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The Role of Punishment and Reward Sensitivity in the Emotional Labor Process: A Within-Person Perspective

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In this diary study, we tested the possibility that dispositional reward and punishment sensitivity, two central constructs of reinforcement sensitivity theory, would modify the relationship between emotional labor and job-related well-being (i.e., work engagement, emotional exhaustion, depersonalization). Specifically, based on a social functional account of emotion, we hypothesized that surface acting entails the risk of social disapproval and therefore may be more detrimental for high than for low punishment-sensitive individuals. In contrast, deep acting is hypothesized to hold the promise of social approval and therefore may be more beneficial for high than for low reward-sensitive individuals. Hypotheses were tested in a sample of 237 service workers (N = 1,584 daily reports) who completed a general survey and daily surveys over the course of 10 working days. Multilevel analyses showed that surface acting was detrimental to well-being, and more strongly so for high than for low punishment-sensitive individuals. The results are consistent with the idea that heightened sensitivity to social disapproval aggravates the negative effects of surface acting.

Keywords: behavioral inhibition, behavioral activation, diary study, emotional labor, multilevel, well-being

Emotional labor, a term coined by Hochschild (1983) three decades ago, refers to the process of regulating both feelings (i.e., deep acting) and expressions (i.e., surface acting) as part of the work role (Grandey, 2000). Emotional labor has been argued to be an effortful regulatory process that involves mental effort and drains cognitive resources and may therefore negatively affect employee health and well-being (Grandey, 2000; Holman, Martinez-Iñigo, & Totterdell, 2008). Over the last three decades, research has accumulated showing that the emotion regulation strategy of surface acting—regulating only the expression of emotions—is strongly and negatively related to job-related well-being (Brotheridge & Grandey, 2002; Grandey, Foo, Groth, & Goodwin, 2012; for meta-analyses see Bono & Vey, 2005; Hülsheger & Schewe, 2011). In contrast, research on the emotion regulation strategy of deep acting—regulating the actual feeling—has revealed weak and sometimes inconsistent relationships with job-related well-being (e.g., Brotheridge & Grandey, 2002; Grandey, 2003; for meta-analyses see Bono & Vey, 2005; Hülsheger & Schewe, 2011).

The apparent inconsistency in findings regarding the deep-acting—well-being relationship suggest the influence of moderating variables. Although findings have been more consistent regarding surface acting, its effects, too, may be intensified by moderator variables (Judge, Woolf, & Hurst, 2009). Research examining moderators of emotional labor strategies is on the rise (e.g., Grandey et al., 2012; Nguyen, Groth, & Johnson, 2013; Scott & Barnes, 2011; Scott, Barnes, & Wagner, 2012). However, there is still considerable ground to cover, particularly with respect to identifying individual difference variables that may influence the impact of emotional labor (Bono & Vey, 2005; Grandey, 2000; Judge et al., 2009).

There is building evidence that personality traits, such as extraversion (Chi, Grandey, Diamond, & Krimmel, 2011; Judge et al., 2009), self-monitoring (Scott et al., 2012), and emotional intelligence (Johnson & Spector, 2007) could modify the impact of emotional labor strategies. The present study aims to further this line of inquiry by investigating dispositional sensitivity to social disapproval (Gray’s 1990) reinforcement sensitivity theory (RST) of personality. RST describes how individuals differ in their reactions to rewarding and punishing stimuli (Corr, 2004). One advantage of RST as compared to other personality models is that it explains individual differences at different levels of analyses; for example, in terms of their biological underpinnings, motivational and behavioral manifestations, and mood and cognition (van der Linden, Taris, Beckers, & Kindt, 2007).

In the present study, we propose that the relationship of surface and deep acting with job-related well-being is influenced by an individual’s dispositional reward and punishment sensitivity. Sensitivity to reward refers to the disposition to react with positive feelings and show goal-directed behavior when confronted with cues of reward. Sensitivity to punishment, in contrast, refers to the disposition to react with high levels of anxiety when facing potentially threatening situations or when anticipating negative reactions from others, such as conflict or social disapproval (Carver & White, 1994; Gray, 1990). We build upon social functional accounts of emotion (Côté, 2005; Van Kleef, 2009) and argue that...
surface acting interacts with punishment sensitivity while deep acting interacts with reward sensitivity. High punishment-sensitive individuals may suffer more from surface acting because they are more concerned about possible negative reactions from interaction partners than their low punishment-sensitive counterparts. In contrast, high reward-sensitive individuals may capitalize on the positive reactions of interaction partners triggered by deep acting, while low reward-sensitive individuals may be more indifferent to these reactions.

We address these research questions from a within- and between-person perspective: At the within-person level, we examine how daily fluctuations in surface and deep acting relate to daily fluctuations in job-related well-being. At the between-person level, we examine how dispositional punishment and reward sensitivity influence these within-person associations (i.e., cross-level interactions). This approach complements existing interindividual research and accounts for the fact that employees’ use of emotional labor strategies is dynamic and fluctuates from day to day (Judge et al., 2009; Scott & Barnes, 2011). Although within-person research on emotional labor is on the rise (Bono, Foldes, Vinson, & Muros, 2007; Judge et al., 2009; Sanz-Vergel, Rodriguez-Munoz, Bakker, & Demerouti, 2012; Scott & Barnes, 2011; Scott et al., 2012; Trougakos, Beal, Green, & Weiss, 2008; van Gelderen, Heuven, van Veldhoven, Zeelenberg, & Croon, 2007), we believe there remains a strong need to conduct such research, in particular to uncover how the effects of daily emotional labor play out differently for different people.

In the following section, we outline the rationale for our hypotheses. Next, we present an experience-sampling or daily diary design used in this study to collect daily data from 239 Dutch service workers over 10 working days. Finally, we describe the results of this study and its implications for employees and organizations.

Theoretical Background and Hypotheses

Emotional Labor and Job-Related Well-Being

Emotional labor research assumes that employees have to comply with emotional display rules that are explicitly or implicitly prescribed by organizations (Ashforth & Humphrey, 1993; Diefendorff & Richard, 2003; Hochschild, 1983; Rafaeli & Sutton, 1989). These display rules shape employee emotional displays in ways that facilitate the attainment of organizational objectives through more effective workplace interaction (Diefendorff, Erickson, Grandey, & Dahling, 2011; Grandey, 2000). Employees naturally experience a variety of emotions throughout their workdays, and oftentimes these emotions are different from the ones expected by the organization (Ashforth & Tomiuk, 2000), a situation which has been referred to as emotion–rule dissonance (Holman et al., 2008). Accordingly, employees must engage in emotional labor, they must manage their emotions and emotional displays in order to conform with display rules (Hochschild, 1983; Scott & Barnes, 2011).

