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Teachers' emotional labor in response to daily events with individual students: The role of teacher—student relationship quality



TEACHING ND TEACHER EDUCATION

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HIGHLIGHTS

- Teachers reported on emotional labor during multiple events across a school year.
- In relatively close relationships, teachers tend to show more genuine emotions.
- In relatively conflictuous relationships, they tend to show less genuine emotions.
- In dependent relationships, teachers are more inclined to fake or hide emotions.
- Links between event appraisals and emotional labor did not depend on relationship.

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ABSTRACT

This diary study examined the role of teachers' relationship perceptions (closeness, conflict, dependency) in shaping emotional labor strategies (genuine expression, surface acting) during daily events with individual students. Thirty-seven primary school teachers reported on their emotional labor in 563 events with 77 students, in which at least one negative emotion was expressed. Relationship perceptions were associated with emotional labor, beyond teachers' appraisals of the event's valence and students' disruptive behaviors. Specifically, teachers reported more genuine expression of emotions in closer relationships, less genuine expression in relatively conflictuous relationships, and more surface acting (faking and hiding emotions) in relatively dependent relationships.

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During a school year, teachers experience a myriad of positive and negative events when interacting with each of their students. These events elicit a range of emotions in teachers (Chang, 2009, 2013). Some emotions can be freely expressed, whereas others – in particular negative emotions – cannot (Barber, Grawitch, Carson, & Tsouloupas, 2011). Teachers tend to follow internalized rules that prescribe whether it is appropriate or not to express an emotion within a particular teaching situation. Especially in the company of students, teachers in western cultures seem to avoid the display of strong negative emotions (Winograd, 2003; Zembylas, 2002). This might be more so for teachers in eastern, more collectivistic, cultures (cf. Matsumoto et al., 2008; Safdar et al., 2009). Therefore, teachers need to engage in emotional labor, such as to hide their emotions (e.g., not showing their anxiety), or even to fake emotions (e.g., act as if they enjoy the situation, while actually feeling angry; Glomb & Tews, 2004). Although seen as a necessity for the benefit of student learning and development, teachers who often fake and hide emotions also tend to report lower occupational wellbeing (Wang, Hall, & Taxer, 2019). Because of the links between emotional labor and teachers' occupational wellbeing, it is important to gain insight into the different strategies of emotional labor that teachers use during daily teaching.

In contrast to interactions within other professions, such as those of customer service employees, teachers' interactions with each of their students endure the length of a school year, during

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which the two members in the interaction are close in proximity (Chang & Davis, 2009). A recent theoretical model about dyadic teacher-student relationships and teacher wellbeing (Spilt, Koomen, & Thijs, 2011) implies that the affective relationship between teacher and student could well play a role in the emotional labor strategies a teacher uses in response to classroom events involving that student. With some students, such as those with high levels of disruptive behaviors, teachers are more likely to have unfavorable relationships (Birch & Ladd, 1998; Murray & Zvoch, 2011; Spilt & Koomen, 2009). These students, in turn, are more likely than other students to be involved in classroom events that are appraised and experienced as negative by the teacher (Koenen, Vervoort, Kelchtermans, ; Spilt & Koomen, 2009). To date, however, empirical research on teachers' emotional labor has not taken the affective quality of teachers' relationships with individual students into account. The few studies thus far have focused on teachers' relationships with the classroom as a whole (Taxer & Frenzel, 2015; Yao et al., 2015), neglecting the importance of dyadic relationships for teachers' emotional processes. Therefore, the aim of this study was to investigate the role that teachers' perceptions of dyadic relationship quality plays in shaping teachers' emotional labor strategies during relevant events with individual students. It was our ambition to investigate the link with relationship quality beyond the associations with the student's (disruptive) behavior and the teacher's appraisal of the event (i.e., how negative versus positive the event was for the teacher).

1. Teachers' emotional labor

Emotional labor refers to managing emotions and emotional expressions to be consistent with the expectations about appropriate emotional expression that exist within an occupation (Brotheridge & Grandey, 2002; Glomb & Tews, 2004). The most comprehensive and commonly used conceptualization of emotional labor in teachers is the one proposed by Diefendorff, Croyle, and Gosserand (2005). These authors distinguish between three emotional labor strategies: surface acting (i.e., expressing an emotion that differs from the experienced emotion, for example by faking or hiding an emotion), deep acting (i.e., internalizing the desired emotion such that the expressed emotion is more consistent with the felt emotion), and genuine expression (i.e., expressing the emotion that is actually experienced). This last strategy has been added to previous conceptualizations of emotional labor because, also in case of authentic emotional expression, teachers may still have to put effort in ensuring that their emotional expressions coincide with the occupational expectations (Ashforth & Humphrey, 1993; Diefendorff et al., 2005). For instance, it may take a great deal of emotional management for teachers to appropriately express the anger they feel during a classroom event including disruptive behavior. Empirical studies examining outcomes of teachers' emotional labor show that the three emotional labor strategies correspond differently with teachers' occupational wellbeing and teaching behaviors (for an overview, see the metaanalysis by Wang et al., 2019). Specifically, surface acting is consistently found to be detrimental, whereas genuine expression of emotions is found to be adaptive for teacher wellbeing (although there are indications that this may be different for positive versus negative emotions, see Wang et al., 2019). For deep acting, findings are mixed. In many studies, no relation was found between deep acting and teacher wellbeing (e.g., Karim & Weisz, 2011; Näring, Briët, & Brouwers, 2006; Näring, Vlerick, & van de Ven, 2012; Noor & Zainuddin, 2011) and a recent meta-analysis resulted in an overall nonsignificant relationship (Wang et al., 2019).

Most of what is known about teachers' emotional labor stems from research using trait-level conceptualizations, that is, general levels of emotional labor. More recently, authors have argued for the need to assess emotional labor on a state-level, such as the strategies used on a specific work day or during specific emotional events (Chang, 2013; Gabriel & Diefendorff, 2015; Grandey & Gabriel, 2015). These state-level measurements are less susceptible to retrospective biases (Frenzel, 2014) and have been argued to capture the actual ways in which teachers regulate their emotions in challenging classroom events (Chang, 2013). Moreover, as it has been claimed that it is the recurring daily emotional events that have a strong impact on wellbeing (Spilt, Koomen, & Thijs, 2011; Lazarus, 2006; Lazarus & Folkman, 1987), state-level emotional labor research may be especially important.

Two recent empirical studies have shown that assessing teachers' emotional labor strategies on a state level can make a meaningful contribution (Keller, Chang, Becker, Goetz, & Frenzel, 2014; Lavy & Eshet, 2018). Keller et al. (2014) assessed teachers' traitlevel emotional labor through a questionnaire and teachers' statelevel emotional labor through experience sampling in the classroom. They found moderate associations between the two, demonstrating that, although related, these measurement approaches tap into different aspects of emotional labor. Specifically, the emotional labor strategies teachers report to generally engage in, may not necessarily be the strategies they actually use during concrete teaching situations. The study of Lavy and Eshet (2018) concluded that, like trait-level strategies, teachers' emotional labor strategies on a work day-level also affected teacher wellbeing. Their study showed that teachers' daily use of surface acting was associated with decreasing job satisfaction and increasing burnout. Teachers' daily use of deep acting was associated with increasing job satisfaction (although the association was smaller than that with surface acting), but not with burnout. Considering the limited number of studies and the inconsistency in terms of strategies involved, it is not fully clear which emotional labor strategies can be differentiated in state-level research focusing on specific events in the classroom with individual students.

2. Dyadic teacher-student relationships and emotional labor

Based on the theoretical model about dyadic teacher-student relationships and teacher wellbeing (Spilt, Koomen, & Thijs, 2011), teachers' daily use of emotional labor during events with a student may be influenced by their internalized relationship representations regarding that student, beyond how they appraise the event happening at that moment. This theoretical model has its roots in attachment theory. According to this view, a sensitive teacher may act as a temporary attachment figure in a student's life by providing a safe haven and secure base (Verschueren & Koomen, 2012). Teachers form qualitatively different affective relationships with each individual student in their classroom (Hamre & Pianta, 2001; Pianta, Hamre, & Stuhlman, 2003), which are proposed to be internalized by the teacher in so-called 'mental representations'. Mental representations of the relationship contain a set of internalized cognitions and feelings regarding the self, the student, and the self-student relationship, which guide expectations and behaviors toward the student in future interactions in a consistent and predictable manner (Pianta & Stuhlman, 2003; Pianta, 1999; Spilt, Koomen, & Thijs, 2011). Empirically, teachers' relationship representations are most widely assessed by the Student-Teacher Relationship Scale (STRS; Pianta, 2001). This questionnaire measures teachers' conscious perceptions of closeness, conflict, and dependency in the relationship with an individual student. Closeness refers to the degree of warmth and positive affect between the teacher and a student. Conflict refers to the negativity or lack of rapport between the teacher and a student. Last, dependency refers to the extent to which the teacher feels that the child displays

clinginess or possessiveness towards the teacher. Closeness is considered a favorable relationship dimension, whereas both conflict and dependency are considered unfavorable (Verschueren & Koomen, 2012).

