More Than One Strategy: A Closer Examination of the Relationship Between Deep Acting and Key Employee Outcomes

Merve Alabak, Ute R. Hülsheger, Fred R. H. Zijlstra, and Philippe Verduyn
Maastricht University

The relationship between emotional labor strategies (i.e., deep acting and surface acting) and employee outcomes has been often studied. Yet, although the impact of surface acting on employee well-being is clear, findings regarding deep acting have been inconsistent. In the present study, we propose that this may be explained by the multidimensional nature of deep acting, which subserves different specific emotion regulation strategies. With a 5-day diary study, we investigated the links between subtypes of deep acting (i.e., cognitive change and attentional deployment) and key employee outcomes (i.e., mental fatigue, self-authenticity, and rewarding interactions) in a sample of 244 employees. Multilevel analyses confirmed that different emotion regulation strategies underlying deep acting were differentially related to employee outcomes, which may explain the mixed results of previous research examining deep acting as a uniform construct. Theoretical and practical implications of considering specific emotion regulation strategies underlying deep acting are discussed.

Keywords: attentional deployment, cognitive change, mental fatigue, self-authenticity, rewarding interactions

The service sector takes center stage in the present economic landscape. For example, in the United States, Japan, and Europe, the number of employees working in this sector amounts to 70% or higher (The World Bank, 2016). This implies that many employees have to interact regularly with clients or customers. During these interactions, employees are expected to conform to organizational display rules. Typically, these rules require them to show positive or neutral expressions, even during negative encounters. Consequently, emotional labor, defined as emotion regulation to fit organizationally desired displays, is currently a key component of many jobs (Grandey, 2000; Hochschild, 1983).

A distinction has been made between two ways of engaging in emotional labor: deep acting and surface acting (Grandey, 2000; Hochschild, 1983). Deep acting refers to the adjustment of one’s internal emotional state to create emotional expressions that are aligned with display rules (e.g., transforming a negative feeling into a positive one to behave friendly toward a rude customer). Surface acting refers to the alignment of one’s emotional expression with display rules without altering one’s emotional experience (e.g., faking a friendly face when interacting with a rude customer).

Deep acting and surface acting have been theorized to have different consequences for employee outcomes. In particular, although surface acting would be generally a maladaptive strategy (e.g., decreasing job satisfaction or well-being), the opposite would hold true for deep acting (Brotheridge & Grandey, 2002; Kammeyer-Mueller et al., 2013). Although empirical studies generally supported the negative relationship between surface acting and well-being-related outcomes, findings regarding the role of deep acting have been mixed (Bono & Vey, 2005; Hülsheger & Schewe, 2011; Kammeyer-Mueller et al., 2013).

One potential reason for these mixed findings is that the multidimensional nature of deep acting is typically ignored (cf. Hülsheger & Schewe, 2011). In particular, to perform deep acting, employees may rely on at least two fundamentally different emotion regulation strategies: cognitive change and attentional deployment (Grandey, 2000). Moreover, these regulation strategies may differentially impact employee outcomes (Hülsheger & Schewe, 2011; Mikolajczak, Tran, Brotheridge, & Gross, 2009). Yet, deep acting is typically assessed as a unitary construct that captures employees’ attempts or efforts to align felt and required emotions (Brotheridge & Lee, 2003; Grandey & Gabriel, 2015; Hülsheger & Schewe, 2011). This approach has two disadvantages: First, the actual emotion regulation is confounded with the underlying motivation of modifying emotions to follow display rules (Grandey & Gabriel, 2015). That is, the current deep acting measures may be more likely to assess the level of motivation of employees to adjust their emotions rather than their actual engagement or success in deep acting. Second, the actual cognitive strategies used by employees to change felt emotions are not captured (Mikolajczak et al., 2009).
emotion regulation strategies that have been argued to underlie deep acting efforts, namely, cognitive change and attentional deployment (Grandey, 2000; Groth, Hennig-Thurau, & Walsh, 2009).

The overall aim of the present study is to examine the relationship between deep acting strategies (i.e., cognitive change and attentional deployment) and three employee outcomes: mental fatigue, self-authenticity, and rewarding interactions. Considering that emotions and the use of emotional labor strategies fluctuate within individuals over time (cf. Beal & Troupakos, 2013; Hülsheger, Lang, Schewe, & Zijlstra, 2015; Judge, Woolf, & Hurst, 2009; Scott & Barnes, 2011), our predominant focus is on relationships at the within-person level of analysis. We focus on mental fatigue, self-authenticity, and rewarding interactions as outcomes because they constitute the key proximal outcomes of emotional labor strategies (Brotheridge & Lee, 2002; Côté, 2005; Holman, Martinez-iñigo, & Totterdell, 2008; Hülsheger & Schewe, 2011) and are determinants of important downstream well-being outcomes such as job satisfaction or emotional exhaustion (Holman et al., 2008; Hülsheger & Schewe, 2011). By examining the possible differential impact of subtypes of deep acting (i.e., attentional deployment and cognitive change) on the three examined employee outcomes, the present study will advance the current literature because it may explain why previous research on deep acting–outcome relationships has been inconsistent. Furthermore, knowledge about the functioning of specific cognitive emotion regulation strategies in relation to well-being-related outcomes is instrumental in designing work-related emotion regulation interventions. In the remainder, we will first elaborate on the multidimensional nature of deep acting and subsequently present the hypotheses of the present study.

Deep Acting: Cognitive Change and Attentional Deployment

There are many parallels between theories on emotional labor (Grandey, 2000) and the process model (Gross, 1998), of which the latter is the dominant theory in the field of emotion regulation. The process model makes a distinction between antecedent-focused and response-focused strategies. Deep acting maps onto antecedent-focused emotion regulation, which aims at preventing or changing emotions before they are fully developed. Surface acting maps onto response-focused emotion regulation, which refers to suppressing the experience or expression of emotions.

The category of antecedent-focused strategies is further distinguished in subcategories, and Grandey (2000) pointed out that two of these subtypes together constitute the construct of deep acting, namely, cognitive change and attentional deployment. Cognitive change refers to altering one’s way of thinking about the situation so that the desired emotion emerges (Grandey, 2000; Gross, 2014). Cognitive change, in turn, can be further subdivided into two specific strategies, namely, perspective-taking (i.e., taking the customer’s perspective regarding the situation) and positive reappraisal (i.e., reinterpreting the situation; Diefendorff, Stanley, & Gabriel, 2015; Grandey, 2000, 2003; Gross, 2001; Rupp, McCance, Spencer, & Sonntag, 2008). For example, a hotel clerk may adopt the perspective of a rude customer (Grandey, 2003) or she may see the encounter as a challenge instead of a stressor (Grandey, 2000) to change her emotional experience, which, in turn, prevents her from expressing a negative emotion. Both perspective-taking and positive reappraisal are frequently used to regulate emotions (Totterdell & Holman, 2003; Totterdell & Parkinson, 1999). For example, 911 call-takers reported often trying to see the situation from a caller’s point of view (Tracy & Tracy, 1998), and bill collectors reappraised unpleasant interactions with debtors by thinking that these arguments are not personal (Sutton, 1991).

