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Moving emotional labor beyond surface and deep acting: A discordance–congruence perspective

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Abstract

Emotional labor (EL) is the process by which employees manage their true feelings in order to express organizationally desired emotional displays. We develop and test components of an organizing framework for emotional labor wherein various aspects of emotional labor are understood through the underlying *discordance* versus *congruence* in felt versus displayed emotions. Meta-analytic results from 109 independent studies (total $N = 36{,}619$) demonstrate that discordant emotional labor states are associated with a range of harmful consequences (health-, attitudinal-, and performance-related), whereas congruent emotional labor states do not incur these harmful consequences. We identify different patterns of worker- and work-related correlates on the basis of emotional discordance–congruence, as well as interesting occupational differences in these relationships. Lastly, we find discordant forms of emotional labor partially mediate the effects of organizational display rules on burnout, whereas congruent states do not mediate this relationship.

Keywords

emotional labor, emotions and moods, meta-analysis

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Emotions are an integral part of the human experience. Over the past 30 years, research in organizational psychology has increasingly attended to the emotional drivers of work behavior and outcomes. One might say that all roads have led to affect; researchers in a variety of topic areas have found that emotional processes are core components of individual and collective processes in organizations, including workplace motivation (e.g., George & Brief, 1996), leadership (e.g., Gooty, Connelly, Griffith, & Gupta, 2010), workplace attitudes (e.g., Weiss & Cropanzano, 1996), conflict management and negotiation (e.g., Fulmer & Barry, 2004; van Kleef, De Dreu, & Manstead, 2004), and team functioning (e.g., Barsade, 2002; Kelly & Barsade, 2001). One of the most central aspects of emotions that shapes behavior in the workplace is emotional labor.

Emotional labor requires workers to subordinate their genuine emotions in order to display emotions which are consistent with work role expectations (Glomb & Tews, 2004). Although much of the early work on emotional labor has focused on the effects of emotions on workers in the service, healthcare, and hospitality industries (e.g., Holman, Chissick, & Totterdell, 2002), emotional expression is a core aspect of the human experience, and so there is an increasing emphasis on understanding emotional processes in the workplace (e.g., Bono, Foldes, Vinson, & Muros, 2007; Fisher & Ashkanasy, 2000). This widespread effort to understand worker emotions has generated a large base of empirical studies which shed light on worker emotions, particularly the emotional labor construct. However, whereas individual empirical studies illuminate particular dimensions of emotional labor as well as their linkages to particular antecedents, correlates, and consequences there is a need to theoretically synthesize this research in terms of what is presently known about emotional labor, and what we most need to figure out in the coming decade. Thus, this review will: (a) advance an integrated view of emotional labor by examining the nomological network surrounding five emotional labor states examined in prior research (which differ by the extent to which they result in dissonance between felt and displayed emotions), and (b) explore the impact of discordant and congruent states as an underlying theoretical driver which explains patterns of observed relationships between emotional labor and its correlates and consequences.

Toward this end, this research makes five important contributions to knowledge on emotions in the workplace. First, we present the bottom line on the consequences of emotional labor for a range of health, attitudinal, and performance outcomes. Second, we present the state of knowledge on emotional labor correlates, both worker-related (e.g., neuroticism) and work-related (e.g., display rules). Third, we test two conceptual (occupation and target of emotional labor) moderators and one methodological (study design) moderator of the relationship between emotional labor and its correlates and consequences. Fourth, we explore the joint effects of display rules and emotional labor states on employee emotional well-being. Fifth, we organize our results in light of a theoretical reorganization of emotional labor states along the discordance–congruence continuum, which reflects the extent to which felt and displayed emotions are aligned.

Emotions and the emotional labor construct

Scholars agree that emotions affect "physiology, facial and bodily expressions, behavior, cognition, and subjective experiences" (Côté & Morgan, 2002, p. 947), and that humans are capable, with effort, of regulating their emotions so as to optimize their responses to changing contexts (Weiss & Cropanzano, 1996). According to Gross (1999), emotion regulation refers to all conscious and unconscious efforts to change one or more aspects of an emotion. Gross identifies two forms of emotion regulation: antecedent-focused and response-focused. Antecedent-focused emotion regulation involves the individual reassessing

the source of the emotion (e.g., a nurse reminding herself to feel sympathetic toward an insolent patient; the initial emotion of irritation is replaced with sympathy upon the reevaluation of the source of the emotion). Response-focused emotion regulation involves the individual manipulating their physiology, facial and/or bodily expressions, behaviors, and cognitions once the emotion has already registered (e.g., a teacher attempting to fake a positive emotion toward a recalcitrant student; Côté & Morgan, 2002). Gross (1998) found individuals experience more psychological strain when engaging in a response-focused emotion regulation strategy (faking or suppressing their genuine emotions), than when they either exercise in an antecedent-focused strategy or do not regulate their emotions. Further, Côté and Morgan (2002) found this pattern of effects extends to job-related outcomes as well; response-focused emotion regulation strategies (e.g., suppression or faking of emotions) led to decreased job satisfaction and turnover intentions.

All organizations have both expressed and implied guidelines for employee conduct based on the position the employee holds. Within these guidelines are relatively strict expectations of acceptable and unacceptable emotions to display at work; these expectations are called display rules (Diefendorff, Erickson, Grandey, & Dahling, 2011). Emotional labor occurs when an employee has to alter his/her true emotions in order to conform with the organization's/job's display rules (Morris & Feldman, 1997). When genuine emotions are aligned with requirements for emotive displays, then the employee is free to act in a manner that is consistent with their natural desires (emotional consonance; Zammuner & Galli, 2005b). Research suggests emotional consonance has a number of positive effects, including enhanced feelings of personal accomplishment and decreased levels of emotional exhaustion (Näring, Briët, & Brouwers, 2006). Problems arise, however, when employees' genuine emotions are asymmetric or inconsistent with display rules. For example, the employee may be experiencing a negative emotion, but is required to display a positive one (e.g., in a customer service interaction; Grandey, Dickter, & Sin, 2004) or may be experiencing positive emotions, but is required to display negative emotions (e.g., hospital employees often have to suppress positive mood or emotions in favor of a more subdued emotive display). In scenarios where genuine emotions are inconsistent with required emotive displays, employees must either break display rules or they must engage in emotion regulation in order to enhance, suppress, or fake their genuine emotions to produce the prescribed emotional display (Grandey, 2000).

Emotional labor strategies have been differentiated based on the extent to which they involve an antecedent-focused or response-focused emotion regulation strategy. This distinction has important implications for the resulting emotional state. With antecedent-focused strategies, the resulting emotional state is congruous—felt and expressed emotions are inherently consistent. Whereas energy may be required initially to adjust felt emotions, no further energy drain is incurred once the emotions are in line. Conversely, with response-focused strategies, the effort is not expended to change the felt emotion but rather is continuously expended to mask true emotions so that emotive displays conform to expectations. In this sense, the distinguishing feature of response-focused strategies is the discordance between felt and displayed emotions. We use this congruence/discordance view of emotional labor states as a lens to understand the differential patterns of relationships found in past research on emotional labor.

Researchers have articulated five emotional labor strategies, which fall at different points on this emotional congruence–discordance continuum. Two of these strategies fall toward the end of the continuum reflecting congruence between felt emotions and required/displayed emotive behavior (emotional consonance and deep acting) and three fall along the opposite

end of continuum which reflects discordance between felt emotions and required/displayed emotion expressive behavior (surface acting, emotional dissonance, emotional suppression). Table 1 reports examples from the extant literature of definitions and operationalizations of these five emotional labor states.

Discordant emotional states

Discordant emotional states are psychological conditions wherein an individual's authentic felt emotions are in conflict with his/her expressed emotions. Research on emotional labor elaborates three constructs—surface acting, dissonance, and suppression—each reflecting aspects of emotional discordance.

Surface acting. Surface acting occurs when employees simply present a "good-employee" facade, or "act" in the appropriate way at work to meet organizational expectations, even though their true feelings remain unchanged and inconsistent with their displayed feelings (Hochschild, 1983; Johnson & Spector, 2007). Researchers have defined surface acting as a "response-focused strategy" in which the individual effectively carries out the emotional labor process to display the organizationally desired emotion, even though the displayed emotion conflicts with the individual's authentic feelings (Spencer & Rupp, 2009). The distinguishing criterion in surface acting is that the individual does not modify his or her true feelings internally to match what is required—the external appearance conforms with expectations while the internal emotions/feelings do not change (Hochschild, 1983; Karatepe & Aleshinloye, 2009). Therefore, in surface acting, the state of emotional dissonance caused by the incongruity between acting and feeling is never reconciled.

Emotional dissonance. To avoid the consequences involved in displaying true emotions, an individual may have to separate from their felt emotions in order to meet the external expectations and occupational requirements; this form of detachment is formally referred to as emotional dissonance (Hochschild, 1983; Johnson & Spector, 2007). Emotional dissonance is a consequence of having to display specific emotions that contrast with those genuinely felt by an individual, and has been described as a type of person–role conflict, because the individual does not identify with the role requirements and must alter their response in order to satisfy role expectations (Abraham, 1999; Hochschild, 1983; Wharton & Erickson, 1993).

Emotional suppression. Like surface acting and emotional dissonance, emotional suppression creates discordance between one's felt and displayed emotions. Emotional suppression occurs when an individual regulates her emotions by attempting to inhibit or suppress expressive behaviors which would be inconsistent with organizational display rules (Dollard & Winefield, 1994; Srivastava, Tamir, McGonigal, John, & Gross, 2009).

Congruent emotional states

Congruent emotional states are psychological conditions wherein an individual's authentic felt emotions are consistent with his/her expressed emotions. Research on emotional labor elaborates two constructs—deep acting and emotional consonance—each reflecting aspects of emotional congruence.

Deep acting. An individual practicing deep acting does not simply display the appropriate emotions, but actually internalizes the mandated emotion; deep acting is the process of "modifying internal affect so that it matches with [the] outward expressions" demanded by the job–role requirements (Hochschild, 1983; Spencer & Rupp, 2009, p. 429). This realignment resolves the initial emotional discordance, resulting in an emotional state where felt and displayed emotions are congruent.

Table 1. Definitions and operationalizations of emotional labor states

Authors, year	Conceptual definition	Operational definition
	Emotional labor	
Glomb and Tews, 2004	"Emotional labor is 'the act of displaying appropriate emotion (i.e., conforming with a display rule)' regardless of whether the emotion is discrepant with internal feelings" (p. 2)	Assessed emotional dissonance and surface acting using the Brotheridge and Lee (1998) measures with questions such as "Pretend to have emotions that you don't really feel" and "Resist expressing my true feelings" (p. 11). Additionally emotional dissonance was also examined with the Morris and Feldman (1997) 3-item measure that included questions like "When I work with customer/clients, the way I act and speak often doesn't match what I really feel" (p. 11)
Morris and Feldman, 1996	"The effort, planning, and control needed to express organizationally desired emotion during interpersonal transactions" (p. 987)	Suggest that questionnaires "to collect information about emotional experience and expression can offer a number of advantages, including access to more emotional experiences over a longer period of time . . . [and] may be the only way to get subjects to reveal especially sensitive information such as emotional dissonance" (p. 1004)
Grandey, 2000	"May involve enhancing, faking, or suppressing emotions to modify the emotional expression . . . in response to display rules for the organization or job" (p. 95)	Suggests that "diary studies of emotional events would illustrate the type of events employees respond to at work, as well as act as a coping technique suggested by the emotion regulation researchers" (p. 108)
	Deep acting	
Spencer and Rupp, 2009	An "antecedent-focused strategy . . . [that] concerns modifying internal affect so that it matches with outward expressions" (p. 429)	Measured emotional labor "with an eight-item measure . . . [that] measures the extent to which participants expended effort while managing their emotions during their customer-service encounters. Participants indicated their level of agreement with each item by using a scale anchored at 1 (strongly disagree) and 7 (strongly agree)" (p. 434)
Johnson and Spector, 2007	"Deep acting corresponds with managing underlying feelings to actually feel the emotion required by the display rules" (p. 319)	Measured using a 5-point Likert response scale and asking things like, "On an average day at work, how often do you do each of the following when interacting with customers? . . . Make an effort to actually feel the emotions that I need to display to others" (p. 324)

(continued)

Table 1. (continued)

Authors, year	Conceptual definition	Operational definition
	Emotional consonance	
Diefendorff, Croyle, and Gosserand, 2005	"[I]ndividuals may simply express what they feel, or when this will not produce the desired display, they may surface act . . . or deep act . . . Thus, surface acting (SA) and deep acting (DA) may be considered compensatory strategies that individuals use when they cannot spontaneously display the appropriate emotions" (p. 340)	Measured using a 3-item scale adapted from Kruml and Geddes (2000): "The emotions that I express to customers are genuine," "The emotions I show customers come naturally," and "The emotions I show customers match what I spontaneously feel" (p. 355)
Näring, Briët, and Brouwers, 2006	"A high level of emotional consonance will indicate that a person effortlessly expresses emotions that are felt, and we regard this as the absence of emotional labour" (p. 306)	Assessed emotional consonance using items such as "I react to students' emotions naturally and easily" and "The emotions I show the students match what I truly feel" (p. 306)
Yugo, 2009	"[T]here is a third strategy that has been considered as a part of emotional labor: the expression of genuine felt emotions . . . This takes place when the employee's actual emotions already mimic those expected from the job, thereby eliminating the effort involved in order to achieve the organizationally desired response" (pp. 6–7)	Assessed genuine expression of felt emotion was using the 3-item measure by Diefendorff et al. (2005). Items include "The emotions I show customers come naturally" and "The emotions I show customers match what I spontaneously feel" (pp. 21–22)
	Emotional dissonance	
Johnson and Spector, 2007	"The separation of felt emotion from expressed emotion to meet external expectations" (p. 319)	Measured using the Emotional Labor Scale (Brotheridge & Lee, 2003) which uses a 5-point Likert response scale asking the employees, "On the average day at work, how often do you do the following when interacting with customers?" (p. 324) and then follow up with questions like, "Hide my true feelings about a situation" (p. 324)
Bakker and Heuven, 2006	"Emotional dissonance is the discrepancy between authentic and displayed emotions as part of the job" (p. 426)	Operationalized following Zapf, Vogt, Seifert, and Mertini's (1998) questions, which asked, "How often are you confronted with the following situations during you work?" and included follow-up questions like, "Having to show certain feelings to patients (civilians) that do not correspond with the way you feel at that moment" (p. 430)
Abraham, 1999	"Emotional dissonance is a form of person–role conflict, in which a person's response conflict with role expectations of the desired level of emotion" (p. 442)	Measured with the Aldemann's Emotional Labor Scale (1989) with questions like, "To what degree do you think making the customer feel important is expected of you as part of your job?" (p. 446)

(continued)

Table 1. (continued)

Authors, year	Conceptual definition	Operational definition
	Surface acting	
Spencer and Rupp, 2009	"Response-focused strategy . . . [that] results when an individual displays the appropriate emotion even though it is not consistent with his or her true feelings" (p. 429)	Measured emotional labor "with an eight-item measure . . . [that] measures the extent to which participants expended effort while managing their emotions during their customer-service encounters. Participants indicated their level of agreement with each item by using a scale anchored at 1 (strongly disagree) and 7 (strongly agree). Higher scores indicate higher levels of effort involved during emotion management" (p. 434)
Karatepe and Aleshinloye, 2009	"Surface acting occurs when employees fake their emotions by changing their outer demeanor to conform with the organizational display rules while their inner feelings remain unchanged" (p. 349)	Measured using the Chu and Murrmann (2006) scale with items like, "I fake a good mood when interacting with customers" and "I fake the emotions I show when dealing with customers" (p. 353)
Glasø and Einarsen, 2008	"The management of feelings to create a publicly observable and desirable emotional display as part of a job role" (p. 484)	Measured through a questionnaire asking to what extent "leaders and subordinates do express, suppress, and fake their emotions by items related to these emotional factors" (p. 487)
	Emotional suppression	
Gross and John, 2003	"Expressive suppression is a form of response modulation that involves inhibiting ongoing emotion-expressive behavior . . . For example, one might keep a poker face while holding a great hand during a card game" (p. 349)	Assessed suppression using the Emotion Regulation Questionnaire (ERQ), with questions such as "I control my emotions by not expressing them" and "When I am feeling negative emotions, I make sure not to express them" (p. 351)
Näring, Briët, and Brouwers, 2006	" . . . actually hiding anger and disgust and fear . . . " (p. 307)	Assessed suppression using items such as "I hide my anger about something someone has done" (p. 307)
Schaubroeck and Jones, 2000	"[T]he psychological characteristics of denial and suppression are consistently linked to lower immune levels and susceptibility to viral infection . . . as well as cardiovascular illness" (p. 169)	Assessed suppression of negative efference using items such as "To be effective in my job, I must try to suppress how upset or distressed I may feel" (p. 171)
Sieverding, 2009	"The regulation of emotion, and especially its suppression, is known to have physiological, social, affective, and cognitive consequences . . . In terms of the cognitive consequences of emotional suppression, several studies have shown that suppression reduces memory for social information, which was interpreted as an indicator of increased cognitive load" (p. 392)	Assessed hiding feelings using a single item: "During the job interview, did you try to suppress or hide your feelings (e.g., anger, insecurity, anxiety, helplessness, etc.)?" (p. 394)

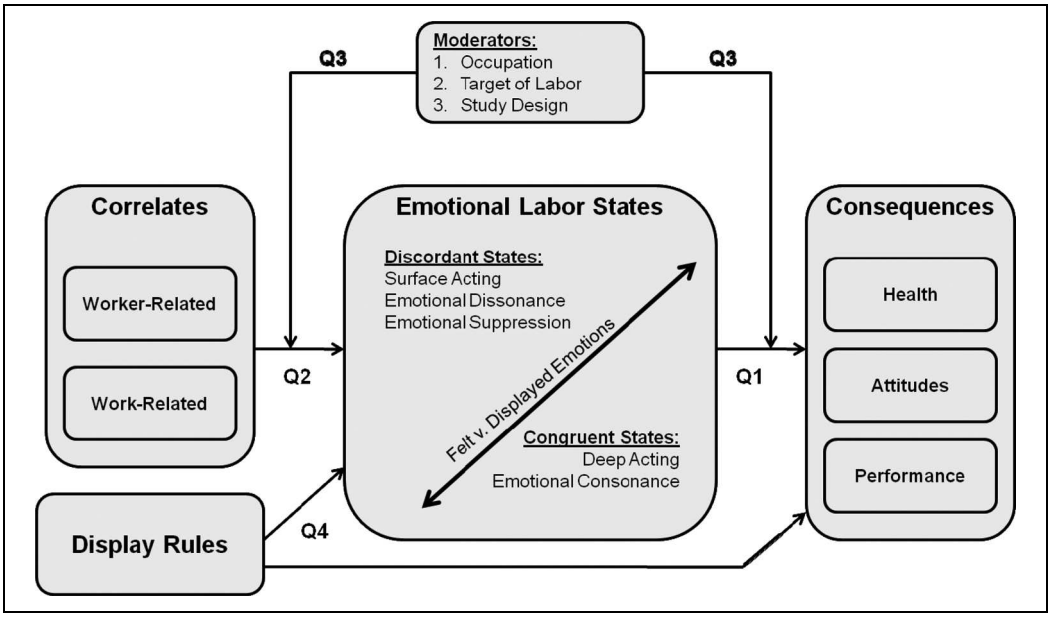


Figure 1. Discordance–congruence model of emotional labor.