Teachers' relationship perceptions of closeness, conflict, and dependency could influence emotional responses in different ways. First, they may directly influence their emotional responses (Spilt, Koomen, & Thijs, 2011; Chang & Davis, 2009). During a classroom event with an individual student, teachers' emotional responses are argued not only to depend on the appraisal of the event itself, but also on past events with that particular student (i.e., the appraisal process becomes short-circuited; Chang & Davis, 2009). Accordingly, teachers may associate particular emotional labor strategies with particular students. Thus, they may engage in more detrimental emotional labor strategies (i.e., more surface acting and less genuine expression) in events with students of whom they have a more unfavorable relationship perception (direct effects), even when teachers' appraisal of the event is taken into account (e.g., teachers' appraisal of valence). Second, teachers' mental representations of teacher-student relationships may also function as a lens through which events with a student are interpreted, thereby qualifying their emotional responses (Spilt, Koomen, & Thijs, 2011). This means that teachers' emotional responses could be amplified or diminished, depending on the quality of the internalized relationship experiences. Based on past problematic events with an individual student, teachers may interpret specific events with negative behavior by students of whom they have an unfavorable relationship perception as more problematic and threatening than similar events with students of whom they have a more favorable relationship perception. In other words, teachers may need to work harder to express only the emotions considered appropriate (i.e., less genuine expression, more surface acting), in case of negative events with students with whom they share a relatively unfavorable relationship. Thus, a stronger link between the valence of the event (how negative versus positive an event is for the teacher) and emotional labor strategies would be expected for these students (i.e., a moderation effect).

The links between teachers' student-specific relationship perceptions and their emotional labor strategies in response to events involving individual students have never been empirically examined. There is some initial evidence focusing on a classroom level, showing that teachers' perceptions of their affective relationships with students in general are related to their emotional labor strategies (Taxer & Frenzel, 2015; Yao et al., 2015). Yao et al. (2015) found that teachers who reported a better school climate (including teachers' perception of supportive relationships with all the students in their classroom) also reported less engagement in trait-level surface acting (i.e., less hiding and faking of emotions) and more engagement in deep acting. This study did not include a measure for genuine expression. The study by Taxer and Frenzel (2015) examined the extent to which teachers felt related to all the students in their classroom and linked this to how often teachers generally engaged in genuinely expressing, faking, and hiding positive and negative emotions. Findings indicated that when teachers felt more related to their class, they more frequently expressed genuine positive emotions. Contrary to the authors' expectations, relatedness with all students was not associated with genuinely expressing negative emotions, nor with faking or hiding emotions. The authors argue that this may indicate that teachers who feel highly related to their class simply do not experience many negative emotions. To capture those teaching situations that do elicit negative emotions, it may, however, be necessary to include several specific events for each teacher. This way, possible associations between affective teacher-student relationships and

teachers' emotional labor strategies could be assessed more thoroughly.

3. Present study

The aim of the present study was to examine the role of teachers' perceptions of their relationships with individual students in shaping their emotional labor strategies during multiple daily classroom events with these students across one school year. To create variation in classroom events, two students were selected per teacher based on differences in their displays of disruptive and positive behavior (see Selection and description of target students for selection method). Since research suggests that emotional labor strategies for positive emotions and negative emotions are conceptually different and that emotional labor in response to negative emotions is more prevalent in the classroom (Barber et al., 2011; Taxer & Frenzel, 2015), the current study assessed teachers' genuine expression of emotions (a strategy considered adaptive) and teachers' surface acting (a strategy considered detrimental) in response to events in which teachers experienced at least one negative emotion (see Procedure).

Inspired by the theoretical model of Spilt, Koomen, & Thijs, 2011, we examined two roles that teachers' individual relationship representations may play in their daily emotional labor processes (see Fig. 1). First, we examined whether teachers' perceptions of closeness, conflict, and dependency of the relationship with the student directly predicted teachers' emotional labor strategies during relevant classroom events, beyond how teachers actually appraised the valence of the events (i.e., how positive or negative they rated the events; research question 1). As teachers are more likely to have unfavorable relationships with disruptive students (Spilt & Koomen, 2009; Birch & Ladd, 1998; Murray & Zvoch, 2011), we controlled for teachers' perception of students' level of general disruptive behavior to assess the unique contributions of teachers' perceptions of closeness, conflict, and dependency in predicting teachers' emotional labor. We expected that teachers would engage in more detrimental emotional labor (i.e., less genuine expression and more surface acting) in response to events with students with whom they shared unfavorable relationship characteristics (i.e., low on closeness, high on conflict, and/or high on dependency).

Second, we examined whether teachers' relationship perceptions moderated the link between teachers' appraisal of the valence of the events with the student and teachers' daily emotional labor strategies (Spilt, Koomen, & Thijs (2011); research question 2). Based on the theoretical model by Spilt et al. (2011), we expected that there would be a stronger link between the valence of the event and emotional labor strategies for students with whom the teacher shared unfavorable relationship perceptions. In particular, we expected that teachers would engage in more detrimental emotional labor (i.e., less genuine expression and more surface acting) in response to negatively appraised events when a student is involved with whom the teacher shared more unfavorable relationship characteristics (i.e., lower on closeness, higher on conflict, and/or higher on dependency), compared to when a student is involved with whom the teacher shared more favorable relationship characteristics (i.e., higher on closeness, lower on conflict, and/ or lower on dependency).

4. Method

4.1. Participants

In this study, 37 teachers of 35 regular elementary schools in the Netherlands participated. They taught grade 3–6 (students aged



Fig. 1. Hierarchical structure of research questions in the study. Note: RQ = research question. When examining the research questions, we controlled for the student's general disruptive behavior (Level 2).

8–13, M = 10.39, SD = 1.03) for at least two days a week (M = 3.80, SD = 0.99). Most of the participating teachers were female (N = 26, 70 %). Teachers were on average 40.32 years old and had been teaching for an average of 14.92 years (SD = 10.43).

4.2. Procedure

The current study was part of a longitudinal research project about the role of teachers' daily recurring emotional processes in the development of stress and wellbeing in teachers and student adjustment. In this project, teachers completed daily diaries about relevant classroom events with two selected target students (see below for the selection procedure and description of the target students). Furthermore, teachers and students completed several trait-level questionnaires during three classroom visits across one school year (beginning, middle, and end of the school year). In this study, only teacher-reported data were included.

After obtaining ethical approval from the Ethics Review Board of the Faculty of Social and Behavioral Sciences of the University of Amsterdam (project no. 2016-CDE-7254), we contacted 427 schools across the Netherlands by phone, emails, or flyers. Moreover, calls on social media were posted by the first author and research assistants. Thirty-seven teachers of 35 schools provided informed consent and agreed to participate in the study after reading the information letter about the study's purposes. Parents of all their students also received information letters about the study and consent forms. Out of 889 students, 20 students were not allowed to participate and were therefore excluded (2.25 %). These students were not selected as target students for the diaries.

Twice a week during 15 weeks across the school year, teachers received emails with a link to an online diary (i.e., 10 emails at the beginning, 10 in the middle, and 10 at the end of the school year). In total, teachers were prompted to complete 30 diaries within one school year, half (n = 15) in response to events with one target student, the other half (n = 15) in response to events with the other target student. When teachers did not complete a scheduled diary, they received an email on another workday, until they reached the desired 15 diaries per student. When teachers missed more than two consecutive diaries without notice, they were reminded through email or by phone. When teachers informed us that they could not complete diaries or did not respond well to reminders, we interrupted the data collection and continued later in consultation with the teacher. At the end of the school year, all teachers received

a 30 Euro voucher or gift of their own choice.

In the online diaries, teachers were asked to recall and describe the most relevant event of that workday in relation to one of the target students. The specific instruction read: "Today, you complete the diary about (name student). The rest of this questionnaire is about an event that happened today that you remember and that you find important. The event must relate to (name student) and may be positive or negative." Later in the diary, teachers were asked to describe the remembered event with the target student "as specific as possible." After describing the event, teachers were asked to rate the valence of the event (see Measures). Moreover, they were presented with a list of discrete emotions and were asked to rate the intensity of each emotion felt during the event (see de Ruiter, Poorthuis, & Koomen, 2019). Only when teachers reported that they experienced at least one negative emotion (e.g., worried, angry, sad, insecure) to a certain intensity (i.e., a little bit, quite, very, or very much), they were presented with items about the emotional labor strategies used in response to the event (see Measures).

4.3. Selection and description of target students

For the general aim of the longitudinal research project, it was vital to select two students for each teacher varying in disruptive and positive behaviors. As filling out behavioral questionnaires for all students would be too time-consuming for teachers, two less time-consuming selection methods were developed, in which teachers were asked to assign their students to three behavior categories at the beginning of the school year. In the first selection method, teachers assigned each of their students to one of three categories based on the frequency of disruptive behavior the student displayed. Students were assigned to either the 1) regularly disruptive, the 2) occasionally disruptive, or the 3) rarely disruptive category. We randomly selected one student from the first category (regularly disruptive) as one of the target students. In the second selection method, teachers assigned each of their students to one of three categories based on how often the behavior of the student provided the teacher with positive energy. Students were assigned to either the 1) (almost) always providing positive energy, the 2) regularly providing positive energy, or the 3) occasionally providing positive energy category. We randomly selected the second target student from the first category (almost always providing positive energy). The two selection methods were examined in a pilot study

(N = 80 teachers) and proved to be valid in differentiating students in terms of disruptive and positive behaviors, as assessed by psychometrically grounded student trait-level instruments (see de Ruiter, 2021).

