

# CUSTOMER REACTIONS TO EMOTIONAL LABOR: THE ROLES OF EMPLOYEE ACTING STRATEGIES AND CUSTOMER DETECTION ACCURACY

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**In this research, we extend emotional labor theories to the customer domain by developing and testing a theoretical model of the effects of employee emotional labor on customer outcomes. Dyadic survey data from 285 service interactions between employees and customers show that employees' emotional labor strategies of deep and surface acting differentially influence customers' service evaluations and that customers' accuracy in detecting employees' strategies can intensify this impact. We also investigate the potential moderating effects of service type on the relationship between emotional labor and customer outcomes but find no support for such an effect.**

Recent service management research increasingly focuses on the role of emotions in service delivery, particularly the emotional labor performed by service employees. Frontline workers are expected to display certain emotions (e.g., happiness) and suppress others (e.g., anger) in their daily interactions with customers to comply with their job requirements and organizational expectations. Against this background, the concept of emotional labor—the “process of regulating both feelings and expressions for the organizational goals” (Grandey, 2000: 97)—has received ample attention in existing research in an effort to understand how service organizations can better deliver “service with a smile” to their customers by effectively managing their employees' emotional display (for a recent review, see Grandey [2008]).

Since Hochschild (1983) introduced the concept, most research on emotional labor has focused on its dimensionality and its effects on employee well-being. With regard to emotional labor dimensions, *deep acting* (attempting to modify felt emotions so that a genuine emotional display follows) and *sur-*

*face acting* (faking or amplifying emotions by displaying emotions not actually felt) represent two main strategies of regulating emotion that employees use to comply with expectations of emotional display (Hochschild, 1983; Kruml & Geddes, 2000). Research has highlighted several negative consequences of emotional labor on employees, including psychological health problems such as stress, burnout, and emotional exhaustion (Brotheridge & Grandey, 2002; Hochschild, 1983; Morris & Feldman, 1997), but has only sparingly addressed the question whether emotional labor also influences *customers*. This gap is surprising, because the personal interaction between a service employee and customer comprises an essential part of the service experience (Bitner, 1990; Bowen, 1990), and the role of emotions in influencing social processes (Hatfield, Cacioppo, & Rapson, 1994; Hochschild, 1979) provides reason to believe that employees' emotion regulation during service interactions affects customer outcomes, such as service quality and customer loyalty, that are critical for service success.

This research is an attempt to narrow the existing research gap by examining the link between employees' emotional labor and customers' perceptions of the service experience. Specifically, we consider whether employees' emotional labor strategies—either genuine emotional display (deep acting) or fake emotional display (surface acting)—affect customers' evaluations of service experiences

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and their long-term relationships with the service providers. Do customers react positively to all displays of friendly emotions, even feigned ones, or do they have a less positive service experience when employees fake their emotional display? To what extent are customers able to detect fake and genuine emotions accurately, and how does this influence their assessments of service experience?

We addressed these questions by developing a theoretical model of the links between employees' emotional labor, customers' accuracy in detecting different emotional labor strategies, and the resulting customer outcomes, drawing on social psychological research into emotion regulation and emotion recognition. We tested the model empirically by analyzing the survey data of 285 matched employee-customer dyads with partial least squares (PLS) structural equation modeling. Our analysis of dyads offers a unique contribution to research, as it allowed us to focus on emotional labor performed in a specific and immediate service transaction rather than ask employees about their retrospective behavioral patterns in general, as is often done in emotional labor research.

## THEORETICAL BACKGROUND

### Role of Emotions in Service Interactions

Although some prior research has examined the role of emotions in service interactions between employees and customers, most of this research focuses on employees' outer emotional *display* rather than their internal emotion *regulation*. For example, some studies examine the relationship between employees' displayed emotions and customers' emotions by asking customers or independent observers to rate the emotional display of service employees and then linking these ratings to service evaluations. Tsai (2001) and Tsai and Huang (2002) uncovered a link between independent observers' assessments of employee affective delivery and self-reported customer mood and loyalty intentions, and Mattila and Enz (2002) similarly found a link between observational data on hotel clerks' emotional displays and customers' service encounter evaluations, as well as positive moods after the encounter. Tan, Foo, and Kwek (2004) reported a link between the extent of employees' positive emotions (measured by greeting, eye contact, and so forth) and customer satisfaction. These studies focused on outwardly displayed emotions and primarily addressed whether service friendliness and related observable behaviors lead to positive customer evaluations. However, they leave unexplored the underlying cognitive emotion

management processes and, in particular, specific emotional labor strategies.

To our knowledge, only two studies have investigated how emotional labor strategies might influence service delivery outcomes. Hennig-Thurau, Groth, Paul, and Gremler (2006), in a study of the emotional contagion process, found a significant impact of employees' emotional authenticity on customers' emotions in a simulated service encounter. Grandey (2003) focused instead on the concept of "affective delivery"—which she defined as service delivery perceived as friendly and warm by customers—as an outcome of emotional labor strategies and found a positive relationship with deep acting but a negative relationship with surface acting. However, in her study coworkers of the observed employees, rather than customers, assessed the affective delivery. Although these studies have revealed important insights into related phenomena, they have not revealed how emotional labor strategies affect the customer experience, nor the effects of whether customers are able to accurately detect emotional authenticity.

### Emotional Labor as an Emotion Regulation Process

Emotional labor research focuses specifically on the self-regulatory processes that employees use to display emotions in compliance with organizational expectations. Service organizations usually have explicit or implicit emotional display rules: that is, norms and standards of behavior that indicate which emotions are appropriate and should be publicly expressed toward customers and which should be suppressed (Hochschild, 1983; Rafaeli & Sutton, 1987). For example, all employees at Ritz-Carlton hotels need to follow "the Ritz-Carlton Basics," service rules for dealing with customers, spelled out on pocket-sized cards issued to all employees. One service rule reads: "Smile—We are on stage. Always maintain positive eye contact."

Researchers have identified deep and surface acting as the two most commonly used emotional labor strategies for coping with display rule requirements (Hochschild, 1983; Kruml & Geddes, 2000; Zapf, 2002). In deep acting, employees attempt to modify their felt emotions so that a genuine, organizationally desired emotional display can follow. Hochschild (1983) exemplified deep acting by citing flight attendants who cope with angry and annoying passengers by thinking of them as frightened first-time fliers, therefore changing their inner feelings from annoyance to pity and empathy. When deep acting, employees endeavor to express authentic emotions, and though not every attempt

succeeds, emotions expressed as a result of deep acting are more likely to be authentic than those expressed through surface acting, which occurs when employees only change their outward emotional display without genuinely altering how they actually feel (i.e., they are faking). In surface acting, frustrated employees may suppress their frustration and simply smile at an annoying customer, thus “putting on a mask” without actually changing their feelings and expressing feigned rather than genuine emotions (Grandey, 2003).

