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Psychological Detachment as a Mediator Between Successive Days' Job Stress and Negative Affect of Teachers

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The study investigated the mediating role of teachers' psychological detachment between successive days' job stress and negative affect. Fifty-seven Finnish teachers answered to a mobile diary four times a day on two successive workdays assessing their negative affect, three times a day assessing their job stress and once a day after work assessing their psychological detachment from work. Two-level modeling on both the between individual level and within day level was used to test the mediational model. The data supported the mediational model where teachers' job stress hinders their psychological detachment, which again increases their negative affect and job stress on the subsequent day. On the basis of our results teachers' occupational health interventions intended to reduce their job stress and support their psychological detachment from work are desirable. In addition, robust work-home segmentation norms within schools are suggested to support teachers' psychological detachment from work.

Keywords: teacher, psychological detachment, job stress, negative affect, diary study, multilevel modeling

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INTRODUCTION

Studies concerning the factors that protect against teacher job stress and its consequences are vital, as teachers in many Western countries have reported high job stress levels (Duxbury and Higgins, 2013; Markow et al., 2013; Education Support, 2019; Herman et al., 2020). In addition, teachers might encounter a plethora of different emotions during one day, even though they might not remember these afterwards (Sutton and Wheatley, 2003). With our diary design, we aimed to gain a more in-depth look at the complexity of teachers' daily job stress and negative affect, as well as avoiding the distortion that retrospection can cause (see Carson et al., 2010). Earlier research has further indicated that higher job stress experienced by teachers is connected to their negative affect (Hamama et al., 2013; Poon et al., 2019). However, previous research has also shown that teachers' psychological detachment is helpful regarding their affect (Fritz et al., 2010; Virtanen et al., 2021) but job stressors hamper it (Sonnentag and Krueger, 2006). The absence of psychological detachment is harmful concerning teachers' job stress (Gluschkoff et al., 2016) but there remains a lack of research concerning the mediating role of psychological detachment among teachers (see Türktörün et al., 2020). Hence, the current study tested the mediational model in which teachers' higher job stress would hinder their psychological detachment from work (see Sonnentag and Krueger, 2006; Sonnentag and Fritz, 2015) and hindered psychological detachment would result in

more negative affect (see Virtanen et al., 2021) and job stress (see Gluschkoff et al., 2016) on the subsequent day. Thus, we were interested in whether psychological detachment would mediate the effect of previous days' job stress on subsequent day's negative affect and job stress.

Teachers' Psychological Detachment From Work as a Mediator

Looking at the concept of recovery, Meijman and Mulder (1998) stated that an individual recovers from work when their resources rebound to their original state of being. According to their Effort-Recovery Model, for the recovery to succeed, it is vital that the person does not need to use the same or at least many of the means and abilities they needed at work for a sufficient time thereafter. For example, the mere end of the working hours in itself is not enough, as the person might continue to ruminate about the stressor(s) encountered at work (see Brosschot et al., 2006; Zijlstra et al., 2014).

Psychological detachment was the focus of the current study. It refers to the absence of work-related tasks and thoughts and is one of the four possible recovery experiences introduced by Sonnentag and Fritz (2007). Previous research has indicated the central position of psychological detachment as a means of recovering from job stress and protecting an employee from possible ill-health outcomes deriving from job stress (Sonnentag and Fritz, 2015). In addition, a higher level of psychological detachment also decreases the overall need for recovery (Sonnentag et al., 2010). For these reasons, psychological detachment was chosen as the measure of recovery for the current study.

A multitude of previous research regarding people working in different occupational fields, measured on both between and within levels and reviewed by Sonnentag and Fritz (2015), have shown that the stressors experienced at work lead to a lower level of psychological detachment. According to previous research among teachers, the stressors teachers experience at work, such as workload, are indeed related to lower levels of psychological detachment (Sonnentag and Krueger, 2006). Further, teachers' increased strain due to work is related to more work-related rumination in the evening, which was found by diary studies conducted by Cropley et al. (2006) and Cropley and Millward Purvis (2003). We thus hypothesize (H1) that teachers' high job stress levels during the work day lead to lower levels of psychological detachment during off-job time (see Cropley and Millward Purvis, 2003; Cropley et al., 2006; Sonnentag and Krueger, 2006; Sonnentag and Fritz, 2015).