Emotional consonance. Emotional consonance refers to emotional labor states where the individual expresses his/her genuine felt emotions (Yugo, 2009; Zammuner & Galli, 2005b). Consonance is similar to deep acting in that there is a congruence between felt and expressed and emotions. The notable difference is that with consonance there is no need to expend any energy-regulating emotions because natural emotions are in line with those expected in the job context.

Figure 1 presents an overview of the nomological net of relationships examined in the current study, centered on this discordant–congruent conceptualization of the emotional labor construct. Various aspects of emotional labor are distinguished by the extent to which emotional psychological states are discordant or congruent—reflecting harmony between felt and displayed emotions on the one hand, versus conflict between felt and displayed emotions on the other. We organize our review around four research questions depicted in Figure 1.

Research Question 1: What are the health, attitudinal, and performance consequences of discordant and congruent emotional labor states?

The occurrence of emotional labor in all workplaces, coupled with the knowledge that certain working conditions make it difficult for employees to avoid emotional labor, suggests that it is important to understand any potential negative implications associated with the construct and employee- and work-related outcomes. Three types of consequences of emotional labor have been posited: health outcomes, attitudinal outcomes, and performance outcomes.

Health consequences. The most often-studied consequence of emotional labor is burnout. Burnout is closely related to emotional labor because of the parallel emphasis on front-line employee–customer exchanges as well as the management of emotions, and has been defined as "an indication of the employees' growing

inability to adequately manage their emotions when interacting with clients'' (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001, p. 527). Although burnout similarly acknowledges the need for the regulation of emotions in the workplace to meet prescribed role requirements, it focuses on the implications of no longer being capable of successfully controlling emotional displays, whereas emotional labor focuses on the strategy of creating appropriate displays. Three specific dimensions of burnout were identified by Maslach and Jackson (1981) and have been widely accepted in research to date: depersonalization, reduced personal accomplishment, and emotional exhaustion (Zapf et al., 2001).

One indicator of burnout, depersonalization, occurs when an individual ''seeks emotional distance or feels estranged from others,'' (Brotheridge & Lee, 2003, p. 367). Employees experiencing depersonalization are no longer able to effectively manage their emotions relative to personal interactions. In turn, they emotionally retreat, often becoming apathetic and distant from the situation by viewing the customers as objects rather than persons. Similarly, emotional labor may result in another dimension of burnout, reduced personal accomplishment, an employee's ''diminished sense of efficacy or accomplishment in their role performance'' (Brotheridge & Lee, 2003, p. 367). Maslach, Schaufeli, and Leiter (2001) explained that reduced personal accomplishment can be derived from a deficit of proper resources or the depletion of energy and lack of unity with the job, causing employees to doubt their skills and abilities or not feel satisfied with their work performance. Employees utilizing emotional labor to successfully carry out work tasks with the proper emotional display may suffer from reduced personal accomplishment because of the propensity to perceive their performance as inauthentic, preventing them from taking credit for any achievements attained while employing emotional labor (Dormann & Kaiser, 2002; Mikolajczak, Menil, & Luminet, 2007; Miller & Kosten, 2008).

A third indicator of burnout, emotional exhaustion, has also been found to correlate with emotional labor. Defined as ''the state of depletion and fatigue,'' emotional exhaustion is often manifested through expressions of irritation, anger, depression, and disappointment (Grandey, 2003, p. 89; Zhang & Zhu, 2008). The energy exertion aspect of emotional labor is thought to lead directly to emotional exhaustion (Brotheridge & Lee, 2003).

Emotional labor may also adversely affect other aspects of employee health. If the psychological strain associated with emotional discordance becomes intense, it could lead to physiological health problems. Additionally, the strain and exhaustion characteristic of burnout could also harm the individual's physical health. Research in this area has reported a strong negative correlation between emotional labor and health (Dormann & Kaiser, 2002; Wegge, Vogt, & Wecking, 2007; Zapf, Vogt, Seifert, Mertini, & Isic, 1999).

Attitudinal consequences. A second focus of emotional labor research has been aimed at understanding the attitudinal consequences of emotional labor. Research suggests emotional labor can affect job satisfaction (Rutner, Hardgrave, & McKnight, 2008), work withdrawal, and turnover intentions (Abraham, 1999; Bakker & Heuven, 2006; Karatepe & Aleshinloye, 2009; Rutner et al., 2008). As research suggests these outcomes have repercussions for organizational competitiveness (e.g., Harrison, Newman, & Roth, 2006; Shore & Martin, 1989), it is important to explore the extent to which the discordance versus congruence of emotions may have differential implications for employee work attitudes.

Performance consequences. Employees struggling with emotional labor may also face performance problems. The energy expended managing emotions may well detract from cognitive resources needed to make high-quality decisions and perform tasks effectively

(Bakker & Heuven, 2006). Further, in many jobs, part of work performance is the ability to produce required emotive displays (e.g., nurses must be able to express sympathy and compassion in addition to performing other nursing tasks); the energy expended in performing emotional labor and the employee's success in doing so may detract from the emotional resources required to effectively perform in their role.

Research Question 2: What are the worker- and work-related correlates of emotional labor states?

A second critical question is what predicts or co-occurs with emotional labor? Empirical research has explored a variety of factors which are thought to precede emotional labor. We classify these in terms of those which are worker-related (i.e., tied to individual differences) versus those which are work-related (i.e., stemming from an aspect of the work environment). In order to avoid causal ambiguity, we use the term correlates instead of antecedents.

Worker-related correlates. Empirical work suggests associations between emotional labor and the Big Five personality characteristics (Diefendorff, Croyle, & Gosserand, 2005), self-monitoring (Bono & Vey, 2004; Diefendorff et al., 2005), emotional intelligence (Wong & Law, 2002), self-efficacy (Bandura, 1994), and affectivity (Bono & Vey, 2004), though these relationships seem to differ depending on the emotional labor state studied. Such disparity may have implications for conclusions drawn regarding the role of personality in work performance. For example, recent research on emotional intelligence (which is "the ability to recognize and use emotional information in social interactions"; Grandey, 2000, p. 106) has concluded that emotional labor moderates the relation between emotional intelligence and job performance; emotionally intelligent individuals perform better than emotionally unintelligent individuals at emotionally laborious jobs, but there is no difference between groups for jobs that do not involve emotional labor (Wong & Law, 2002). However, it is unclear whether this is true for all forms of emotional labor, or just discordant states. Further, positive affectivity has been shown to be negatively related to emotional labor, while negative affectivity is positively related to emotional labor (Bono & Vey, 2004), though these findings appear to be based mostly on research related to discordant forms of emotional labor.

Work-related correlates. Aspects of the job context may also affect emotional labor. For example, Morris and Feldman (1996) hypothesized that supervisor support, routineness of task, task variety, form of interaction, and job autonomy may be associated with worker emotions, emotive displays, and emotional labor.

Research Question 3: Do occupational group, EL target, and study design moderate the relationships between emotional labor and its correlates and consequences?

Research has demonstrated that emotional labor can impact a diverse range of employees and workplaces. We examine two conceptual (occupational group, target of EL) and one methodological (study design) moderator of emotional labor relationships. Although emotional labor is relevant to the experience of work regardless of the occupation (Glasø & Einarsen, 2008), there are some professions in which employees are more prone to engage in emotional labor. Some of the most notable occupations recognized for high EL usage levels are front-line positions, specifically customer service representatives, call-center agents, police officers, nurses, and teachers. We also examine the extent to which the target of the emotional labor is internal versus external to the organization. It is possible, for

example, that individuals have to engage in more emotional labor when the source is internal (i.e., coworkers and supervisors), whereas they can more easily "escape" from external sources (e.g., customers). Third, we examine the study design as a possible methodological moderator of observed relationships.

Research Question 4: Do discordant and congruent emotional labor states mediate the relationship between display rules and burnout?

Past research demonstrates that situational constraints, namely organizational display rules ("social norms regarding the appropriate experience and display of emotions"; Bono & Vey, 2004, p. 215), lead employees to engage in emotional labor. The logic of past work posits that emotional display rules present in the work environment lead to emotional labor, and that emotional labor in turn affects burnout. Interestingly, this pattern fits with discordant states, but not congruent ones; when display rules lead to emotional labor states wherein there exists conflict between felt and displayed emotions, the emotional labor will relay into burnout. However, when emotional display rules prompt congruent emotional labor states, there is no reason for the emotional labor to produce a burnout response. Thus, we examine the extent to which discordant and congruent emotional labor states differentially mediate the relationship between display rules and burnout.

Method

Database

One hundred and nine independent studies reported in 97 manuscripts (total $N = 36{,}619$) examining emotional labor in the workplace were included in this meta-analysis. To ensure a comprehensive search, we compiled the relevant literature using a multi-faceted approach involving (a) a computerized search of the PsychInfo, Business Source Premier, and Google Scholar databases using relevant keywords or phrases (e.g., emotional labor, surface acting, deep acting, emotion and customer service, emotion and dissonance, emotion and suppression, emotion and regulation, etc.), (b) a manual search for references cited in studies included in this meta-analysis, and (3) a search of references cited in recent reviews of the emotional labor construct (e.g., Bono & Vey, 2004; Chau, 2007).

To be included in the database, studies must have either reported a correlation between emotional labor and at least one relevant construct, or reported sufficient information to compute a correlational relationship between emotional labor and this construct. Ten studies reported the results of an experiment investigating the role of emotional labor and/or display rules in relevant correlates/outcomes. These studies reported sufficient effect size information (e.g., means and standard deviations for experimental and control groups, t or F statistics) to permit conversion of the effect size estimates into a point-biserial correlation using formulas provided in Hunter and Schmidt (2004). As point-biserial correlations are attenuated (in this case, due to the dichotomization of either emotional labor or display rules in the primary study), corrections were made to convert correlations to a full ± 1 scale; we also made adjustments to the sample sizes for the corrected correlations to avoid underestimating sample error variance using procedures described in Hunter and Schmidt (1990, 2004) and Ones, Viswesvaran, and Schmidt (1993). When studies contained multiple samples and reported effect sizes separately for each sample, those correlations were analyzed independently. When authors reported multiple estimates of the same relationship from the same sample (e.g., satisfaction and more than one form of emotional labor), those correlations were examined separately only as appropriate for subanalyses (e.g., satisfaction and deep acting vs. surface acting), but an average correlation was computed for all global meta-analyses of those relationships (e.g., emotional labor and satisfaction) to maintain independence

Table 2. Descriptive statistics of meta-analytic database

	k	*N*
Total	109	36550
Type of emotional labor		
General emotional labor	27	12672
Deep acting	45	13887
Emotional consonance	12	3695
Surface acting	56	15562
Emotional dissonance	29	7567
Emotional suppression	9	1512
Display rules	29	11129
Setting		
Field	99	34959
Lab	10	1591
Design		
Survey	99	34959
Experiment	10	1591
Occupation		
Customer service	33	8339
Healthcare	11	4410
Education	10	1914
Other/Various	55	21887
Target of emotional labor		
Internal to organization	45	21803
Served by organization	59	12822
Mixed	5	1925

(Hunter & Schmidt, 2004). A list of the studies included in this meta-analysis is included in the reference section prefixed with an asterisk.

Primary study characteristics. Table 2 reports descriptive statistics for the meta-analytic database. The majority of studies employed field samples (91%) and used survey methods of collecting information about emotional labor and/or display rules (91%). Thirty percent of the samples were employees in customer service roles (e.g., call centers, hospitality/hotels, retail), 10% of the samples were employees within the healthcare industry (e.g., doctors, nurses, medical technicians), and 9% of the samples were employees within the education industry (e.g., teachers, college professors, tutors, principals); 50% primary study authors simply broadly surveyed working adults and included members of various industries/roles within the same sample (e.g., customer service, education, health care, law enforcement, administrative). Forty-one percent of the studies on emotional labor examined the role of emotional labor directed towards individuals within the employee's organization (e.g., supervisors, coworkers, team members, and direct reports), 54% of the studies examined the role of emotional labor directed towards individuals served by the organization (e.g., customers, clients, students, patients, the community, etc.), and 5% of the studies examined emotional labor in general, without specifying the target.

Measurement of emotional labor. As can be seen in Table 3, a variety of measures have been used to assess emotional labor. We would have liked to conduct a moderator analysis examining the role of emotional labor scale in the relationships examined within this study. However, about half (43.36%) of the studies employed measures of emotional labor which were more or less sequentially developed/improved over time and which include a common subset of items to assess one or more of the emotional labor dimensions (e.g., Brotheridge & Lee, 2003; Diefendorff et al., 2005; Grandey, 2003; or Richards & Gross, 2000). Unfortunately, as item-level effects were not reported in these studies, we were not able to examine these scales independently. Although a number of other "independent" measures have been used, none have been used with enough frequency to permit moderator analyses. An important direction for future research is to explore the comparative validity of common emotional labor scales in explaining variance in employee personal and work outcomes.

