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# Is emotional exhaustion only the result of work experiences? A diary study on daily hassles and uplifts in different life domains

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## ABSTRACT

**Background and objectives:** Emotional exhaustion is considered to be the key symptom of burnout. Although it has been defined that emotional exhaustion rather results from work-related experience than from other life domains, this has rarely been studied empirically. The study aimed to investigate the role of different life domains in predicting emotional exhaustion. More precisely, we examined whether daily uplifts and hassles from different life domains were related to emotional exhaustion beyond work-related uplifts and hassles.

**Design:** A diary study was conducted over the course of 14 consecutive days.

**Method:** 141 beginning teachers provided information about their daily hassles and uplifts as well as their daily emotional exhaustion.

**Result:** Results of multilevel analyses showed that work-related uplifts were negatively and work-related hassles were positively related to emotional exhaustion. Additionally, private uplifts were associated with a statistically significant decrease and private hassles with an increase in emotional exhaustion beyond work-related events.

**Conclusion:** Although the variance in emotional exhaustion that was explained by private events was small, the present study suggests that burnout symptoms might not be completely independent from individuals' daily lives outside work.

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## KEYWORDS

Diary study; emotional exhaustion; daily uplifts and hassles; teachers

Emotional exhaustion is the central quality of burnout and refers to feelings of being emotionally overextended and depleted of one's emotional resources (Maslach et al., 2001). The most prominent definition of burnout by Maslach et al. (2001) considers it a consequence of work-related experiences. Similarly, the job-demand resources model suggests that work-related stressors and the absence of resources in the workplace result in higher levels of emotional exhaustion (Bakker & Demerouti, 2007; Bakker et al., 2014). In contrast, the context-specificity of the burnout construct is critically debated (Bianchi et al., 2014). In line with this, the transactional model of stress and coping suggests that sources of stress and burnout are routed in stressors and resources from different life domains (Lazarus & Folkman, 1984).

However, the question as to whether burnout is only a function of work-related experiences or also affected by other life domains has rarely been tested empirically. Therefore, the present study investigated whether the experience of emotional exhaustion could be reinforced or alleviated by experiences in both the work and the private context – even though it is a work-related state of mind. To investigate this research question, we conducted a 14-day diary study in a sample of  $N =$

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141 teachers. In doing so, we were able to obtain a more comprehensive and ecologically valid picture of individuals' daily work- and non-work-related experiences (Bolger et al., 2003).

## **Emotional exhaustion as a key symptom of burnout**

During the last decades, predictors and consequences of burnout have received considerable attention in research. Burnout is described as a situation-specific work-related construct (Maslach, 2003; Maslach et al., 2001; Schaufeli et al., 2009). The most common definition of burnout was provided by Maslach and her colleagues (Maslach et al., 2001), who defined burnout as a multidimensional construct, "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment" (Maslach et al., 1996, p. 4). Of the three aspects, emotional exhaustion is said to be the core component of burnout and its most obvious manifestation. It is characterized by feelings of physical and emotional depletion in the working context.

For many years, social professions have been considered to be at particular risk of experiencing burnout symptoms. This was one reason why we decided to focus on teachers in our study (Johnson et al., 2005). Beyond that, the teaching profession and teachers' health are of high relevance because teachers substantially contribute to students' learning and the development of the next generation (Hattie, 2009). Importantly, current research showed that emotional exhaustion impairs the quality of teachers' work performance, thus, making it especially relevant to learn about the predictors of teachers' exhaustion (Klusmann et al., 2008, 2016).

## **Work-related factors and their relevance for emotional exhaustion**

The predominant conceptualization of burnout defined the syndrome as a result of stressors on the job (Maslach et al., 2001). Thus, the exclusive focus in explaining the causes of burnout was on the work domain. Correspondingly, to concretize the conditions that lead to emotional exhaustion, the job demands-resources model (JD-R; Bakker & Demerouti, 2014), which is rooted in work and organizational psychology, mainly focused on factors located in the working contexts. The model suggested that emotional exhaustion is a result of high job demands (= job stressors) and limited job resources. More precisely, high job demands result in constant overload and, ultimately, in emotional exhaustion. Thereby, job demands were described as physical, social, or organizational job aspects that require continuous physical or mental effort. On the other hand, job resources were defined as physical, social, psychological, or organizational job aspects that are either functional for achieving working objectives, inducing personal growth and development, or buffering the effects of job demands (Demerouti et al., 2001). Hence, the JD-R model assumed both direct and moderating/buffering effects of work-related resources. Inspired by the JD-R model, numerous studies have identified job demands and resources in different occupational groups (for an overview see, e.g., Bakker & Demerouti, 2007). Among teachers, positive interactions with students and support from colleagues and mentors have frequently been mentioned as job resources (Klassen et al., 2012; Schmidt et al., 2017). In contrast, problems with classroom management, challenging relationships with students, time pressure, organizational tasks, and lack of support from colleagues were identified as typical job demands (Aldrup et al., 2018; Geving, 2007; Hakanen et al., 2006; Klusmann et al., 2008; Schmidt et al., 2017).

Hence, the JD-R model and prior research clearly illustrated the role of the work context in the burnout process. However, the potential role of other life domains remains an open question. This knowledge is vital for obtaining a better etiological understanding and could provide important insights for the design of interventions.

## The role of different life domains for the development of emotional exhaustion

The transactional model of stress and coping provided a valuable theoretical background for the idea that burnout symptoms were not merely attributable to the work domain (Lazarus & Folkman, 1984; Maslach & Leiter, 2016). Following the transactional model, stress emerges from the interaction between a person and the environment when events are appraised as harm/loss, threat, or exceeding the resources and coping capacities of a person (Lazarus & Folkman, 1984). Prolonged stress exposure and inadequate coping strategies can, in turn, result in the experience of burnout symptoms (Lazarus, 1999). Regarding the relation between experiences in and outside work, Lazarus (1999) postulated explicitly, that “work cannot be isolated from other aspects of a person’s life” (p. 132). He argued that the overall context of a person’s life always serves as an important background that has to be taken into account to understand the stress process and a person’s emotional experience.

The processes of how different life domains affect each other were often discussed based on the example of work-family conflict. In this context, Edwards and Rothbard (2000) suggested three mechanisms that could be particularly helpful in explaining how experiences from other life domains besides work could affect emotional exhaustion. First, according to the *spillover* effect, cognitive or emotional processes explain the interplay of experiences between life domains. For example, stressors in the private domain, like an unhappy relationship, might induce a negative mood. In turn, people may appraise work-related demands more negatively and, thus, exacerbate feelings of emotional exhaustion. Second, *resource drain* describes the finiteness of resources, such as time, attention, and energy. Consequently, resources expended in one domain are unavailable in other domains. For example, having time-consuming family obligations and little time for recovering from work might also increase emotional exhaustion (Fritz & Sonnentag, 2005) because these resources were missing in the working context. Third, the *buffer effect* describes the interplay between resources from one domain and demands from another domain. For example, emotional support from family and friends could serve as a helpful coping strategy to attenuate the effect of work demands on emotional exhaustion (Halbesleben, 2006). Similar mechanisms were also formulated in the *work-home resources model* (ten Brummelhuis & Bakker, 2012). Analog to the draining effect, they assumed that demands in one area of life (e.g., in the family) reduce resources such as time, energy, and sleep that are needed for other areas of life as well (Bakker et al., 2019).

