0018-506X\(02\)00024-7](https://doi.org/10.1016/S0018-506X(02)00024-7)
- McHale, N., Clark, D. A., & Tramonte, L. (2015). Does optimism moderate mood repair? A daily diary study. *Motivation and Emotion*, 39(3), 409–419
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, & H. Thierry (Eds.), *Handbook of work and organizational psychology, vol. 2: Work psychology* (pp. 5–33). Hove, UK: Psychology Press
- Moreno-Jiménez, B., Rodríguez-Muñoz, A., Sanz-Vergel, A. I., & Garrosa, E. (2012). Elucidating the role of recovery experiences in the job demands-resources model. *The Spanish Journal of Psychology*, 15(2), 659–669. doi:https://doi.org/10.5209/rev_SJOP.2012.v15.n2.38877
- Morrison, R. L., & Cooper-Thomas, H. D. (2013). *Relationships in organizations: A work psychology perspective*. New York: Palgrave Macmillan
- Navarro, J., Roe, R. A., & Artiles, M. I. (2015). Taking time seriously: Changing practices and perspectives in work/organizational psychology. *Revista de Psicología del Trabajo y de las Organizaciones*, 31(3), 135–145. <https://doi.org/10.1016/j.rpto.2015.07.002>
- Neff, L. A., & Geers, A. L. (2013). Optimistic expectations in early marriage: A resource or vulnerability for adaptive relationship functioning? *Journal of Personality and Social Psychology*, 105(1), 38–60. doi:<https://doi.org/10.1037/a0032600>
- Nezlek, J. B. (2008). An introduction to multilevel modeling for social and personality psychology. *Social and Personality Psychology Compass*, 2(2), 842–860. doi:<https://doi.org/10.1111/j.1751-9004.2007.00059.x>
- Nezlek, J. (2012). Multilevel modeling analysis of diary-style data. In M. R. Mehl, & T. S. Conner (Eds.), *Handbook of research methods for studying daily life*. New York, NY: Guilford Press. doi: <https://doi.org/10.5860/choice.50-1159>
- Nolen-Hoeksema, S., Parker, L. E., & Larson, J. (1994). Ruminative coping with depressed mood following loss. *Journal of Personality and Social Psychology*, 67(1), 92. doi:<https://doi.org/10.1037/0022-3514.67.1.92>

- Parker, S. L., Sonnentag, S., Jimmieson, N. L., & Newton, C. J. (2020). Relaxation during the evening and next-morning energy: The role of hassles, uplifts, and heart rate variability during work. *Journal of occupational health psychology, 25*(2), 83. doi: 10.1037/ocp0000155
- Posig, M., & Kickul, J. (2003). Extending our understanding of burnout: test of an integrated model in non-service occupations. *Journal of occupational health psychology, 8*(1), 3. <https://doi.org/10.1037/1076-8998>
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*(4), 437–448. doi:<https://doi.org/10.3102/10769986031004437>
- Prem, R. (2017). The Effects of a Changing World of Work on Daily Working Life. In: Korunka, C., Kubicek, B. (eds) *Job Demands in a Changing World of Work*. Springer. doi:<https://doi.org/10.1007/978-3-319-54678-07>
- Quinn, R. W., Spreitzer, G. M., & Lam, C. F. (2012). Building a sustainable model of human energy in organizations: Exploring the critical role of resources. *Academy of Management Annals, 6*(1), 337–396. doi: <https://doi.org/10.1080/19416520.2012.676762>
- Rasbash, J., Browne, W., Goldstein, H., Yang, M., Plewis, I., Healy, M., & Lewis, T. (2000). *A user's guide to MLwiN*. London, UK: Multilevel Models Project Institute of Education, University of London
- Rhee, S. Y., Hur, W. M., & Kim, M. (2017). The Relationship of Coworker Incivility to Job Performance and the Moderating Role of Self-Efficacy and Compassion at Work: The Job Demands-Resources (JD-R) Approach. *Journal of Business Psychology, 32*, 711–726. <https://doi.org/10.1007/s10869-016-9469-2>
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*, 150–163. doi:<https://doi.org/10.2307/2391486>
- Salminen, S., Mäkikangas, A., & Feldt, T. (2014). Job resources and work engagement: Optimism as moderator among Finnish managers. *Journal of European Psychology Students, 5*(1), <https://doi.org/10.5334/jeps.bu>
- Sanz-Vergel, A. I., Sebastián, J., Rodríguez-Muñoz, A., Garrosa, E., Moreno-Jiménez, B., & Sonnentag, S. (2010). Adaptación del “Cuestionario de Experiencias de Recuperación” a una muestra española [Adaptation of the Recovery Experiences Questionnaire in a Spanish sample]. *Psicothema, 22*(4), 990–996
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice*. London: Taylor & Francis