Attentional deployment refers to shifting one’s focus away from the situation or from the emotional parts of it to modify the emotional state (Grandey, 2000; Mikolajczak et al., 2009). For example, a hotel clerk may recall a happy memory during an interaction with a negative customer to modulate his negative feelings, preventing him from expressing a negative emotion. Similar to cognitive change, attentional deployment is often adopted and has even been found to be one of the most frequently recruited regulation strategies (Brans, Koval, Verduyn, Lim, & Kuppens, 2013; Diefendorff, Richard, & Yang, 2008; Totterdell & Parkinson, 1999). For example, Scott and Myers (2005) found that firefighters often resort to attentional deployment to regulate their emotions.

Cognitive change (subsuming perspective-taking and positive reappraisal) and attentional deployment have been argued to be the underlying emotion regulation strategies of deep acting (Grandey, 2000; Groth et al., 2009; Hülsheger et al., 2015; Mikolajczak et al., 2009). The deep acting construct as it is typically assessed in the emotional labor literature, however, captures the attempts to align required and felt emotions, but not the actual strategies involved in doing so (cf. Hülsheger et al., 2015; Mikolajczak et al., 2009). Employees endorsing deep acting items (e.g., “I made an effort to actually feel the emotions that I need to display to others” [Brotheridge & Lee, 2003]) may thus engage in cognitive change strategies (subsuming perspective-taking and positive reappraisal), attentional deployment, or both. This is troublesome because cognitive change strategies and attentional deployment are fundamentally different (Gross, 1998). Although cognitive change requires one to actively attend to the emotion-eliciting situation, attentional deployment often involves diverting attention (Paul, Simons, Knesche, Kathmann, & Endrass, 2013). This is also reflected at the neural level where cognitive change strategies and attentional deployment strategies have been found to have different neural correlates (McRae et al., 2010; Thiruchselvam, Blechert, Shепpes, Rydstrom, & Gross, 2011). In addition to these fundamental differences in the nature of these regulation strategies, attentional deployment and cognitive change strategies have been shown to be differentially related to a wide range of outcome variables outside the field of emotional labor research. For example, it has been shown that attentional deployment is more useful for temporary emotional relief (Paul et al., 2013), whereas cognitive change is more effective to handle with negative encounters in the long run (Kross & Ayduk, 2008). Moreover, in an organizational context, Bal, Chiaburu, and Diaz (2011) found that employees using high levels of cognitive change are successful at coping with the negative results of contract breaches and are more likely to engage in taking-charge behaviors. These patterns were not observed for attentional deployment. Given these differences in outcomes, these strategies may also differentially impact employee outcomes in the emotional labor context, where emotional situations are more complex.
In the following sections, we will briefly discuss the impact of deep acting subtypes (attentional deployment vs. cognitive change) on employee outcomes (mental fatigue, self-authenticity, and rewarding interactions). In particular, we will argue why attentional deployment may be differentially related to each of these outcomes as compared with cognitive change. Because previous research indicated that perspective-taking and positive reappraisal had similar emotional outcomes (Webb, Miles, & Sheeran, 2012), we expect similar relationships between both forms of cognitive change and the three proximal employee outcomes.

### Mental Fatigue

Effects of emotional labor on employee well-being have frequently been explained using resource-based theories such as the conservation of resources (COR) theory (Grandey & Gabriel, 2015; Hobfoll, 1989, 2002). According to the COR theory (Hobfoll, 1989, 2002), individuals seek to protect valued resources because they are functional in achieving their goals. These resources are manifold and can reside at the individual (e.g., mental and energetic resources) as well as the contextual level (e.g., social support; ten Brummelhuis & Bakker, 2012). By engaging in emotion regulation in situations demanding emotional labor, employees try to portray the organizationally desired emotion while protecting their personal resources (Grandey & Gabriel, 2015). Within the context of emotion regulation and emotional labor, a particular threat to individuals’ personal resources is that emotion regulation requires the expenditure of energetic and mental resources to manage one’s emotions (Gross, 2001; Holman et al., 2008; Richards & Gross, 2000). This may lead to feelings of mental exhaustion and fatigue in the short term (Xanthopoulou, Bakker, Oerlemans, & Koszucka, 2018) as well as to chronic forms of fatigue and exhaustion, such as burnout, in the long term (Hülsheger & Schewe, 2011). Despite the close theoretical connection between emotional labor and mental fatigue, it is unlikely that all emotional labor strategies similarly deplete one’s mental resources. Indeed, although suppression (a form of emotion regulation similar to surface acting) and surface acting have been found to deplete individuals’ mental resources (Martínez-Iñigo, Toterdell, Alcove, & Holman, 2007; Richards & Gross, 2000), deep acting has been argued to be less effortful and consume less mental and energetic resources, as felt and required emotions are aligned and do not need to be constantly monitored (Brotheridge & Lee, 2002; Grandey, 2003; Uy, Lin, & Ilies, 2017). This prediction has, however, rarely been tested empirically. Furthermore, specific subtypes of deep acting (attentional deployment vs. cognitive change) may also differ regarding the extent to which they require mental energetic resources and are experienced as draining. Studies directly comparing the extent to which subtypes of deep acting strategies drain mental resources in an interpersonal context are lacking, but initial evidence is available suggesting that especially cognitive change strategies (i.e., perspective-taking and positive reappraisal) allow for successfully engaging in emotional labor while largely preserving one’s resources. In particular, in experimental research, cognitive change strategies have been found to have rather low cognitive costs (John & Gross, 2004; Sheppes & Meiran, 2008). This suggests that cognitive change strategies may also come with rather low cognitive costs in real-life settings, but direct evidence is needed to back this hypothesis. On the other hand, employees using attentional deployment strategies such as distraction need to alternate between paying attention to those distractors and to their communication partner. Task switching is known to be very taxing (Rogers & Monsell, 1995) even when engaging in two largely automated tasks such as talking on the phone while driving (Chabris & Simons, 2010). In emotional labor situations, it is unlikely that dealing with a difficult customer will ever become a fully automated task, adding to the cognitive load involved when resorting to distraction to conform to organizational display rules. Based on this initial evidence and theoretical rationale, we expect that when an employee engages in attentional deployment or cognitive change more than usual on a particular day, he or she will experience greater mental fatigue. However, because attentional deployment may be more effortful than cognitive change, we expect attentional deployment to be more strongly related to mental fatigue.

**Hypothesis 1:** Cognitive change in terms of (a) perspective-taking and (b) positive reappraisal is positively related to mental fatigue.

