This is a repository copy of *Emotional labor profiles among teachers : associations with positive affective, motivational and well-being factors*.

White Rose Research Online URL for this paper:
http://eprints.whiterose.ac.uk/168401/

Version: Accepted Version

Article:

Emotional Labor Profiles among Teachers: Associations with Positive Affective,

Motivational and Well-being Factors

Irena Burić[a], Lisa E. Kim[b] & Flaviu Hodis[c]

[a] Department of Psychology, University of Zadar, Croatia; e-mail: iburic@unizd.hr

[b] Department of Education, University of York, UK; e-mail: lisa.kim@york.ac.uk

[c] Faculty of Education, Victoria University of Wellington, New Zealand; e-mail:

flaviu.hodis@vuw.ac.nz

Corresponding author:

Irena Burić

Department of Psychology, University of Zadar
Obala kralja Petra Krešimira IV., br. 2
23000 Zadar
Croatia

E-mail: iburic@unizd.hr; buric.irena@gmail.com Phone: +38523200550

Abstract

Research indicates that teachers perform emotional labor on a daily basis. However, previous studies have mostly used a variable-centered approach that examines the associations of emotional labor strategies with particular outcome variables. This approach did not consider the possibility that teachers use different emotional labor strategies simultaneously. Therefore, in this study we took a person-centered approach and explored the emotional labor profiles in a large sample of Croatian teachers (N = 2,002) employed across educational levels (i.e., elementary, middle, and high school levels) by using latent profile analysis. In addition, we examined differences among profiles with regard to teachers' positive affect, self-efficacy, work engagement, and job satisfaction. Results indicated the existence of six emotional labor profiles that were characterized by different combinations of deep acting, hiding feelings, and faking emotions. Profiles of teachers who dominantly rely on deep acting had the most adaptive patterns of analyzed outcomes, while profiles of teachers who reported higher levels of hiding feelings, regardless the level of deep acting, exhibited less desirable levels of positive affect, self-efficacy, work engagement, and job satisfaction.

Keywords: teachers, emotional labor, positive indicators, latent profile analysis

Educational Impact and Implications Statement

Emotional labor can be costly for teachers' motivation and psychological well-being. Deep acting (i.e., trying to experience emotions that are desirable in teaching profession) is as an adaptive emotion regulation strategy for teachers if it is not used in conjunction with high levels of surface acting (i.e., hiding the experiences of "undesirable" emotions and faking the experience of "desirable" emotions). In contrast, surface acting, especially the suppression of emotions experienced while teaching and interacting with students, is maladaptive for teachers' motivation and professional well-being. Therefore, to support teachers' well-being, it may be beneficial to train teachers (e.g., by means of workshops) on how to use reappraisal strategies to modify their experiences of (negative) emotions and prevent the over-reliance on hiding undesirable emotions and faking the desirable ones.

Emotional Labor Profiles among Teachers: Associations with Positive Affective,

Motivational and Well-being Factors

Teachers' emotions have recently emerged as a prominent area of research in education and

educational psychology. Teachers experience a wide variety of emotions associated with their

profession (e.g., Burić, Slišković, & Macuka, 2018; Sutton & Wheatley, 2003) that impact

not only their teaching practices and students' outcomes (e.g., Frenzel, 2014; Frenzel, Goetz,

Stephens, & Jacob, 2009) but also their well-being (Burić & Macuka, 2018; Chang, 2009;

Keller, Chang, Becker, Goetz, & Frenzel, 2014). However, teachers' emotional experiences

and expressions are not necessarily spontaneous and genuine. Instead, their emotions can

often be constrained by certain emotional display rules that are specific to the teaching

profession. In particular, teachers are expected to show positive emotions (e.g., enjoyment

and pride) when students strive and make progress, and to suppress or hide negative emotions

(e.g., anger and hopelessness) when students misbehave in class (Sutton, 2004; Taxer &

Frenzel, 2015). In addition, teachers are expected to keep the intensity of their emotional

experiences to a moderate level (Yin & Lee, 2012).

The process of matching teachers' emotional expressions to such emotional display

rules can lead to experiences of emotional labor. Emotional labor— the regulation of one's

feelings to influence their facial and bodily expressions— has two main forms: deep acting

and surface acting (Grandey, 2000; Hochschild, 1983). Deep acting involves the conscious

management of internal feelings in order to experience the supposed emotion and to modulate

the observable emotional expression; surface acting involves the modification of outward

displays of emotions by hiding and faking to comply with the emotional display rules

(Grandey, 2000). In general, surface acting is considered harmful to one's well-being

whereas findings for deep acting are mixed: this form of emotional labor has been considered

beneficial, harmful, or even unrelated to well-being (Brotheridge & Lee, 2002; Grandey,

2003; Hülsheger & Schewe, 2011). The majority of studies on teachers' emotional labor have used a variable-centered approach (Craig & Smith, 2000) that examines the associations of each emotional labor strategy with particular outcome variables. As a result, they have not considered the possibility that teachers may use different emotional labor strategies simultaneously and have failed to reveal the possible existence of subpopulations of teachers who use distinct combinations of surface and deep acting and who, as a result, exhibit different patterns of professional well-being indicators. Therefore, in recent years, scholars have started to explore teachers' emotional labor through the lens of a person-centered approach (i.e., Cheung & Lun, 2015; Fouquereau et al., 2019).

Variable-and person-centered approaches to data analysis have different assumptions (Masyn, 2013). Specifically, the former (vs. the latter) assumes that the population is homogeneous (vs. heterogeneous) with regard to the associations among the constructs of interest (Masyn, 2013). As a result of this difference, variable-centered techniques aim to analyze associations between/among variables, whereas person-centered approaches focus on the identification of subpopulations of individuals characterized by specific configurations (or profiles) on a set of variables (Fouquereau et al., 2019).

Masyn (2013) argued that person- and variable-centered data analytic strategies complement each other and, thus, should not be seen "as rival or oppositional approaches" (p. 553). Moreover, data analytic techniques belonging to these two sets are appropriate for addressing different types of questions and have distinct strengths and drawbacks, which often complement one another. For example, high correlations among predictors could pose important problems in variable-centered analyses (e.g., inflated standard errors); in contrast, these correlations are modelled readily in person-centered approaches. Similarly, if the assumption of population homogeneity, which governs variable-centered approaches, is unlikely to be met, person-centered analyses enable researchers "to identify latent classes or

groups of individuals characterized by different response patterns on a subset of variables" (Masyn, 2013, p. 553).

Even though researchers have recently started to employ person-centered approaches in their investigation of emotional labor (e.g., Cheung & Lun, 2015; Fouquereau et al., 2019; Gabriel et al., 2015), the available studies were conducted on rather heterogeneous cultures and occupations (but rarely teachers), used relatively small sample sizes, and relied on different conceptualizations of emotional labor. As a result, findings were often inconsistent and knowledge on emotional labor profiles in general, and particularly on teachers' profiles, has remained scarce. However, uncovering profiles of teachers with different constellations of emotional labor strategies that are distinctively related to a variety of outcome indicators is not only relevant for reconciling conflicting and building scant knowledge in the field, but also for endeavors to ensure resources that would promote and maintain satisfactory levels of teachers' well-being and job performance.

Therefore, the current study seeks to explore the existence, number, and types of emotional labor profiles on a large national sample of teachers by using a latent profile analysis (LPA; Asparouhov & Muthén, 2014; Bakk, Tekle, & Vermunt, 2013; Masyn, 2013; Vermunt, 2010; Vermunt & Magidson, 2002). In addition, by examining the differences among profiles with regard to teachers' positive affective, motivational, and well-being factors (i.e., positive affect, teacher self-efficacy, work engagement, and job satisfaction), this study aims to uncover the unobserved profiles of teachers with (sub)optimal constellations of emotional labor strategies.

Effects of Emotional Labor: Results from Research that Adopted a Variable-Centered Approach

Emotional labor can be understood as an umbrella term for an integrated process that encompasses emotional requirements (i.e., emotional display rules of a certain profession),

emotion regulation (i.e., strategies used to regulate inner feelings and outward expressions to meet the emotional display rules – deep acting and surface acting), and emotional performance (i.e., matching emotional display with emotional requirements; Grandey & Gabriel, 2015). According to the self-regulatory view of emotional labor (Diefendorff & Richard, 2008), emotional labor processes unfold during employees' interactions with customers as employees monitor discrepancies between actual and expected emotions. In order to reach their goal, that is, to match felt or expressed emotions with the display rules and, therefore, to reduce the discrepancies, employees mobilize particular emotion regulation strategy.

Deep acting and surface acting are the two main strategies that employees from different occupations, including teachers, can use to reduce such discrepancies and regulate their emotions in the workplace. Grandey (2000) argued that deep acting shares conceptual similarities to situation reappraisal as an antecedent-focused emotion regulation (i.e., an attempt to modify felt emotion), while surface acting resembles suppression as a response-focused emotion regulation (i.e., an attempt to modify or suppress emotional expression; Gross, 1998; Gross & John, 2007). Therefore, deep acting often refers to an effort to change feelings to meet emotional display rules by using reappraisal or refocusing, while surface acting implies suppressing undesirable emotional displays, as well as pretending and faking desirable emotions (Grandey & Gabriel, 2015). For example, in order to be effective, teachers are expected to deliver an enthusiastic style of teaching. Enthusiastic styles of teaching may either reflect teachers' inner experiences of enjoyment or occur as an observable behavior that is not necessary accompanied with the actual experience of this particular emotion (Keller, Hoy, Goetz, & Frenzel, 2016). Therefore, to behave enthusiastically, teachers may engage in deep acting and start to actually experience enjoyment. Alternatively, they may engage in surface acting by pretending to experience enjoyment, that is, by displaying

"faked" enthusiasm to their students. Similarly, teachers who feel frustrated and angered by rude and disrespectful behaviors of certain students may choose either to find reasons for such behavior in students' difficult family circumstances (deep acting) or simply suppress these undesirable emotions to appear calm and professional (surface acting).

Scholars offer different views regarding the potential adversity of engaging in emotional labor for employee's well-being and performance. For example, Hochschild (1983) argued that engaging in either deep acting or surface acting might be harmful since it alienates an individual from his/her sense of true experiences and expressions of their emotions for the sake of the expectations of their workplace. A different conceptual perspective suggests that even though both reappraisal and suppression require directing attention and investing regulatory efforts, which could be demanding for an individual, reappraisal seems to be less costly (Grandey & Melloy, 2017).

In general, surface acting is mostly viewed as problematic and deep acting as more beneficial for one's well-being (Grandey & Gabriel, 2015). Several mechanisms were proposed to explain such associations between surface/deep acting and well-being. For instance, according to the ego-depletion model (Baumeister et al., 1998; Vohs, Baumeister, & Tice, 2007), purposeful self-control and regulatory processes are effortful and deplete mental resources. More specifically, while engaging in surface acting, teachers have to constantly monitor their actual and desired emotions and change emotional expressions when needed, which can drain their mental resources and diminish well-being (Hülsheger & Schewe, 2011). Next, the social interaction model of emotional labor (Côté, 2005) proposes that surface acting involves inauthentic emotional expressions that can hinder positive inter-individual interactions and promote negative ones. For example, if students can detect phoniness in their teachers' emotional expressions, they may start to feel disappointed, disrespectful or even angry, which may increase teachers' stress and consequently impair their well-being and

work motivation. In contrast, amplifying positive emotions via deep acting may result in emotional displays that students perceive as authentic, which may lead to more favorable and satisfying interactions with them (Côté, 2005). In turn, positive and rewarding interactions with students can enhance feelings of efficacy and personal accomplishment (Brotheridge & Lee, 2002). As an illustration, teachers' expressions of genuine positive emotions may lead to greater students' satisfaction and positive behaviors in class, which supports teachers' well-being and motivational outcomes. Notably, emotional labor can shape subsequent emotions. More specifically, surface acting alters outer expressions but leaves the felt (i.e., original) emotions intact. Thus, when teachers try to suppress or hide negative emotions, engaging in surface acting may not stop the experience of adverse feelings and, therefore, might affect negatively their psychological well-being (Gross & John, 2003). In contrast, deep acting truly changes one's felt emotions; that is, it transforms negative emotions into positive ones. In turn, experienced positive emotions contribute to building personal resources and coping mechanisms (Fredrickson, 1998) and positively shape teachers' evaluative judgments about their jobs (Weiss & Cropanzano, 1996).