Coding procedure and coder reliability

Each study was coded for (a) sample size, (b) sample characteristics, including occupation, (c) study design, (d) operationalization of emotional labor, (e) target of the emotional

Table 3. Summary of Emotional Labor Scales used in the meta-analytic database

Author(s), year	Scale name/Construct	Number of studies in which it is cited
Adelmann, 1989	Emotional Labor Scale	1
Best et al., 1997	Emotion Work Requirements Scale	7
Brief et al., 1988	Job Affect Scale	2
Brotheridge and Grandey, 2002*	Emotion Work Requirements Scale and Emotional Labor Scale	1
Brotheridge and Lee, 1998	Emotional Labor Scale	12
Brotheridge and Lee, 2002*	Emotional Labor Scale	2
Brotheridge and Lee, 2003*	Emotional Labor Scale	17
Chu and Murrmann, 2006	Hospitality Emotional Labor Scale	3
Diefendorff et al., 2005*	Includes measures of surface and deep acting, emotional consonance, display rules, and frequency/duration/ routineness of interactions	13
Diefendorff and Richard, 2003	Emotion Management Behaviors	1
Dormann and Kaiser, 2002*	Frankfurt Emotion Work Scale and items measuring emotional dissonance	1
Glasø and Einarsen, 2008*	Emotion regulation	2
Glomb and Tews, 2004	Discrete Emotions Emotional Labor Scale	3
Grandey, 1998*	Emotional Labor Scale	2
Grandey, 2003*	Includes measures of surface and deep acting and display rules	14
Grandey et al., 2004	Emotion regulation	2
Grandey et al., 2005*	Response-focused emotional regulation	1
Gross and John, 2003*	Emotion Regulation Questionnaire	1
Hollenbeck et al., 1989	*No explicit measures of emotional labor*	2
Izard et al., 1974	Differential Emotions Scale	1
Kruml and Geddes, 2000	Emotive effort and emotive dissonance	4
Mann, 1998	Emotional Labor Inventory	2
McCormick et al., 1989*	Interpersonal interaction items of the Position Analysis Questionnaire	1
Morris and Feldman, 1997	Emotional labor	4
Näring and Briët, 2004	Dutch Questionnaire of Emotional Labor	1
Pugliesi, 1999	Emotional labor	1
Richards and Gross, 2000*	Emotion Regulation Questionnaire	3
Roger and Najarian, 1989	Emotion Control Questionnaire	1
Rupp and Spencer, 2006*	Includes measure of emotional labor and display rules	1
Rutner et al., 2008*	Includes measures of surface and deep acting and display rules	1
Schaubroeck and Jones, 2000	Emotional labor	4
Schneider et al., 1998	Global Service Climate Scale	1
Sieverding, 2009	Display rules	1
Spencer and Carnevale, 2003	Emotional labor	1

(continued)

Table 3. (continued)

Author(s), year	Scale name/Construct	Number of studies in which it is cited
Sutton and Rafaeli, 1988	Display of positive emotion	1
Tsai, 2001*	Employee Affective Delivery Scale	1
VanVeldhoven and Meijman, 1994	Psychosocial strain at work	2
Wilk and Moynihan, 2005	Importance of employee job performance	1
Wu, 2003	Emotional labor	1
Zapf et al., 1999	Frankfurt Emotion Work Scale	15

Note. Asterisks indicate studies that primarily cite other scales rather than providing new items.

labor (i.e., whether the emotional labor was focused towards individuals within the organization or to individuals served by the organization), (f) correlations/effects between emotional labor/display rules and relevant correlates/outcomes, and (g) reliability estimates for emotional labor and correlates/outcomes, when available. To ensure coding consistency and construct validity, the authors jointly developed a coding scheme based upon the conceptual and operational definitions for relevant constructs within the primary studies. Two of the study's authors independently coded the studies that met criteria for inclusion in this study. Intercoder agreement was very high (99%), likely due to the objective nature of the data coded and the consistency with which it was reported in the primary studies. Instances of disagreement were resolved through discussion.

Coding of the emotional labor construct. Although approximately 25% of studies reported results for only emotional labor in general/overall, the majority of studies investigated one or more of five states of emotional labor: (a) two representative of emotion congruence: deep acting (e.g., Grandey, 2003; Holman et al., 2002; Zhang & Zhu, 2008), and emotional consonance (e.g., Diefendorff et al., 2005; Näring et al., 2006; Yugo, 2009), and (b) three representative of emotion discordance: surface acting (e.g., Chau, 2007; Totterdell & Holman, 2003; Zammuner & Galli, 2005a), emotional dissonance (e.g., Abraham, 1999; Giardini & Frese, 2006; Lewig & Dollard, 2003), and emotional suppression (e.g., Gross & John, 2003; Schaubroeck & Jones, 2000; Sieverding, 2009). We first coded each of the types of emotional labor separately to examine the role of each in relevant correlates and consequences. Then, to obtain an overall estimate of the relationships associated with emotional labor, average correlations across subdimensions were computed as appropriate.

Coding of emotional labor outcomes. The primary studies evaluated two key types of consequences of emotional labor: employee-related and work-related. Employee-related outcomes of emotional labor were burnout and health. Three different indicators of burnout were reported in the primary studies: (a) depersonalization (distancing oneself from personal interactions at work, often characterized by viewing customers/clients as objects), (b) reduced personal accomplishment (reduced self-efficacy or reduced association with work-related accomplishments), and (c) emotional exhaustion (the depletion of emotional energy). We examined the role of emotional labor on burnout overall as well as by indicator of burnout. Employee health examined the effect of emotional labor on the physical wellness of employees and was typically

operationalized by a subjective health assessment or through established scales (e.g., like the Pennebaker *Inventory of Limbic Languidness*; Pennebaker, 1982).

Work-related outcomes associated with emotional labor examined in the primary studies included job satisfaction, work withdrawal, turnover intent, and performance (task and emotion). Job satisfaction was operationalized primarily through the use of validated satisfaction measures (e.g., Diener, Emmons, Larsen, & Griffin, 1985; McKnight, 1997). Work withdrawal, an employee's tendency to withdraw from work (e.g., via absenteeism, tardiness, or excessive breaks), and was measured most commonly using the Job Involvement Questionnaire (Kanungo, 1982; Misra, Kanungo, & Stuhler, 1985). Turnover intent, the employee's desire to leave the organization, was typically operationalized either through an idiosyncratic scale or with a validated measure (Cropanzano, James, & Konovsky, 1993; Porter, Steers, Mowday, & Boulian, 1974; Singh, Verbeke, & Rhoads, 1996). Work performance was typically operationalized using subjective performance evaluations or through objective measures of employee performance. We coded type of performance as a moderator; specifically, performance was coded as being either "task" (e.g., job or task performance) or "emotion" (e.g., successfully displaying required emotions as indexed by customer perception of emotional displays, etc.).

Coding of emotional labor correlates. The primary studies examined two types of correlates of emotional labor: individual-difference variables and work-related correlates. The constructs examined within individual-difference variables included worker sex and tenure as well as a number of personality constructs, including the Big Five (openness, conscientiousness, agreeableness, extraversion, and emotional stability), self-monitoring, emotional intelligence, self-efficacy, positive and negative affectivity, and positive and negative emotions. All personality correlates were assessed using validated scales. Work-related correlates included employee perception of job or workplace stress, workplace support, display rules (requirements to present certain emotions during the course of performing the job), worker tenure, and justice perceptions.

Analyses

The meta-analytic methods outlined by Hunter and Schmidt (2004) were used to analyze data. Corrections were made for sampling error and measure reliability. Corrections were made for measure reliability using artifact distribution meta-analysis as reliability estimates were not consistently reported in primary studies. Given the possibility of a file-drawer effect wherein significant findings are more likely to be published than insignificant findings (Rosenthal, 1979), we conducted a file-drawer analysis (Hunter & Schmidt, 2004) to estimate the number of studies reporting null effects that would be required to reduce the reliability-corrected correlations to a specified lower value (we used $\rho = .05$).

Moderator analyses were conducted for emotional labor state examined in the primary studies (deep acting, emotional consonance, surface acting, emotional dissonance, emotional suppression), type of burnout (depersonalization, reduced personal accomplishment, emotional exhaustion), type of performance indicator (task or emotion), occupation (customer service, education, healthcare), study design (experiment, survey), and target of emotional labor (internal to organization, including coworkers, supervisors, and direct reports; vs. served by organization, including customers, clients, patients, and community). We followed Hunter and Schmidt's (2004) approach to testing for moderators; meta-analyses were conducted by level of moderator, and then conclusions were drawn about the presence and nature of moderators by examining both the credibility intervals (CV) and the confidence intervals (CI) around ρ within each meta-analysis (rho; the reliability-corrected

mean correlation; Hunter & Schmidt, 2004; Whitener, 1990). Whereas the CV provides an estimate of the variability of ρ across studies (wide CVs suggest the presence of a moderator, and CVs that do not include zero indicate that effects generalize across studies; Bobko & Roth, 2008; Kisamore, 2008; Kisamore & Brannick, 2008), the CI provides an estimate of the accuracy of our estimation of ρ (Whitener, 1990). As such, relationships may be interpreted to generalize across situations in which the 80% of CV does not include zero, and ρs may be interpreted to be meaningfully different from one another when one ρ estimate was not included in the CI band of the other ρ estimate.

Using regression analyses, we sought to determine the independent contribution of emotional labor (overall, as well as by dimension of emotional labor) to the prediction of burnout after controlling for the effects of display rules. Following the theory-testing method developed by Viswesvaran and Ones (1995), we conducted regression analyses on meta-analytically derived correlations between the variables (i.e., meta-analytic regression; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Zimmerman, 2008). We used the harmonic means of the total sample sizes on which each meta-analytic correlation from the input matrix was estimated to compute the standard errors associated with the regression coefficients (cf. Viswesvaran & Ones, 1995).

Results

Tables 4 through 13 present results of meta-analytic tests examining the core relationships among emotional labor and its presumed correlates and consequences.

RQ1: What are the health, attitudinal, and performance consequences of discordant and congruent emotional labor states?

Extensive research attention has been directed at two types of employee-related consequences: burnout and health. As can be seen in Table 4, our meta-analysis of the 59 studies that examined emotional labor in relation to burnout suggests a stable positive relationship between the two constructs ($\rho = .29$, $k = 59$, the 80% credibility interval does not include zero). The same is seen for each dimension of burnout, with the strongest correlations found for the role of emotional labor in depersonalization ($\rho = .36$, $k = 20$, the 80% credibility interval does not include zero) and emotional exhaustion ($\rho = .29$, $k = 54$, the 80% credibility interval does not include zero). When type of emotional labor is examined separately the difference between discordant and congruent emotions becomes apparent: whereas discordant emotional labor states are positively associated with burnout (surface acting: $\rho = .40$, $k = 37$; emotional dissonance: $\rho = .38$, $k = 23$; and emotional suppression: $\rho = .21$, $k = 3$), congruent emotional labor states are not predictive of burnout (deep acting: $\rho = .02$, $k = 59$, and emotional consonance: $\rho = .05$, $k = 5$). This same distinction between discordant and congruent emotional labor states is seen for each dimension of burnout as well as for employee health.

With regards to work-related consequences of emotional labor, research has examined the role of emotional labor in four types of work-related outcomes, including job satisfaction, work withdrawal, turnover intentions, and employee performance. The differential pattern of effects between discordant and congruent emotional labor states is seen here as well. As can be seen in Table 5, when congruent emotional labor states are examined, effects on satisfaction tend to be positive, whereas when discordant states are examined, the effects tend to be negative. For example, surface acting is significantly negatively related to job satisfaction ($\rho = -.28$, $k = 13$, the 80% credibility interval does not include zero) while emotional consonance (display of naturally felt emotions) is positively associated with jobs satisfaction ($\rho = .35$, $k = 3$, the 80% credibility interval does not include zero; the

Table 4. Emotional labor and worker-related outcomes

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Burnout overall	**59**	**17991**	**.24**	**.15**	**.29**	**.16**	**.09/.50**	**.25/.33**	**13.71**	**15.78**	**283**
Congruent states:											
● Deep acting	28	9171	.02	.13	.02	.14	−.16/.21	−.02/.06	17.85	17.86	—
● Emotional consonance	5	1661	.04	.26	.05	.35	−.39/.50	−.19/.29	4.32	4.33	—
Discordant states:											
● Surface acting	37	10666	.33	.11	.40	.11	.26/.53	.36/.44	24.93	31.18	259
● Emotional dissonance	23	7023	.30	.08	.38	.07	.30/.47	.33/.43	42.44	56.25	152
● Emotional suppression	3	669	.16	.11	.21	.11	.06/.35	.07/.35	36.82	39.25	10
Burnout – depersonalization	**20**	**6359**	**.27**	**.11**	**.36**	**.13**	**.20/.53**	**.31/.41**	**21.13**	**25.75**	**124**
Congruent states:											
● Deep acting	10	2125	.04	.16	.05	.18	−.18/.28	−.05/.15	19.00	19.02	—
● Emotional consonance	4	1471	−.04	.25	−.06	.34	−.49/.38	−.37/.25	4.30	4.32	1
Discordant states:											
● Surface acting	11	2894	.36	.07	.48	.05	.41/.55	.43/.53	56.29	68.60	95
● Emotional dissonance	8	3430	.35	.04	.49	.00	.49/.49	.46/.52	100	100	70
● Emotional suppression	2	518	.14	.10	.20	.11	.07/.34	.03/.37	40.67	41.28	6
Burnout – Emotional exhaustion	**54**	**16914**	**.24**	**.13**	**.29**	**.14**	**.11/.46**	**.25/.33**	**16.75**	**17.96**	**259**
Congruent states:											
● Deep acting	23	7680	.02	.12	.02	.13	−.14/.19	−.02/.06	20.66	20.67	—
● Emotional consonance	5	1661	.10	.18	.12	.22	−.16/.40	−.04/.28	9.04	9.21	7
Discordant states:											
● Surface acting	36	10524	.32	.13	.38	.14	.20/.55	.34/.42	16.70	19.21	238
● Emotional dissonance	21	6394	.31	.08	.38	.07	.28/.47	.34/.42	40.30	44.88	139
● Emotional suppression	2	516	.16	.10	.18	.08	.08/.29	.05/.31	40.46	40.55	5
Burnout – Reduced personal accomplishment	**18**	**6144**	**.06**	**.10**	**.08**	**.11**	**−.06/.22**	**.03/.13**	**27.10**	**27.23**	**11**
Congruent states:											
● Deep acting	9	2561	−.11	.19	−.13	.23	−.42/.16	−.25/−.01	9.43	9.55	14
● Emotional consonance	4	1471	−.04	.35	−.05	.44	−.62/.51	−.41/.31	2.28	2.29	—

(continued)

Table 4. (continued)

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Discordant states:											
• Surface acting	11	2251	.12	.11	.16	.10	.03/.30	.08/.24	43.33	43.73	24
• Emotional dissonance	8	3430	.11	.06	.14	.05	.08/.19	.10/.18	62.82	63.58	14
• Emotional suppression	1	365	.19	—	—	—	—	—	—	—	—
• Meta-analysis	k	N	r	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Health	**16**	**4378**	**−.13**	**.14**	**−.16**	**.15**	**−.36/.04**	**−.23/−.09**	**17.45**	**17.94**	**35**
Congruent states:											
• Deep acting	6	3013	.07	.10	.09	.11	−.05/.23	.00/.18	19.62	20.11	5
• Emotional consonance	2	251	−.05	.11	−.06	.07	−.15/.03	−.21/.09	70.61	70.62	1
Discordant states:											
• Surface acting	6	3013	−.19	.08	−.24	.08	−.35/−.14	−.31/−.17	28.81	32.25	23
• Emotional dissonance	7	806	−.29	.13	−.35	.11	−.48/−.21	−.45/−.25	47.45	48.70	42
• Emotional suppression	1	278	−.22	—	—	—	—	—	—	—	—

Note. k = number of correlations meta-analyzed; N = total number of groups; r = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer k representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

ρs are not included in the confidence interval for the compared effects). A similar pattern is seen with work withdrawal and turnover intentions. Here congruent emotional labor states tend to be negatively associated with work withdrawal and intent to turnover, while discordant states tend to be positively associated with these outcomes. For example, surface acting and emotional dissonance are positively associated with withdrawal (ρ =.12, k = 2, and ρ =.41, k = 4, respectively, the 80% credibility intervals do not include zero) while deep acting and emotional consonance are negatively associated with it (ρ = -.23, k = 2, and ρ = -.23, k = 2, respectively, the 80% credibility intervals do not include zero; the ρs are not included in the confidence interval of the compared effects). And, while surface acting and emotional dissonance are positively related with turnover intentions (ρ =.23, k = 6, and ρ =.34, k = 5, respectively, the 80% credibility intervals do not include zero), deep acting is negatively associated with it (ρ = -.09, k = 3, the 80% credibility interval does not include zero; the ρs are not included in the confidence interval of the compared effects).Insert Table 5 here

Overall, there is no consistent association between emotional labor and employee performance (ρ =.04, k = 24, the 80% credibility interval includes zero). Interestingly, however, when we examine type of emotional labor, congruent emotions (deep acting) are positively associated with employee performance (ρ =.12, k = 9, the 80% credibility interval does not include zero) while discordant states are not correlated with performance; this pattern is repeated for each type of performance, task and emotion (ρ =.20, k = 3, and ρ =.09, k = 6, respectively, the 80% credibility intervals do not include zero).

RQ2: Which worker- and work-related correlates are related to discordant and congruent emotional labor states?

As can be in Table 6, emotional labor is negatively correlated with both perceived supervisor support and justice perceptions (ρ = -.16, k = 12, and ρ = -.30, k = 3, respectively, the 80% credibility intervals do not include zero), and positively correlated with workplace stress (ρ =.38, k = 9, the 80% credibility interval does not include zero). Importantly, for perceived supervisor support and workplace stress, the relationship appears to hold for the discordant emotional labor states, surface acting and emotional dissonance (support: ρ = -.15, k = 6, and ρ = -.24, k = 6, respectively; stress: ρ =.43, k = 5, and ρ =.30, k = 2, respectively; the 80% credibility intervals do not include zero), but not for congruent states (the ρs are not included in the confidence interval of the compared effects). In fact, deep acting is actually positively associated with supervisor support (ρ =.15, k = 6, the 80% credibility interval does not include zero).