Two emotional labor strategies have been identified as the core of emotional labor: deep acting and surface acting (Grandey, 2000; Gross, 1998; Hochschild, 1983). Deep acting is an antecedent-focused form of emotion regulation. It occurs before an emotion is generated, and it aims at changing the situation or the perception of a situation (Grandey, 2000). When engaging in deep acting, individuals try to modify actual feelings to match required displays (Grandey, 2003). The intent of the employee is to be authentic to the customer (“acting in good faith,” Rafaeli & Sutton, 1989). Surface acting, on the other hand, is a response-focused form of emotion regulation. It occurs after the emotion is generated, and involves modifying emotional expressions without changing underlying feelings. When engaging in surface acting, an employee manipulates or fakes the appropriate emotional display without any effort to change what he or she is actually feeling (Grandey, 2000; Scott & Barnes, 2011). In other words, the intent of the employee is to fulfill job duties by faking emotions that are not really felt (“acting in bad faith,” Rafaeli & Sutton, 1989).

A large body of literature suggests that surface acting is more detrimental to employee health and well-being than is deep acting. This is evidenced in a recent meta-analysis by Hülsheger and Schewe (2011), showing surface acting to be strongly, negatively associated with indicators of job-related well-being (all p-values > −.30), and strongly, positively with indicators of ill-being (all p-values > .40). In contrast, deep acting was not meaningfully related to indicators of ill- or well-being, overall.

Several theoretical reasons have been advanced to explain the differential effects of surface and deep acting (Hülsheger & Schewe, 2011). First, not all forms of self-regulation diminish mental resources to a similar extent. According to Gross (2002), regulation strategies that target early processing stages (i.e., antecedent-focused strategies such as deep acting) require less cognitive effort than regulation strategies that target later processing stages (i.e., response-focused strategies such as surface acting). Accordingly, surface acting is assumed to consume more mental resources and to undermine job-related well-being to a larger extent than does deep acting. Second, surface acting requires the display of an emotional façade, and negatively affects one’s sense of personal authenticity (Brotheridge & Lee, 2002; Simpson & Stroh, 2004). Inauthenticity, in turn, associates positively with psychological distress (Brotheridge & Lee, 2002; Erickson & Ritter, 2001). Third, interaction partners react more unfavorably to inauthentic (i.e., surface acting) compared to authentic (i.e., deep acting) displays of emotions (Hennig-Thurau, Groth, Paul, & Gremler, 2006). These unfavorable reactions (e.g., anger, disappointment, disrespect) are stressors, increasing the sender’s strain levels (Côté, 2005). Fourth, when employees engage in surface acting, they modify their public display but not their internal experience of emotion. Since emotional labor typically involves the regulation of negative (rather than positive) emotions, employees engaging in surface acting will continue to experience negative emotions, even though their facial and bodily expression may suggest otherwise. Lingering negative emotions, in turn, adversely impact job-related well-being (Gross & John, 2003).

A Within-Person Analysis of the Emotional Labor—Well-Being Relationship

The majority of studies on emotional labor have employed between-person designs—thus focusing on the extent to which variables co-vary across individuals. As mentioned earlier, the conclusion of these between-person studies is that individuals who tend to engage in surface acting generally experience higher levels
of strain when compared with individuals who are less inclined to engage in surface acting.

Within-person research investigates the covariation of variables within people over time. Between-person and within-person research inform each other (Ilies, Johnson, Judge, & Keeney, 2011). Yet, they are conceptually independent and may lead to different or contradictory conclusions, especially when the constructs vary over time (Bolger & Schilling, 1991; Molenaar & Campbell, 2009). For example, between-person studies have found self-efficacy and performance to associate positively (Seo & Ilies, 2009); high self-efficacy promotes performance because it enhances individual motivation. Within-person research has sometimes found self-efficacy to negatively associate with individual performance (Seo & Ilies, 2009). One possible explanation is that individuals with high self-efficacy become overconfident over time and allocate fewer resources to familiar tasks, which reduces performance.

We adopt a within-person perspective to emotional labor because surface and deep acting are likely to change over time. As highlighted by Fredja (1993), emotions are experienced episodically, with punctuated beginnings and limited life spans. Accordingly, emotion regulation, too, must occur on an episode-to-episode basis (Beal, Trougakos, Weiss, & Green, 2006). From the studies that have taken within-persons approach, it is apparent that surface and deep acting do indeed vary within persons over time. For example, Judge et al. (2009) found that 39% and 32% of the variance in surface and deep acting was within-person. Scott and Barnes (2011) found that 14% and 38% of the variance in surface and deep acting was within-person. Sanz-Vergel et al. (2012) found that 45% of the variance in surface acting could be attributed to within-person variations (the authors did not measure deep acting). These studies indicate that there is systematic variance in emotional labor strategies within persons, such that most people vary in the degree to which they engage in emotional labor. This within-person variation, in turn, is related to important outcomes, including job-related well-being.

For the present study, we have selected work engagement, emotional exhaustion, and depersonalization as complementary indicators of job-related well-being. Work engagement manifests as a work-related mental state that is marked by vigor (i.e., high levels of energy and motivation to invest effort while working), dedication (i.e., a sense of enthusiasm and pride), and absorption in one’s work (i.e., being fully concentrated and engrossed in one’s work) (Bakker, Schaufeli, Leiter, & Taris, 2008; Schaufeli, Bakker, & Salanova, 2006). Work engagement is nurtured by a variety of job resources (e.g., skill use, social support, job autonomy). In contrast, demanding aspects of the job, such as engaging in surface acting, thwart the development of work engagement (Halbesleben, 2010).

Emotional exhaustion marks the opposite of the vigor dimension of work engagement and forms the most central symptom of the burnout syndrome (Maslach, Schaufeli, & Leiter, 2001). Emotional exhaustion describes feelings of being emotionally overextended and drained by one’s contact with other people (Leiter & Maslach, 1988). When exhausted, employees feel physically fatigued, emotionally depleted, worn out by work, and unable to recover (Cole, Walter, Bedeian, & O’Boyle, 2012). Important predictors of emotional exhaustion are job demands. For example, work pressure and emotional demands have been found to positively relate to emotional exhaustion (Bakker, Demerouti, & Verbeke, 2004). Job resources, on the other hand, appear to lessen the risk of feeling emotionally drained at work. Halbesleben (2006), for example, found that getting social support from supervisors or colleagues at work reduces the risk of emotional exhaustion.