**Hypothesis 2:** Attentional deployment is positively related to mental fatigue.

**Hypothesis 3:** Attentional deployment is more strongly related to mental fatigue than cognitive change strategies, that is, (a) perspective-taking and (b) positive reappraisal.

### Self-Authenticity

Self-authenticity refers to remaining true to the self (Vannini & Franzese, 2008). In contrast to surface acting, deep acting has been assumed to contribute to feeling authentic because emotional experience and expression are aligned (Brotheridge & Lee, 2002; Groth et al., 2009; Hülsheger & Schewe, 2011). Yet, subtypes of deep acting may be differentially related to self-authenticity, and these differential relationships may have been masked in previous studies using an omnibus measure of deep acting assessing the attempt to align required and felt emotions (Brotheridge & Lee, 2002). Direct evidence on the relationship between cognitive change (i.e., perspective-taking and positive reappraisal) and attentional deployment with self-authenticity is largely lacking. However, it can be expected that attentional deployment will result in lower levels of self-authenticity compared with cognitive change strategies (i.e., perspective-taking and positive reappraisal). Attentional deployment and cognitive change strategies differ with respect to the nature of the emotion that they elicit and may therefore result in different levels of emotional congruence (i.e., congruence between felt and displayed emotions). Cognitive change strategies alter the meaning of the current encounter such that an initial negative event is experienced as neutral or even positive. As a result, the exposed emotional behavior is a direct readout of the employees’ evaluation of the situation, allowing the employee to feel authentic. From the discordance–congruence perspective of emotional labor (Mesmer-Magnus, DeChurch, & Wax, 2012), this generates a congruent emotional state in which employees’ authentically felt emotions are in harmony with their expressed emotions. Attentional deployment, however, creates an additional neutral or positive emotion, leaving the initial appraisal of the
negative emotional state in which employees’ authentic emotions still partially disharmonize with their emotional expressions (Mesmer-Magnus et al., 2012). Even though employees’ expression may match display rules, they are likely to feel inauthentic when serving with a smile during an encounter appraised as negative. Based on this reasoning, we expect that when an employee engages in more than his or her typical level of attentional deployment on a particular day, he or she may report less self-authenticity. In contrast, when an employee engages in more than his or her typical level of cognitive change on a particular day, he or she may report greater self-authenticity.

Hypothesis 4: Cognitive change in terms of (a) perspective-taking and (b) positive reappraisal is positively related to self-authenticity.

Hypothesis 5: Attentional deployment is negatively related to self-authenticity.

Rewarding Interactions

As indicated earlier, the COR theory (Hobfoll, 1989, 2002) maintains that individuals seek to protect and (re)gain resources that can reside internally within the individual or externally within the (work) context. Hobfoll (1989) argued that social relations may facilitate the preservation of other valued resources and are therefore instrumental in (re)gaining resources. In the context of emotional labor, the experience of satisfying interactions with customers that are experienced as rewarding has therefore been identified as an important contextual resource. In fact, in addition to mental fatigue and self-authenticity, rewarding interactions are seen as a key proximal outcome of emotional labor strategies and an important mechanism explaining their differential impact on more distal downstream well-being outcomes (Brotheridge & Lee, 2002; Grandey & Gabriel, 2015; Holman et al., 2008; Hülsheger & Schewe, 2011; Martinez-Inigo et al., 2007). Rewarding interactions capture employees’ experience of the extent to which interactions provide them with positive social feedback, turning interactions into a rewarding experience for the employee (Brotheridge & Lee, 2002). Notably, previous research has suggested that deep and surface acting are differentially related to rewarding interactions (Brotheridge & Lee, 2002; Martinez-Inigo et al., 2007) because clients are able to differentiate between authentic and inauthentic emotional displays (Grandey, Fisk, Mattila, Jansen, & Sideman, 2005). The authentic nature of emotions expressed through deep acting (vs. faking through surface acting) may be noticed by customers, who then likely respond in a positive manner such that rewarding interactions are created (Brotheridge & Lee, 2002; Côté, 2005). However, we argue that the degree to which this is the case may depend on the type of deep acting employees engage in.

In nonorganizational contexts, it has been shown that people adopting cognitive change strategies (i.e., perspective-taking and positive reappraisal) are perceived as caring and responsive by others (Cutuli, 2014). Moreover, people who frequently use cognitive change strategies tend to maintain closer relationships with others (English, John, Srivastava, & Gross, 2012; Gross & John, 2003; Gross, Richards, & John, 2006). In contrast, attentional deployment is less rooted in a motivation for friendly and proactive contact (Totterdell & Holman, 2003), and employees who engage in attentional deployment may find it more difficult to carefully listen to customers because they are cognitively engaged with an unrelated distractor. Moreover, it has been shown that customers feel negative emotions when employees rely on non-problem-focused strategies to deal with their complaint, such as creating distraction by telling a joke (Little, Klumper, Nelson, & Ward, 2013). Based on these findings, we expect that when an employee deals with attentional deployment more than he or she normally does on a particular day, he or she will experience less rewarding interactions. In contrast, when he or she engages in cognitive change strategies more than he or she normally does on a particular day, he or she may experience more rewarding interactions.

Hypothesis 6: Cognitive change in terms of (a) perspective-taking and (b) positive reappraisal is positively related to rewarding interactions.

Hypothesis 7: Attentional deployment is negatively related to rewarding interactions.

To test our hypotheses, we conducted a diary study repeatedly assessing subtypes of deep acting strategies and three employee outcomes (mental fatigue, self-authenticity, and rewarding interactions). Notably, considering the inherent dynamic nature of emotions (Kuppens & Verduyn, 2017) and emotion regulation (Kalokerinos, Résohois, Verduyn, & Kuppens, 2017), all hypotheses will be primarily examined at the within-person level of analysis. However, to make full use of the data, these hypotheses will also be tested at the between-person level in a supplementary analysis.

Method

Participants and Procedure

Participants were recruited from a variety of occupations and organizations in Germany and Canada using the snowballing technique (Gosserand & Diefendorff, 2005; Grandey, Fisk, & Steiner, 2005). A total of 464 individuals were approached in person, via e-mail, via text messaging, or via social media (e.g., Facebook and LinkedIn) and asked to forward the study invitation to other people they know. Therefore, the actual number of individuals having received an invitation to the study may likely be higher than 464. Participants were eligible for participation if they worked at least 20 hr per week and if their job required them to interact with customers. A total of 376 participants met the eligibility criteria and expressed interest in the study by filling in the general questionnaire and by providing an e-mail address on which they could receive the daily diary surveys. The response rate was therefore 81.03% considering the 464 participants who were approached directly, but it is likely to be lower to the extent that our invitation had been forwarded by snowballing. The study was approved by the local ethical review board (#ECP-166_05_04_2016).