Looking at the effect of teachers' psychological detachment, Virtanen et al. (2021) found that teachers' higher daily detachment predicts their lower afternoon negative affect. A study by Fritz et al. (2010) further showed that teachers' psychological detachment during the weekend is linked to higher levels of certain positive emotions measured both directly after the weekend and later at the end of the following week at work. Moreover, according to the study by Gluschkoff et al. (2016), teachers' lower level of detachment is connected to their higher levels of exhaustion. Another study by Cropley et al. (2015) of

teachers showed that work-related rumination in the evening is connected to higher levels of evening cortisol and flattened cortisol awakening response in the subsequent morning, indicating higher stress levels. Finally, in the study by Aronsson et al. (2003), non-recuperated teachers showed more symptoms of burnout and stress-related health issues than other groups. Therefore, we hypothesize (H2) that teachers' low psychological detachment during off-job time leads to higher amounts of both negative affect (see Fritz et al., 2010; Virtanen et al., 2021) and job stress (see Aronsson et al., 2003; Cropley et al., 2015; Gluschkoff et al., 2016) during the subsequent day.

Previous research in many occupational fields has given support for psychological detachment working as a mediator between job stressors and their wellbeing outcomes (Sonnentag and Fritz, 2015). The only studies so far on the mediating effect of teachers' psychological detachment among other recovery or break experiences are the diary study by Virtanen et al. (2021) and the cross-sectional study by Gluschkoff et al. (2016). Virtanen et al. (2021) found that at the end of the work day, the effect of teachers' emotional work-related demands on their positive and negative affect was mediated through their detachment. However, they did not study psychological detachment in the evening. Gluschkoff et al. (2016) did not find a mediating effect of psychological detachment but instead noticed the mediating effect of lower relaxation between effort-reward imbalance and lower self-efficacy. In addition, Cropley et al. (2006) investigated the mediating effect of work-related rumination between higher strain due to work and lower quality of sleep but found that their study did not support the mediational model. Adding to these inconsistent results, according to the review by Türktoran et al. (2020) there remains a lack of research concerning the mediating effects of psychological detachment among teachers.

Teachers' Job Stress in Relation to Their Negative Affect

The aim of the current study was to test the mediating effect of teachers' psychological detachment regarding both their stress and negative affect. We took this approach because, according to Lazarus (1991a), stress and emotions are significantly interrelated. First of all, both emotions (Lazarus, 1991a) and stress (Lazarus and Folkman, 1984) occur when a person encounters their surroundings. Second, they both evolve through a person's similar evaluation process concerning the importance of this encounter regarding one's wellbeing (Lazarus and Folkman, 1984; Lazarus, 1991a). Third, stress can be seen as a part of emotions (Lazarus, 1991a). Stress can result when a person experiences their surroundings as overly demanding or their resources insufficient and hence the situation as jeopardizing their wellbeing (Lazarus and Folkman, 1984). If the situation matters in terms of one's wellbeing (Lazarus, 1991b) and hinders one from achieving one's goals, negative emotions emerge (Lazarus, 1991a). Hence, stress and negative emotions would occur simultaneously, as in both cases, one's wellbeing is seen as being put at risk (Lazarus and Folkman, 1984; Lazarus, 1991a). Furthermore, Kyriacou (2001) links teacher stress to the negative

emotions experienced by teachers concerning something in their job.