Depersonalization is the opposite of the dedication dimension of work engagement and is the relational dimension of burnout. It refers to the development of negative, cynical attitudes toward work and the people with whom one works (e.g., clients and colleagues). Depersonalization is the attempt of employees to put distance between themselves and the customer by considering them as more or less impersonal objects (Brotheridge & Grandey, 2002). In this way, depersonalization is conceptualized as a coping mechanism resulting from demanding surface acting and lack of resources (Alarcon, 2011).

In building on earlier findings from between- and within-person research on emotional labor and well-being (Hülsheger & Schewe, 2011; Judge et al., 2009; Scott & Barnes, 2011), we expect to find within-person correlations between surface acting and job-related well-being.

We hypothesize:

**Hypothesis 1:** Daily surface acting is negatively related to daily work engagement.

**Hypothesis 2:** Daily surface acting is positively related to daily emotional exhaustion.

**Hypothesis 3:** Daily surface acting is positively related to daily depersonalization.

As mentioned before, deep acting is assumed to comprise two well-being processes that operate in opposite direction: deep acting leads to a loss of resources due to effortful emotional regulation (albeit less so than surface acting) but also to a gain of resources because of rewarding social interactions and the actual experience of positive emotions. Both processes are assumed to be equally strong, resulting in no net gain or loss (Grandey, 2003; Hülsheger & Schewe, 2011). Accordingly, we do not hypothesize to find within-person correlations between deep acting and job-related well-being.

**The Moderating Role of Reward and Punishment Sensitivity**

The Reinforcement Sensitivity Theory (RST, Gray, 1987, 1990; Gray & McNaughton, 2000; Pickering & Gray, 1999) is a biopsychological theory of personality. RST postulates two broad dimensions of personality: Impulsivity and anxiety. These two personality traits represent manifestations of individual differences in the sensitivity of two independent neurological systems that are involved in responding to relevant environmental cues. These systems are referred to as the behavioral activation system (BAS) and the behavioral inhibition system (BIS).

The BAS is sensitive to signals of reward and nonpunishment. Activation of the BAS is thought to be associated with positive emotions, such as elation, relief, and happiness (Corr, 2004; Pickering & Gray, 1999). In terms of individual differences in personality, greater reward (BAS) sensitivity should be reflected in a greater proneness to engage in goal-directed behavior, and to
experience positive feelings when the person is exposed to cues of impending reward (Carver & White, 1994). The BIS is sensitive to signals of punishment and nonreward. BIS activation has been argued to be associated with negative feelings, including anxiety, fear, frustration, and sadness (Corr, 2004). In terms of individual differences, greater punishment (BIS) sensitivity should be reflected in greater anxiety proneness, at least when the person is exposed to the proper situational cues (Carver & White, 1994).

We hypothesize that punishment sensitivity aggravates the negative effect of surface acting, such that when engaging in surface acting, the negative effect on job-related well-being are more pronounced for individuals high rather than low on punishment sensitivity. We further posit that reward sensitivity moderates the relationship between deep acting and job-related well-being, such that deep acting benefits individuals high rather than low on reward sensitivity. Our hypotheses are built on two main arguments.

The first argument is that engaging in surface acting contains the risk of social disapproval by the interaction partner, whereas, in contrast, engaging in deep acting offers the promise of social approval. This argument is grounded theoretically in the Emotion as Social Information (EASI) model (Van Kleef, 2009; Van Kleef, De Dreu, & Manstead, 2010) and the Social Interaction model of emotional labor (Côté, 2005). Both models propose that emotions and emotional displays provide social signals and therefore affect social interactions. Emotional displays are picked up by interaction partners (e.g., customers) and influence their emotional and behavioral responses which, in turn, reaffect the employee and his or her affect, emotions, and ultimately his or her well-being.

The second argument, based on personality research (Gray & McNaughton, 2000), is that high punishment-sensitive individuals are more sensitive to cues of social disapproval, relative to low punishment-sensitive individuals; and that high reward-sensitive individuals are more sensitive to cues of social approval, relative to low reward-sensitive individuals. In the following paragraphs, we further develop the rationale in support of the moderating role of punishment and reward sensitivity in the relationship between emotional labor and job-related well-being.

The Interplay Between Daily Surface Acting and Punishment Sensitivity

Risk of social disapproval. In surface acting, the display of emotions is inauthentic because emotions expressed do not match the internal experience. Evidence shows that individuals can generally distinguish authentic from inauthentic emotion displays (Ekman, Friesen, & O'Sullivan, 1988; Frank, Ekman, & Friesen, 1993). Individuals generally tend to react negatively to inauthentic emotion displays, presumably because inauthenticity may signal a lack of interest, a lack of trust, dishonesty, or the intention to manipulate the interaction partner (Côté, 2005). The evidence accumulated so far supports the view that interaction partners respond adversely to inauthentic displays of emotions. For example, inauthentic emotion display has been negatively related to perceived customer orientation (Groth, Hennig-Thurau, & Walsh, 2009), perceived friendliness (Grandey, Fisk, Mattila, Janssen, & Sideman, 2005), and customer satisfaction (Grandey et al., 2005). Further support comes from Butler et al. (2003) who find that inauthenticity, as evidenced by suppressing emotional expressions, inhibits relationship formation. Summing up, the available evidence suggests that surface acting, by yielding inauthentic emotion displays, elicits negative reactions from interaction partners in terms of social disapproval.

Punishment sensitivity and social disapproval. BIS is sensitive to signals of punishment and nonreward. High punishment-sensitivity individuals should therefore be more sensitive to cues of social disapproval than low punishment-sensitivity individuals. Recent evidence suggests that punishment sensitivity is associated with perceptions of threat in terms of social exclusion (Yanagisawa et al., 2011). Yanagisawa et al. (2011), using an experimental design, found that high punishment-sensitive individuals suffered from greater level of social pain (i.e., unpleasant feelings) during exclusion from a virtual ball-tossing game, relative to individuals who are less sensitive to punishment. Furthermore, evidence is accumulating that BIS is the personality/biological basis for many of the cognitive reactions observed in socially anxious individuals (Gray & McNaughton, 2000; Kimbrel, 2008). Social anxiety is characterized by concerns that one’s distress may be detected by others, concerns over humiliation, embarrassment, or similar emotional consequences resulting from fear of negative evaluation by others (American Psychiatric Association, 2013). Socially anxious individuals worry extensively about the impressions they make on others (Alden & Bieling, 1998), and have a heightened fear of being rejected by others (Harb, Heimberg, Fresco, Schneier, & Liebowitz, 2002).