So far, only a few studies have investigated the relationship between aspects of individuals’ private lives and burnout and the results were mixed. In a recent study, the occurrence of major life events outside work such as serious family problems, physical illness, divorce, or separation was associated with burnout (Mather et al., 2014). Moreover, studies focusing on work-home or home-work-interference found that individuals who described their private life as being supportive of their work-related demands reported fewer burnout symptoms (Montgomery et al., 2003; Peeters et al., 2005). In a study considering specific stressors in private life, Bakker et al. (2005) found that time constraints and emotional demands at home statistically significantly predicted employees’ emotional exhaustion over and above work demands and resources. Regarding social support from other life domains, a meta-analysis by Halbesleben (2006) found that non-work social supports were significantly associated with emotional exhaustion. In contrast, in a three-year longitudinal study, home resources (family/partner/friends support) or home demands (quantitative home demands, emotional home demands) did not predict changes in emotional exhaustion over time (Hakanen et al., 2008). Furthermore, Bakker et al. (2000) showed that the quality of teachers’ relationships with students predicted burnout but not the relationship with their partner.

However, these studies (except for Mather et al., 2014) only considered selective qualities (time and emotional constraints) of one specific life domain (home) so that important aspects of individuals’ lives might have been omitted. Additionally, previous studies assessed rather stable, trait-like demands and resources at one or two measurement time points. For example, in the study by

Hakanen et al. (2008), there might have been important changes in individuals' lives outside work within the time frame of the study explaining the non-significant association between private life and changes in emotional exhaustion three years later. Accordingly, different researchers have underlined the importance of taking into account the variability of demands and resources from moment to moment to deepen our understanding of the stress process (Almeida, 2005; Lazarus, 1999).

## Daily events in different life domains and their relation to emotional exhaustion

Several decades ago, researchers already suggested that daily events are more predictive for well-being and health-related outcomes than major demands (Kanner et al., 1981). In research on daily demands and resources, the terms *hassles* and *uplifts* have been established. More precisely, *hassles* refer to daily disruptive, frustrating, and stressful events resulting from the interaction with the environment, whereas *uplifts* are positive, joyful experiences (Kanner et al., 1981). Daily events were regarded to reflect individuals' current life situations and the stressors and resources associated with them (Lazarus, 1999). Moreover, daily hassles (e.g., "having an argument with a colleague", "child is ill today") and uplifts (e.g., "enough time to prepare my lessons for tomorrow", "nice evening with a friend") take into account the variability and changing nature of demands and resources in different life domains that make different days more or less demanding (Bolger et al., 2003; Zirkel et al., 2015). Central life domains commonly identified among various studies on daily hassles and uplifts were family and friends, work, household, financial aspects, health and physical activity, time, and environment (Maybery & Graham, 2001; Maybery et al., 2007).

Research on individuals' daily experience has benefited from recent theoretical but also methodological developments. In terms of theoretical developments, Almeida (2005) built upon the transactional model of stress and coping (Lazarus & Folkman, 1984) and suggested that the content, frequency, and subjective relevance of daily events determine the degree to which they represent a stressor. Stressor exposure, in turn, is hypothesized to affect daily fluctuations in individual's well-being. In terms of methodological progress, a growing number of diary studies have shown that they reduce memory bias compared to studies asking for individuals' experiences over longer periods and allow for a reliable and valid assessment of daily events (e.g., Bakker & Bal, 2010; Bolger et al., 2003; Kitching et al., 2009; Simbula, 2010; Zirkel et al., 2015). For example, the validity was supported by studies in the work domain, which revealed an association between teachers' daily events and their emotional exhaustion (Aldrup et al., 2017; Schmidt et al., 2017). In addition, daily assessments are best suited to obtain a representative sample of individuals' experience in and outside work. Considering these methodological and theoretical advantages, a daily diary study represented an advantageous approach for investigating if resources and stressors outside work also affect the work-related feeling of emotional exhaustion.

## Present study

The central aim of this study was to examine if hassles and uplifts in different life domains were related to teachers' emotional exhaustion, as the central aspect of burnout. In investigating this research question, we add to the controversial debate about the context-specificity of burnout symptoms (Bianchi et al., 2014). The few studies addressing this research question have only considered selective trait-like aspects of people's lives outside the work context (e.g., Bakker et al., 2005). Thus, a broader investigation of these non-work-related life domains is needed to avoid the problem of underestimating their role in the development of burnout. Furthermore, due to the predominant focus on stable aspects, the dynamic and changing nature of people's experiences in different life domains has widely been neglected.

Using data from a 14-day diary study, we first investigated whether daily hassles and uplifts from outside work affected teachers' emotional exhaustion beyond work-related events. In line with

Lazarus (1999) and Almeida (2005), we considered both the frequency of daily uplifts and hassles and the subjective relevance that people attributed to these events. Drawing on previous research (Bakker & Bal, 2010; Schmidt et al., 2017; Simbula, 2010), we expected that hassles at work were positively related to emotional exhaustion, whereas work-related uplifts show a small negative association. Importantly, assuming an interdependency between work and non-work domains described theoretically in terms of draining and spillover effects, we expected hassles from outside work to increase emotional exhaustion over and above work events, whereas we hypothesized uplifts to reduce emotional exhaustion. We assumed to find this pattern of results for both the frequency and the relevance of daily events, but anticipated more pronounced effects for the subjective rating of the events' relevance (see Maybery et al., 2007; Reich et al., 1988). Second, as postulated in the JD-R model (Demerouti et al., 2001), we assumed that uplifts buffer the association between daily work-related hassles and emotional exhaustion. Going beyond the JD-R model, we tested these buffer effects for both work-related uplifts and uplifts from outside work. Third, to gain insights about potentially differential links between daily hassles and uplifts in a wide range of life domains and emotional exhaustion, we considered the content of the events (work, family/friends, household, health and physical activity, and time). Whereas we speculated that uplifts regarding social support, physical activity, and time might indicate successful coping strategies, thus, preventing emotional exhaustion, we investigated the effects of hassles from the different life domains rather explorative.

In addressing these research questions, we extended previous research in important ways. First, we provided extensive insights into the quantity and quality of people's positive and negative experiences in everyday life. Moreover, the use of a daily diary approach allowed us to examine the associations between hassles/uplifts and emotional exhaustion both within- and between persons. The within-person level took the dynamic nature of daily experience into account and provided an answer to the question of whether the quantity and quality of specific events are immediately mirrored in teachers' daily emotional exhaustion (Bolger et al., 2003). Moreover, the between-person level provided information about the link between rather stable inter-individual differences in stressors and resources affecting emotional exhaustion.

## Method

### Procedure

The study was approved by the State Ministry of Education and complies with the principles of the Declaration of Helsinki (World Medical Association, 2013). Teachers were contacted via e-mail to deliver information about the study and to ask for participation. The consent to participate was obtained in written form from all participants. Participants received individual codes providing individual access to their online diary. As an incentive, teachers received a cumulatively increasing remuneration of up to 50 Euro depending on the number of days they filled out the online diary (i.e., 1 Euro on day 1, 2 Euro on days 2 and 3, and so forth).

