



## Is “service with a smile” enough? Authenticity of positive displays during service encounters

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### Abstract

Service providers use impression management strategies to engender satisfaction and repeat business in customers. Managing emotional expressions is one strategy to meet those goals. We extended research on the “Duchenne Smile” to see if authenticity of employee expressions influenced the impressions formed of the employee’s friendliness and the overall satisfaction with the encounter. Furthermore, we took two other factors into account—task performance and busyness—to examine the conditions under which authenticity would have the greatest impact. In Study 1, we obtained reactions to videotaped simulations that manipulated authenticity of positive displays and task performance during a hotel check-in encounter. ANCOVA results supported that authenticity of the service provider enhanced perceptions of friendliness, but only influenced customer satisfaction when tasks were performed well. In Study 2, hierarchical linear modeling with reactions from 255 customers of 64 restaurant servers showed that perceived display authenticity enhanced the perceived friendliness of the employee when the store was slow, but less so when it was busy. Display authenticity had a direct effect on customer satisfaction, regardless of task performance (which was generally high) and busyness. We conclude that display authenticity is an extra-role behavior for service encounters with an additive effect on encounter satisfaction only when other factors are at optimal levels. We suggest implications for display rule policies and service training.

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“Your troubles should be masked with a smile...once an unhappy or dissatisfied customer walks out the door, they are gone forever!”—from a customer service handbook (Steinberg & Figart, 1999).

“The more the heart is managed, the more we value the unmanaged heart” (Hochschild, 1983, p. 192).

Policy statements such as the first quote make it clear that in service encounters smiles need to be displayed, whether they are authentically felt or not, to obtain satisfied customers (Rafaeli & Sutton, 1987). Ironically, however, others have proposed that positive displays that are inauthentic undermine the assumed benefits of “service with a smile” (Ashforth & Humphrey, 1993; Grandey, 2000). In fact, experimental research has shown that reactions to an inauthentic display are less positive than to an authentic, or Duchenne, smile (e.g., Ekman, 1992; Ekman & Friesen, 1982; Frank, Ekman, & Friesen, 1993). This

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suggests that the service requirement for positive displays is insufficient for the benefits to occur; however, researchers have pointed out that minimal empirical attention has been given to how authenticity enhances or minimizes the effects of positive displays (Pugh, 2001; Tsai, 2001; Tsai & Huang, 2002). As stated in the second quote, as organizations make more efforts to control emotional displays of employees, the value of authenticity may be at a premium. Thus, both experimental emotion research and customer service theories suggest that authenticity enhances reactions to service encounters.

Though authentic (Duchenne) smiles may enhance customer reactions, other encounter factors may act as a boundary on this effect. The Duchenne smile research is primarily examined in laboratory settings simulating social encounters (e.g., Frank et al., 1993; Surakka & Hietanen, 1998) where the focus of the observer is on the interpersonal behaviors. In service encounters, the purpose of the encounter is to receive some product or service; thus, many other factors besides interpersonal demeanor are also critical to target reactions (Parasuraman, Zeithaml, & Berry, 1985; Schneider, White, & Paul, 1998). Perhaps authenticity is less critical to target reactions when the reason for the exchange is economic; conversely, perhaps authenticity becomes even *more* important when money is changing hands. The effect of authenticity is also less well understood in dynamic and realistic encounters since it is often studied with photos or written vignettes. Perhaps authenticity only emerges as important when all other distractions are controlled but has minimal influence in a dynamic and realistic interaction. In response to these unknowns, many researchers have called for attention to authenticity in service encounters (Ashforth & Tomiuk, 2000; Côté & Morgan, 2002; Mattila & Enz, 2002; Pugh, 2001; Tsai & Huang, 2002).

Thus, we attempted to extend the experimental research on Duchenne smiles by Ekman and colleagues by examining the power of authentic positive displays to influence reactions under realistic conditions. In particular, we used service encounters as a dyadic interaction in which certain factors—the quality of the task performance and the busyness of the service context—may enhance or minimize the impact of authenticity. The impression management and extra-role behaviors literature is used to propose hypotheses and results from both a laboratory experiment and a survey field study are presented. In addition to extending and applying theory on authentic displays, this research is important for practical reasons. As stated in the introductory quote, there may be only one opportunity to win over a customer in a service encounter. Studying reactions to a single encounter provides useful information to practitioners about the most important aspects for a quality service encounter.

### Authenticity as impression management and extra-role behavior in service encounters

Impression management is a critical part of the service provider's role. He, or more likely, she, is often the first and only person with whom the public ever interacts. The service provider represents the company to the public; thus the company has a vested interest in impressions being managed well by the service provider (Albrecht & Zemke, 1985; Grove & Fisk, 1989). According to impression management theorists, one can strategically create a positive impression by appearing both *competent* and *likeable* (Jones & Pittman, 1980; Tedeschi & Norman, 1985). In the service setting, expertise/competence is one of the dimensions of interaction quality of service encounters (Czepiel, Solomon, & Surprenant, 1985; Gronroos, 1990), and employees manage impressions of competence by being efficient, available, accurate, and knowledgeable about products (Parasuraman et al., 1985; Zeithaml, Berry, & Parasuraman, 1991). Another key dimension of interaction quality is the service providers' positive attitude and demeanor (Czepiel et al., 1985; Gronroos, 1990). Positive displays and friendliness enhance overall service quality (Dieffendorff & Richard, 2003; Tsai & Huang, 2002); thus, service organizations attempt to manage employees' positive displays as well as their task-based skills for encounters with customers.

Organizations use a variety of techniques to control service employees' positive displays, including training, monitoring, and rewards (Hochschild, 1983; Rafaeli & Sutton, 1987). Display requirements as specific as providing a smile and maintaining eye contact with customers for three seconds are enforced by secret shoppers and the fear of being sent to "smile school" (Curtis, 1998). However, the *quality* of the smile is more difficult to enforce. Providing "service with a smile" meets the job requirements, and employees may do the minimum required of them by simply pasting on a fake smile. Others, however, may put in the effort to remain positive and enthusiastic throughout the workday. Thus, we argue that the extent that these required displays seem *authentically* positive is at the discretion of the employee. As such, it provides a source of variance within positive displays that may help explain customer reactions. In particular, authentic positive displays are proposed as discretionary behaviors that go beyond requirements and increase the overall value of the encounter (Grandey & Brauburger, 2002).

#### *All smiles are not created equal*

Impression management processes include both the strategies of the actor and the perceptions of the observer. Below, we first discuss how employees engage in strategies that create inauthentic or authentic displays.

We then argue that the authenticity of displays influences customer's attributions for employee behavior.

#### *Strategies of the employee*

Extra-role behaviors are recognized as occurring spontaneously and altruistically, but also strategically for instrumental gains (Eastman, 1994; Tedeschi & Riess, 1981). Similarly, though being authentically positive with customers may occur spontaneously (Tolich, 1993), authenticity may also be performed through impression management techniques (Gross, 1998). In fact “sometimes people may succeed in producing a false smile which is indistinguishable from a felt smile. . . false smiles are more likely to be perfectly performed if the person is highly practiced” (Ekman & Friesen, 1982, p. 245). Thus, “authentic” displays can be an outcome of skilled impression management.

Goffman (1959) illustrated two models of impression management strategies that differ in the extent that authentic smiles would be achieved. In the first model, the actor gives a “real, sincere, or honest performance”—one that is not purposefully staged and instead is the “unintentional product of the individual's unselfconscious response to the facts in his situation” (Goffman, 1959, p. 70). This could occur naturally or be achieved through “deep acting,” whereby the employee works internally to manage his or her own feelings which then creates authentic displays (Hochschild, 1983). Thus, the idea that facial expressions are used as strategies for interactions does not negate the fact that they may actually communicate internal states (Kirouac & Hess, 1999). In contrast, the second model describes a performance that is false, constructed in order to fulfill established expectations for social behavior. Such performances are contrived and “painstakingly pasted together, one false item on another” (Goffman, 1959, p. 70). This has also been called “surface acting” (Hochschild, 1983). Clearly, the former strategy will present a more authentic impression than the latter.