An important social psychological theoretical underpinning of deep and surface acting strategies comes from the concept of emotion regulation (Côté, 2005; Grandey, 2000; Gross, 1998a). Emotion regulation—the “process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998a: 275)—encompasses a broader set of behaviors, whereas emotional labor represents a specific type of emotion regulation (Côté, 2005). Research differentiates between two kinds of emotion regulation that closely correspond with the emotional labor strategies of deep and surface acting: In antecedent-focused emotion regulation, people modify their perceptions of a situation through cognitive reappraisal or by drawing on emotional memories before the emotion is fully developed (Gross, 1998b), which mirrors Hochschild’s (1983) strategy of deep acting. In response-focused emotion regulation, people change their depiction of a given emotion after experiencing that emotion rather than adjust their perception of the situation (Gross, 1998a; Totterdell & Holman, 2003), which is similar to surface acting (Grandey, 2000).

### Emotion Recognition

Because we focus on emotion detection during employee-customer interactions, research on people’s ability to recognize other people’s emotions is of pivotal interest. Emotion recognition has been widely studied in the social psychological literature and remains perhaps the most reliably validated dimension of emotional intelligence (Elfenbein, Marsh, & Ambady, 2002). It is well documented that people’s ability to understand the nonverbal behavior of others and detect deception predicts a range of important work outcomes, including job performance (Elfenbein, Foo, White, Tan, & Aik, 2007; Elfenbein et al., 2002).

People can generally distinguish sincere from deceptive emotional display, though their judgments are prone to error (Ekman, 2001, 2003; Ekman & O’Sullivan, 1991; Ekman, O’Sullivan, & Frank,

1999). One difficulty in accurately detecting emotions is that no universally applicable cues can differentiate deception from truth telling (Ekman & O’Sullivan, 1991). Research shows some success with the use of the facial action coding system (Ekman & Friesen, 1978), which systematically attempts to categorize the physical expression of emotions. Although using this coding scheme improves detection accuracy of truth telling and deception, the system relies on an extremely time-consuming, frame-by-frame video analysis performed by trained experts and is thus not applicable to real-time interactions in social life. In the context of service interactions, research shows that employees can detect customers’ emotions (Scherer & Ceschi, 2000), but we are unaware of any research that examines customers’ accuracy in detecting the emotions of service employees or its influence on customers’ evaluations of a service transaction.

## THEORETICAL MODEL OF THE EFFECTS OF EMOTIONAL LABOR STRATEGIES AND DETECTION ACCURACY ON CUSTOMER OUTCOMES

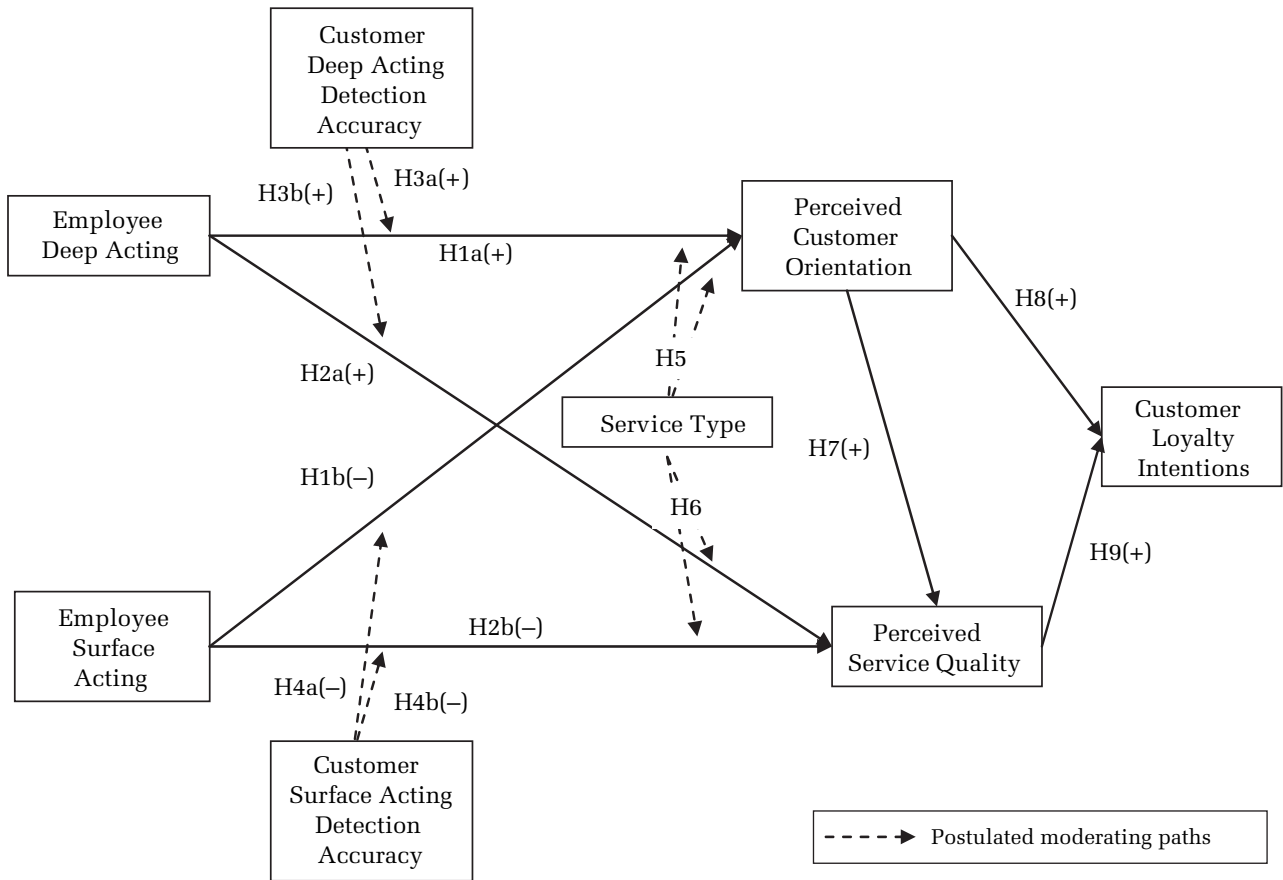
### Model Overview

We provide the theoretical model for our research in Figure 1. Building on deep and surface acting as two key emotional labor strategies (Grandey, 2003; Gross, 1998b; Hochschild, 1983), we predict that service employees’ use of deep and surface acting influences the important customer outcomes of perceived customer orientation and service quality and that the accuracy with which customers detect the emotional labor strategies moderates this relationship. In addition, comparing high- and moderate-contact services, we predict that customers’ reactions to emotional labor differ depending on the type of service offered.

### Customer Outcomes of Emotional Labor Strategies

Managing frontline employees’ emotions has been recognized as an important facet of maintaining loyal customers (Albrecht & Zemke, 1985; Schneider & Bowen, 1985), as the experience and perception of emotional cues during service delivery strongly influence customers’ evaluations of a service encounter (Oliver, 1997; Schmit & Allscheid, 1995). We build on Grandey (2000) and postulate that the emotional labor strategies used by service employees—that is, deep or surface acting—differentially impact perceived customer orientation and service quality, two well-established

**FIGURE 1**  
**Theoretical Model**



customer perceptions that feature established links with customer loyalty toward a service firm.