The study started with a pre-questionnaire assessing demographic, personal, and work-related variables and was then followed by the diary on 14 consecutive days. As part of the diary, teachers reported on daily work-related and private uplifts and hassles as well as on their emotional exhaustion. To ensure that the diary entries referred to the current day, the daily questionnaires could only be completed from 6 pm to midnight and it was not possible to enter information for any of the previous or future days.

### Sample

Our original sample comprised  $N = 181$  early career teachers working at German schools. Of these teachers, nine only filled in the pre-questionnaire. Because we investigate within-person change

in different life domains, we retained only participants who had completed the pre-questionnaire and the diary on at least three days to get a generalizable estimate of teachers' daily experience. In the online supplement, we also report robustness checks of our results by reporting the analyses once for all teachers even if they only participated in the study on one or two days, and once only for teachers who participated on at least seven days, that is, on 50% of the days. The final sample consisted of  $N = 141$  teachers. The excluded participants ( $N = 40$ ) did not statistically significantly differ from the final sample ( $N = 141$ ) regarding their emotional exhaustion (assessed in the pre-questionnaire). However, a statistically significant higher proportion of women was represented in the final sample:  $\chi^2(1, N = 181) = 6.21, p = .02$ .

Teachers of the final sample were, on average,  $M = 32.02$  years old ( $SD = 4.96$ ), 80.3% were female, and 77.0% were living in a relationship. They were within their first four years of teaching after completing the second state examination ( $M = 2.43$  years,  $SD = 1.28$ ). Participants completed the diary 1607 times and, on average, on 11.40 days ( $SD = 2.71$ ). In other words, 81.4% of the theoretically possible diaries were filled out.

## Measures

### Daily uplifts and hassles

Every day, participants reported on their experiences at work and outside work ("Please write down the positive and negative events that you experienced at work/outside work today!", see Appendix for the complete instruction). Participants could mention up to 20 events in an open-answer format. Afterwards, participants rated the valence of each event on a 5-point scale ranging from 1 = *very negative*, 3 = *neutral* to 5 = *very positive*. These ratings were used to define positive events as uplifts (rating = 4 or 5) and negative events (rating = 1 or 2) as hassles. Additionally, we asked for the subjective relevance of each event on a 4-point scale ranging from 1 = *irrelevant* to 4 = *very relevant*. Thus, we were able to consider both the frequency of individuals' daily hassles and uplifts (i.e., total number of uplifts/hassles on a given day) and the subjective relevance of these events (i.e., sum of relevance ratings for uplifts/hassles on a given day).

Additionally, we categorized the events into seven overarching themes representing the most common content domains of daily hassles and uplifts that were identified in a literature review by Maybery and Graham (2001). Building upon work by Kanner et al. (1981) and Lazarus and Folkman (1984) the domains are: Work, family and friends, time pressure/leisure time, health, financial aspects, household, and environment. These categories have been shown to be valid indicators of negative as well as positive experience on a day-to-day basis (Maybery et al., 2007). First, the category *work* included all events concerning professional tasks such as teaching, preparing lessons, and interacting with colleagues and parents (e.g., "had a noisy class today"). Second, *family and friends* subsumed all events referring to social interaction with partners, family members, or friends (e.g., "a long telephone conversation with an old friend"). Third, *health and physical activity* included all events regarding health status and sports (e.g., "a strong headache today"). Fourth, *household* subsumed all events concerning the maintenance of the home environment, cooking, buying groceries, cleaning, and taking care of animals (e.g., "I had to do my weekly cleaning"). Fifth, *financial* included all events dealing with money, material things that were bought or lost, and general financial concerns (e.g., "bought an expensive laptop today"). Sixth, *time* subsumed all events addressing either time pressure or, on the contrary, leisure time and opportunities to relax (e.g., "I could spend the whole afternoon reading my book"). Seventh, *environment* covered events addressing traffic or the weather (e.g., "I got completely wet today"). The interrater reliability was satisfactory (Cohen's Kappa  $\kappa = .90$ ). Because very few events were mentioned from the categories *financial* and *environment* in comparison to the five other categories, we grouped them with the few unclassifiable events in one category *others*. Table 1 summarizes the frequency of hassles and uplifts in each category and how personally relevant participants perceived them.

**Table 1.** Descriptive statistics and correlations of daily events with emotional exhaustion on the person- and day-level.

	Frequency of events per day						Relevance of events per day					
	<i>M</i>	<i>Var<sub>w</sub></i>	<i>Var<sub>b</sub></i>	ICC	<i>r<sub>w</sub></i>	<i>r<sub>b</sub></i>	<i>M</i> <sup>1</sup>	<i>Var<sub>w</sub></i>	<i>Var<sub>b</sub></i>	ICC	<i>r<sub>w</sub></i>	<i>r<sub>b</sub></i>
<b>Exhaustion</b>	1.60	0.28	0.11	.27								
<b>Work-related</b>												
<i>Uplifts</i>	1.69	2.10	0.48	.19	-.14*	-.08	3.24	23.21	5.63	.20	-.14*	-.11
<i>Hassles</i>	1.00	1.16	0.25	.18	.29*	.29*	2.96	11.09	2.42	.18	.28*	.28*
<b>Private</b>												
<i>Uplifts</i>	2.02	1.35	0.70	.34	-.12*	-.04	3.38	15.84	8.76	.36	-.14*	-.08
Social	0.86	0.64	0.18	.22	-.07*	-.12	3.53	8.23	2.29	.22	-.07*	-.15*
Physical	0.23	0.19	0.03	.12	-.05	.00	3.45	2.34	0.36	.13	-.05	-.03
Household	0.32	0.30	0.06	.17	-.03	.05	3.21	3.16	0.69	.18	-.03	.04
Time	0.47	0.46	0.09	.16	-.08*	.10	3.22	1.78	0.27	.17	-.10*	.08
Other	0.15	0.16	0.02	.12	-.02	-.16*	3.21	4.89	0.98	.13	-.02	-.16*
<i>Hassles</i>	0.55	0.59	0.14	.20	.11*	.24*	3.06	5.85	1.41	.19	.14*	.25*
Social	0.13	0.14	0.03	.16	-.00	.06	3.38	1.61	0.34	.18	.01	.04
Physical	0.14	0.15	0.02	.13	.15*	.38*	3.16	1.57	0.22	.13	.18*	.38*
Household	0.10	0.12	0.01	.09	-.02	-.04	2.71	0.90	0.09	.09	-.01	-.01
Time	0.07	0.07	0.004	.05	.11*	.29*	3.26	0.81	0.05	.06	.11*	.26*
Other	0.11	0.12	0.01	.04	.03	.02	2.72	0.97	0.04	.04	.04	.04

Note: <sup>1</sup>To provide a better impression of relevance of events in each category, we report the mean per event in this category rather than the average relevance per day; *Var<sub>w</sub>* = variance at the day-level (within-person); *Var<sub>b</sub>* = variance at the person-level (between-person); *r<sub>w</sub>* = correlation at the day-level (within-person); *r<sub>b</sub>* = correlation at the person-level (between-person); ICC = Intra Class Correlation; \*  $p < .05$ .