- Scheier, M. F., & Carver, C. S. (1992). Effects of optimism on psychological and physical well-being: Theoretical overview and empirical update. *Cognitive Therapy and Research, 16*(2), 201–228. doi:<https://doi.org/10.1007/BF01173489>
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the Life Orientation Test. *Journal of Personality and Social Psychology, 67*(6), 1063–1078. doi:<https://doi.org/10.1037/0022-3514.67.6.1063>
- Schwarz, N. (2012). *Handbook of research methods for studying daily life*. New York, NY: Guilford Press
- Schmidt, S., Roesler, U., Kusserow, T., & Rau, R. (2014). Uncertainty in the workplace: Examining role ambiguity and role conflict, and their link to depression—A meta-analysis. *European Journal Of Work And Organizational Psychology, 23*(1), 91–106. doi:<https://doi.org/10.1080/1359432X.2012.711523>
- Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology, 20*(3), 285–304. doi:<https://doi.org/10.1080/13594320903513916>
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology, 88*, 518–528. doi: <https://doi.org/10.1037/0021-9010.88.3.518>
- Sonnentag, S. (2010). Recovery from fatigue: The role of psychological detachment. In P. L. Ackerman (Ed.), *Cognitive fatigue: The current status and future for research and application* (pp. 253–272). Washington, CD: American Psychological Association. doi: <https://doi.org/10.1037/12343-012>
- Sonnentag, S. (2015). Dynamics of well-being. *Annual Review of Organizational Psychology and Organizational Behavior, 2*, 261–293. doi:<https://doi.org/10.1146/annurev-orgpsych-032414-111347>
- Sonnentag, S., & Binnewies, C. (2013). Daily affect spillover from work to home: Detachment from work and sleep as moderators. *Journal of Vocational Behavior, 83*, 198–208. doi:<https://doi.org/10.1016/j.jvb.2013.03.008>
- Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: Development and validation of a measure assessing recuperation and unwinding at work. *Journal of Occupational Health Psychology, 12*, 204–221. doi:<https://doi.org/10.1037/1076-8998.12.3.204>
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior, 36*, 72–103. doi:<https://doi.org/10.1002/job.1924>
- Teasdale, J. D. (1988). Cognitive vulnerability to persistent depression. *Cognition & Emotion, 2*(3), 247–274

- Tetrick, L., & Winslow, C. J. (2015). Workplace stress management interventions and health promotion. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 583–603. doi:<https://doi.org/10.1146/annurev-orgpsych-032414-111341>
- Thompson, E. R. (2007). Development and validation of an internationally reliable short-form of the Positive and Negative Affect Schedule (PANAS). *Journal of Cross-Cultural Psychology*, 38(2), 227–242. doi:<https://doi.org/10.1177/0022022106297301>
- Trougakos, J. P., Beal, D. J., Green, S. G., & Weiss, H. M. (2008). Making the break count: An episodic examination of recovery activities, emotional experiences, and positive affective displays. *Academy of Management Journal*, 51, 131–146. doi:<https://doi.org/10.5465/AMJ.2008.30764063>
- Van Yperen, N. W., & Snijders, T. A. (2000). A multilevel analysis of the demands–control model: Is stress at work determined by factors at the group level or the individual level? *Journal of occupational health psychology*, 5(1), 182. doi: <https://doi.org/10.1037//1076-8998.5.1.182>
- Wharton, A. S. (1993). The affective consequences of service work managing emotions on the job. *Work and Occupations*, 20(2), 205–232. doi:<https://doi.org/10.1177/0730888493020002004>
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486–493. doi:<https://doi.org/10.1037/0021-9010.83.3.486>
- Yang, L. Q., Spector, P. E., Chang, C. H. D., Gallant-Roman, M., & Powell, J. (2012). Psychosocial precursors and physical consequences of workplace violence towards nurses: A longitudinal examination with naturally occurring groups in hospital settings. *International Journal of Nursing Studies*, 49, 1091–1102. doi:<https://doi.org/10.1016/j.ijnurstu.2012.03.006>
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational behavior*, 74(3), 235–244. <https://doi.org/10.1016/j.jvb.2008.11.003>
- Xanthopoulou, D., Sanz-Vergel, A. I., & Demerouti, E. (2014). Reconsidering the daily recovery process. In S. Leka, & R. R. Sinclair (Eds.), *Contemporary occupational health psychology: Global perspectives on research and practice* (3 vol.). Chichester, UK: John Wiley & Sons. doi:<https://doi.org/10.1002/9781118713860.ch4>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.