Meta-analytic findings from variable-centered research across vocational fields (Hülsheger & Schewe, 2011) suggest that surface acting is associated to higher levels of emotional exhaustion, depersonalization, psychological strain, and psychosomatic complaints, and to lower levels of job satisfaction and organizational attachment. In addition, surface acting is related to lower levels of emotional performance, that is, the extent that employees' emotional display meets or exceeds expected service norms (Bono & Vey, 2002). In contrast, deep acting has mostly weak and mixed relationships with well-being outcomes and positive associations with emotional performance outcomes. Notably, research indicates that the effects of surface acting tend to be more pronounced than those of deep acting (van Gelderen, Konijn, & Bakker, 2017).

Similar results were also found within the teaching population, whereby teachers' emotional labor strategies are distinctively related to indicators of well-being. For instance, research has shown that surface acting is associated with higher levels of teachers' occupational stress (Hülsheger, Lang, & Maier, 2010) and burnout (Akin, Aydin, Erdogan, Demirkasimoglu, 2014; Cheung & Lun, 2015b; Näring et al., 2006; Taxer & Frenzel, 2015; Zhang & Zhou, 2008), and with lower levels of job satisfaction (Yin, Huang, Zhang, & Jin, 2013; Zhang & Zhou, 2008). In contrast, deep acting tends to be associated with teachers' greater job satisfaction (Cheung & Lun, 2015b; Zhang & Zhou, 2008) and lower burnout (Akin et al, 2014; Cheung & Lun, 2015b; Philipp & Schüpbach, 2010; Zhang & Zhou, 2008). Nonetheless, there are studies that failed to find any association between deep acting and well-being indicators (e.g., Karim & Weisz, 2011; Näring et al., 2006) or even found a positive relationship between deep acting and emotional exhaustion (e.g., Wrobel, 2013). These inconsistent findings are supported by the results of a recent meta-analysis (Wang et al., 2019), which reported that surface acting is associated with poorer psychological well-being while the relationship between deep acting and psychological well-being was practically non-significant. Mixed and inconsistent findings on the relationship between deep acting and well-being among teachers (and other occupations) are in line with Hochschild's notion that deep acting "involves deceiving oneself as much as deceiving others" (1983, p. 33), which may prove costly in the long run despite some positive momentary effects. In addition, even though emotional display that results from deep acting may appear genuine to the observers (e.g. students) and thus lead to social gains (e.g., more satisfying relationships with students), deep acting still requires making regulatory efforts (Brotheridge & Grandey, 2002; Hobfoll, 1989).

Emotional Labor Profiles in Previous Research

Although both theory and empirical evidence indicate that surface acting is mostly considered as harmful and deep acting as neutral or beneficial (Grandey & Gabriel, 2015; Hülsheger & Schewe, 2011; Morris & Feldman, 1996), the effects of these emotional labor strategies can be quite different depending on the combination of strategies implemented. For instance, Gabriel et al. (2015) found that the beneficial effects of deep acting are reduced when individuals display high levels of surface acting as well. Therefore, investigating multiple emotional labor strategies simultaneously, rather than in isolation, may shed fresh light on the existing mixed findings.

Recently, researchers have started to identify emotional labor profiles and link them to various antecedents and effects. For example, Gabriel et al. (2015) identified five profiles based on two emotional labor strategies (i.e., deep acting and surface acting) across two independent samples of service workers in the United States ($N = 692$) and Singapore ($N = 552$). The five profiles were: *non-actors* (i.e., extremely low levels of both surface acting and deep acting), *low actors* (i.e., similarly low levels of surface and deep acting), *surface actors* (i.e., high in surface acting and low in deep acting), *deep actors* (i.e., high in deep acting and low in surface acting), and *regulators* (i.e., high in both strategies). These profiles were distinctively related to their well-being indicators. More specifically, *surface actors* reported the lowest levels of well-being operationalized through job satisfaction, emotional exhaustion, and inauthenticity. However, *regulators* who had high levels of both deep and surface acting also reported suboptimal well-being. The opposite pattern of results was observed for *deep actors*, *low actors* and *non-actors* whose levels of well-being were mostly desirable.

Gabriel et al.'s (2015) five emotional labor profiles were replicated in a recent study within 884 participants from various jobs and types of work organizations in the UK (Nguyen & Stinglhamber, 2019). Again, *surface actors* exhibited the lowest levels of well-being (i.e.,

emotional exhaustion and turnover intentions) and attitudes toward their organization (i.e., job satisfaction and affective commitment), while *deep actors* exhibited the highest levels of well-being. Overall, these studies suggest that engaging in surface acting (either in isolation or in combination with deep acting) can lead to poorer levels of well-being.

However, quite different profiles were uncovered in a sample of 262 Chinese teachers (Cheung & Lun, 2015) in which emotional labor was operationalized as deep acting, surface acting, and expression of naturally felt emotion. These authors reported three teacher profiles: *emotionally congruent employees* (higher levels of deep acting and naturally felt emotions), *display rules compliers* (higher levels of surface acting and deep acting), and *active actors* (higher levels of all three strategies). *Display rule compliers* exhibited the highest level of job burnout and the lowest level of job satisfaction, while teachers who engaged in the expression of naturally felt emotion (i.e., *emotionally congruent employees* and *active actors*) reported a more desirable pattern of well-being indicators. Almost identical profiles were found in another study that collected data from a sample of Chinese call-center representatives and customer service representatives in retail stores (Cheung, Lun, & Cheung, 2018). Moreover, similar to previous LPA study findings, Cheung and colleagues found that engaging in deep acting was not related to high levels of well-being (i.e., job satisfaction, quality of work life, psychological distress, and work-to-family conflict) when combined with surface acting. In contrast, their results suggest that combining the expression of naturally felt emotions with deep acting may be associated with stronger well-being outcomes.

A recent study took a step forward by using a triadic approach to emotional labor that distinguished between two facets of surface acting — hiding feelings and faking emotions (Fouquereau et al., 2019). This research focused on two samples of employees from France — a group of employees whose job involved direct, intensive, and sustained contact with customers (i.e., 236 teachers and 95 nursing assistants) and a group whose job involved

limited, indirect, or sporadic contact with customers (i.e., 114 workers from employment agency, 103 telephone operators in call centers, and 94 check-out assistants). Fouquereau and colleagues found three profiles in both samples; the structure of the profiles differed between the samples. First, the *high emotional labor* profile was identified in both samples; this profile was characterized by high levels on all three emotional labor strategies (i.e., deep acting, hiding feelings, and faking emotions). Second, the *moderate emotional labor* profile (similarly moderate levels of all three strategies) was identified in the first sample, and the *moderate surface acting and high deep acting* in the second sample of participants occupying a position that involves limited contact with customers (deep acting was much higher than hiding feelings and faking emotions). The third profile was labeled as *low emotional labor* in the first sample (low to moderately low levels on all emotional labor strategies) and as *low surface acting and moderately low deep acting* in the second sample (somewhat higher levels of hiding feelings and faking emotions). The results showed that lower levels of job satisfaction, performance, and psychological detachment, as well as higher levels of emotional exhaustion, sleeping problems, and counterproductive work behaviors were associated with profiles involving high levels of surface acting. Fouquereau et al. (2019) advised that it may be best for employees to use low or moderate levels of surface acting, regardless of how much they use deep acting.

Although the studies cited above showed somewhat mixed findings depending on the operationalization of emotional labor and particular sample of employees, they reached similar conclusions — surface acting is almost always harmful for employees' well-being while deep acting may be beneficial, but only in the absence of surface acting.

Positive Affective, Motivational, and Well-being Outcomes of Teachers' Emotional Labor Profiles

Job satisfaction and burnout have been the most studied well-being outcomes in relation to emotional labor (Grandey & Gabriel, 2015). However, many other individual outcomes of emotional labor are worth examining. In the present study, we investigated the less explored positive factors that may differ across emotional labor profiles. More specifically, we examined positive affective (i.e., positive affect), motivational (i.e., teacher self-efficacy and work engagement), and well-being factors (i.e., job satisfaction) to strengthen our understanding of how the interactions among facets of emotional labor can shape individuals' positive work-related experiences. We chose positive affect and self-efficacy given their importance in shaping teachers' performance and professional well-being (e.g., Burić & Kim, 2020a; Frenzel, 2014; Frenzel et al., 2016; Kim & Burić, 2020; Klassen & Tze, 2014; Zee & Koomen, 2016). Similarly, we focused on work engagement and job satisfaction because of their relevance for employees' performance, health, and organizational commitment (Bakker & Demerouti, 2008; Gaertner, 1999; Innstrand, Langballe, & Falkum, 2011; Judge, Thoresen, Bono, & Patton, 2001).

Positive affect. Positive affect represents a combination of pleasantness and activation and pertains to experiences of positive mood, that is, feelings of joy, interest, enthusiasm, or alertness (Larsen & Diener, 1992). Daily use of surface acting seems to subsequently raise the experience of negative affect while daily engagement in deep acting not only decreases negative affect but also increases positive affect (Scott & Barnes, 2011). Similar results were found in a longitudinal study with teachers — deep acting predicted greater joy while hiding feelings predicted hopelessness (Burić, Slišković, & Penezić, 2019).

Teacher self-efficacy. Teacher self-efficacy is rooted in social-cognitive theory (Bandura, 1977) and refers to a set of beliefs about one's ability to manage classrooms, engage students, and use effective instructional strategies (Tschannen-Moran & Hoy, 2001). Teachers' self-efficacy can be influenced by the emotional experiences that are associated

with a particular emotional labor strategy. More specifically, according to the social-cognitive theory (Bandura, 1977), emotional arousal and emotions serve as a source of information about one's performance as well as a filter through which efficacy information is interpreted (Kavanagh & Bower, 1985). Indeed, empirical evidence suggests that positive affective experiences predict higher levels of self-efficacy beliefs while negative affective experiences predict lower levels of self-efficacy beliefs (e.g., Burić & Moè, 2020; Burić, Slišković, & Sorić, 2020; Medrano, Flores-Kanter, Moretti, & Pereno, 2016). Previous studies have often portrayed self-efficacy as a personal resource that moderates the relationship between emotional labor and well-being outcomes (e.g., Xanthopoulou, Bakker, & Fischbach, 2013; Hsieh, Hsieh, & Huang, 2016; Sloan, 2014). Nevertheless, it is reasonable to assume that self-efficacy beliefs are also directly affected by emotional labor strategies because of, for example, the emotional experiences that stem from them.

