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# **Emotional Labor Actors: A Latent Profile Analysis of Emotional Labor Strategies**

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## **Abstract**

Research on emotional labor focuses on how employees utilize 2 main regulation strategies-surface acting (i.e., faking one's felt emotions) and deep acting (i.e., attempting to feel required emotions)-to adhere to emotional expectations of their jobs. To date, researchers largely have considered how each strategy functions to predict outcomes in isolation. However, this variable-centered perspective ignores the possibility that there are subpopulations of employees who may differ in their combined use of surface and deep acting. To address this issue, we conducted 2 studies that examined surface acting and deep acting from a person-centered perspective. Using latent profile analysis, we identified 5 emotional labor profiles-non-actors, low actors, surface actors, deep actors, and regulators-and found that these actor profiles were distinguished by several emotional labor antecedents (positive affectivity, negative affectivity, display rules, customer orientation, and emotion demands-abilities fit) and differentially predicted employee outcomes (emotional exhaustion, job satisfaction, and felt inauthenticity). Our results reveal new insights into the nature of emotion regulation in emotional labor contexts and how different employees may characteristically use distinct combinations of emotion regulation strategies to manage their emotional expressions at work.

**Keywords:** Deep acting, Emotional labor, Employee well-being, Latent profile analysis, Surface acting

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Emotional labor, or the management of emotions as part of the work role (Grandey, Diefendorff, & Rupp, 2013), is central to many service occupations where employees are the first point of contact customers have with the organization. Scholars have sought to understand the emotional labor process (e.g., Grandey, 2000), which includes the perception of emotional display rules (i.e., emotional requirements from the organization), the regulation of emotions to conform to display rules, and actual emotional expressions to customers (Barger & Grandey, 2006; Hochschild, 1983; Pugh, 2001; Rafaeli & Sutton, 1987; Tsai, 2001). Broadly speaking, studies often emphasize one part of this process, with much of the work focusing on the emotion regulation strategies used by employees, namely, surface acting and deep acting (e.g., Brotheridge & Grandey, 2002; Brotheridge & Lee, 2002; Grandey, 2003). Surface acting involves hiding or suppressing felt emotions to show what is required, whereas deep acting involves changing internal feelings to align with display rules (Grandey, 2000; Hochschild, 1983). Many have argued that surface acting is harmful because maintaining displayed emotions that are discrepant from felt emotions drains resources (Brotheridge & Lee, 2002; Grandey, 2003), an idea that is supported by meta-analytic findings (Hülshager & Schewe, 2011). In contrast, deep acting is often described as beneficial because felt and displayed emotions are aligned (Brotheridge & Lee, 2002; Grandey, 2003), but empirical findings are mixed on whether deep acting is beneficial, harmful, or unrelated to well-being (Hülshager & Schewe, 2011).

To date, the most common way to examine these emotion regulation strategies is to ask employees to self-report the extent to which they use each strategy and to examine the relationships of each strategy with antecedents and outcomes (e.g., Brotheridge & Lee, 2002; Diefendorff, Croyle, & Gosserand, 2005; Grandey, 2003). This analytic approach reflects a *variable-centered* strategy (Craig & Smith, 2000) in which the unique and independent relations of each emotion regulation strategy with other variables are revealed. However, such an approach does not account for the ways in which individuals may use the two regulation strategies in conjunction to manage the emotional labor demands they face on the job. For instance, some employees may use surface and deep acting at high levels in their emotional labor jobs, whereas other employees may primarily rely on one strategy or the other. These ideas suggest that distinct types of emotional laborers likely exist. To investigate such a possibility, a *person-centered* approach (Craig & Smith, 2000) is needed to explore the presence of distinct subpopulations of emotional labor actors that differentially combine surface acting and deep acting strategies. Moreover, by identifying different types of emotional labor actors, insight can be gained into how these profiles relate to antecedent conditions and well-being outcomes.

In light of this unexplored area of emotional labor research, the current study makes three primary contributions to the extant literatures. First, using latent profile analysis (LPA; Marsh, Lüdtke, Trautwein, & Morin, 2009; Muthén & Muthén, 2000; Vermunt, 2010), we explored the potential existence of distinct latent emotional labor actor profiles. In doing so, we established emotional labor actors in one sample (Study 1) and confirmed the structure in a second sample (Study 2), an approach advocated in the literature (Wang & Hanges, 2011). Adopting a person-centered approach allows us to identify how different subpopulations of workers characteristically use distinct combinations of surface and deep acting to manage their emotions at work. Second, we linked these profiles to antecedents (e.g., dispositional affectivity, display rules, customer orientation, and emotion demands–abilities [ED–A] fit) and outcomes (e.g., emotional exhaustion, job satisfaction, and felt inauthenticity) that have been identified as important in the emotional labor process (e.g., Grandey, 2000). These analyses reveal new insight into the conditions, or subpopulations, under which surface acting and deep acting might be more or less beneficial for employee well-being. Therefore, we have advanced emotional labor research by providing insight into when and why “different theories [related to emotional labor] may correspond to different subpopulations” (Wang & Hanges, 2011, p. 29). Finally, we directly compare the person-centered (LPA) approach with the variable-centered (regression) approach to clarify the new conceptual insight into emotional labor research offered by this novel analytic method.

## **A Critique of Variable-Centered Emotional Labor Research**

In conjunction with growth in service-based occupations (Zeithaml & Bitner, 2000) has been an increase in research aimed at understanding factors that relate to employees effectively displaying appropriate emotions at work (e.g., Barger & Grandey, 2006; Pugh, 2001; Tsai, 2001). Employees in service occupations often are required to provide “service with a smile,” where positive displays are intended to enhance service quality and

the customer experience (Grandey et al., 2013; Hochschild, 1983; Rafaeli & Sutton, 1987). Emotional expectations are conveyed to employees via emotional display rules that describe which emotions should and should not be displayed to customers (Ekman, 1973; Wharton & Erickson, 1993). Given that employees may not always feel what they are expected to display (e.g., feeling frustrated, but needing to appear friendly), employees are thought to actively manage their feelings and expressions to conform to display rules via emotional labor strategies (Grandey, 2003; Hochschild, 1983).

Borrowing from Hochschild's (1983) original description of this emotion management process, researchers have focused on surface acting and deep acting as the primary strategies that employees use to regulate their emotions. *Surface acting* involves a "faking" process through which outward expressions are altered, yet internal feelings are left intact (Grandey et al., 2013). Conversely, *deep acting* is an effortful process through which employees change their internal feelings to align with organizational expectations, producing more natural and genuine emotional displays (Grandey et al., 2013). Although the underlying regulatory processes involved in each approach differ, the objective of both (in service occupations) is typically to show positive emotions, which are presumed to impact the feelings of customers and bottom-line outcomes (e.g., sales, positive recommendations, and repeat business; Pugh, 2001; Tsai, 2001). However, as previously mentioned, research generally has found surface acting to be more consistently problematic for employee well-being than deep acting (Grandey, 2003; Hülshager & Schewe, 2011).

Given the emphasis on surface and deep acting as the means by which emotional labor is enacted, these constructs have been the focus of substantial research. Scholars typically assess these constructs at a general level (e.g., how much one typically surface acts) and test their independent effects on outcomes (e.g., Brotheridge & Lee, 2002; Diefendorff et al., 2005) using a *variable-centered approach*. However, such an approach ignores the possibility that these strategies may be used in tandem and the variety of ways in which different individuals may combine them. For instance, variable-centered analyses (i.e., correlation, regression) and theory that accompanies them most often emphasize linear relationships among variables, ignoring (or at a minimum de-emphasizing) the potential for variables to combine in novel or unique ways to shape outcomes. Although interaction effects may be used to model how constructs combine in variable-centered analyses, such an analytic approach may fail to detect the existence of distinct subgroups that exhibit unique patterns of the relevant variables, especially when a subgroup represents a relatively small number of individuals. The identification of novel subpopulations who utilize distinct combinations of surface acting and deep acting could extend emotional labor theory by either presenting new insight into the emotion regulation of service employees or reconciling contradictory perspectives and findings on the effects of emotion regulation on outcomes. Therefore, several key questions in the emotional labor literature may be better answered by a person-centered analytic approach. For instance, what is the prevalence of individuals who use both surface acting *and* deep acting at high (low) levels or rely on just one strategy? What antecedents and consequences are associated with different strategy combinations? If individuals do not use either strategy, does this indicate a lack of effort or a natural ability to display positive emotions? Moreover, are there profiles for which higher deep acting may be beneficial or higher surface acting may be benign? As we discuss in the following section, person-centered approaches provide an analytical lens to examine these questions in addition to helping shed light on ambiguous or inconsistent findings in the literature.

## **A Person-Centered Approach to Emotional Labor**

Although variable-centered approaches have yielded much insight into the relations of each emotion regulation strategy with other variables, person-centered approaches (e.g., latent profile analysis [LPA]) have the potential to extend emotional labor research by identifying how different profiles (constellations) for regulating emotions are differentially linked to antecedents and outcomes (Craig & Smith, 2000; Wang & Hanges, 2011). Even though person- and variable-centered approaches have similar goals (e.g., understanding emotion regulation strategies in relation to criteria; Zyphur, 2009), the analytic lens and interpretation differ. For instance, whereas variable-centered approaches look at how a set of continuous variables predict outcomes *separately and across people*, person-centered approaches allow researchers to understand how variables operate *conjointly and within people* to shape outcomes.

Profiles that emerge from person-centered approaches can differ along profile indicators quantitatively or qualitatively. According to Marsh et al. (2009; see also Wang & Hanges, 2011), quantitatively distinct profiles vary in the absolute level of the profile indicators; in the current study, this means that one profile could contain people who are high in both surface acting and deep acting, whereas another profile could contain people who are low in both surface and deep acting. In contrast, qualitatively distinct profiles refer to differences between profiles in their relative standing on the profile indicators. In the present research, this may mean that one profile has high surface acting and low deep acting, whereas another profile has moderate surface acting and high deep acting. Thus, a person-centered approach allows for distinct subpopulations to be identified that differ in the quantity (level) and quality (shape) of the profile indicators, something that is not possible with variable-centered analyses.