The diary study was conducted online. Accordingly, the 376 participants received an e-mail at around 5 p.m. on 7 consecutive days (Monday to Sunday) with an invitation to fill in the respective daily diary survey. Many people working in service and caring jobs do not have regular Monday-to-Friday working weeks, and...
also work on Saturdays and/or Sundays. Daily surveys were therefore sent out on 7 consecutive days, and participants were instructed to complete the daily surveys only on workdays. A total of 325 participants continued to complete the daily part of the study and filled in at least one daily questionnaire (attrition rate of 13.56%). To control that surveys were not filled in on nonworkdays, a filter question with a skip logic was included at the beginning of every daily survey. The average number of completed daily questionnaires per person was 4.14.

We restricted our sample to participants who filled out at least three daily diary surveys. This resulted in a final sample of 244 participants (181 German). The majority of the participants were female (65%). On average, participants were 40 (SD = 13.8) years old and had been working for 10 years in their current jobs (SD = 10.7). Most participants held a bachelor’s or a higher degree (64.5%). The sample included employees from two different occupational contexts. We therefore used Humphrey and colleagues’ (Humphrey, Pollack, & Hawver, 2008) taxonomy (customer service jobs, caring professions, and social control jobs) and The International Standard Classification of Occupations (2008) to categorize which occupational context our participants belonged to using the job title they indicated in the general questionnaire. Accordingly, services and sales workers (e.g., sales assistant, hairdresser, and waiter) and clerical support workers (e.g., bank teller and call center employee) were classified as customer service employees (Humphrey et al., 2008; The International Standard Classification of Occupations, 2008), whereas health-care sector employees (e.g., nurse and social worker; Kinman & Leggetter, 2016) and education sector employees (e.g., teacher and academic; Ang, 2005; Lawless, 2018) were classified as caring professions. More than half of the participants (54%) were employed in caring work (e.g., nurses, teacher, academic, and psychologist), which necessitates showing sympathy and understanding in stressful life events (Humphrey et al., 2008) or academic and personal problems (Ang, 2005; Lawless, 2018). The remaining 46% were employed in service work (e.g., waiter/waitress, hairdresser, sales assistant, and bank teller), which requires showing welcoming and friendly expressions (Humphrey et al., 2008). Nine participants indicated a vague job title and could therefore not be assigned to an occupational context. The rest of the participants could be assigned to either the service or the caring category. Notably, none of our participants held social control jobs (e.g., police officers, bouncers, or bill collectors), jobs that may require the display of anger (Humphrey et al., 2008). A sample including diverse occupations is often used in emotional labor research (Humphrey et al., 2008) and has the advantage that increases the generalizability of our findings by capturing a wider range of occupations with emotional labor requirements.

Measures

The general questionnaire consisted of demographic variables (i.e., age, gender, tenure, and educational level). The seven daily surveys assessed day-level surface acting, cognitive change (i.e., perspective-taking and positive reappraisal), attentional deployment, mental fatigue, self-authenticity, rewarding interactions, and customer-related social stressors. Participants were instructed to refer to the past working day when answering all items except for the mental fatigue items, which referred to current-moment experiences. An advantage of this approach compared with requesting participants to report on their emotional labor strategies adopted during a particular encounter is that possible accumulative effects are better captured when asking people to report on their overall amount of emotional labor. Indeed, possible negative consequences of engaging in suboptimal regulation strategies may not reach the surface level when these strategies are not repeatedly adopted during several interactions taking place on a particular day.

Also, it was clarified to the participants that the term “customer” included any group of people they interacted with as part of their job, including patients, students, or clients. All questionnaires were provided in English to Canadian participants and in German to German participants. In terms of content, that is, instructions, items, and item sequence, the questionnaires were identical. If available, validated English and German versions of the scales were used. If scales were not available in either English or German, items were translated.

Cognitive change. Because no scale for the assessment of cognitive change in the emotional labor context was available in the literature, we constructed a five-item scale consisting of perspective-taking and positive reappraisal items for the purpose of the present study. We combined and adapted items previously used to assess perspective-taking in customer interaction contexts, resulting in the following two items to assess perspective-taking (Axtell, Parker, Holman, & Totterdell, 2007; Grandey, Dickter, & Sin, 2004): “I tried to see things from the customer’s point of view.”; “I thought about how I would feel in the customer’s situation.” To construct items to assess positive reappraisal, we built upon an established emotion regulation framework (Mikolajczak et al., 2009), arguing that positive reappraisal involves reappraising situations by putting things into perspective, looking for the silver lining, and infusing situations with positive meaning. Accordingly, we reviewed general emotion regulation scales (Neils, Quoidbach, Hansenne, & Mikolajczak, 2011) and selected and adapted items for the emotional labor context. Three items were used to assess positive reappraisal: “I tried to see the positive side of things. I told myself: However difficult the situation/interaction is, it is an opportunity to learn and grow.”; “I tried to reinterpret what people said or did so that I don’t take their actions personally.”; and “I tried to put things into perspective. I told myself: Even if I feel bad right now, the feeling will eventually pass by.” Items were answered on a 5-point scale ranging from 1 (never) to 5 (very often). The item stem referred to the past workday.

Attentional deployment. We constructed a scale consisting of three items: “I thought about something enjoyable that was unrelated to the situation and made me feel happy.”; “I deliberately thought about a happy memory that helped me feel the required emotion”; and “I directed my attention away from difficult emotional aspects of the interaction in order to actually feel more positive.” Items were assessed on a 5-point scale (1 = never; 5 = very often). The item stem referred to the past workday.

Because we used newly developed scales to assess cognitive change and attentional deployment, we sought to verify the factor structure of these two scales and their distinctiveness from surface acting. Furthermore, we sought to empirically test whether perspective-taking and positive reappraisal were best subsumed under an overall Cognitive Change factor or should be treated as two separate factors. Considering all emotional labor-related
items, we therefore conducted a series of multilevel confirmatory factor analyses (CFA) using Mplus8, following procedures recommended in the literature ( Heck, 2001; Heck & Thomas, 2015). Specifically, we tested a one-factor model in which all items (cognitive change, attentional deployment, and surface acting) loaded onto the same factor (confirmatory factor analysis [CFI] = .63; Tucker–Lewis index [TLI] = .57, standardized root mean square residual [SRMR] within-person .13, SRMR between-person .22), a two-factor model with cognitive change and attentional deployment loading on one and surface acting items on the other factor (CFI = .81; TLI = .77; SRMR within-person .06, SRMR between-person .12), a three-factor model (Cognitive Change, Attentional Deployment, and Surface Acting; CFI = .85; TLI .82; SRMR within-person .06, SRMR between-person .13), and a four-factor model (Reappraisal, Perspective-taking, Attentional Deployment, and Surface Acting; CFI = .92, TLI = .90, SRMR within-person .04, SRMR between-person .10). As only the four-factor model provided an acceptable fit, we treated perspective-taking and positive reappraisal as separate constructs.