A total number of 74 students were selected for the 37 teachers. However, three students changed schools after the first five diary entries. We therefore selected a third target student for these teachers, based on teachers' allocation of students at the beginning of the school year. These teachers then completed the remaining diary entries for the newly selected student. The total sample of 77 target students were between 8 and 12 years old (M = 10.45, SD = 1.10) at the start of the school year. More than half of the target students were of male gender (N = 44, 57.10 %). Based on student reports about their parents' country of origin, most students were of Dutch origin (N = 62, 80.50 %).

4.4. Measures

Daily Valence. Teachers' appraisal of the *valence* of events with one of the target students was measured by asking the teachers how they rated the event they had described on a 6-point Likert scale ranging from 1 (*very negative*) to 6 (*very positive*).

Daily Emotional Labor. When teachers rated experiencing at least one negative emotion to a certain intensity (i.e., a little bit, quite, very, or very much), they were presented with eight statements reflecting different state emotional labor strategies in response to the event. Two statements reflected a subscale genuine expression of emotions (e.g., "I showed emotions that I actually felt"), whereas the remaining six statements reflected a subscale surface acting (e.g., "I tried not to express the negative emotions I felt"). These statements were derived from or inspired by four different studies (see Appendix) and tapped the ideas of expressing felt emotions (i.e., genuine expression) and hiding negative emotions or faking positive emotions (i.e., supportive surface acting). The two subscales of genuine expression and surface acting were distinguished through multilevel confirmatory factor analysis, described extensively in the preliminary analyses. Teachers rated the extent to which they agreed with each statement on a 5-point Likert scale (1 = disagree; 2 = slightly disagree; 3 = do not disagree/do not agree; 4 = slightly agree; 5 = agree). Mean scores of the two scales were used in the analyses. We examined whether the two scales used in the diaries were reliable in assessing within-subject changes through multilevel confirmatory factor analysis (Mythén &

Table 1

Reliabilities, descriptive statistics, intercorrelations, and variances of variables.

Asparouhov, 2011) in Mplus. From the estimated factor loadings and variances of the within-part of the model, a statistic (omega) was calculated, which reflects the proportion of true score variance (relative to the total variance). Omega can be interpreted similarly to other reliability coefficients (Bolger & Laurenceau, 2013). The omega estimates for both genuine expression and surface acting were satisfactory (see Table 1), indicating that the diary measure of emotional labor could reliably distinguish teachers in terms of their patterns of change over time.

Perception of Teacher-Student Relationship. Teachers' perceptions of the affective quality of their relationships with each of the target students were measured using a shortened version of the translated Dutch version of the Student-Teacher Relationship Scale (STRS; Koomen, Verschueren, van Schooten, Jak, & Pianta, 2012), three months after the school year had started. This instrument consists of three subscales: *closeness*, which evaluates the degree of warmth, openness, and security in the relationship (e.g., "I share an affectionate and warm relationship with this child"), conflict, which reflects negative aspects of the relationship, including tension, anger, and mistrust (e.g., "This child and I always seem to be struggling"), and *dependency*, which assesses the degree to which children show age-inappropriate demanding and claiming behavior toward the teacher (e.g., "This child reacts strongly to separation from me"). Teachers responded on a 5-point scale ranging from 1 (definitely does not apply) to 5 (definitely applies). Mean scores of the scales were used in the analysis. The shortened version consists of 5 items per dimension and has shown adequate psychometric properties in previous studies (Zee, Koomen, & Van der Veen, 2013, Zee, de Jong, & Koomen, 2017, Bosman, Roorda, van der Veen, & Koomen, 2018). In the present study, the internal consistency of the three scales was satisfactory (see Table 1).

General Disruptive Behavior. Teachers' perceptions of the target students' level of *general disruptive behavior* was measured with the broader externalizing behavior subscale (Goodman, Lamping, & Ploubidis, 2010) of the Dutch version of the Strengths and Difficulties Questionnaire (SDQ; Van Widenfelt, Goedhart, Treffers, & Goodman, 2003), three months after the school year had started. This scale combines two subscales: conduct problems (5 items) and hyperactivity/inattention (5 items). Teachers responded to items such as "Often has temper tantrums or hot tempers" on a 5-point Likert scale, ranging from 1 (*not true*) to 5 (*certainly true*). The mean score of the scale was used in the analyses. The overall scale has been shown to have more adequate

		Correlations								
		# items	α/ω	1	2	3	4	5	6	7
Between-student level (L2)										
1	General disruptive behavior	10	.89	_						
2	Conflict	5	.89	.68**	-					
3	Closeness	5	.83	42**	60**	-				
4	Dependency	5	.74	.49**	.67**	16	-			
Within-student level (L1, events)										
5	Valence	1		52**	39*	.55**	34	_	.17**	16**
6	Genuine expression	2	.76	38**	55**	.70**	28	.24	_	61**
7	Surface acting	6	.86	.34*	.59**	56**	.51*	31	97**	-
Grand mean				2.25	2.01	3.80	2.12	3.51	4.09	2.02
Between-teacher variance (L3)		0.00	0.01	0.03	0.02	0.37*	0.12	0.16		
Between-student variance (L2)			0.91**	1.19**	0.73**	0.65**	0.48*	0.14	0.13	
Within-student variance (L1)								2.25**	0.95**	0.86*
ICC level 2 (student)				1,00	0.99	0.96	0.97	0.27	0.21	0.25
ICC level 3 (teacher)			0.00	0.01	0.04	0.03	0.12	0.10	0.14	

Note. Between-student level correlations are given below the diagonal; within-student level correlations are given above the diagonal. * Correlations significant at p < .05; ** Correlations significant at p < .01.

psychometric properties than the original SDQ factors in low-risk samples (Goodman et al., 2010). The internal consistency of the scale was satisfactory (see Table 1).

4.5. Data analytic strategy

In total, 975 diaries were completed (87.84 % of expected number of diary entries). In 576 of the diaries teachers reported to experience at least one negative emotion during the event they described (59.08 % of the total number of diaries). These diaries were checked for eligibility by the first author to examine whether teachers had actually described an event with one of the target students. Thirteen diaries (2.26 %) were excluded because a) teachers reported that nothing specific had happened with the target student (n = 9), b) teachers reported that the target student had been absent that workday (n = 3), and c) an event with the mother instead of the target student was reported (n = 1). This resulted in a final sample of 563 diaries, used for all analyses. For the vast majority of target students (n = 73), multiple diaries were included in the analyses (i.e., those diaries describing events in which teachers had rated to experience at least one negative emotion). On average, 7 diaries per target student were included in the analyses (range: 1–15).

Diary entries (Level 1, N = 563) were nested within target students (Level 2, N = 77), who were nested within teachers (Level 3, N = 37). Multilevel modeling in Mplus Version 7.31 (Muthén & Muthén, 1998-2018) was used to account for the dependence of observations (Hox, 2010). The three-level nature of the data was considered by using the TYPE = COMPLEX TWOLEVEL command. The COMPLEX part was used to adjust standard errors for nonindependence within teachers. As such, non-independence within teachers was accounted for but not explicitly modeled. In contrast, non-independence within students was explicitly included into the model using the TWOLEVEL part. We further applied the full information maximum likelihood (FIML) estimation to handle the unequal number of diaries per target student at level 1 (Duncan, Duncan, Li, & Strycker, 2002).

Before testing our research questions, three steps were taken to inspect the factorial structure and to examine the measurement invariance of the emotional labor construct assessed during multiple events regarding two individual students within teachers. Following the steps described by Jak (2017), we first examined the variance in the eight emotional labor items at the between-student level (level 2). A saturated model was fitted at the within-student level (i.e., all items were modeled to be correlated with each other) and a null model at the between-student level (i.e., all variances were fixed at 0). Intraclass correlations (ICCs) were used to examine whether there was sufficient variance in the items at the between-student level. Second, a multilevel confirmatory factor analysis (MCFA; Muthén, 1994) was performed to find an appropriate factor structure of the emotional labor construct across students. Some studies have examined teachers' emotional labor as a singular construct (e.g., Keller et al., 2014; Kinman, Wray, & Strange, 2011), whereas others differentiate between genuine expression and surface acting (see Diefendorff et al., 2005), or even between genuine expression, faking emotions, and hiding emotions (e.g., Glomb & Tews, 2004; Grandey & Gabriel, 2015). Model fit indices, the comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA), were used to compare the fit of a one-factor model (Emotional labor), a two-factor model (Genuine expression and Surface acting), and a three-factor model (Genuine expression, Faking, and Hiding) on the within-student level. For the CFI, values of 0.90 or higher were considered indicative of satisfactory fit, while values above 0.95 indicated excellent fit (Hu & Bentler, 1999). For the RMSEA, values \leq 0.05 were taken to reflect good fit and values between 0.05 and 0.08 as representing adequate fit (Browne & Cudeck, 1992). Third, to make valid comparisons across students, we examined whether the found factors were measurement invariant across students. Support for strong factorial invariance across students was found when the factor model with equal factor loadings across levels and no residual variance at the student level fitted the data.