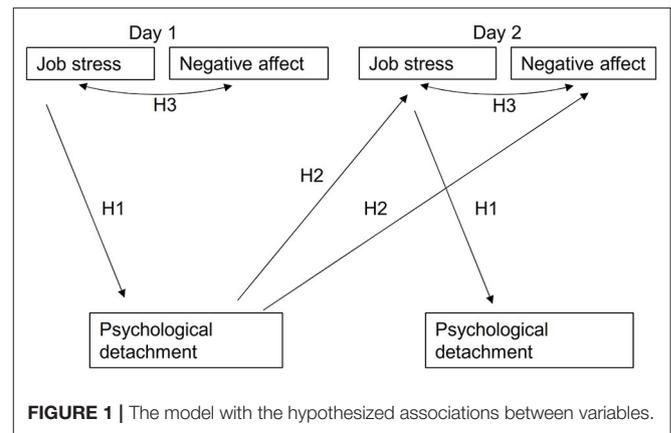
According to earlier studies, higher job stress in teachers is indeed related to teachers' experience of negative affect (Hamama et al., 2013), particularly in respect to their daily nervousness and daily irritability (Poon et al., 2019). Teacher stressors are further connected to their emotional responses, as was shown by a meta-analysis by Montgomery and Rupp (2005), and teachers' daily emotional demands at work are related to higher negative affect both in the afternoon and in the evening (Virtanen et al., 2021). Hence, we further hypothesized (H3) that job stress and negative affect in teachers correlate with one another on both day one and day two (see Lazarus and Folkman, 1984; Lazarus, 1991a; Kyriacou, 2001; Hamama et al., 2013; Poon et al., 2019; Virtanen et al., 2021).

Teachers' Negative Affect

In our study, we chose to focus on negative affect instead of positive affect because previous research has shown that teachers' negative affect is related to their stress (Hamama et al., 2013; Poon et al., 2019; Virtanen et al., 2021). According to Lazarus (1991a), affect refers to the person's experience of the emotions that have emerged and, as noted before, negative emotions occur when one's goal achievement is hindered. As the Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) was used in the current study, negative affect was not seen as opposed to positive affect, but as a different dimension, the level of which had to be investigated separately (Lazarus, 1991a). According to Watson et al. (1988), high negative affect contains feelings of discomfort against something disagreeable, whereas low negative affect helps one experience peace.

In this study, we considered emotions as state emotions that like stress (Sliwinski et al., 2009; Aldrup et al., 2017) fluctuate within a person (Keller et al., 2014; Becker et al., 2015; Frenzel et al., 2015) as opposed to permanent trait emotions (Lazarus, 1991a). There have been a few earlier experience sampling studies (see Keller et al., 2014; Becker et al., 2014; Goetz et al., 2015) and diary studies (Becker et al., 2015; Frenzel et al., 2015; Lavy and Eshet, 2018; Koenen et al., 2019; Virtanen et al., 2021) on teachers' emotions, but only one of them (Koenen et al., 2019) has focused solely on teachers' negative affect. Diary studies concerning teachers' negative affect are important as teachers report more negative emotions when investigated with trait than with state measures (Goetz et al., 2015).

According to a study by Goetz et al. (2015), anger, though not experienced as much as positive emotions, was the most common negative emotion for teachers. In Keller et al. study (2014), anger was experienced by teachers to some extent on about a third of their regular lessons using event and random sampling. However, it has also been indicated that only a small amount of negative affect was experienced by teachers in relation to their students (Koenen et al., 2019). The diary study by Virtanen et al. (2021) showed that teachers' negative affect typically builds up toward the afternoon and then diminishes toward the evening. Their study further indicated that teachers' negative affect experienced in the afternoon predicts the experience of these emotions also in the evening. However, because the results from earlier research



concerning teachers' negative affect vary, it is important to continue researching it.

The Aim of the Present Study

To summarize, the aim of the current study was to test the mediational model according to which job stress in teachers hinders their psychological detachment from work (see Sonnentag and Krueger, 2006; Sonnentag and Fritz, 2015) and their thus lowered level of psychological detachment on the previous day results in more negative affect (see Virtanen et al., 2021) and job stress (see Gluschkoff et al., 2016) on the subsequent day. The model with the hypothesized associations between variables is shown in **Figure 1**. The research question was as follows: Does psychological detachment during off-job time act as a mediator between teachers' previous and subsequent day's job stress and negative affect? We expected that a higher level of job stress during the work day would predict a lower level of psychological detachment during off-job time on both day 1 and day 2 (H1). Moreover, we expected that a lower level of psychological detachment during off-job time on day 1 would predict higher levels of negative affect and job stress on day 2 (H2). Finally, we expected to find that job stress and negative affect correlate with one another on both day 1 and day 2 (H3).