As can be seen in Table 7, individuals high in openness to experience, conscientiousness, agreeableness, and extraversion tend to be more likely to report congruent than discordant emotional labor states, whereas individuals high in neuroticism tend to be more likely to report discordant than congruent emotional labor states. Whereas surface acting and emotional dissonance are positively associated with neuroticism (ρ =.31, k = 5, and ρ =.08, k = 3, respectively, the 80% credibility intervals do not include zero), positive correlations are found for deep acting (ρs =.12,.10,.29, and.16, respectively; the 80% credibility intervals do not include zero) and negative correlations are found for surface acting (ρs = -.06, -.21, -.19, and -.14, respectively; the 80% credibility intervals do not include zero) with the other Big 5 constructs, openness, conscientiousness, agreeableness, and extraversion (the ρs are not included in the confidence interval of the compared effects).

Results also indicate emotionally intelligent individuals (e.g., emotional consonance; ρ =.25, k = 3, the 80% credibility intervals does not include zero) as well as those high in positive affectivity (e.g., deep acting, ρ =.14, k = 14

Table 5. Emotional labor and work-related outcomes

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Satisfaction	**37**	**12237**	**−.08**	**.26**	**−.09**	**.3**	**−.48/.29**	**−.17/−.01**	**4.41**	**4.45**	**30**
Congruent states:											
• Deep acting	9	4400	.06	.13	.07	.14	−.10/.24	−.01/.15	12.98	13.07	4
• Emotional consonance	3	580	.3	.16	.35	.17	.14/.57	.17/.53	16.64	17.18	18
Discordant states:											
• Surface acting	13	6171	−.23	.11	−.28	.11	−.42/−.13	−.35/−.21	17.17	18.54	60
• Emotional dissonance	11	1694	−.16	.24	−.20	.01	−.55/.15	−.35/−.05	10.91	11.1	33
Work withdrawal	**10**	**4606**	**−.02**	**.17**	**−.02**	**.2**	**−.27/.23**	**−.11/.07**	**7.59**	**7.6**	**—**
Congruent states:											
• Deep acting	2	2171	−.19	.03	−.23	0	−.23/−.23	−.27/−.19	100	100	7
• Emotional consonance	2	949	−.20	.11	−.23	.12	−.39/−.08	−.38/−.08	15.14	15.56	7
Discordant states:											
• Surface acting	2	2171	.1	.08	.12	.08	.02/.22	.01/.23	16.29	16.71	3
• Emotional dissonance	4	647	.33	.1	.41	.08	.30/.52	.31/.51	50.81	54.09	29
Turnover intentions	**12**	**4158**	**.15**	**.15**	**.17**	**0**	**−.03/.38**	**.09/.25**	**12.48**	**12.8**	**29**
Congruent states:											
• Deep acting	3	2434	−.08	.04	−.09	0	−.09/−.08	−.13/−.05	98.58	99.15	3
Discordant states:											
• Surface acting	6	3098	.2	.09	.23	.09	.11/.34	.16/.30	2.57	21.91	22
• Emotional dissonance	5	1024	.3	.17	.34	.18	.11/.57	.20/.48	13.45	14.29	29
Work performance (overall)	**24**	**3965**	**.03**	**.17**	**.04**	**.18**	**−.20/.27**	**−.04/.12**	**21.46**	**21.47**	**—**
Congruent states:											
• Deep acting	9	1500	.1	.1	.12	.07	.03/.21	.05/.19	64.22	64.83	13
Discordant states:											
• Surface acting	10	1651	−.05	.14	−.06	.14	−.25/.12	−.15/.03	32.24	32.33	2
• Emotional dissonance	7	757	−.02	.31	−.03	.36	−.49/.44	−.32/.26	9.81	9.82	—
• Emotional suppression	6	716	−.12	.2	−.14	.2	−.39/.12	−.30/.02	21.24	21.3	11
Emotion performance	**6**	**1082**	**.08**	**.26**	**.1**	**.3**	**−.29/.48**	**−.12/.32**	**8.11**	**8.16**	**6**
Congruent states:											
• Deep acting	3	344	.16	.14	.2	.13	.04/.36	.03/.37	45.5	46.23	9
Discordant states:											

(continued)

Table 5. (continued)

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
• Surface acting	3	344	−.04	.04	−.05	0	−.05/−.05	−.10/.00	100	100	—
• Emotional dissonance	1	96	−.71	—	—	—	—	—	—	—	—
Task performance	**18**	**2619**	**−.01**	**.17**	**−.01**	**.17**	**−.23/.21**	**−.08/.06**	**24.96**	**24.96**	**—**
Congruent states:											
• Deep acting	6	1156	.08	.07	.09	0	.09/.09	.04/.14	100	100	5
Discordant states:											
• Surface acting	7	1307	−.06	.15	−.07	.17	−.28/.14	−.18/.04	23.04	23.13	3
• Emotional dissonance	5	621	.08	.18	.1	.19	−.15/.35	−.07/.27	24.85	24.93	5
• Emotional suppression	6	716	−.12	.2	−.14	.2	−.39/.12	−.30/.02	21.24	21.3	11
Perceived supervisor support	**12**	**3994**	**−.13**	**.11**	**−.16**	**.12**	**−.31/−.01**	**−.22/−.10**	**24.33**	**24.73**	**26**
Congruent states:											
• Deep acting	6	1578	.13	.1	.15	.09	.04/.26	.07/.23	39.82	40.08	12
Discordant states:											
• Surface acting	6	1578	−.12	.1	−.15	.1	−.27/−.02	−.23/−.07	35.93	36.14	12
• Emotional dissonance	6	2425	−.19	.05	−.24	0	−.24/−.24	−.28/−.20	100	100	23
• Emotional suppression	1	365	−.07	—	—	—	—	—	—	—	—
Justice perceptions	**3**	**490**	**−.26**	**.07**	**−.30**	**0**	**−.30/−.30**	**−.38/−.22**	**100**	**100**	**15**
Workplace stress	**9**	**3759**	**.31**	**.11**	**.38**	**.12**	**.23/.54**	**.31/.45**	**15.63**	**20.02**	**59**
Congruent states:											
• Deep acting	3	544	−.04	.14	−.05	.16	−.25/.15	−.22/.12	27.01	27.09	—
Discordant states:											
• Surface acting	5	855	.35	.12	.43	.11	.28/.58	.32/.54	30.58	36.55	38
• Emotional dissonance	2	1588	.25	.03	.3	0	.30/.30	.26/.34	100	100	10
• Emotional suppression	1	151	.2	—	—	—	—	—	—	—	—

Note. *k* = number of correlations meta-analyzed; *N* = total number of groups; *r* = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer *k* representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

Table 6. Emotional labor and work-related correlates

Meta-analysis	*k*	*N*	*r*	*SDr*	ρ	*SD*ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Perceived supervisor support	**12**	**3994**	**−.13**	**.11**	**−.16**	**.12**	**−.31/−.01**	**−.22/−.10**	**24.33**	**24.73**	**26**
Congruent states:											
● Deep acting	6	1578	.13	.10	.15	.09	.04/.26	.07/.23	39.82	40.08	12
Discordant states:											
● Surface acting	6	1578	−.12	.10	−.15	.10	−.27/−.02	−.23/−.07	35.93	36.14	12
● Emotional dissonance	6	2425	−.19	.05	−.24	.00	−.24/−.24	−.28/−.20	100	100	23
● Emotional suppression	1	365	−.07	—	—	—	—	—	—	—	—
Justice perceptions	**3**	**490**	**−.26**	**.07**	**−.30**	**.00**	**−.30/−.30**	**−.38/−.22**	**100**	**100**	**15**
Workplace stress	**9**	**3759**	**.31**	**.11**	**.38**	**.12**	**.23/.54**	**.31/.45**	**15.63**	**20.02**	**59**
Congruent states:											
● Deep acting	3	544	−.04	.14	−.05	.16	−.25/.15	−.22/.12	27.01	27.09	—
Discordant states:											
● Surface acting	5	855	.35	.12	.43	.11	.28/.58	.32/.54	30.58	36.55	38
● Emotional dissonance	2	1588	.25	.03	.30	.00	.30/.30	.26/.34	100	100	10
● Emotional suppression	1	151	.20	—	—	—	—	—	—	—	—
Tenure	**18**	**6034**	**.00**	**.06**	**.00**	**.02**	**−.02/.02**	**−.02/.02**	**96.63**	**96.63**	**—**
Congruent states:											
● Deep acting	8	2540	.08	.10	.08	.09	−.03/.20	.02/.14	31.33	31.40	5
● Emotional consonance	1	257	.00	—	—	—	—	—	—	—	—
Discordant states:											
● Surface acting	6	1569	−.05	.11	−.08	.14	−.25/.10	−.20/.04	33.13	33.22	4
● Emotional dissonance	6	2088	−.02	.06	−.03	.05	−.09/.02	−.09/.03	78.98	79.00	—

Note. k = number of correlations meta-analyzed; N = total number of groups; r = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer k representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

Table 7. Emotional labor and worker-related correlates

Meta-analysis	*k*	*N*	*r*	*SDr*	ρ	*SD*ρ	80%CV	90%CI	%SEV	%ARTV	FDk
					Big Five Personality Factors						
Neuroticism	**11**	**3308**	**.05**	**.11**	**.06**	**.11**	**−.08/.21**	**−.01/.13**	**30.27**	**30.39**	**2**
Congruent states:											
● Deep acting	5	1527	−.03	.08	−.04	.08	−.15/.06	−.12/.04	46.31	46.44	—
● Emotional consonance	1	297	−.24	—	—	—	—	—	—	—	—
Discordant states:											
● Surface acting	5	1527	.25	.14	.31	.15	.12/.50	.18/.44	15.82	19.66	26
● Emotional dissonance	3	1382	.07	.02	.08	.00	.08/.08	.06/.10	100	100	2
Openness to experience	**4**	**600**	**.02**	**.0**	**.02**	**.00**	**.02/.02**	**.02/.02**	**100**	**100**	**—**
Congruent states:											
● Deep acting	2	544	.09	.03	.12	.00	.12/.12	.07/.17	100	100	3
● Emotional consonance	1	297	.10	—	—	—	—	—	—	—	—
Discordant states:											
● Surface acting	2	544	−.05	.06	−.06	.00	−.06/−.06	−.14/.02	100	100	1
● Emotional dissonance	1	40	−.10	—	—	—	—	—	—	—	—
Conscientiousness	**5**	**1225**	**−.04**	**.07**	**−.05**	**.04**	**−.11/.00**	**−.11/.01**	**77.95**	**78.01**	**—**
Congruent states:											
● Deep acting	3	1169	.08	.04	.10	.00	.10/.10	.05/.15	100	100	3
● Emotional consonance	1	297	.16	—	—	—	—	—	—	—	—
Discordant states:											
● Surface acting	3	1169	−.18	.10	−.21	.10	−.34/−.07	−.32/−.10	23.21	23.23	10
● Emotional dissonance	1	40	−.27	—	—	—	—	—	—	—	—
Agreeableness	**6**	**1456**	**.10**	**.11**	**.14**	**.11**	**.00/.28**	**.04/.24**	**36.83**	**37.10**	**11**
Congruent states:											
● Deep acting	3	1169	.23	.04	.29	.00	.29/.29	.24/.34	100	100	14
● Emotional consonance	1	297	.30	—	—	—	—	—	—	—	—
Discordant states:											
● Surface acting	3	1169	−.16	.09	−.19	.08	−.30/−.09	−.29/−.09	33.04	33.09	8
● Emotional dissonance	1	40	−.01	—	—	—	—	—	—	—	—
Extraversion	**9**	**1966**	**.05**	**.07**	**.06**	**.01**	**.05/.07**	**.01/.11**	**99.35**	**99.56**	**2**
Congruent states:											
● Deep acting	5	1527	.13	.03	.16	.00	.16/.16	.13/.19	100	100	11
● Emotional consonance	1	297	.28	—	—	—	—	—	—	—	—

(continued)

Table 7. (continued)

Meta-analysis	*k*	*N*	*r*	*SDr*	ρ	*SD*ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Discordant states:											
● Surface acting	5	1527	−.12	.08	−.14	.06	−.22/−.06	−.21/−.07	53.73	55.39	9
● Emotional dissonance	1	40	.10	—	—	—	—	—	—	—	—
Other Personal Characteristics											
Self-monitoring	**7**	**1423**	**.08**	**.16**	**.10**	**.17**	**−.12/.32**	**−.02/.22**	**20.24**	**20.41**	**7**
Congruent states:											
● Deep acting	4	933	.07	.08	.09	.06	.01/.17	.01/.17	65.77	66.20	3
● Emotional consonance	2	554	−.08	.13	−.09	.13	−.26/.07	−.26/.08	23.04	23.20	2
Discordant states:											
● Surface acting	4	933	.16	.10	.21	.09	.10/.32	.10/.32	45.52	47.75	13
● Emotional dissonance	2	233	.28	.09	.34	.03	.31/.38	.21/.47	91.48	93.17	12
Emotional intelligence	**7**	**2263**	**.04**	**.11**	**.05**	**.12**	**−.10/.21**	**−.04/.14**	**24.24**	**24.27**	**—**
Congruent states:											
● Deep acting	6	1740	.16	.18	.20	.21	−.07/.46	.05/.35	10.53	10.74	18
● Emotional consonance	3	1057	.19	.01	.25	.00	.25/.25	.24/.26	100	100	12
Discordant states:											
● Surface acting	6	1740	−.16	.15	−.20	.17	−.41/.02	−.35/−.05	15.17	15.60	18
Positive affectivity	**19**	**5476**	**−.01**	**.10**	**−.01**	**.09**	**−.12/.10**	**−.05/.03**	**39.09**	**39.09**	**—**
Congruent states:											
● Deep acting	14	4719	.12	.08	.14	.06	.06/.22	.10/.18	50.99	51.94	25
● Emotional consonance	3	1593	.17	.02	.21	.00	.21/.21	.19/.23	100	100	10
Discordant states:											
● Surface acting	13	3950	−.22	.09	−.26	.08	−.36/−.16	−.31/−.21	37.64	39.81	55
● Emotional dissonance	1	53	−.25	—	—	—	—	—	—	—	—
● Emotional suppression	1	150	−.06	—	—	—	—	—	—	—	—
Negative affectivity	**25**	**6274**	**.18**	**.15**	**.21**	**.16**	**.01/.40**	**.15/.27**	**17.46**	**17.86**	**80**
Congruent states:											
● Deep acting	14	4766	.04	.13	.05	.14	−.13/.22	−.02/.12	16.83	16.86	—
● Emotional consonance	4	1671	−.21	.21	−.27	.26	−.60/.07	−.49/−.05	4.91	5.30	18
Discordant states:											
● Surface acting	14	4766	.30	.12	.36	.13	.19/.53	.30/.42	15.76	17.97	87
● Emotional dissonance	5	608	.32	.18	.38	.19	.14/.63	.22/.54	19.90	20.04	33
● Emotional suppression	1	150	.06	—	—	—	—	—	—	—	—

(continued)

Table 7. (continued)

Meta-analysis	*k*	*N*	*r*	*SDr*	ρ	*SD*ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Sex	**39**	**13312**	**.01**	**.08**	**.01**	**.07**	**−.08/.09**	**−.01/.03**	**44.18**	**44.19**	**—**
Congruent states:											
• Deep acting	12	4553	.01	.11	.01	.11	−.13/.15	−.04/.06	21.68	21.68	—
• Emotional consonance	6	673	.18	.24	.18	.24	−.13/.50	.02/.34	7.28	7.38	16
Discordant states:											
• Surface acting	15	5422	−.02	.11	−.02	.10	−.15/.11	−.07/.03	23.22	23.23	—
• Emotional dissonance	16	6067	.01	.08	.01	.07	−.08/.10	−.02/.04	41.84	41.84	—
• Emotional suppression	3	592	.00	.11	.00	.09	−.12/.12	−.10/.10	42.17	42.17	—
Positive emotions	**4**	**617**	**−.05**	**.18**	**−.06**	**.20**	**−.31/.19**	**−.24/.12**	**20.07**	**20.10**	**1**
Negative emotions	**7**	**1134**	**.34**	**.18**	**.40**	**.19**	**.16/.63**	**.27/.53**	**15.80**	**17.45**	**49**
Self-efficacy	**3**	**508**	**−.05**	**.09**	**−.06**	**.05**	**−.12/−.01**	**−.16/.04**	**80.69**	**80.82**	**1**

Note. k = number of correlations meta-analyzed; N = total number of groups; r = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer k representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

versus surface acting, ρ = -.26, k = 13, respectively, the 80% credibility intervals do not include zero and the ρs are not included in the confidence interval of the compared effects) tend to report congruent emotional labor states, whereas high self-monitors (surface acting, ρ =.21, k = 4, and emotional dissonance, ρ =.34, k = 2, respectively, the 80% credibility intervals do not include zero) and those high in negative affectivity (surface acting, ρ =.36, k = 14, or emotional dissonance, ρ =.38, k = 5, the 80% credibility intervals do not include zero) tend to report discordant emotional labor states.

RQ3: Do occupational group, target of emotional labor, and study design moderate the relationships between emotional labor and its correlates and consequences?