We specified a series of random intercept multilevel models to predict genuine expression and surface acting. For the first research question, we examined the associations between teachers' relationship perceptions and teachers' emotional labor strategies during relevant events, beyond the valence of the event and students' general disruptive behavior. We started with establishing a fixed slope model with valence (level 1 control variable) predicting genuine expression and surface acting (Model 1). We followed Bolger and Laurenceau's approach (2013) in creating two versions of valence. We subtracted the grand mean of valence across teachers, students, and the 563 events (M = 3.51) from the raw scores of valence (i.e., grand-mean centering). This new variable was then split into two components: a between-students means component: between-valence (i.e., the valence means for that student across all events) and within-student deviations from those means' components: within-valence. In the fixed slope models, between-valence was added as predictor of genuine expression and surface acting on the between-level, whereas within-valence was added as predictor on the within-level. We then added closeness, conflict, and dependency separately as predictors on the between-level in the fixed slope models (Models 2ac). In these models, we controlled for general disruptive behavior by including this variable as predictor on the between-level.

For the second research question, we examined whether teachers' relationship perceptions moderated the link between teachers' appraisal of the valence of the events with the students and teachers' emotional labor strategies. We built random slope models (Models 3a-c) to examine whether the association between within-valence and genuine expression and the association between within-valence and surface acting varied across students, indicating the possibility of the existence of a moderator on the student-level. Random slopes were tested in separate models for the association between within-valence and genuine expression (Models 3a1-c1) on the one hand and the association between within-valence and surface acting on the other hand (Models 3a2c2). Random slope models were compared with the fixed slope models (Models 2a-c) using chi-square difference tests based on log likelihood values and a scaling correction factor obtained with the MLR estimator (Satorra & Bentler, 2010). Moreover, we examined the Akaike Information Criterion (AIC) and Bayes Information Criterion (BIC), preferring models with lower values (Hox, 2013). We then tested for cross-level interactions by including closeness, conflict, and dependency as predictors of the Level 1 slope of within-valence and genuine expression (Models 4a1-c1) and in separate models as predictors of the Level 1 slope of within-valence and surface acting (Models 4a2-c2; Aguinis, Gottfredson, & Culpepper, 2013).

5. Results

5.1. Factorial structure and measurement invariance of emotional labor

Fitting a saturated model at the within-student level and a null model at the between-student level showed significant variance in the emotional labor items at the between-student level, $\chi^2(36) = 321.71$, p < .001, with intraclass correlations (ICCs) of the eight items ranging from 0.06 to 0.16. Thus, allowing examination

of the associations with emotional labor at the student level.

The one-factor model (Emotional labor) did not fit the data well, $\chi^2(20) = 172.70$, p < .001, RMSEA = 0.12, CFI = 0.91. Both the two-factor model (Genuine expression and Surface acting, $\chi^2(19) = 66.92$, p < .001, RMSEA = 0.07, CFI = 0.97) and the three-factor model (Genuine expression, Hiding, and Faking, $\chi^2(17) = 64.25$, p < .001, RMSEA = 0.07, CFI = 0.97) fitted the data adequately. Because the Hiding and Faking factors were very strongly correlated at the within-student level (r = 0.91), making it difficult to differentiate between them on the within-level, we decided to use the two-factor model as measurement model in subsequent analyses. In this model, Genuine expression was negatively correlated with Surface acting (r = -0.61). Factor loadings of the items ranged from 0.53 to 0.83 (see Appendix).

The two-factor model with equal factor loadings and zero residual variance at the student-level fitted the data adequately, $\chi^2(17) = 64.25$, p < .001, RMSEA = 0.07, CFI = 0.97. Thus, support for strong factorial invariance across students is found and indicates that a particular score for Genuine expression and Surface acting means the same for each target student.

5.2. Descriptive analyses

Table 1 presents all relevant descriptive statistics of our study variables. On average, teachers perceived their relationships with the target students as higher on closeness (M = 3.80), than on dependency (M = 2.12) and conflict (M = 2.01). Teachers rated the valence of events on average as somewhat positive (M = 3.51). Teachers engaged in more genuine expression (M = 4.09) than in surface acting (M = 2.02).

The correlations in Table 1 are displayed at both the betweenstudent level (L2) and the within-student level (L1). On the between-student level, teachers reported more unfavorable relationships (i.e., higher on conflict, higher on dependency, and lower on closeness) with target students rated higher on general disruptive behavior. When teachers perceived the relationship with the target student as higher on conflict, they rated the valence of events as more negative. An opposite pattern can be found for relationships higher on closeness. For dependency, we did not find a significant correlation with valence. On the within-student level, when teachers reported to engage in more genuine expression during an event, they reported less surface acting. In four events (0.7 %), teachers reported to engage substantially in both genuine expression and surface acting (both strategies receiving a score of >3.50). Qualitative examination of the content of these events revealed that in those events multiple (both positive and negative) student behaviors were described during one longer event or that other students were involved in the event for whom teachers reported different emotional labor strategies.

The variances of the variables are also displayed in Table 1. Most of the variance in teachers' genuine expression and Surface acting was attributable to the within-student level (i.e., between the events). ICCs showed that a considerable part of the variance in genuine expression (21 %) and surface acting (25 %) was attributable to the between-student level. Smaller proportions of variance in genuine expression and surface acting were attributable to the teacher-level (10 % and 14 %, respectively). Overall, these results suggest sufficient variability in genuine expression and surface acting at the student-level (Kahn, 2011), allowing to examine the associations with level 2 predictors (i.e., closeness, conflict, and dependency).

5.3. Valence of events predicting teachers' emotional labor

Within-valence was modeled as predictor of genuine expression

and surface acting on the within-student level, whereas betweenvalence was modeled as predictor on the between-student level. within-valence positively predicted genuine expression (B = 0.11, SE = 0.03, p = .001) and negatively predicted surface acting (B = -0.10, SE = 0.03, p = .001). Thus, when teachers rated an event with a target student as more positive than on average for that student, they reported that the emotions they expressed were more genuine and that they engaged in less surface acting during the event. For between-valence, there were no significant associations between teachers' valence ratings and teachers' genuine expression and surface acting.

5.4. Direct effects of closeness, conflict, and dependency (research question 1)

First, closeness was added to the valence model as predictor on the between-student level of genuine expression and surface acting (Table 2, Model 2a). Closeness positively predicted genuine expression (B = 0.22, SE = 0.11, p < .05), but did not predict surface acting. Second, the direct effect of conflict was examined in the same way (Model 2b). Conflict negatively predicted genuine expression (B = -0.22, SE = 0.08, p < .01), but did not predict surface acting. Third, we examined the direct effect of dependency in the same way (Model 2c). Dependency did not predict genuine expression, but positively predicted surface acting (B = 0.22, SE = 0.09, p < .05). Thus, when teachers perceived the relationship with the student as more close, they reported that the emotions expressed during the events were more genuine. In contrast, when teachers perceived the relationship with the student involved in the events as more conflictuous, they reported that the emotions during the events expressed were less genuine. When teachers perceived the relationship with the student involved in the events as more dependent, they reported to engage in more surface acting. In all models, we controlled for the student's general disruptive behavior, which did not significantly predict genuine expression or surface acting in either of the models. Removal of this variable in the models resulted in small changes in the coefficients and did not alter the interpretation of the effects.

5.5. Moderation effects of closeness, conflict, and dependency (research question 2)

In separate models we examined whether the association between within-valence and genuine expression and the association between within-valence and surface acting varied across students (Models 3a1-c2). We did not find significant slope variance for the association between valence and genuine expression (3a1: $\chi^2_{diff} = -1.68$, $\Delta df = 1$, p = .195; $3b1: \chi^2_{diff} = -1.66$, $\Delta df = 1$, p = .198; $\chi^{2}_{diff} = -1.63, \Delta df = 1, p = .201$, nor between valence and surface acting (3a2: $\chi^{2}_{diff} = -0.90, \Delta df = 1, p = .343; 3b2: \chi^{2}_{diff} = -0.90, \Delta df = 1, p = .343; 3c2: \chi^{2}_{diff} = -0.88; \lambda^{2}_$ p = .348). Moreover, other information criteria (AIC and BIC) in the random slope models did not indicate improved model fit. This suggests that the associations between both valence and genuine expression and valence and surface acting were similar for each target student. However, as the test of random slopes does not always have enough power for testing variance, it is possible that there actually is variability in slopes (Snijders & Bosker, 1999). If the proposed cross-level interactions are hypothesized based on theory, it is recommended to still proceed testing those, as fixed effects can be evaluated using statistical tests with more power (Aguinis et al., 2013; Snijders & Bosker, 1999). Because we had such a rationale, we did proceed with testing cross-level interactions between relationship dimensions and valence in predicting genuine expression and surface acting.

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Table 2

Multilevel models of the direct effects of closeness, conflict, and dependency.