#### *Perceptions formed by the observer*

Much research supports that authentic emotional displays have different neurological bases than forced expressions (DePaulo, 1992; Ekman, Friesen, & O'Sullivan, 1988). In fact, research suggests that observers can discriminate between authentic and inauthentic facial expressions through subtle facial cues (Ekman et al., 1988). Felt smiles, also known as Duchenne smiles, are characterized by the activation of certain muscle groups around the eye as well as by the symmetry and duration of the smile (Ekman & Friesen, 1982). When displays seem fake (i.e., non-Duchenne smiles) they have unintended effects on the target. Experiments with images of different expressions have shown that people recognize authentic smiles and that they react less positively to inauthentic ones (Ekman et al., 1988; Frank

et al., 1993; Surakka & Hietanen, 1998). In a study by Frank et al. (1993), participants observed videotapes of women showing either Duchenne or non-Duchenne smiles and then rated the women's personalities with bipolar adjective pairs (e.g., honest–dishonest, stable–unstable, sincere–insincere, and likable–unlikable). Those who saw the Duchenne smiles rated the actors more positively than those who saw the non-Duchenne smiles.

This previous research has been important to identify that a smile does not always have positive effects on observers; it depends on the authenticity of that smile. Others have argued that the ability to recognize authenticity is weaker than previous research suggests (DePaulo, 1992). The previous research has tended to be performed in laboratories under very controlled situations. It may be that authenticity does not have the same effect in encounters that are for other purposes than social relations; in fact, perhaps authentic smiles are irrelevant in a realistic and economic interaction.

#### *The impact of authenticity on service encounter impressions*

The study of authenticity in a service context is important for several reasons. First, a service encounter provides a dynamic and comparatively complex social interaction in which we could determine the generalizability of the Duchenne smile research. Second, the service encounter is a social interaction where a smile is not only important for social reasons but also for financial and long-term benefits (Rafaeli & Sutton, 1987). If inauthenticity undermines the assumed benefits of “service with a smile” then questions must be raised about the logic of such an explicit requirement. Two types of impressions are pertinent to this question in the context of service encounters. Does authenticity influence impressions of the employee, and does it influence the appraisal of the service encounter? A conceptual model of the proposed relationships is shown in Fig. 1.

#### *Impressions of the service provider*

It has been established that people place great emphasis on nonverbal cues when forming impressions of individuals (DePaulo, 1992; Schneider, Hastorf, & Ellsworth, 1979) because nonverbal cues are seen as less controllable than words or directed action (Fox & Spector, 2000, p. 205; Rosenfeld, 1966). An actor who makes eye contact and expresses positive emotion (e.g., smiling) evokes impressions of someone who is honest, friendly, and likable (Harker & Keltner, 2001; Kleinke, Meeker, & LaFong, 1974; Levine & Feldman, 1997). In fact, whether in the context of a friendship or a business exchange, people who display more positive emotions are more well liked (Clark & Taraban, 1991). However, this

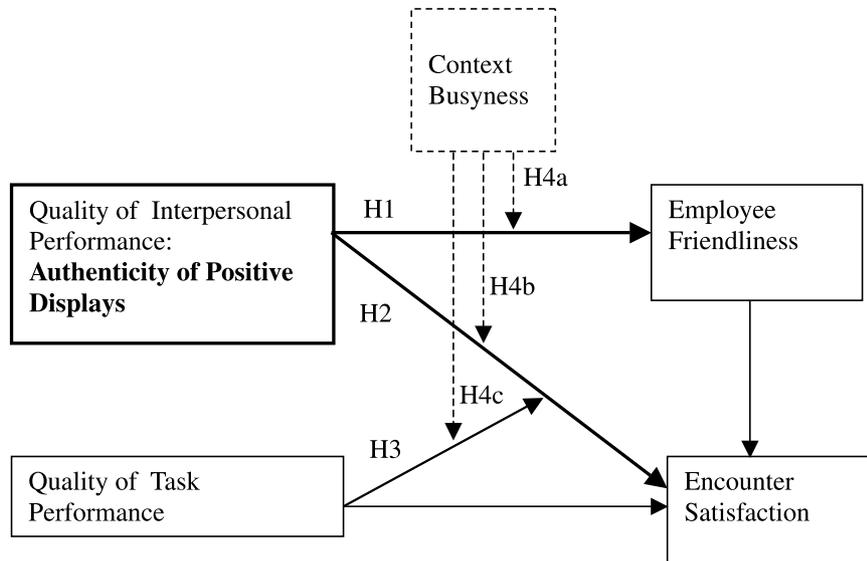


Fig. 1. Conceptual model of relationships.

positive impression of the individual may only be formed to the extent that the display is authentic: “if the audience knows that the image claimed is false, the actor may be discredited” (Gardner & Martinko, 1988, p. 333). In other words, if the impression seems calculated rather than a true representation of feeling, then the impression management fails (Eastman, 1994; Grove & Fisk, 1989; Schneider, 1981). As stated above, in laboratory studies Duchenne smiles result in more positive attributions of personal characteristics than non-Duchenne smiles (Frank et al., 1982). Furthermore, in field research customer service employees who reported being authentically positive with customers earned higher ratings on their interpersonal demeanor (i.e., friendliness) with customers than less authentic employees (Grandey, 2003; Totterdell & Holmann, 2003).

Thus, we expect that authentic smiles lead to positive internal attributions of the employee whereas inauthentic smiles weaken such attributions. In particular, we focus on appraisals of friendliness. Friendly displays are part of the interpersonal requirements for service encounters (Rafaeli & Sutton, 1987; Zeithaml, Parasuraman, & Berry, 1990), and they have been linked to ratings of service quality of the encounter in general (Parasuraman et al., 1985; Tsai & Huang, 2002).

**Hypothesis 1.** When service providers’ displays are authentically positive, they will be rated as friendlier employees than when they are inauthentic.

#### *Impressions of the service encounter*

In the growing service sector, an important indicator of job performance for service workers is satisfaction with the encounter (Albrecht & Zemke, 1985; Bitner,

1990). Service encounter satisfaction is related to, yet distinct from, a general attitude about the service; satisfaction is a response to an individual transaction rather than a general assessment of the service of that company (Bitner, 1990; Mano & Oliver, 1993). Encounter satisfaction has been associated with outcomes such as customer loyalty, intentions to return, and positive word-of-mouth intentions (Athanasopoulos, Gounaris, & Stathakopoulos, 2001; Bolton & Lemon, 1999), all of which are associated with the bottom-line for service organizations. Previous research has supported that “service with a smile” impacts customer’s impressions of the service encounter (Bitner, Booms, & Tetrault, 1990; Pugh, 2001; Tsai, 2001; Tsai & Huang, 2002), but the authenticity of smiles has not been examined as a factor.

We expect that authenticity of displays will similarly have a unique and direct effect on satisfaction. In particular, we expect that authentic smiling acts as an extra-role behavior that enhances organizational effectiveness. Much research has shown that extra-role behaviors influence performance ratings in organizational settings (Allen & Rush, 1998; Johnson, 2001). Hochschild (1983) proposed that authenticity in service encounters has become more valued as the demand for “service with a smile” has increased: “we have become adept at recognizing and discounting commercialized feeling: ‘oh, they have to be friendly, that’s their job’” (p. 190). Behaviors that come across as authentically positive illustrate high motivation by going beyond the requirements, such that authenticity of positive displays directly enhances satisfaction with the service encounter. The authentic display provides extra-role behaviors that go beyond the requirements, thus enhancing the evaluation of overall performance (Grandey & Brauburger, 2002; Organ,

1997). Smiles that simply meet the requirements (i.e., an unfeigned smile) may be viewed as blatant impression management, and thus not have the enhancement effect (Bolino, 1999).