Work engagement. Work engagement is an affective-motivational, positive, and fulfilling state of work-related well-being that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). In spite of the fact that the relationship between emotional labor and work engagement has been rarely examined (e.g., Lu & Guy, 2014), it can be assumed that emotional labor shapes work engagement (e.g., via the experience of positive or negative affective experiences). More specifically, deep acting in most instances results in experiencing positive affect, which functions as a signal to approach and to initiate a goal-directed action (Elliot, 2006; Kazén, Kaschel, & Kuhl, 2008). In addition, positive affect broadens momentary thought-action repertoires by boosting individuals' awareness and encouraging novel, diverse, and exploratory thoughts and actions. Over time, this broadened behavioral repertoire builds skills and resources, therefore, enabling individuals to become absorbed in an ongoing activity, that is, to be engaged in their work (e.g., Baumann & Kuhl, 2002; Frederickson, 2001). On the contrary,

negative affective experiences that may endure (or even worsen) as a result of surface acting, interfere with the ongoing stream of action, narrow mental processes, and block mobilization of cognitive resources and behavioral initiatives, thus impairing work engagement (Bledow, Schmitt, Frese, & Kühnel, 2011; Frederickson, 2001).

Job satisfaction. Job satisfaction can be defined as one's evaluation of their job or its environment (Weiss, 2002). Job satisfaction is tightly related to affective experiences on the job and can be defined as an evaluative judgement that stems from experienced affect in a workplace (Brief & Weiss, 2002). As already noted, surface acting is related to reduced job satisfaction (Hülsheger & Schewe, 2011; Wang et al., 2019) while deep acting is related to greater job satisfaction (Cheung & Lun, 2015; Grandey & Gabriel, 2015).

The Present Study

The aim of the present research is to identify emotional labor profiles among Croatian teachers employed at different educational levels (i.e., elementary, middle, and high school levels). The Croatian educational system has been undergoing transition within the European Union integration processes during the last several years to ensure a delivery of high-quality education as well as highly skilled workforce that can successfully compete on a global labor market. To accomplish this important task, Croatian teachers are expected to provide high-quality instruction, which, among others things, implies appropriate emotional responding in the classroom (Sutton, 2004) and providing adequate emotional support toward their students (Fauth et al., 2014; Kunter et al., 2008). In order to achieve these goals, teachers often have to rely on different forms of emotional labor, which may be used in isolation or in conjunction.

Research that examines emotional labor via person-centered approaches is scant. In addition, past studies often relied on a different operationalization of the emotional labor construct and used diverse samples of employees. Consequently, the number and type of the uncovered emotional labor profiles were oftentimes inconsistent. For example, even though

Gabriel et al. (2015) and Nguyen and Stinglhamber (2019) identified five emotional labor profiles that overlapped in regard to their structure, the three emotional labor profiles identified in the studies of Cheung et al. (2015) and Fouquereau et al. (2019) were conceptually distinct.

Studies that explored emotional labor profiles among teachers are even scarcer (e.g., Cheung & Lun, 2015; Fouquereau et al., 2019). Moreover, such studies used information provided by relatively small samples, and relied on distinct conceptualization of emotional labor. Therefore, in the present research, and in line with Fouquereau et al.'s (2019) study, we took a triadic approach to teachers' emotional labor by measuring deep acting and two facets of surface acting, that is, hiding feelings and faking emotions. Differentiating these two forms of surface acting is essential due to their distinct relations with various important outcomes (e.g., Burić, 2019; Burić & Frenzel, 2020; Burić et al., 2019; Lee & Brotheridge, 2011; Lee, Lowell, & Brotheridge, 2010). In addition, compared to previous research, we used a considerably larger sample of teachers ($N > 2,000$) employed across different levels of compulsory education to fully discover the possible richness of profiles based on distinct constellations of emotional labor strategies.

Considering the inconsistent patterns of results of previous studies, which we reported earlier, formulating specific hypotheses regarding the number and the types of profiles is rather difficult. Nonetheless, we expected to uncover several profiles of teachers characterized by distinct combinations of emotional labor strategies, which would, to some extent, be consistent with profiles found in previous studies. In addition, based on the theoretical considerations and empirical results outlined previously, we expected that profiles of teachers who rely more heavily on surface acting (regardless of their usage of deep acting) would also be associated with lower levels of positive affect, teacher self-efficacy, work engagement, and job satisfaction. In contrast, we expected that profiles of teachers who are

more prone to engage in deep acting and are less likely to use surface acting should be associated with higher levels of positive affect as well as greater levels of job satisfaction, teacher self-efficacy, and work engagement.

Method

Participants and Procedure

The sample included 2002 teachers (1659 female, 317 male, and 56 did not indicate their gender) employed across 135 state schools in Croatia. Teachers were on average 42.34 years old ($SD = 10.13$) and had 15.95 years of teaching experience ($SD = 10.43$). Of the total sample, 584 teachers taught at elementary school level, 730 teachers taught at middle school level, and 536 teachers taught at secondary school level. Some teachers ($n = 170$) did not report the educational level at which they taught, while only two teachers taught at multiple educational levels (e.g., they were both middle and secondary school teachers). As 30 teachers had missing data for all profile indicators, the effective sample size was 1992 teachers.

The participation in the study was voluntary and anonymous. Teachers were recruited with the assistance of chiefs of the County Councils of School Psychologists in Croatia who contacted the school psychologists employed in schools under their supervision and obtained the consent of teachers who agreed to enroll in the research. An average response rate across schools was 30%. Data collection was conducted via postal service and with an assistance of school psychologists. School psychologists received paper-and-pencil questionnaires by postal service and distributed them to teachers. After approximately one week, teachers returned the filled in questionnaires (each in its closed envelope) to school psychologists who, then, sent them back to the research team. This research was approved by an ethical committee at the institution of employment of the first author.

Measures

Emotional labor. Teachers' emotional labor was measured using the Emotional Labor Scale (ELS; Brotheridge & Lee, 2003; Lee & Brotheridge, 2010). This scale consists of three subscales that assess deep acting (3 items; $\alpha = .86$; sample item: "Make an effort to actually feel the emotions I need to display"), hiding feelings (3 items; $\alpha = .80$; sample item: "Hide my true feelings about a situation"), and faking emotions (3 items; $\alpha = .76$; sample item: "Pretend to have emotions that I don't really have"). Teachers rated how often they perform the described behaviors in a typical workday using a five-point rating scale ranging from 1 (never) to 5 (always).

Positive affect. Teachers' positive affect was assessed with the Positive Affect Scale of the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988), which consists of adjectives describing positive affective states (10 items, $\alpha = .90$; sample items: e.g., "enthusiastic", "excited", "strong"). Teachers rated the extent to which they felt in a described way at their work, during the past week, on a five-point scale ranging from 1 (very slightly or not at all) to 5 (extremely).

Teacher self-efficacy. Teachers' self-efficacy was measured by the Teacher Self-Efficacy Scale (TSES; Schwarzer, Schmitz, & Daytner, 1999), which taps self-efficacy beliefs in various domains of teaching (e.g., interactions with students and parents, coping with job stress) (10 items, $\alpha = .90$; sample item: "I am convinced that I am able to successfully teach all relevant subject content to even the most difficult students"). Teachers rated the extent to which each belief is true for themselves on a four-point scale ranging from 1 (not at all true) to 4 (exactly true).

Work engagement. Teachers' work engagement was assessed by the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003). UWES consists of three subscales that measure vigor (6 items, $\alpha = .90$; sample item: "At my work, I feel bursting with energy"), dedication (5 items, $\alpha = .84$; sample item: "I find the work that I do full of meaning and

purpose"), and absorption (6 items, α = .82; sample item: "I am immersed in my work").

Teachers rated how often they feel in the described way at their work by using a seven-point

scale ranging from 0 (never) to 6 (always/every day).

Job satisfaction. Teachers' job satisfaction was measured by the Job Satisfaction

Scale (Judge et al., 2001) that gauges overall satisfaction with job (5 items, α = .90; sample

item: "I feel fairly satisfied with my present job"). Teachers evaluated their level of

agreement with each item on a 7-point scale ranging from 1 (completely disagree) to 7

(completely agree).

Statistical Analyses

As a preliminary step, descriptive statistics and Pearson correlation coefficients

among teacher demographics and study variables were calculated. A latent profile analysis

was then conducted to determine the number and types of emotional labor profiles among

teachers. Subsequently, extracted profiles of teachers were compared based on affective,

motivational, and well-being factors, namely, positive affect, teacher self-efficacy, work

engagement, and job satisfaction.

Latent profile analysis (LPA) is a mixture modeling (McLachlan & Peel, 2000) data

analytic technique that employs "response profiles, or pattern of observed variable score

elevations" (Peugh & Fan, 2013, p. 618) to uncover a set of unobserved (i.e., latent) classes.

By means of LPA, researchers model participants' heterogeneous patterns of responses to

latent class indicators as a mix of normal distributions within each class (Peugh & Fan, 2013;

Tein, Coxe, & Cham, 2013). When the profile indicators are assumed to be uncorrelated

within latent classes (or locally independent; Pastor & Gagné, 2013; Peugh & Fan, 2013;

Tein et al., 2013; Vermunt, 2010; Vermunt & Magidson, 2002), LPA represents the

correlations among these indicators in the population by means of mixing classes

characterized by different indicator means (Pastor & Gagné, 2013). When local independence

is imposed, which was the case for this research, LPA estimates three types of parameters in each class: the mean and variance of each indicator and the percentage of participants who were classified in the given class.

Conducting LPA involves two steps. In step one (i.e., latent class enumeration), researchers determine the number of latent classes and highlight the mean response profile in each latent class (Peugh & Fan, 2013). To do so, they examine information provided by multiple statistical indexes. Informed by widely used methodological recommendations (e.g., Nylund, Asparuhov, & Muthén, 2007; Pastor & Gagné, 2013; Peugh & Fan, 2013; Tein et al., 2013), we took into consideration the Akaike's Information Criterion (AIC; Akaike, 1973), the Bayesian Information Criterion (BIC, Schwarz, 1978), the sample-size adjusted BIC (SABIC; Sclove, 1987), as well as the adjusted and bootstrapped likelihood ratio test (ALRT and BLRT; McLachlan & Peel, 2000), and the entropy (Celeux & Soromenho, 1996); for in-depth discussions and examples of LPA model building, estimation, and interpretation of findings, interested readers could see Masyn (2013). For AIC, BIC, and SABIC, lower (vs. higher) values indicate a model that fits better (vs. worse). ALRT and BLRT test whether a more complex model (i.e., a k-class model) fits better than a model that has one less latent class (i.e., a k-1 class model). A p-value associated with ALRT (BLRT) below the significance level (i.e., .05) indicates a better fit for the more complex model (i.e., the k-class model) compared to its simpler counterpart. Entropy is an index that quantifies the separation of latent classes. Entropy values range between 0 and 1, with higher values indicating better class separation.

All LPAs in this study were conducted in Mplus, version 8.2 (Muthén & Muthén, 2010). To use all available data, we employed full information maximum likelihood estimation (FIML, Arbuckle, 1996) with Mplus' robust maximum likelihood estimator (MLR). All LPA models investigated estimated freely the means of the profile indicators in

each latent class. Most indicator variances were also estimated freely in each class (for exceptions see Table 2 and the discussion in the 'Results' section). The covariances among indicators within latent classes were fixed to zero in all models.