MATERIALS AND METHODS

Participants and Procedure

Altogether, 57 second and third grade teachers (51 females, 5 males; mean age = 46, range 26–63; mean years of work experience = 19, range 0–40; mean number of students = 20, range 11–26) participated in this diary study. The participating teachers were from Central Finland, and the data were collected for a larger project regarding the stress of teachers and students and the interaction between them (Lerkkanen and Pakarinen, 2016–2022). The ethical board of the university approved the research plan before the research began. Written consent was collected from all participating teachers before data collection. The data collection took place in Spring 2019 and Spring 2020. If a teacher had participated in the study on both measurement occasions, the occasion when more measurement points had

been used was taken into account. If there were as many measurement points on both measurement occasions, the first was considered. First two successive measurement days were included in the analysis; in case of the measurement days being divided between 2 weeks, the week with more complete data was selected. The data were collected mostly by a mobile phone or tablet and, in one case, using a personal computer.

Teachers were asked to fill in a mobile diary, which consisted initially of five questions regarding the teacher's negative affect. The teachers answered these questions four times a day during designated periods (5 a.m.–9 a.m., 9 a.m.–4 p.m., 12 a.m.–8 p.m., and 9 p.m.–12 p.m.) on two successive workdays. In addition, three times a day during set periods (5 a.m.–9 a.m., 9 a.m.–4 p.m., and 12 a.m.–8 p.m.) teachers answered questions on stress and on whether the feelings they experienced were related to work. Furthermore, once in the evenings (9 p.m.–12 p.m.), the teachers were asked to respond to one additional section of four items in their diaries concentrating on their psychological detachment from work. There were approximately 3.1 answers per day (a total of 698 separate observations). Out of these observations, some had to be left out of the current data if they were answered within 1 h of an earlier answer. In these cases, the latest answer was taken into account.

Measures

Negative Affect

Negative affect was measured four times a day during specific periods (5 a.m.–9 a.m., 9 a.m.–4 p.m., 12 a.m.–8 p.m., and 9 p.m.–12 p.m.) using a shortened version of the PANAS (Watson et al., 1988; Thompson, 2007), using the Finnish translation by Hietalahti et al. (2016), which was modified to focus on the situation-specific affect for the purposes of the current study. A short instruction was first given for the teachers: 'Think about yourself and how you feel at the moment. How do you feel at the moment? Choose the most appropriate alternative'. After this, the teachers rated their negative emotions one at the time on a scale from 1 to 5 (1 = does not describe me at all, 5 = describes me very well). The negative affect ($\alpha = 0.544$) comprised the items of *afraid*, *nervous*, *upset*, *ashamed*, and *hostile*.

Job Stress

The teachers were asked to assess the stress they were experiencing at the moment three times a day (5 a.m.–9 a.m., 9 a.m.–4 p.m., and 12 a.m.–8 p.m.) with a validated single-item question originating from the Occupational Stress Questionnaire (Elo et al., 2003) and modified to measure situation-specific stress in the current study's context. The question was as follows: "Stress means a situation in which a person feels tense, restless, nervous or anxious or is unable to sleep at night because his/her mind is troubled all the time. Do you feel this kind of stress at the moment?" The teachers answered the question on a scale from 1 to 6 (1 = not at all, 6 = very much). Further, the single-item question on stress was followed by the question: "To what extent do your feelings derive from your work in your opinion?" The question was answered on a scale of "not at all," "to some extent," "for the most part," and "completely." In the further analysis of the mediational model, the stress question was weighted with

TABLE 1 | Percentages of variation and correlations on three levels, means and standard deviations for negative affect, job stress and psychological detachment.

	Negative affect	Job stress	Psychological detachment
Within day level			
Negative affect	77.9%	0.51***	na
Job stress	0.51***	45.5%	na
Psychological detachment	na	na	na
Between day level			
Negative affect	11.2%	0.93***	-0.05
Job stress	0.93***	15.2%	-0.19
Psychological detachment	-0.05	-0.19	45.7%
Between individual level			
Negative affect	10.9%	0.08	-0.43
Job stress	0.08	39.3%	-0.63***
Psychological detachment	-0.43	-0.63***	54.3%
Mean	1.20	0.82	3.28
SD	0.27	0.94	0.97

*** $p < 0.001$; Range for negative affect and psychological detachment 1–5; range for job stress 1–6.

the question regarding the job-relatedness of the stress. This was done by multiplying the value from the stress question with the value from the question regarding the job-relatedness of the stress. Before the multiplication, the values for the question regarding the job-relatedness of the stress were transformed into a scale of 0–1 (0 = not at all, 1 = completely).