### **Emotional exhaustion**

Emotional exhaustion was measured every day with four items following a German version (Enzmann & Kleiber, 1989) of the Maslach Burnout Inventory (MBI; Maslach et al., 1996). Items (e.g., “I felt exhausted at work today.”) were measured on a 4-point scale ranging from 1 = *strongly disagree* to 4 = *strongly agree*. Following Bolger and Laurenceau (2013), we computed multilevel confirmatory factor analyses (MCFA) to calculate the coefficient omega ( $\omega$ ) as an indication of whether within-person changes could be reliably measured. The reliability of the scale was high ( $\omega = .79$ ) indicating that the instrument was able to reliably measure within-person changes in emotional exhaustion.

### **Covariates**

On the day-level, we included the grand-mean centered emotional exhaustion of the prior day to control for the previous day's (i.e., lagged) emotional exhaustion when estimating the effect of daily variables on emotional exhaustion (see Bolger & Laurenceau, 2013). Furthermore, to control for variability in emotional exhaustion and daily experiences that might be attributable to the weekend, we included this as an additional covariate (0 = workday, 1 = weekend). On the person-level, we considered age and gender (0 = male, 1 = female), which are frequently considered to play a role for levels of emotional exhaustion.

### **Statistical analyses**

Using a diary approach results in a nested data structure with days (Level 1) nested within individuals (Level 2). Multilevel models are recommended and are frequently used to analyze such nested data (Bolger & Laurenceau, 2013) because they account for the dependency of the data and, more importantly, allow for conducting analyses at two conceptually different levels of analysis. On the day-level (Level 1), it is possible to investigate whether intra-individual variability in daily hassles and uplifts is reflected in intra-individual fluctuation of emotional exhaustion. On the person-level (Level 2), we can address the question as to whether inter-individual differences in people's average daily experiences can explain differences in their mean levels of emotional exhaustion. Therefore, we applied multilevel regression analyses to answer our research questions using the software Mplus 7 (Muthén & Muthén, 1998–2012).

To address our first research question, we set up a random intercept model with emotional exhaustion as outcome and uplifts at work, hassles at work, uplifts outside work, and hassles outside work as predictors. Prior emotional exhaustion and weekend were included as covariates at Level 1, gender and age at Level 2. Before the analyses, we z-standardized ( $M = 0$ ,  $SD = 1$ ) continuous variables (i.e., emotional exhaustion, relevance of events, and age) and grand-mean centered the frequency of events variables to improve interpretability. The dummy variables gender and weekend remained in their original metric. Next, we calculated the person mean of daily uplifts and hassles for analyses at Level 2 and created group-mean centered versions of these variables for analyses at Level 1, which allowed us to investigate the mere within-subject process (Bolger & Laurenceau, 2013). Please note that emotional exhaustion of the previous day was not group-mean centered because in addition to controlling for changes in emotional exhaustion from one day to the next, this approach allowed us to take into account inter-individual differences in the level of emotional exhaustion.

Because we were interested in investigating the role of the frequency and the subjective relevance of daily uplifts and hassles, we estimated two models using (a) the frequencies and (b) the subjective relevance of daily work and non-work uplifts and hassles as predictors. Furthermore, to examine the value of including the non-work domains in addition to the work context and as a measure of effect size, we determined the proportion of reduction in variance (PRV; Peugh, 2010) at both levels by dividing the difference between the variance of the work-only model and the

model including predictors from multiple life domains by the variance of the work-only model. In the next step, we explored whether uplifts could buffer the negative association between work-related hassles and emotional exhaustion. For that purpose, we extended the model by including interaction terms between work-related hassles and (a) work-related uplifts and (b) non-work-related uplifts on Level 1 and Level 2.

Finally, we were interested in gaining an in-depth understanding of the differential roles of common non-work life domains in predicting emotional exhaustion. To reduce the complexity of our models, we modified our models for frequency (Model 1) and relevance (Model 2) first, by including the specific categories of non-work-related uplifts instead of the overall score (Model 3a and Model 4a) and, second, by adding the specific categories of non-work-related hassles rather than the overall score (Model 3b and Model 4b). Prior emotional exhaustion, weekend, gender, and age were included as covariates in all models

### **Missing data**

Although the participants showed a high level of commitment by completing the questionnaires on an average of 11 days, there were missing values on the day and the item level. On the day level, no missing data occurred for daily uplifts and hassles because when teachers had generally filled out the diary but did not report events in one life domain, we took this as indication of not having experienced anything noteworthy (e.g., no work-related events during weekends). However, there was no information about teachers' emotional exhaustion for 21.0% of the diary entries (exhaustion of the previous day: 34.4%). On the person level, 1.4% of the data for gender and age were not completed. We handled missing data by applying a full information maximum likelihood algorithm as suggested by Enders (2010).

## **Results**

### **Descriptives**

Overall, participants reported 4319 work-related events and 4158 events outside work that were either positive or negative. Of the work-related events, participants rated 2709 (62.7%;  $M = 1.69$  per day) as uplifts (i.e., positive) and 1610 (37.3%;  $M = 1.00$  per day) as hassles (i.e., negative). With regard to experiences outside work, participants reported even more uplifts ( $n = 3270$ ; 78.6%;  $M = 2.02$  per day) than hassles ( $n = 888$ ; 21.4%;  $M = 0.55$  per day). As Table 1 illustrates, the subjective relevance, which was rated on a 1–4-scale, was perceived to be higher for work-related uplifts ( $M = 3.24$ ) than for hassles ( $M = 2.96$ ). Similarly, uplifts outside work ( $M = 3.38$ ) were rated as more relevant than hassles outside work ( $M = 3.06$ ). Furthermore, Table 1 provides an overview about the frequency of events in different non-work domains and the subjective relevance of these experiences. Uplifts were most frequently reported in the social domain and hassles in the social and physical domain. Uplifts and hassles in the social domain were also the ones perceived as most relevant. Regarding their emotional exhaustion, teachers reported an average level of  $M = 1.60$  across the 14 days of the study.

Next, we were interested in determining the proportion of variance in daily uplifts and hassles and teachers' emotional exhaustion that was attributable to inter-individual differences between persons versus intra-individual fluctuations on a daily basis. Therefore, we calculated the intraclass correlation coefficient (ICC), which showed that only around one fifth of the variance in daily uplifts and hassles were attributable to inter-individual differences (work-related hassles: 18%, work-related uplifts: 19%, private hassles: 20%, private uplifts: 34%; also see Table 1). Hence, there was high variability within individuals on a daily basis. For emotional exhaustion, the proportion of variance at the between-person level was somewhat larger (ICC = .27), but still 73% of the variation was

located on the day-level (see the meta-analysis of Podsakoff et al., 2019 for the average size of within-person variation).

Finally, Table 1 shows the bivariate correlations between frequency and relevance of the daily events and emotional exhaustion on the person- and day-level. The correlations indicate statistically significant associations between emotional exhaustion and the frequency of work-related uplifts ( $r_w = -.14$ ) at the within-person level and with work-related hassles on both levels ( $r_w = .29$ ,  $r_b = .29$ ). Similarly, experiencing more personally relevant hassles in the work domain was correlated with more emotional exhaustion on both the day- and the person-levels (hassles:  $r_w = .28$ ,  $r_b = .28$ ), whereas more relevant uplifts were linked to lower exhaustion on the day-level only ( $r_w = -.14$ ). Regarding teachers' experience outside work, the same pattern emerged. The bivariate correlations indicated that there are indeed small but statistically significant associations between the frequency ( $r_w = -.12$ ) and relevance ( $r_w = -.14$ ) of uplifts on the day level. Similarly, experiencing more relevant and a greater frequency of hassles outside work was associated with more emotional exhaustion on both levels (frequency:  $r_w = .11$ ,  $r_b = .24$ ; relevance:  $r_w = .14$ ,  $r_b = .25$ ).