Consistent with Wang and Hanges (2011; see also Foti, Bray, Thompson, & Allgood, 2012; Morin, Morizot, Boudrias, & Madore, 2011), we argue that person-centered approaches can provide several important insights into emotional labor theory. First, this approach may shed light on how surface and deep acting relate to antecedents and outcomes in novel or more complex ways. This is due to person-centered approaches capturing unobserved heterogeneity in the way participants report using these strategies (Wang & Hanges, 2011). In comparison, variable-centered approaches “ignore the fact that participants may come from different subpopulations in which the observed relations between variables may differ, quantitatively and qualitatively” (Morin et al., 2011, p. 59). Applied to the current context, this may mean that person-centered approaches can clarify the relations between emotional labor strategies and other variables of interest. Theoretically, it is often assumed that surface and deep acting are mutually exclusive, such that one strategy is used at the expense of the other (i.e., presumed to be negatively related; Austin, Dore, & O’Donovan, 2008; Kruml & Geddes, 2000; Zapf, 2002). Yet, meta-analytic results demonstrate a positive relation (Hülshager & Schewe, 2011), suggesting that employees may use both strategies (see Beal & Trougakos, 2013). It may be that both views are correct but that they are correct for different people (i.e., some individuals may rely on surface acting at the expense of deep acting; others may rely on both strategies). By focusing solely on linear relationships of these strategies with outcomes, past work may have ignored the complexity of how these strategies combine to influence outcomes in distinct employee subgroups.

Second, person-centered approaches can help clarify potential theoretical inconsistencies in the literature. As Wang and Hanges (2011) stated, scholars can utilize subgroup membership to identify when and why certain theories hold, particularly when testing relations of profiles with antecedents and outcomes. Thus, theoretical frameworks applied to broad samples with little consideration of unobserved heterogeneity may miss nuances in the way constructs operate. For instance, in emotional labor research, scholars often purport that surface acting is problematic and deep acting is advantageous (e.g., Grandey, 2000; Grandey et al., 2013; Hochschild, 1983). Yet, results are mixed at best when it comes to actually detecting the benefits associated with deep acting (Hülshager & Schewe, 2011). Part of the reason for these conflicting results (i.e., positive, null, and negative relations) for deep acting may be that past studies do not consider how high or low deep acting is paired with surface acting. That is, although deep acting theoretically may be more beneficial, these benefits may not be realized when paired with high surface acting. By utilizing a person-centered approach, researchers can isolate groups of individuals who utilize only deep acting, only surface acting, or combine the two strategies in different quantities. Doing so may enhance our understanding of the conditions under which the two strategies are harmful or beneficial. As a note, understanding combinations of regulation strategies with person-centered approaches differs from interaction tests in variable-centered work, in that person-centered approaches yield categories based on heterogeneity observed in the data, whereas interaction tests can yield artificial categories of individuals that may or may not actually exist (Morin et al., 2011). Thus, “any areas of research normally prompting a regression mindset but involving the study of variables that could be considered as a coherent system may be recast in a theoretically useful way by adopting an LPA mindset” (Zyphur, 2009, p. 683).

## **Study 1: Establishing Emotional Labor Actors**

In Study 1, we adopted an inductive approach (e.g., Woo & Allen, in press) to establish our emotional labor actor profiles. As highlighted in our discussion of person-centered approaches above, we

sought to assess whether profiles that are quantitatively and qualitatively distinct exist; a hypothetical taxonomy of possible emotional labor actors is depicted in Table 1. Thus, Study 1 was guided by the following general research question:

*Research Question 1:* Are there quantitatively and qualitatively distinct profiles of emotional labor actors?

Table 1  
*Hypothetical Profiles of Surface and Deep Actors*

Deep acting amount	Surface acting amount		
	Low	Medium	High
Low	Non-actors	Some faking	Surface actors
Medium	Some trying	Moderates	Faking, yet trying
High	Deep actors	Trying, yet faking	Regulators

As highlighted by Wang and Hanges (2011), a benefit of LPA is in linking profiles to antecedents and outcomes, providing “further understanding of the unobserved heterogeneity” (p. 26) in people. We explored three antecedents that may impact an individual’s chronic use of surface acting and deep acting: emotional display rule perceptions (Diefendorff & Gosserand, 2003; Wharton & Erickson, 1993) and dispositional positive affectivity and negative affectivity (Kammeyer-Mueller et al., 2013; Scott & Barnes, 2011). As reviewed, emotional display rules to show positive emotions and hide negative emotions are arguably the primary job-based antecedents of surface and deep acting (Ashforth & Humphrey, 1993; Diefendorff & Gosserand, 2003). Moreover, recent meta-analytic work indicates that negative affectivity positively relates to surface acting and positive affectivity positively relates to deep acting and negatively relates to surface acting (Kammeyer-Mueller et al., 2013). In addition, we also examined whether the obtained emotional labor profiles might exhibit different levels of two commonly examined emotional labor outcomes: emotional exhaustion and job satisfaction (e.g., Grandey, 2003; Hülsheger & Schewe, 2011; Judge, Woolf, & Hurst, 2009). Thus, we pursued the following questions:

*Research Question 2:* Do emotional display rule perceptions, dispositional positive affect, or dispositional negative affect predict emotional labor actor profile membership?

*Research Question 3:* Do emotional labor actor profiles exhibit different levels of emotional exhaustion or job satisfaction?

## Method

### Participants and procedure

Eight hundred and twenty-two participants from different service occupations within the United States completed paper surveys. To be included, participants had to list a job title and job duties that involved customer interactions. The first and second authors used this information paired with O\*NET Online to verify customer contact; such a procedure is similar to emotional labor studies that have included participants from various service occupations (e.g., Diefendorff et al., 2006). This resulted in a final sample of 692 service workers<sup>1</sup> (84.18% retained) with the top three service occupations being service/sales staff (56.8%), clerical staff (14.2%), and health care employees (9.5%). The average age was 29.42 years old. Participants were largely female (69.3%) and White (84.0%), worked 29.92 hr per week, and had an average organizational tenure of 4.10 years and job tenure of 3.15 years.

<sup>1</sup> Participants came from three archival data sets of service employees. Two of the data sets were included in previous publications (Diefendorff, Croyle, & Gosserand, 2005; Gosserand & Diefendorff, 2005), while the third data set has not been used in a previously published work. We tested the profile enumeration with subsample included as a set of two dummy codes and found that the five profile structure was replicated, reducing concerns about subsample differences contributing to the profile structure.

## Measures

### *Surface and deep acting*

Seven items from Diefendorff et al. (2005; adapted from Brotheridge & Lee [2002], Grandey [2003], and Kruml & Geddes [2000]) assessed surface acting (e.g., “I put on an act in order to deal with customers in an appropriate way”;  $\alpha = .92$ ) on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Using the same 5-point scale, four items measured deep acting (e.g., “I try to actually experience the emotions that I must show to customers”;  $\alpha = .83$ ).

### *Dispositional affectivity*

The Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) was used, with 10 items assessing both positive affectivity (e.g., “excited,” “enthusiastic”;  $\alpha = .87$ ) and negative affectivity (e.g., “upset,” “distressed”;  $\alpha = .86$ ). All items were measured on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Dispositional affect data were only available for a portion of our sample ( $n = 646$ ).

### *Display rules*

Seven items from Diefendorff et al. (2005) were used to assess display rule perceptions (four “show positive display” rule items; three “hide negative display” rule items) on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). Items were combined into a composite integrative display rule measure ( $\alpha = .77$ ). Example items include “Part of my job is to make the customer feel good” and “I am expected to suppress my bad moods or negative reactions to customers.” Data were available for 568 participants.

### *Emotional exhaustion*

Six items ( $\alpha = .89$ ) from Wharton (1993) were used to measure emotional exhaustion for 170 participants. Items were assessed on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). An example item is “I feel used up at the end of the work day.”

### *Job satisfaction*

Three items ( $\alpha = .74$ ) were used from Cammann, Fichman, Jenkins, and Klesh (1983) to measure employee job satisfaction. Items were on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*) and asked respondents to describe the level of satisfaction with their job. Data were available for 522 participants.

## Analytic approach

Following guidelines from Nylund, Asparouhov, and Muthén (2007), we began by specifying two latent profiles and increased the number of latent profiles until the increase in model fit no longer merited the reduction in parsimony achieved by specifying another latent class. This approach is inductive and has been widely utilized in LPA (i.e., latent class analysis [LCA]) research (e.g., Foti et al., 2012; Morin et al., 2011; Woo & Allen, in press). Consistent with Foti et al. (2012; see also Morin et al., 2011), we examined seven fit statistics to evaluate models: log likelihood (LL), Akaike information criterion (AIC), Bayesian information criterion (BIC; recommended by Nylund et al., 2007), sample-size-adjusted BIC (SSA-BIC; recommended by Tofighi & Enders, 2007), Lo-Mendell-Rubin likelihood ratio test (LMR; Lo, Mendell, & Rubin, 2001; recommended by Tofighi & Enders, 2007), bootstrap likelihood ratio test (BLRT; recommended by Nylund et al., 2007), and entropy. There are no cutoff scores for LPA fit statistics. Rather, the best model has the following fit statistics: LL, AIC, BIC, and SSA-BIC values should be lower in comparison to other profile solutions; entropy should be larger in comparison to other profile solutions; and LMR and BLRT should be significant ( $p < .05$ ). Additionally, researchers should consider the theoretical meaning of solutions when selecting the best profile structure (Foti et al., 2012).

All analyses were conducted in Mplus Version 7.11 (Muthén & Muthén, 1998–2013). We used the automatic three-step approach to model auxiliary variables (i.e., antecedents, outcomes; Asparouhov & Muthén, 2013). In the first step, the latent profile analysis is conducted as outlined previously to determine the number of profiles that fit the data (i.e., profile enumeration). Second, most likely class membership (i.e., the profile to which an individual most likely belongs) is obtained based on the posterior distribution from the previous step (Asparouhov & Muthén, 2013); this step accounts for “the estimated probability that each individual has of

belonging to each of the profiles” (Morin et al., 2011, p. 66). Finally, the auxiliary variables are assessed in relation to the profile solution, taking into consideration the most likely class membership and classification error rate. These steps highlight a primary advantage of LPA over more traditional cluster analyses: it accounts for the error in profile classification when examining the links of the profiles with other variables (Wang & Hanges, 2011).