**Effect of employee emotional labor on perceived customer orientation.** Service employees' customer orientation reflects the extent to which their behavior during personal interactions with customers meets the customers' needs (Hennig-Thurau, 2004). Employees' interest in, and ability to fulfill, customers' service-related needs represent the central elements of customer orientation (Brady & Cronin, 2001; Brown, Mowen, Donovan, & Licata, 2002). Customers' perceptions of employees' customer orientation is a key element of a service company's value creation process, as customer orientation strongly influences customers' perceptions of the quality of the service provided, as well as behavioral outcomes such as customer loyalty (Brady & Cronin, 2001; Hennig-Thurau, 2004; Walsh & Beatty, 2007).

With regard to the impact of emotional labor strategies on perceived customer orientation, we expect that employee deep acting has a positive impact. Efforts to engage in authentic positive displays should signal to customers that employees

are interested in their needs and motivated to meet them. This perception, which can occur at either a conscious or an unconscious level (Barsade, 2002), is fostered by the authenticity of the displayed emotions, because authenticity signals that the employees' displayed interest in the customers is sincere and genuine (Hennig-Thurau et al., 2006). However, for employee surface acting, we expect a negative impact on perceived customer orientation, because faking positive emotions may lead customers to question whether the employees are truly interested in their needs and sufficiently motivated to work hard to satisfy them. In addition, Richards and Gross (2000) suggested that surface acting may require employees to invest more cognitive resources, which could impair their cognitive performance and affect customers' evaluations even if the customers are not aware that the employees are engaging in surface acting (Richards & Gross, 2000). Thus:

*Hypothesis 1a. Employee deep acting relates positively to perceived customer orientation.*

*Hypothesis 1b. Employee surface acting relates negatively to perceived customer orientation.*

**Effect of employee emotional labor on service quality.** Service quality, one of the most researched constructs in service management, refers to a customer's overall impression of the relative superiority of a service (Bitner & Hubbert, 1994). Service quality bridges frontline employees' performance with customers' loyalty to a service (Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994; Zeithaml, Berry, & Parasuraman, 1996).

We argue that emotional labor relates to key dimensions of service quality such as reliability ("employees show a sincere interest"), responsiveness ("employees are willing to help you"), and assurance ("employees instill confidence") (Parasuraman, Berry, & Zeithaml, 1991; Parasuraman, Zeithaml, & Berry, 1988). Specifically, we expect employee deep acting to have a positive influence on customers' service quality perceptions, because the greater authenticity of such displays should suggest a sincere interest (i.e., increase service quality reliability) and result in higher customer confidence (i.e., increase service quality assurance). Employee authenticity should also stimulate customers' beliefs that the employees serving them are truly willing to help (i.e., increase service quality responsiveness). In contrast, the lack of authenticity associated with surface acting may lead customers to question, either consciously or unconsciously, the employees' reliability and responsiveness and should reduce customers' confidence in the service firm, which in turn decreases service quality. Therefore, we propose:

*Hypothesis 2a. Employee deep acting relates positively to perceived service quality.*

*Hypothesis 2b. Employee surface acting relates negatively to perceived service quality.*

### **Moderating Role of Customers' Emotional Labor Detection Accuracy**

We propose that the hypothesized link between service employees' emotional labor strategies and the customers' evaluation of the service experience is moderated by the customers' level of detection accuracy regarding whether employees are engaging in deep or surface acting. This argument is based on evidence from social psychological research pertaining to emotion recognition that suggests that employees will be able to conceal their true emotions from customers in an interactive service encounter only to a certain degree and that customers' emotion recognition accuracy will dif-

fer across individuals. Specifically, Ekman and colleagues demonstrated that though people can generally monitor and control some aspects of their behavior according to display requirements, true feelings sometimes "leak out" through behavioral channels that are less controllable and often beyond the conscious awareness of social actors (Ekman, 2001; Ekman & Friesen, 1969).

Given that the recognition of employees' emotional labor strategies varies, we expect the effects of deep and surface acting on customer outcomes to be stronger if customers accurately detect the emotional labor strategy used by employees. If employees strive to display authentic emotions, but their efforts go unnoticed by the customers, the positive effects of deep acting should be weaker (Ekman, 2001; Ekman et al., 1999). Similarly, employee surface acting that goes unnoticed by customers may not have a strong negative impact on customer outcomes, but we expect the negative effects of surface acting on customer outcomes to be stronger if surface acting is accurately perceived as such by customers. Thus:

*Hypothesis 3a. The greater customers' deep acting detection accuracy, the more strongly positive the relationship between employee deep acting and perceived customer orientation.*

*Hypothesis 3b. The greater customers' deep acting detection accuracy, the more strongly positive the relationship between employee deep acting and perceived service quality.*

*Hypothesis 4a. The greater customers' surface acting detection accuracy, the more strongly negative the relationship between employee surface acting and perceived customer orientation.*

*Hypothesis 4b. The greater customers' surface acting detection accuracy, the more strongly negative the relationship between employee surface acting and perceived service quality.*

### **Moderating Effects of Service Type**

Services are highly heterogeneous and diverse in nature (Cook, Go, & Chung, 1999). For this research, it is particularly relevant that services differ in regard to their level of employee-customer contact. Drawing on Bowen (1990), we distinguish between high-contact services and moderate-contact services and expect the type of service offered (high vs. moderate contact) to moderate the effect of employees' emotional labor strategies on customers' service evaluations. *High-contact services* involve extensive contact with employees, a high level of

customization, and strong differences between alternative service offerings (e.g., dental services). *Moderate-contact services*, in contrast, entail less contact and a less-important role of employees, as well as less customization (e.g., dry-cleaning services).

Specifically, we argue that customers might not value genuine emotional displays from employees as much in moderate-contact services as they do in high-contact services (Grayson, 1998). In situations where customers do not place importance on genuine display (i.e., moderate contact services), even if they correctly recognize employees' surface acting, it may not negatively influence their service experience (see, for example, Rafaeli, 1989; Sutton & Rafaeli, 1988). In contrast, in high-contact services, employees' use of deep versus surface acting may have a more pronounced influence on customers' evaluations of service experiences. Thus:

*Hypothesis 5. The relationship between employee deep (surface) acting and perceived customer orientation is stronger for high-contact services than for moderate-contact services.*

*Hypothesis 6. The relationship between deep (surface) acting and perceived service quality is stronger for high-contact services than for moderate-contact services.*