It should be noted that there is a less cognitive explanation for why authentic smiles may contribute to satisfaction with the encounter. A primitive emotional contagion perspective would argue that observing a Duchenne smile is more likely to lead to unconsciously mimicking the expression and feeling more positively due to facial feedback mechanisms (e.g., Hatfield, Cacioppo, & Rapson, 1994; Pugh, 2001; Tsai & Huang, 2002). One study tested this hypothesis, where participants observed a Duchenne smile, a non-Duchenne smile, and neutral expression while their facial muscle changes were recorded, and then felt emotions were reported by the participant (Surakka & Hietanen, 1998). They found no differences in the facial response to Duchenne or non-Duchenne smiles, not supporting an authenticity effect on mimicry. Instead, Duchenne smile directly increased felt positive affect compared to non-Duchenne smiles, though only when viewed first. This suggests a less primitive process of increasing mood, perhaps through previous positive associations with authentic displays (Hatfield et al., 1994). We expect that customers feel satisfied after viewing authentic displays in a service encounter because they perceive it as going beyond requirements, which is associated with good service.

**Hypothesis 2.** When service providers' displays are authentically positive, overall satisfaction with the encounter will be higher than when they are inauthentic.

#### *Does authenticity always matter?*

Importantly though, the relationship of authenticity with encounter satisfaction may only hold under certain circumstances. As stated earlier, other factors are known to contribute to customer encounter satisfaction. The quality of the service delivery is also dependent on the expertise or competence of the service provider (Bitner et al., 1990; Czepiel et al., 1985; Solomon, Suprenant, Czepiel, & Gutman, 1985). Behaviors that enhance impressions of competence include knowledge of products, efficiency, and accuracy (Grove & Fisk, 1989; Parasuraman et al., 1985). Thus the effect of authenticity must be examined while taking these other important predictors of service quality into account. We predicted above that authentic positive displays act as an extra-role aspect of the service encounter. As such, it is likely to only enhance impressions of an otherwise competent performance. This is consistent with research demonstrating that organiza-

tional citizenship behaviors (extra-role, voluntary behaviors) have the greatest effect on job performance ratings when the employee is performing in-role tasks effectively (e.g., Rotundo & Sackett, 2002). Thus, if the service transaction is performed inefficiently and mistakes are made, the authenticity of the employee should be unlikely to influence the satisfaction with the encounter because the core requirements of the encounter were not met. Though the authentic display may still lead to attributions of friendliness about the *employee*, the satisfaction of the *encounter* should not be enhanced by authenticity when tasks are performed poorly. In a brief encounter, both the technical and interpersonal skills are critical (Parasuraman et al., 1985; Price, Arnould, & Deibler, 1995), but no known research has tested how these factors interact to predict satisfaction.

**Hypothesis 3.** The authenticity of the service provider has a stronger positive relationship with satisfaction when task performance is high compared to when it is low.

#### **Study 1**

Understanding the dynamics of the customer service experience presents a methodological dilemma for researchers. Service encounters in real settings are problematic since interactions may be perceived differently depending upon when they are experienced and by whom (Bateson & Hui, 1992). Previous studies in this research area have used written vignettes (e.g., Blodgett, Hill, & Tax, 1997; Levesque & McDougall, 2000), photographs (Surakka & Hietanen, 1998), and field observations (Pugh, 2001; Tsai & Huang, 2002). While all of these methods have their strengths, videotaped stimuli shown in a laboratory provide more realistic, dynamic emotional cues, and more control over confounding effects (Levesque & McDougall, 2000). Though video stimuli may pose a threat to external validity, Bitner (1990) suggests that depicting a situation salient to the intended audience provides an acceptable level of experimental and mundane realism. Furthermore, in their study on the effects of the service environment on customer perceptions, Bateson and Hui (1992) found that videotapes induced similar psychological and behavioral effects as those observed in real service settings. Indeed, service researchers advocate the use of videotapes when the goal is to (a) manipulate a limited number of factors in a simple service situation, (b) study interactions in short, boundary-closed interactions, and (c) investigate reactions (psychological, behavioral) in everyday service settings (Bateson & Hui, 1992, p. 280). Thus, we relied on vid-

eotaped vignettes in our first study to manipulate our conditions of interest, control for confounds, and test causal relationships.

### *Method*

Simulated service encounters were videotaped to represent four conditions: authentic expressions during low and high task performance, and inauthentic expressions during low and high task performance. A between-person design was used such that each participant viewed only one condition. A hotel check-in scenario was depicted to represent the short-term service encounter. Hotel settings were selected for two reasons: (1) the hotel industry is a key economic player in the service sector ([www.bls.org](http://www.bls.org)) and (2) providing quality service is critical to retain customer loyalty and market share for the hotel industry.

### *Stimuli development*

Filming of the service encounters took place at a front desk of a local hotel during working hours, in a location that did not interfere with the hotel's functioning. This provided authentic background noises, thereby increasing ecological validity. In addition, the actress wore the appropriate "costume" to enhance realism (Rafaelli, 1989): a white collared shirt and a navy blue blazer with a name tag supplied by the hotel. The same basic work behaviors and outcomes occurred in all conditions. To provide a realistic situation in which the employee could respond with authenticity or inauthenticity, all conditions began with the hotel desk clerk completing a challenging call (evidenced by her comments into the phone, "I'm sorry sir...I'm not sure...I'll look into that...") as the focal customer comes into view. The video showed the hotel clerk from the waist up, with her face in the middle of the screen. To minimize the influence of the on-screen customer on the participants, (1) her facial cues were not shown—only one shoulder and the back of customer's head was in view, (2) the customer's script was minimal to limit vocal cues, and (3) the vocal tone of the customer was affectively neutral when speaking. In all scenes, the following events took place as part of the script: the clerk greets the approaching customer, finds the reservation, takes an interrupting phone call, processes a credit card, and presents the room key. The customer requests information about pool hours and expresses the need for a wake-up call. In all conditions, the tangible service outcomes are delivered (i.e., the room is ready and the customer is given the key), but the process (task performance and displays) of receiving this outcome varied.

*Authenticity manipulations.* An actress from the local Masters of Fine Arts program was selected for all scenes

to hold constant appearance and idiosyncrasies across conditions. Because we were interested in reactions to affective displays rather than the employees' experience of producing the displays, a trained actress performed the scenes. This provided more natural and realistic vignettes due to: (1) her previous training in dramaturgical techniques for modifying expressions and (2) her previous experience being videotaped so that she appeared natural on film. Though we used a trained actress, it should be noted that real employees report using these techniques (Grandey, 2003; Grandey, Dickter, & Sin, 2004; Totterdell & Holmann, 2003), and studies have shown people could be trained to modify expressions effectively (Ekman & Friesen, 1982; Totterdell & Parkinson, 1999).

Before filming each scene, the actress was asked to imagine that she was finishing a call with a demanding customer and was given motivation consistent with dramaturgical techniques to produce the displays. For the authentic positive display conditions, the actress was asked to think of the incoming customer as a chance to help someone and make them feel good, consistent with customer service training manuals (Harvey, 1999), and she was encouraged to use her acting background to create genuine positive inner feelings and displays (deep acting). For the inauthentic positive display conditions, the actress was told that she was required to smile in this scene, and she followed that command by manipulating her face muscles without modifying her thoughts or feelings (surface acting). Scenes were re-filmed until they were performed smoothly and the displays were shown consistently and realistically within the scene.