So far, we have argued that surface acting entails a risk of social disapproval, and that social-evaluative situations are particularly stressful for high punishment-sensitive individuals. Combined, these arguments suggest that daily surface acting, putting on a “mask”, will cause more strain among high punishment-sensitive individuals, relative to low punishment-sensitive individuals. Accordingly, we hypothesize:

Hypothesis 4: Punishment sensitivity moderates the relationship between daily surface acting and (a) daily work engagement (negative), (b) daily emotional exhaustion (positive), and (c) daily depersonalization (positive), such that relationships are stronger for high rather than low punishment-sensitive individuals.

The Interplay Between Daily Deep Acting and Reward Sensitivity

As mentioned in the introduction, recent meta-analyses have revealed weak and inconsistent relationships between deep acting and indicators of employee well-being (Bono & Vey, 2005; Hülsheger & Schewe, 2011). In trying to explain these findings, Hülsheger and Schewe (2011) drew on conservation of resources theory (Hobfoll, 1989) and argued that deep acting may involve opponent processes that lead to a resource loss (deep acting is effortful and drains mental resources) and at the same time to a resource gain (deep acting promotes the experience of positive emotions and creates rewarding social interactions). As a result, the positive and the negative well-being related effects of deep acting may cancel each other out, resulting in no net gain or loss (see also Grandey, 2003; Hülsheger, Lang, & Maier, 2010). We argue that reward sensitivity influences to what extent employees...
experience a resource gain, thereby either strengthening or weakening the beneficial effects of deep acting.

**Reward sensitivity and social approval.** In deep acting, individuals try to align required and true feelings, resulting in authentic emotion displays. Individuals generally tend to react positively to authentic emotion displays. Authenticity signals that the displayed interest is sincere and genuine. In a service encounter, displaying authentic emotions oftentimes exceeds customer expectations (Grandey et al., 2005). Also, in deep acting, customers are more likely to catch a positive mood (Hennig-Thurau et al., 2006). As such, authentic emotion displays may result in increased customer satisfaction (Grandey, 2003; Grandey et al., 2005; Totterdell & Holman, 2003) and financial gains (Chi et al., 2011). Hence, we believe it is reasonable to assume that deep acting, resulting in authentic emotion displays, elicits positive reactions from interaction partners in terms of social approval.

BAS is sensitive to signals of reward and nonpunishment. High reward-sensitive individuals should therefore be more sensitive to cues of social approval than low reward-sensitive individuals. Yanagisawa et al. (2011) provide direct support for this idea by showing that people with greater reward sensitivity report more pleasure during social inclusion relative to individuals who are less sensitive to reward. Similarly, Stahl, van Laar, Eelmers, and Derks (2012), in a study on interpersonal rejection, demonstrate that people with a promotion focus—a construct similar to reward sensitivity—are more attentive to social acceptance cues. Individuals high in reward-sensitivity may therefore experience more resource gain from deep acting than their low reward-sensitive counterparts. Specifically, high reward-sensitive individuals may gain more resources from deep acting than they lose. In contrast, low reward-sensitive individuals who are insensitive to cues of social approval may experience little gain from deep acting and the resource loss may therefore outweigh the gains.

Taken together, these arguments thus suggest that daily deep acting will benefit the well-being of high reward-sensitive individuals, while hindering the well-being of low reward-sensitive individuals. Accordingly, we hypothesize:

**Hypothesis 5:** Reward sensitivity moderates the relationship between daily deep acting and (a) daily work engagement, (b) daily emotional exhaustion, and (c) daily depersonalization. Specifically, we expect that the relationship with (a) daily work engagement is positive, (b) daily emotional exhaustion is negative, and (c) daily depersonalization is negative for high reward-sensitive individuals, while it is insignificant for low reward-sensitive individuals.

**Method**

**Procedure and Participants**

In this study, we used a daily diary approach where we asked employees to complete an online diary questionnaire at the end of the working day for 10 consecutive days and a general questionnaire at the beginning of the study. The 10-day time frame was selected because Reis and Wheeler (1991) argued that 2 weeks (e.g., 10 work days) make a generalizable sample in the lives of individuals.

The study was conducted among service workers in the Netherlands. We adopted a two-stage sampling strategy. In a first stage, the study was advertised as a study on dealing with emotions in service industries, using social media (e.g., Twitter, Facebook, LinkedIn), flyers, e-mails, and on a website. Managers who expressed interest were contacted via e-mail and/or phone and asked for participation. In a second stage, a sample of employees of each organization received an invitation e-mail sent by management, in which the study was described, participation was encouraged, and confidentiality and anonymity of responses were assured. Employees who agreed to participate were directed to another webpage where they completed the general questionnaire, generated a personal identification code, and submitted their personal e-mail address. The link to the general questionnaire was sent out on a Monday. A week later, starting on Monday, every day for a total of 10 consecutive days (excluding the weekend), participants received an e-mail with the link to the daily questionnaire. They were instructed to complete the daily questionnaire as close as possible to the end of their workday, and not later than 10.00 p.m. The personal identification code was used to perform data linkage. To prevent late responding and backfilling, daily questionnaires were made inaccessible after the desired reporting window had passed (Fisher & To, 2012).

In total, 937 employees were invited to participate, of which 275 responded to the general and daily questionnaires (29.3% response rate). Employees represented six companies from various service industries. Two companies were high schools, two were health care providers, one was a hotel, and one an IT company. Thirty-six persons were deleted from the analyses because they filled out the daily questionnaire only once. The final sample consisted of 239 participants. Participants in the final sample completed on average seven daily questionnaires. The participants’ average age was 43.98 (SD = 11.36). They had an average tenure at their organization of 11.97 years (SD = 9.46), with an average tenure in their profession of 17.58 years (SD = 11.51); 70.4% of the participants had full-time jobs; 32.0% of the participants were female; 12.7% of the participants occupied a management position, half of which reported supervising 20 or more employees.

**Measures**

**General questionnaire data.** The general questionnaire assessed reward and punishment sensitivity.

**Reward (BAS) sensitivity.** Reward sensitivity was measured using the 13-item Dutch version of Carver and White’s (1994) BAS scale. Items are scored on a 4-point Likert scale (1 = completely disagree; 4 = completely agree). A sample item is “When I want something, I usually go all-out to get it.” Cronbach’s alpha was .76.

**Punishment (BIS) sensitivity.** Punishment sensitivity was measured using the 7-item Dutch version of Carver and White’s (1994) BIS scale. Items are scored on a 4-point Likert scale (1 = completely disagree; 4 = completely agree). A sample item is “I feel pretty worried or upset when I think or know somebody is angry at me.” Cronbach’s alpha was .82.