**Mental fatigue.** We used five items adapted from the State Self-Control Capacity Scale (Ciarcio, Twenge, Muraven, & Tice, 2007; adopted to German by Bertram, Unger und, & Dickhäuser, 2011) to measure mental fatigue. In line with the COR theory, these items capture feelings of mental fatigue and exhaustion, indicating the extent to which energetic and mental resources have been drained. Sample items are “I feel mentally exhausted” and “I feel drained”. Items were answered on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items referred to participants’ momentary experiences at the time of filling in the survey, thereby capturing individuals’ mental fatigue after work resulting from the resources invested throughout the workday.

**Self-authenticity.** Self-authenticity was measured with two items adopted from the studies by English and John (2013) and Erickson and Ritter (2001). Items were “I didn’t feel I could be myself when interacting with others.” and “I felt artificial in my interactions with others.” on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). These two items were reverse coded before conducting analyses. Items were answered with reference to the past workday.

**Rewarding interactions.** Rewarding interactions were assessed with three items adopted from Broderidge and Lee (2002): “I ‘gave’ a lot but didn’t ‘get much’ in return.”; “I found my interactions with my clients to be rewarding.”; and “I got very little thanks or recognition from my clients in return for my efforts.” The first and last items were reverse coded. Items were answered on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items were answered with reference to the past workday.

**Control Variables**

We controlled for customer-related social stressors, a potential confounder of the relationship between deep acting strategies and employee outcomes, because research has documented that employees are more likely to engage in emotional labor during stressful encounters (Grandey, Foo, Groth, & Goodwin, 2012; Rupp et al., 2008; Rupp & Spencer, 2006). Observed emotion regulation–outcome relationships may therefore reflect effects of not only the emotion regulation strategy itself but also the situation that drove employees to regulate their emotions (Hülsheger & Schewe, 2011). Furthermore, we controlled for surface acting, which has been found to be highly correlated with deep acting (Gabriel & Diefendorff, 2015).

**Customer-related social stressor.** Customer-related social stressor was assessed with 16 items adapted from the study by Dudenhöffer and Dormann (2013). A sample item is “I had to deal with customers who argued with me.” Items were answered on a 5-point scale ranging from 1 (never) to 5 (very often). Items were answered with reference to the past workday. Customer-related social stressor items capture stressful demands that are frustrating, impede goal attainment, and can therefore be considered to be hindrance stressors using the challenge–hindrance–stressor framework (LePine, Podsakoff, & LePine, 2005).

**Surface acting.** Surface acting was measured with the six-item Surface Acting subscale of the Emotional Labor Scale developed by Broderidge and Lee (2003; updated by Lee & Broderidge, 2011 and adapted to German by Hülsheger, Lang, & Maier, 2010). A sample item is “I pretend to have emotions that I do not really have.” Items were answered on a 5-point scale ranging from 1 (never) to 5 (very often). The item stem referred to the past workday.

**Distinctiveness of predictor and outcome variables.** To confirm the empirical distinctiveness of predictor and outcome variables, we ran a full multilevel CFA including all emotional labor (i.e., perspective-taking, positive reappraisal, attentional deployment, and surface acting) and outcome variables (i.e., mental fatigue, rewarding interactions, and self-authenticity), with items loading on their respective factors. The seven-factor model resulted in acceptable to good fit (CFI = .92, TLI = .90, SRMR within-person .04, SRMR between-person .09).

**Measurement invariance.** Because we collected data with a German and an English version of the questionnaire, we ran multigroup multilevel CFAs testing for measurement invariance for every measure used in our study. Following recommendations in the literature (Vandenberg & Lance, 2000), we tested a series of invariance models of increasing strictness per construct: configural, metric, scalar, and invariant uniqueness. Overall, analyses confirmed measurement invariance (scalar or invariant uniqueness) for all constructs with CFI values ranging from .91 (Customer-related Social Stressors and Surface Acting) to .98 (Perspective-taking, Attentional Deployment, and Mental Fatigue) and SRMR within-person values ranging from .01 (Perspective-taking) to .06 (Mental Fatigue, Surface Acting). One exception was self-authenticity with a CFI value of .83. However, the SRMR value at the within-person level was good (.03). A full table of results can be obtained from the authors.

**Analytical Procedure**

Considering the multilevel structure of our data with daily measures nested within individuals, we conducted multilevel path analyses using a multilevel structural equation modeling framework in Mplus8 (Muthén & Muthén, 1998–2017). Using this approach, variance is decomposed into within- and between-person variance corresponding to an implicit latent person-mean centering of the predictor variables at the within-person level (Muthén & Muthén, 2017). Due to the dynamic nature of emotions and emotion regulation, our main focus was on studying relationships between emotion regulation strategies and outcome variables.
at the within-person level of analysis. However, as diary studies yield data at the within- and between-person level of analysis, we chose to report relationships at the between-person level as a supplementary analysis. As data can be analyzed simultaneously at the within- and between-person level using multilevel structural equation modeling, findings at both levels of analysis are reported in Table 3. At the between-person level, predictor variables were grand mean centered. Estimates at Level 1 thus inform about relationships at the within-person level, that is, how a person’s daily deviations from their own mean level of, for example, attentional deployment relate to outcome variables. Estimates at Level 2 inform about relationships at the between-person level, that is, how a person’s average level of, for example, attentional deployment across days relates to average levels of outcome variables.

The final analysis relied on 999 observations stemming from 244 individuals. The intraclass correlations ranged between .52 and .67 (Table 1), indicating that within-person variation ranged from 33% (surface acting) to 48% (rewarding interactions), demonstrating that all variables varied substantially at the within-person level and suggesting that studying relationships at the within-person level is suitable. In fact, within-person variation of deep acting regulation strategies and surface acting was highly similar to previous findings (Schreurs, Guenter, Hülsheger, & van Emmerik, 2014; Uy et al., 2017) and higher than within-person variation found for surface and deep acting in other diary studies on emotional labor (Scott & Barnes, 2011).

Results

First, we calculated basic descriptive statistics for the assessed variables. Specifically, means, standard deviations, intraclass correlations, and internal consistencies of the variables included in the current study are reported in Table 1. The bivariate correlations among the study variables at the within-person level and the between-person level are presented in Table 2.

We then tested our specific hypotheses using multilevel path analysis, predicting mental fatigue, self-authenticity and rewarding interactions with perspective-taking, positive reappraisal, and attentional deployment, controlling for surface acting and customer-related social stressors. Results are presented in Table 3. We will first report findings on the relationships at the within-person level because this was our main focus.