*Task performance manipulations.* To manipulate the level of task performance, two scripts for the videos were constructed based on relevant research regarding quality customer service dimensions (Parasuraman et al., 1985). In the high task performance condition, the clerk was accessible to the customer by putting an incoming call on hold, efficient in finding the reservation and entering information, provided accurate information about requested hotel services and payment options, and showed knowledge by providing information about a free continental breakfast and the pool's hours. In the low task performance condition, the clerk was unavailable when she answered an interrupting phone call, had difficulty finding the reservation because she "looked at the wrong screen," made mistakes entering the customer's name, was uncertain about pool hours, and mentioned the free breakfast only when asked. Consistent with expectations for a basic service script, an apology ("sorry") for the first mistake was offered (Levesque & McDougall, 2000). In both conditions, the service outcome—the hotel room—was ready, and a key was given to the customer.

### *Preliminary manipulation checks*

The video stimuli were subjected to coding by pairs of research assistants to ensure that the videos manipulated the displays and performance in the intended way.

*Authenticity of positive displays.* First, we trained two undergraduate research assistants to identify authentic and inauthentic smiles based on the main facial muscle differences in the eyes and mouth as identified in Duchenne smile research (Ekman & Friesen, 1982; Frank et al., 1993). Coders independently watched more than the four focal videos to minimize the process of elimination in their coding decisions. The video viewing order was randomized for each coder. Coders correctly categorized the scenes as being either authentic or inauthentic across the task performance levels. They also rated agreement (1 = disagree to 5 = agree) with two authenticity items (the clerk was “faking how she feels” or “acting a part”), and concurred that in both high and low task performance conditions the authentic ( $M_{\text{high}} = 1.50$ ,  $M_{\text{low}} = 1.75$ ) and inauthentic ( $M_{\text{high}} = 4.50$ ,  $M_{\text{low}} = 4.50$ ) conditions were successfully manipulated. To establish that the positive display behaviors were consistent and that only the authenticity varied, coders indicated if the following behaviors occurred: a smile, eye contact, and a rhythmic vocal tone (Rafaeli & Sutton, 1987; Pugh, 2001; Tsai & Huang, 2002). All three positive display behaviors were identified as occurring in all four videos by the coders.

*Coding quality of task performance.* First, a class of undergraduate students from an upper-division Hotel and Restaurant Management course evaluated the high and low performance scripts and determined that both conditions represented realistic hotel check-in encounters. After filming, a pair of research assistants (different than the first pair) independently rated the task performance exhibited in each scene. The video viewing order was randomized for each coder and they watched more than the four focal videos. They were asked to focus on the employees’ task behaviors rather than expressions, and identify whether the video was “high task performance,” “low task performance,” or “neither high nor low task performance.” They were able to correctly identify the scenes as representing high or low performance across display manipulations. They also rated agreement on a seven-point scale with four task performance items (referring to perceived competency, accuracy, availability, and knowledge) based on previous literature (Parasuraman et al., 1985). As expected, the high task performance manipulation was rated similarly high across display ( $M_{\text{authentic}} = 6.40$ ,  $M_{\text{inauthentic}} = 6.30$ ) and similarly low for the low task manipulation across display ( $M_{\text{authentic}} = 1.90$ ,  $M_{\text{inauthentic}} = 1.70$ ). The coding supported our manipulations.

### *Participants and procedures*

The study was conducted with 114 junior- and senior-level college students from upper-division industrial psychology and business courses who received extra course credit for participation. The mean age was 21 (range 19–35 years), and 61% ( $N = 69$ ) of the participants were female. The majority (83%) was Caucasian, eight were African-American, six were Asian, three were Indian, and two were Hispanic. Ninety-five percent of participants had stayed in a hotel within the year (mode = 2 times). The participants signed up for time slots, with no more than five per group. The four videos (two display conditions  $\times$  two task performance conditions) were randomly assigned to time slots, resulting in fairly equivalent cell sizes: high authentic—high performance (28), high authentic—low performance (26), low authentic—high performance (30), and low authentic—low performance (30).

Upon arriving, participants completed a brief survey. Participants were seated in a way to minimize eye contact or interactions. They were then told the study was on customer service, and they would watch a video simulating a hotel check-in encounter. They were instructed to observe the encounter from the perspective of the customer in the scene. To set the scene and hold service expectations constant, they were told: “You have just arrived at the Hotel Royale, a hotel with a good reputation, after traveling for several hours. You have a job interview early the next morning. You need to check into the hotel.” This was a reasonable situation for these participants, many of whom were beginning the process of applying and interviewing for jobs. After the video was completed, the participants completed the survey items after which they were debriefed.

### *Instruments*

Likert-type agreement scales were used where 1 = strongly disagree, 4 = neither agree nor disagree, and 7 = strongly agree, except where noted.

*Manipulation checks.* Consistent with related research, the participant was asked to indicate whether the hotel clerk performed the following *positive display behaviors* (yes = 1, no = 0) in the scene: smile at, make eye contact, and speak in a rhythmic (non-monotone) vocal tone (Pugh, 2001; Rafaeli & Sutton, 1990; Tsai, 2001). These values were summed (range from 0 to 3). Two items were used to check the *authenticity* of the displays: the clerk was “faking how she feels in this interaction,” and “pretending, or putting on an act, in this interaction” (reverse coded;  $\alpha = .77$ ) based on items by Erickson and Wharton (1997). The *task performance* manipulation check was “this service provider seems competent in required skills.”

*Friendliness of service provider.* Friendliness of the hotel clerk was measured with a scale from Tsai and Huang (2002) that asks the extent to which the hotel clerk “provided the service in a friendly manner,” “had a kind smile,” and “treated the customer nicely.” The  $\alpha$  coefficient was .89.

*Satisfaction with the encounter.* Participants were asked, “if you were the customer in this encounter, to what extent would you feel satisfied,” and replied on a seven-point response scale (1 = not at all, 4 = somewhat, 7 = extremely).

Sex of the participant was included as a covariate since there is evidence that men and women attend to, interpret, and react to emotional expressions differently (e.g., Haviland & Malatesta, 1981; Tidd & Lockard, 1978).

## Results

### Manipulation checks

We needed to ensure that the display manipulations did not vary in their positive behaviors but did vary in the authenticity of the delivery, and that task performance was viewed as distinctly high and low. To ensure the presence of the intended effects and absence of unintended effects, we followed suggested procedures (Perdue & Summers, 1986) and conducted a  $2 \times 2$  factorial analysis of variance predicting each manipulation check.

*Positive displays.* Supporting that the occurrence of positive displays (smiling, eye contact, and rhythmic vocal tone) did not vary across condition, there was no significant main effect or interaction [overall  $F(3, 110) = 1.95, p > .10$ ]. Furthermore, a planned simple contrast between the two authenticity conditions was not significant, and the means for both supported that positive displays were observed in both conditions ( $M_{\text{authentic}} = 2.83, M_{\text{inauthentic}} = 2.68, p > .10$ ). Further examination of the item “smile” showed that 100% of subjects observed a smile in all four conditions.

*Authenticity of displays.* Only the intended manipulations had a significant effect on the perception of authenticity [ $F(1, 110) = 184.57, p < .001$ ]; the task performance manipulation [ $F(1, 110) = .12, p > .10$ ] and interaction [ $F(1, 110) = 2.15, p > .10$ ] were not significant predictors. A planned simple contrast supported that the difference between the high and low authentic displays was indeed perceived as different in the direction expected ( $M_{\text{high}} = 3.89, M_{\text{low}} = 1.38, p < .001$ ).