**Control variables.** In all analyses, we controlled for company membership by including five dummy variables. The IT company was chosen as the reference category.
Daily data. The diary assessed state measures of emotional labor (surface acting and deep acting), emotional exhaustion, de-personalization, and work engagement. The measures reflect persons' levels on these characteristics on the specific days tested.

Daily deep and surface acting. Deep and surface acting were assessed using the Dutch version of Grandey's (2003) emotional labor scales. Respondents were asked to indicate how often they had engaged in each of the activities on that day at work using a 5-point Likert-type scale (1 = never; 5 = always). A sample item for the 2-item deep acting scale is “Today, I worked hard to feel the emotions that I need to show to others.” A sample item for the 5-item surface acting scale is “Today, I put on an act in order to deal with others in an appropriate way.” Cronbach’s alphas across the 10 days ranged from .79 to .87 (M = .85) for deep acting and from .76 to .88 (M = .83) for surface acting.

Daily work engagement. Daily work engagement was assessed using four items taken from the UWES-9 (Schaufeli et al., 2006). Items were rated on a 7-point Likert-type scale (1 = totally disagree; 7 = totally agree). Items were adapted to enable the measurement of day-to-day changes in work engagement. An example item reads “Today, I felt strong and vigorous while working.” Cronbach’s alphas ranged from .89 to .91 (M = .91).

Daily emotional exhaustion. Daily emotional exhaustion was measured using three items taken from the Dutch version of the MBI-GS (Schaufeli, Leiter, Maslach, & Jackson, 1996). Items were rated on a 7-point Likert-type scale (1 = totally disagree; 7 = totally agree). Items were adapted to enable the measurement of day-to-day changes in emotional exhaustion. An example item reads “I felt totally exhausted because of my work today.” Cronbach’s alphas ranged from .94 to .97 (M = .95).

Daily de-personalization. Daily de-personalization was measured using three items taken from the Dutch version of the MBI-GS (Schaufeli et al., 1996). Items were rated on a 7-point Likert-type scale (1 = totally disagree; 7 = totally agree). Items were adapted to enable the measurement of day-to-day changes in de-personalization. An example item reads “Today, I was cynical about whether my work contributes anything.” Cronbach’s alphas ranged from .77 to .92 (M = .83).

Data Analyses

Each participant provided data at the person level (Level-2) (i.e., reward and punishment sensitivity) and at the day level (Level-1) (i.e., deep and surface acting, work engagement, emotional exhaustion, and de-personalization). Regarding the structure of the data, measurements at the day level (Level 1) were nested within persons (Level-2) since each person was surveyed at the end of each day throughout a 10-day interval. Multilevel analysis was used for analyzing the data, because it accounts for the dependent nature of the measurements at the lower level (Hox, 2002).

R version 2.15.0 was used for data analysis. Person-level predictor and control variables were centered around the grand mean, and the day-level predictor variables deep and surface acting were centered around the person mean. Centering day-level variables at the person mean implies that all between-persons variance in these variables is removed, and interpretations referring to stable between-persons differences can be ruled out (Sonnentag, Binnewies, & Mojza, 2008).

For the analyses, 1,584 measurement points (Level 1) from 239 employees (Level 2) were available. The dependent variables were work engagement, emotional exhaustion, and de-personalization. To test the hypothesized interaction effects, we entered the variables in five consecutive steps. After the estimation of the unconditional means model (null model), that is to say, the model that included the intercept as the only predictor, we added the variable time to the model to account for a possible linear trend in the dependent variable. We compared a model in which the slope of time was fixed (Model 1a) to an identical model in which the slope of time was allowed to vary across individuals (Model 1b). In Model 2, we entered five dummy variables representing the six companies (the IT company was used as the reference category). In Model 3, deep and surface acting were entered, together with the moderators, reward and punishment sensitivity. Finally, in Model 4, the deep acting × reward sensitivity and surface acting × punishment sensitivity interaction terms were added.

We estimated the models using maximum likelihood estimation method (ML) to compare model fit using the deviance statistics. ML is the preferred estimation procedure when the hypotheses are focused on the fixed regression parameters (Twisk, 2006), as is the case in this study. We tested the multivariate significance of effects in each step by computing the change in model fit compared with the previous step. We relied on deviance statistics (−2 log likelihood) for comparing models that did not differ in the number of fixed effects.

Results

First, following Ilies, Scott, and Judge (2006), we conducted a confirmatory factor analysis (CFA) on the day-level constructs (deep acting, surface acting, work engagement, emotional exhaustion, and de-personalization) to examine whether they were distinct from each other. A five-factor model fit the data at acceptable levels (RMSEA = 0.09, SRMR = 0.08, NNFI = .93, CFI = .94), particularly when compared to a one-factor model (RMSEA = 0.27, SRMR = 0.21, NNFI = 0.52, CFI = 0.57), and to a two-factor model in which emotional labor items load on one factor and well-being items on the other (RMSEA = 0.23, SRMR = 0.17, NNFI = 0.63, CFI = 0.68).

Next, we examined within-person and between-person variations of the day-level measures across the 10 days by estimating a null model for each variable. The null model provides estimates of within- and between-individual variance for the variable under study (Bryk & Raudenbush, 1992). Forty-one per cent of the variance in deep acting and 38% in surface acting could be attributed to within-person variation. Furthermore, 44% in work engagement, 39% of the variance in emotional exhaustion, and 38% in de-personalization was attributable to within-person variation. This finding suggests that the dependent variables are not stable over time but fluctuate considerably, thereby supporting the application of multilevel analysis. Table 1 reports the means, the standard deviations, and the correlations among all the study variables.

Tables 2, 3, and 4 display model fit information, estimates for the fixed parameters, and estimates for the variance components for work engagement (see Table 2), emotional exhaustion (see Table 3), and de-personalization (see Table 4). As can be seen from the tables, time did not significantly relate to any of the outcome variables, suggesting that the outcomes did not vary in a linear
manner. We also tested for quadratic and cubic trends in the outcomes but no significant findings were observed (results available from first author). For the dependent variables work engagement and emotional exhaustion, we retained the fixed-slope model (Model 1a) for further analyses because the model fit did not significantly improve when the slope was free to randomly vary. For depersonalization, however, the model fit did improve and a random-slope slope model (Model 1b) was retained.

Test of Hypotheses

The first set of hypotheses stated that surface acting would be negatively related to work engagement (H1) and positively related to emotional exhaustion (H2) and depersonalization (H3) at the end of the work day. As is shown in Tables 2–4 (Model 3), surface acting negatively predicted work engagement ($B = -0.26$, $p < .01$), and positively predicted emotional exhaustion ($B = 0.53$, $p < .01$) and depersonalization ($B = 0.23$, $p < .01$). Hence, Hypotheses 1–3 were supported.