### **Predicting emotional exhaustion by work-related and private daily uplifts and hassles**

Our main research question was whether private uplifts and hassles are significantly associated with emotional exhaustion beyond daily work-related experiences. To answer this question, we specified two separate multilevel models, one for the frequency and one for the relevance of the events. Daily variables were located at Level 1 and person variables at Level 2. On the day-level, we included emotional exhaustion on the previous day and if it was a workday or weekend as covariates (see Bolger & Laurenceau, 2013). On the person-level, we controlled for age and gender. The results of the analyses are displayed in Table 2.

#### **Frequency of work-related and private events**

In the first model, the *frequency* of work-related and private events were included as predictors of emotional exhaustion both on the day- and person-levels (including control variables). As assumed, uplifts at work were negatively associated with emotional exhaustion on the day-level ( $B = -0.12$ ,  $p < .001$ ), whereas hassles at work were positively related to emotional exhaustion ( $B = 0.25$ ,  $p < .001$ ). In other words, on days when teachers reported more uplifts at work than on the average of their days, they also reported lower levels of emotional exhaustion. In contrast, on days with more hassles at work than on the average of their days, teachers' emotional exhaustion was higher. Importantly, over and above the work-related events the frequency of private uplifts was negatively related to emotional exhaustion ( $B = -0.06$ ,  $p < .001$ ), whereas there was no statistically significant effect for hassles.

On Level 2, we included the aggregated means of uplifts and hassles at work and outside work in the models. The results revealed that the frequency of work-related uplifts was negatively associated with emotional exhaustion ( $B = -0.16$ ,  $p = .041$ ) indicating that teachers who reported, on average, more uplifts at work than other participants, felt less emotionally exhausted. Additionally, hassles at work were positively related to emotional exhaustion ( $B = 0.26$ ,  $p = .003$ ) showing that teachers who reported more hassles than the average participant had higher emotional exhaustion. However, on the between-person level neither hassles nor uplifts outside work showed an effect on emotional exhaustion. This model explained 15.9% of the variance on the day level and 32.7% on the person-level. Thereby, 1.2% (day-level) and 1.1% (person-level) were explained through events outside work over and above the control variables and work events.

#### **Relevance of work-related and private events**

The second model was similar to the first, but we included the *subjective relevance* of uplifts and hassles rather than only their frequency. Again, work related uplifts ( $B = -0.19$ ,  $p < .001$ ), and hassles ( $B = 0.29$ ,  $p < .001$ ) statistically significantly predicted teachers emotional exhaustion on

**Table 2.** Predicting beginning teachers' emotional exhaustion by person- and day-level variables: results from multilevel analyses.

	<b>Model 1 (Frequency)</b>				<b>Model 2 (Relevance)</b>				<b>Model 3a/b (Frequency)</b>				<b>Model 4a/b (Relevance)</b>			
	Uplifts		Hassles		Uplifts		Hassles		Uplifts		Hassles		Uplifts		Hassles	
	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>	<i>B</i>	<i>SE</i>
PERSON-LEVEL																
<b>Work</b>	-0.16*	0.08	0.26*	0.09	-0.30*	0.12	0.31*	0.11	-0.17*	0.08	0.28*	0.08	-0.30*	0.13	0.35*	0.10
<b>Private</b>	0.01	0.07	0.23	0.13	0.00	0.10	0.23*	0.11								
Social									-0.09	0.10	0.03	0.25	-0.11	0.09	0.01	0.10
Physical									0.18	0.25	0.98*	0.18	0.09	0.10	0.42*	0.08
Household									0.04	0.18	-0.37	0.26	0.05	0.10	-0.11	0.10
Time									0.27*	0.13	0.65	0.50	0.15	0.10	0.16	0.14
Other									-0.69*	0.20	-0.48	0.27	-0.27*	0.08	-0.17	0.11
Gender	0.01	0.10			0.02	0.10			0.00	0.09	0.01	0.10	0.01	0.09	0.00	0.10
Age	-0.06	0.05			-0.07	0.05			-0.06	0.05	-0.06	0.04	-0.06	0.05	-0.06	0.04
DAY-LEVEL																
<b>Work</b>	-0.12*	0.02	0.25*	0.03	-0.19*	0.04	0.29*	0.04	-0.12*	0.02	0.26*	0.03	-0.19*	0.04	0.31*	0.04
<b>Private</b>	-0.06*	0.02	0.05	0.04	-0.10*	0.03	0.07*	0.03								
Social									-0.07*	0.03	-0.11	0.07	-0.07*	0.03	-0.03	0.03
Physical									-0.08	0.05	0.32*	0.08	-0.04	0.02	0.15*	0.03
Household									-0.01	0.04	-0.12	0.07	0.00	0.03	-0.05*	0.02
Time									-0.10*	0.04	0.21*	0.08	-0.10*	0.03	0.07*	0.02
Other									-0.05*	0.05	0.00	0.05	-0.02	0.02	0.00	0.02
Prior Exhaustion	0.12*	0.04			0.11*	0.04			0.12*	0.04	0.12*	0.04	0.12*	0.04	0.12*	0.04
Weekend	0.07	0.10			0.07	0.10			0.08	0.10	0.09	0.10	0.09	0.10	0.09	0.01

Note: Emotional exhaustion was z-standardized ( $M = 0$ ,  $SD = 1$ ); \*  $p < .05$ .

the day-level. Additionally, experiencing personally relevant private uplifts ( $B = -0.10, p < .001$ ) and hassles ( $B = 0.07, p < .001$ ) was statistically significantly related to emotional exhaustion beyond teachers' work-related events. Thus, on days when teachers mentioned more relevant uplifts in the private domain than usual, they were less emotionally exhausted regardless of their work-related experience that day. Vice versa, this was also true for the relevance of teachers' daily hassles.

On the person-level, the relevance of work-related hassles ( $B = 0.31, p = .004$ ) and uplifts ( $B = -0.30, p = .001$ ) was again related to teachers' emotional exhaustion. Interestingly, the subjective relevance of teachers' private hassles revealed an additional effect: Teachers who reported more relevant hassles outside work than their colleagues were at the same time more exhausted independent of their work-related hassles and uplifts. Model 2 explained 16.1% of the variance on the day-level and 34.6% on the person-level. Thereby, 1.8% (day-level) and 1.1% (person-level) were explained through events outside work over and above the control variables and work events.

### **Daily uplifts as a moderator between work-related hassles and exhaustion**

In the second step, we tested our assumption that daily uplifts (which reflect the availability of resources on a day-to-day basis) serve as buffers against work-related hassles. Therefore, we added interaction terms between hassles at work and uplifts at work as well as between hassles at work and uplifts outside work in both models (i.e., frequency and relevance models). Again, we added these variables both on the day- and person-levels.