*Competence of service provider.* The two main effects and their interaction had significant effects on the task performance of the employee, suggesting confounding of the manipulations. This is not uncommon in experimental designs of this nature (see Allen & Rush,

1998). Following previous authors, we examined the effect sizes of the significant effects. According to Perdue and Summers (1986), when effect sizes for the unintended variable are much smaller than the intended variable, concern for the unintended effect should not be warranted. Accordingly, the performance manipulation had a much larger effect on the perception of competence [ $F(1, 110) = 352.20, p < .001, \eta^2 = .75$ ], than the main effect of authenticity [ $F(1, 110) = 2.87, p < .01, \eta^2 = .01$ ] or the interaction [ $F(1, 110) = 10.28, p < .01, \eta^2 = .02$ ]. The means show that competence was low across the authenticity conditions for the low performance manipulation ( $M_{\text{authentic}} = 2.04, M_{\text{inauthentic}} = 2.33$ ), but there was a marked decrease in perceived competence when a faked display occurred during high task performance ( $M_{\text{authentic}} = 6.32, M_{\text{inauthentic}} = 5.37$ ). Since the same scripts were used and our preliminary coding demonstrated distinct and intended effects, it is doubtful that there were objectively different aspects to the videos. Instead, authenticity may be another factor that illustrates the competence of a service worker, such that managing authenticity of displays manages impressions of competence. The effect could also be due to rater biases (halo effects). To confirm that unintended differences in task performance could not explain any found differences, analyses were performed with perceived competence as a control in a post hoc analysis, reported below.

### Descriptive analyses

Table 1 shows the correlations among all of the variables in the upper half of the diagonal. In the table, task performance (1 = poor, 2 = good) and display authenticity (1 = inauthentic, 2 = authentic) represent the manipulations. As expected, an authentic display had a strong positive relationship with perceived friendliness and a moderate relationship with encounter satisfaction in comparison with an inauthentic display (see Table 1). Participant sex was related to perceived friendliness and satisfaction with the encounter such that men had more positive impressions of the (female) service provider and the encounter. Thus, we controlled for participant sex in all analyses.

### Analyses-of-covariance

Separate 2 (authenticity)  $\times$  2 (task performance) analyses-of-covariance (ANCOVAs) with sex as a covariate were performed for each of the dependent variables: perceived friendliness and satisfaction with the encounter. In the full model, sex had a small significant effect on friendliness but did not have a significant effect on encounter satisfaction. For both outcomes, the full model was significant ( $p < .001$ ). See Table 2 for cell means.

*Friendliness of service provider.* Positive display authenticity had a significant effect on perceived friendliness

Table 1  
Descriptives and bivariate correlations for Study 1 (N = 114) and Study 2 (N = 255)

	M <sup>a</sup>	SD	M <sup>b</sup>	SD	1	2	3	4	5	6
1. Customer gender (1 = M, 2 = F)	—	—	—	—	—	—	-.08	.06	-.21*	-.20*
2. Busyness of restaurant	—	—	3.15	1.11	0	—	—	—	—	—
3. Task performance	—	—	4.49	.57	.13*	.11**	—	.02	.42***	.72***
4. Display authenticity	—	—	4.29	.92	.11**	.06	.37***	—	.55***	.29***
5. Employee friendliness	4.73	1.53	4.58	.52	.08	.12**	.64***	.37***	—	.64***
6. Encounter satisfaction	3.92	1.88	4.53	.59	.01	.07	.51***	.37***	.59***	—

<sup>a</sup> Correlations for Study 1 are located above the diagonal; measures were rated on a seven-point scale. Task performance and display authenticity are manipulations (1 = low, 2 = high).

<sup>b</sup> Study 2 correlations are below the diagonal; measures were rated on a five-point scale.

\*  $p < .05$ .

\*\*  $p < .10$ .

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

Table 2  
Descriptives and ANOVA results for authenticity and task performance (Study 1)

	Task performance				ANOVA (F)		
	High		Low		Display authenticity	Task perform.	Authenticity × Perform.
	M	SE	M	SE			
Friendliness of service provider					61.73**	32.24**	1.99
Inauthentic positive display	4.37	.20	3.47	.21			
Authentic positive display	6.30	.21	4.82	.22			
Satisfaction with encounter					25.12**	198.00**	52.36**
Inauthentic positive display	4.05	.18	2.71	.18			
Authentic positive display	6.33	.19	2.29	.20			

Note. Sex is included as a covariate in all analyses.

\*\*  $p < .01$ .

as predicted by Hypothesis 1 [ $F(1,107) = 61.73, p < .001, \eta^2 = .29$ ]. Observing the authentic display condition resulted in a higher friendliness attribution ( $M = 5.56$ ) compared with a significantly lower rating ( $M = 3.92, p < .001$ ) for the inauthentic positive display condition. Unexpectedly, task performance had a significant, though weaker, main effect on perceived friendliness [ $F(1,107) = 32.24, p < .001, \eta^2 = .15$ ]. Those who observed the service provider with low task performance felt that she was less friendly ( $M = 4.15$ ) than the highly competent service provider ( $M = 5.33, p < .001$ ). This may suggest a general “halo” effect—the very competent provider may have made a very good impression, enhancing ratings on all items (Cooper, 1981; Murphy & Balzer, 1986). There was no interaction effect on friendliness [ $F(1,107) = 1.99, p > .10, \eta^2 = .01$ ].

*Satisfaction with the encounter.* The level of task performance had a strong effect on overall satisfaction [ $F(1,106) = 198.00, p < .001, \eta^2 = .51$ ] such that high task performance was more satisfying ( $M = 5.19$ ) than low ( $M = 2.50, p < .001$ ). Authenticity also had a significant main effect on overall satisfaction with the encounter [ $F(1,106) = 25.12, p < .001, \eta^2 = .06$ ]. Consistent with Hypothesis 2, satisfaction was higher when an

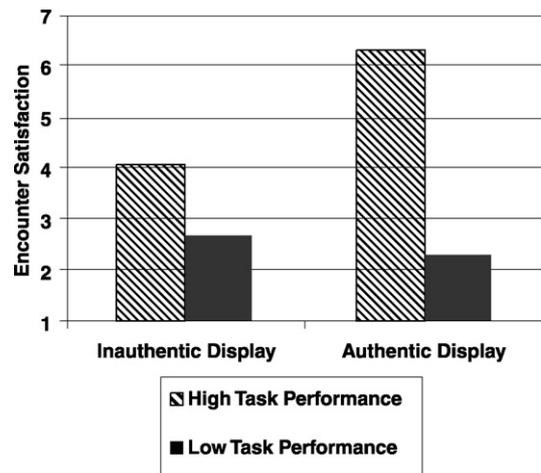


Fig. 2. Interaction of authenticity and task performance on encounter satisfaction (Study 1).

authentic display was shown ( $M = 4.31$ ) than when the service provider was inauthentic ( $M = 3.38, p < .001$ ). These main effects were, however, qualified by a significant two-way interaction [ $F(1,106) = 52.36, p < .001, \eta^2 = .13$ ]. The interaction can be seen in graphic form in Fig. 2. During high task performance, an authentic

display significantly enhanced customer satisfaction with the overall encounter ( $M = 6.33$ ) in comparison with an inauthentic display ( $M = 4.05$ ,  $p < .001$ ). During low task performance, the authenticity of the positive display made little difference in the overall satisfaction with the encounter ( $M_{\text{authentic}} = 2.29$ ,  $M_{\text{inauthentic}} = 2.71$ ,  $p > .10$ ). Univariate ANCOVAs showed that the effect of authenticity had a significant effect during high task performance [ $F(1, 54) = 77.15$ ,  $p < .001$ ,  $\eta^2 = .57$ ] but not during low task performance [ $F(1, 51) = 2.30$ ,  $p > .10$ ,  $\eta^2 = .04$ ]. Thus Hypothesis 3 was supported.