The results further showed that punishment sensitivity negatively predicted work engagement ($B = -0.47$, $p < .01$), and positively predicted emotional exhaustion ($B = 0.72$, $p < .01$) and depersonalization ($B = 0.29$, $p < .01$). Deep acting ($B = 0.12$, $p < .01$) and reward sensitivity ($B = 0.52$, $p < .01$) were both positively related to work engagement.

The second set of hypotheses predicted that punishment sensitivity would moderate the relationship between surface acting and

Table 1

Means, Standard Deviations, and Correlations of the Study Variables, N = 239 respondents, and N = 1,584 Data Points

<table>
<thead>
<tr>
<th>Parameter</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level-2 variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reward sensitivity</td>
<td>2.97</td>
<td>0.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Punishment sensitivity</td>
<td>2.75</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Level-1 variables</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Surface acting</td>
<td>1.66</td>
<td>0.63</td>
<td>0.5</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Deep acting</td>
<td>2.29</td>
<td>1.08</td>
<td>0.81</td>
<td>.08</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Daily exhaustion</td>
<td>2.46</td>
<td>1.53</td>
<td>0.82</td>
<td>.40</td>
<td>.42</td>
<td>.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Daily depersonalization</td>
<td>1.80</td>
<td>1.01</td>
<td>0.77</td>
<td>.28</td>
<td>.27</td>
<td>.02</td>
<td>.57</td>
<td></td>
</tr>
<tr>
<td>7. Daily engagement</td>
<td>5.29</td>
<td>1.23</td>
<td>0.70</td>
<td>0.70</td>
<td>0.60</td>
<td>0.60</td>
<td>0.49</td>
<td></td>
</tr>
</tbody>
</table>

Note. Correlations were computed between individuals, using each participant’s mean scores for the level-1 variables.

\[ p < .05 \text{ (two-tailed).} \quad ** p < .01 \text{ (two-tailed).} \]

Table 2

Fixed Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting Daily Work Engagement

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Null model</th>
<th>Model 1a</th>
<th>Model 1b</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>5.24 (.06)</td>
<td>5.22 (.07)</td>
<td>5.22 (.07)</td>
<td>5.23 (.09)</td>
<td>5.18 (.11)</td>
<td>5.19 (.11)</td>
</tr>
<tr>
<td>Time</td>
<td>0.01 (.01)</td>
<td>0.00 (.01)</td>
<td>0.00 (.01)</td>
<td>0.00 (.01)</td>
<td>0.01 (.01)</td>
<td>0.01 (.01)</td>
</tr>
<tr>
<td>School A</td>
<td>-0.12 (.19)</td>
<td>-0.12 (.19)</td>
<td>-0.12 (.19)</td>
<td>-0.12 (.19)</td>
<td>-0.12 (.19)</td>
<td>-0.12 (.19)</td>
</tr>
<tr>
<td>School B</td>
<td>-0.53 (.19)</td>
<td>-0.53 (.19)</td>
<td>-0.53 (.19)</td>
<td>-0.53 (.19)</td>
<td>-0.53 (.19)</td>
<td>-0.53 (.19)</td>
</tr>
<tr>
<td>Health care A</td>
<td>0.60 (.28)</td>
<td>0.60 (.28)</td>
<td>0.60 (.28)</td>
<td>0.60 (.28)</td>
<td>0.60 (.28)</td>
<td>0.60 (.28)</td>
</tr>
<tr>
<td>Health care B</td>
<td>0.18 (.25)</td>
<td>0.18 (.25)</td>
<td>0.18 (.25)</td>
<td>0.18 (.25)</td>
<td>0.18 (.25)</td>
<td>0.18 (.25)</td>
</tr>
<tr>
<td>Hotel</td>
<td>0.26 (.19)</td>
<td>0.26 (.19)</td>
<td>0.26 (.19)</td>
<td>0.26 (.19)</td>
<td>0.26 (.19)</td>
<td>0.26 (.19)</td>
</tr>
<tr>
<td>Deep acting (DA)</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Surface acting (SA)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Reward sensitivity (RS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punishment sensitivity (PS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA × RS</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA × PS</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
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<td><strong>Random parameters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2 Intercept/intercept</td>
<td>0.84</td>
<td>0.84</td>
<td>0.82</td>
<td>0.77</td>
<td>0.70</td>
<td>0.70</td>
</tr>
<tr>
<td>Time(Time)</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1 Intercept/intercept</td>
<td>0.66</td>
<td>0.66</td>
<td>0.65</td>
<td>0.66</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>–2 × log likelihood</td>
<td>4,358.92</td>
<td>4,358.51</td>
<td>4,355.07</td>
<td>4,341.11</td>
<td>3,603.54</td>
<td>3,597.33</td>
</tr>
<tr>
<td>Difference of –2 × Log</td>
<td>0.41</td>
<td>3.43</td>
<td>17.40**</td>
<td>737.56**</td>
<td>6.21**</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard errors are in parentheses.

\[ p < .05 \quad ** p < .01 \]
work engagement (H4a), emotional exhaustion (H4b), and depersonalization (H4c). As is shown in Table 2 (Model 4), H4a was supported in that punishment sensitivity influenced the relationship between surface acting and work engagement ($B = -0.22$, $p < .05$). Table 3 shows that punishment sensitivity moderated the relationship between surface acting and emotional exhaustion ($B = 0.23$, $p < .05$), supporting H4b. Finally, as shown in Table 4, punishment sensitivity also moderated the relationship between surface acting and depersonalization ($B = 0.16$, $p < .05$), supporting H4c.

We plotted the interactions at three levels of punishment sensitivity (i.e., $+1\ SD$, 0, and $-1\ SD$; Bauer & Curran, 2005), and conducted simple slope tests to examine the nature of the interaction. The interactions are graphically represented in Figures 1, 2, and 3. A visual inspection of the graphs and simple slopes test showed that surface acting was more negatively related to work engagement for high punishment-sensitive individuals ($B = -0.37$, $t = -4.90$, $p < .001$) than for low punishment-sensitive individuals ($B = -0.13$, $t = -1.57$, ns). Surface acting was more positively related to emotional exhaustion for high punishment-sensitive individuals ($B = 0.65$, $t = 7.02$, $p < .001$) than for low punishment-sensitive individuals ($B = 0.39$, $t = 3.99$, $p < .001$). Similarly, surface acting was more positively related to depersonalization for high punishment-sensitive individuals ($B = 0.39$, $t = 6.15$, $p < .001$) than for low punishment-sensitive individuals ($B = 0.06$, $t = 0.98$, ns).