In the relevance model, we found a statistically significant interaction between work-related hassles and uplifts on the day level ( $B = -0.08, p = .032$ ). Hence, the positive association between daily work-related hassles and emotional exhaustion decreased when teachers reported more relevant work-related uplifts compared to their individual mean of positive events per day. More precisely, when the relevance of work-related uplifts was one unit above the teachers' average, the effect of daily work-related hassles was smaller but still statistically significant ( $B = .22, p < .001$ ). With a two unit increase in the relevance of work-related uplifts, there was still a significant but again weaker effect of work-related hassles on emotional exhaustion ( $B = .14, p = .034$ ). Hence, experiencing relatively more work-related uplifts (than on an average day) attenuated the positive association between work-related hassles and emotional exhaustion. In contrast, when the relevance of work-related uplifts was one ( $B = .38, p < .001$ ) or two units ( $B = .46, p < .001$ ) less than on average days, the association between work-related hassles and emotional exhaustion intensified. Contrary to our expectations, we could not find a significant interaction effect between uplifts from outside work and work-related hassles on emotional exhaustion.

### **The differential roles of teachers' life domains**

Third, to gain more insights into the specific effects of the life domains outside work, we calculated four additional models. In the first two multilevel models (3a and 4a in Table 2), we investigated uplifts in the private domains for both the frequency and relevance; in the second two models (3b and 4b), we took a differentiated look at hassles in the private domain. Beginning with daily uplifts in different life domains, the in-depth analyses revealed that both the frequency ( $B = -0.07, p = .021$ ) and the relevance ( $B = -0.07, p = .014$ ) of social uplifts were related to a decrease in emotional exhaustion on the day-level. Similarly, on days when teachers experienced more ( $B = -0.10, p = .004$ ), and more relevant ( $B = -0.10, p < .001$ ) events concerning *leisure time activities* than usual, they were less exhausted.

On the person-level, a different pattern emerged. Teachers who reported more uplifts concerning *leisure time* were unexpectedly more exhausted ( $B = 0.27, p = .044$ ). In addition, more frequent ( $B = -0.69, p < .0001$ ) and more relevant ( $B = -0.27, p < .0001$ ) uplifts assigned to the category *other* were associated with lower emotional exhaustion on the between-level.

In the analyses for the specific categories of *hassles*, statistically significant coefficients indicated a positive association between the frequency and relevance of *health-related* events ( $B = 0.32, p < .001$ ;  $B = 0.15, p < .001$ ) and *time* ( $B = 0.21, p = .010$ ;  $B = 0.07, p = .002$ ) and emotional exhaustion on the day-level. Hence, on days when more and highly relevant hassles regarding one's health and time pressure occurred, teachers were more emotionally exhausted than on regular days. Unexpectedly, results revealed a negative effect for *household* events, but we are hesitant to interpret this finding and suspect a suppressor effect because the bivariate association with emotional exhaustion was small and not statistically significant (MacKinnon et al., 2000). On the person-level, we found that teachers reporting more and more relevant hassles regarding their *physical health* were at the same time more exhausted than other participants ( $B = 0.98, p = .000$ ;  $B = 0.42, p = .000$ ).

## Discussion

The present study investigated whether private uplifts and hassles are related to teachers' emotional exhaustion beyond daily work-related events. Our results showed, first, that work-related uplifts were negatively associated with emotional exhaustion on the day- and person-levels, whereas work-related hassles showed the reverse pattern of relationships. Second, daily hassles and uplifts outside work were significantly linked with emotional exhaustion – beyond work-related experiences. Moreover, we found that daily negative events regarding one's physical health and time aggravated teachers' emotional exhaustion over and above work events. In contrast, days on which teachers experienced more positive social events and uplifts regarding leisure time went along with less emotional exhaustion. Although these effects were statistically significant, the teachers' daily experiences outside work only explained a small proportion of variance in emotional exhaustion.

### *The role of different life domains for emotional exhaustion*

Our results were in line with the JD-R model in that we found consistent associations of work-related experiences with emotional exhaustion. Our results showed that work-related events were associated with emotional exhaustion both when considering their mere frequency but also when taking into account their relevance. Thereby, work-related uplifts and hassles explained within-person (day-level) as well as between-person (person-level) associations with teachers' emotional exhaustion. Our results correspond with the findings of previous studies that have identified teachers' positive experiences as protective factors and teachers' negative experiences as risk factors for emotional exhaustion (e.g., Hakonen et al., 2006). Moreover, we also presented support for the buffer-hypothesis because the link between daily hassles at work and teachers' emotional exhaustion was less pronounced on days on which they experienced positive events in the school context as well.

Importantly, our study extends previous research on the factors influencing teachers' emotional exhaustion, in particular, because it takes experiences in other life domains into account as well. Asking teachers for positive and negative events on a daily basis, they mentioned events at work slightly more frequently, whereas events outside work tended to be perceived as more personally relevant. Moreover, the predominance of positive compared to negative events was even more pronounced in the non-work domains. Most importantly, we found evidence that events in domains outside work were associated with emotional exhaustion. These effects were especially visible on the within-person level, which indicates that non-work related hassles and uplifts manifest in intra-individual fluctuations of emotional exhaustion on a daily basis.

These findings were very similar regardless of whether we considered the mere frequency of uplifts and hassles or took into account their subjective relevance as well (see Reich et al., 1988). This finding was in contrast to the assumption that the subjective relevance of uplifts and hassles is more closely related to a person's stress experience than the frequency (Maybery et al., 2007).

However, most prior studies presented a list of events rather than assessing uplifts and hassles in an open format. Therefore, participants may have more easily remembered events that were, in fact, less relevant. In contrast, participants in our study mostly reported on highly relevant events (see Table 1). Hence, the occurrence of an event often went along with high relevance of that event making it difficult to find diverging effects for frequency and relevance.

Furthermore, the present study provides a valuable contribution because assessing daily non-work events in an open format allowed us to consider the full range of daily experiences outside work rather than focusing on specific aspects, such as social support by family and friends (e.g., Halbesleben, 2006). By analyzing the associations of different life domains with emotional exhaustion in detail, a relatively complex pattern appeared, in which the links between private uplifts and hassles with emotional exhaustion differed between life domains and between the person- and day levels. We found a pattern in support of the idea that specific life domains are particularly relevant for work-related emotional exhaustion (Edwards & Rothbard, 2000). Both hassles and uplifts concerning a person's time were associated with exhaustion on the day level, which appears reasonable because events in this category indicate that there was a lack of time to relax or, on the contrary, more room for leisure activities than usual, thus, increasing or decreasing one's emotional exhaustion. Similarly, frequent and subjectively relevant hassles regarding one's health were associated with emotional exhaustion on the within-person level. Thus, on days when finite resources like time and physical health were threatened, this was immediately mirrored in work-related emotional exhaustion (see also Hobfoll, 1989). Furthermore, results on the between-person level showed that people experiencing more health-related issues overall had higher emotional exhaustion than people reporting fewer physical complaints. This finding was also in line with results from research in major life events where an association between health problems and burnout symptoms was found (Mather et al., 2014). In addition, we found a positive link between uplifts in the time domain and emotional exhaustion. This finding appeared contradictory at first glance given that positive events in this domain referred to spare time activities. However, considering that people additionally mentioned opportunities to sleep late or to finally be able to recover, this finding appears plausible. That is, people for whom opportunities to relax were more salient and perceived as subjectively relevant, were the ones who were in need of rest and, hence, more emotionally exhausted. The importance for different kinds of recovery processes for employee well-being has been shown in previous research (Bennett et al., 2017; Sonnentag, 2001).