Hypotheses 1a/b and 2 referred to relationships of perspective-taking, positive reappraisal, and attentional deployment with mental fatigue. Results revealed that positive reappraisal was positively related to mental fatigue (estimate = .09, \( p < .05 \)), whereas perspective-taking was unrelated to mental fatigue. Attentional deployment was positively related to mental fatigue (estimate = .10), but this relationship was only marginally significant with a \( p \) value of .07. Hypotheses 1a/b and 2 were thus partly supported.

In Hypothesis 3a/b, we expected that attentional deployment is more strongly related to mental fatigue than the cognitive change strategies of perspective-taking and positive reappraisal. To test this hypothesis, we used the model constraints command in Mplus8 to test the statistical significance of the difference between (a) the perspective-taking–mental fatigue and the attentional deployment–mental fatigue relationships and (b) the difference between the positive reappraisal–mental fatigue and the attentional deployment–mental fatigue relationships. For the sake of readability, we present results of these comparisons in a separate table, that is, Table 4. Results showed that the relationship of attentional deployment with mental fatigue was not significantly stronger than relationships of perspective-taking and positive reappraisal with mental fatigue. Hypothesis 3 was therefore not supported.

Hypotheses 4 a/b and 5 referred to relationships of perspective-taking, positive reappraisal, and attentional deployment with self-authenticity. Both cognitive change strategies (i.e., positive reappraisal and perspective-taking) and attentional deployment were not associated with self-authenticity at the within-person level, failing to support Hypotheses 4a/b and 5.

Hypotheses 6 a/b and 7 referred to relationships of perspective-taking, positive reappraisal, and attentional deployment with rewarding interactions. Perspective-taking was indeed positively related to rewarding interactions (estimate =

---

**Table 1**

<table>
<thead>
<tr>
<th>Study Variables</th>
<th>Occupational context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Caring ((N = 127))</td>
</tr>
<tr>
<td></td>
<td>(M (SD))</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Perspective-taking</td>
<td>.77</td>
</tr>
<tr>
<td>2. Positive reappraisal</td>
<td>.76</td>
</tr>
<tr>
<td>3. Attentional deployment</td>
<td>.80</td>
</tr>
<tr>
<td>4. Surface acting</td>
<td>.92</td>
</tr>
<tr>
<td>5. Mental fatigue</td>
<td>.85</td>
</tr>
<tr>
<td>6. Self-authenticity</td>
<td>.60</td>
</tr>
<tr>
<td>7. Rewarding relationships</td>
<td>.66</td>
</tr>
<tr>
<td>8. CRSS</td>
<td>.92</td>
</tr>
</tbody>
</table>

*Note.* CRSS = customer-related social stressors. Cronbach’s \(\alpha\) was calculated individually for every day and then averaged across the 7 days \((N = 244)\).

* Significant difference between the two occupational groups.
1. Perspective-taking — .15
2. Positive reappraisal .51***
3. Attentional deployment .22**
4. Surface acting .08
5. Mental fatigue .01
6. Self-authenticity .01
7. Rewarding interactions .20**
8. CRSS .22**

Table 3

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mental Fatigue Estimate (SE)</th>
<th>Self-authenticity Estimate (SE)</th>
<th>Rewarding Interactions Estimate (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Within-person level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRSS</td>
<td>.25*** (.06)</td>
<td>−18*** (.05)</td>
<td>−19* (.06)</td>
</tr>
<tr>
<td>Perspective-taking</td>
<td>−.00 (.04)</td>
<td>−.02 (.03)</td>
<td>.11*** (.04)</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>.09* (.04)</td>
<td>.03 (.04)</td>
<td>−.02 (.04)</td>
</tr>
<tr>
<td>Attentional deployment</td>
<td>.10* (.05)</td>
<td>−.06 (.05)</td>
<td>−.05 (.05)</td>
</tr>
<tr>
<td>Surface acting</td>
<td>.29*** (.06)</td>
<td>−.38*** (.05)</td>
<td>−.25*** (.05)</td>
</tr>
<tr>
<td>Residual variance</td>
<td>.25*** (.02)</td>
<td>.28*** (.02)</td>
<td>.29*** (.02)</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>.20*** (.03)</td>
<td>.18*** (.03)</td>
<td>.12** (.05)</td>
</tr>
<tr>
<td><strong>Between-person level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>2.64*** (.04)</td>
<td>3.97*** (.03)</td>
<td>3.53*** (.04)</td>
</tr>
<tr>
<td>CRSS</td>
<td>.23* (.11)</td>
<td>−.12 (.08)</td>
<td>−.44*** (.09)</td>
</tr>
<tr>
<td>Perspective-taking</td>
<td>−.11 (.07)</td>
<td>.10 (.06)</td>
<td>.31*** (.06)</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>.11 (.10)</td>
<td>.03 (.06)</td>
<td>−.13* (.07)</td>
</tr>
<tr>
<td>Attentional deployment</td>
<td>−.03 (.10)</td>
<td>−.24*** (.07)</td>
<td>.03 (.08)</td>
</tr>
<tr>
<td>Surface acting</td>
<td>.48*** (.09)</td>
<td>−.57*** (.07)</td>
<td>−.17** (.07)</td>
</tr>
<tr>
<td>Residual variance</td>
<td>.31*** (.03)</td>
<td>.16*** (.03)</td>
<td>.21*** (.03)</td>
</tr>
<tr>
<td><strong>R²</strong></td>
<td>.40*** (.06)</td>
<td>.65*** (.07)</td>
<td>.40*** (.06)</td>
</tr>
</tbody>
</table>

Note. CRSS = customer-related social stressors.

.11, p < .001). In contrast, positive reappraisal and attentional deployment were not significantly related to rewarding interactions. Hypothesis 6a was thus supported, whereas Hypotheses 6b and 7 were not supported.

Supplementary Analyses

To test the robustness of our findings and to make full use of the data, we ran a series of supplementary analyses. Below, we provide them.

Homology of relationships at the within- and between-person levels of analysis. Research in the field of emotional labor typically focuses on either the within-person (Judge et al., 2009) or the between-person level of analysis (Brotheridge & Lee, 2002). However, emotion regulation varies meaningfully between as well as within individuals, and both levels of analysis provide meaningful and important information. At the between-person level, one captures a person’s typical or chronic level of engagement in emotion regulation strategies and how it relates to well-being outcomes. At the within-person level, one captures day-to-day deviations from an individual’s typical level of engagement in emotion regulation strategies and links this to day-to-day variations in well-being outcomes. As Judge, Hulin, and Dalal (2012) noted, relationships may differ in direction or magnitude across different levels of analysis. Researchers have therefore argued that rather than assuming homology, researchers should explicitly test whether relationships and processes at one level are consistent with analogous relationships and processes at the other level (Chen, Bliwise, & Mathieu, 2005). Doing so advances our understanding of multilevel constructs and theories: Finding homology adds to the parsimony of theoretical models and speaks to their generalizability; finding differences in relationships points to the necessity to refine theories and consider boundary conditions (Chen et al., 2005).