### Relationships among Customer Outcomes

Our theoretical model includes relationships among the customer outcomes of perceived customer orientation and service quality and links them with customer loyalty intentions, which play a pivotal role in stable, long-term relationships between service businesses and their customers (Zeithaml et al., 1996). Service quality perceptions form during service delivery in such a way that customer-oriented attitudes and corresponding behaviors of frontline personnel have a significant effect on service quality perceptions (Brady & Cronin, 2001; Crosby, Evans, & Cowles, 1990). Brady and Cronin (2001) found that employees' customer orientation influences service quality, and Hennig-Thurau (2004) reported a strong effect of perceived customer orientation on attitudinal customer satisfaction, a construct closely related to service quality. Furthermore, empirical evidence indicates that customer-oriented employee attitudes and behaviors drive customers' intentions to stay loyal to a service firm (DeWitt & Liu, 2002; Hennig-Thurau, 2004), as does service quality, an established determinant of customer loyalty intentions (Zeithaml et al., 1996). Therefore:

*Hypothesis 7. Perceived customer orientation relates positively to perceived service quality.*

*Hypothesis 8. Perceived customer orientation relates positively to customer loyalty intentions.*

*Hypothesis 9. Perceived service quality relates positively to customer loyalty intentions.*

## METHODS

### Procedures and Sample

We surveyed dyads of customers and service employees from a variety of service industries immediately after a customer and a frontline employee completed a service transaction. Thus, our unit of analysis is a distinct service interaction rather than general, retrospective patterns of behavior, which is the focus of most emotional labor research. Graduate students of a major university distributed the questionnaires to service customers. Each participating student received a packet with up to five pairs of matching customer and employee questionnaires, as well as a cover letter that explained the study and provided instructions about data collection. We instructed participating students to use one pair of questionnaires for themselves and distribute the remaining pairs using a snowballing technique, in which they recruited friends or relatives to participate (Zinkhan, Burton, & Wallendorf, 1983). They were to distribute at least three of the remaining pairs of questionnaires to working adults. We informed neither participating customers nor employees about the research topic; the information provided to all participants suggested the study was about "satisfaction with services."

Customers took both the customer survey and the employee survey with them to their next service encounter and asked the service employee who served them immediately after the service transaction whether he or she could fill out the employee survey. If the employee agreed, the customer simultaneously filled out the customer survey.<sup>1</sup> In addition to the survey itself, each employee received a short letter explaining the study and assuring him or her of the confidentiality of responses, as well as an envelope with a unique seal. We instructed the employees to put completed surveys in the envelopes and seal them, so that they were assured that the customers would not see their responses. The

<sup>1</sup> Although the nature of the research design made it impossible to determine the exact response rate for service employees, information obtained during debriefing sessions suggested that the 299 dyads obtained represent approximately a 40 percent response rate.

employees then handed the sealed envelopes back to the customers, who returned the completed survey pairs to us (we informed them that breaking the seal would invalidate a questionnaire). All survey pairs contained identifying codes so that we could subsequently identify the employee-customer dyads. To ensure a sufficient variety in services, we assigned the student customers randomly to one of two experimental conditions, either high-contact service or moderate-contact service; the cover letter listed services of each type and instructed the customers to take both surveys with them on their next visit to a listed service. We took all services listed in the cover letters directly from Bowen (1990).

To ensure the legitimacy of the collected data, we incorporated several quality checks. Most important, both the customer and the employee survey asked for the date and time of the focal service transaction, the name of the business, and the name of the employee. We informed the students prior to the study that we would conduct quality checks to verify the information provided and would only pay for completed survey pairs containing valid data. On receiving the completed survey pairs, we performed random checks by calling service businesses to verify that the transactions had taken place. We uncovered no inconsistencies. Next, we compared the handwriting on all questionnaires to ensure that no customer had filled out the employee questionnaire or multiple customer questionnaires. As a result of these quality checks, we deemed 14 pairs of questionnaires either to be questionable or to contain too much missing data and removed them from further analysis.

The final sample therefore contained 285 employee-customer dyads. The customers in the final sample ranged in age from 17 to 63 years, with a mean age of 26.7 years ( $s.d. = 10.5$ ). Fifty-eight percent of customers were female. Service employees in the final sample had a mean age of 27.8 years ( $s.d. = 9.6$ ), over a range from 16 to 66 years. Their average job tenure was 3.1 years ( $s.d. = 4.9$ ), over a range from 10 months to 42 years. Sixty-three percent of employees were female. Finally, 24 percent of the dyads involved high-contact services, and the remaining dyads represented moderate-contact services.

## Measures

**Employee measures.** The employee questionnaire contained reflective, multi-item measures of the two emotional labor strategies (deep and surface acting), as well as several demographic and identifying variables (day and time of service interaction, business name and type, employee name).

In addition, we assessed positive and negative affectivity as control variables, which enabled us to rule out alternative explanations for a link between emotional labor strategies and customer outcomes.

To assess employee deep and surface acting, we used two three-item measures from Grandey (2003), originally developed by Brotheridge and Lee (2003). The focus of these items was the particular service interaction an employee had just completed with a customer, not the employee's preferred emotional labor strategy in general. Specifically, all items were preceded by the stem, "During *today's* interaction with the customer who handed you the questionnaire . . .," and used a response scale ranging from 1, "strongly disagree," to 7, "strongly agree." All construct-measuring items from our model appear in the Appendix. The control variables of positive and negative affectivity were assessed with the ten-item Positive Affect Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988). This scale assesses trait affectivity, asking respondents to report how they "feel on average" on a scale ranging from 1, "not at all" to 5, "extremely."

**Customer measures.** The customer questionnaire contained reflective, multi-item measures of perceived customer orientation, service quality, customer loyalty intentions, and perceptions of employees' emotional labor strategies, as well as demographic and identifying variables. We measured perceived customer orientation with a six-item scale adapted from Brown et al. (2002) but reworded the items slightly to capture the customer perspective (e.g., "I try to help customers achieve their goals" was changed to "The employee tried to help me achieve my goals"). One item was dropped because of poor factor loadings. To measure perceived service quality, we used a two-item scale assessing overall service quality developed by Brady and Cronin (2001). We measured customer loyalty intentions with four items, three taken from Zeithaml et al. (1996) and one from Taylor and Baker (1994). We report all items in the Appendix.

**Detection accuracy.** To assess emotional labor detection accuracy, it was necessary to assess customers' perceptions of employees' emotional labor strategies. We did so by using the same items from the employee questionnaire, adapted to reflect the customer perspective (e.g., "I just pretended to have the emotions I needed to display to this customer" was changed to "I believe the employee just pretended to have the emotions he/she needed to display to me"). Pretesting indicated that one surface acting item provoked some misunderstanding among customers, so we paraphrased that item. As in the employee questionnaire, the stem of these

questions focused on the interaction a customer had just completed with a service employee. The response scale was the same as it was for the employee questionnaire (1 = “strongly disagree” to 7 = “strongly agree”).