	N	Model 2a with closeness				Model 2b with conflict					Model 2c with dependency				
	Genuine expression		Surface acting		Genuine expression		Surface acting		Genuine expression		Surface acting				
	В	SE	В	SE	В	SE	В	SE	В	SE	В	SE			
Intercept Within-student level (L1)	3.46**	0.52	2.06**	0.51	4.51**	0.21	1.78**	0.24	4.50**	0.24	1.56**	0.25			
Within valence Between-student level (L2)	0.11**	0.03	-0.09**	0.03	0.11**	0.03	-0.09**	0.03	0.11**	0.03	-0.09**	0.03			
Between valence Closeness	0.02 0.22*	0.09 0.11	$-0.11 \\ -0.05$	0.09 0.11	0.04	0.08	-0.10	0.09	0.05	0.07	-0.09	0.08			
Conflict Dependency					-0.22**	0.08	0.18	0.09	-0.04	0.10	0.22*	0.09			
General disruptive behavior	-0.07	0.09	0.06	0.09	0.03	0.10	-0.07	0.11	-0.12	0.10	-0.02	0.08			

Note. * Coefficients significant at p < .05; ** Coefficients significant at p < .01.

Table 3

Final multilevel models including the cross-level interactions.

	М	Models with closeness				Models with conflict				Models with dependency			
	4a1 Genuine expression		4a2 Surface acting		4b1 Genuine expression		4b2 Surface acting		4c1 Genuine expression		4c2 Surface acting		
	B SE		В	SE	В	SE	В	SE	В	SE	В	SE	
Intercept Within-student level (L1)	3.46**	0.52	2.06**	0.51	4.51**	0.21	1.78**	0.23	4.50**	0.24	1.56**	0.25	
Within-valence Within-valence X Relationship dimension ^a	0.03 0.02	0.18 0.05	-0.10 0.00	0.15 0.04	0.13 -0.01	0.07 0.03	$-0.06 \\ -0.01$	0.06 0.02	0.15 -0.02	0.08 0.03	-0.03 -0.03	0.06 0.02	
Between-student level (L2)	0.02	0.00	0.11	0.00	0.04	0.00	0.10	0.00	0.05	0.07	0.00	0.00	
Between-valence Relationship dimension ^a General disruptive behavior	0.02 0.22* -0.07	0.09 0.11 0.09	-0.11 -0.05 0.06	0.09 0.11 0.09	0.04 -0.21** 0.03	0.08 0.08 0.10	-0.10 0.18 -0.07	0.09 0.09 0.11	0.05 -0.04 -0.13	0.07 0.13 0.10	-0.09 0.22* -0.02	0.08 0.09 0.08	

Note. Cross-level interactions were examined in separate models for both outcome variables (genuine expression and surface acting).

*Coefficients significant at p < .05; ** Coefficients significant at p < .01.

^a Depending on the model, this variable represents either closeness, conflict, or dependency.

In the separate models, closeness, conflict, and dependency were included as predictors of the random slopes to examine possible moderation (Models 4a1-c2, Table 3). None of these cross-level interactions were significant. Thus, closeness, conflict, and dependency did not moderate the association between valence and genuine expression, nor the association between valence and surface acting.

6. Discussion

The theoretical model on dyadic teacher-student relationships and teacher wellbeing by Spilt, Koomen, & Thijs, 2011 posits that teachers' representational models of relationships with individual students guide their emotional responses in daily interactions with these students. Testing basic notions from this model, the current study investigated how teachers' relationship perceptions of closeness, conflict, and dependency about two individual students were related to their daily uses of emotional labor strategies during a variety of events with these students across a school year. First, we found that teachers reported to engage in more genuine expression of emotions in response to daily events with a student with whom they perceived to have a closer relationship, whereas they reported less genuine expression in case of a more conflictuous relationship. Teachers reported more surface acting in case of a more dependent relationship. These results hold when taking into account how teachers appraise the valence of the specific event as well as how they judge the general disruptive behavior of the specific student. Second, we found no evidence that

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teachers' relationship representations modified their use of emotional labor in response to negatively appraised events. In conclusion, the present study has provided initial evidence that the affective quality of dyadic teacher—student relationships is related to how teachers manage their emotions and emotional expressions in interactions with individual students. Moreover, results regarding factorial structure and measurement invariance provided evidence that teachers' emotional labor strategies (genuine expression and surface acting) can be validly assessed in response to specific classroom events.

6.1. Teachers' relationship perceptions and emotional labor during classroom events

In contrast to our expectations, not all relationship dimensions (i.e., closeness, conflict, and dependency) were related to each of the emotional labor strategies. Toward students with whom they shared close relationships, the emotions expressed by teachers during events were more sincere, but they did not engage in less surface acting. These findings are in line with those of Taxer and Frenzel (2015) who also found a positive association between teachers' feelings of relatedness to all the students in their classroom and teachers' genuine expression of positive emotions, but no associations between relatedness and hiding or faking emotions. Collectively, it may indicate that when teachers share a favorable relationship with a student, most of the emotions they show are genuine, although they still may occasionally engage in surface acting. This may not necessarily be a bad thing, as some authors argue that there is 'power in pretending' when surface acting occurs occasionally, meaning that the teacher can still achieve adaptive outcomes for both the student and him- or herself (e.g., Chang & Davis, 2009; Glomb & Tews, 2004). In contrast, emotional labor may become detrimental when teachers routinely fake or suppress the emotions they feel in response to a student (Lavy & Eshet, 2018; Zhang, Zhang, Lei, Yue, & Zhu, 2016).

Toward students with whom they share conflictuous relationships, the emotions expressed by teachers were less genuine. Although the association between conflict and surface acting was almost similar in size, the p-value was above the significance threshold and thus we cannot conclude that teachers solve this emotional dissonance by engaging in more surface acting. Perhaps teachers use other strategies to deal with their dissonance, for example by attentional deployment, an emotion regulation strategy that is considered related to deep acting (Grandey, 2000). Attentional deployment involves cognitive distraction (Gross, 1998), such as a teacher thinking or focusing on something else and ignoring the misbehavior displayed by a student. Indeed, in descriptive studies, it was found that a large subset of teachers described diverting their attention away from misbehaving students, helping them to regulate their emotions in an immediate situation (Chang & Taxer, 2020; Sutton, 2004). Also in the present study, three teachers explicitly described that they had ignored the misbehavior of the target student in an event. Other emotion regulation strategies teachers use at work include avoiding the situation, active modification (i.e., active attempts to change the features or causes of a given emotional situation), reappraisal, and tension reduction (Burić, Penezić, & Sorić, 2017; Chang & Taxer, 2020).

In contrast to closeness and conflict, dependency was the only relationship dimension that was not related to genuine expression, but to surface acting instead. Toward students with whom they share dependent relationships, teachers routinely seem to hide and fake their emotions. High dependency on teachers is considered an indicator of emotional insecurity (Verschueren & Koomen, 2012) and refrains students from exploring the classroom and from interacting with peers (Birch & Ladd, 1998; Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012). A recent meta-analysis showed medium to large associations between relational dependency and internalizing behavior (Roorda, Zee, & Koomen, 2020). This means that high dependency on teachers is particularly characteristic for emotionally vulnerable students, especially in the higher primary grades (Roorda, Zee, & Koomen, 2020). Moreover, internalizing problems and dependency appear to strengthen each other over time (Roorda et al., 2014), highlighting the important role of the teacher. Various authors emphasize that dependent behaviors elicit protective or directive teaching behaviors (Birch & Ladd, 1998), and vice versa (Zee, Koomen, & Van der Veen, 2013). It is possible that – especially when it comes to strong negative emotions - teachers may engage routinely in surface acting during events with an overly dependent student, in order to protect this student from negative teacher emotions and to ensure an emotionally secure base from which that student can explore.

Contrary to our hypotheses, we did not find any evidence for a moderating role of teachers' relationship perceptions in their daily emotional labor processes. Teachers did not engage in more detrimental emotional labor strategies in case of negative events in response to students of whom they had a more unfavorable relationship perception compared to students with whom they shared a more favorable relationship. A related study, using the same dataset, did find evidence for a moderating role of perceived general disruptive behavior (de Ruiter, Poorthuis, Aldrup, & Koomen, 2020). This study found a stronger link between valence and discrete negative emotions for students who were perceived by teachers as more disruptive in the past (i.e., students with whom teachers may also share a more unfavorable relationships). Teachers reacted with higher levels of anger and anxiety to negative events with students they perceived as disruptive, compared to students perceived as less disruptive. This finding could imply that teachers' relationship representations could function as a lens through which events with a student are interpreted when it comes to the negative emotions teachers experience, but not for the strategies teachers use to manage these emotions. With regard to teachers' emotional labor, it is also conceivable that moderation does not so much apply to associations between valence and emotional labor strategies, but to links between the strategies and occupational wellbeing. Chang and Davis (2009) argue that teachers' engagement in surface acting can still be considered productive, as long as their goal is to really get to know the student. Extending this idea, teachers may be more emotionally drained when they engage in surface acting in response to a student with whom they share an unfavorable relationship, compared to when they deal with a more positively represented student.