Beyond this and in accordance with previous research, days with a higher number and more relevant social events were associated with a decrease in emotional exhaustion (see also French et al., 2017). Interestingly, uplifts from the *other* category, which contains uplifts with contents not belonging to any other category or environmental or financial aspects, were associated with lower levels of emotional exhaustion. Although these events were mentioned quite rarely, teachers who reported more such events were less exhausted.

However, we also found unexpected associations. There was neither a positive nor a negative effect of events addressing household. Here, we can only speculate about possible explanations. For example, it would be interesting to see whether these finding would be different in a sample including participants in a different life phase associated with more domestic obligations. Our participants were relatively young with an average age of 32 years and the minority had children (only 15% had been on maternity leave). However, parenthood has been found to increase household obligations both in quality and quantity, especially for women (Baxter et al., 2008).

Taken together, the results point out that other life domains than work might be of interest when studying the etiology of emotional exhaustion. However, there are still open questions and limitations of the present study.

### **Limitations and future research**

Our study is one of the first to investigate the relationship between daily work-related as well as non-work-related events and daily emotional exhaustion. However, some limitations should be noted. First, our sample included teachers and, therefore, the generalizability of our results might be limited. Even though teaching is a social profession, which are typically said to be at risk for burnout (Maslach & Leiter, 2016), teachers' everyday working lives differ from other professions, for example, in terms of the amount of work done at home (e.g., preparing lessons or correcting tests). Therefore, experiences outside work may be more closely associated with their emotional exhaustion. Additionally, the private lives of young professionals, like the ones we included in our sample, might differ from the private lives of older and more experienced employees. Future research could investigate whether similar associations can be found between the variables of interest in other professions and older, more experienced employees. Second, although we studied teachers' experiences over 14-days, the multilevel models applied have to be regarded as cross-sectional analyses. Thus, we cannot rule out reverse causality, in particular, on the person level where we could not control for prior emotional exhaustion. Hence, it is possible that, for example, negative events regarding teachers' physical health were the consequence of their general emotional exhaustion and not vice versa (Shirom & Melamed, 2005). Third, we cannot test potential psychological mechanisms like spillover or resource drain in the context of our study. Further research is needed to investigate the mediating pathways on a cognitive and behavioral level. Fourth, our questionnaire first asked participants about working events and about all other events in the next step. This could have drawn participants' attention especially to the working domain thus leading to an overestimation of the relative frequency of work-related events. Finally, daily experiences as well as daily emotional exhaustion were assessed via self-report measures in our study. Even though diaries have high ecological validity and are close to the real daily lives of individuals (Bolger et al., 2003), we did not have any information about participants' actual behavior, experiences, and burnout. Future research might include objective measures, such as cortisol level, as an indicator of stress level (e.g., Almeida et al., 2009).

### **Implications**

Considering non-work positive and negative experiences enabled us to contribute to the debate of the context-specificity of emotional exhaustion (Bianchi et al., 2014). We could indeed find support for the assumption that experiences outside work contribute to emotional exhaustion – a work-related state of mind (Maslach et al., 2001). Health and physical activity, social interactions, and time constraints, in particular, played a significant role in explaining emotional exhaustion. Although non-work events do not seem to be the main source of emotional exhaustion, they should be taken into account to receive a more comprehensive picture of a person's stressors and resources that could elicit or prevent the development of burnout symptoms. Hence, it might be helpful for interventions to take into account other life domains in addition to work because it opens a wider field of possible resources and does not ignore the close interconnectedness of life domains in- and outside work that characterize today's reality (French et al., 2017). In general, our findings support the idea that interventions should not only aim to reduce daily hassles, but that the promotion of daily uplifts is important as well. After all, uplifts buffered the relationship between hassles and emotional exhaustion, but they also had a main effect in reducing exhaustion.

### **Conclusion**

Our study is one of the first to more comprehensively assess daily events in people's lives outside work to investigate the associations of non-work-related uplifts and hassles with daily emotional exhaustion. Whereas previous research only focused on the identification of demands and resources



within the work context, our study shifted the focus to the broad range of the positive and negative experiences in the non-work domains. The present study provides evidence that burnout symptoms might not be completely independent from individuals' daily lives outside work. Although the widespread notion that the development of burnout is context-specific might have contributed to conceptual clarification, the huge interest in, and the acceptance of the phenomenon, an exclusive focus on the work domain potentially prohibits a deeper understanding of burnout symptoms, their etiology, and therapy.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## References

- Aldrup, K., Klusmann, U., & Lüdtkte, O. (2017). Does basic need satisfaction mediate the link between stress exposure and well-being? A diary study among beginning teachers. *Learning and Instruction*, 50, 21–30. <https://doi.org/10.1016/j.learninstruc.2016.11.005>
- Aldrup, K., Klusmann, U., Lüdtkte, O., Göllner, R., & Trautwein, U. (2018). Student misbehavior and teacher well-being: Testing the mediating role of the teacher-student relationship. *Learning and Instruction*, 58, 126–136. <https://doi.org/10.1016/j.learninstruc.2018.05.006>
- Almeida, D. M. (2005). Resilience and vulnerability to daily stressors assessed via diary methods. *Current Directions in Psychological Science*, 14(2), 64–68. <https://doi.org/10.1111/j.0963-7214.2005.00336.x>
- Almeida, D. M., McGonagle, K., & King, H. (2009). Assessing daily stress processes in social surveys by combining stressor exposure and salivary cortisol. *Biodemography and Social Biology*, 55(2), 219–237. <https://doi.org/10.1080/1948560903382338>
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206. <https://doi.org/10.1348/096317909X402596>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Work and well-being: Wellbeing: A complete reference guide* (Vol. III, pp. 37–64). Wiley-Blackwell.
- 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(1), 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2005). The crossover of burnout and work engagement among working couples. *Human Relations*, 58(5), 661–689. <https://doi.org/10.1177/0018726705055967>
- Bakker, A. B., Du, D., & Derks, D. (2019). Major life events in family life, work engagement, and performance: A test of the work-home resources model. *International Journal of Stress Management*, 26(3), 238–249. <https://doi.org/10.1037/str0000108>
- Bakker, A. B., Schaufeli, W. B., Demerouti, E., Janssen, P. P. M., Van der Hulst, R., & Brouwer, J. (2000). Using equity theory to examine differences between burnout and depression. *Anxiety, Stress, & Coping*, 13(3), 247–268. <https://doi.org/10.1080/10615800008549265>
- Baxter, J., Hewitt, B., & Haynes, M. (2008). Life course transitions and housework: Marriage, parenthood, and time on housework. *Journal of Marriage and Family*, 70(2), 259–272. <https://doi.org/10.1111/j.1741-3737.2008.00479.x>
- Bennett, A. A., Bakker, A. B., & Field, J. G. (2017). Recovery from work-related effort: A meta-analysis. *Journal of Organizational Behavior*, 39(3), 262–275. <https://doi.org/10.1002/job.2217>
- Bianchi, R., Truchot, D., Laurent, E., Brisson, R., & Schonfeld, I. S. (2014). Is burnout solely job-related? A critical comment. *Scandinavian Journal of Psychology*, 55(4), 357–361. <https://doi.org/10.1111/sjop.12119>
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54(1), 579–616. <https://doi.org/10.1146/annurev.psych.54.101601.145030>
- Bolger, N., & Laurenceau, J.-P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. The Guilford Press.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *The Academy of Management Review*, 25(1), 178–199. <https://doi.org/10.2307/259269>
- Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.