Step two of conducting LPA involves analyzing the extent to which the latent classes (profiles) are similar (vs. different) with regard to the set of six investigated factors. To undertake this step, we employed the AUXILIARY option of the VARIABLE command in Mplus (see Asparouhov & Muthén, 2014 for more details). Specifically, we used Mplus' DU3STEP command — that implements the 3-step approach modified by Vermunt (2010) — to include these auxiliary factors in the latent profile analyses; this allows the auxiliary factors to have unequal means and variances across classes (Asparouhov & Muthén, 2014). Some simulation work (Asparouhov & Muthén, 2014, 2020; Bakk et al. 2013; Vermunt, 2010) suggest that this approach performs well in most conditions, with the exceptions of those simultaneously characterized by low sample size and low/very low class separation.

Results

Descriptive statistics and bivariate correlations between the study variables are shown in Table 1. As can be seen, deep acting was positively associated with positive affect, self-efficacy, dimensions of work engagement, and job satisfaction. In contrast, the two facets of surface acting (i.e., hiding feelings and faking emotions) were negatively correlated with the outcome variables.

- Table 1 -

Latent Class Enumeration

In the first step of the LPA, we identified the number of classes that modeled appropriately participants' endorsement of the profile indicators. LPA used three indicators, which were calculated as the mean scores of the deep acting, hiding feelings, and faking emotions items, respectively. The means and standard deviations for the indicators (in the

total sample) are summarized in the last two rows of Table 1. The (absolute) values of

skew/kurtosis for deep acting (-0.667/0.213), hiding feelings (0.158/-0.024), and faking

emotions (0.566/-0.079) were small or very small and lower than the recommended cutoff

values (i.e., 2.00 for skew; 7.00 for kurtosis). These results suggest that the assumption of

multivariate normality of indicators was not problematic (Curran, West, & Finch, 1996).

For the models with 3 – 7 classes, the analyses encountered estimation problems. To

overcome these problems, the variances of one or two indicators were restricted to small

values in one or two classes (see Table 2 for details).

-   Table 2 -

Table 2 indicates that AIC did not offer useful information for latent class

enumeration; across the number of latent classes examined, AIC values decreased as the

numbers of classes extracted increased. The examination of the results associated with the

BLRT was also not fruitful, as this test statistic invariably favored the more complex models

over the simpler ones. Given that the 7-class model had a very small class (i.e., $n = 13$; 0.65%

of the sample), we did not consider models with 7 or more classes as being potentially

appropriate. BIC, SABIC, and A-LRT favored the 6-class model; the value of the entropy

associated with the 6-class model suggested an appropriate separation of classes. Taken all of

these aspects into consideration, we retained the 6-class model. The mean profiles

corresponding to the six classes are represented graphically in Figure 1; the characteristics of

the profiles are summarized in Table 3.

-   Figure 1 -

-   Table 3 -

Description of Latent Classes/Profiles

These six emotional labor classes or profiles are displayed in Figure 1. The first latent

profile is labeled *low regulators* (14.69% of the sample) and was characterized by relatively

low levels of all three emotional labor strategies. However, even though all three emotional labor strategies were generally low, level of deep acting (M_{DA} = 2.61) was somewhat higher than levels of hiding feelings (M_{HF} = 2.36) and faking emotions (M_{FE} = 1.90).

The second latent profile is labeled *non-actors* (4.79%) and included teachers who rarely used an emotional labor strategy. Nonetheless, teachers classified in this profile still used hiding feelings with somewhat higher frequency (M_{DA} = 1.14; M_{HF} = 1.59; M_{FE} = 1.08).

The third latent profile was labeled *true deep actors* (18.68%). Teachers in this group reported moderate to high levels of deep acting (M_{DA} = 3.82) along with low levels of hiding feelings (M_{HF} = 1.76) and faking emotions (M_{FE} = 1.10).

The fourth profile, labeled *regulators* (20.13%), was characterized by moderate levels of all three emotional labor strategies (M_{DA} = 3.39; M_{HF} = 2.97; M_{FE} = 2.78). On average, teachers in this profile used slightly more frequently deep acting than hiding feelings and faking emotions.

The fifth profile comprised the largest subgroup of teachers (36.21%) and was labeled *deep actors*. It included teachers who had moderate to high levels of deep acting (M_{DA} = 3.90) and moderate to low levels of hiding feelings (M_{HF} = 2.31) and faking emotions (M_{FE} = 1.88). This group used similarly high levels of deep acting as the true deep actors; however, they used slightly higher levels of the other two strategies.

Finally, the sixth profile, labeled *suppressors* (5.50%) included teachers with moderate to high level of all three emotional labor strategies (M_{DA} = 3.33; M_{HF} = 3.88; M_{FE} = 3.05). Notably, teachers classified in this profile reported using hiding feelings somewhat more frequently than deep acting and faking emotions.

A closer inspection of these results reveals the existence of 'parallel' latent profiles with similar constellations of emotional labor strategies among teachers who engaged in emotional labor more or less frequently.. More specifically, *low regulators* (profile 1) and

regulators (profile 4) were characterized by similar patterns of emotional labor strategies (i.e., deep acting was stronger than hiding feelings, which was stronger than faking emotions), but *regulators* used these strategies more frequently than *low regulators*. Similarly, *non-actors* (profile 2) and *suppressors* (profile 6) predominately relied on hiding feelings but *suppressors* used this strategy much more often. Lastly, both *true deep actors* (profile 3) and *deep actors* (profile 5) frequently engaged in *deep acting* but *true deep actors* seldom used hiding feelings and faking emotions; in contrast, *deep actors* used these two strategies more frequently.

Comparisons among the Emotional Labor Profiles on the Six Factors

In step two, we examined similarities and differences among these emotional labor profiles with regard to six factors (i.e., positive affect, teacher self-efficacy, vigor, dedication, absorption, and job satisfaction). The results of these analyses are discussed below.

Positive affect. Teachers classified in profile 3, *true deep actors*, had the highest average level of this factor, followed closely by teachers classified in profile 5 (*deep actors)*; the difference between these two profiles was not statistically significant. The third highest average level of positive affect pertained to profile 2 (*non-actors*); the difference between profile 2 and profile 5 (*deep actors*) was not statistically significant, whereas that between profile 2 (*non-actors*) and profile 3 (*true deep actors*) was. On average, positive affect was the lowest in profile 6 (*suppressors*) and profile 1 (*low regulators*); the difference between these mean values was not statistically significant. The third lowest average value for this factor corresponded to profile 4 (*regulators*). The differences between profile 4, on the one hand, and profiles 1 (*low regulators*) and 2 (*non-actors*), on the other, were not statistically significant. However, positive affect in profile 4 (*regulators*) was significantly higher than in profile 6 (*suppressors*) and significantly lower than in profiles 3 (*true deep actors*) and 5 (*deep actors)*.

Teacher self-efficacy. Results in Table 4 indicate that differences among classes/profiles with regard to this factor were generally small. Nevertheless, teachers classified in class/profile 3 (*true deep actors*) had significantly higher levels of self-efficacy than teachers classified in all the other classes/profiles. The second and third highest levels on this factor pertained to profile 5 (*deep actors*) and profile 2 (*non-actors*); the difference between these two profiles was very small and not statistically significant. Profile 1 (*low regulators*) and profile 4 (*regulators*) had practically identical average levels of teacher self-efficacy. The magnitude of this factor was the lowest for profile 6 (*suppressors*); however, the differences among the latter three profiles (i.e., *low regulators, regulators,* and *suppressors*) were not statistically significant.

Vigor. The highest average levels for this factor were recorded for profile 3 (*true deep actors*) and 5 (*deep actors*); the mean levels for these profiles were identical. The third highest average level of vigor pertained to profile 2 (*non-actors*); the difference between profile 2 and profile 3 (*true deep actors*) was not statistically significant. On average, vigor was the lowest in profiles 6 (*suppressors*) and 1 (*low regulators*); the difference between them was not statistically significant. The third lowest mean value on this factor corresponded to profile 4 (*regulators*); this value was significantly higher than the corresponding values for profiles 6 (*suppressors*) and 1 (*low regulators*) and significantly lower than the average vigor in profiles 2 (*non-actors*), 3 (*true deep actors*), and 5 (*deep actors*).

Dedication. Results summarized in Table 4 indicate that profiles 3 (*true deep actors*) and 5 (*deep actors*) had the highest average values for this factor; the difference between these profiles was not statistically significant. The third highest average level of dedication corresponded to profile 2 (*non-actors*); the difference between this profile and profile 5 (*deep actors*) was not statistically significant. The lowest average levels of dedication were

associated with profile 6 (*suppressors*) and profile 1 (*low regulators*); the difference between these two profiles was not statistically significant. The third lowest level of dedication pertained to profile 4 (*regulators*); the mean difference between profile 4 and profile 6 (*suppressors*) was not statistically significant; the remaining differences in dedication involving profile 4 were statistically significant.

Absorption. Teachers classified in profile 3 (*true deep actors*) and profile 5 (*deep actors*) had the highest levels of absorption of all profiles; the difference between them was not statistically significant. The third highest average level of this factor corresponded to profile 2 (*non-actors*); the difference between this profile and profile 5 (*deep actors*) was not statistically significant. The lowest average levels of absorption were associated with profile 6 (*suppressors*) and profile 1 (*low regulators*); the difference between these two profiles was not statistically significant. The third lowest level of absorption pertained to profile 4 (*regulators*); profile 4 had a significantly higher average value of absorption than profiles 6 (*suppressors*) and 1 (*low regulators*) and a significantly lower mean level than profiles 5 (*deep actors*) and 3 (*true deep actors*). The difference between profiles 4 (*regulators*) and 2 (*non-actors*) was not statistically significant.

Job satisfaction. Teachers classified in profile 3 (*true deep actors*), profile 5 (*deep actors*), and profile 2 (*non-actors*) had the highest mean levels on this factor. The differences among them were not statistically significant (see Table 4). Teachers classified in profiles 3, 5, and 2, had significantly higher levels of job satisfaction than their counterparts in profile 4 (*regulators*), profile 1 (*low regulators*), and profile 6 (*suppressors*). The differences among the latter three profiles (i.e., *regulators*, *low regulators*, and *suppressors*) were not statistically significant.

Of all the profiles, *true deep actors* had the highest and *deep actors* had the second highest mean values on all the examined outcomes. The differences between these two

profiles were generally small and most often not statistically significant. *Non-actors* and *regulators* had the third and, respectively, the fourth highest average values for the outcomes investigated. The differences between these profiles were somewhat larger for job satisfaction, vigor, and dedication than for the remaining outcomes. Finally, *suppressors* had the lowest, and *low regulators* the second lowest, mean values for the outcomes analyzed. None of the differences between these profiles was statistically significant. A graphical representation of the mean differences across the six profiles with regard to the six factors (i.e., positive affect, self-efficacy, vigor, dedication, absorption, and job satisfaction) is included in Figure 2.

Moderators. We examined similarities/differences among profiles with regard to teachers' gender, age, teaching experience, and educational level at which they taught. Results of these analyses suggest that gender was unrelated to latent class and that the profiles enumerated were relatively consistent in terms of teachers' age and level of experience. Finally, the results indicate that the school level did not have a close association with latent class. Overall, these findings suggest that teachers' demographic variables explored in this study had no meaningful associations with the latent profiles uncovered (see Table S1 in Supplemental Material).

- Table 4 –

- Figure 2 -

Discussion

The aim of this research was to identify the emotional labor profiles in a large sample of teachers. To do so, we investigated whether different combinations of deep acting and two facets of surface acting (i.e., hiding feelings and faking emotions) underpin distinct subpopulations of teachers. In addition, we sought to investigate whether emotional labor

profiles differ with regard to six key positive job-related factors (i.e., positive affect, teacher self-efficacy, three dimensions of work engagement, and job satisfaction).