To model antecedents, we used the R3STEP command in Mplus (Asparouhov & Muthén, 2013; Vermunt, 2010), which conducts a series of multinomial logistic regressions that are used to assess whether an increase in an antecedent would result in a higher probability that a person belongs to one class over another class. As previously noted, our antecedents exhibited some missing data. In the R3STEP procedure, analyses utilize listwise deletion. Therefore, tests of our antecedents were made with the 522 participants who had all three antecedent variables.<sup>2</sup>

To model outcomes as auxiliary variables in step three, we utilized the DCON command in Mplus (Lanza, Tan, & Bray, 2013; see also Asparouhov & Muthén, 2013), which provides comparisons among the profiles on each of the outcome variables modeled (i.e., determines whether each profile is significantly different from each other on each dependent variable separately). Though a more technical treatment of this analysis is beyond the scope of this article, interested readers are directed to Asparouhov and Muthén (2013) and Lanza et al. (2013) for a more in-depth discussion of the three-step approach. Following Lanza et al. (2013), we analyzed the antecedents (R3STEP) and outcomes (DCON) separately.

## Results and Discussion

Means, standard deviations, and correlations of Study 1 variables are in Table 2 below the diagonal. Surface and deep acting were not significantly correlated ( $r = .03, ns$ ), consistent with theory suggesting that these emotion regulation strategies are independent (e.g., Austin et al., 2008). All other correlations in Table 2 were consistent with previous meta-analytic evidence (e.g., positive correlation between surface acting and emotional exhaustion,  $r = .31, p < .01$ ; no correlation between deep acting and emotional exhaustion,  $r = -.11, ns$ ; see Hülshéger & Schewe, 2011).

Table 2  
Means, Standard Deviations, and Correlations of All Study 1 and Study 2 Variables

Variable	Study 1												Study 2	
	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	<i>M</i>	<i>SD</i>
1. Surface acting	2.48	0.89	(.92/.93)	.31**	-.27**	.33**	.22**	-.22**	.14**	.44**	-.15**	-.12**	2.93	0.87
2. Deep acting	3.10	0.96	.03	(.83/.85)	.05	.08	.41**	.08	.07	.25**	.16**	.16**	3.42	0.78
3. Job satisfaction	4.00	0.94	-.44**	.14**	(.74/.88)	-.61**	.11*	.48**	-.26**	-.43**	.42**	.39**	3.79	0.73
4. Emotional exhaustion	2.58	0.94	.31**	-.11	-.22*	(.89/.92)	-.04	-.33**	.44**	.48**	-.31**	-.33**	3.47	1.33
5. Display rules	4.18	0.68	.18**	.14**	.05	-.11	(.77/.71)	.17**	-.02	.08	.33**	.26**	3.82	0.57
6. Positive affect	3.65	0.67	-.42**	.27**	.44**	-.38**	.03	(.87/.89)	-.02	-.35**	.49**	.30**	3.46	0.82
7. Negative affect	1.75	0.62	.48**	-.01	-.39**	.43**	.03	-.34**	(.86/.88)	.30**	-.12**	-.21**	2.09	0.79
8. Felt inauthenticity	—	—	—	—	—	—	—	—	(-/.87)	-.24**	-.26**	2.38	0.79	
9. Customer orientation	—	—	—	—	—	—	—	—	—	(-/.87)	.39**	5.68	0.87	
10. ED-A fit	—	—	—	—	—	—	—	—	—	—	(-/.86)	3.91	0.68	

Note. Study 1 means, standard deviations, and correlations are below the diagonal; Study 2 means, standard deviations, and correlations are above the diagonal. Reliabilities are along the diagonal; Study 1 is before the slash. Positive and negative affect are dispositional affect. ED-A fit = emotion demands-abilities fit. Study 1 did not contain felt inauthenticity, customer orientation, or ED-A fit. For Study 2, surface acting, deep acting, display rules, customer orientation, and ED-A fit were assessed at Time 1; emotional exhaustion, job satisfaction, and felt inauthenticity were measured at Time 2.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3 provides the fit statistics for possible latent profile structures. We chose the five-profile solution because it exhibited lower LL, AIC, BIC, and SSA-BIC values, as well as significant LMR and BLRT values, in comparison to the two-, three-, and four-profile solutions. Although the six-profile solution had slightly

<sup>2</sup> To identify whether reducing our sample size to test all antecedents together biased results, we performed supplemental LPA testing display rules ( $n = 568$ ) and dispositional affect ( $n = 646$ ) separately. Only one result changed when we conducted the tests separately—deep actors perceived higher levels of display rules than low actors. Thus, we tested all antecedents within the same model. Moreover, we also considered demographic variables (e.g., age, gender, job tenure) as potential antecedents in combination with display rules and dispositional affect. Only one significant difference emerged, such that older adults were more likely to be non-actors than regulators. Given the largely null findings, we elected to not present the full results of these analyses, but they are available upon request.



lower LL, AIC, and SSA–BIC statistics in comparison to the five-profile solution, the LMR and BLRT statistics were nonsignificant and the entropy value was lower. Thus, we retained the five-profile structure (see Figure 1).

Table 3  
Fit Statistics for Profile Structures in Study 1 and Study 2

No. of profiles	LL	FP	AIC	BIC	SSA–BIC	LMR ( $p$ )	BLRT ( $p$ )	Entropy
Study 1								
2	-1828.500	7	3671.001	3702.778	3680.552	0.0000	0.0000	0.700
3	-1818.920	10	3657.840	3703.236	3671.484	0.0005	0.0000	0.742
4	-1809.266	13	3644.531	3703.546	3662.269	0.0327	0.0000	0.625
5	-1797.987	16	3627.974	3700.608	3649.805	0.0085	0.0000	0.680
6	-1792.728	19	3623.456	3709.708	3649.380	0.1132	0.0300	0.665
Study 2								
2	-1303.440	7	2620.879	2651.074	2628.853	0.0000	0.0000	0.736
3	-1288.942	10	2597.884	2641.019	2609.275	0.0076	0.0000	0.665
4	-1282.276	13	2590.553	2646.629	2605.361	0.0141	0.0000	0.689
5	-1272.894	16	2577.788	2646.805	2596.014	0.0007	0.0000	0.729
6	-1268.601	18	2575.201	2657.159	2596.845	0.1246	0.1429	0.750

Note. LL = log-likelihood; FP = free parameters; AIC = Akaike information criteria; BIC = Bayesian information criteria; SSA–BIC = sample-size-adjusted BIC; LMR = Lo, Mendell, and Rubin (2001) test; BLRT = bootstrapped log-likelihood ratio tests.

Figure 1. Latent profiles for different emotional labor actors in Study 1.

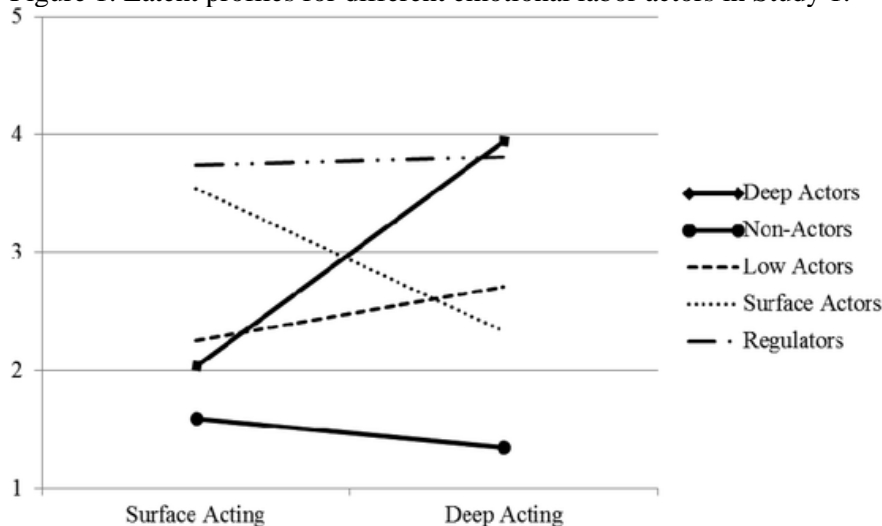


Table 4 displays the estimated means and confidence intervals for the indicators in each profile. In addition, Cohen’s  $d$  effect sizes are presented, reflecting the standardized mean differences in surface acting and deep acting across the five latent profiles. We labeled those with the most common profile *low actors* (39.16%;  $M_{\text{surface acting}} = 2.25$ ;  $M_{\text{deep acting}} = 2.71$ ), given that these individuals reported similar levels of the two strategies that could not be considered moderate or high, but the label also distinguishes them from the least common profile, *non-actors* (5.49%), individuals who reported extremely low levels of both surface acting ( $M = 1.59$ ) and deep acting ( $M = 1.35$ ). Those with the next most common profile (32.08%) were labeled *deep actors*, given that the mean deep acting level was high ( $M = 3.95$ ) and the mean surface acting level was low ( $M = 2.04$ ). *Surface actors* (12.14%;  $M_{\text{surface acting}} = 3.54$ ;  $M_{\text{deep acting}} = 2.33$ ), who were high in surface acting and low in deep acting, and *regulators* (11.13%;  $M_{\text{surface acting}} = 3.74$ ;  $M_{\text{deep acting}} = 3.81$ ), who were high in both strategies, made up fairly equal portions of the sample. Taken together, these results revealed two qualitatively different profiles (surface actors and deep actors) and three quantitatively different profiles (non-actors, low actors, and regulators), conforming to four of the a priori emotional labor profiles in Table 1.<sup>3</sup> In response to Research Question 1, these results suggest that quantitatively and qualitatively different emotional labor actors exist in service occupations.

<sup>3</sup> Given that Study 1’s data came from combining three data sets, we tested whether each of the five profiles was represented within each of the subsamples. We found fairly comparable profile proportions within each subsample, suggesting that the profiles were not idiosyncratic to a single data set.