The third set of hypotheses stated that reward sensitivity would moderate the relationship between deep acting and work engagement (H5a), emotional exhaustion (H5b), and depersonalization (H5c). As is shown in Table 3, none of the hypotheses were supported using conventional two-tailed tests of significance. However, the interaction between deep acting and reward sensitivity in predicting emotional exhaustion ($B = -0.18$) was significant using a one-tailed test of significance. A one-tailed test is appropriate in this case as all hypotheses were directional and theory-driven (Jones, 1952, 1954; Kimmel, 1957; see also e.g., Ambrose, Schminke, & Mayer, 2013; Hulsheger, Alberts, Feinholdt, & Lang, 2013; Lim & Ployhart, 2004).

We plotted the deep acting $\times$ reward sensitivity interaction at three levels of reward sensitivity (i.e., $+1\ SD$, 0, and $-1\ SD$; Bauer & Curran, 2005), and conducted a simple slope test to examine the nature of the interaction. The interaction is graphically represented in Figure 4. A visual inspection of the graph and a simple slopes test showed that deep acting was unrelated to emotional exhaustion for high reward-sensitive individuals ($B = -0.03$, $t = -0.59$, ns). For low reward-sensitive individuals the slope was positive and significant at $p = .06$ ($B = 0.11$, $t = 1.90$, $p < .10$).

**Discussion**

This daily diary study examined within-person changes in deep and surface acting and how these day-level fluctuations associated with changes in job-related well-being in terms of work engagement, emotional exhaustion, and depersonalization. Consistent with prior (between-person) research, the results show that surface acting was negatively related to job-related well-being at the end of the work day. Deep acting was positively related to work engagement at the end of the work day. We further investigated the moderating role of the individual-difference variables reward and punishment sensitivity, and found that the negative surface-acting–well-being relationship was more pronounced for high punishment-sensitive individuals.
Our findings extend the emerging body of literature on short-term effects of emotional labor in several ways. First, recently, researchers have started investigating personality traits as moderators of the relationship of emotional labor with well-being and performance. These studies have focused predominantly on extraversion (Chi et al., 2011; Judge et al., 2009), self-monitoring (Scott et al., 2012), and emotional intelligence (Johnson & Spector, 2007). The present study introduces two key constructs from

Table 4
Fixed Effects Estimates (Top) and Variance-Covariance Estimates (Bottom) for Models Predicting Daily Depersonalization

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Null model</th>
<th>Model 1a</th>
<th>Model 1b</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.87 (0.06)</td>
<td>1.90 (0.06)</td>
<td>1.90 (0.06)</td>
<td>1.98 (0.08)</td>
<td>2.02 (0.10)</td>
<td>2.02 (0.10)</td>
</tr>
<tr>
<td>Time</td>
<td>−0.01 (0.01)</td>
<td>−0.01 (0.01)</td>
<td>−0.01 (0.08)</td>
<td>0.00 (0.01)</td>
<td>−0.14 (0.17)</td>
<td>−0.14 (0.18)</td>
</tr>
<tr>
<td>School A</td>
<td>0.00 (0.17)</td>
<td>0.20 (0.17)</td>
<td>0.15 (0.17)</td>
<td>0.15 (0.17)</td>
<td>0.15 (0.17)</td>
<td>0.15 (0.17)</td>
</tr>
<tr>
<td>Health care A</td>
<td>−0.38 (0.25)</td>
<td>−0.47 (0.29)</td>
<td>−0.47 (0.29)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
</tr>
<tr>
<td>Health care B</td>
<td>−0.17 (0.22)</td>
<td>−0.38 (0.24)</td>
<td>−0.39 (0.24)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
</tr>
<tr>
<td>Hotel</td>
<td>−0.62** (0.17)</td>
<td>−0.69** (0.17)</td>
<td>−0.69** (0.17)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
<td>0.00 (0.01)</td>
</tr>
<tr>
<td>Deep acting (DA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface acting (SA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.23** (0.05)</td>
<td>0.23** (0.05)</td>
</tr>
<tr>
<td>Reward sensitivity (RS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Punishment sensitivity (PS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.29** (0.11)</td>
<td>0.29** (0.11)</td>
</tr>
<tr>
<td>DA × RS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA × PS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.16* (0.08)</td>
</tr>
</tbody>
</table>

Random parameters

| Level 2 | Intercept/intercept | 0.66 | 0.66 | 0.77 | 0.69 | 0.63 | 0.63 |
| Level 1 | Intercept/time      | 0.41 | 0.41 | 0.37 | 0.37 | 0.36 | 0.36 |
|         | −2 × log likelihood | 3,638.08 | 3,636.62 | 3,610.11 | 3,591.30 | 3,034.30 | 3,029.76 |
| Difference of −2 × Log    | 1.46 | 26.51** | 18.81** | 556.99** | 4.54 |
| Df                      | 1    | 2    | 5    | 4    | 2    |

Note. Standard errors are in parentheses.

*p < .05. **p < .01.

Figure 1. Work engagement as a function of daily surface acting and punishment sensitivity.

Figure 2. Emotional exhaustion as a function of daily surface acting and punishment sensitivity.
reinforcement sensitivity theory (RST), reward and punishment sensitivity, as possible moderators of the relationship between emotional labor and job-related well-being. RST differs from most other personality models in that it provides a theoretical account of the neural and psychological processes underlying the major dimensions of personality.

We proposed that the effects of surface acting on job-related well-being are more pronounced among high (as opposed to low) punishment-sensitive individuals for two reasons: (1) surface acting entails a risk of social disapproval (Côté, 2005; Van Kleef, 2009); and (2) high punishment-sensitive individuals are more concerned about social disapproval (Yanagisawa et al., 2011). Consistent with our predictions, we found that high punishment-sensitive individuals suffered more from surface acting than did low punishment-sensitive individuals. High levels of surface acting meant less work engagement and more emotional exhaustion, especially for high punishment-sensitive individuals. Furthermore, high punishment-sensitive individuals became increasingly more depersonalized when performing surface acting, whereas low punishment-sensitive individuals remained relatively unaffected. Overall, the results are consistent with the idea that heightened sensitivity to social disapproval aggravates the negative effects of surface acting.