6.2. Assessing emotional labor in response to classroom events with individual students

In contrast to most research on emotional labor in teachers, the current study used a state-level approach and examined emotional labor in response to multiple events through daily diaries. In this way, it was possible to recover the actual affective experiences of teachers with more accuracy (Robinson & Clore, 2002; Stone et al., 2006). In line with previous findings (Keller et al., 2014), results from our ICCs showed that teachers' engagement in emotional labor appears to be quite situation-specific. Moreover, as we collected a variety of events concerning two individual students, our study demonstrated that there is also considerable student-specific variation in teachers' emotional labor. As we could examine how deviations from the average valence appraisal for a specific student corresponded to deviations in teachers' emotional labor strategies (i.e., thereby controlling for differences in valence appraisals between students), it made our study well-suited for examining the role that teachers' perceptions of their relationships with individual students plays within teachers' daily emotional labor processes.

The current study also provided initial evidence that similar emotional labor strategies could be empirically distinguished in response to specific events, compared to the ones assessed in traitlevel measurements. Genuine expression and surface acting were quite strongly negatively associated at the within-student level (i.e., event-level), showing that when teachers genuinely express their emotions during an event, they tend not to fake or hide their emotions, and vice versa. Still, factor analysis provided support for assessing genuine expression and surface acting as two separate dimensions and not as two poles of one dimension. Supplemental qualitative analyses revealed that both strategies can occasionally be used in the context of one event: simultaneously, when teachers deal with different students displaying different behaviors or consecutively, when one student displays different behaviors for a longer period of time. Thus, even at an event-level genuine expression and surface acting can be seen as complementary strategies.

6.3. Limitations and directions for future research

Several limitations of this study need to be considered that call for further research. A first limitation is related to the generalizability of our findings. The study partly relied on a convenience sample of teachers. The work load for taking part in this research could have prevented especially those teachers from participating who were already experiencing their work as an emotional burden.

In addition, it should be noted that the current findings only apply to events in which teachers experience at least one negative emotion to a certain extent. Since there is evidence that the emotional labor strategies for expressing positive emotions (i.e., disciplinary surface acting) versus expressing negative emotions (i.e., supportive surface acting) are conceptually different (Boersma & Koomen, 2014; Barber et al., 2011), we decided to focus on supportive surface acting, modifying the expression of negative emotions. It would be interesting to know whether disciplinary surface acting, i.e., modifying the expression of positive emotions, is similarly related to teachers' perceptions of relationships dimensions. Future studies using more representative samples are advised to consider both positive and negative emotions, when linking teacher-student relationship dimensions to teachers' emotional labor strategies, or to examine specific discrete emotions (e.g., Taxer & Frenzel, 2015; Wang, Hall, Chiu, Goetz, & Gogol, 2020). Furthermore, the present study only focused on the emotional labor strategies genuine expression and surface acting, whereas deep acting was not included. In preliminary research, we found that teachers were quite able to understand the meaning of and difference between the surface acting and deep acting constructs when items were presented on a trait level. However, similar items on an event-specific level caused problems, as some teachers indicated that they did not know how to complete the deep acting items and others did not sense the difference between surface acting and deep acting (Boersma & Koomen, 2014). Therefore, we decided not to include deep acting in the present study. Future research is needed to test more extensively how deep acting can be assessed in relation to specific classroom events.

Moreover, the current study relied on teacher reports only. Future research could also incorporate students' perspectives and students' outcomes to get a better understanding of teachers' emotional labor in the context of dyadic teacher-student relationships. To be specific, student perspectives on the quality of the dyadic relationship could be included to get a more complete picture (Jellesma, Zee, & Koomen, 2015). Regarding students' outcomes, a recent diary study, combining both teachers' and students' perspectives of teacher enthusiasm during specific lessons, found that teacher reports of enthusiasm did not correspond to students' perceptions of enthusiastic teacher behaviors, in a sizable number of lessons (Keller, Becker, Frenzel, & Taxer, 2018). In lessons in which teachers reported to experience below-average levels of enthusiasm but students reported to perceive them as enthusiastic, students reported less enjoyment and more boredom compared to lessons in which teachers' experienced enthusiasm corresponded with students' perceived level of teacher enthusiasm. This suggests that surface acting – expressing enthusiasm even when this is not experienced - may influence student classroom experiences negatively. When teachers engage in more surface acting in response to some students compared to others, these particular students could therefore be at greater risk for developing negative feelings towards school.

Last, it is important to note that our study design precludes any causal or directional conclusions. Although teachers' perceptions of the affective quality of the relationships with the target students were measured during the first wave of data collection, thus preceding the completion of most diaries, it cannot be concluded that teachers' relationship perceptions influence their use of different emotional labor strategies. In line with theoretical arguments (Spilt, Koomen, & Thijs, 2011; Chang & Davis, 2009), it is likely that these variables are reciprocally related and possibly reinforce one another. For example, a teacher who perceives dependency in the relationship with a student could increasingly use surface acting during events with that student in order to protect the student from the confrontation with negative teacher emotions, which in turn may lead to more dependency, since the student can start doubting the emotional authenticity of the teacher and may therefore not be able to use the teacher as a secure base from which to explore (Verschueren & Koomen, 2012). Future studies would profit from combining event-related diaries with a longitudinal design to unravel these long-term processes and effects.

7. Conclusion and practical implication

Daily events with individual students are important sources for teacher emotions (Hargreaves, 2000). The present study was the first to provide insight into how and why teachers manage these emotions and their emotional expressions during specific classroom events with individual students. Findings indicate teachers' emotional labor strategy choices are in part dependent upon the quality of their affective relationships with individual students involved in events. As teachers' daily engagement in emotional labor appears to be linked to their occupational wellbeing (Keller et al., 2014; Lavy & Eshet, 2018), our findings have an important practical implication. Investment in improving dyadic teacher-student relationships could foster teachers' occupational wellbeing. To be specific, promoting closeness and reducing conflict in the relationship could give rise to more genuine expression of emotions over time. Initiatives to reduce dependency, on the other hand, could prevent teachers from routinely turning to faking or suppressing the emotions they feel, in order to protect students they consider vulnerable while this could undermine their own wellbeing. A range of interventions have been proposed that can be used to improve teachers' relationships with individual students and thereby promote more genuine expression of emotions (e.g., Banking Time, see Driscoll & Pianta, 2010; Playing-2-gether, see Vancraeyveldt et al., 2014). In addition, a teacher training such as the Interpersonal Skills Training (Zee, Koomen, & Van der Veen, 2013), may help teachers to break the mutual reinforcement between dependent student behavior and protective teacher behavior and thereby weaken the routine responses of faking and hiding emotions for such students. Finally, LLInC (Leerkracht Leerling Interactie Coaching, meaning Teacher Student Interaction Coaching), previously referred to as the Relationship-Focused Reflection Program (RFRP; (Bosman, Zee, de Jong, & Koomen, 2021; Spilt, Koomen, Thijs, & van der Leij, 2012)) seems promising, as an important part of the intervention consists of promoting teacher reflection on emotional experiences in response to specific events with individual students. Such an approach could benefit teachers in two ways. First, when teachers become aware of their emotions in relation to specific students they may appraise future events with these students as less negative (see Chang & Davis, 2009). Second, this approach may also result in a more favorable teacher-student relationship. Both ways could result in more productive emotional labor and possibly, over a longer time frame, improve occupational wellbeing.

Appendix

Item wordings, means, standard deviations and factor lodings for the assessment of event-related emotional labor.

Item	Based on/original item	М	SD	Factor loading
Genuine expression				
 The way I responded was exactly how I felt at that time [De manier waarop ik reageerdwas precies zoals ik mij op dat moment voelde] 	e The emotions that I show customers match those that I truly feel (Kruml & Geddes, 2000)	4.03	1.27	.75
2. I showed emotions that I actually felt [Ik liet emoties zien die ik daadwerkelijk voelde]	The emotions I show to the customer are real (Kruml & Geddes, 2000)	4.15	1.16	.79
Surface acting				
 I tried not to express the negative emotions I felt [Ik probeerde de negative emoties die is voelde niet te uiten] 	k Resist the expression of negative emotions (Barber et al., 2011)	2.23	1.48	.79
4. I hid the negative emotions I felt [Ik verborg de negatieve emoties die ik voelde]	Hide felt negative emotions (Barber et al., 2011)	2.01	1.36	.83
5. I suppressed my feelings [Ik onderdrukte mijn gevoelens]	At the moment, I have to suppress my feelings (Keller et al., 2014)	2.02	1.38	.73
6. Despite my negative feelings, I presented a relaxed face [Ondanks mijn negatieve gevoelens hield ik mijn gezicht in de plooi]	In spite of the situation, I present a relaxed face (Andela, Truchot, & Borteyrou, 2015)	2.31	1.47	.74
7. I displayed emotions that I did not really feel [Ik liet emoties zien die ik niet echt voelde	At the moment, I have to display emotions that do not correspond to my inner feelings (Keller et al., 2014)	1.87	1.33	.53
8. I pretended to have positive emotions [Ik deed alsof ik positieve emoties had]	Pretend to have positive emotions (Barber et al., 2011)	1.68	1.15	.60