Table 4  
Descriptive Information per Latent Profile for Study 1 and Study 2

Study/profiles	% of sample	Surface actors		Deep actors		Deep actors Cohen's <i>d</i>		Non-actors Cohen's <i>d</i>		Low actors Cohen's <i>d</i>		Regulators Cohen's <i>d</i>		Surface actors Cohen's <i>d</i>	
		<i>M</i>	95% CI	<i>M</i>	95% CI	SA	DA	SA	DA	SA	DA	SA	DA	SA	DA
Study 1															
Deep actors	32.08	2.04	[1.92, 2.16]	3.95	[3.77, 4.13]	—	—	0.51	2.70	-0.24	1.29	-1.92	0.15	-1.69	1.68
Non-actors	5.49	1.59	[1.31, 1.87]	1.35	[1.15, 1.55]	-0.51	-2.70	—	—	-0.74	-1.41	-2.42	-2.55	-2.20	-1.02
Low actors	39.16	2.25	[2.13, 2.38]	2.71	[2.49, 2.94]	0.24	-1.29	0.74	1.41	—	—	-1.68	-1.14	-1.45	0.39
Regulators	11.13	3.74	[3.52, 3.96]	3.81	[3.64, 3.99]	1.92	-0.15	2.42	2.55	1.68	1.14	—	—	0.23	1.53
Surface actors	12.14	3.54	[3.29, 3.79]	2.33	[2.13, 2.53]	1.69	-1.68	2.20	1.02	1.45	-0.39	-0.23	-1.53	—	—
Study 2															
Deep actors	35.33	2.34	[2.20, 2.48]	3.65	[3.53, 3.78]	—	—	1.49	3.16	0.19	1.57	-1.48	-0.22	-1.56	1.25
Non-actors	1.27	1.05	[1.00, 1.10]	1.20	[1.02, 1.39]	-1.49	-3.16	—	—	-1.30	-1.59	-2.97	-3.38	-3.05	-1.90
Low actors	14.85	2.17	[2.05, 2.30]	2.43	[2.27, 2.60]	-0.19	-1.57	1.30	1.59	—	—	-1.68	-1.79	-1.75	-0.32
Regulators	42.57	3.63	[3.51, 3.74]	3.82	[3.71, 3.94]	1.48	0.22	2.97	3.38	1.68	1.79	—	—	-0.08	1.47
Surface actors	5.98	3.69	[3.39, 3.99]	2.68	[2.36, 3.01]	1.56	-1.25	3.05	1.90	1.75	0.32	0.08	-1.47	—	—

Note. Study 1 was collected in the United States; Study 2 was collected in Singapore. Study 1 utilized an inductive approach to generate the latent profiles; Study 2 was a confirmatory study. Cohen's *d* effect sizes are presented with each number representing the standardized difference in surface acting (SA) or deep acting (DA) between the class in each row and the class in each column (positive Cohen's *d* indicates that the mean for the row class is higher than the column class). CI = confidence interval.

In terms of antecedents (Table 5 and Figure 2), analyses yielded evidence that employees higher in dispositional negative affectivity were more likely to be regulators or surface actors than non-actors, low actors, or deep actors. Moreover, being higher in dispositional positive affectivity was associated with individuals being classified as deep actors more so than any other class; high dispositional positive affectivity also indicated that individuals were more likely to be non-actors, low actors, or regulators in comparison to surface actors. These results suggest a close correspondence between deep acting and positive affectivity, a finding supported in meta-analytic work (Kammeyer-Mueller et al., 2013). Moreover, these findings demonstrate that non-actors are dispositionally more positive and less negative, in general, suggesting that they may experience less need to regulate due to their generally positive affect. For display rules, non-actors had lower display rule perceptions than did deep actors, regulators, and surface actors but were not significantly different from low actors. Low actors also had lower display rule perceptions than regulators, but not deep actors and surface actors. In general, these results demonstrate that non-actors in particular perceive relatively low demands to express positive and suppress negative emotions on the job in comparison to most actors. Combined, these results provide insight into Research Question 2, showing that the theoretical antecedents of display rules and dispositional affectivity differentiate profiles of emotional labor actors.

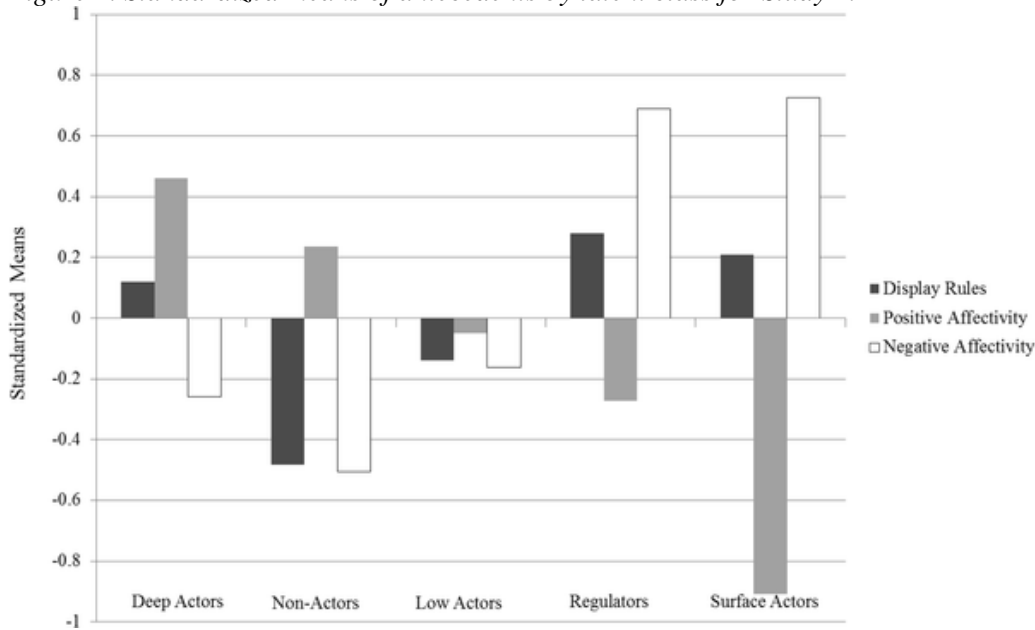
Table 5  
Three-Step Results for Antecedents (R3STEP) for Study 1 and Study 2

Study/antecedent	Deep v. Non	Deep v. Low	Deep v. Reg	Deep v. Surf	Non v. Low	Non v. Reg	Non v. Surf	Low v. Reg	Low v. Surf	Reg v. Surf
Study 1										
Display rules	0.87**	0.25	-0.99	-0.44	-0.62	-1.86*	-1.31*	-1.24*	-0.69	0.55
Positive affect	1.23*	1.63**	1.85**	3.61***	0.40	0.62	2.38***	0.22	1.98**	1.76*
Negative affect	1.58	-0.30	-2.17***	-1.83**	-1.88	-3.75**	-3.41**	-1.87***	-1.53**	.34
Study 2										
Display rules	3.79***	1.21*	-1.34***	0.09	-2.58	-5.14***	-3.70*	-2.56***	-1.12	1.44*
Positive affect	0.89	-0.23	0.59*	0.17	-1.12	-0.30	-0.73	0.82**	0.40	-0.43
Negative affect	1.47	0.24	-0.37	0.33	-1.22	-1.83	-1.14	-0.61*	0.08	0.69
Customer orientation	-0.16	0.13	0.45	1.49**	0.29	0.61	1.65**	0.31	1.36*	1.04*
ED-A	-3.44*	0.37	0.23	0.06	3.81*	3.67*	3.50*	-0.14	-0.31	-0.17

Note. All values are estimates from the R3STEP logistic regression analyses. Due to listwise deletion, in Study 1, analyses were conducted with 522 participants and in Study 2 with 478 participants. Positive values indicate that higher values on the antecedent make a person more likely to be in the first latent profile out of the two being compared; negative values indicate that higher values on the antecedent make a person more likely to be in the second latent profile. Deep = deep actors; Non = non-actors; Low = low actors; Reg = regulators; Surf = surface actors; ED-A fit = emotion demands-abilities fit.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Figure 2. Standardized means of antecedents by latent class for Study 1.



For well-being outcomes (Table 6 and Figure 3), surface actors had the worst well-being (i.e., highest emotional exhaustion, lowest job satisfaction) compared with all other profiles, consistent with the general finding that high surface acting is harmful (Cohen’s *d* ranges from 0.65 to 2.33). Regulators had the second worst well-being but were better than surface actors (Cohen’s *d* emotional exhaustion = 0.65, Cohen’s *d* job satisfaction = 0.71), suggesting that although individuals using both strategies at a high level are worse off than most profiles, they are better off than individuals who only use high levels of surface acting. Our remaining profiles (deep actors, non-actors, and low actors) all had comparably lower levels of emotional exhaustion. This finding for deep actors suggests that high deep acting may not be harmful for well-being when it is paired with low surface acting. Further, reporting moderate (low actors) or very low (non-actors) levels of both surface acting and deep acting produced similarly low levels of emotional exhaustion, suggesting that engaging in some surface acting and deep acting may not necessarily increase levels of exhaustion. Moreover, deep actors had the highest rating of job satisfaction (Cohen’s *d* ranges from 0.49 to 2.33), further illustrating the potential benefits of this profile.<sup>4</sup> These results speak to the importance of Research Question 3, illustrating that different profiles of emotional labor actors relate to different levels of emotional exhaustion and job satisfaction.