We then created the emotional labor detection accuracy measures using Lance’s (1988) residual centering regression approach. The approach involves a two-step procedure in which an interaction term is first regressed on its two components via ordinary least squares and then the residuals of this regression are used instead of the respective interaction term in tests of the structural model. We chose residual centering over alternatives such as mean centering because the former minimizes multicollinearity that might result from the usual high correlations of regression variables with their product terms and also provides a “straightforward means to assess the predictability of some criterion from the *interaction* among predictors” (Lance, 1988: 166; cf. Bottomley & Holden, 2001). Specifically, we calculated the difference between an employee’s deep (surface) acting score and his/her customer’s perception of the employee’s deep (surface) acting. For both deep and surface acting, we used the mean of the individual items to calculate the difference. As we were primarily interested in dichotomous categories (i.e., hits vs. misses), we then applied a median split, assigning a value of 1 to cases with a difference score higher than the median (i.e., low accuracy) and a value of 2 to cases with a difference score lower than the median

(i.e., high accuracy). Mersman and Donaldson (2000) also recommended this approach to mitigate the reliability concerns associated with difference scores. Next, we estimated the cross-product residuals of a regression of deep (surface) acting detection accuracy and employee deep (surface) acting on the cross-product of the two variables (i.e., deep (surface) acting detection accuracy and employee deep (surface) acting). We then used cross-product residuals of these regressions as the deep (surface) acting accuracy by employee deep (surface) acting interaction variables.

**Service type.** We assigned moderate-contact service a value of 1 and high-contact service a value of 2. We again used residual centering to generate interaction term variables, running regressions with the cross-product of service type and employee deep (surface) acting as a dependent variable and service type and employee deep (surface) acting as regressors. We use the residual terms of these regressions as service type by employee deep (surface) acting interaction variables when estimating the structural model.

## RESULTS

### Reliability, Validity, and Common Method Bias

The means, standard deviations, reliability estimates, and correlation coefficients of all variables appear in Table 1. The reliability of all reflective scales is satisfactory, with  $\alpha$  scores ranging from .84 to

TABLE 1  
Means, Standard Deviations, and Correlations<sup>a</sup>

Variables	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11
1. Employee positive affectivity	3.76	0.60	(.85)										
2. Employee negative affectivity	2.05	0.67	-.16**	(.87)									
3. Employee deep acting	3.76	1.43	.16**	-.01	(.84)								
4. Employee surface acting	2.88	1.58	-.23**	.24**	.06	(.88)							
5. Customer perceptions of employee deep acting	4.21	1.41	.18**	.00	.20**	-.02	(.86)						
6. Customer perceptions of employee surface acting	2.86	1.29	-.05	.12*	-.04	.21**	-.19**	(.89)					
7. Customer deep acting detection accuracy			.12*	-.02	.31**	.03	.00	.06					
8. Customer surface acting detection accuracy			.05	-.15*	.02	-.23**	.01	-.19**	.03				
9. Perceived customer orientation	5.35	1.08	.18**	-.12*	.13*	-.05	.42**	-.22**	-.03	.04	(.85)		
10. Perceived service quality	5.22	1.27	.19**	-.14*	.17**	-.03	.41**	-.10	.03	.04	.54**	(.88)	
11. Customer loyalty intentions	5.00	1.29	.04	-.10	.08	-.01	.18**	-.24**	-.09	.08	.42**	.63**	(.91)
12. Service type <sup>b</sup>			.08	.03	.15*	.03	.16*	-.08	.08	.08	.09	.14*	.05

<sup>a</sup>  $n = 285$ . Values in parentheses on the diagonal are internal consistency estimates. Absent means and standard deviations indicate the variable in the row is binary.

<sup>b</sup> 1 = “moderate-contact services,” 2 = “high-contact services.”

\*  $p < .05$

\*\*  $p < .01$

Two-tailed tests.



.91. To assess convergent and discriminant validity of all emotional labor strategy and customer outcome measures, we subjected the measurement models of all multi-item scales for both the employee and customer variables to confirmatory factor analyses (CFA) using AMOS 6.0. For the employee measures, we estimated a two-factor model with deep acting and surface acting as separate constructs. The overall fit statistics for the two-factor model indicate a good fit to the data ( $\chi^2[8, n = 285] = 12.40, p = .13$ ; comparative fit index [CFI] = .99; incremental fit index [IFI] = 1.00; Tucker-Lewis index [TLI] = .99; and root-mean-square error of approximation [RMSEA] = .06). The fit of the two-factor structure was significantly better than that of a one-factor structure ( $\Delta\chi^2[1] = 386.3, p < .01$ ). For the customer measures, we estimated a five-factor model (with customer perceptions of employee deep acting and surface acting and the three customer outcomes: customer orientation, service quality, and customer loyalty intentions) that also provided a good fit to the data ( $\chi^2[209, n = 285] = 304.22, p < .01$ ; CFI = .94; IFI = .94; TLI = .92; RMSEA = .08). The five-factor model provided a better fit than either a four-factor model in which we combined deep and surface acting into one factor ( $\Delta\chi^2[4] = 473.04, p < .01$ ) or a one-factor model ( $\Delta\chi^2[10] = 1,455.83, p < .01$ ). We report the factor loadings for all items in the Appendix.

To further assess the discriminant validity of our measures, we followed the procedures outlined by Fornell and Larcker (1981), which require that the average variance extracted for two constructs exceed the squared correlation between the constructs to demonstrate discriminant validity. Results confirmed that all our study constructs have sufficient discriminant validity.

Finally, although our data come from three different sources (employees, customers, and coders, in the case of service type), common method bias might still influence some postulated relations in our model, such as the links among the customer variables and those between customer perceptions of emotional labor strategies and customer outcomes. To rule out the existence of such a bias, we used methods recommended by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). Specifically, we used structural equation modeling to estimate a variation of the model that includes only those variables collected from customers, as well as a latent common method variance factor on which every item in the model was allowed to load (in addition to its loading on its respective construct). We compared the significance of all theorized model paths between the models with and without the additional factor and found no differences, which indicates the absence of common method bias (Podsakoff et al., 2003).

## Hypothesis Testing

We tested our theoretical model with PLS structural equation modeling, a distribution-free method with fewer constraints and statistical specifications than covariance-based techniques such as LISREL (Fornell & Bookstein, 1982). We used SmartPLS (Version 2.3, Ringle, Wende, & Will, 2005) and estimated the inner weightings with the path method (Chin, 2001). The *t*-values were generated through a bootstrapping procedure with 500 resamples with 285 cases each (Fornell & Bookstein, 1982). The structural model contains the two employee emotional labor strategies, the two employee deep (surface) acting by customer detection accuracy variables, the two employee deep (surface) acting by service type variables, and the three customer outcome variables of perceived customer orientation, perceived service quality, and customer loyalty intentions. In addition to the theoretically proposed model paths, we also included the main effects from the emotional labor detection accuracy variables, service type, and paths from negative and positive affectivity to the customer outcomes variables of perceived customer orientation and service quality as controls. We also tested a baseline model that includes only the control variables of positive and negative affectivity; it allowed us to isolate the incremental variance explanation for the customer outcomes that can be attributed to the model constructs. In the baseline model, positive and negative affectivity were linked to each of the three customer outcomes. The PLS results for both the theoretical and the baseline model appear in Table 2; Figure 2 highlights the significant model paths.