Psychological Detachment

Teachers' experiences of psychological detachment were measured once in both measurement days' evenings during off-job time (9 p.m.–12 p.m.) with four items from the Recovery Experience Questionnaire (Sonnetag and Fritz, 2007) which was validated in Finnish by Kinnunen et al. (2011). The teachers were asked to evaluate to what extent certain thoughts and activities described their leisure time on the measurement day, e.g., *I forget about work*. The answers ranged from 1 to 5 (1 = I fully disagree, 5 = I fully agree; $\alpha = 0.880$).

Analysis Strategy

Due to the three levels studied (within-day level, between-day level and between-individual level) for descriptive purposes, multilevel modeling was used as the method of analysis (Luke, 2011; Christ et al., 2017). The analyses were executed using the Mplus 8.2 statistical program (Muthén and Muthén, 1998–2017). On the within-day level, we studied how much negative affect and job stress vary during a day across different measurement points. On the between-day level, we were interested in how much of the variation in negative affect, job stress and psychological detachment differed due to the measurement days (day 1 or day 2). Moreover, on the between-individual level, we tested how each individual teacher differed from other teachers regarding their variation concerning each of the aforementioned variables (negative affect, job stress, and psychological detachment).

After calculating percentage of variation and correlations on different levels (see **Table 1**), we tested our hypothesized mediational model. A two-level structural equation model (SEM) in which there were separate variables for the two successive measurement days was formulated. The model was based on the variation between individual teachers and on the variation within days on two successive days. Two-level modeling was used because it took into account the differences between days and thus the effect of previous day on the next day, according to our theoretically built detachment as a mediator model. On the within level, the model was saturated, allowing for all connections between variables because these correlations were not a part of our research question. The model parameters were estimated using full information maximum likelihood estimator with robust standard error and scale corrected chi-square value (MLR estimator in Mplus). Missing values were supposed to be missing at random.

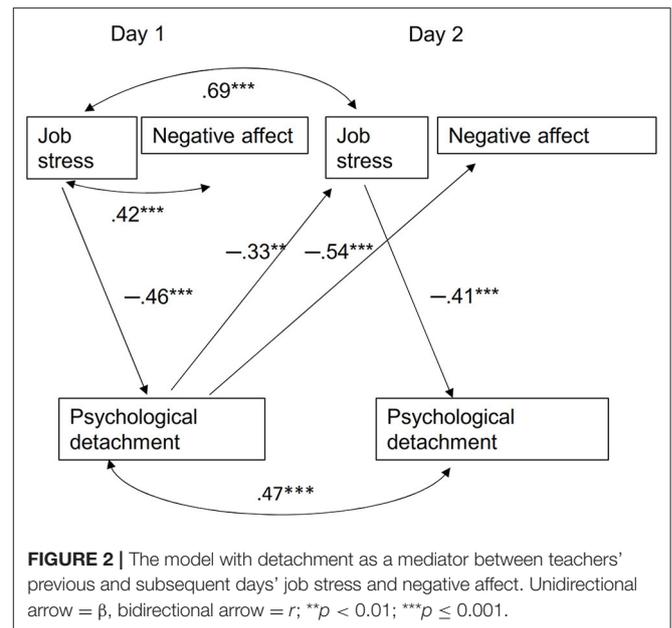
The chi-square test and other goodness-of-fit indices, four altogether, were used to evaluate the model fit. In the case of the chi-square test, results smaller than degrees of freedom and with statistical non-significance would revoke the null hypothesis that the model would not correspond to the state of the variables in a larger population (Bentler and Bonett, 1980). The comparative fit index (CFI) and Tucker–Lewis index (TLI) would both signify the appropriateness of the model fit if the values were greater than around 0.95, according to Hu and Bentler (1999), who also noted that the appropriateness of the model fit for root mean squared error of approximation (RMSEA) would be reached with values lower than around 0.06 and that values lower than 0.08 for the standardized root mean squared residual (SRMR) would indicate an appropriate model fit. Also, a small SRMR value would demonstrate a good fit despite the values of other indices (Bentler, 2006). We adopted these originally single-level cut-off values for multiple levels in multilevel analysis, supposing that they would guide our evaluation of fit sufficiently (see Ryu, 2014).