Two theoretical (occupation and target of emotional labor) and one methodological (study design) moderators of the emotional labor relationships were examined whenever sufficient studies were available within each level of the moderator to conduct the moderator analysis (we only computed a moderator analysis when at least two studies were included in at least two levels of the moderator as a meta-analysis cannot be meaningfully computed with one study). Unfortunately, there were not a sufficient number of studies available to perform a fully factorial moderator analysis to compare the role of these moderators in discordant versus congruent emotional labor states.

As can be seen in Table 8, occupational setting moderates the strength of relationships between emotional labor and its correlates and consequences. Emotional labor is more strongly related to burnout, health, satisfaction, work withdrawal, turnover intentions and negative affectivity in customer service roles as compared with education and healthcare occupations (the ρs are stronger for customer service occupations and are not included in the confidence intervals for the other occupations). No difference is seen in the emotional labor – performance or emotional labor – support relationships across occupation (the confidence intervals overlap significantly). The positive affectivity - emotional labor relationship appears to be stronger in educational occupations than in healthcare and customer service occupations (the ρ of.20 is not included in the confidence intervals of the compared effects). Lastly, the display rules – emotional labor relationship appears to be stronger for healthcare than customer service occupations (ρ =.40, k = 3, and ρ =.19, k = 8, respectively, the 80% credibility intervals do not include zero; the ρs are not included in the confidence interval of the compared effect).

As can be seen in Table 9 by examining the confidence intervals, for the most part, the strength of the emotional labor relationships we examined does not differ depending on whether the emotional labor in question is targeted toward individuals internal to the organization (i.e., supervisors, coworkers, direct reports) or to individuals served by the organization (e.g., customers, patients). The exceptions include health, stress, satisfaction, and agreeableness, where stronger effects are seen for emotional labor targeted to those served by the organization; and perceived supervisor support where a stronger effect is seen for emotional labor directed toward individuals internal to the organization.

As can be seen in Table 10, we only had sufficient samples to explore study design as a moderator for four correlates of emotional labor. With the exception of performance, study design does not appear to moderate the emotional labor relationships. With regard to performance, we see a weak positive effect for surveys and a weak negative effect for experiments (the ρs are not included in the confidence interval of the compared effect).

Table 8. Occupation as a moderator of the emotional labor relationships

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Burnout											
● Customer service	19	4625	.27	.12	.32	.12	.16/.48	.27/.37	23.50	25.54	103
● Education	8	1386	.11	.11	.15	.10	.02/.28	.06/.24	50.21	51.43	16
● Healthcare	6	3688	.21	.12	.26	.14	.08/.44	.16/.36	10.46	12.30	25
Health											
● Customer service	4	605	−.31	.12	−.37	.12	−.52/−.22	−.49/−.25	35.98	36.72	26
● Education	1	40	−.25	—	—	—	—	—	—	—	—
● Healthcare	3	2426	−.05	.07	−.06	.08	−.16/.04	−.14/.02	23.54	24.03	1
Satisfaction											
● Customer service	11	2071	−.16	.23	−.20	.27	−.54/.14	−.34/−.06	9.45	9.61	33
● Education	3	727	.10	.07	.13	.03	.09/.17	.04/.22	84.00	84.87	5
● Healthcare	3	2939	−.07	.08	−.09	.09	−.20/.02	−.19/.01	16.03	16.51	3
Work withdrawal											
● Customer service	2	275	.20	.12	.23	.10	.11/.36	.07/.39	49.07	49.43	7
● Healthcare	2	2083	−.05	.06	−.06	.07	−.15/.03	−.14/.02	26.81	26.94	1
Turnover intentions											
● Customer service	5	854	.26	.20	.30	.21	.03/.56	.13/.47	13.05	13.45	25
● Healthcare	2	2443	.08	.09	.11	.11	−.03/.24	−.03/.25	9.87	9.96	3
Performance											
● Customer service	13	2550	.07	.17	.08	.18	−.14/.31	−.01/.17	18.23	18.30	8
● Education	3	317	−.03	.14	−.05	.14	−.23/.13	−.27/.17	47.61	47.64	—
● Healthcare	1	108	−.08	—	—	—	—	—	—	—	—
Perceived supervisor support											
● Customer service	8	2154	−.11	.14	−.13	.15	−.32/.06	−.23/−.03	19.33	19.48	13
● Education	2	405	−.19	.09	−.23	.06	−.31/−.15	−.36/−.10	62.23	64.12	7
Tenure											
● Customer service	8	3002	−.01	.05	−.02	.00	−.02/−.02	−.08/.04	100	100	—
● Education	1	523	−.06	—	—	—	—	—	—	—	—
● Healthcare	2	255	.04	.05	.06	.00	.06/.06	−.03/.15	100	100	1
Positive affectivity											
● Customer service	3	949	.05	.07	.06	.04	.00/.12	−.02/.14	66.34	66.42	1
● Education	2	195	.15	.22	.20	.27	−.14/.54	−.14/.54	20.52	20.52	6
● Healthcare	2	982	−.12	.01	−.13	.00	−.13/−.13	−.14/−.12	100	100	3
Negative affectivity											
● Customer service	5	1265	.39	.11	.44	.11	.31/.58	.35/.53	24.34	26.88	39
● Education	2	195	.10	.03	.13	.00	.13/.13	.08/.18	100	100	3
● Healthcare	2	982	.24	.00	.26	.00	.26/.26	.26/.26	100	100	8
Sex											
● Customer service	14	3676	.02	.10	.02	.08	−.09/.13	−.02/.06	39.64	39.65	—
● Education	1	365	.06	—	—	—	—	—	—	—	—
● Healthcare	4	2650	−.03	.05	−.03	.03	−.06/.00	−.07/.01	72.80	72.87	—
Display rules											
● Customer service	8	1712	.16	.12	.19	.12	.04/.34	.11/.27	31.60	31.94	22
● Healthcare	3	1239	.31	.04	.40	.00	.40/.40	.35/.45	100	100	21

Note. *k* = number of correlations meta-analyzed; *N* = total number of groups; *r* = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer *k* representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

RQ4: Do discordant and congruent emotional labor states mediate the relationship between display rules and burnout?

In Table 11, we report the role of display rules in emotional labor states. We find a significant positive correlation between organizational display rules and emotional labor ($\rho = .32$, $k = 30$, the 80% credibility interval does not include zero) as well as each emotional labor state, regardless of whether it is discordant or congruent; the strongest of effect is seen for emotional dissonance, followed by surface and deep acting ($\rho = .51, .31$, and.32, respectively; the 80% credibility intervals do not include zero; the ρs are not included in the confidence interval of the compared effect).

In Table 12, we report the effects of display rules on work- and worker-related outcomes. We find display rules are positively associated with emotion performance and negatively associated with work withdrawal ($\rho = .19$, $k = 2$, and $\rho = -.21$, $k = 8$, respectively, the 80% credibility intervals do not include zero). We also find display rules are positively correlated with all three indicators of burnout: depersonalization, emotional exhaustion, and reduced personal accomplishment ($\rho = .17, .14$, and.29, respectively; the 80% credibility intervals do not include zero). We sought to explore the extent to which emotional labor explains variance in burnout above and beyond display rules. Reported in Table 13 are the results of a series of meta-analytic regressions exploring the extent to which emotional labor states mediate the relationship between display rules and burnout. Results suggest that emotional labor overall, as well as the three discordant emotional labor states (surface acting, dissonance, and suppression), offer significant explanatory variance in employee burnout beyond that which can be explained by display rules. Specifically, whereas display rules are found to explain 1% of the variance in burnout (Model 1), emotional labor overall adds an additional 8% explained variance (Model 2); surface acting (Model 5) and emotional dissonance (Model 6) each explain an additional 15% of the variance in burnout after controlling for display rules. The congruent emotional labor states, deep acting (Model 3) and emotional consonance (Model 4), were not found to mediate the display rule–burnout relationship.

Discussion

The past decade has witnessed an increasing interest in the role of emotions in many aspects of work and human performance (Elfenbein, 2007), though the role of emotions in motivating behavior is not nearly as well studied or understood as is the role of more cognitive and attitudinal processes. Much research on workplace emotions examines the extent to which emotions are beneficial or harmful to different aspects of performance (c.f. Antonakis, Ashkanasy, & Dasborough, 2009; Dasborough, Ashkanasy, Tee, & Tse, 2009; Elfenbein, 2005; Elfenbein, Polzer, & Ambady, 2007). Within this, we can consider job contexts that constrain the natural experience and expression of human emotions. The emotional labor phenomenon piqued the interest of organizational scholars who found that workers in the customer service and healthcare fields showed higher levels of burnout, and that there were interesting differences in resultant burnout owing to differences in how workers dealt with the emotional demands of their jobs (e.g., Porter et al., 1974; Pugliesi, 1999; Sutton & Rafaeli, 1988). Thirty years later, the emotional labor phenomenon provides a useful framework for thinking about emotional dynamics affecting all workers as they manage the interplay between their natural/felt emotions and their required/displayed emotions.

The current study synthesizes this literature, positioning the emotional labor construct within its nomological network of antecedent, consequent, mediating, and moderating

Table 9. Target of emotional labor as a moderator of emotional labor relationships

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Burnout											
● Internal to org.	22	10788	.23	.11	.28	.12	.13/.43	.23/.33	14.91	17.04	101
● Served by org.	36	7048	.22	.16	.28	.17	.06/.50	.22/.34	18.99	21.01	166
Health											
● Internal to org.	7	3244	−.09	.12	−.11	.14	−.28/.07	−.20/−.02	14.01	14.42	8
● Served by org.	7	901	−.29	.11	−.34	.09	−.46/−.23	−.42/−.26	52.12	53.82	41
Stress											
● Internal to org.	4	1730	.26	.10	.32	.11	.18/.47	.22/.42	18.67	22.38	22
● Served by org.	4	1647	.37	.10	.46	.11	.32/.59	.36/.56	17.35	27.03	33
Negative emotions											
● Internal to org.	4	765	.34	.19	.39	.20	.13/.64	.21/.57	11.38	12.02	27
● Served by org.	3	369	.32	.14	.40	.14	.22/.58	.23/.57	32.45	34.77	21
Satisfaction											
● Internal to org.	12	5168	−.10	.12	−.11	.13	−.28/.05	−.17/−.05	16.11	16.36	14
● Served by org.	22	5753	−.19	.22	−.23	.25	−.55/.09	−.32/−.14	7.55	7.92	79
Work withdrawal											
● Internal to org.	3	2961	−.07	.05	−.09	.04	−.14/−.04	−.15/−.03	48.87	49.40	2
● Served by org.	7	1645	.08	.25	.10	.29	−.27/.47	−.09/.29	6.96	6.99	7
Turnover intentions											
● Internal to org.	7	3202	.13	.14	.15	.15	−.04/.35	.05/.25	10.53	10.76	14
● Served by org.	5	956	.21	.16	.24	.16	.03/.45	.11/.37	19.37	19.99	19
Performance											
● Internal to org.	8	1750	.05	.10	.06	.10	−.06/.19	−.01/.13	42.84	42.99	2
● Served by org.	15	2065	.03	.20	.04	.22	−.24/.31	−.07/.15	18.21	18.22	—
Perceived supervisor support											
● Internal to org.	4	2393	−.18	.04	−.21	.00	−.21/−.21	−.25/−.17	100	100	13
● Served by org.	8	1601	−.06	.14	−.08	.15	−.27/.12	−.19/.03	24.88	24.95	5
Tenure											
● Internal to org.	11	4052	.01	.07	.01	.07	−.09/.10	−.02/.04	54.39	54.39	—
● Served by org.	8	2184	.01	.05	.01	.00	.01/.01	−.04/.02	100	100	—
Neuroticism											
● Internal to org.	7	2544	.07	.10	.08	.11	−.06/.22	.01/.15	26.46	26.63	4
● Served by org.	4	764	−.02	.09	−.03	.06	−.11/.05	−.14/.08	72.06	72.10	—
Openness to experience											
● Internal to org.	2	263	−.03	.02	−.03	.00	−.03/−.03	−.05/−.01	100	100	—
● Served by org.	2	337	.05	.05	.07	.00	.07/.07	−.01/.15	100	100	1
Agreeableness											
● Internal to org.	3	888	.05	.02	.07	.00	.07/.07	.04/.10	100	100	1
● Served by org.	3	568	.19	.13	.24	.14	.06/.41	.08/.40	29.02	29.86	11
Extraversion											
● Internal to org.	5	1201	.02	.04	.02	.00	.02/.02	−.01/.05	100	100	—
● Served by org.	3	533	.07	.02	.09	.00	.09/.09	.07/.11	100	100	2
Self-monitoring											
● Internal to org.	3	573	.03	.23	.04	.27	−.31/.38	−.25/.33	9.83	9.85	—
● Served by org.	4	850	.12	.04	.15	.00	.15/.15	.11/.19	100	100	8

(continued)

Table 9. (continued)

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Emotional intelligence											
● Internal to org.	2	645	−.01	.15	−.01	.18	−.24/.22	−.18/.16	13.69	13.70	—
● Served by org.	5	1618	.06	.09	.08	.08	−.02/.18	−.01/.17	41.85	41.98	3
Positive affectivity											
● Internal to org.	11	3108	−.01	.11	−.01	.11	−.15/.12	−.06/.04	28.88	28.89	—
● Served by org.	8	2344	.01	.09	.02	.08	−.09/.12	−.08/.12	40.95	40.96	—
Negative affectivity											
● Internal to org.	11	3076	.20	.15	.23	.16	.03/.43	.14/.32	14.57	15.12	40
● Served by org.	13	3096	.15	.14	.18	.14	.00/.37	.10/.26	21.01	21.31	34
Sex											
● Internal to org.	20	8925	−.01	.07	−.01	.05	−.07/.05	−.04/.02	53.99	54.00	—
● Served by org.	18	4309	.04	.10	.04	.08	−.07/.18	.00/.08	41.58	41.61	—

Note. k = number of correlations meta-analyzed; N = total number of groups; r = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer k representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

Table 10. Study design as a moderator of emotional labor relationships

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Negative emotions											
● Experiment	3	493	.25	.17	.30	.17	.08/.52	.11/.49	19.72	19.88	15
● Survey	4	641	.40	.16	.47	.16	.26/.67	.32/.62	17.98	22.16	34
Positive emotions											
● Experiment	2	287	−.10	.25	−.12	.28	−.48/.24	−.47/.12	10.81	10.81	3
● Survey	2	330	.00	.03	.00	.00	.00/.00	−.03/.03	100	100	—
Performance											
● Experiment	8	898	−.07	.17	−.08	.17	−.30/.14	−.19/.03	30.56	30.63	5
● Survey	16	3067	.06	.16	.07	.17	−.15/.28	−.01/.15	21.13	21.22	6
Sex											
● Experiment	5	441	−.06	.14	−.06	.10	−.20/.07	−.16/.04	57.38	57.41	1
● Survey	33	12793	.01	.08	.01	.06	−.07/.09	−.01/.03	43.38	43.39	—

Note. k = number of correlations meta-analyzed; N = total number of groups; r = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; $SD\rho$ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer k representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

variables. We find that much can be learned about the patterns of determinants and consequences of emotional labor by organizing the results within a congruence–discordance perspective. Researchers have focused on five emotional labor states that vary by the extent to which "felt" and "displayed" emotions are in alignment with one another. When emotions are not in alignment, more energy is required to "fake" or "suppress" true emotions in order to meet organizational display rules. We delineate these emotional

Table 11. Display rules and emotional labor

Meta-analysis	*k*	*N*	*r*	*SD*r	ρ	*SD*ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Display rules	**30**	**9062**	**.26**	**.16**	**.32**	**.19**	**.08/.57**	**.26/.38**	**10.77**	**11.99**	**162**
Congruent states:											
• Deep acting	19	5343	.26	.11	.32	.12	.17/.48	.27/.37	24.80	26.76	103
• Emotional consonance	4	1159	.18	.28	.24	.35	−.21/.69	−.07/.55	4.27	4.71	15
Discordant states:											
• Surface acting	19	5343	.24	.16	.31	.19	.06/.55	.23/.39	11.88	12.99	99
• Emotional dissonance	8	3301	.47	.10	.51	.05	.35/.66	.45/.57	18.05	22.06	74
• Emotional suppression	2	298	.12	.43	.15	.54	−.54/.84	−.48/.78	3.64	3.65	4

Note. *k* = number of correlations meta-analyzed; *N* = total number of groups; *r* = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer *k* representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