The composite reliability of the theoretical model is .88 or greater for all model constructs, and the average variance extracted (AVE) is greater than .75 except for perceived customer orientation (AVE = .64). The results support several, but not all, of our hypotheses regarding the inner model relationships. Specifically, we find a significant link between employee deep acting and perceived customer orientation ( $\beta = .11, p < .05$ ) in support of Hypothesis 1a, but the path between employee surface acting and perceived customer orientation is not significant, providing no support for Hypothesis 1b. The direct effect of employee deep acting on service quality is nearly as strong as the one between deep acting and perceived customer orientation ( $\beta = .10$ ), though only significant at the .10 level. However, when examining the total effect that also accounts for the indirect effect through perceived customer orientation, results are in line with the proposed effect of employee deep acting on service quality ( $\gamma = .15, p < .01$ ). The limited direct effect provides support for Hypothesis 2a,

**TABLE 2**  
**Path Coefficients from Partial Least Squares Analyses<sup>a</sup>**

Hypothesis	Path from	To	Theoretical Model	Baseline Model
			Path Coefficient (t)	Path Coefficient (t)
1a	Employee deep acting	Perceived customer orientation	.11* (2.06)	
1b	Employee surface acting	Perceived customer orientation	-.02 (0.35)	
2a	Employee deep acting	Perceived service quality	.10 (1.78)	
2b	Employee surface acting	Perceived service quality	-.03 (0.65)	
3a	Employee deep acting × customer deep acting detection accuracy	Perceived customer orientation	.11* (1.99)	
3b	Employee deep acting × customer deep acting detection accuracy	Perceived service quality	.08 (1.68)	
4a	Employee surface acting × customer surface acting detection accuracy	Perceived customer orientation	-.16* (2.85)	
4b	Employee surface acting × customer surface acting detection accuracy	Perceived service quality	.08 (1.55)	
5	Service type × employee deep acting	Perceived customer orientation	-.01 (0.16)	
5	Service type × employee surface acting	Perceived customer orientation	.01 (0.27)	
6	Service type × employee deep acting	Perceived service quality	.08 (1.40)	
6	Service type × employee surface acting	Perceived service quality	-.00 (0.11)	
7	Perceived customer orientation	Perceived service quality	.50* (10.56)	
8	Perceived customer orientation	Customer loyalty intentions	.09 (1.70)	
9	Perceived service quality	Customer loyalty intentions	.63* (14.08)	
	Negative affectivity	Perceived customer orientation	-.15* (2.93)	-.15* (2.88)
	Positive affectivity	Perceived customer orientation	.13* (2.17)	.16* (2.71)
	Negative affectivity	Perceived service quality	-.04 (0.98)	-.05 (1.13)
	Positive affectivity	Perceived service quality	.07 (1.41)	.10 (1.94)
	Customer deep acting detection accuracy	Perceived customer orientation	-.10 (1.71)	
	Customer surface acting detection accuracy	Perceived customer orientation	.01 (0.40)	
	Service type	Perceived customer orientation	.07 (1.43)	
	Customer deep acting detection accuracy	Perceived service quality	.01 (0.33)	
	Customer surface acting detection accuracy	Perceived service quality	-.02 (0.57)	
	Service type	Perceived service quality	.06 (1.41)	
<i>R</i> <sup>2</sup> , perceived customer orientation			.12	.05
<i>R</i> <sup>2</sup> , perceived service quality			.34	.30
<i>R</i> <sup>2</sup> , customer loyalty intentions			.47	.47

<sup>a</sup> Values of *t* were calculated through bootstrapping with 500 resamples with 285 cases per sample.

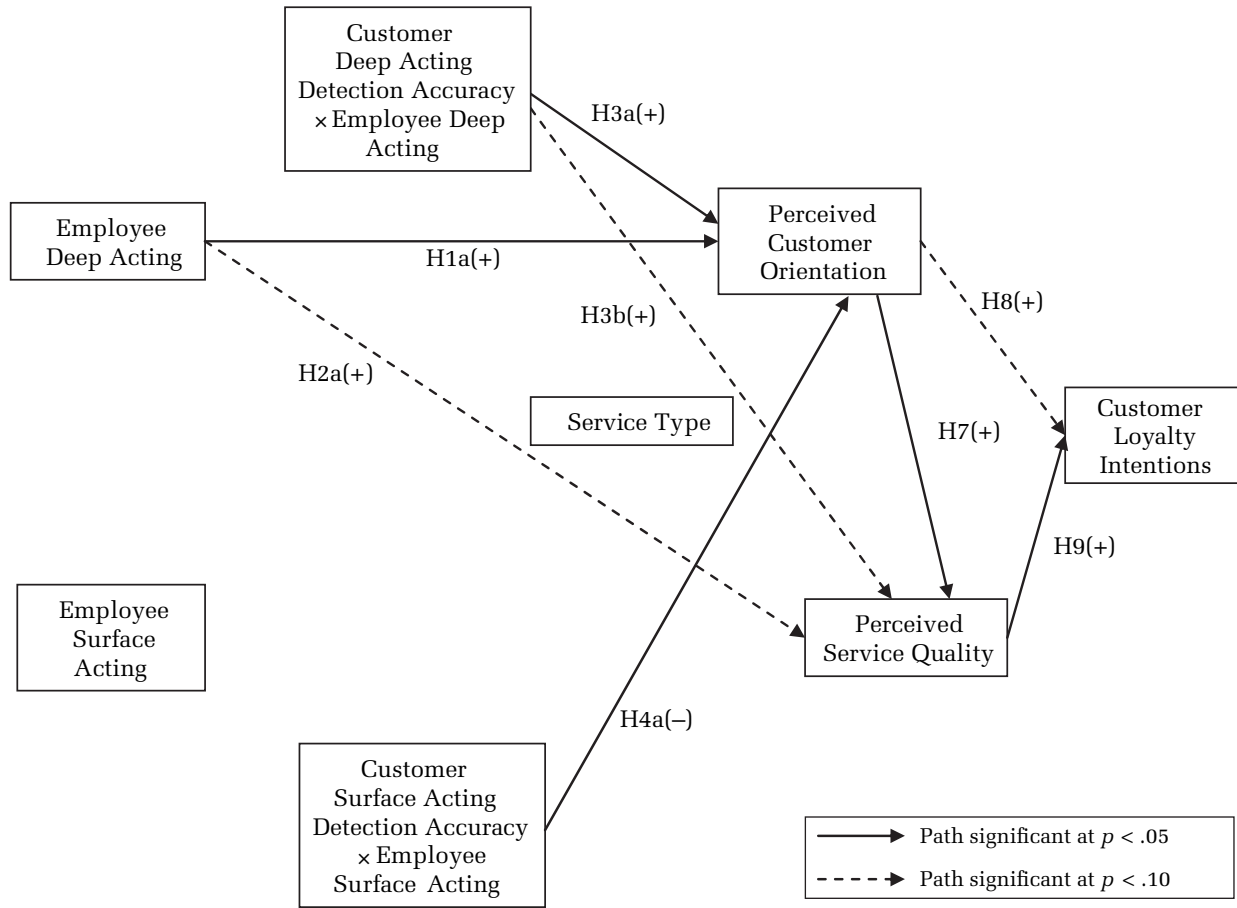
\* *p* < .05

again only at the .10 level. Both the direct and the total effect of employee surface acting on service quality fail to reach significance, so Hypothesis 2b does not receive support. We also found that employee deep acting exerts a significant total effect on customer loyalty intentions ( $\gamma = .11$ ,  $p < .01$ ), a finding not formally hypothesized.