Table 6  
Three-Step Results for Distal Outcomes for Study 1 and Study 2

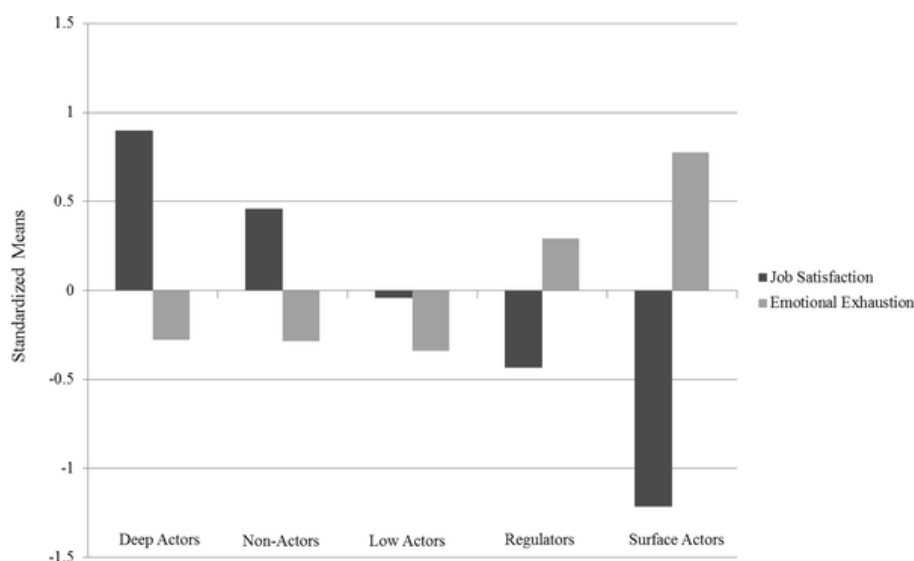
Study/outcome	Deep (A)	Non (B)	Low (C)	Reg (D)	Surf (E)	Chi square
Study 1						
Emotional exhaustion	2.32 <sub>D,E</sub>	2.32 <sub>D,E</sub>	2.27 <sub>D,E</sub>	2.86 <sub>A,B,C,E</sub>	3.31 <sub>A,B,C,D</sub>	36.72***
Job satisfaction	4.85 <sub>B,C,D,E</sub>	4.44 <sub>A,C,D,E</sub>	3.96 <sub>A,B,D,E</sub>	3.59 <sub>A,B,C,E</sub>	2.82 <sub>A,B,C,D</sub>	623.24***
Study 2						
Emotional exhaustion	3.07 <sub>B,D,E</sub>	1.75 <sub>A,C,D,E</sub>	2.98 <sub>B,D,E</sub>	3.93 <sub>A,B,C</sub>	4.13 <sub>A,B,C</sub>	103.97***
Job satisfaction	3.80 <sub>C,D,E</sub>	3.92 <sub>C,D,E</sub>	4.50 <sub>A,B,D,E</sub>	3.65 <sub>A,B,C,E</sub>	3.19 <sub>A,B,C,D</sub>	125.26***
Felt inauthenticity	2.08 <sub>B,D,E</sub>	1.37 <sub>A,C,D,E</sub>	1.98 <sub>B,D,E</sub>	2.64 <sub>A,B,C,E</sub>	4.07 <sub>A,B,C,D</sub>	829.50***

Note. All analyses were run utilizing the DCON procedure in Mplus. The values for emotional exhaustion, job satisfaction, and felt inauthenticity for each profile are means. In Study 1 (United States), data were available for 170 participants for emotional exhaustion and 646 participants for job satisfaction. In Study 2, data were available for 480 participants for job satisfaction and felt inauthenticity, and 479 participants for emotional exhaustion. Subscripts indicate profiles that are significantly different at  $p < .05$ . Deep = deep actors; Non = non-actors; Low = low Actors; Reg = regulators; Surf = surface actors.

\*\*\*  $p < .001$ .

<sup>4</sup> Another option to determine the differences between profiles on our outcomes was to conduct an analysis of variance with most likely class as our grouping variable. Results of these analyses were largely the same as those found with the DCON procedure in MPlus. As such, we only present the results from our MPlus analyses.

Figure 3. Standardized means of distal outcomes by latent class for Study 1.



Our results offer three theoretical contributions. First, we found support for the idea that the competing (i.e., individuals use surface acting *or* deep acting) and complementary (i.e., individuals use surface acting *and* deep acting) views of emotional labor can coexist in different subpopulations. We found quantitatively different profiles suggesting that some people in some groups utilize surface and deep acting at similar levels (non-actors, low actors, and regulators; approximately 57% of employees) and qualitatively different profiles suggesting that some people in some groups primarily use one strategy (surface actors and deep actors; approximately 43% of employees).

Second, we provided some insight into the particular conditions in which deep acting may be beneficial or harmful for employee well-being. Our latent profiles revealed that deep acting can have benefits (e.g., high job satisfaction, low emotional exhaustion) when it occurs (a) at high levels and in combination with low surface acting (deep actors) or (b) at low levels in combination with low levels of surface acting (low actors). Thus, by capturing the unobserved heterogeneity in the population of emotional labor actors, we have offered clarification as to when the benefits attributed to deep acting may be observed, potentially explaining why past research has found largely null effects (e.g., Hülsheger & Schewe, 2011).

Finally, our results found a class of individuals who do not appear to regulate at all—non-actors (see Grandey et al., 2013). These individuals appear to perceive low levels of display rules and experience low negative affectivity, high positive affectivity, and high well-being. These findings present preliminary evidence that individuals who are not regulating their emotions via surface or deep acting are not abandoning the goal of regulating emotions and engaging in emotional deviance (Rafaeli & Sutton, 1987). Rather, these individuals may typically feel positive emotions, perceive little need to regulate, and experience positive well-being at work. We more formally explore the potential benefits of this profile in Study 2.

To further illustrate the unique value of adopting a person-centered approach to examining surface acting and deep acting, Table 7 provides regression analysis results for surface acting, deep acting, and their interaction in predicting the Study 1 outcomes. Consistent with meta-analytic findings (Hülsheger & Schewe, 2011), surface acting positively predicted emotional exhaustion ( $b = 0.31, p < .001$ ) and negatively predicted job satisfaction ( $b = -0.48, p < .001$ ). We did find that deep acting negatively related to emotional exhaustion ( $b = -0.14, p < .05$ ) counter to the bivariate results, suggesting the possibility of a suppressor effect (Cohen, Cohen, West, & Aiken, 2003). For job satisfaction, deep acting was a positive predictor ( $b = 0.16, p < .001$ ), consistent with the bivariate results and recent research (Scott et al., 2012). It is important to note that no significant interactions emerged, suggesting that the effects of deep acting did not depend on surface acting, something that we were able to observe for particular subpopulations in the LPA approach. These results show how variable-centered approaches may not only fail to capture different types of emotional labor actors but may also not fully capture effects that only emerge for specific subpopulations.

**Table 7**  
*Regression Results for Study 1 and Study 2 Predicting Emotional Labor Outcomes*

Study/profile	Emotional exhaustion		Job satisfaction		Felt inauthenticity	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<b>Study 1</b>						
Surface acting (SA)	0.31***	0.07	-0.48***	0.04		
Deep acting (DA)	-0.14*	0.07	0.16***	0.04		
SA × DA	-0.06	0.06	0.06	0.04		
<b>Study 2</b>						
Surface acting (SA)	0.53***	0.07	-0.26***	0.04	0.42***	0.04
Deep acting (DA)	-0.05	0.08	0.14**	0.04	-0.10*	0.05
SA × DA	-0.07	0.08	0.03	0.04	-0.11*	0.04

*Note.* All coefficients are centered and unstandardized. Felt inauthenticity was not measured in Study 1. In Study 2, emotional exhaustion, job satisfaction, and felt inauthenticity were assessed 1 week after surface and deep acting. Study 1 was conducted in the United States; Study 2 variables were collected in Singapore. *SE* = standard error.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

## **Study 2: Replicating and Expanding Our Understanding of Emotional Labor Actors**

Study 2 was designed to replicate the profile structure observed in Study 1, as well as expand the antecedents (e.g., display rules, positive affectivity, negative affectivity, customer orientation, and emotion demands–abilities fit) and outcomes (e.g., emotional exhaustion, job satisfaction, and felt inauthenticity). Because our data from Study 1 came from three samples, in Study 2 we conducted a single data collection. Moreover, given that all variables in Study 1 were assessed simultaneously, in Study 2, we assessed our antecedents and emotional labor strategies at Time 1 and our criteria 1 week later at Time 2. Based upon the results of Study 1, we made formal predictions in Study 2. First, we proposed that we would replicate Study 1’s five-profile structure. Thus, we made the following hypothesis:

*Hypothesis 1:* Five latent profiles will be identified that differ quantitatively (non-actors, low actors, and regulators) and qualitatively (surface actors and deep actors).

Second, for our antecedents, the results of Study 1 indicated that profiles who utilized at least a low level of surface acting, deep acting, or both strategies (e.g., low actors, surface actors, deep actors, and regulators) reported emotional display rule perceptions that were higher than non-actors (who reported virtually no surface acting and deep acting). Thus, we proposed that high perceptions of display rules would increase the probability of individuals being in the low actor, surface actor, deep actor, or regulator class versus the non-actor class.

*Hypothesis 2:* High levels of display rule perceptions will be more likely for the low actors, surface actors, deep actors, and regulators than for the non-actors.

Third, fitting with the results of Study 1, we hypothesized that high dispositional positive affectivity would increase the probability that individuals would be non-actors, low actors, deep actors, or regulators in comparison to surface actors, and high dispositional negative affect would increase the probability that individuals would be surface actors or regulators as opposed to non-actors, low actors, and deep actors. These predictions are also generally consistent with meta-analytic work (Kammeyer-Mueller et al., 2013). Thus, we proposed the following:

*Hypothesis 3:* High levels of dispositional positive affectivity will increase the probability that individuals will be non-actors, low actors, deep actors, and regulators as opposed to surface actors.

*Hypothesis 4:* High levels of dispositional negative affectivity will increase the probability that individuals will be surface actors and regulators as opposed to non-actors, low actors, and deep actors.