RESULTS

Descriptive Results

Variation was found on different levels for different variables (see **Table 1**). Regarding teachers' negative affect, 77.9% of the variation was on the within day level, 11.2% on the between day level and 10.9% on the between individual teacher level. Concerning job stress in teachers, there was 45.5% of within day level variation, 15.2% of between day level variation and 39.3% of between individual teacher level variation. Consequently, all the variables measured multiple times a day varied most on the within day level. Finally, regarding psychological detachment there was variation on the between day level (45.7% of the variation) and on the between individual teacher level (54.3% of the variation).

The correlations between the variables were estimated on the within day, between day and between individual teacher levels (see **Table 1**). First, on the within day level, a statistically significant positive correlation was found between job stress and negative affect ($r = 0.51$, $p < 0.001$). Second, regarding between day level, a statistically significant positive correlation was found



between job stress and negative affect ($r = 0.93$, $p < 0.001$). Third, on the between individual teacher level, a statistically significant negative correlation was found between psychological detachment and job stress ($r = -0.63$, $p < 0.001$).

Testing the Mediational Model

When looking at the goodness-of-fit indices reflecting the model fit, all the fit indices signified a good model fit: $\chi^2(6) = 5.49$, $p = 0.48$; CFI = 1.00; TLI = 1.01; RMSEA = 0.00; SRMR (between) = 0.08. Thus, the data supported the mediational model (see **Figure 2** for the standardized model results) in which job stress hindered psychological detachment, which again resulted in more negative affect and job stress on the subsequent day. Variation in teachers' job stress predicted nearly half of the variation in their psychological detachment on the same day on both day 1 and day 2: thus, higher job stress predicted lower psychological detachment. What is more, variation in the psychological detachment on day 1 predicted over half of the variation in teachers' negative affect on day 2 and a third of the variation in their job stress on day 2. A lower level of psychological detachment predicted a higher level of negative affect and a higher level of job stress.

DISCUSSION

In the current study, we collected and analyzed data to find support for the validity of our mediational model in which job stress in teachers hinders their psychological detachment from work, and their consequently unsuccessful psychological detachment results in more negative affect and job stress. Our results supported the model and thus reinforced the mediating role of psychological detachment between the previous and subsequent day's job stress and negative affect of teachers. The current research thus provided further insight into the role of

teachers' psychological detachment and its mediating effect (see Türktoran et al., 2020).

First, as we expected (H1), teachers' higher job stress indeed predicted their lower level of psychological detachment on both the previous and the subsequent day. This is in keeping with a multitude of previous studies in many occupational fields reviewed by Sonnentag and Fritz (2015), indicating the association between stressors and lower level of detachment, and with the study by Sonnentag and Krueger (2006), which had similar findings concerning teachers. In addition, our findings are in line with studies by Cropley et al. (2006) and Cropley and Millward Purvis (2003) that showed the relationship between higher strain and higher work-related rumination.

Second, as expected (H2), teachers' lower level of psychological detachment on the previous day predicted both their higher negative affect and their higher job stress on the subsequent day. The connection between a lower level of psychological detachment and higher negative affect aligns with Virtanen et al. (2021), who found that teachers' daily detachment acts as a predictor of their lower afternoon negative affect, and with Fritz et al. (2010), who found the link between teachers' detachment during the weekend and their higher positive affect. Moreover, the link between a lower level of psychological detachment and higher job stress supports the earlier findings by Gluschkoff et al. (2016) that there is an association between lower detachment and higher exhaustion; the findings by Cropley et al. (2015) that indicated the connection between higher rumination and higher stress; and the findings of Aronsson et al. (2003) who noted the link between not recuperating and experiencing more stress-related and burnout symptoms.

Finally, our hypothesis (H3) regarding the association between teachers' job stress and negative affect both on the previous and the subsequent day was partially supported. Job stress and negative affect correlated with each other on the previous day both on within day and between individual teacher levels. However, the association between job stress and negative affect on the subsequent day was only found on the within day level. Thus, the earlier findings regarding the strong link between job stress and negative affect (see Hamama et al., 2013; Poon et al., 2019; Virtanen et al., 2021) only gained partial support. However, this was due to detachment on the previous day being an explanatory variable concerning both job stress and negative affect on the subsequent day. It thus explained part of the variance regarding both subsequent day's job stress and negative affect and, hence, affected the correlation between these variables, making it smaller and not significant.