#### *Follow-up analyses*

In our manipulation checks, the employee with authentic displays was viewed as more competent than when inauthentic in the high task performance scenes. We controlled for perceived competence in a  $2 \times 2$  ANCOVA to see if authenticity would still predict satisfaction. Competence had a significant effect ( $p < .001$ ), but authenticity still had a significant effect beyond perceived competence on overall satisfaction [ $F(1, 105) = 20.87$ ,  $p < .001$ ,  $\eta^2 = .05$ ]. Next, we tested whether the effects of authenticity on overall satisfaction during high task performance could be explained by the appraisal of the employee's friendliness. A univariate ANCOVA with only the high task performance participants showed that perceived friendliness had a significant effect on satisfaction with the encounter ( $p < .05$ ) but display authenticity predicted satisfaction beyond perceived friendliness [ $F(1, 53) = 14.16$ ,  $p < .001$ ,  $\eta^2 = .09$ ]. Thus, an authentic smile enhanced the satisfaction with the encounter compared with an inauthentic smile during high task performance, and this effect was not fully explained by the attribution of friendliness or competence of the employee.

#### *Discussion*

This study considered display authenticity in service research as recently encouraged by others (e.g., Côté & Morgan, 2002; Pugh, 2001; Tsai & Huang, 2002) and applied Duchenne smile research ideas to a service encounter. We controlled for contextual factors that may influence impressions (e.g., service climate, busyness, and attractiveness) and focused on the authenticity of displays and task performance. An experimental research approach allowed for this control and permitted us to make causal inferences about the relationships; previous field studies could not determine if the customer's mood or satisfaction actually influenced the servers' displays (Pugh, 2001; Tsai & Huang, 2002). Though there is a necessary trade-off between realism and control, we created video vignettes that looked like a real hotel check-in encounter, manipulating both affective displays and task performance. Overall, the results shed light on the role of authenticity in

service encounters, and suggest theoretical and practical implications.

In brief, we supported impression management theory and experimental research on the Duchenne smile (e.g., Ekman & Friesen, 1982) by demonstrating that the authenticity of the display influenced impressions of the service provider's friendliness (Hypothesis 1). Moreover, the authenticity of the service provider influenced reactions to the overall encounter (Hypothesis 2) but only if the core task performance was high (Hypothesis 3). Thus, we found support for authenticity as a factor that enhances core performance, rather than being a unique additive factor, similar to citizenship behaviors that enhance performance to the greatest degree when required behaviors are performed well (Rotundo & Sackett, 2002). An inauthentic smile may suggest an ingratiation motive (Bolino, 1999), reducing its positive effect on the observer. The results extend previous theory and research that has suggested that authenticity is predictive of service performance (Ashforth & Humphrey, 1993; Ashforth & Tomiuk, 2000; Grandey, 2000, 2003; Hochschild, 1983).

A potential limitation is that videotaped vignettes were shown to students. Thus, we did not measure actual employees' behavior or real customer reactions in this study. Other researchers have argued for the external validity of laboratory experiments (Anderson, Lindsay, & Bushman, 1999; Hollenbeck, 2003), particularly when a realistic scenario for the participants is used. Our participants were university students who were beginning their job searches, similar to our scenario. Their relative inexperience with hotels, though, may create different results than more experienced hotel patrons who may attend to different aspects of the situation to form impressions. Furthermore, it is possible that the effects would be different in other service settings; others argue that positive displays are important for all service providers (Price et al., 1995), but the value of authenticity may be more important in a hotel check-in than other encounters. Finally, consistent with other research (e.g., Tsai & Huang, 2002), we used slow-paced contexts, and in doing so may have enhanced the strength of the authenticity effect. To counteract these limitations, a second study was undertaken in a field setting within a different service industry.

#### **Study 2**

In the second study, we focused on a real restaurant context rather than a simulated hotel setting. Customers go to restaurants not just for the food but also for the interpersonal treatment by their wait staff (Mattila, 2001). Furthermore, restaurant servers are highly motivated to manage their self-presentation, since smiling has been associated with tipping behaviors (Tidd & Loc-

kard, 1978). In this field study, we examined how perceptions of authenticity and task performance combined to influence ratings of satisfaction with a real service encounter. Furthermore, we wanted to examine the effect of authenticity in a real environment where the situation is more dynamic and complex. One contextual factor that modifies the influence of interpersonal demeanor is busyness (Pugh, 2001; Rafaeli & Sutton, 1990), and we expected busyness to moderate our hypothesized relationships.

#### *Authenticity of displays and busyness*

Part of the impression management process is that the observer makes attributions about the actor's behavior (Bolino, 1999; Rioux & Penner, 2001; Weiner, 2000). Busyness of the context may provide information about whether to attribute an employee's behavior to internal or external characteristics. In Study 1, our video stimuli displayed slow conditions: there were no other customers in the encounter, there was only one phone call during the encounter, and there was minimal background noise. In the current field study, we examined the impact of busyness on our predicted relationships.

#### *Impressions of the service provider*

In a slow work environment, there are few external factors to which the observer could attribute the employees' behavior. Thus, an inauthentic display in a slow environment is likely to result in an internal attribution of unfriendliness, while in a busy environment there is more opportunity to make external attributions for the display (Weiner, 2000). We expected that in a busy work environment inauthentic displays are more likely to be attributed to the situation than to the service providers' character; thus the relationship of authenticity with perceived friendliness should be weakened when the context is busy compared to when it is slow.

#### *Impressions of the service encounter*

Encounter satisfaction, likewise, should be less influenced by the quality of displays in a chaotic environment than in a leisurely one. Rafaeli (1989) and Sutton and Rafaeli (1988) found stronger norms for positive displays when a store was slow than when it was busy. The service provider's demeanor (e.g., authenticity) should have minimal impact on satisfaction when there are long lines or many other customers, such that busyness weakens authenticity's relationship with encounter satisfaction. However, this relationship may depend not only on store busyness but also on the task performance of the service provider.

In a leisurely service environment, the relational nature of the encounter is an important part of the transaction (Rafaeli, 1989) such that an authentic display provides a "bonus" that enhances encounter satisfaction

provided the core tasks are performed well and does not influence satisfaction if tasks are performed poorly. This was supported in Study 1. We propose that authenticity is less likely to enhance satisfaction when tasks are performed well in busy work contexts because the customers are more interested in efficiency, accuracy, and availability than the relational nature of the encounter (Rafaeli, 1989; Sutton & Rafaeli, 1988). Thus when there is a line of customers, good task performance produces satisfaction and the display quality (authenticity) matters little.

If core task performance is poor in a slow context, an internal attribution of low competence is made (Weiner, 2000) and this overrides any effect authenticity might have, as shown in Study 1. In a busy context there may be an external attribution for the low-performing behavior, thus potentially reducing dissatisfaction over low performance in a slow context. We propose that such an external attribution for the low performance in a busy encounter is more likely if the display is authentic. Authentic displays are more likely to create impressions of being trustworthy, calm, and confident than inauthentic displays (Frank et al., 1993), thus, customers are more likely to believe an authentic server is handling a difficult situation as well as possible. An inauthentic display makes a person seem agitated and untrustworthy (Frank et al., 1993), thus a low performer who is faking expressions is likely to be perceived as incompetent. Customers are more likely to be dissatisfied with a low task performance encounter that is attributed to an internal and controllable characteristic (competence) than an external and uncontrollable characteristic (busyness) (Weiner, 2000). Thus, display authenticity should reduce the dissatisfaction with an encounter where the task performance is poor in a busy environment.

Given these arguments, we predict that the two direct relationships supported in Study 1 (Hypotheses 1 and 2) should be weaker when the encounter context is busy compared to when the context is slow. The two-way interaction proposed between authenticity and task performance (Hypothesis 3) is expected to occur in slow environments and the effect should reverse in busy environments.