Fourth, we tested two additional antecedents: customer orientation and emotion demands–abilities (ED–A) fit. Customer orientation is a dispositional variable conceptualized as the extent to which employees have concern for delivering high-quality customer service (Donovan, Brown, & Mowen, 2004). Allen, Pugh, Grandey, and Groth (2010) found that customer orientation positively related to deep acting and negatively related to surface acting, suggesting that individuals with high customer orientation may choose to engage in more authentic forms of emotion regulation (i.e., deep acting). As such, we theorized that higher levels of customer orientation would make individuals more likely to be in classes that use high deep acting only (deep actors) as opposed to surface acting at high levels (surface actors and regulators). We also expected that individuals utilizing low levels of emotion regulation (non-actors and low actors) may do so because they are higher in customer orientation and naturally appraise customer behavior in a more favorable or benevolent way. Giving customers the “benefit of the doubt” during difficult interactions may produce benefits for employees in the form of fewer negative feelings and less of a need to actively regulate emotions. Thus, we hypothesized the following:

*Hypothesis 5:* Higher levels of customer orientation will increase the probability that individuals will be non-actors, low actors, and deep actors as opposed to regulators and surface actors.

In addition, perceived ED–A fit has emerged as a distinct type of person–job fit capturing the extent to which individuals’ emotional abilities match the emotional demands of the job (Diefendorff, Greguras, & Fleenor, in press). Given that individuals who perceive high ED–A fit report close correspondence between their abilities and the emotional demands of the job, we hypothesized that high perceived ED–A fit should correspond to being a non-actor in comparison to all other profiles. Inherently, a perceived discrepancy between emotional demands and an individual’s emotional abilities increases the likelihood that he or she will need to actively regulate their emotions when interacting with customers in small (low actors) or large (surface actors, deep actors, and regulators) amounts. In this vein, non-actors are the only class where no regulatory effort is invested. As such, we proposed the following:

*Hypothesis 6:* High levels of perceived ED–A fit increase the probability that individuals will be non-actors as opposed to low actors, surface actors, deep actors, and regulators.

Finally, for our outcomes, we proposed that surface actors, followed by regulators, would exhibit the worst well-being (i.e., high emotional exhaustion, low job satisfaction, and high felt inauthenticity), whereas non-actors, low actors, and deep actors would exhibit similarly high levels of well-being. Our prediction for emotional exhaustion and job satisfaction stems from the results of Study 1 as well as research suggesting negative consequences when engaging in high surface acting (Grandey, 2003; Hülsheger & Schewe, 2011). For felt inauthenticity, which occurs when individuals experience a disconnect between what they perceive to be their genuine self and what they display to others (Ashforth & Tomiuk, 2000), we hypothesized that inauthenticity would be higher for surface actors and regulators than for the other profiles. This difference was proposed due to both profiles exhibiting high surface acting, which has been linked to felt inauthenticity (Erickson & Wharton, 1997). Even if individuals also report deep acting at a high level (regulators), having a profile involving high surface acting is likely to harm authenticity, which runs counter to theory suggesting that high deep acting should be linked to authenticity (e.g., Grandey, 2000). However, similar to the findings in Study 1 for well-being, we expected that regulators may have slightly lower feelings of inauthenticity given their use of high deep acting in conjunction with high surface acting. Thus, we made the following hypothesis:

*Hypothesis 7:* Surface actors, followed by regulators, will experience (a) higher emotional exhaustion, (b) less job satisfaction, and (c) higher felt inauthenticity in comparison to non-actors, low actors, and deep actors.

## Method

### Participants and procedure

Students who were part of a university subject pool in Singapore were asked to recruit one full-time working adult who worked at least 30 hr per week in the customer service industry. Participants had to be fluent in English, have Internet access to complete surveys online, and be willing to complete two surveys separated by 1 week. Six hundred and thirty students initially provided the name and contact information of one full-time employee.

We e-mailed potential participants details regarding the study (e.g., purpose, timeline). Included in the e-mail was a link to the first survey (demographics, emotional labor strategies, display rule perceptions, dispositional affectivity, customer orientation, and ED-A fit). Participants who had not completed the initial survey after 1 week were sent a reminder e-mail. Seven to 10 days later (depending on when the first survey was completed), an invitation for the second survey (felt authenticity, emotional exhaustion, and job satisfaction) was e-mailed to participants who completed the first survey. To match Time 1 and Time 2 surveys, we asked participants to provide their e-mail addresses on both surveys. At Time 1, 560 of the 630 potential participants completed the survey (88.9%). After removing seven participants because of missing data on our emotional labor measures, our total sample size was 552 employees (87.6% overall response rate). Accounting for attrition from Time 1 to Time 2, we had 480 participants with complete data.<sup>5</sup>

Our sample was largely female (59.2%), with 87.7% identifying as being of Chinese descent. The average age was 38.8 years, with participants having worked with their current company for 5.22 years on average and in their current position for 4.49 years on average. Similar to Study 1, our sample came from a variety of service industries including management (36.1%), service or sales (26.0%), and clerical staff (7.9%). In addition to coming from a different cultural context and being required to work more hours than Study 1 participants, Study 2 participants were also older,  $t(1238) = -12.61, p < .001$ .

### Time 1 measures

#### *Surface acting and deep acting*

We used the same seven surface acting items ( $\alpha = .93$ ) and four deep acting items ( $\alpha = .85$ ) from Diefendorff et al. (2005) as in Study 1.<sup>6</sup>

#### *Display rules*

We again used Diefendorff et al.'s (2005) seven-item scale ( $\alpha = .71$ ).

#### *Positive and negative affectivity*

We again used the PANAS (Watson et al., 1988) to assess positive ( $\alpha = .89$ ) and negative ( $\alpha = .88$ ) dispositional affectivity.

#### *Customer orientation*

Following Allen et al. (2010), we used the four-item "need to pamper" customer orientation subscale (Donovan et al., 2004); this represents an employee's tendency to want to assist customers ( $\alpha = .87$ ). Items were on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*). An example is "I enjoy nurturing my service customers."

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<sup>5</sup> The 72 respondents who did not complete the second survey after completing the first did not differ from the rest of the sample by gender, age, organizational level, organizational tenure, or job tenure ( $p > .05$ ). Given that all 552 participants had complete data on the surface acting and deep acting measures, our latent profiles were tested on the full sample. Similar to Study 1, antecedent and outcomes analyses were performed on a smaller portion of the sample ( $n = 478$  for antecedents due to listwise deletion;  $n = 479$  or 480, depending on the dependent variable; see Table 6).

<sup>6</sup> As highlighted by an anonymous reviewer, other emotional labor scales exist and with different rating metrics (e.g., frequency scales; Brotheridge & Lee, 2002). In supplemental analyses for Study 2, we considered emotional labor actors derived from the Brotheridge and Lee (2002) assessment, and a similar profile solution was generated.

### *Emotion demands-abilities fit*

We used Diefendorff et al.'s (in press) three-item scale assessing the perceived fit between emotional demands and abilities ( $\alpha = .86$ ). Participants responded on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). An example item is "The match is very good between the emotional demands of my job and my personal skills."

### *Emotional exhaustion*

As in Study 1, we used six items from Wharton (1993;  $\alpha = .92$ ).

### *Job satisfaction*

As in Study 1, we used three items from Cammann et al. (1983;  $\alpha = .88$ ).

### *Felt inauthenticity*

We used a three-item measure by Richard (2006;  $\alpha = .87$ ). All items were measured on a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*). An example item is "I feel that I am not being myself in my interpersonal interactions at work."

## **Analytic approach**

The analytic approach used in Study 1 was replicated with the addition of two antecedent variables (customer orientation, ED–A fit) and one additional outcome variable (felt inauthenticity).

## **Results and Discussion**

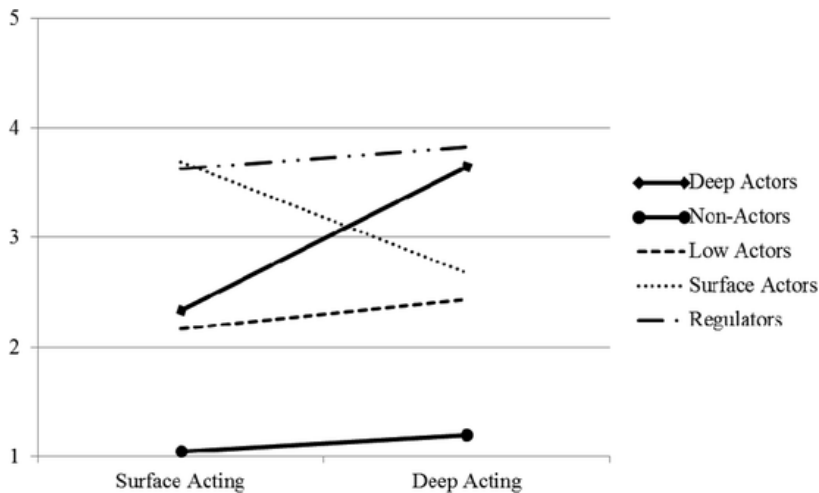
Descriptive statistics and correlations are above the diagonal in Table 2. Similar to Study 1, surface acting positively related to emotional exhaustion ( $r = .33, p < .01$ ) and negatively related to job satisfaction ( $r = -.27, p < .01$ ); we also found a positive relation between surface acting and felt inauthenticity ( $r = .44, p < .01$ ). Again, we found limited support for benefits associated with deep acting, with null relations emerging with emotional exhaustion ( $r = .08, ns$ ), job satisfaction ( $r = .05, ns$ ), and felt inauthenticity ( $r = .07, ns$ ).

Table 3 displays the LPA fit statistics. Using the fit criteria from Study 1, we found that the five-profile solution was the best solution in that it exhibited low LL, AIC, and SSA–BIC statistics (SSA–BIC was slightly larger than the four-profile solution), significant LMR and BLRT statistics, and large entropy (entropy was higher for the two-profile solution, but the LL, AIC, BIC, and SSA–BIC statistics were also higher, making it a less viable solution). As a note, the six-profile solution exhibited lower LL, AIC, BIC, and SSA–BIC statistics and larger entropy in comparison to the five-profile solution; however, the LMR and BLRT statistics were nonsignificant, and these statistics have been viewed as the most accurate in determining the correct solution (Nylund et al., 2007).