Results of findings at the between-person level are reported in the lower part of Table 3. Overall, the pattern of relationships at the between-person level was largely similar to findings at the within-person level reported in the main Results section: Similar to findings at the within-person level, perspective-taking was positively related to rewarding interactions at the between-person level (estimate = .31, p < .001), whereas positive reappraisal and attentional deployment were not significantly related to rewarding interactions. However, there were also some differences: In contrast to findings at the within-person level, attentional deployment was negatively related to self-authenticity (estimate = −.24, p < .001).

Table 4

<table>
<thead>
<tr>
<th>Relationship difference</th>
<th>Within (Level 1)</th>
<th>Between (Level 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate (SE)</td>
<td>Estimate (SE)</td>
</tr>
<tr>
<td>Attentional deployment &gt; perspective-taking</td>
<td>.10 (.06)</td>
<td>.08 (.12)</td>
</tr>
<tr>
<td>Attentional deployment &gt; positive reappraisal</td>
<td>.01 (.08)</td>
<td>−.14 (.18)</td>
</tr>
</tbody>
</table>
.001), and positive reappraisal was not significantly related to mental fatigue at the between-person level. Notably, these differences concerned predominantly the size and not the direction of effects.

One may therefore wonder whether apparent differences in the size of relationships between the between- and the within-person level are statistically significant or not. Therefore, to directly compare our findings at the between- and within-person level of analysis, we ran a series of homology tests. We explicitly tested this by introducing nine new parameters to our multilevel model, specifying the difference of each regulation-strategy–outcome relationship between the two levels (Muthén & Muthén, 2017). Results are reported as contextual effects in Table 3. None of these differences was significant except for the relationship between perspective-taking and rewarding interactions. It was significantly stronger at the between-person level compared with the within-person level (estimate = .20, p < .05). Apart from this exception, results thus suggest homology of our hypothesized relationships across levels.

Analyses without controlling for customer-related social stressors. As outlined in the Method section, we controlled for customer-related social stressors in assessing the relationships between the emotion regulation strategies and outcome variables in our main analysis. As a supplementary analysis, we reran analyses without controlling for customer-related social stressors. The pattern of results and significance levels remained the same.

Customer-related social stressors as a moderator of the relationships between deep acting strategies and outcomes. Considering previous research showing that employees’ appraisal of customer-related demands interacted with deep acting in predicting exhaustion (Huang, Chiaburu, Zhang, Li, & Grandey, 2015), one may wonder whether customer-related social stressors interacted with specific deep acting strategies in predicting outcome variables. Such an interaction would imply that the relationship between deep acting strategies and employee outcomes is contextualized because the relationship would be different for low-versus high-level stress situations. We examined this possibility but found no evidence for an interaction of perspective-taking, positive reappraisal, or attentional deployment with customer-related social stressors in predicting outcome variables (Perspective-Taking × Customer Stressors: for mental fatigue: estimate = .03, p = .66; for self-authenticity: estimate = -.05, p = .31; for rewarding interactions: estimate = -.02, p = .45; Positive Reappraisal × Customer Stressors: for mental fatigue: estimate = -.01, p = .85; for self-authenticity: estimate = .02, p = .61; for rewarding interactions: estimate = -.00, p = .92; Attentional Deployment × Customer Stressors: for mental fatigue: estimate = .01, p = .83; for self-authenticity estimate = .01, p = .78; for rewarding interactions estimate = .02, p = .65).

Occupational context as a moderator of the relationships between deep acting strategies and outcomes. Another potential moderator of the hypothesized relationships could be occupational context (coded dichotomously as service = 1 vs. caring profession = 2) because occupations may vary in overall emotional labor requirements as well as in usage of emotional labor strategies (Bhave & Glomb, 2016). We therefore examined the effect of occupational context on the intercepts and random slopes of the within-person relationships between deep acting strategies and the three employee outcomes in Mplus8. Our moderation analysis revealed that occupational context was not a significant cross-level moderator of the relationships between deep acting strategies and outcomes: Perspective-Taking × Occupational Context: for mental fatigue: estimate = .01, p = .83; for self-authenticity: estimate = -.00, p = .91; for rewarding interactions: estimate = .01, p = .85; Positive Reappraisal × Occupational Context: for mental fatigue: estimate = -.09, p = .17; for self-authenticity: estimate = .10, p = .12; for rewarding interactions: estimate = -.00, p = .99; Attentional Deployment × Occupational Context: for mental fatigue: estimate = .09, p = .25; for self-authenticity: estimate = -.08, p = .29; for rewarding interactions: estimate = .01, p = .88.

Occupational context differences in deep acting strategies and outcomes. Because previous research has shown differences in the usage of emotional labor strategies between occupational groups, we also examined whether there were significant occupational differences in study variables. Means and standard deviations are depicted in Table 1. A one-way multivariate analysis of variance was used to test for occupational differences in perspective-taking, positive reappraisal, attentional deployment, surface acting, mental fatigue, self-authenticity, rewarding interactions, and customer-related social stressor. The two occupational groups differed only in self-authenticity, F(1, 233) = 5.91, p = .016, ηp² = .03. Employees in the caring sector (M = 4.07, SD = .71) reported slightly higher self-authenticity than employees in the service sector (M = 3.84, SD = .76).

Discussion

The aim of the present study was to advance our understanding of the relationship between deep acting strategies and proximal employee outcomes (i.e., mental fatigue, self-authenticity, and rewarding interactions), focusing primarily at the within-person level of analysis. For this purpose, we used a granular approach decomposing deep acting into attentional deployment and two cognitive change strategies (i.e., perspective-taking and positive reappraisal). Our findings suggest value in examining deep acting as a multidimensional construct, with different deep acting strategies being differentially related to employee outcomes.

Our findings revealed that perspective-taking is an especially adaptive strategy when engaging in emotional labor. In particular, when employees adopted perspective-taking on a particular day more than they usually do, they reported greater rewarding interactions without suffering any cost in terms of mental fatigue or diminished self-authenticity. In contrast, neither positive reappraisal nor attentional deployment were positively associated with rewarding interactions, and both these alternative deep acting strategies were found to be mentally exhausting (even though the relationship for attentional deployment was only marginally significant).

The finding that using more perspective-taking than one habitually does is positively associated with rewarding interactions may be due to the connection between perspective-taking and proactivity in helping customers (Axtell et al., 2007; Totterdell & Holman, 2003). It has been shown that perspective-taking may result in helping behavior (Axtell et al., 2007). The customer may reciprocate the responsiveness of employees by developing a favorable interaction, as suggested by the social exchange theory (Blau, 1964).
The finding that perspective-taking, unlike attentional deployment and positive reappraisal, is not associated with mental fatigue may be due to perspective-taking being more frequently used. The more often a strategy is used, the more likely it is to become automatized and to require less mental resources. This explanation is consistent with the results of the present study showing that perspective-taking was the most frequently adopted strategy among the set of strategies examined.