We further proposed that reward sensitivity would act as a moderator, such that deep acting would be beneficial for high and detrimental for low reward-sensitive individuals. We argued that: (1) deep acting holds the promise of social approval; and (2) high reward-sensitive individuals are more sensitive to cues of social approval than low reward-sensitive individuals. We found only partial support for this hypothesis: We did indeed find a significant positive relationship between deep acting and emotional exhaustion for low reward-sensitive individuals. Contrary to our predictions, however, deep acting was unrelated to emotional exhaustion for high reward-sensitive individuals. These findings suggest that low reward-sensitive individuals fail to capitalize on the potential beneficial effects of deep acting by not being sensitive enough to the rewarding social interactions promoted by deep acting. In consequence, the gains of deep acting do not outweigh the costs involved in effortful emotion regulation for low reward-sensitive individuals. No interactions were found with deep acting for depersonalization and work engagement. Deep acting was positively associated with work engagement and unrelated to depersonalization regardless of the level of reward sensitivity.

Second, our study adds to the handful of recent studies suggesting that emotional labor is a dynamic process, wherein the use and consequences of emotional labor vary between individuals and within individuals (Judge et al., 2009; Sanz-Vergel et al., 2012; Scott et al., 2012). In our study more than 30% of the variance in deep acting, surface acting, and their well-being outcomes was within-person. This is in line with previous diary studies reporting considerable levels of within-person variation for surface acting (Hülsheger et al., 2013; Judge et al., 2009; Sanz-Vergel et al., 2012) and deep acting (e.g., Judge et al., 2009). However, Scott and Barnes (2011) found only 14% of the variance to be due to within-person changes over time. Perhaps, these differences in within-person variance may be explained by different norm strengths for display rules in different settings (Ashforth & Humphrey, 1993). Norm strength basically indicates whether (in a particular setting) there is a clear norm for displaying emotions or not. For example, the norm strength for display rules in an haute cuisine restaurant should be higher as compared to a fast food restaurant. The stronger the norm, the less likely it should be that employees deviate from the norm, all else being equal; this, in turn, may imply that employees more consistently surface act (from day to day) as compared to employees that experience more latitude in display rules (i.e., norm strength is weak). While speculative at this
point, it seems worthwhile to investigate in how far differences in norm strength can explain differences in within-person variance in surface and deep acting in future studies. Overall, these results highlight the need for future within-person research on emotional labor.

Third, our study contributes to the emotional labor literature by studying an outcome that has, to date, received little attention in the emotional labor literature, namely work engagement. While previous emotional labor research has focused predominantly on the link between emotional labor strategies and indicators of poor health (e.g., burnout), fewer studies have investigated indicators of work goals. Although the causal direction of this relationship is still open to question (see Limitations), the results suggest that deep acting may stimulate personal growth, foster self-esteem, and may thus protect one’s sense of authenticity (Philipp & Schüpbach, 2010). The expression of one’s authentic self is intimately associated with engagement at work: Authenticity at work allows “employees connecting with work and addressing difficult issues (i.e., the engagement behavior)” (Macey & Schneider, 2008, p. 12). In short, while speculative at this point, sense of authenticity may well explain why deep acting, but not surface acting, benefits work engagement. Another possible explanation is that deep acting has motivational potential (Hackman & Oldham, 1980). Deep acting may stimulate personal growth, foster a sense of accomplishment, and may be instrumental in achieving work goals. Although the causal direction of this relationship is open to question (see Limitations), the results suggest that deep acting is favored in response to situations that are appraised as emotionally “challenging”, that is, having opportunities for personal development (Cavanaugh, Boswell, Roehling, & Boudreau, 2000).

Potential Limitations and Suggestions for Future Research

Our study is subject to some limitations highlighting interesting areas for future research. First, although we collected data over time, we cannot make any definite inferences about causality. It might, for instance, well be that work engagement leads to less surface acting and more deep acting. Future studies may thus want to assess well-being, surface and deep acting repeatedly during one work day in order to be able to conduct cross-lagged panel analyses and test for reverse and reciprocal effects. Note, however, that our predictions are in line with theory and that causal relationships from emotional labor to well-being have been demonstrated in previous studies (e.g., Hülsheger, Lang, & Maier, 2010).

Second, we should note that estimates of within-person variance may confound true within-person variation with variation due to measurement errors (e.g., Wang & Grimm, 2012). This implies that estimates of within-person variation overestimate the amount of true variation, but it is impossible to specify this further (Butler, Song, & Ilies, 2013). The fact that we collected data over 10 measurement points, however, somewhat mitigates these measurement error concerns: This is because the more observations available, the greater the chance to obtain reliable estimates of within-person variation (e.g., Becker, Ullrich, & van Dick, 2013).

Third, we relied on self-reports to measure emotional labor, reward and punishment sensitivity, and job-related well-being. Although a diary design might reduce retrospective bias, it is still possible that common-method variance might come into play. However, by person-mean centering our daily measures, we eliminated the possibility that interindividual differences in response tendencies would bias our findings (Sonnentag et al., 2008). Furthermore, we assessed reward and punishment sensitivity and emotional labor via different questionnaires and at different time points, and tested for cross-level interactions, which rules out the possibility that the interaction effect we found in our study is completely due to common-method bias (Siemsen, Roth, & Oliveira, 2010). Nonetheless, multisource research seems beneficial to confirm our findings on the association of emotional labor and job-related well-being.

Fourth, we have argued that the threat of social disapproval and the promise of social approval explain the interaction between emotional labor and job-related well-being. For this study, however, it was not possible to gather the data required to directly examine these explanatory mechanisms. Also, we did not measure interaction partners’ actual responses to emotional labor. Accordingly, two obvious directions for future research are to investigate the mechanisms through which emotional labor, and reward and punishment sensitivity jointly influence employee well-being, and to include actual instead of anticipated (i.e., threat vs. promise) responses of interaction partners.

Practical Implications

This study offers valuable insights for supervisors and employees. For supervisors, our study has several implications. As surface acting is more burdensome for punishment-sensitive employees, supervisors should provide those employees with additional resources. For example, supervisors and human resource professionals should provide employees with trainings on how to avoid surface acting and engage in deep acting. Supervisors should also inspire genuine positive emotions in employees through constructive leadership (Grandey et al., 2005); this may make it less likely that employees will experience the need to fake positive emotions. Employees also can benefit from an authentic work climate where supervisors and human resource professionals might not only focus on employees’ emotion regulation competencies but also on their punishment (BIS) sensitivity, because these individuals seem to be especially sensitive to the negative salutary effects of emotional labor.
labor in terms of surface acting. Last but not least, punishment-sensitive employees should be hesitant to select themselves into the most emotional-labor-intensive jobs, or at least, should take additional precautions to protect themselves from the negative implications of surface acting (e.g., securing social support at work).

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