**Hypothesis 4.** The busyness of the context moderates the relationships of authenticity with friendliness and customer satisfaction.

**Hypothesis 4a.** The relationship between authenticity and friendliness is weaker in busy contexts than in slow-paced contexts.

**Hypothesis 4b.** The relationship between authenticity and encounter satisfaction is weaker in busy contexts than in slow-paced context.

**Hypothesis 4c.** When the context is slow, authenticity has a stronger positive relationship with encounter satisfaction when task performance is high compared to when it is low; when the context is busy, authenticity has a stronger positive relationship with encounter satisfaction when task performance is low compared to when it is high.

## Method

### Participants and procedures

As part of a larger study, a research assistant gained approval from management at six casual dining restaurants in a college town (population ~50,000 when data was gathered) and recruited 64 restaurant servers from these restaurants to participate. The servers were given five customer-comment cards to hand out with the bill during their shift. The customers were informed on the card that the results were for research purposes only, and asked to seal their completed card in the provided envelope and place it in a drop-box on their way out the door. In total, 275 cards were returned, an 86% response rate, and 255 of those were fully completed (80% of total possible). The customers were equally likely to be male or female, and in their mid-30's on average ( $M = 33.28$ ,  $SD = 13.92$ ).

### Instruments

A five-point Likert-type scale was used, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree, for all scales except where otherwise noted. Means and standard deviations can be found in Table 1. *Sex of the customer* was included as a control variable, as in Study 1.

**Server authenticity.** The items from Study 1 were modified for Study 2: “This server seemed to be faking how she/he felt in this interaction,” and “This server seemed to be pretending, or putting on an act, in this interaction” ( $\alpha = .77$ ). Responses were coded so that higher values represent more authenticity.

**Task performance.** Two items tapped service quality dimensions of the encounter (Parasuraman et al., 1985): “the server was available when I needed him/her during the encounter” and “the server was timely and accurate in his/her interactions with us” ( $\alpha = .76$ ).

**Busyness.** Previous operationalizations of busyness have asked about the number of people in line at banks (Pugh, 2001) or convenience stores (Sutton & Rafaeli, 1988). In a restaurant context, the line of patrons is not the best sign of busyness. Customers were asked about the objective, observable environment rather than the customers' perception of the store pace, which may be confounded with task performance ratings. The

five-point scale asked if, at that time, there were “hardly any other customers” (1), “some other customers” (2), “half the tables occupied” (3), “almost all tables occupied (4), and “all tables occupied and a waiting line” (5). The mean was 3.15 ( $SD = 1.11$ ).

**Friendliness of the service provider.** The same three items from Study 1 were used ( $\alpha = .75$ ).

**Satisfaction with the encounter.** One item asked, “to what extent were you satisfied with the service?” where 1 = very dissatisfied, 2 = dissatisfied, 3 = neutral, 4 = satisfied, and 5 = very satisfied.

## Results

### Descriptive results

Table 1 shows the correlation matrix for all reported variables. Busyness was weakly correlated with employee friendliness ( $r = .12$ ,  $p < .06$ ) though in the opposite direction found in previous studies of store clerks (e.g., Rafaeli, 1989). The service delivery variables (friendliness and task performance) were strongly correlated ( $r = .64$ ,  $p < .001$ ), supporting that these are sub-dimensions of service quality (Czepiel et al., 1985) and replicating the association found in the laboratory study. Authenticity was only moderately associated with friendliness and task performance ( $r = .37$  for both,  $p < .01$ ). Importantly, no encounters received a “disagree” rating to the friendliness item “provided a nice smile,” assuring that our measure of authenticity is assessing the authenticity of positive displays.

### Hierarchical linear modeling

Multiple customers rated each restaurant server. Characteristics of the server (e.g., personality) have been shown to explain perceptions of friendliness and customer satisfaction (Bettencourt, Gwinner, & Meuter, 2001; Hogan, Hogan, & Busch, 1984). Since the server with whom the customers interacted may generate consistent effects across encounters, relationships among our variables may be non-independent. This non-independence makes it more likely that we will find significant effects when the null hypothesis is actually supported (Bliese, 2002; Kenny & Judd, 1986). Therefore, we analyzed our data using hierarchical linear modeling (HLM, Bryk & Raudenbush, 1992) in SAS Proc Mixed (Singer, 1998) because this analytic technique is designed to handle nested data such as repeated observations within individuals. The customer encounter was the level-1 unit of analysis, and server was the level-2 unit of analysis. Following Hofmann and Gavin (1998), the level-1 predictors were centered before running the analyses. In equation form, the full HLM models were specified as follows:

Model 1

$$L1: \text{Friendliness}_{ij} = \beta_{0j} + \beta_{1j} (\text{Gender}_{ij}) + \beta_{2j} (\text{Busyness}_{ij}) + \beta_{3j} (\text{Task Performance}_{ij}) + \beta_{4j} (\text{Authenticity}_{ij}) + \beta_{5j} (\text{Authenticity}_{ij} * \text{Busyness}_{ij}) + r_{ij}$$

$$L2: \beta_{0j} = \gamma_{00} + \gamma_{01} (\text{Server}_j) + U_{0j}$$

Model 2

$$L1: \text{Satisfaction}_{ij} = \beta_{0j} + \beta_{1j} (\text{Gender}_{ij}) + \beta_{2j} (\text{Friendliness}_{ij}) + \beta_{3j} (\text{Busyness}_{ij}) + \beta_{4j} (\text{Task Performance}_{ij}) + \beta_{5j} (\text{Authenticity}_{ij}) + \beta_{6j} (\text{Authenticity}_{ij} * \text{Busyness}_{ij}) + \beta_{7j} (\text{Authenticity}_{ij} * \text{Task Performance}_{ij}) + \beta_{8j} (\text{Task Performance}_{ij} * \text{Busyness}_{ij}) + \beta_{9j} (\text{Authenticity}_{ij} * \text{Busyness}_{ij} * \text{Task Performance}_{ij}) + r_{ij}$$

$$L2: \beta_{0j} = \gamma_{00} + \gamma_{01} (\text{Server}_j) + U_{0j}$$

The analyses were performed in steps using nested models to allow us to calculate the variance explained from the prior step. We first ran a null model, where the outcome variables of perceived friendliness and customer satisfaction were separately regressed on a unit vector where no parameters were selected (Hofmann, 1997). These null models showed that server could explain 19.2% of the available variance in perceived friendliness and 7% of the available variance in customer satisfaction. These findings underscore the importance of using hierarchical modeling to test our hypotheses to be sure that the substantive relationships of authenticity with friendliness and customer satisfaction hold beyond server effects.

*Friendliness of the service provider.* In the second step, all variables except authenticity (customer gender, store busyness, and task performance ratings) were entered. Task performance was a significant predictor ( $\beta_3 = .55, p < .01$ ) and the combined set of variables explained 32% of the available variance in perceived friendliness. In the next model, perceived authenticity was found to be a significant predictor of friendliness ( $\beta_4 = .09, p < .01$ ) that significantly increased the explained variance ( $p < .05$ ). Thus, server authenticity during the encounter had a significant relationship with perceived friendliness beyond the server, the customer’s sex, the busyness of the environment, and the server’s task performance, supporting Hypothesis 1. Results are reported on the left side of Table 3.

The predicted interaction of authenticity and busyness (Hypothesis 4a) also had a significant effect ( $\beta_5 = -.06$ ), explaining an additional 1% of the available variance in friendliness (both  $p < .05$ ). The two-way interaction of authenticity and busyness was graphed according to Aiken and West (1991) (see Fig. 3). The results are supportive of Hypothesis 4a: the relationship of authenticity with the friendliness of the service provider was positive in slow contexts, whereas the relationship was weaker when the restaurant was busy.