Relatedly, our study provided further evidence for a resource-based perspective on emotional labor. Consistent with previous theorizing (Brotheridge & Lee, 2002), ineffective emotion regulation (positive reappraisal or attentional deployment) draws on and threatens employees’ resources, whereas effective strategies (perspective-taking) are more likely to prevent resource loss or generate new resources (e.g., rewarding experience).

The observed differences in consequences of deep acting strategies underscore the importance of approaching deep acting as a multifaceted construct. For example, although previous research showed that daily deep acting measured as a unidimensional construct was unrelated to indicators of resource depletion such as exhaustion (Judge et al., 2009; Uy et al., 2017), our study expanded previous findings by demonstrating that some forms of deep acting (positive reappraisal and to a lesser extent attentional deployment) can be demanding on a daily basis. The current study also complements previous research on the relationship between deep acting and rewarding interactions. For instance, Brotheridge and Lee (2002) did not find a significant link between deep acting and rewarding interactions. However, the current study suggests that this might not be the case for all subtypes of deep acting because perspective-taking was found to be positively related to rewarding interactions in the present study.

Previous mixed findings about the consequences of deep acting may therefore be explained by the nonspecific nature of deep acting measures, assessing attempts and motivation to align required and felt emotions but not capturing the actual strategies individuals use to achieve that goal. Previous findings suggesting that positive reappraisal (Niven, Sprigg, & Armitage, 2013) and attentional deployment (Andela, Truchot, & Borteyrou, 2015) may not be adaptive, whereas perspective-taking may be adaptive (Rafaeli et al., 2012) in an emotional labor context back our argument and are in line with our findings.

Our supplementary between-level analysis further emphasizes the importance of approaching deep acting as a multifaceted construct. For instance, in contrast to previous research (Brotheridge & Lee, 2002) showing that deep acting is associated with increased self-authenticity, we found that employees who chronically tend to engage in the deep acting strategy of attentional deployment felt less sincere. In our supplementary analysis, we followed repeated calls to explicitly test for homology, that is, whether relationships between variables are the same across levels of analysis (Chen et al., 2005; Judge et al., 2012). To this end, we introduced contextual effects, formally testing whether the strength of relationships at the within-person level differed from the strength of the relationship at the between-person level (cf. Bliese, Maltarich, & Hendricks, 2018). Results suggested that with one exception, all relationships between deep acting strategies and outcomes were similar across levels, confirming homology. Thus, any differences that may appear from eyeballing and comparing within- and between-person results and significance levels (e.g., the positive reappraisal-mental fatigue relationship or the negative attentional deployment–self-authenticity relationship) are indeed not statistically significant and should not be interpreted to be an indicator of differences in relationships across levels.

A significant contextual effect regarding the perspective-taking–rewarding interactions relationship suggests that the relationship is significantly stronger at the between-person level. It thus appears that long-term, chronic engagement in perspective-taking especially benefits rewarding interactions.

**Practical Implications**

The findings of the present study are important for employee training and selection procedures. Unlike previous recommendations for emotional labor training programs (Deng, Walter, Lam, & Zhao, 2017; Scott & Barnes, 2011), we recommend perspective-taking as a good regulation strategy fostering the benefits of employees, customers, and organizations. Although previous emotional labor training programs have combined attentional deployment and cognitive change strategies (Hülsheger et al., 2015), the present findings suggest that it may be more beneficial to only focus on perspective-taking instead. Accordingly, programs may point employees to the benefits of perspective-taking (Axtell et al., 2007) and provide tools to be empathic and build a friendly relationship with customers. Moreover, as people differ in trait levels of perspective-taking (Davis, 1983), it might also be advisable to select people with high perspective-taking skills for jobs with strong interpersonal emotional challenges.

**Limitations and Future Directions**

The present study advances our understanding of the consequences of emotional labor strategies. However, a number of limitations have to be mentioned. First, our data do not allow for strong causal conclusions. Future studies using an experimental approach are needed to follow up on the present findings. Second, self-authenticity and rewarding interactions scales did not yield high reliabilities. Future conceptual replications of this study can include different measures and other-rated (e.g., customer) or dyadic (e.g., both employee-rated and customer-rated) scales to measure rewarding interactions and authenticity. Third, an asset of the present study is that we controlled for customer-related stressors in our analysis, but other contextual features were not taken into account. Consistent with calls to include situational features in the study of emotion regulation (Aldao, Sheppes, & Gross, 2015; Bonanno & Burton, 2013), future studies are needed to identify possible situation characteristics that may moderate the present findings. For instance, perspective-taking might be more likely chosen in interactions with regular customers because employees may lack sufficient information to properly engage in perspective-taking during a first interaction with a customer. Fourth, experience-sampling studies involving multiple measurement occasions per day can be beneficial to differentiate long- and short-term consequences of emotional labor strategies and investigate lagged relationships. Fifth, we focused on four different ways of regulating emotions at the workplace. However, employees may have an even wider repertoire of strategies that they resort to during customer interactions (Diefendorff et al., 2008; Grandey, 2000). Future research examining other strategies than cognitive
change and attentional deployment (e.g., situation modification) are needed to identify the possible differential impact of these strategies and their possible interplay. Sixth, a natural extension of the present study would be to measure more distal outcomes (e.g., job satisfaction and performance) of emotional labor and examine proximal outcomes (mental fatigue, rewarding interactions, and self-authenticity) as mediators. Relatively, future research may also examine the relationships between subtypes of deep acting and performance-related or customer outcomes (e.g., service delivery). Seventh, although we controlled for customer-related social stressors that mainly target hindrance stressors, future research may adopt a broader conceptualization of stressors and also consider challenge-stressors (Huang et al., 2015). Doing so may better reveal the importance of controlling for customer-related social stressors because in the present study, results were highly similar regardless of whether customer-related social stressors were controlled for. Finally, although the present findings warn us about the multifaceted nature of deep acting, there is still room to consider other possibilities about its mixed effect on employee outcomes. For instance, it has been argued that deep acting items might assess employees’ effort (Brotheridge & Lee, 2003) or motivation (Grandey & Gabriel, 2015) to modify emotions. Indeed, Totterdell (2003) demonstrated that deep acting strategies used in a given event might be guided by employees’ level of emotion regulation motivation (i.e., the motivation of employees to modify their emotions or to express required emotions) in the same event. We therefore encourage researchers to extend the present study by focusing on alternative explanations about what shapes deep acting outcomes.

**Conclusion**

Emotional labor is a key component of an increasing number of professions. The relationship between deep acting and employee outcomes is complex and depends on the specific deep acting strategy adopted. Perspective-taking was overall found to be the most optimal deep acting strategy, being positively related to rewarding interactions without draining employees’ mental resources.

**References**


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