Table 12. Display rules and consequences

Meta-analysis	*k*	*N*	*r*	SD_r	ρ	SD_ρ	80%CV	90%CI	%SEV	%ARTV	FDk
Worker-related consequences											
Burnout	17	8389	.07	.10	.09	.12	−.06/.24	.04/.14	18.47	18.73	14
• Depersonalization	8	3436	.13	.05	.17	.03	.13/.21	.13/.21	79.69	83.12	19
• Emotional exhaustion	17	8389	.12	.09	.14	.10	.01/.27	.10/.18	22.37	22.82	31
• Reduced personal accomplishment	8	3436	.22	.05	.29	.00	.29/.29	.25/.33	100	100	38
Health	5	2486	.06	.09	.06	.09	−.05/.18	−.01/.13	23.99	24.03	1
Negative emotions	4	1793	.06	.19	.07	.21	−.19/.22	−.11/.25	6.29	6.30	2
Positive emotions	4	1826	.13	.16	.16	.18	−.07/.38	.00/.32	8.35	8.39	9
Work-related consequences											
Work performance	8	1370	.11	.12	.14	.12	−.02/.29	.05/.23	37.87	38.14	14
• Task performance	6	762	.08	.11	.09	.08	−.01/.20	.01/.17	63.32	63.47	5
• Emotion performance	2	608	.15	.13	.19	.14	.01/.36	.00/.38	20.22	20.72	6
Work withdrawal	4	2380	−.17	.13	−.21	.15	−.40/−.02	−.40/−.02	9.65	10.08	13
Job satisfaction	8	3810	.05	.13	.06	.14	−.12/.23	−.03/.15	13.23	13.27	2
Perceived supervisor support	6	2841	−.02	.16	−.02	.18	−.26/.21	−.13/.09	8.75	8.76	—

Note. *k* = number of correlations meta-analyzed; *N* = total number of groups; *r* = sample size weighted mean observed correlation; SD_r = sample size weighted standard deviation of the observed correlations; ρ = sample size weighted mean observed correlation corrected for unreliability in both measures; SD_ρ = standard deviation of ρ; 80%CV = 80 percent credibility interval around ρ; 90%CI = 90% confidence interval around ρ; %SEV = percent variance due to sampling error; %ARTV = percent variance due to all corrected artifacts; FDk = file drawer *k* representing the number of "lost" studies reporting null findings necessary to reduce ρ to .05.

labor states as gradations along an emotional congruence–discordance continuum that characterizes the increasing emotional energy demands inherent in each emotional labor state. By refocusing emotional labor research on this emotional energy-based way of

Table 13. Regression analysis examining unique contributions of emotional labor and its subcomponents to burnout

	Burnout						
Construct	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
1. Display rules	.09**	−.01	.09**	.08**	−.04*	−.14**	.06
2. Emotional labor overall		.29**					
Congruent states:							
3. Deep acting			−.01				
4. Emotional consonance				.03			
Discordant states:							
5. Surface acting					.41**		
6. Emotional dissonance						.45**	
7. Emotional suppression							.20**
Df	1, 602 – 10519	1, 10518	1, 7219	1, 1891	1, 7495	1, 5311	1, 601
R^2	.01**	.08**	.01	.01	.16**	.16**	.05**
ΔR^2	.01**	.08**	.00	.00	.15**	.15**	.04**

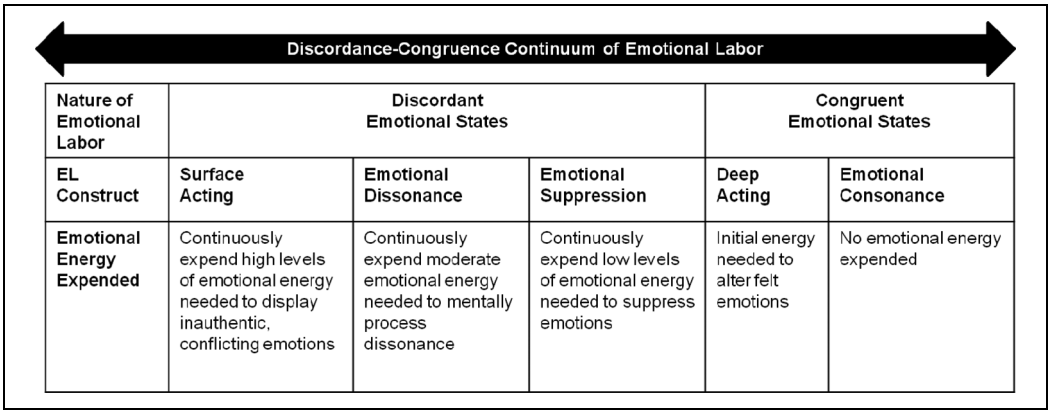
Note. All coefficients are standardized. Degrees of freedom vary for Model 1, depending on which other predictor "display rules" was entered with.
*$p < .01$; **$p < .001$.

thinking, we elucidate underlying patterns in important and unanswered questions about, for example, which types of individual differences lead to which forms of emotional labor, and which types of labor lead to which consequences.

As can be seen in Figure 2 depiction of the emotional congruence–discordance continuum, these five strategies range from *emotional consonance* (where there is perfect alignment between felt and displayed emotions that requires no energy to "manage" emotions) to *surface acting* (where felt emotions are in contrast to the emotions one displays, requiring energy both to mask the true emotions and to act out the desired emotions). Although d*eep acting* requires some initial exertion of energy to change one's underlying emotions, once felt emotions are revised, the desired emotions can be continually displayed without the additional exertion of energy. *Suppression* and *dissonance* are both on the discordant side of the continuum because they require continuous energy exertion to deal with the incompatibility in felt and desired emotions. Less energy needs to be exerted with suppression than dissonance; with suppression, the felt and displayed emotions are not necessarily in conflict, but rather a felt emotion needs to be hidden. Therefore, there is the emotional cost of masking an emotion, but not the additional cost of displaying a disingenuous one. With dissonance there is clear conflict between the felt and displayed emotions. We now consider the implications of this discordance–congruence perspective on emotional labor. Table 14 summarizes the research questions raised in the remainder of the discussion section.

RQ1: What are the health, attitudinal, and performance consequences of discordant and congruent emotional labor states?

The current findings show that emotional labor has consistent effects on important employee outcomes. The discordance–congruence perspective explains the divergent pattern of results with regard to burnout. Whereas discordant emotional labor states are positively



Nature of Emotional Labor	Discordant Emotional States			Congruent Emotional States	
EL Construct	**Surface Acting**	**Emotional Dissonance**	**Emotional Suppression**	**Deep Acting**	**Emotional Consonance**
Emotional Energy Expended	Continuously expend high levels of emotional energy needed to display inauthentic, conflicting emotions	Continuously expend moderate emotional energy needed to mentally process dissonance	Continuously expend low levels of emotional energy needed to suppress emotions	Initial energy needed to alter felt emotions	No emotional energy expended

Figure 2. The discordance–congruence continuum of emotional labor states.

associated with burnout, congruent emotional labor states are not predictive of burnout. We find this same pattern of effects for discordant and congruent emotional labor states for each dimension of burnout as well as for employee health. We expect the emotional energy needed to engage in discordant emotional labor states depletes employees' emotional reserves, which both adds to the experience of stress and reduces their ability to cope with other job stressors. Recurrent and unrelenting job stress has been consistently found to result in burnout and diminished health (Lee & Ashforth, 1996). This pattern of divergent consequences is even more apparent when looking at the effects of discordant and congruent states on job satisfaction, work withdrawal, turnover intentions, and job performance. With these constructs, the general pattern was that congruent states have a positive impact, whereas discordant states have a negative effect. Thus, emotional processes can be either beneficial or harmful, depending on the amount of emotional energy required to enact them.

RQ2: Which worker- and work-related correlates are related to discordant and congruent emotional labor states?

We identify patterns of worker- and work-related correlates; for example, evidence suggests certain individual characteristics (e.g., neuroticism, negative affectivity) are positively associated with discordant, but not congruent, emotional labor. Individuals high in neuroticism are described as nervous, emotional, insecure, and unstable (McCrae & Costa, 1987); these individuals also appear to be more likely to adopt the response-focused emotion regulation strategies characteristic of discordant emotional labor states. Neurotic individuals may not feel secure enough to express true emotions (emotional consonance) or their true emotions may be so dynamic/unstable that congruent emotional labor states are incompatible. Similarly, as individuals high in negative affectivity are predisposed to experience negative affective states and tend to have more trouble identifying the positive aspects in situations and relationships (Watson & Clark, 1984), it may feel more natural for them to simply suppress inappropriate emotions and/or fake appropriate emotions than to attempt to adjust their true feelings to suit organizational display rules.

On the other hand, other personality characteristics and some work conditions appear to be positively associated with congruent, but not discordant, emotional labor states. For example, our findings suggest

Table 14. Summary of future research directions in emotional labor by area of inquiry

Research areas	Research questions
Moderators of correlate–EL relationships	1. Are there differences across job types in the relative use of discordant versus congruent states?
	2. Does situational strength moderate the strength of relationships between worker- and work-related correlates and emotional labor?
	3. Do the effects of situational strength (e.g., severity of consequences) on emotional labor depend on whether the emotional labor target is internal or external to the organization?
Antecedents of EL	4. What factors shape the decision to engage in discordant versus congruent forms of emotional labor?
	5. Which organizational-development functions (e.g., training, feedback) can best develop emotional labor skills?
Emotional contagion	6. Do teams create role structures to distribute and/or compartmentalize emotional labor within them? And, which structures for emotional labor distribution are most beneficial to team processes and outcomes?
	7. In what ways does team affect management shape the emotional labor forms exhibited by team members?
EL measurement	8. What is the relative validity of different self-report scales used to measure EL?
	9. What are the advantages and disadvantages of different methodologies for operationalizing EL?
Affective circumplex	10. Do the consequences of discordant and congruent emotional labor depend on the valence and/or intensity of the felt and displayed emotions?
	11. To what extent do the compounding consequences of discordant and congruent emotional labor states depend on the valence and/or intensity of the felt and displayed emotions?

Note. EL = emotional labor.

employee (a) perceptions of supervisor support, (b) perceptions of fairness within the workplace, (c) conscientiousness, and (d) positive affectivity, prompt concordant emotional labor states, which are not only healthier (e.g., those associated with lower rates of burnout and health problems) but also more likely to promote effective task and emotion performance. Research suggests conscientious individuals (who are by definition dependable, ambitious, reliable, and persevering; Barrick, Mount, & Judge, 2001; Cooper-Hakim & Viswesvaran, 2005) report higher levels of organizational commitment and job involvement. Fairness and support perceptions are also known to prompt commitment and involvement (Mathieu & Zajac, 1990). Being committed to the organization and involved in the job may enhance both the importance and perceived credibility/accuracy of organizational display rules, inspiring employees to want to feel the way the organization wants them to (deep acting) or making them feel comfortable and safe when expressing true felt emotions (emotional consonance) by engaging in the more antecedent-focused response strategies characteristic of congruent emotional labor states. Similarly, as much research on emotional labor focuses on the employee's struggle to display positive emotions when their natural reaction may be to experience negative emotions, it is not surprising that individuals high in positive affectivity (who are predisposed to experience positive affective states; Watson & Clark, 1984) are more likely to report congruent emotional labor states.

RQ3: Do occupational group, target of emotional labor, and study design moderate the relationships between emotional labor and its correlates and consequences?

Given that past research has found somewhat differing effects across emotional labor studies, we sought to understand the extent to which two theoretical (occupation and target of emotional labor) and one methodological (study design) moderators explained some of the variance in these findings. Although study design is not a moderator of the emotional labor relationships, we find some interesting differences on the basis of occupation group and target of emotional labor. With regard to occupation, our findings suggest the negative effects of emotional labor are stronger within customer service occupations than in either the healthcare or education industries. Specifically, we find stronger associations between emotional labor and burnout, poor health, low job satisfaction, withdrawal behavior, and intentions to leave the job in customer service roles than in the healthcare or educational industries. Since we were unable to conduct a fully factorial moderator analysis to compare the role of these moderators in discordant versus congruent emotional labor states, it may be that individuals in customer service roles are more likely to surface act, suppress emotions, or experience dissonance when dealing with customers, and the effect of these discordant emotional states is driving this finding. This is an interesting question for future research (see Table 14, Question 1).

Interestingly, we also found that display rules more strongly influence emotional labor within healthcare as compared with customer service jobs. A potential explanation for this finding lies in the difference in situational strength. Situational strength describes the extent to which an environment elicits the same reaction from different individuals regardless of their personality type (Meyer, Dalal, & Bonaccio, 2009). In a number of ways, healthcare is a stronger situation than customer service. The four facets of situational strength are clarity (i.e., cues regarding responsibilities and requirements), consistency (i.e., extent to which cues are consistent with one another), constraints (i.e., limitations in individual discretion to deviate from formal procedures), and consequences (i.e., severity of the positive and negative consequences arising from worker actions). Healthcare settings present stronger situational-strength features than do customer service settings across these four facts. Situational strength is a valuable way to study features of display rules in future research on emotional labor (see Table 14, Question 2).

With regard to target of emotional labor, we find that although individual-difference variables do not interact with emotional labor target to affect the experience of emotional labor states (which may support the idea that emotional labor states are affected more by individual experiences and responses to contextual cues than by the systematic differences in the emotional labor situation), more negative effects on employee health and work satisfaction occur when emotional labor is directed toward individuals external to the organization than to individuals within the organization. Future research might explore whether the perceived severity of consequences associated with performance failures with organizational clients increases employee anxiety in scenarios where they must display incongruent emotions with customers as compared to coworkers (see Table 14, Question 3). Interestingly, the link between emotional labor and perceived supervisor support appears to be more negative when emotional labor must be exercised for individuals internal to the organization. This relationship may be driven by the perception that the employee must temper their emotions in order to interact with their own supervisor, for example, and is a matter for future research.

RQ4: Do discordant and congruent emotional labor states mediate the relationship between display rules and burnout?

A core idea in the emotional labor literature is that organizational display rules prompt individuals to engage in psychological and behavioral strategies in order to manage their emotions at work, and that these strategies differentially affect outcomes. The current findings show that the viability of this logic depends on the specific form of emotional labor under investigation. While display rules were related to all forms of emotional labor except consonance, their relation to burnout was differentially mediated by the form of emotional labor. Notably, deep acting and emotional consonance did not mediate this effect, as these congruent forms of emotional labor are not consistently related to burnout. On the other hand, with discordant forms of emotional labor, there is a clear pattern of partial mediation.

Taken together, these results suggest that display rules are positively associated with most forms of emotional labor. Given that deep acting and consonance are forms of emotional labor requiring minimal energy exertion and that they relate to positive worker and work outcomes (e.g., do not produce burnout and are positively associated with satisfaction, performance, and job involvement), future research is needed that explores the determinants of which strategy is utilized (see Table 14, Question 4). In particular, what determines when individuals will choose discordant versus congruent strategies? (e.g., Scott & Barnes, 2011, have role examined the role of sex in emotional labor processes, but there may be other individual and contextual factors which determine, over time, how an employee chooses to employ emotional labor). Another relevant question for future research is how can deep acting and consonance skills be developed? (see Table 14, Question 5).

Additional directions for future research

In addition to the directions for future research discussed in conjunction with our four research questions above, there are three additional areas in need of future examination: emotional contagion, the affect circumplex, and measurement.

Emotional contagion. While much of the research on emotional labor has explored relationships at the individual level, an interesting new vista centers on the nature and impact of emotional labor within teams and work units. Research on emotional contagion suggests that within teams, members' experience and expression of emotions reciprocally influence one another (Cole, Walter, & Bruch, 2008; Ilies, Wagner, & Morgeson, 2007; Sy, Cote, & Saavedra, 2005). This raises both positive and negative possibilities. On the beneficial side, group-work settings provide valuable social support in stressful work settings (Chiaburu & Harrison, 2008; Haslam & Reicher, 2006; LeBlanc, Hox, Schaufeli, Taris, & Peeters, 2007; Viswesvaran, Sanchez, & Fisher, 1999; Zickar, Balzer, Aziz, & Wryobeck, 2008). Groups also enable role differentiation that can be extended to the enactment of emotions. As our results find individuals differ in their predispositions to experience certain types of emotional labor, in teams, a beneficial strategy may be to create a role structure that enables more emotionally attuned members to lead the team in emotionally charged situations (see Table 14, Question 6).

Conversely, the interdependence of work teams may also provide a harmful diffusion of negative emotions. Whereas in individually based jobs, workers have an emotional buffer from colleagues' negative emotions, in team-based jobs, team members are directly affected by the emotional states of their teammates (Rizkalla, Wertheim, & Hodgson, 2008). Marks, Mathieu, and Zaccaro (2001) introduce a teamwork process, affect management, that describes team members regulating one another's positive and negative emotions so

that they are constructive to task performance (see Table 14, Question 7). Given that an increasing number of jobs are performed in team arrangements, this research seems particularly promising.