Practical Implications

Our study indicated the importance of teachers' psychological detachment during off-job time, not only regarding their subsequent negative affect but also their job stress. According to earlier research, teachers have various ways to recover during off-job time, and the helpful methods include relaxing activities, activities involving other people and exercising (Sonnentag, 2001). Interventions concerning psychological detachment outside work could also be helpful in strengthening

teachers' psychological detachment from work, especially if they would aim at the primary appraisal processes and if they would contain boundary management, emotion regulation and sleep improvement strategies, last for over 2 weeks and for over 4 h (see meta-analysis by Karabinski et al., 2021). Psychological detachment can be supported, for example, with the help of unguided (Ebert et al., 2015) or guided (Thiart et al., 2015) internet-based intervention programmes targeted at teachers' recovery that have proven successful in enhancing their psychological detachment from work. Moreover, our study supported the notion that high levels of job stress at work diminish the level of psychological detachment. Thus, creating robust work-home segmentation norms within the school organization (see Park et al., 2011), including the use of job-related information and communication technology (see Bauwens et al., 2020), could be helpful in diminishing teachers' stress levels after work hours and in helping them detach themselves from work.

Limitations

The present study and its results have certain limitations. First, the study sample was small, age range was relatively large and gender distribution was a little more skewed than among Finnish teachers in general (Finnish National Agency for Education, 2020) and data was collected only on two consecutive working days. Hence, in order to be able to confirm the effect of the previous day's psychological detachment on the subsequent day's negative affect and stress more reliably, the study should be replicated with a bigger and more versatile sample and for a longer time period. Future studies should also take into account possible individual differences (e.g., age, work experience) or contextual factors that could act as moderators on the mediation process described in this paper (see Muller et al., 2005). Second, the data were collected using only mobile diaries in which the teachers answered questions about their stress levels. In addition, the wording of the question regarding the job-relatedness of teachers' stress was such that the job-relatedness described in their answers could have also been interpreted in relation to the negative affect. This possibly led to common method bias (Richardson et al., 2009). To ensure the objectivity of the results, for example, physical measurements, perspectives from other people meeting the teachers during their working days and interviews with the teachers themselves could be added to gain a deeper understanding of the phenomenon. Last, we did not measure other, for example, positive factors influencing teachers' psychological detachment from work. Future studies should also take this into account and investigate, for example, the role of recovery interventions (Ebert et al., 2015; Thiart et al., 2015) and perceived segmentation norms within school organizations (see Park et al., 2011).

CONCLUSIONS

Despite these limitations, our study provides a valuable addition to the limited number of earlier studies investigating

teachers' psychological detachment as a mediator. Psychological detachment during off-job time which is influenced by the job stress experienced affects how teachers experience negative affect and job stress on the subsequent day. We recommend that interventions providing teachers with practical tools that enhance their psychological detachment should be targeted at both teacher pre-service and in-service training. We also recommend that schools create robust work-home segmentation norms, thus helping teachers better achieve psychological detachment.

DATA AVAILABILITY STATEMENT

The datasets presented in this article are not readily available because of the ongoing research. Requests to access the datasets should be directed to anna-mari.a-m.aulen@jyu.fi.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Ethical Committee of the University of Jyväskylä. The patients/participants provided their written informed consent to participate in this study.

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AUTHOR CONTRIBUTIONS

A-MA was responsible for the research questions and drafting of the present manuscript, and she acts as a corresponding author. EP was the responsible researcher and M-KL was the principal investigator of the larger study project, Teacher and Student Stress and Interaction in Classroom (TESSI), under which the current study has been conducted. EP and M-KL were responsible for the study design, data collection, publishing plan, and they supported by co-authoring the current manuscript. TF was responsible for the research questions and supported by co-authoring the current manuscript. AT was responsible for the statistical analyses and supported by co-authoring the current manuscript. All authors contributed to the article and approved the submitted version.

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