The research uncovered six emotional labor profiles that were characterized by different combinations of deep acting, hiding feelings, and faking emotions. The largest profile of teachers, labeled *deep actors*, reported that they mostly use deep acting, but also sometimes rely on both hiding feelings and faking emotions. The second largest profile (i.e., *regulators*) moderately used all three strategies, but with somewhat higher frequency of deep acting. The next profile of teachers was labeled *true deep actors* because these teachers used almost exclusively deep acting. Next, *low regulators* engaged in all three emotional labor strategies with a similar low frequency; once again, deep acting was reported to be used slightly more frequently than hiding feelings and faking emotions. The last two profiles of teachers were the smallest (in terms of number of teachers) and were labeled *suppressors* (they frequently used all three strategies, but mostly hiding feelings) and *non-actors* (they rarely used any strategy but when they did, it is likely they chose hiding feelings).

The number and the types of profiles identified in the present research do not completely replicate prior findings. More specifically, our analysis uncovered six emotional labor profiles while previous studies identified five (Gabriel et al., 2015; Nguyen & Stinglhamber, 2019) or three profiles (Fouquereau et al., 2019; Cheung & Lun, 2015; Cheung et al., 2018). When making these comparisons, it is important to emphasize that previous research used different conceptualizations of the emotional labor construct, which may had led to different number and constellations of profiles. For instance, some researchers assessed only two forms of emotional labor (i.e., deep acting and surface acting; Gabriel et al., 2015; Nguyen & Stinglhamber, 2019) while others additionally assessed the expression of naturally felt emotions (Cheung & Lun, 2015; Cheung et al., 2018). From our understanding, the study conducted by Fouquereau and colleagues was the only one that used the triadic approach to

emotional labor, which is the approach we employed in this research. However, as noted above, these authors found only three profiles in their subsample of teachers and nursing assistants – *high emotional labor* profile (i.e., high levels of all emotional labor strategies), *moderate emotional labor* profile (i.e., moderate levels on all emotional labor strategies), and *low emotional labor* profile (i.e., low to moderately low levels of all emotional labor strategies). Moreover, it seems that only *low emotional labor* profile and *high emotional labor* profile found by Fouquereau and colleagues resemble relatively closely the *non-actors* profile and *regulators* profile revealed in the present research, respectively, indicating greater diversification of profiles in a large sample of Croatian teachers.

In general, prior studies included diverse samples of employees that mostly came from non-teaching occupations as well as samples from different countries and cultural backgrounds, which may have contributed to the disparities in terms of the resulting number and types of profiles. In contrast, our research collected data only from teachers. Next, the sample size in the current study was quite large, which could have raised the likelihood of a larger number of profiles being identified. Lastly, the nature of the current study's profile enumeration process and the attendant decisions regarding the number of profiles, could have also contributed to the current results diverging from those of other studies.

Nonetheless, some of the six profiles found in our sample are directly comparable to profiles uncovered in previous research other than those found in Fouquereau et al.'s study. For instance, when compared to profiles from other studies (i.e., Gabriel et al., 2015; Nguyen & Stinglhamber, 2019), *low regulators* are similar in the constellation of emotional labor strategies to "low actors", *true deep actors* are similar to "deep actors", while *non-actors* and *regulators* identified in our study closely resemble "non-actors", and "regulators" revealed in their studies, respectively.

As we underlined previously, this research revealed "parallel" latent emotional labor profiles, which have similar combinations of emotional labor strategies but are used with different frequency. In particular, *non-actors* and *suppressors* share the same constellation of strategies (i.e., predominately rely on hiding feelings), but *suppressors* use them with higher frequency. The same is true for *deep actors* and *true deep actors*, as well as for *low regulators* and *regulators*.

Notwithstanding their similarities in the rank-order of the indicators, the *non-actors* and *suppressors* profiles differed significantly with regard to all the outcomes investigated. In the same vein, although *low regulators* and *regulators* had the same rank-order of the magnitudes of their indicators, these profiles were characterized by significant differences with regard to three outcomes; namely, vigor, dedication, and absorption. These results support our decision to enumerate six profiles rather than a smaller number of profiles. Moreover, the decision reflects an important strength of this research — the large sample size enabled us to reveal fine-grained differences in combinations of emotional labor strategies. In addition, the findings underline that adopting a person-centered approach in the investigation of emotional labor of teachers enables us to explore the richness of subpopulations of teachers characterized by their uses of distinct constellations of strategies.

Differences in Affective, Motivational, and Well-Being Factors among Emotional Labor Profiles

An important aim of our research was to examine similarities and differences among the emotional labor profiles with regard to positive affect, teacher self-efficacy, work engagement, and job satisfaction. We found that *true deep actors* and *deep actors* reported the highest levels of these outcomes. They were followed by the *non-actors* and *regulators*, while the *low regulators* and *suppressors* displayed the lowest levels of the outcomes. A closer look into these differences leads us to four conclusions. First, relying predominately on

deep acting while keeping the use of hiding feelings and faking emotions at low to moderate levels of frequency appears to be the most adaptive pattern; this is reflected in relatively high mean values of the outcome measures among the *true deep actors* and *deep actors*. This result is also in line with some previous variable-centered research, which showed deep acting is associated with higher levels of positive affective experiences and well-being (e.g., Burić et al., 2019; Hülsheger & Schewe, 2011; Scott & Barnes, 2011). Other studies using a person-centered approach have similarly demonstrated the beneficial effects of deep acting — deep acting combined with low levels of surface acting was related to greater professional well-being (Gabriel et al., 2015; Nguyen & Stinglhamber, 2019).

Second, high frequency of suppression (i.e., hiding feelings), regardless of the frequency of deep acting, seems maladaptive for teachers' affect, motivation, and well-being; this is reflected in the fact that *suppressors* had the lowest mean values of the outcome measures among all profiles. Suppression, a form of surface acting, is effortful and depletes mental and well-being resources (Baumeister et al., 1998; Hülsheger & Schewe, 2011). In addition, it may hinder positive and satisfying relationships with others (e.g., students) due to the perceived inauthenticity of ones' emotional expressions (Côte, 2005). Moreover, suppression does not actually alter the experienced (and mostly negative) emotions; instead, these adverse affective states endure and hinder psychological well-being and positive professional development. The negative consequences of suppression (and surface acting more generally) have been identified in both variable-centered research (e.g., Hülsheger & Schewe, 2011; Kammeyer-Mueller et al., 2013; Morris & Feldman, 1996) and person-centered research. More specifically, prior studies that analyzed emotional labor via a latent profile analysis came to a similar conclusion — surface acting in isolation or combined with deep acting is related to poorer job-related outcomes (Cheung et al., 2018; Fouquereau et al., 2019; Gabriel et al., 2015; Nguyen & Stinglhamber, 2019).

Third, the profile of *non-actors*, which was characterized by low frequency of all three emotional labor strategies (but somewhat higher frequency of hiding feelings), also had relatively high levels of analyzed outcomes. This suggests that in order to keep their positive affect, self-efficacy, work engagement, and job satisfaction at acceptable levels, it is not necessary that teachers engage in deep acting. Instead, it seems that avoiding any kind of regulation of emotions could be a desirable strategy as well. This result supports the perspective according to which emotional labor may be harmful to personal well-being because one's use of emotional labor strategies treats desirable emotional expressions as entities, which can ultimately alienate oneself from the authentic self (Hochschild, 1983).

Lastly, compared to the other facet of surface acting (i.e., hiding feelings), faking emotions seems to be less important in explaining the differences in the analyzed outcomes. In both the total sample and in each of the profiles, teachers more frequently suppress than fake their emotions. This finding suggests that even though one of the emotional requirements of the teaching profession is to show positive emotions (e.g., Sutton, 2004; Taxer & Frenzel, 2015), which could also be accomplished through faking (Taxer & Frenzel, 2015), teachers were less likely to report that their emotional expressions in classrooms were unauthentic. In turn, this may reflect their true tendency to comply with the emotional display rules (e.g., by engaging in deep acting), but also the possibility of their engagement in socially desirable responding.

Limitations and Future Directions

The present research had certain limitations that should be mentioned to provide context in the general interpretation of the results. First, all study variables were assessed via the same method, that is, self-report. Self-reports may be laden with social desirability effects but also by common-method bias, which may lead to artificial inflation of correlations among analyzed variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Future studies should

consider using other sources of report when assessing the outcome indicators to provide more accurate estimates of the established effects. Moreover, measures of teacher self-efficacy and work engagement can be complemented by school principals' reports of teacher motivation or by data on actual teacher turnover to reveal additional associations between teacher motivation and their emotional labor profiles.

Second, we relied on a cross-sectional design, which precluded us from drawing any conclusions regarding the directionality of the observed associations among distinct profiles and analyzed outcomes. Employing longitudinal designs would enable investigating stability of emotional labor profiles across time, as well as examining the direction of the associations between profiles and outcomes.

Third, this study focused only on the tentative outcomes of emotional labor rather than both its antecedents and outcomes. Even though different profiles of teachers tended to differ in their levels on the six factors, the profiles had very weak or nonsignificant associations with teachers' demographics (e.g., gender, age) or teaching characteristics (e.g., years of teaching experience, educational level at which they taught). Thus, future studies should aim to examine a wider array of determinants of emotional labor profiles among teachers — whether it be personal (e.g., dispositional affectivity, personality traits) and/or organizational (e.g., perceived principals' and colleagues' support, workload, emotional requirements). Moreover, future studies should examine a wider variety of outcomes (e.g., indicators of teacher effectiveness) as well as implement longitudinal designs. In addition, future research could investigate profiles of teachers defined by emotion regulation strategies other than deep acting and surface acting. For instance, teachers may use a number of other strategies to regulate and cope with their emotions at workplace (e.g., situation selection, active modification of situational features, attentional deployment, deep breathing, venting, and seeking social support; Burić, Penezić, & Sorić, 2017; Taxer & Gross, 2018). Exploring

profiles defined by specific combinations of diverse regulatory strategies may help strengthen understanding of teachers' emotional lives.

Fourth, the LPA encountered statistical estimation problems. These issues seemed to be caused by very low variability with regard to some profile indicators. Although we overcame these estimation problems, we advise caution with regard to our findings until they are triangulated by future research. Lastly, even though the current study was conducted on a large sample of Croatian teachers, future research should include samples of teachers from more diverse ethnic and cultural backgrounds to account for possible particularities of emotional experiences in the teaching profession across countries and cultures.

Conclusions and Practical Implications

The current research represents one of the first empirical attempts to uncover subpopulations of teachers that have distinct and unique constellations of emotional labor strategies. We achieved this by using a triadic approach while defining and investigating emotional labor (i.e., deep acting, hiding feelings, and faking emotions). Our results suggest that traditional conceptualization according to which emotional labor consists of two main strategies – deep acting and surface acting – may not be sufficient to fully understand teacher emotion regulation and its impact. Measuring the two related but conceptually distinct components of surface acting separately showed that faking emotions might not be as harmful as hiding feelings. More specifically, when teachers engage in faking emotions (e.g. faking happiness, enthusiasm, or pride due to students achievements), they do it not only to comply with the emotional display rules of teaching profession, but also to promote students' learning (Oplatka, 2007; Sutton, Mudrey-Camino, & Knight, 2009). Indeed, there is empirical evidence showing that faking emotions is positively related to indicators of teaching effectiveness (Burić, 2019; Burić & Frenzel, 2020), which may actually help dampen its adverse impact on teacher affect, well-being, and motivation. In contrast, teachers

mostly use suppression to hide undesirable negative emotions like anger, anxiety, or hopelessness. Since such emotions hardly entail any rewarding components, their impact is solely adverse.