As shown in Table 4 (see Figure 4), the five profiles resembled the profiles from Study 1. Regulators ( $M_{\text{surface acting}} = 3.63$ ;  $M_{\text{deep acting}} = 3.82$ ) comprised the majority of the sample (42.57%), followed by deep actors (35.33%;  $M_{\text{surface acting}} = 2.34$ ;  $M_{\text{deep acting}} = 3.65$ ), low actors (14.85%;  $M_{\text{surface acting}} = 2.17$ ;  $M_{\text{deep acting}} = 2.43$ ), and surface actors (5.98%;  $M_{\text{surface acting}} = 3.69$ ;  $M_{\text{deep acting}} = 2.68$ ). The smallest profile was non-actors (1.27%;  $M_{\text{surface acting}} = 1.05$ ;  $M_{\text{deep acting}} = 1.20$ ); although the proportion was small, the addition of this profile improved model fit (see Table 3) and matched profile results in Study 1 (non-actors were the smallest proportion and had similar levels of the profile indicators). Thus, even though the profile proportions in Study 2 differed somewhat from Study 1, the general structure replicated, supporting Hypothesis 1.

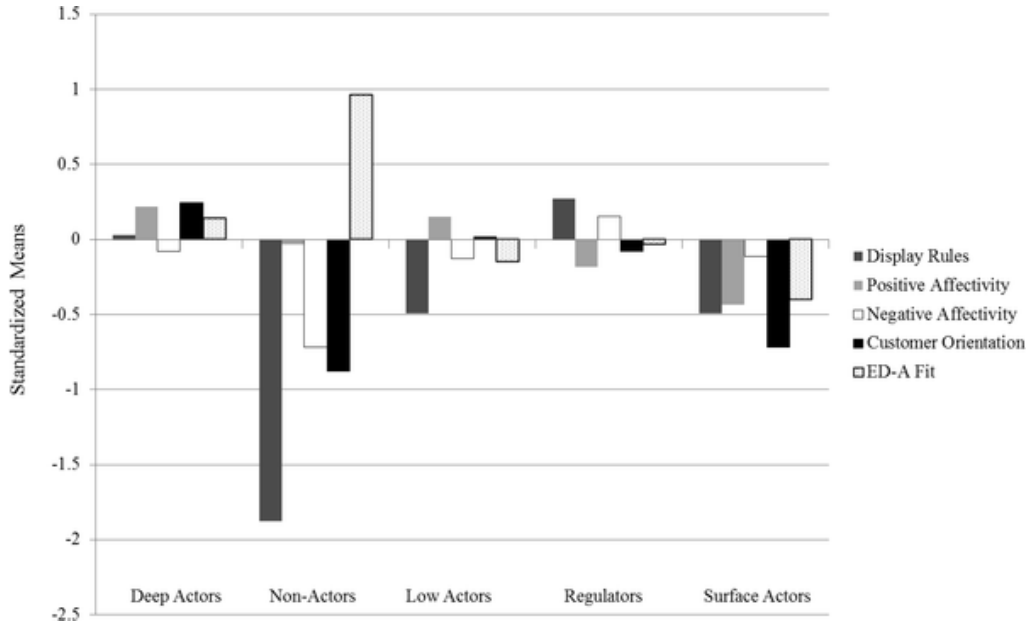


Figure 4. Latent profiles for different emotional labor actors in Study 2.



Next, we tested whether antecedents differentiated our profiles (see Table 5 and Figure 5). For display rules, non-actors had lower levels of display rule perceptions than regulators, surface actors, and deep actors, but not low actors, largely supporting Hypothesis 2. We found additional differences, such that regulators had higher display rule perceptions than deep actors, surface actors, and low actors, and high display rule perceptions also increased the likelihood of being in the deep actor profile compared with the low actor profile. Surface actors and low actors did not differ in display rule perceptions, nor did deep actors and surface actors.

Figure 5. Standardized means of antecedents by latent class for Study 2. ED-A = emotional demands-abilities.



Hypotheses 3 and 4 focused on dispositional positive and negative affectivity, respectively (see Table 5). Consistent with expectations, results indicated that being low in negative affectivity or high in positive affectivity was associated with a higher probability of being a low actor compared with a regulator. Also, being higher in positive affectivity increased the likelihood of being in the deep actor profile compared with the regulator profile. However, no other differences emerged as a function of dispositional affectivity; that is, positive or negative dispositional affect did not differentiate non-actors from deep actors, regulators, low actors, or surface actors. Thus, we provide limited support for Hypotheses 3 and 4.

For Hypothesis 5, we considered how customer orientation differentiated the profiles (see Table 5). Interestingly, people with a high customer orientation were associated with a lower probability of being in the surface actor class than any other class (though customer orientation did not differentiate any other profiles). These results partially support Hypothesis 5, given that regulators—who had high levels of surface acting and deep acting—were not differentiated from non-actors, low actors, or deep actors on the basis of customer orientation.

For Hypothesis 6, we tested how ED–A fit uniquely predicted latent profile membership (see Table 5). Higher levels of ED–A fit were associated with a higher probability of being in the non-actor class than any other class; there were no other differences between the remaining profiles in ED–A fit. Thus, Hypothesis 6 was supported.<sup>7</sup>

Finally, we tested whether our profiles exhibited different emotional exhaustion, job satisfaction, and felt inauthenticity (Hypothesis 7; see Table 6 and Figure 6). Results revealed that surface actors experienced higher emotional exhaustion (Cohen's  $d$  ranged from 0.15 to 1.78), lower job satisfaction (Cohen's  $d$  ranged from 0.85 to 1.80), and higher felt inauthenticity (Cohen's  $d$  ranged from 1.77 to 2.88) compared with all profiles (though not significantly different from regulators on emotional exhaustion). Regulators closely followed for felt inauthenticity and job satisfaction, suggesting that even though these individuals had worse well-being than non-actors, low actors, and deep actors (Cohen's  $d$  ranged from 0.21 to 1.67), their well-being was better than that of surface actors (Cohen's  $d$  ranged from 0.15 to 1.77). For the remaining classes, non-actors had significantly lower emotional exhaustion and felt inauthenticity than low actors (Cohen's  $d$  emotional exhaustion = 1.15, Cohen's  $d$  felt inauthenticity = 1.10) and deep actors (Cohen's  $d$  emotional exhaustion = 1.03, Cohen's  $d$  felt inauthenticity = 1.01; the latter two classes did not differ), whereas low actors had higher job satisfaction than non-actors and deep actors (Cohen's  $d$  was 0.87 and 1.10, respectively; the latter classes did not differ). Taken together, the results for deep actors showed that individuals who exhibit high deep acting in the presence of low surface acting may experience well-being outcomes that are much better than individuals who utilize high levels of deep acting in the presence of surface acting (regulators). Moreover, these individuals are not significantly different from those who engage in low (low actors) or almost no (non-actors) regulation. These results again highlight that the theorized benefits of deep acting exist but in a small subset of individuals who also surface act at low levels. Thus, Hypothesis 7 was supported.<sup>8</sup>

Finally, we tested whether regression analyses would have yielded the same results as our LPA analyses. As shown in Table 7, analyses revealed significant relations of surface acting with emotional exhaustion ( $b = 0.53, p < .001$ ), job satisfaction ( $b = -0.26, p < .001$ ), and inauthenticity ( $b = 0.42, p < .001$ ). For deep acting, we found a significant positive relation with job satisfaction ( $b = 0.14, p < .01$ ) and a negative relation with felt inauthenticity ( $b = -0.10, p < .05$ ), both of which were not significant in bivariate tests, suggesting that the inclusion of surface acting may have acted as a suppressor. Finally, there was only one significant interaction between surface acting and deep acting in predicting felt inauthenticity ( $b = -0.11, p < .05$ ), such that the relation between surface acting and felt inauthenticity was stronger when deep acting was high compared with when it was low. Thus, using the variable-centered approach, we would have concluded that deep acting has limited benefits and may even be harmful when combined with surface acting. In contrast, LPA results suggest that there is a subpopulation of employees for which deep acting may be beneficial (i.e., deep actors).

In sum, Study 2 replicated the profile structure in Study 1, in addition to demonstrating how the profiles uniquely relate to outcomes and antecedents. Moreover, we gained insights from the person-centered approach

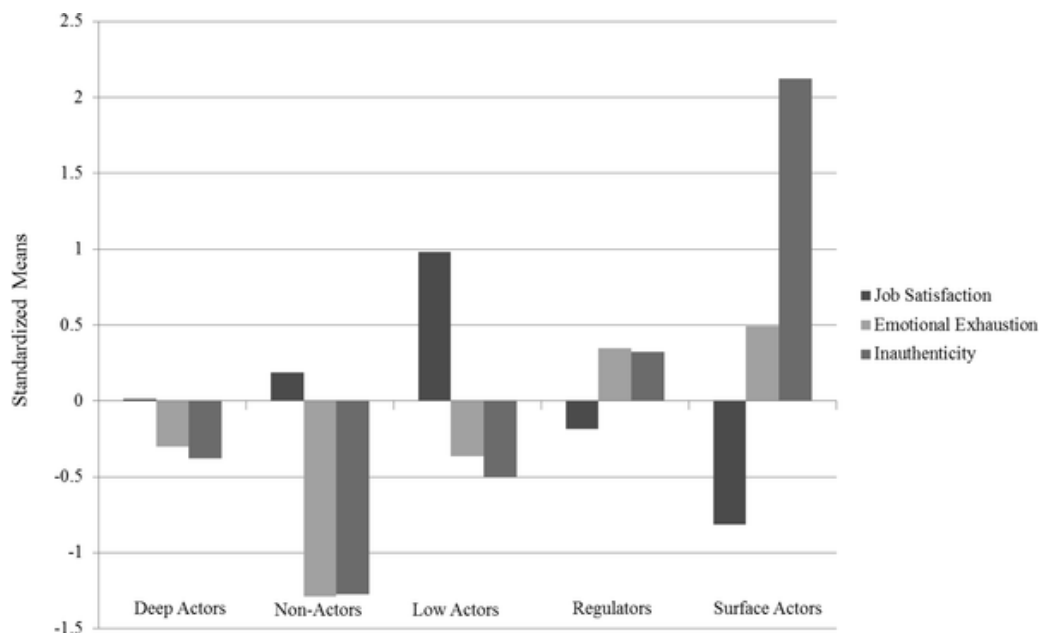
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<sup>7</sup> Consistent with Study 1, we considered age, gender, and job tenure as antecedents of our latent profiles in Study 2 in combination with dispositional affect, customer orientation, and ED–A fit. Null results emerged with a couple exceptions: non-actors had higher tenure than low actors, and regulators and deep actors had higher levels of job tenure than non-actors. These analyses were not included in the article but are available upon request.