References

- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39, 1490–1528. https://doi.org/10.1177/ 0149206313478188
- Andela, M., Truchot, D., & Borteyrou, X. (2015). Emotional labour and burnout : Some methodological considerations and refinements. *Canadian Journal of Behavioural Science*, 47(4), 321–332. https://doi.org/10.1037/cbs0000024
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. Academy of Management Review, 18(1), 88–115. https:// doi.org/10.5465/amr.1993.3997508
- Barber, L. K., Grawitch, M. J., Carson, R. L., & Tsouloupas, C. N. (2011). Costs and benefits of supportive versus disciplinary emotion regulation strategies in teachers. *Stress and Health*, 27(3), 173–187. https://doi.org/10.1002/smi.1357
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology*, 34(5), 934–946. https:// doi.org/10.1037/0012-1649.34.5.934
- Boersma, T., & Koomen, H. M. Y. (2014). Emoties, emotionele arbeid en stressontwikkeling bij leerkrachten in dagelijkse situaties (Emotions, emotional labor and stress development in teachers in daily interactions). University of Amsterdam [Unpublished masterthesis].
- Bolger, N., & Laurenceau, J.-P. (2013). Intensive longitudinal methods: An introduction to diary and experience sampling research. New York, NY: The Guilford Press.
- Bosman, R. J., Roorda, D. L., van der Veen, I., & Koomen, H. M. Y. (2018). Teacher–student relationship quality from kindergarten to sixth grade and students' school adjustment: A person-centered approach. *Journal of School Psychology*, 68, 177–194. https://doi.org/10.1016/j.jsp.2018.03.006
- Bosman, R. J., Zee, M., de Jong, P. F., & Koomen, H. M. Y (2021). Using relationshipfocused reflection to improve teacher-child relationships and teachers' student-specific self-efficacy. *Journal of School Psychology*, 87, 28–47. https:// doi.org/10.1016/j.jsp.2021.06.001
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work. *Journal of Vocational Behavior*, 60, 17–39. https://doi.org/10.1006/jvbe.2001.1815
- Browne, M. W. & Cudeck, R. (1992). Alternative ways of assessing model fit. Sociological Methods & Research, 21(2), 230–258. https://doi.org/10.1177/ 0049124192021002005
- Burić, I., Penezić, Z., & Sorić, I. (2017). Regulating emotions in the teacher's workplace: Development and initial validation of the Teacher Emotion Regulation Scale. International Journal of Stress Management, 24(3), 217–246. https:// doi.org/10.1037/str0000035
- Chang, M.-L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, 21(3), 193–218. https://doi.org/10.1007/s10648-009-9106-y
- Chang, M.-L. (2013). Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation and coping. *Motivation and Emotion*, 37(4), 799–817. https://doi.org/ 10.1007/s11031-012-9335-0
- Chang, M.-L., & Davis, H. A. (2009). Understanding the role of teacher appraisals in shaping the dynamics of their relationships with students: Deconstructing teachers' judgments of disruptive behavior/students. In P. A. Schutz, & M. Zembylas (Eds.), Advances in teacher emotion research (pp. 95–127). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4419-0564-2_6.

- Chang, M.-L., & Taxer, J. (2020). Teacher emotion regulation strategies in response to classroom misbehavior. *Teachers and Teaching*, 1–17. https://doi.org/10.1080/ 13540602.2020.1740198
- de Ruiter, Poorthuis, A., Aldrup, K., & Koomen, H. (2020). Teachers' emotional experiences in response to daily events with individual students varying in perceived past disruptive behavior. *Journal of School Psychology*, 82, 85–102. https://doi.org/10.1016/j.jsp.2020.08.005
- de Ruiter, Poorthuis, A. M. G., & Koomen, H. M. Y. (2019). Relevant classroom events for teachers: A study of student characteristics, student behaviors, and associated teacher emotions. *Teaching and Teacher Education*, 86, Article 102899. https://doi.org/10.1016/j.tate.2019.102899
- de Ruiter, J. A. (2021). The way they make me feel: Exploring teachers' momentary emotional experiences in response to individual students. (Doctoral dissertation, University of Amsterdam, the Netherlands). Retrieved from UvA-DARE https:// hdl.handle.net/11245.1/27b06d50-1bb2-42e6-8bb7-43a96c884f0d.
- Diefendorff, J. M., Croyle, N. H., & Gosserand, R. H. (2005). The dimensionality and antecedents of emotional labor strategies. *Journal of Vocational Behavior*, 66(2), 339–357. https://doi.org/10.1016/j.jvb.2004.02.001
- Doumen, S., Koomen, H. M. Y., Buyse, E., Wouters, S., & Verschueren, K. (2012). Teacher and observer views on student-teacher relationships: Convergence across kindergarten and relations with student engagement. *Journal of School Psychology*, 50(1), 61–76. https://doi.org/10.1016/j.jsp.2011.08.004
- Driscoll, K. C., & Pianta, R. C. (2010). Banking time in head start: Early efficacy of an intervention designed to promote supportive teacher—child relationships. Early Education & Development, 21(1), 38–64. https://doi.org/10.1080/ 10409280802657449
- Duncan, T. E., Duncan, S. C., Li, F., & Strycker, L. A. (2002). Multilevel modeling of longitudinal and functional data. In D. S. Moskowitz, & S. L. Hershberger (Eds.), Modeling intraindividual variability with repeated measures data: Methods and applications (pp. 171–202). New York: Routledge, Taylor & Francis Group.
- Frenzel, A. C. (2014). Teacher emotions. In E. A. Linnenbrink-Garcia, & R. Pekrun (Eds.), International handbook of emotions in education (pp. 494–519). New York: Routledge.
- Gabriel, A. S., & Diefendorff, J. M. (2015). Emotional labor dynamics: A momentary approach. Academy of Management Journal, 58(6), 1804–1825. https://doi.org/ 10.5465/amj.2013.1135
- Glomb, T. M., & Tews, M. J. (2004). Emotional labor: A conceptualization and scale development. Journal of Vocational Behavior, 64(1), 1–23. https://doi.org/ 10.1016/S0001-8791(03)00038-1
- Goodman, A., Lamping, D. L., & Ploubidis, G. B. (2010). When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the strengths and difficulties questionnaire (SDQ): Data from British parents, teachers and children. *Journal of Abnormal Child Psychology*, 38(8), 1179–1191. https://doi.org/10.1007/s10802-010-9434-x
- Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5(1), 95–110. https://doi.org/10.1037/1076-8998.5.1.95
- Grandey, A. A., & Gabriel, A. S. (2015). Emotional labor at a crossroads: Where do we go from here? Annual Review of Organizational Psychology and Organizational Behavior, 2(1), 323–349. https://doi.org/10.1146/annurev-orgpsych-032414-111400
- Gross, J. J. (1998). The emerging field of emotion regulation : An integrative review. *Review of General Psychology*, 2(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the

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trajectory of children's school outcomes through eighth grade. Child Development, 72(2), 625–638.

- Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education*, 16(8), 811–826. https://doi.org/ 10.1016/S0742-051X(00)00028-7
- Hox, J. J. (2010). Multilevel analysis: Techniques and applications. New York, NY: Routledge.
- Hox, J. J. (2013). Multilevel regression and multilevel structural equation modeling. In T. D. Little (Ed.), *The oxford handbook of quantitative methods* (2nd ed., pp. 925–944). Oxford: Oxford University Press.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. https://doi.org/10.1080/10705519909540118
- Jak, S. (2017). Testing and explaining differences in common and residual factors across many countries. Journal of Cross-Cultural Psychology, 48(1), 75–92. https://doi.org/10.1177/0022022116674599
- Jellesma, F. C., Zee, M., & Koomen, H. M. Y. (2015). Children's perceptions of the relationship with the teacher: Associations with appraisals and internalizing problems in middle childhood. *Journal of Applied Developmental Psychology*, 36, 30–38. https://doi.org/10.1016/j.appdev.2014.09.002.
- Kahn, J. H. (2011). Multilevel modeling: Overview and applications to research in counseling psychology. *Journal of Counseling Psychology*, 58(2), 257–271. https://doi.org/10.1037/a0022680
- Karin, J., & Weisz, R. (2011). Emotional intelligence as a moderator of affectivity/ emotional labor and emotional labor/psychological distress relationships. Psychological Studies, 56(4), 348–359. https://doi.org/10.1007/s12646-011-0107-9
- chological Studies, 56(4), 348–359. https://doi.org/10.1007/s12646-011-0107-9 Keller, M. M., Becker, E. S., Frenzel, A. C., & Taxer, J. L. (2018). When teacher enthusiasm is authentic or inauthentic: Lesson profiles of teacher enthusiasm and relations to students' emotions. AERA Open, 4(4), 1–16. https://doi.org/ 10.1177/2332858418782967
- Keller, M. M., Chang, M.-L., Becker, E. S., Goetz, T., & Frenzel, A. C. (2014). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: An experience sampling study. *Frontiers in Psychology*, 5, 1442. https://doi.org/10.3389/fpsyg.2014.01442
- Kinman, G., Wray, S., & Strange, C. (2011). Emotional labour, burnout and job satisfaction in UK teachers: The role of workplace social support. *Educational Psychology*, 31(7), 843–856. https://doi.org/10.1080/01443410.2011.608650
- Koenen, A. K., Vervoort, E., Kelchtermans, G., Verschueren, K., & Spilt, J. L. (2019). Teachers' daily negative emotions in interactions with individual students in special education. *Journal of Emotional and Behavioral Disorders*, 27(1), 37–51. https://doi.org/10.1177/10634266177395
- Koomen, H. M. Y., Verschueren, K., van Schooten, E., Jak, S., & Pianta, R. C. (2012). Validating the Student–Teacher Relationship Scale: Testing factor structure and measurement invariance across child gender and age in a Dutch sample. *Journal* of School Psychology, 50(2), 215–234. https://doi.org/10.1016/j.jsp.2011.09.001
- Kruml, S. M., & Geddes, D. (2000). Exploring the dimensions of emotional labor: The heart of hochschild's work. *Management Communication Quarterly*, 14(1), 8–49.
- Lavy, S., & Eshet, R. (2018). Spiral effects of teachers' emotions and emotion regulation strategies: Evidence from a daily diary study. *Teaching and Teacher Education*, 73, 151–161. https://doi.org/10.1016/j.tate.2018.04.001
- Lazarus, R. S. (2006). Emotions and interpersonal relationships: Toward a personcentered conceptualization of emotions and coping. *Journal of Personality*, 74(1), 9–46. https://doi.org/10.1111/j.1467-6494.2005.00368.x
- Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. European Journal of Personality, 1, 141–169.
- Matsumoto, D., Yoo, S. H., Fontaine, J., Anguas-Wong, A. M., Arriola, M., Ataca, B., et al. (2008). Mapping expressive differences around the world: The relationship between emotional display rules and individualism versus collectivism. *Journal of Cross-Cultural Psychology*, 39(1), 55–74. https://doi.org/10.1177/ 0022022107311854
- Murray, C., & Zvoch, K. (2011). Teacher-student relationships among behaviorally at-risk African American youth from low-income backgrounds: Student perceptions, teacher perceptions, and socioemotional adjustment correlates. *Journal of Emotional and Behavioral Disorders*, 19(1), 41–54. https://doi.org/10.1177/ 1063426609353607
- Muthén, B. O. (1994). Multilevel covariance structure analysis. Sociological Methods & Research, 22(3), 376–398. https://doi.org/10.1177/0049124194022003006
- Mythén, B. O., & Asparouhov, T. (2011). Beyond multilevel regression modeling: Multilevel analysis in a general latent variable framework. In J. Hox, & J. K. Roberts (Eds.), *Handbook of advanced multilevel analysis* (pp. 15–40). New York: Taylor & Francis.
- Muthén, L. K., & Muthén, B. O. (1998-2018). Mplus user's guide (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Näring, G., Briët, M., & Brouwers, A. (2006). Beyond demand–control: Emotional labour and symptoms of burnout in teachers. Work & Stress, 20(4), 303–315. https://doi.org/10.1080/02678370601065182
- Näring, G., Vlerick, P., & van de Ven, B. (2012). Emotion work and emotional exhaustion in teachers: The job and individual perspective. *Educational Studies*, 38(1), 63–72. https://doi.org/10.1080/03055698.2011.567026
- Noor, N. M., & Zainuddin, M. (2011). Emotional labor and burnout among female teachers: Work-family conflict as mediator. Asian Journal of Social Psychology, 14(4), 283–293. https://doi.org/10.1111/j.1467-839X.2011.01349.x
- Pianta, R. C. (1999). Enhancing relationships between children and teachers. Washington, DC, US: American Psychological Association. https://doi.org/10.1037/ 10314-000

- Pianta, R. C. (2001). In P. A. Resources (Ed.), Student-teacher relationship scale. Professional manual. FL: Lutz.
- Pianta, H., & Stuhlman. (2003). Relationships between teachers and children. In W. M. Reynolds, & G. E. Miller (Eds.), *Handbook of psychology*. New York, NY: John Wiley.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128(6), 934–960. https://doi.org/10.1037/0033-2909.128.6.934
- Roorda, D. L., Verschueren, K., Vancraeyveldt, C., van Craeyevelt, S., & Colpin, H. (2014). Teacher-child relationships and behavioral adjustment: Transactional links for preschool boys at risk. *Journal of School Psychology*, 52(5), 495–510. https://doi.org/10.1016/j.jsp.2014.06.004
- Roorda, D. L., Zee, M., & Koomen, H. M. Y. (2020). Don't forget student-teacher dependency! A Meta-analysis on associations with students' school adjustment and the moderating role of student and teacher characteristics. *Attachment & Human Development*. https://doi.org/10.1080/14616734.2020.1751987
- Safdar, S., Friedlmeier, W., Matsumoto, D., Yoo, S. H., Kwantes, C. T., Kakai, H., et al. (2009). Variations of emotional display rules within and across cultures: A comparison between Canada, USA, and Japan. Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement, 41(1), 1–10. https:// doi.org/10.1037/a0014387
- Satorra, A., & Bentler, P. M. (2010). Ensuring positiveness of the scaled chi square test statistic. *Psychometrika*, 75(2), 243–248. https://doi.org/10.1007/s11336-009-9135-y
- Snijders, T. A. B., & Bosker, R. J. (1999). Multilevel analysis: An introduction to basic and advanced multilevel modeling. Thousand Oaks, CA: SAGE Publivations INC.
- Spilt, J. L., & Koomen, H. M. Y. (2009). Widening the view on teacher-child relationships: Teachers' narratives concerning disruptive versus nondisruptive children. *School Psychology Review*, *38*(1), 86–101.
 Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance
- Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher–student relationships. *Educational Psychology Review*, 23(4), 457–477. https://doi.org/10.1007/s10648-011-9170-y
- Spilt, J. L., Koomen, H. M. Y., Thijs, J. T., & van der Leij, A. (2012). Supporting teachers' relationships with disruptive children: The potential of relationship-focused reflection. Attachment and Human Development, 14(3), 305–318. https:// doi.org/10.1080/14616734.2012.672286
- Stone, A. A., Schwartz, J. E., Schkade, D., Schwarz, N., Krueger, A., & Kahneman, D. (2006). A population approach to the study of emotion: Diurnal rhythms of a working day examined with the day reconstruction method. *Emotion*, 6(1), 139–149. https://doi.org/10.1037/1528-3542.6.1.139
- Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. Social Psychology of Education, 7(4), 379–398. https://doi.org/10.1007/s11218-004-4229-y
- Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and Teacher Education*, 49, 78–88. https://doi.org/10.1016/j.tate.2015.03.003
- Van Widenfelt, B. M., Goedhart, A. W., Treffers, P. D. A., & Goodman, R. (2003). Dutch version of the strengths and difficulties questionnaire (SDQ). European Child & Adolescent Psychiatry, 12(6), 281–289. https://doi.org/10.1007/s00787-003-0341-3
- Vancraeyveldt, C., Verschueren, K., Wouters, S., Van Craeyevelt, S., Van den Noortgate, W., & Colpin, H. (2014). Improving teacher—child relationship quality and teacher-rated behavioral adjustment amongst externalizing preschoolers: Effects of a two-component intervention. *Journal of Abnormal Child Psychology*, 43(2), 243–257. https://doi.org/10.1007/s10802-014-9892-7
- Verschueren, K., & Koomen, H. M. Y. (2012). Teacher-child relationships from an attachment perspective. Attachment and Human Development, 14(3), 205–211. https://doi.org/10.1080/14616734.2012.672260
- Wang, H., Hall, N. C., Chiu, M. M., Goetz, T., & Gogol, K. (2020). Exploring the structure of teachers' emotional labor in the classroom: A multitraitmultimethod analysis. *Educational Measurement: Issues and Practice*, 39(3), 122–134. https://doi.org/10.1111/emip.12353
- Wang, H., Hall, N. C., & Taxer, J. L. (2019). Antecedents and consequences of teachers' emotional labor: A systematic review and meta-analytic investigation. *Educational Psychology Review*, 31(3), 663–698. https://doi.org/10.1007/s10648-019-09475-3
- Winograd, K. (2003). The functions of teacher emotions: The good, the bad, and the ugly. *Teachers College Record*, 105, 1641–1673.
- Yao, X., Yao, M., Zong, X., Li, Y., Li, X., & Guo, F. (2015). How school climate influences teachers' emotional exhaustion: The mediating role of emotional labor. *International Journal of Environmental Research and Public Health*, 12(10), 12505–12517. https://doi.org/10.3390/ijerph121012505
- Zee, M., de Jong, & Koomen, H. M. Y. (2017). From externalizing student behavior to student-specific teacher self-efficacy: The role of teacher-perceived conflict and closeness in the student-teacher relationship. *Contemporary Educational Psychology*, 51, 37–50. http://doi.org/10.1016/j.cedpsych.2017.06.009.
- Zee, M., Koomen, H. M. Y., & Van der Veen, I. (2013). Student-teacher relationship quality and academic adjustment in upper elementary school: The role of student personality. *Journal of School Psychology*, 51(4), 517–533. http://doi.org/ 10.1016/j.jsp.2013.05.003.
- Zembylas, M. (2002). "Structures of feeling" in curriculum and teaching: Theorizing the emotional rules. *Educational Theory*, 52(2), 187–208. https://doi.org/10.1111/ j.1741-5446.2002.00187.x
- Zhang, Y., Zhang, L., Lei, H., Yue, Y., & Zhu, J. (2016). Lagged effect of daily surface acting on subsequent day's fatigue. Service Industries Journal, 36, 809–826. https://doi.org/10.1080/02642069.2016.1272593