Next, by using the person-centered approach that is still largely underrepresented in the literature on teacher emotion regulation and recruiting a large sample of teachers from different educational levels, we identified more emotional labor profiles compared to previous studies (e.g., Cheung & Lun, 2015; Gabriel et al., 2015; Fouquereau et al., 2019). Findings of the present research indicate the existence of a much broader range of individual differences among teachers with regard to the type and frequency of emotion regulation strategies they use in everyday work. The richness of subpopulations of teachers who use different emotion regulation strategies to different extents has passed undetected in many previous studies that adopted a dominant variable-centered approach.

 In addition, we explored the associations these profiles had with a number of less explored factors, that is, teachers' positive affect, motivation, and well-being. Traditionally, or in the variable-centered studies, teacher emotional labor has been mostly examined in relation to burnout as negative indicator of teacher well-being and to job satisfaction as positive indicator of teacher well-being (Wang et al., 2019). Studies linking teacher emotional labor profiles with many other outcomes that are relevant for teacher well-being and job performance are practically non-existent. Therefore, the present research adds to a scant base of knowledge on how being classified into a specific emotional labor profile might relate to key aspects that are integral to teachers' professional lives.

Finally, identifying subpopulations of teachers with distinct profiles of emotion regulation strategies and examining profile differences in their associations with job outcomes could be an important first step in the creation and implementation of intervention programs that promote and support teachers' positive work-related outcomes. Considering

the global problem of teacher shortages largely due to high attrition rates (Dupriez, Delvaux, & Lothaire, 2016; Education for All Global Monitoring Report and the UNESCO, 2015; IBF International Consulting, 2013), ensuring that teachers have access to effective professional development resources is of crucial importance. More specifically, providing teachers with resources to promote and maintain high levels of happiness and well-being may be helpful in raising instructional quality (e.g., Frenzel, 2014) and teacher retention rates (DeStercke, Goyette, & Robertson, 2015). In general, our results suggest that deep acting can be considered as an adaptive emotion regulation strategy for teachers when it is not used in conjunction with high levels of surface acting. In contrast, high frequency of surface acting, especially the high frequency of suppression, appears to be always maladaptive with regard to the outcomes examined. Therefore, to support their well-being, it may be beneficial to train pre-service and in-service teachers on how to use deep acting or reappraisal strategies to regulate emotions experienced at work. For example, teachers could be trained on how to change their perspective of certain students' disruptive behavior from evaluating it as a sign of intentional disobedience to seeing it as an attempt to attract adults' attention to the problems at home. At the same time, efforts should be directed toward raising teacher awareness of potentially adverse effects of surface acting, and especially suppression, in order to minimize its use in classrooms. In addition, mindfulness-based interventions may be helpful in reducing suppression as an emotion regulation strategy (Hülsheger, Alberts, Feinholdt, & Lang, 2013) and identifying healthier ways to promote and support teachers' authentic emotions.

In conclusion, it seems that fostering specific combinations of emotion regulation strategies among teachers can promote not only their well-being, but can also play an important role in shaping instructional quality and students' outcomes. In particular, experienced and displayed positive emotions (e.g., enthusiasm) that stem from effective use

of certain emotional labor strategies may raise the quality of delivered instructions and enhance students' learning. Therefore, teachers' emotional expressions that result from engaging in emotional labor in the classroom and their effective use during teaching and interacting with students, could prove useful to administrators during teacher evaluation processes.

References

Burić, I. (2019). The role of emotional labor in explaining teachers' enthusiasm and students' outcomes: A multilevel mediational analysis. *Learning and Individual Differences, 70,* 12-20.

Burić, I., & Frenzel, A. C. (2020). Teacher emotional labour, instructional strategies, and students' academic engagement: a multilevel analysis. *Teachers and Teaching,* 1-18.

Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An analysis using multilevel structural equation modeling. *Learning and Instruction, 66,* 101302.

Burić, I., & Macuka, I. (2018). Self-efficacy, emotions and work engagement among teachers: A two wave cross-lagged analysis. *Journal of Happiness Studies, 19*(7), 1917-1933.

Burić, I., & Moè, A. (2020). What makes teachers enthusiastic: The interplay of positive affect, self-efficacy and job satisfaction. *Teaching and Teacher Education, 89,* 103008.

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

Burić, I., Slišković, A., & Macuka, I. (2018). A mixed-method approach to the assessment of

teachers' emotions: development and validation of the Teacher Emotion Questionnaire.

Educational psychology, 38(3), 325-349.

Burić, I., Slišković, A., & Sorić, I. (2020). Teachers' emotions and self-efficacy: A test of

reciprocal relations. *Frontiers in Psychology, 11*, 1650.

Kim, L. E., & Burić, I. (2020b). Teacher self-efficacy and burnout: Determining the

directions of prediction through an autoregressive cross-lagged panel model. *Journal of

Educational Psychology, 112*(8), 1661–1676. https://doi.org/10.1037/edu0000424

Akaike, H. (1973). Information theory and an extension of the maximum likelihood principle.

In B. N. Petrov & F. Csaki (Eds.), *Second international symposium on information

theory* (pp. 267–281). Budapest, Hungary: Akademiai Kiado.

Akin, U., Aydin, I., Erdoğan, Ç., & Demirkasimoğlu, N. (2014). Emotional labor and burnout

among Turkish primary school teachers. *Australian Educational Researcher, 41*(2),

155–169. doi:10.1007/s13384-013-0138-4, 2014

Arbuckle, J. L. (1996). Full information in the presence of incomplete data. In G. A.

Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling:

Issues and techniques* (pp. 243-277). Mahwah, NJ: Lawrence Erlbaum Associates.

Asparouhov, T., & Muthén, B. O. (2014). Auxiliary variables in mixture modeling: Three-

step approaches using Mplus. *Structural Equation Modeling: A Multidisciplinary

Journal, 21*, 329–341. doi:10.1080/10705511.2014.915181

Asparouhov, T. & Muthén, B. (2020). Auxiliary variables in mixture modeling: Using the

BCH method in Mplus to estimate a distal outcome model and an arbitrary second

model. Mplus Web Notes: No. 21. May 14, 2014. Revised September 15, 2020.

Bakk, Z., Tekle, F. B., & Vermunt, J. K. (2013). Estimating the association between latent

    class membership and external variables using bias-adjusted three-step approaches.

    Sociological Methodology, 43, 272–311. doi.org/10.1177/0081175012470644

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career*

    Development International, 13(3), 209–223. doi:10.1108/13620430810870476, 2008;

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change.

    Psychological Review, 84(2), 191–215. doi:10.1037/0033-295x.84.2.191

Baumann, N., & Kuhl, J. (2002). Intuition, affect, and personality: Unconscious coherence

    judgments and self-regulation of negative affect. *Journal of Personality and Social*

    Psychology, 83(5), 1213–1223. doi:10.1037/0022-3514.83.5.1213

Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion: Is the

    active self a limited resource? *Journal of Personality and Social Psychology, 74*, 1252-

    1265. doi:10.1037/0022-3514.74.5.1252

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The Strength Model of Self-Control.

    Current Directions in Psychological Science, 16(6), 351–355. doi:10.1111/j.1467-

    8721.2007.00534.x

Bledow, R., Schmitt, A., Frese, M., & Kühnel, J. (2011). The affective shift model of work

    engagement. *Journal of Applied Psychology, 96*(6), 1246–1257. doi:10.1037/a0024532

Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace.

    Annual Review of Psychology, 53, 279–307.

    doi:10.1146/annurev.psych.53.100901.135156.

Brotheridge, C. M., & Lee, R. T. (2002). Testing a conservation of resources model of the

    dynamics of emotional labor. *Journal of Occupational Health Psychology, 7*(1), 57–67.

    doi:10.1037/1076-8998.7.1.57

Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the Emotional Labour Scale. *Journal of Occupational and Organizational Psychology, 76*(3), 365–379. doi:10.1348/096317903769647229

Celeux, G., & Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *Journal of Classification, 13*, 195–212. doi:10.1007/BF01246098

Chang, M.-L. (2009). An appraisal perspective of teacher burnout: examining the emotional work of teachers. *Educational Psychology Review, 21*(3), 193–218. doi:10.1007/s10648-009-9106-y

Cheung, F. Y. L., & Lun, V. M. C. (2015). Relation between emotional labor and organizational citizenship behavior: An investigation among Chinese teaching professionals. *Journal of General Psychology, 142*(4), 253–272. doi:10.1080/00221309.2015.1091764

Cheung, F., & Lun, V. M. C. (2015). Emotional labor and occupational well-being: A latent profile analytic approach. *Journal of Individual Differences, 36*(1), 30–37. doi:10.1027/1614-0001/a000152

Cheung, F., Lun, V. M. C., & Cheung, M. W. L. (2018). Emotional labor and occupational well-being: Latent profile transition analysis approach. *Frontiers in Psychology, 9*(JUL). doi:10.3389/fpsyg.2018.01084

Cote, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review, 30*(3), 509–530. doi:10.5465/amr.2005.17293692

Craig, S., & Smith, J. (2000, April). Integrity and personality: A person-oriented investigation. In D. Norris (Chair), Patterns, patterns every-where! Application of person-oriented methodology to problems in industrial-organizational psychology.

Paper presented at the 15th annual meeting of the Society for Industrial– Organizational

Psychology meeting, New Orleans, Louisiana.

Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to

nonnormality and specification error in confirmatory factor analysis. *Psychological

Methods, 1*, 16–29. doi:10.1037/1082-989X.1.1.16

De Stercke, J., Goyette, N., & Robertson, J. E. (2015). Happiness in the classroom: Strategies

for teacher retention and development. *Prospects, 45*(4), 421–427. doi:10.1007/s11125-

015-9372-z

Dupriez, V., Delvaux, B., & Lothaire, S. (2016). Teacher shortage and attrition: Why do they

leave? *British Educational Research Journal, 42*(1), 21–39. doi:10.1002/berj.3193

Elliot, A. J. (2006). The hierarchical model of approach-avoidance motivation. *Motivation

and Emotion, 30*(2), 111–116. doi:10.1007/s11031-006-9028-7

Fouquereau, E., Morin, A. J. S., Lapointe, É., Mokounkolo, R., & Gillet, N. (2019).

Emotional labour profiles: Associations with key predictors and outcomes. *Work and

Stress, 33*(3), 268–294. doi:10.1080/02678373.2018.1502835;

Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology,

2*(3), 300–319. doi:10.1037/1089-2680.2.3.300

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The

broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226.

doi:10.1037/0003-066x.56.3.218

Frenzel, A. C. (2014). Teacher emotions. In R. Pekrun & E. A. Linnenbrink (Eds.),

International Handbook of Emotions in Education (pp. 494-519). New York:

Routledge.

Frenzel, A. C., Goetz, T., Stephens, E. J., & Jacob, B. (2009). Antecedents and effects of

teachers' emotional experiences: An integrated perspective and empirical test. In P. A.

Schutz and M.s Zembylas (Eds.), *Advances in teacher emotion research* (pp. 129-151). Dordrecht: Springer.

Frenzel, A., Pekrun, R., Goetz, T., Daniels, L.M., Durksen, T.L., Becker-Kurz, B., & Klassen, R.M. (2016). Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemporary Educational Psychology, 46*, 148 – 163. DOI: org/10.1016/j.cedpsych.2016.05.003.