Regarding the effects of customers' emotional labor detection accuracy on service outcomes, we find that the interaction of employee deep acting by deep acting detection accuracy has the proposed positive effect on perceived customer orientation ( $\beta = .11$ ,  $p <$

.05) in support of Hypothesis 3a. In other words, if customers accurately detect the extent of employee deep acting, the deep acting strategy has a stronger positive effect on perceived customer orientation. Although the coefficient on the path from this interaction to service quality is somewhat weaker ( $\beta = .08$ ) and marginally significant ( $p < .10$ ), the total effect of this relationship is significant ( $\gamma = .13$ ,  $p < .05$ ). Again, as a result of the limited direct effect, Hypothesis 3b is supported at only the .10 level. We also find a significant and substantial negative direct path from the interaction of employee surface acting and surface

**FIGURE 2**  
**Significant Model Paths**



acting detection accuracy interaction to perceived customer orientation ( $\beta = -.16, p < .01$ ), which supports Hypothesis 4a. The negative direction of this path implies that though employee surface acting does not have a direct main effect on perceived customer orientation, the effect becomes significant in cases in which a customer accurately detects an employee's surface acting strategy, so that surface acting leads to reduced levels of perceived customer orientation in those circumstances. No such effect (either direct or total) emerges for service quality, providing no support for Hypothesis 4b.

Given the relevance of detection accuracy for perceived customer orientation (for both deep and surface acting), it is interesting to note that employee deep acting and customers' perceptions of employee deep acting correlate significantly ( $r = .20, p < .01$ ), as is the case for the correlation between employee surface acting and customers' perceptions of employee surface acting ( $r = .21, p < .01$ ). Thus, customers are able to detect employees' emotional labor strategies, although the relatively low correlation coefficients suggest that such ability is far from perfect.

This inference is supported by the means of the unadjusted difference between employee and customer-perceived deep acting and the one between employee and customer-perceived surface acting, which are 1.45 and 1.42, respectively, with both measures being significantly different from 0 ( $p < .01$ ). Also, the standard deviations of both difference measures suggest that the accuracy of detecting employee emotions differs substantially among customers ( $\sigma_{\text{deep acting}} = 1.17$ ;  $\sigma_{\text{surface acting}} = 1.14$ ).

Counter to our expectations, no support emerged for the proposed moderating effect of service type. Specifically, we find that the service interaction term variables have no significant impact on customer orientation and service quality; the main effects of service type are also nonsignificant. Thus, Hypotheses 5 and 6 do not receive support.

Finally, the relations among the service outcomes are largely as proposed, showing that perceived customer orientation has a strong direct effect on service quality ( $\beta = .50, p < .01$ ) and that service quality is strongly linked to customer loyalty intentions ( $\beta = .63, p < .01$ ), in support of Hypotheses 7 and 9.

Counter to our expectations, the direct effect of perceived customer orientation on customer loyalty intentions (Hypothesis 8) fails to reach significance at the .05 level, but it is marginally significant ( $p < .10$ ). The total effect of perceived customer orientation on loyalty intentions is quite strong ( $\gamma = .41, p < .01$ ), which suggests that perceived customer orientation influences customer loyalty intentions mostly through service quality. This finding is in line with that of Brady and Cronin (2001), who demonstrated an indirect impact of customer orientation on loyalty, and Hennig-Thurau's (2004) finding of a direct impact in only one of two service industries.

### Variance Explanation

Regarding variance explanation, we find that the theoretical model that contains employees' emotional labor strategies and detection accuracy variables, as well as the service type moderator, explains 11.5 percent of perceived customer orientation. The baseline model (which includes only the control variables of positive and negative affectivity) explains 5.4 percent of the variance in the same outcome variable, so we conclude that the difference of 6.1 percent in variance explanation can be attributed to employees' emotional labor, customers' emotional labor detection accuracy, and service type.

As we were mainly interested in employees' emotional labor and customers' emotional labor detection accuracy, we computed an additional structural model that includes these variables but not service type. This model explains 5.6 percent more variance than the baseline model, an increase that can be attributed solely to emotional labor and detection accuracy. Because PLS does not offer formal significance tests between different models, we conducted a blockwise OLS regression analysis with the variables included in the baseline model and the emotional labor and detection accuracy variables and found that this increase in explained variance was significant ( $p < .01$ ). The effects of emotional labor and detection accuracy on service quality could not be examined in the same straightforward manner because the theoretical model implies a path from perceived customer orientation to service quality in all models. To isolate the increase in explained variance in service quality caused by emotional labor and detection accuracy, we ran the structural model (without the service type variables) with PLS but deleted the path from customer orientation to service quality. In doing so, we found that explained variance (measured as the  $R^2$  of service quality) rose from 5.5 percent (baseline model) to 10.2 percent, an increase of 4.7 percent that can be attributed to emotional labor and detection

accuracy. Again, using blockwise OLS regression, we found the increase was significant ( $p < .01$ ).

## DISCUSSION

### Summary of Results and Theoretical Implications

With this research, we attempt to examine the relationship between service employees' emotional labor and customers' resulting service experiences, an important yet underresearched facet of service management. We developed and empirically tested a theoretical model of the differential effects of the emotional labor strategies of deep and surface acting and customers' ability to detect these strategies accurately on customer outcomes in real-world service interactions. We did so by collecting survey data from 285 dyads of employees and customers immediately following a service encounter. By focusing on the service encounter as the unit of analysis and collecting the data immediately after the service transaction, we contribute to emotional labor research in that we examine immediate emotional labor behaviors as they are experienced by employees and customers rather than examine them on average, as is predominantly done in research.

Our results demonstrate that service employees' internal regulatory emotional labor strategies differentially influence customer outcomes and that customers' ability to judge the employees' strategies accurately moderates these impacts. We find that deep acting provides positive benefits for customers, a result that is in line with research that shows the positive benefits of deep acting for workers (Grandey, 2003). Deep acting therefore emerges as an important driver of service delivery outcomes such as perceived customer orientation and service quality. Surface acting does not exert the same positive effect, but we do not find a negative main effect on customers either. As another key contribution, this research sheds light on the crucial role of customers' accuracy in detecting employees' strategies; results show that surface acting exerts negative effects when customers perceive it as such. Put differently, surface acting is not a problem as long as customers do not recognize it. The crucial role of emotion detection in turn becomes even more obvious through our finding that detection accuracy also increases the positive impact of deep acting on customer outcomes. As we do not find support for a hypothesized moderating role of service type, it seems that the impact of emotional labor strategies on the customer experience that we do find is not specific to a certain type of service, but tends to exist regardless of the kind of service offered.