Measurement of emotional labor. We coded the emotional labor scale used in each of the primary studies included in our database with the hope of examining scale type as a possible methodological moderator of emotional labor relationships. What we found was interesting with regard to the state of emotional labor measurement: although there exist a number of scales to assess the various emotional labor states, the majority of these scales appear to have been iteratively developed, such that authors built upon and/or modified existing emotional labor scales or combined pieces of various existing scales rather than developing completely new scale items. For example, Brotheridge and Lee's 1998 scale, Brotheridge and Lee's 2003 scale, and Grandey's 2003 scale are all essentially variations of one another, and contain both identical and highly similar items. Since (a) there was so much overlap in the scales used in the primary studies, and (b) the primary studies did not report item-level relationships for the emotional labor scales, we were not able to conduct theoretically meaningful moderator analyses for emotional labor scale. In addition to the extensive overlap in emotional labor scales, we also found quite a bit of inconsistency with regard to both the labeling of emotional labor states and the operational definitions authors used to describe them. This definitional inconsistency likely exacerbates problems associated with the development of emotional labor scales. We have attempted to bring some clarity to the dimensions of the emotional labor construct by compiling a summary of operational and conceptual definitions for the five emotional labor states examined here (see Table 1) as well as a summary of citations for the emotional labor scales used in the primary studies in our meta-analytic database (see Table 3). However, future research is needed to address the issue of how best to measure emotional labor (see Table 14, Question 8). As the emotional labor experience is a personal one, scales have been a popular choice for assessing the experience of emotional labor and choice of emotional labor management strategy. Morris and Feldman (1996) suggested that surveys may be the only way to capture the sort of personal and sensitive information inherent to emotional labor. However, others have argued a multimethod approach may be more appropriate (see Table 14, Question 9). Grandey (2000) suggested that emotional labor is emergent, and as such it would be prudent to assess emotional labor from a more longitudinal perspective. She argues that diary methods would allow researchers to identify the sorts of events that preempt emotional labor responses and the coping techniques that are adopted to address them, as well as investigate any individual differences which may interact. These are promising directions for future research.

Affective circumplex. Past work on emotional labor generally considers both the suppression of negative emotions and the display of inauthentic positive emotions as similar components of emotional labor. Russell's (1980) affective circumplex model provides a useful way to further broaden and decontextualize the emotional labor construct. According to Russell, affect can be understood by considering two orthogonal dimensions; *valence* being the extent to which emotions are positive (e.g., happy) versus negative (e.g., sad), and *intensity* describing the degree of arousal as ranging from low (e.g., calm) to high (e.g., excited). An interesting direction for future work is to consider the extent to which the impact of discordance–congruence (the emotional state created by the degree of overlap between felt and displayed emotions) depends on the valence and intensity of felt and displayed emotions (see Table 14, Question 10). Perhaps there are asymmetries related to the direction of discordance, or the extent to which felt

emotions are positive and displayed are negative, or vice versa. Similarly, there may be asymmetric effects of feeling a low-arousal state and being required to display a high-arousal state (e.g., a tired flight attendant who needs to display alertness) as compared to experiencing a high-arousal state when a low-arousal one is required (e.g., a panicked flight attendant needing to seem calm and collected). Further, it may be prudent to examine longitudinally the intersection of the affective circumplex on congruence–discordance. Wegner (1994) proposed the idea that when employees experience more emotional discordance during an event, particularly when they have been required to act positive when they felt negative, the result may be that negative affective outcomes become more intense over time (due to repetitive rumination on the negative event; see Table 14, Question 11).

Conclusion

Jobs governed by organizationally sanctioned emotional-display rules are increasing in number as local economies turn toward a service and away from a production orientation; to be effective in their roles, front-line employees must be sensitive in their emotional displays to customers; team process and performance is benefitted by team members who are high in interpersonal acumen and who engage in emotional displays that underscore effective team interactions. Emotional labor has become an expectation of most employees, regardless of role or industry, placing a premium on research which explores the correlates and consequences of organizational display rules and various forms of emotional labor. In this study, we cumulated the extant literature on emotional labor to explore the correlates and consequences of employees "faking" their emotions to meet the real or perceived expectations of their roles. Results suggest that more negative outcomes result when employees display emotions in the line of work which are inconsistent with their true/felt emotions (discordant). Our results suggest several meaningful directions for future research related to antecedents, correlates, and consequences of emotional labor as well as potential moderating and mediating factors of these relationships, along with implications for organizational intervention.

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References

*Abraham, R. (1999). The impact of emotional dissonance on organizational commitment and intention to turnover. *The Journal of Psychology*, *133*, 441–455.

*Adams, G. A., & Buck, J. (2010). Social stressors and strain among police officers: It's not just the bad guys. *Criminal Justice and Behavior*, *37*, 1030–1040.

Adelmann, P. K. (1989). Emotional labor and employee well-being. (Doctoral dissertation). (UMI No. 9013846)

*Allen, J. A., Pugh, S. D., Grandey, A. A., & Groth, M. (2010). Following display rules in good or bad faith?: Customer orientation as a moderator of the display rule-emotional labor relationship. *Human Performance*, *23*, 101–115.

Antonakis, J., Ashkanasy, N. M., & Dasborough, M. T. (2009). Does leadership need emotional intelligence? *The Leadership Quarterly*, *20*, 247–261.

*Austin, E. J., Dore, T. C. P., & O'Donovan, K. M. (2008). Associations of personality and emotional intelligence with display rule perceptions and emotional labour. *Personality and Individual Differences*, *44*, 679–688.

*Bakker, A. B., & Heuven, E. (2006). Emotional dissonance, burnout, and in-role performance among nurses and police officers. *International Journal of Stress Management*, *13*, 423–440.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (*Vol. 4*, pp. 71–81). New York, NY: Academic Press.

*Barger, P. B. (2009). Service without a smile?! Exploring the roles of customer injustice, anger and individual differences in emotional deviance. (Doctoral dissertation). (UMI No. 3367656)

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, *9*, 9–30.

Barsade, S. G. (2002). The Ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, *47*, 644–675.

*Beal, D. J., Trougakos, J. P., Weiss, H. M., & Green, S. G. (2006). Episodic processes in emotional labor: Perceptions of affective delivery and regulation strategies. *Journal of Applied Psychology*, *91*, 1053–1065.

*Becker, W. J. (2010). Shared display rules and emotional labor in work teams. (Doctoral dissertation). (UMI No. 3403254)

Best, R. G., Downey, R. G., & Jones, R. G. (1997, April). *Incumbent perceptions of emotional work requirements*. Paper presented at the 12th annual conference of the Society for Industrial and Organizational Psychology, St. Louis, MO.

*Bhave, D. P., & Glomb, T. M. (2009). Emotional labor demands, wages and gender: A within-person, between-jobs study. *Journal of Occupational and Organizational Psychology*, *82*, 683–707.

*Blau, G., Fertig, J., Tatum, D. S., Connaughton, S., Park, D. S., & Marshall, C. (2010). Further scale refinement for emotional labor: Exploring distinctions between types of surface versus deep acting using a difficult client referent. *Career Development International*, *15*, 188–216.

Bobko, P., & Roth, P. L. (2008). Psychometric accuracy and (the continuing need for) quality thinking in meta-analysis. *Organizational Research Methods*, *11*, 114–126.

Bono, J. E., Foldes, H. J., Vinson, G., & Muros, J. P. (2007). Workplace emotions: The role of supervision and leadership. *Journal of Applied Psychology*, *92*, 1357–1367.

Bono, J., & Vey, M. A. (2004). Toward understanding emotional management at work: A quantitative review of emotional labor research. In C. Hartel, N. M. Ashkanasy, & W. Zerbe (Eds.), *Emotions in organizational behavior* (pp. 213–233). Mahwah, NJ: Lawrence Erlbaum Associates.

*Bono, J. E., & Vey, M. A. (2007). Personality and emotional performance: Extraversion, neuroticism, and self-monitoring. *Journal of Occupational Health Psychology*, *12*, 177–192.

Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, *73*, 193–198.

*, Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work." *Journal of Vocational Behavior*, *60*, 17–39.

Brotheridge, C. M., & Lee, R. T. (1998, August). *On the dimensionality of emotional labor: Development and validation of an emotional labor scale*. Paper presented at the First Conference on Emotions in Organizational Life, San Diego, CA.

*, 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*, 57–67.

*, Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the emotional labor scale. *Journal of Occupational and Organizational Psychology*, *76*, 365–379.

*Castanheira, F., & Chambel, M. J. (2010). Reducing burnout in call centers through HR practices. *Human Resource Management*, *49*, 1047–1065.

*Chau, S. L. (2007). *Examining the emotional labor process: A moderated model of emotional labor and its effects on job performance and turnover*. Unpublished doctoral dissertation, The University of Akron, OH.

*Chau, S. L., Dahling, J. J., Levy, P. E., & Diefendorff, J. M. (2009). A predictive study of

emotional labor and turnover. *Journal of Organizational Behavior*, *30*, 1151–1163.

*Cheung, F. Y. L., & Tang, C. S. K. (2009a). Quality of work life as a mediator between emotional labor and work family interference. *Journal of Business and Psychology*, *24*, 245–255.

*, Cheung, F. Y., & Tang, C. S. K. (2009b). The influence of emotional intelligence and affectivity on emotional labor strategies at work. *Journal* **of** *Individual Difference*, *30*, 75–86.

Chiaburu, D. S., & Harrison, D. A. (2008). Do coworkers make the place? Conceptual synthesis and meta-analysis of lateral social influences in organizations. *Journal of Applied Psychology*, *93*, 1082–1103.

Chu, K. H. L., & Murrmann, S. K. (2006). Development and validation of the Hospitality Emotional Labor Scale. *Tourism Management*, *27*, 1181–1191.

Cole, M. S., Walter, F., & Bruch, H. (2008). Affective mechanisms linking dysfunctional behavior to performance in work teams: A moderated mediation study. *Journal of Applied Psychology*, *93*, 945–958.

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, *86*, 425–445.

Cooper-Hakim, A., & Viswesvaran, V. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, *131*, 241–259.

*Côté, S., & Morgan, L. M. (2002). A longitudinal analysis of the association between emotion regulation, job satisfaction, and intentions to quit. *Journal of Organizational Behavior*, *23*, 947–962.

Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior*, *14*, 595–606.

*Çukur, C. Ş. (2009). The development of the Teacher Emotional Labor Scale (TELS): Validity and reliability. *Educational Sciences: Theory & Practice*, *9*, 559–574.

*Dahling, J. J., & Perez, L. A. (2010). Older worker, different actor? Linking age and emotional labor strategies. *Personality and Individual Differences*, *48*, 574–578.

Dasborough, M. T., Ashkanasy, N. M., Tee, Y. J., & Tse, H. M. (2009). What goes around comes around: How meso-level negative emotional contagion can ultimately determine organizational attitudes toward leaders. *The Leadership Quarterly*, *20*, 571–585.

*Diefendorff, J. M., & Croyle, M. H. (2008). Antecedents of emotional display rule commitment. *Human Performance*, *21*, 310–332.

*Diefendorff, J. M., Croyle, M. H., & Gosserand, R. H. (2005). The dimensionality and antecedents of emotional labor strategies. *Journal of Vocational Behavior*, *66*, 339–357.

*Diefendorff, J. M., Erickson, R. J., Grandey, A. A., & Dahling, J. J. (2011). Emotional display rules as work unit norms: A multilevel analysis of emotional labor among nurses. *Journal of Occupational Health Psychology*. Advance online publication. doi: 10.1037/a0021725

*Diefendorff, J. M., & Richard, E. M. (2003). Antecedents and consequences of emotional display rule perceptions. *Journal of Applied Psychology*, *88*, 284–294.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*, 71–75.

*Diestel, S., & Schmidt, K.-H. (2010). Costs of simultaneous coping with emotional dissonance and self-control demands at work: Results from two German samples. *Journal of Applied Psychology*, Advance online publication. doi: 10.1037/a0022134

*Di Mascio, R. (2010). The service models of frontline employees. *Journal of Marketing*, *74*, 63–80.

Dollard, M. F., & Winefield, A. H. (1994). Organizational response to recommendations based on a study of stress among correctional officers. *International Journal of Stress Management*, *1*, 81–101.

*Dormann, C., & Kaiser, D. M. (2002). Job conditions and customer satisfaction. *European* Journal of Work and Organizational Psychology, *11*, 257–283.

*Duke, A. B., Goodman, J. M., Treadway, D. C., & Breland, J. W. (2009). Perceived organizational support as a moderator of emotional labor/outcomes relationships. *Journal of Applied Social Psychology*, *39*, 1013–1034.

Elfenbein, H. A. (2005, August). *Team emotional intelligence: What it can mean and how it can impact performance*. Paper presented at the 65th Meeting of the Academy of Management, Honolulu, HI.

Elfenbein, H. A. (2007). Emotion in organizations: A review and theoretical integration. *Academy of Management Annals*, *1*, 371–457.

Elfenbein, H. A., Polzer, J. T., & Ambady, N. (2007). Team emotion recognition accuracy and team performance. In N. M. Ashkanasy, W. J. Zerbe, & C. E. J. Härtel (Eds.), *Research on emotions in organizations* (Vol. *3*, pp. 87–119). Amsterdam, the Netherlands: Elsevier.

*Feldman, M. (2008). Controlling our emotion at work: Implications for interpersonal and cognitive task performance in a customer service simulation. (Doctoral dissertation). (UMI No. 3335342)

Fisher, C. D., & Ashkanasy, N. M. (2000). The emerging role of emotions in work life: An introduction. *Journal of Organizational Behavior*, *21*, 123–129.

Fulmer, I. S., & Barry, B. (2004). The smart negotiator: Cognitive ability and emotional intelligence in negotiation. *International Journal of Conflict Management*, *15*, 245–272.

George, J. M., & Brief, A. P. (1996). Motivational agendas in the workplace: The effects of feelings on focus of attention and work motivation. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytic essays and critical reviews* (pp. 75–109). Greenwich, CT: Elsevier Science/JAI Press.

*Giardini, A., & Frese, M. (2006). Reducing the negative effects of emotion work in service occupations: Emotional competence as a psychological resource. *Journal of Occupational Health Psychology*, *11*, 63–75.

*Glasø, L., & Einarsen, S. (2008). Emotion regulation in leader–follower relationships. *European Journal of Work and Organizational Psychology*, *17*, 482–500.

*Glomb, T. M., & Tews, M. J. (2004). Emotional labor: A conceptualization and scale development. *Journal of Vocational Behavior*, *64*, 1–23.

*Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, *12*, 301–318.

Gooty, J., Connelly, S., Griffith, J., & Gupta, A. (2010). Leadership, affect, and emotions: A state of the science review. *The Leadership Quarterly*, *21*, 979–1004.

*Gosserand, R. H., & Diefendorff, J. M. (2005). Emotional display rules and emotional labor: The moderating role of commitment. *Journal of Applied Psychology*, *90*, 1256–1264.

*Gountas, S., Ewing, M. T., & Gountas, J. I. (2007). Testing airline passengers' responses to flight attendants' expressive displays: The effects of positive affect. *Journal of Business Research*, *60*, 81–83.

Grandey, A. (1998, August). *Emotional labor: A concept and its correlates*. Paper presented at the First Conference on Emotions in Organizational Life, San Diego, CA.

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

*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*, 86–95.

Grandey, A. A., Dickter, D. N., & Sin, H. P. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior*, *25*, 397–418.

*Grandey, A. A., Fisk, G. M., & Stiener, D. D. (2005). Must "Service with a smile" be stressful? The moderating role of personal control for American and French employees. *Journal of Applied Psychology*, *90*, 893–904.

*Grandey, A. A., Tam, A. P., & Brauburger, A. L. (2002). Affective states and traits in the workplace: Diary and survey data from young workers. *Motivation and Emotion*, *26*, 31–55.

Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, *74*, 224–237.

Gross, J. J. (1999). Emotion and emotion-regulation. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 525–552). New York, NY: Guilford.

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.

*Groth, M., Hennig-Thurau, T., & Walsh, G. (2009). Customer reactions to emotional labor: The roles of employee acting strategies and customer detection accuracy. *Academy of Management Journal*, *52*, 958–974.

Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, *49*, 305–325.

Haslam, S. A., & Reicher, S. D. (2006). Stressing the group: Social identity and the unfolding dynamics of stress. *Journal of Applied Psychology*, *91*, 1037–1052.

Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.

Hollenbeck, J. R., Williams, C. R., & Klein, H. J. (1989). An empirical examination of the antecedents of commitment to difficult goals. *Journal of Applied Psychology*, *74*, 18–23.

*Holman, D., Chissick, C., & Totterdell, P. (2002). The effects of performance monitoring on emotional labor and well-being in call centers. *Motivation and Emotion*, *26*, 57–81.

*Holmes, E. (2008). The role of emotional dissonance as an affective state on the emotional labor process of retail chain pharmacists. (Doctoral dissertation). (UMI No. 3361174)

*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*, 505–521.

Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. *Newbury Park*, CA: Sage.

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). *New York*, NY: Sage.

*Ibanez-Rafuse, C. (2010). Hiring smiling faces: The moderating role of emotional intelligence when performing emotional labor among a sample of flight attendants. (Doctoral dissertation). Retrieved from (UMI No. 3398313)

Ilies, R., Wagner, D. T., & Morgeson, F. P. (2007). Explaining affective linkages in teams: Individual differences in susceptibility to contagion and individualism–collectivism. *Journal of Applied Psychology*, *92*, 1140–1148.