Gabriel, A. S., Daniels, M. A., Diefendorff, J. M., & Greguras, G. J. (2015). Emotional labor actors: A latent profile analysis of emotional labor strategies. *Journal of Applied Psychology, 100*(3), 863–879. doi:10.1037/a0037408

Gaertner, S. (1999). Structural determinants of job satisfaction and organizational commitment in turnover models. *Human Resource Management Review, 9*(4), 479–493. doi:10.1016/S1053-4822(99)00030-3

Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology, 5*(1), 95–110. doi:10.1037/1076-8998.5.1.95

Grandey, A. A. (2003). When "the show must go on": Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal, 46*(1), 86–96. doi:10.2307/30040678

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. doi:10.1146/annurev-orgpsych-032414-111400

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry, 26*(1), 1–26. doi:10.1080/1047840X.2014.940781

Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes:

Implications for affect, relationships, and well-being. *Journal of Personality and Social*

Psychology, 85, 348-362. doi:10.1037/0022-3514.85.2.348

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*.

Berkeley, CA: University of California Press.

Hsieh, C. W., Hsieh, J. Y., & Huang, I. Y. F. (2016). Self-efficacy as a mediator and

moderator between emotional labor and job satisfaction: A case study of public service

employees in Taiwan. *Public Performance and Management Review, 40*(1), 71–96.

doi:10.1080/15309576.2016.1177557

Hülsheger, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of

mindfulness at work: The role of mindfulness in emotion regulation, emotional

exhaustion, and job satisfaction. *Journal of Applied Psychology, 98*(2), 310–325.

doi:10.1037/a0031313

Hülsheger, U. R., Lang, J. W. B., & Maier, G. W. (2010). Emotional labor, strain, and

performance: Testing reciprocal relationships in a longitudinal panel study. *Journal of*

Occupational Health Psychology, 15(4), 505–521. doi:10.1037/a0021003

Hülsheger, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A

meta-analysis of three decades of research. *Journal of Occupational Health Psychology,*

16(3), 361–389. doi:10.1037/a0022876

Innstrand, S. T., Langballe, E. M., & Falkum, E. (2011). The longitudinal effects of

individual vulnerability, organizational factors, and work-home interaction on burnout

among male church ministers in Norway. *Mental Health, Religion and Culture, 14*(3),

241–257. doi:10.1080/13674670903470621

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job

performance relationship: A qualitative and quantitative review. *Psychological Bulletin,*

127, 376–407. DOI: 10.1037/0033-2909.127.3.376

Kammeyer-Mueller, J. D., Rubenstein, A. L., Long, D. M., Odio, M. A., Buckman, B. R.,

Karim, 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. doi:10.1007/s12646-011-0107-9

Kavanagh, D. J., & Bower, G. H. (1985). Mood and self-efficacy: Impact of joy and sadness

on perceived capabilities. *Cognitive Therapy and Research, 9*(5), 507–525.

doi:10.1007/bf01173005

Kazén, M., Kaschel, R., & Kuhl, J. (2008). Individual differences in intention initiation under

demanding conditions: Interactive effects of state vs. action orientation and enactment

difficulty. *Journal of Research in Personality, 42*(3), 693–715.

doi:10.1016/j.jrp.2007.09.005

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*(DEC).

doi:10.3389/fpsyg.2014.01442

Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy, personality, and teaching

effectiveness: A meta-analysis. *Educational Research Review, 12*, 59-76.

doi:10.1016/j.edurev.2014.06.001

Larsen, R. J., & Diener, E. (1992). Promises and problems with the circumplex model of

emotion. In M. S. Clark (Ed.), *Review of personality and social psychology, No. 13.*

Emotion (pp. 25-59). Thousand Oaks, CA, US: Sage Publications, Inc.

Lee, R. T., Lovell, B. L., & Brotheridge, C. M. (2010). Tenderness and steadiness: Relating job and interpersonal demands and resources with burnout and physical symptoms of stress in Canadian physicians. *Journal of Applied Social Psychology, 40*(9), 2319–2342. doi:10.1111/j.1559-1816.2010.00658.x

Lee, R. T., & Brotheridge, C. M. (2011). Words from the heart speak to the heart. *Career Development International, 16*(4), 401–420. doi:10.1108/13620431111158805

Lu, X., & Guy, M. E. (2014). How emotional labor and ethical leadership affect job engagement for Chinese public servants. *Public Personnel Management, 43*(1), 3–24. doi:10.1177/0091026013512278

Masyn, K. E. (2013). Latent class analysis and finite mixture modeling. In T. D. Little (Ed.), *The Oxford Handbook of Quantitative Methods Volume 2: Statistical analysis* (pp. 551–611). New York, NY: Oxford University Press.

McLachlan, G. J., & Peel, D. (2000). *Finite mixture models*. New York, NY: Wiley.

Medrano, L. A., Flores-Kanter, E., Moretti, L., & Pereno, G. L. (2016). Effects of induction of positive and negative emotional states on academic self-efficacy beliefs in college students. *Psicología Educativa, 22*(2), 135–141. doi:10.1016/j.pse.2015.03.003

Morris, J. A., & Feldman, D. C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review, 21*(4), 986–1010. doi:10.5465/amr.1996.9704071861

Muthén, L. K., & Muthén, B. O. (2010). *Mplus user's guide* (6th 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. doi:10.1080/02678370601065182

Nguyen, N., & Stinglhamber, F. (2019). Workplace mistreatment and emotional labor: A latent profile analysis. *Motivation and Emotion*. doi:10.1007/s11031-019-09803-8

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal, 14*, 535–569. doi:10.1080/10705510701575396

Oplatka, I. (2007). Managing emotions in teaching: Toward an understanding of emotion displays and caring as nonprescribed role elements. *Teachers College Record, 109*, 1374–1400.Pastor, D. A., & Gagné, P. (2013). Mean and covariance structure mixture models. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (2nd ed., pp. 343–393). Charlotte, NC: Information Age Publishing.

Peugh, J., & Fan, X. (2013). Modeling unobserved heterogeneity using latent profile analysis: A Monte Carlo simulation. *Structural Equation Modeling: A Multidisciplinary Journal*, 20, 616–639. doi:10.1080/10705511.2013.824780

Philipp, A., & Schüpbach, H. (2010). Longitudinal effects of emotional labour on emotional exhaustion and dedication of teachers. *Journal of Occupational Health Psychology, 15*(4), 494–504. doi:10.1037/a0021046

Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903. doi:10.1037/0021-9010.88.5.879

Schaufeli, W.B. & Bakker, A. (2003). Burnout en bevlogenheid. [Burnout and engagement] W. Schaufeli, A. Bakker & J. de Jonge (Red.), *De psychologie van arbeid en gezondheid* (pp.295-310). Houten: Bohn Stafleu Van Loghum.

Schaufeli, W., Salanova, M., González-romá, V., & Bakker, A. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. doi:10.1023/A:1015630930326

Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 6,* 461–464. doi:10.1214/aos/1176344136

Schwarzer, R., Schmitz, G.S., & Daytner, G.T. (1999). "Teacher Self-efficacy". Freje University Berlin Department of Health Psychology. https://www.statisticssolutions.com/wp-content/uploads/wp-post-to-pdf-enhanced-cache/1/teacher-self-efficacy-scale.pdf.

Sclove, L. S. (1987). Application of model selection criteria to some problems in multivariate analysis. *Psychometrika, 52*, 333–343. doi:10.1007/BF02294360

Scott, B. A., & Barnes, C. M. (2011). A Multilevel field investigation of emotional labor, affect, work withdrawal, and gender. *Academy of Management Journal, 54*(1), 116–136. doi:10.5465/amj.2011.59215086

Sloan, M. M. (2014). The consequences of emotional labor for public sector workers and the mitigating role of self-efficacy. *The American Review of Public Administration, 44*(3), 274–290. doi:10.1177/0275074012462864

Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology of Education, 7,* 379-398. http://dx.doi.org/10.1007/s11218-004-4229-y

Sutton, R. E., Mudrey-Camino, R., & Knight, C. C. (2009). Teachers' emotion regulation and classroom management. *Theory Into Practice, 48*, 130-137. https://doi.org/10.1080/00405840902776418.

Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review, 15*, 327–358. doi: 10.1023/a:1026131715856

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, 42*, 78-88. doi: 10.1016/j.tate.2015.03.003

Tein, J.-Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis: A Monte Carlo simulation. *Structural Equation Modeling: A Multidisciplinary Journal, 20*, 640–657. doi:10.1080/10705511.2013.824781

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783–805. doi:10.1016/s0742-051x(01)00036-1

UNESCO. (2015). *Education for All 2000-2015: Achievements and Challenges*. EFA Global Monitoring Report. Paris: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0023/002322/232205e.pdf

van Gelderen, B. R., Konijn, E. A., & Bakker, A. B. (2017). Emotional labor among police officers: a diary study relating strain, emotional labor, and service performance. *International Journal of Human Resource Management, 28*(6), 852–879. doi:10.1080/09585192.2016.1138500

Vermunt, J. K. (2010). Latent class modeling with covariates: Two improved three-step approaches. *Political Analysis, 18*, 450–469. doi:10.1093/pan/mpq025

Vermunt, J. K., & Magidson, J. (2002). Latent class cluster analysis. In J. A. Hagenaars & A. L. McCutcheon (Eds.), *Applied latent class analysis* (pp. 89–106). Cambridge, UK: Cambridge University Press.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070. doi:10.1037/0022-3514.54.6.1063

Weiss, H. M., & Cropanzano, R. (1996). *Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work.* In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews, Vol. 18* (p. 1–74). Elsevier Science/JAI Press

Wróbel, M. (2013). Can empathy lead to emotional exhaustion in teachers? The mediating role of emotional labor. *International Journal of Occupational Medicine and Environmental Health, 26*(4), 581–592. doi:10.2478/s13382-013-0123-1

Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands: The role of personal resources. *Journal of Personnel Psychology, 12*(2), 74–84. doi:10.1027/1866-5888/a000085

Yin, H., & Lee, J. C.-K. (2012). Be passionate, but be rational as well: Emotional rules for Chinese teachers' work. *Teaching and Teacher Education, 28*(1), 56–65. doi:10.1016/j.tate.2011.08.005

Yin, H., Lee, J. C. K., Zhang, Z., & Jin, Y. (2013). Exploring the relationship among teachers' emotional intelligence, emotional labor strategies and teaching satisfaction. *Teaching and Teacher Education, 35*, 137–145. doi:10.1016/j.tate.2013.06.006

Zhang, Y., & Halvorsen-Ganepola, M. D. K. (2013). A Meta-Analytic structural model of dispositional affectivity and emotional labor. *Personnel Psychology, 66*(1), 47–90. doi:10.1111/peps.12009

Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being. *Review of Educational Research, 86*(4), 981–1015. doi:10.3102/0034654315626801

Table 1

Descriptive Statistics and Correlations among Variables

	Variable	1	2	3	4	5	6	7	8	9	10	11
1	Gender	-	.08**	.048*	-.023	-.057	-.011	-.008	.020	.020	.014	.021
2	Years of experience		-	.081**	.078*	-.012	-.018	.063*	.043	.077**	.045*	.020
	Emotional labor strategies											
3	Deep acting			-	.009	.029	.235**	.163**	.243**	.239**	.220**	.157**
4	Hiding feelings				-	.605**	-.213**	-.233**	-.256**	-.240**	-.207**	-.269**
5	Faking emotions					-	-.174	-.195**	-.232**	-.245**	-.205**	-.258**
6	Positive affect						-	.486**	.712**	.664**	.630**	.571**
7	Teacher self-efficacy							-	.553**	.531**	.478**	.479**
	Work engagement											
8	Vigor								-	.909**	.848**	.699**
9	Dedication									-	.853**	.678**
10	Absorption										-	.593**
11	Job satisfaction											-
	M	-	15.95	3.43	2.39	1.94	3.72	3.34	4.58	4.68	4.50	4.03
	SD	-	10.43	0.95	0.75	0.73	0.65	0.41	0.92	0.85	0.86	0.60

Note. * $p < .05$, ** $p < .01$.