To what extent are customers able to detect emo-

tional labor accurately in the first place? Preliminary insights can be taken from our emotional labor detection accuracy measures and the relationships between employee and customer-perceived emotional labor strategies. The significant correlations between employee emotional labor and customer perceptions of that labor suggest that customers can indeed “decode” employees’ emotional labor strategies, though the limited strength of the correlation coefficients and the relatively high average differences between the employees’ behaviors and the customers’ perceptions of those behaviors also indicate that this decoding ability is far from perfect, as has been theoretically argued (Ekman, 2001; Ekman et al., 1999). It appears that no matter which emotional labor strategy employees choose, their true emotions often leak out (Ekman, 2001, 2003) to be detected by customers. But this detection process is error-prone, in keeping with social psychological research that indicates people can generally detect deceptive emotions, although their accuracy is only slightly better than chance (Ekman & O’Sullivan, 1991; Ekman et al., 1999). It should be noted that this finding contradicts emotional labor theories that predict deep and surface acting differ only in terms of *internal* cognitive regulatory processes and not in terms of emotional displays discernible to other people.

### Implications for Service Managers

The provision of high-quality customer service has long been considered a competitive advantage in service industries, and the delivery of “service with a smile” has received increasing attention in an effort to satisfy customers and increase their loyalty to service firms (Schneider, 1994; Schneider, Ashworth, Higgs, & Carr, 1996). Service employees, as the face of a service firm, must create this image through their own emotional displays (Rupp, Holub, & Grandey, 2007). Service managers should note that the emotional displays of frontline service workers play an important role in driving customer experiences and thus in customers’ staying loyal to a service provider. Specifically, pursuing an “always smile” customer service strategy may not be the most effective means of improving customers’ experiences. Such a strategy may have limited benefit or even a detrimental effect on customers’ service experiences and eventually their loyalty. Prior research suggests that faking emotions may increase staff turnover (Côté & Morgan, 2002); our research suggests that surface acting may be less effective than deep acting in eliciting desired customer responses. Although organizational efforts to increase employee smiling are often well-

intentioned, their effectiveness for both employee and customer outcomes demands careful scrutiny.

Service managers should encourage deep acting strategies by employees. For example, during hiring, managers might focus on individual differences that indicate that some people are more effective at, and more likely to engage in, deep acting (Gosserand & Diefendorff, 2006). Training might also address this issue by suggesting ways to engage effectively in deep acting and thus maximize the chances that customers detect genuine emotional displays. One such approach, perspective taking (Parker & Axtell, 2001), uses empathy training and asks employees to put themselves in the shoes of their customers and thereby view the world through their eyes (Wharton, 1993).

Our finding that customers’ often inaccurate perceptions of emotional labor influence customer outcomes has important implications for managers. Service managers would be well advised to manage both employees’ behavior and customers’ subjective experience of service. For example, the latter could be achieved by more actively managing aspects of the “servicescape” (Bittner, 1992)—the physical aspects of the service environment—or the appearance and aesthetic quality of service employees (Nickson, Warhurst, Witz, & Cullen, 2001) to influence customers’ subjective perceptions of employees’ emotional display.

### Limitations and Future Research Directions

Although this research is the first study to use field data from a variety of services to assess the relationships between emotional labor strategies and customer outcomes, our empirical design did not allow us to control the dyads for situational influences, such as the dynamics of an employee-customer interaction, service environment (e.g., aesthetics, music), and distractions by colleagues or other customers. Future studies on the topic might control for such factors to explain why some customers are better able to read employees’ emotional labor strategies.

Even though our sample covers a variety of gender and age groups, it is not random, which limits the generalizability of the results. An interesting question that arises from our findings is whether other variables moderate the relationship between employee deep and surface acting and customer outcomes. For example, Parker and Axtell (2001) reported that interaction frequency correlated with employee and customer emotions. It would be informative to investigate how variables such as frequency of service use or the longevity of a relationship moderate the emotional labor–customer outcomes link.

A related question is to whether customers' expectations of emotional labor vary depending on the type of service relationship in which they are involved. Gutek and colleagues (Gutek, Bhappu, Liao-Troth, & Cherry, 1999; Gutek, Groth, & Cherry, 2002) conceptualized service relationships by distinguishing between interactions of two people who have a shared history of interactions and expect to interact again in the future (i.e., service relationships) and interactions of people who do not know or expect to see each other again (i.e., service encounters). It would be interesting to investigate whether customer expectations of, and reactions to, emotional labor differ substantially between these two service delivery types. Additional research might benefit from exploring the potential moderating effects of such service characteristics.

Finally, though the survey items we used in this research to measure emotional labor have been validated, they do not separate out the effects of the different facets of emotional display (e.g., smiling, eye contact, body language) on customers. Further research could employ new and multifaceted measurement approaches.

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## APPENDIX

## Construct Measures

TABLE A1  
Results of Confirmatory Factor Analysis<sup>a</sup>

Items	Standardized Coefficient	Composite Reliability
<i>Employee deep acting</i>		.90
I tried to actually experience the emotions I had to show to the customer.	.66	
I worked hard to feel the emotions that I needed to show to this customer.	.90	
I made a strong effort to actually feel the emotions that I needed to display toward this customer.	.85	
<i>Employee surface acting</i>		.92
I just pretended to have the emotions I needed to display to this customer.	.97	
I put on a 'mask' in order to display the emotions my manager wants me to display.	.83	
I put on a 'show' or 'performance' when interacting with this customer.	.74	
<i>Perceived customer orientation</i>		.90
The employee tried to help me achieve my goals.	.76	
The employee seemed to achieve his/her own goals by satisfying me.	.75	
The employee got me to talk about my service needs with him/her.	.63	
The employee kept the best interests of the customer in mind.	.78	
The employee was able to answer my questions correctly.	.76	
<i>Perceived service quality</i>		.94
I would say that this firm provides superior service.	.83	
I believe this firm offers excellent service.	.94	
<i>Customer loyalty intentions</i>		.94
I will say positive things about this service provider to other people.	.92	
I will recommend this service provider to someone who seeks my advice.	.92	
I will consider this service provider my first choice.	.73	
I will encourage friends and relatives to do business with this service provider.	.85	
<i>Customer perceptions of employee deep acting</i>		.92
The employee tried to actually experience the emotions s/he had to show to me.	.70	
The employee worked hard to feel the emotions that s/he needed to show to me.	.86	
The employee made a strong effort to actually feel the emotions that s/he needed to display toward me.	.90	
<i>Customer perceptions of employee surface acting</i>		.93
The employee just pretended to have the emotions s/he displayed to me.	.92	
The employee put on a 'mask' in order to display the emotions his/her boss wants him/her to display.	.83	
The employee showed feelings to me that are different from what s/he actually felt.	.79	

<sup>a</sup>  $n = 285$ . All factor loadings are significant at  $p < .01$ .



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