<sup>8</sup> Similar to Study 1, we also used an analysis of variance with most likely class as our grouping variable to test differences between our outcomes. Results of these analyses were largely the same as those found with the DCON procedure in MPlus. Therefore, we only present the results from our MPlus analyses.

that would not have been gleaned from the variable-centered approach. We elaborate on the theoretical and practical implications of these findings in next section.

Figure 6. Standardized means of distal outcomes by latent class in Study 2.



## General Discussion

By using a person-centered approach (Wang & Hanges, 2011; Zyphur, 2009) to investigate emotional labor strategies, we identified the existence of distinct emotional labor actors, or subpopulations. Overall, our results across two studies revealed five profiles that varied in the *level* (quantitative differences—non-actors, low actors, and regulators) and *shape* (qualitative differences—surface actors and deep actors) of the profile indicators. In turn, these profiles were associated with different levels of three well-being indicators, display rule perceptions, dispositional affectivity, customer orientation, and ED–A fit.

One major theoretical contribution of the current article is that our profiles reconciled differing views of how surface and deep acting should relate to each other by demonstrating that different subpopulations can exhibit different combinations of the strategies. In particular, we found three profiles that indicate that surface acting and deep acting can coexist within individuals at comparable levels (consistent with the notion that the regulation strategies are positively correlated and can be used in tandem) and two profiles that suggest only one may be primarily used, perhaps at the expense of the other (suggesting a negative relationship between the strategies). By modeling the heterogeneity in our samples of service employees, we showed that the two theoretical perspectives can coexist in distinct subpopulations of service workers.

Our results also highlight how emotional labor antecedents and outcomes differ as a function of profile membership. For antecedents, one of the best differentiators of our profiles was perceived ED–A fit, with high levels of ED–A fit distinguishing non-actors from all profiles. Consistent with calls from Grandey et al. (2013) to understand individuals who choose not to regulate, identifying perceived ED–A fit as an antecedent sheds light on the fact that non-actors likely perceive congruence between their abilities and the demands of service occupations, negating the need to regulate emotions. Another antecedent that differentiated profiles was display rule perceptions, with display rules separating those profiles that reported high emotion regulation (regulators, surface actors, and deep actors) from those profiles that did not regulate much or at all (low actors and non-actors). This suggests that the strength of individual perceptions of display rules matter for determining the amount of emotion regulation enacted by employees.

In terms of the outcomes, we found that high levels of deep acting were harmful for employee well-being when individuals also engage in high surface acting (regulators) but that it can be beneficial for employees when engaging in low levels of surface acting (deep actors). Indeed, deep actors experienced well-being comparable to those individuals whose profiles indicated little (low actors) or almost no (non-actors) emotion regulation, suggesting that deep acting may be performed without a cost to employees. Thus, it may be that previous null findings for deep acting (e.g., Brotheridge & Grandey, 2002; Grandey, 2003) occurred because the two subpopulations that engage in high deep acting (regulators and deep actors) were combined in prior samples. Moreover, although regulators did experience better well-being than surface actors, their well-being was still lower than all remaining profiles. LPA allowed us to identify when high levels of deep acting may be beneficial or harmful. Beyond the role of deep acting, our analyses linking profiles to outcomes also indicated that non-actors and low actors had high levels of well-being that were fairly comparable. Thus, it seems that whether one does not regulate emotions (non-actors) or perhaps uses only very low levels of these emotion regulation strategies (low actors), the well-being outcomes are similar.

Although not a main focus, our studies were embedded within two distinct cultures in the United States (Study 1) and Singapore (Study 2). Given that we replicated our profiles across two culturally distinct settings, we believe our five-profile solution is robust. However, three differences did emerge. First, there were slight variations in the percentage of individuals in each profile (see Table 3). In the United States, low actors were the majority of the sample (39.16%), followed by deep actors (32.08%), surface actors (12.14%), regulators (11.13%), and non-actors (5.49%). In Singapore, regulators were the majority (42.57%), followed by deep actors (35.33%), low actors (14.85%), surface actors (5.98%), and non-actors (1.27%). Thus, although deep actors were the second most common and surface actors and non-actors were the least common, the dominant profile varied across cultures, with more people being low actors in the United States and regulators in Singapore. This finding for Singapore may be due to cultural norms related to emotional control, increasing the likelihood of both forms of emotion regulation in some Asian cultures (e.g., Allen, Diefendorff, & Ma, 2014).

Second, different antecedents emerged as important in the two samples. For instance, in the United States (Study 1), negative and positive dispositional affectivity emerged as stronger differentiators of the latent classes, with some class membership differences also emerging for display rule perceptions. However, in Singapore (Study 2), display rule perceptions, customer service orientation, and ED–A fit better differentiated the latent profiles than did dispositional affect; these results were consistent whether or not we included the two additional antecedent variables (i.e., customer orientation and ED–A fit)<sup>9</sup> in Study 2, suggesting that dispositional affect may not play as strong a role in Singapore as in the United States.

Finally, in the United States, job satisfaction was higher for deep actors in comparison to non-actors and low actors, but in Singapore, job satisfaction was highest for low actors, followed by non-actors and deep actors. These results suggest that the relationship between deep acting and job satisfaction that has been found (e.g., Scott, Barnes, & Wagner, 2012) may be stronger in the United States than in Singapore. More work aimed at exploring how emotional labor processes operate in cross-cultural contexts is needed (e.g., Allen et al., 2014). However, we find it reassuring that the general profile structure is largely consistent across our two cultural contexts.

## **Practical Implications**

Several practical recommendations emerge from the current research. In general, it may be useful for managers to think about which emotional labor combinations are beneficial for employee well-being and create conditions that foster those specific constellations. Based on our results, managers may want to ensure that employees utilize fairly low levels of emotion regulation or focus on deep acting. From a selection standpoint, this may involve identifying individuals who perceive high levels of fit with the emotional demands of the job (non-actors). This would be advantageous in the long term given that non-actors exhibited

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<sup>9</sup> When testing dispositional affect and display rules in Study 2 only (similar to Study 1 analyses), results indicated that being high on positive affectivity made individuals likely to be a low actor or deep actor than a surface actor or regulator and being high on negative affectivity made individuals more likely to be a regulator than a low actor or deep actor. No other differences emerged.

some of the best well-being, potentially ensuring their longevity on the job (e.g., Chau, Dahling, Levy, & Diefendorff, 2009). Beyond selection, training and performance management systems designed to encourage effective emotional labor should encourage the use of deep acting and minimize the use of surface acting (see Pugh, Diefendorff, & Moran, 2013), with past work suggesting that adaptive strategies similar to deep acting can be trained (Totterdell & Parkinson, 1999).

If employees are in a class that exhibits low well-being (i.e., surface actors or regulators), managers may consider whether conditions can be introduced that can buffer the effects of profile membership on well-being. Social sharing (McCance, Nye, Wang, Jones, & Chiu, 2013), respite breaks (Trogakos, Beal, Green, & Weiss, 2008), job control (Grandey, Fisk, & Steiner, 2005), and a climate of authenticity (Grandey, Foo, Groth, & Goodwin, 2012) have been linked to reduced negative outcomes from emotional labor. These factors could aid employees who reside in a subpopulation with a harmful combination of emotion regulation strategies.

### **Limitations and Future Directions**

As with any research, our studies have limitations. All measures were collected from the same source. Although it is unlikely that profiles might be more or less likely to co-occur with particular antecedents or outcomes because of same source bias, future studies should collect data from additional sources (e.g., supervisors and customers) on constructs such as authenticity of displays and service performance. Of interest would be establishing whether profiles that were identified as being beneficial for employees (non-actors, low actors, and deep actors) also have higher performance evaluations and more authentic and positive emotional displays. In addition, we did not assess what might prove to be key antecedents of profile membership. For instance, it may be informative to assess emotional intelligence given its importance in the emotional labor process (Newman, Joseph, & MacCann, 2010). Because emotional intelligence can be measured somewhat objectively (e.g., the Mayer–Salovey–Caruso Emotional Intelligence Test [MSCEIT]; Mayer, Salovey, & Caruso, 2002), this may be valuable to consider.

Further, within our samples multiple service occupations were included. Although we view this as a strength, it is possible that occupational differences contributed to the profile structure, though we suspect some of this may be captured by display rule perceptions (which we did assess and model). Future work may consider testing profiles within a single service occupation (e.g., nurses) to rule out occupational differences.

Finally, we captured only general emotion regulation strategy tendencies, as opposed to dynamic variations in strategy use. Although research on LPA to date is consistent with our focus on trait level profile indicators (e.g., Foti et al., 2012), other studies have established that emotional labor is a dynamic process that varies on a daily basis (e.g., Judge et al., 2009; Scott & Barnes, 2011). A fruitful future direction would be to tease apart whether our emotional labor actors exhibit within-person variation over time, in addition to identifying factors that might relate to such variation. In a similar vein, other person-centered techniques that assess changes in class membership over time, like latent transition analysis (Wang & Chan, 2011), could be implemented to show if and when people utilize different profiles of strategies over time.

### **Conclusion**

The burgeoning emotional labor literature has been limited in its conceptualization and understanding of the emotional labor process. In the current study, we attempted to use a new analytic lens (LPA) to better understand how distinct *emotional labor actors* experience their jobs. We were able to demonstrate that (a) different emotional labor actors do consistently exist, (b) latent profile membership can be predicted by antecedents, and (c) latent profile membership differentiates employee well-being outcomes. Our results demonstrate that high deep acting can be beneficial when used in isolation (deep actors), high surface acting (surface actors) is consistently harmful even when paired with the “better” strategy of deep acting (regulators), and non-actors (i.e., people reporting little to no regulation) do exist. Our results demonstrate the benefits of adopting a person-centered approach to better explicate the complexity of emotional labor processes.

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