Table 2

Statistical Criteria Associated with Latent Class Enumeration

Model	SSS	LL	AIC	BIC	SABIC	*p*-ALRT	*p*-BLRT	Entropy
1-class	-	-7096.89	14205.78	14239.36	14220.30	-	-	-
2-class	490	-6573.50	13173.00	13245.76	13204.46	< .001	< .001	.825
3-class*	505	-6351.28	12740.56	12846.90	12786.54	< .001	< .001	.711
4-class**	98	-6248.21	12546.42	12686.34	12606.91	< .001	< .001	.769
5-class**	97	-6146.13	12356.26	12535.36	12433.69	< .001	< .001	.811
6-class**	93	-6110.00	12298.00	**12516.38**	**12392.38**	**.049**	< .001	.742
7-class**	13	-6096.65	12285.30	12542.76	12396.62	.098	< .001	.760

Note. SSS = the smallest sample size associated with any of the classes identified by the given model; LL = log-likelihood; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; SABIC = sample-size adjusted BIC; *p*-ALRT = the *p*-value associated with the adjusted likelihood ratio test; *p*-BLRT = the *p*-value associated with the bootstrapped likelihood ratio test; Values in bold denote that the respective index suggests extracting a model with the specific number of classes; * The models fixed the variance of the 'Faking Emotions' indicator to 0.10 in a class to overcome convergence problems; ** To overcome convergence problems, the models fixed the variances of the 'Faking Emotions' indicator to 0.10 in a class and of the 'Deep Acting' indicator to 0.10 in another class.

Table 3

Descriptive Statistics for Each Class and the Total Sample

Latent class	%	N	Deep acting		Hiding feelings		Faking emotions	
			Mean	Variance	Mean	Variance	Mean	Variance
1. Low regulators	14.69	274	2.61	0.49	2.36	0.30	1.90	0.10[a]
2. Non-actors	4.79	97	1.14	0.10[a]	1.59	0.48	1.08	0.02
3. True deep actors	18.68	391	3.82	0.82	1.76	0.36	1.10	0.02
4. Regulators	20.13	407	3.39	0.32	2.97	0.14	2.78	0.13
5. Deep actors	36.21	730	3.90	0.29	2.31	0.26	1.88	0.17
6. Suppressors	5.50	93	3.33	0.97	3.88	0.25	3.05	0.77
Total sample	100	1992	3.43	0.91	2.40	0.57	1.94	0.53

Note: [a] The variance for the given indicator in the given class was fixed to the value indicated in order to overcome estimation problems.

Table 4

Descriptive Statistics and the Results of the Tests of Significance for Differences among Classes in the Six Criteria

		POA		TSE		VIG		DED		ABS		JOB	
Latent Class	*N*	*M*	*SE*	*M*	*SE*	*M*	*SE*	*M*	*SE*	*M*	*SE*	*M*	*SE*
1. Low regulators	274	$3.46^{a,b}$	0.05	3.23^{a}	0.03	3.99^{a}	0.08	4.12^{a}	0.08	3.99^{a}	0.08	3.71^{a}	0.06
2. Non-actors	97	$3.71^{c,d}$	0.09	3.37^{b}	0.05	4.62^{b}	0.14	4.73^{b}	0.13	$4.51^{b,c}$	0.12	4.14^{b}	0.08
3. True deep actors	391	3.94^{e}	0.05	3.50	0.03	$4.94^{b,c}$	0.08	5.08^{c}	0.07	4.88^{d}	0.07	4.29^{b}	0.04
4. Regulators	407	$3.59^{a,c}$	0.04	3.22^{a}	0.03	4.28	0.06	4.38^{d}	0.06	4.28^{b}	0.05	3.78^{a}	0.04
5. Deep actors	730	$3.87^{d,e}$	0.03	3.40^{b}	0.02	4.94^{c}	0.05	$4.96^{b,c}$	0.04	$4.73^{c,d}$	0.04	4.22^{b}	0.02
6. Suppressors	93	3.24^{b}	0.12	3.13^{a}	0.07	3.88^{a}	0.14	$4.10^{a,d}$	0.16	3.94^{a}	0.14	3.64^{a}	0.10
Total	1992	3.72	0.42	3.34	0.17	4.58	0.85	4.68	0.73	4.50	0.74	4.03	0.36

Notes. POA = Positive affect; TSE = Teacher self-efficacy; VIG = Vigor; DED = Dedication; ABS = Absorption; JOB = Job Satisfaction; SE = standard error.

For the total sample, variances are reported instead of standard errors. Mean values in a given column that share a superscript do not differ significantly at the .05 level of significance.
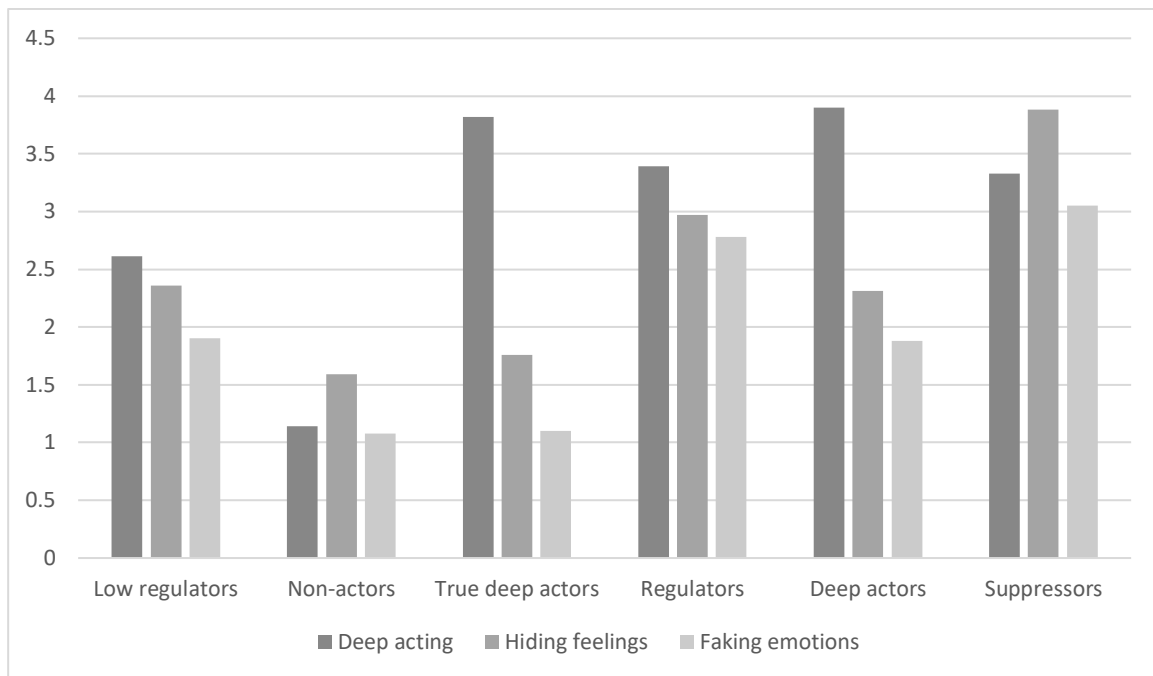
Figure 1

Profiles of Emotional Labor Actors

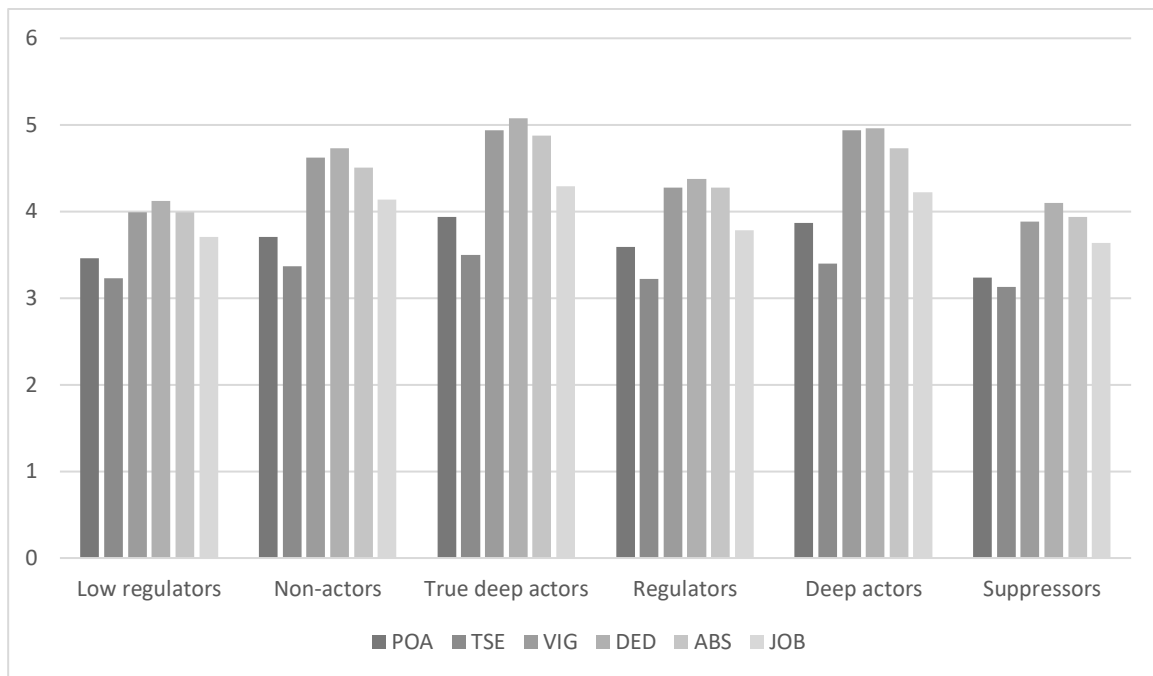*Note*. Scale values ranged from 1 to 5 for each of the three emotional labor strategies.

Figure 2

Mean Differences among Profiles in the Six Factors

Notes. POA = Positive affect; TSE = Teacher self-efficacy; VIG = Vigor; DED = Dedication; ABS = Absorption; JOB = Job Satisfaction.
Scale values ranged from 1 to 5 for POA; 1 to 4 for TSE; 1 to 6 for VIG, DED, and ABS; and 1 to 7 for JOB.

Table S1

Descriptive Statistics and the Results of the Tests of Significance for Differences among Age and Level of Experience

Latent Class	N	Age		EXP	
		M	*SE*	*M*	*SE*
Class 1	274	41.74[ab]	0.96	15.51[ab]	1.24
Class 2	97	40.52[a]	0.92	13.93[a]	1.02
Class 3	391	42.05[ab]	0.65	15.43[ab]	0.74
Class 4	407	41.95[ab]	0.68	15.70[ab]	0.75
Class 5	730	43.14[b]	0.54	16.69[b]	0.66
Class 6	93	42.69[ab]	1.52	16.75[ab]	1.66

Notes. EXP = Level of experience in teaching; SE = standard error.

Mean values in a given column that share a superscript do not differ significantly at the .05 level of significance.