- Enzmann, D., & Kleiber, D. (1989). *Helfer-Leiden: Stress und Burnout in psychosozialen Berufen* [Stress and burnout in human service professions]. Roland Asanger.
- French, K. A., Dumani, S., Allen, T. D., & Shockley, K. M. (2017). A meta-analysis of work-family conflict and social support. *Psychological Bulletin*, *144*(3), 284–314. <https://doi.org/10.1037/bul0000120>
- Fritz, C., & Sonnentag, S. (2005). Recovery, health, and job performance: Effects of weekend experiences. *Journal of Occupational Health Psychology*, *10*(3), 187–199. <https://doi.org/10.1037/1076-8998.10.3.187>
- Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education*, *23*(5), 624–640. <https://doi.org/10.1016/j.tate.2007.02.006>
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, *43*(6), 495–513. <https://doi.org/10.1016/j.jsp.2005.11.001>
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, *22*(3), 224–241. <https://doi.org/10.1080/02678370802379432>
- Halbesleben, J. R. B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology*, *91*(5), 1134–1145. <https://doi.org/10.1037/0021-9010.91.5.1134>
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology*, *20*(2), 178–187. <https://doi.org/10.1108/02683940510579803>
- Kanner, A. D., Coyne, J. C., Schaefer, C., & Lazarus, R. S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts versus major life events. *Journal of Behavioral Medicine*, *4*(1), 1–39. <https://doi.org/10.1007/BF00844845>
- Kitching, K., Morgan, M., & O’Leary, M. (2009). It’s the little things. Exploring the importance of commonplace events for early-career teachers’ motivation. *Teachers & Teaching*, *15*(1), 43–58. <https://doi.org/10.1080/13540600802661311>
- Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers’ relatedness with students: An underemphasized component of teachers’ basic psychological needs. *Journal of Educational Psychology*, *104*(1), 150–165. <https://doi.org/10.1037/a0026253>
- Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Teachers’ well-being and the quality of instruction: The important role of self-regulatory patterns. *Journal of Educational Psychology*, *100*(3), 702–715. <https://doi.org/10.1037/0022-0663.100.3.702>
- Klusmann, U., Richter, D., & Lüdtke, O. (2016). Teachers’ emotional exhaustion is negatively related to students’ achievement: Evidence from a large-scale assessment study. *Journal of Educational Psychology*, *108*(8), 1193–1203. <https://doi.org/10.1037/edu0000125>
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. Springer.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science*, *1*(4), 173–181. <https://doi.org/10.1023/A:1026595011371>
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, *12*(5), 189–192. <https://doi.org/10.1111/1467-8721.01258>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Consulting Psychologists Press.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, *15*(2), 103–111. <https://doi.org/10.1002/wps.20311>
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*(1), 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Mather, L., Blom, V., & Svedberg, P. (2014). Stressful and traumatic life events are associated with burnout: A cross-sectional twin study. *International Journal of Behavioral Medicine*, *21*(6), 899–907. <https://doi.org/10.1007/s12529-013-9381-3>
- Maybery, D. J., & Graham, D. (2001). Hassles and uplifts: Including interpersonal events. *Stress & Health*, *17*(2), 91–104. <https://doi.org/10.1002/smi.891>
- Maybery, D. J., Neale, J., Arentz, A., & Jones-Ellis, J. (2007). The Negative Event Scale: Measuring frequency and intensity of adult hassles. *Anxiety, Stress, and Coping*, *20*(2), 163–176. <https://doi.org/10.1080/10615800701217654>
- Montgomery, A. J., Peeters, M. C. W., Schaufeli, W. B., & Den Ouden, M. (2003). Work-home interference among newspaper managers: Its relationship with burnout and engagement. *Anxiety, Stress, & Coping*, *16*, 195–211. <https://doi.org/10.1080/1061580021000030535>
- Muthén, L. K., & Muthén, B. O. (1998–2012). *Mplus user’s guide* (7th ed.). Muthén & Muthén.
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management*, *12*(1), 43–61. <https://doi.org/10.1037/1072-5245.12.1.43>

- Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology, 48*(1), 85–112. <https://doi.org/10.1016/j.jsp.2009.09.002>
- Podsakoff, N. P., Spoelma, T. M., Chawla, N., & Gabriel, A. S. (2019). What predicts within-person variance in applied psychology constructs? An empirical examination. *Journal of Applied Psychology, 104*(6), 727–754. <https://doi.org/10.1037/apl0000374>
- Reich, W. P., Parrella, D. P., & Filstead, W. J. (1988). Unconfounding the Hassles Scale: External sources versus internal responses to stress. *Journal of Behavioral Medicine, 11*(3), 239–249. <https://doi.org/10.1007/BF00844430>
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International, 14*(3), 204–220. <https://doi.org/10.1108/13620430910966406>
- Schmidt, J., Klusmann, U., Lüdtke, O., Möller, J., & Kunter, M. (2017). What makes good and bad days for beginning teachers? A diary study on daily uplifts and hassles. *Contemporary Educational Psychology, 48*, 85–97. <https://doi.org/10.1016/j.cedpsych.2016.09.004>
- Shirom, A., & Melamed, S. (2005). Does burnout affect physical health? A review of the evidence. In A.-S. G. Antoniou & C. L. Cooper (Eds.), *New horizons in management. Research companion to organizational health psychology* (pp. 599–622). Edward Elgar Publishing. <https://doi.org/10.4337/9781845423308.00049>
- Simbula, S. (2010). Daily fluctuation in teachers' well-being: A diary study using the job demands-resources model. *Anxiety, Stress, & Coping, 23*(5), 563–584. <https://doi.org/10.1080/10615801003728273>
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: A diary study. *Journal of Occupational Health Psychology, 6*(3), 196–210. <https://doi.org/10.1037//1076-8998.6.3.196>
- ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work–home interface: The work–home resources model. *American Psychologist, 67*(7), 545–556. <https://doi.org/10.1037/a0027974>
- World Medical Association. (2013). World Medical Association declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA, 310*(20), 2191–2194. <https://doi.org/10.1001/jama.2013.281053>
- Zirkel, S., Garcia, J. A., & Murphy, M. C. (2015). Experience sampling research methods and their potential for educational research. *Educational Researcher, 44*(1), 7–16. <https://doi.org/10.3102/0013189X14566879>

## Appendix

### Complete instruction for assessing daily uplifts and hassles

#### What did you experience today?

Every day we experience enjoyable and less enjoyable situations. These may be small, unimportant events, or encounters that brighten or cloud the day, or large, significant events.

Please think back on today's events. What positive and negative experiences did you have today? Which events were enjoyable and less enjoyable? We are interested in what happened in both your working life and beyond. For example, a positive event might be “got a surprising phone call from an old friend” (non-work-related) or “was praised by a colleague/superior” (work-related). Negative events might be “got a parking ticket” (non-work-related) or “noticed I'd made a mistake in an important report” (work-related).

Please report on positive and negative events that occurred both in your working life and beyond. Write down those events that come to your mind first! If you can't think of an event for a specific category, you can simply skip it by clicking on “Next.”