Izard, C. E., Dougherty, F. E., Bloxom, B. M., & Kotsch, W. E. (1974). *The Differential Emotions Scale: A method of measuring the subjective experience of discrete emotions*. Unpublished manuscript, Vanderbilt University, Nashville, TN.

*Jin, M. (2009). *Emotional labor in public service work*. Unpublished doctoral dissertation, The Florida State University, Tallahassee, FL.

*Johnson, S. K. (2008). I second that emotion: Effects of emotional contagion and affect at work on leader and follower outcomes. *The Leadership Quarterly*, *19*, 1–19.

Johnson, H. M., & Spector, P. E. (2007). Service with a smile: Do emotional intelligence, gender and autonomy moderate the emotional labor process? *Journal of Occupational Health Psychology*, *12*, 319–333.

*Judge, T. A., Woolf, E. F., & Hurst, C. (2009). Is emotional labor more difficult for some than for others? A multilevel, experience-sampling study. *Personnel Psychology*, *62*, 57–88.

*Kafetsios, K., & Zampetakis, L. A. (2007). Emotional intelligence and job satisfaction: Testing the mediatory role of positive and negative affect at work. *Personality and Individual Differences*, *44*, 712–722.

Kanungo, R. N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology*, *67*, 341–349.

*Karatepe, O. M. (2011). Do job resources moderate the effect of emotional dissonance on burnout?: A study in the city of Ankara, Turkey. *International Journal of Contemporary Hospitality Management*, *23*, 44–65.

*Karatepe, O. M., & Aleshinloye, K. D. (2009). Emotional dissonance and emotional exhaustion among hotel employees in Nigeria. *International Journal of Hospitality Management*, *28*, 349–358.

*Kashdan, T. B., Barrios, V., Forsyth, J. P., & Steger, M. F. (2006). Experiential avoidance as a generalized psychological vulnerability: Comparisons with coping and emotion regulation strategies. *Behaviour Research and Therapy*, *44*, 1301–1320.

Kelly, J. R., & Barsade, S. G. (2001). Mood and emotions in small groups and work teams. *Organizational Behavior and Human Decision Processes*, *86*, 99–130.

*Kiffin-Petersen, S. A., Jordan, C. L., & Soutar, G. N. (2011). The big five, emotional exhaustion, and citizenship behaviors in service setting: The mediating role of emotional labor. *Personality and Individual Differences*, *50*, 43–48.

Kisamore, J. L. (2008). Distributional shapes and validity transport: A comparison of lower bounds. *International Journal of Selection and Assessment*, *16*, 27–29.

Kisamore, J. L., & Brannick, M. T. (2008). An illustration of the consequences of meta-analysis model choice. *Organizational Research Methods*, *11*, 35–53.

Kruml, S. M., & Geddes, D. (2000). Catching fire without burning out: Is there an ideal way to perform emotion labor? In N. M. Ashkanasy, C. E. Härtel, & W. J. Zerbe (Eds.), *Emotions in the workplace: Research, theory, and practice* (pp. 177–188). Westport, CT: Quorum Books/Greenwood Publishing Group.

LeBlanc, P. M., Hox, J. J., Schaufeli, W. B., Taris, T. W., & Peeters, M. C. W. (2007). Take care! The evaluation of a team-based burnout intervention program for oncology care providers. *Journal of Applied Psychology*, *92*, 213–227.

*Lee, H. (2010). The relationship between emotional intelligence and emotional labor and its effect on job burnout in Korean organizations. (Doctoral dissertation). (UMI No. 3396936)

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, *81*, 123–133.

*Lee, R. T., Lovell, B. L., & Brotheridge, C. M. (2009). 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*, *49*, 2319–2342.

*Lewig, K. A., & Dollard, M. F. (2003). Emotional dissonance, emotional exhaustion and job satisfaction in call centre workers. *European Journal of Work and Organizational Psychology*, *12*, 366–392.

Mann, S. (1998). Achieving frontline communication excellence: The potential cost to health. *IEEE Transactions on Professional Communication*, *41*, 1–12.

*Mann, S. (1999). Emotion at work: To what extent are we expressing, suppressing, or faking it? *European Journal of Work and Organizational Psychology*, *8*, 347–369.

*Mann, S., & Cowburn, J. (2005). Emotional labour and stress within mental health nursing. *Journal of Psychiatric and Mental Health Nursing*, *12*, 154–162.

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, *26*, 355–376.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*, 9–113.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397–422.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, *108*, 171–194.

McCormick, E. J., Jeanneret, P. R., & Mecham, R. C. (1989). A study of job characteristics and job dimensions as based on the Position Analysis

Questionnaire (PAQ). *Journal of Applied Psychology*, *56*, 347–368.

McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81–90.

McKnight, D. H. (1997). *Motivating critical computer systems operators: Job characteristics, controls, and relationships*. Unpublished doctoral dissertation, University of Minnesota.

*Meier, M. (2005). The invisibility of emotional labor: A case study of faculty members at small liberal arts colleges. (Doctoral dissertation). (UMI No. 3175011)

Meyer, R. D., Dalal, R. S., & Bonaccio, S. (2009). A meta-analytic investigation into the moderating effects of situational strength on the conscientiousness–performance relationship. *Journal of Organizational Behavior*, *30*, 1077–1102.

*Mikolajczak, M., Menil, C., & Luminet, O. (2007). Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labour processes. *Journal of Research in Personality*, *41*, 1107–1117.

*Miller, K. I., & Koesten, J. (2008). Financial feeling: An investigation of emotion and communication in the workplace. *Journal of Applied Communication Research*, *36*, 8–32.

*Mishra, S. K., & Bhatnagar, D. (2010). Linking emotional dissonance and organizational identification to turnover intention and emotional well-being: A study of medical representatives in India. *Human Resource Management*, *49*, 401–419.

Misra, S., Kanungo, R. N., & Stuhler, E. A. (1985). The motivational formulation of job and work involvement: A cross-national study. *Human Relations*, *38*, 501–518.

*Montgomery, A. J., Panagopolou, E., De Wildt, M., & Meenks, E. (2005). Work-family interference, emotional labor and burnout. *Journal of Managerial Psychology*, *21*, 36–51.

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

Morris, J. A., & Feldman, D. C. (1997). Managing emotions in the workplace. *Journal of Managerial Issues*, *9*, 257–274.

Näring, G., & Briët, M. (2004). *The Dutch Questionnaire on Emotional Labour*. Nijmegen, the Netherlands: Open University The Netherlands.

*Näring, G., Briët, M., & Brouwers, A. (2006). Beyond demand—control: Emotional labour and symptoms of burnout in teachers. *Work and Stress*, *20*, 303–315.

Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of Applied Psychology*, *78*, 679–703.

*Peng, K. Z., Wong, C. S., & Che, H. S. (2010). The missing link between emotional demands and exhaustion. *Journal of Managerial Psychology*, *25*, 77–798.

Pennebaker, J. W. (1982). *The psychology of physical symptoms*. New York, NY: Springer Verlog.

*Philipp, A., & Schüpbach, H. (2010). Longitudinal effects of emotional labor on emotional exhaustion and dedication of teachers. *Journal of Occupational Health Psychology*, *15*, 494–504.

Porter, L., Steers, R., Mowday, R. T., & Boulian, R. (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *Journal of Applied Psychology*, *59*, 603–609.

*Pugh, S. D., Groth, M., & Hennig-Thurau, T. (2010). Willing and able to fake emotions: A closer examination of the link between emotional dissonance and employee well-being. *Journal of Applied Psychology*. Advance online publication. doi: 10.1037/a0021395

*Pugliesi, K. (1999). The consequences of emotional labor: Effects on work stress, job satisfaction, and well-being. *Motivation and Emotion*, *23*, 125–154.

Richards, J. M., & Gross, J. J. (2000). Emotion regulation and memory: The cognitive costs of keeping one's cool. *Journal of Personality and Social Psychology*, *79*, 410–424.

Rizkalla, L., Wertheim, E. H., & Hodgson, L. K. (2008). The roles of emotion management and perspective taking in individuals' conflict

management styles and disposition to forgive. *Journal of Research in Personality*, *42*, 1594–1601.

Roger, D., & Najarian, B. (1989). The construction and validation of a new scale for measuring emotion control. *Personality and Individual Differences*, *8*, 845–853.

Rosenthal, R. (1979). The "file drawer problem" and the tolerance for null results. *Psychological Bulletin*, *86*, 638–641.

*Rupp, D. E., & Spencer, S. (2006). When customers lash out: The effects of customer interactions injustice on emotional labor and the mediating role of discrete emotions. *Journal of Applied Psychology*, *91*, 971–978.

Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, *39*, 1161–1178.

*Rutner, P. S., Hardgrave, B. C., & McKnight, D. H. (2008). Emotional dissonance and the information technology professional. *MIS Quarterly*, *32*, 635–652.

*Schaible, L. M., & Gecas, V. (2010). The impact of emotional labor and value dissonance on burnout among police officers. *Police Quarterly*, *13*, 316–341.

*Schaubroeck, J., & Jones, J. R. (2000). Antecedents of workplace emotional labor dimensions and moderators of their effects on physical symptoms. *Journal of Organizational Behavior*, *21*, 163–183.

*Scheid, T. L. (2010). Consequences of managed care for mental health providers. In A. V. Horwitz & T. L. Scheid (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 529–547). Cambridge, UK: Cambridge University Press.

Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Test of a causal model. *Journal of Applied Psychology*, *83*, 150–163.

Scott, B. A., & Barnes, C. M. (2011). A multilevel field investigation of emotional labor, affect, work withdrawal, and gender. *Academy of Management Journal*, *54*, 116–136.

*Seery, B. L., & Corrigall, E. A. (2009). Emotional labor: Links to work attitudes and emotional exhaustion. *Journal of Managerial Psychology*, *24*, 797–813.

Shore, L. M., & Martin, H. J. (1989). Job satisfaction and organizational commitment in relation to work performance and turnover intentions. *Human Relations*, *42*, 625–638.

*Sieverding, M. (2009). "Be cool!": Emotional costs of hiding feelings in a job interview. *International Journal of Selection and Assessment*, *17*, 391–401.

Singh, J., Verbeke, W., & Rhoads, G. K. (1996). Do organizational practices matter in role stress processes? A study of direct and moderating effects for marketing-oriented boundary spanners. *Journal of Marketing*, *60*, 69–86.

*Sliter, M., Jex, S., Wolford, K., & McInnerny, J. (2010). How rude! Emotional labor as a mediator between customer incivility and employee outcomes. *Journal of Occupational Health Psychology*, *15*, 468–481.

*Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of Vocational Behavior*, *76*, 355–365.

Spencer, S., & Carnevale, P. J. (2003, April). *Power in the process: Accountability and emotional labor in an interview negotiation*. Paper presented at the annual conference of the Society for Industrial and Organizational Psychology, Orlando, FL.

*Spencer, S., & Rupp, D. E. (2009). Angry, guilty, and conflicted: Injustice toward coworkers heightens emotional labor through cognitive and emotional mechanisms. *Journal of Applied Psychology*, *94*, 429–444.

Srivastava, S., Tamir, M., McGonigal, K. M., John, O. P., & Gross, J. J. (2009). The social costs of emotional suppression: A prospective study of the transition to college. *Journal of Personality and Social Psychology*, *96*, 883–897.

Sutton, R. I., & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, *31*, 461–487.

Sy, T., Cote, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone,

and group processes. *Journal of Applied Psychology*, *90*, 295–305.

*Totterdell, P., & Holman, D. (2003). Emotion regulation in customer service roles: Testing a model of emotional labor. *Journal of Occupational Health Psychology*, *8*, 55–73.

*Treadway, D. C., Hochwarter, W. A., Kacmar, C. J., & Ferris, G. R. (2005). Political will, political skill, and political behavior. *Journal of Organizational Behavior*, *26*, 229–245.

*Trougakos, J. P., Jackson, C. L., & Beal, D. J. (2010). Service without a smile: Comparing the consequences of neutral and positive display rules. *Journal of Applied Psychology*. Advance online publication. doi: 10.1037/a0021880

*Tsai, W. (2001). Determinants and consequences of employee displayed positive emotions. *Journal of Management*, *27*, 497–512.

*Tsai, W., & Huang, Y. (2002). Mechanisms linking employee affective delivery and customer behavioral intentions. *Journal of Applied Psychology*, *87*, 1001–1008.

*Tschan, F., Rochat, S., & Zapf, D. (2005). It's not only clients: Studying emotion work with clients and coworkers with an event-sampling approach. *Journal of Occupational and Organizational Psychology*, *78*, 195–220.

Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004). The interpersonal effects of anger and happiness in negotiations. *Journal of Personality and Social Psychology*, *86*, 57–76.

Van Veldhoven, M., & Meijman, T. F. (1994). *Het meten van psychosociale arbeidsbelasting met een vragenlijst: De vragenlijst beleving en beoordeling van de arbeid (VBBA) [The measurement of psychosocial strain at work: The questionnaire experience and evaluation of work]*. Amsterdam, the Netherlands: NIA.

Viswesvaran, C., & Ones, D. (1995). Theory testing: Combining psychometric meta-analysis and structural equation modeling. *Personnel Psychology*, *48*, 865–885.

Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, *54*, 314–334.

*Wallace, J. C., Edwards, B. D., Shull, A., & Finch, D. M. (2009). Examining the consequences in the tendency to suppress and reappraise emotions on task-related job performance. *Human Performance*, *22*, 23–43.

Watson, D., & Clark, L. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, *96*, 465–490.

*Wegge, J., Vogt, J., & Wecking, C. (2007). Customer-induced stress in all centre work: A comparison of audio- and videoconference. *Journal of Occupational and Organizational Psychology*, *80*, 693–712.

Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, *101*, 34–52.

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*, *18*, 1–74.

*Wharton, A. (1993). The affective consequences of service work: Managing emotions on the job. *Work and Occupations*, *20*, 205–232.

Wharton, A. S., & Erickson, R. J. (1993). Managing emotions on the job and at home: Understanding the consequences of multiple emotional roles. *Academy of Management Review*, *18*, 457–486.

Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in meta-analysis. *Journal of Applied Psychology*, *75*, 315–321.

*Wilk, S. L., & Moynihan, L. M. (2005). Display rule "regulators": The relationship between supervisors and worker emotional exhaustion. *Journal of Applied Psychology*, *90*, 917–927.

*Wilson, K. S. (2009). What employees actually do at work matters for the family: A demands-labor-conflict model of work and family. (Doctoral dissertation). (UMI No. 3381428)

Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, *13*, 243–274.

Wu, C. Y. (2003). *Emotional labor in work: Conceptual development, related constructs and psychological process*. Unpublished doctoral dissertation, National Taiwan University, Taipei.

*Yanchus, N. J., Eby, L. T., Lance, C. E., & Drollinger, S. (2010). The impact of emotional labor on work–family outcomes. *Journal of Vocational Behavior*, *76*, 105–117.

*Yugo, J. E. (2009). The role of calling in emotional labor. (Doctoral dissertation). (UMI No. 3371123)

Zammuner, V. L., & Galli, C. (2005a). The relationship with patients: ''Emotional labor'' and its correlates in hospital employees. In C. E. Härtel, W. J. Zerbe, & N. M. Ashkanasy (Eds.), *Emotions in organizational behavior* (pp. 251–285). Mahwah, NJ: Lawrence Erlbaum Associates.

*Zammuner, V. L., & Galli, C. (2005b). Wellbeing: Causes and consequences of emotion regulation in work settings. *International Review of Psychiatry*, *17*, 355–364.

*Zammuner, V. L., Lotto, D., & Galli, C. (2003). Regulation of emotions in the helping professions: Nature, antecedents, and consequences. *Australian e-Journal for the Advancement of Mental Health*, *2*, 2–13.

*Zapf, D., & Holz, M. (2006). On the positive and negative effects of emotion work in organizations. *European Journal of Work and Organizational Psychology*, *15*, 1–28.

*Zapf, D., Seifert, C., Schmutte, B., Mertini, H., & Holz, M. (2001). Emotion work and job stressors and their effects on burnout. *Psychology and Health*, *16*, 527–545.

Zapf, D., Vogt, C., Seifert, C., & Mertini, H. (1998). *FEMA. Fragebogen zu emotionalen Arbeitsanforderungen* (2nd version). Unpublished manuscript.

*Zapf, D., Vogt, C., Seifert, C., Mertini, H., & Isic, A. (1999). Emotion work as a source of stress: The concept and development of an instrument. *European Journal of Work and Organizational Psychology*, *8*, 371–400.

*Zhang, Q., & Zhu, W. (2008). Exploring emotion in teaching: Emotional labor, burnout, and satisfaction in Chinese higher education. *Communication Education*, *57*, 105–122.

Zickar, M. J., Balzer, W. K., Aziz, S., & Wryobeck, J. M. (2008). The moderating role of social support between role stressors and job attitudes among Roman Catholic priests. *Journal of Applied Social Psychology*, *38*, 2903–2923.

Zimmerman, R. D. (2008). Understanding the impact of personality traits on individuals' turnover decisions: A meta-analytic path analysis. *Personnel Psychology*, *61*, 309–348.

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