*Satisfaction with the encounter.* The second model predicting satisfaction is reported on the right side of Table 3. In addition to customer sex, busyness, and task performance, perceived friendliness was included as a con-

Table 3  
Results from hierarchical linear modeling (Study 2)<sup>a</sup>

	Model 1			Model 2		
	Perceived friendliness			Satisfaction with encounter		
	Estimate	SE	Variance explained <sup>b</sup>	Estimate	SE	Variance explained
<b>Step 1</b>						
Null model (server)	.05		.19	.02		.07
<b>Step 2</b>						
Controls			.32*			.37*
Customer gender	.01	.05		-.09	.06	
Perceived friendliness				.52*	.07	
Busyness (BU)	.03	.02		.00	.03	
Task performance (TP)	.55*	.05		.26*	.07	
<b>Step 3</b>						
Server authenticity (AU)	.09*	.05	.02*	.08*	.03	.02*
<b>Step 4</b>						
Interactions			.01*			—
AU × BU	-.06*	.02		-.03	.03	
AU × TP				-.03	.06	
TP × BU				.05	.05	
AU × BU × TP				-.02	.05	

<sup>a</sup> N = 255 encounters with 64 servers. All interaction term variables were centered prior to analysis.

<sup>b</sup> Initial variance explained calculated as covariance parameter estimate for server/(server covariance parameter estimate + residual); subsequent variance calculated as 1 – (variance of current step/variance of previous step); significance determined by  $\chi^2$  difference across models.

\* p < .05.

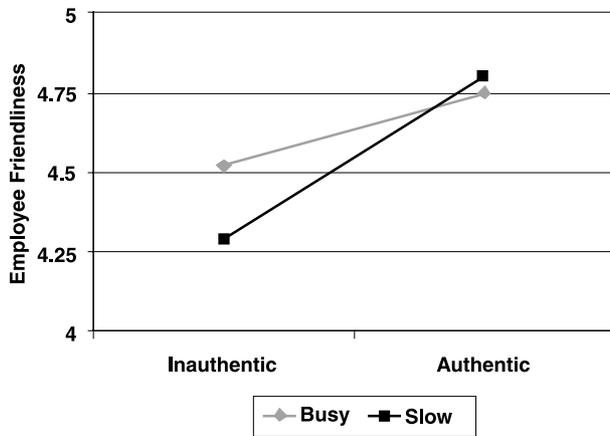


Fig. 3. Interaction of authenticity and restaurant busyness on employee friendliness (Study 2).

trol variable to ensure that authenticity had a unique effect beyond this established predictor of customer satisfaction. Task performance and friendliness were significant predictors, and the addition of these four variables increased the explained variance by 37% ( $p < .01$ ). Authenticity was a significant predictor of satisfaction ( $\beta_5 = .08$ ) that significantly increased the explained variance to 39% (both  $p < .05$ ), supporting Hypothesis 2. The final model, which included the set of interactions, did not significantly increase the variance explained in customer satisfaction, and none of the interactions were significant, failing to support Hypotheses 3, 4b, and 4c.

### Discussion

As in Study 1, this field survey supported Hypothesis 1—the perceived authenticity of the restaurant server positively related to the attribution of friendliness formed about the server. Perceiving the service employee as inauthentic creates a less positive impression about the characteristics of that service provider, as shown in the Duchenne smile research (Frank et al., 1993). More importantly, as posited in Hypothesis 2, authenticity uniquely predicted the overall satisfaction with the encounter, beyond idiosyncratic effects of the server being evaluated (e.g., attractiveness, experience), as well as established predictors of satisfaction: task performance and perceived friendliness. We suggest that authenticity acts as an extra-role behavior enhancing the perceived quality of the encounter.

We did not find support for Hypothesis 3, which proposed authenticity's relationship with satisfaction would depend on the level of task performance. In Study 1, we found that authenticity of displays has little influence on customer satisfaction when task performance is poor (Hypothesis 3), and we argued that this was because the task performance is the core aspect of the delivery

in an economic (rather than social) exchange. One explanation is that the interpersonal delivery of a service encounter in a restaurant setting may be just as “core” as the task delivery (Mattila, 2001). Another explanation for the failure to find this moderating effect is the overall high task performance of the restaurant servers ( $M = 4.49$ ), such that there was no truly “low” task performance situation. In fact, only five encounters earned task performance ratings that were rated at or below the midpoint (3.00). This range restriction may be because all of the servers actually performed at high levels, the servers did not distribute surveys to the customers with whom their interactions were poor, or the customers inflated their ratings. Below we describe steps taken to avoid sampling and response bias to ensure that objectively high task performance is the most likely explanation.

We extended the findings of Study 1 by demonstrating that authenticity was more likely to influence perceived friendliness when the restaurant was slow than when it was busy (Hypothesis 4a). We argued that when a store is slow, the authenticity of the delivery is likely to be attributed to internal characteristics of the employee; in a busy situation, an external attribution can easily be made for a phony smile. The form of the interaction (Fig. 3) shows that inauthentic displays in busy environments resulted in higher ratings of perceived friendliness than inauthentic displays in slow environments, supporting our prediction. The busyness of the store did not significantly decrease the effect of authenticity on satisfaction (Hypothesis 4b) nor did busyness, authenticity and task performance interact to predict satisfaction (Hypothesis 4c). Thus, this contextual factor only influenced the effect of authenticity on the perception of the employee, not the overall appraisal of the encounter itself. The perception of authenticity seems to be a unique and direct predictor of encounter satisfaction.

This study countered some of the limitations from the first study but added some of its own. Due to the self-reported nature of the variables, some relationships are likely inflated by shared method variance. The strong relationships among task performance, friendliness, and satisfaction are to be expected, since task performance and friendliness are established aspects of service interaction quality (Czepiel et al., 1985; Gronroos, 1990; Parasuraman et al., 1985). However, though authenticity was also self-reported, it was only moderately associated with friendliness and task performance ratings, and it was able to predict satisfaction beyond the other variables. Furthermore, the interaction effect is less likely to be explained by this methodological problem. A more critical issue is that the appraisals were all gathered at the same point in time, namely, after the encounter was complete, thus appraisals of friendliness or task performance may have influenced appraisals of authenticity and vice versa. The covariation of the appraisals of

authenticity and task performance may minimize the potential interaction effects compared to our experimental design.

The customer ratings were generally positive, creating skewed data that could be due to sampling biases or response biases. Employees distributed the surveys to the customers themselves: they may have avoided giving a survey to a table where failures had occurred. We attempted to avoid this possibility by ensuring employees about the anonymous nature of the study and the disassociation of the results from any organizational consequences. Instructions encouraged customers to be honest and accurate in their ratings, assuring them that the results would not be used for personnel decisions, and confidentiality was assured by providing a sealed drop box by the door for the surveys.

Our model is also incomplete; other variables besides the ones we included also predict our dependent variables. We did not measure specific service context variables (e.g., lighting, music, air) that are known to influence customer attitudes (e.g., Schneider et al., 1998; Tsai & Huang, 2002) nor employee personality and experience (Bettencourt et al., 2001; Hogan et al., 1984). However, our analyses examined whether customers' appraisals of the encounters could be fully explained by the server that they shared. Server explained unique variance in friendliness and satisfaction, but customers' perceptions of their specific encounters explained variance beyond server.

## General discussion

Overall, this research responded to requests for more attention to the quality of service employee's positive displays, in particular, the authenticity of the displays. We proposed that expressive displays are used to manage customer impressions of the service organization, and that authenticity influences the impression formed of both the service provider and the overall encounter. We asked our research questions using both a controlled laboratory experiment and a field study. These two studies have very different strengths and limitations, and this triangulation allows us to draw stronger interpretations from our findings than either one alone. There were three major factors that differed across the two studies: the type of service (hotel vs. restaurant), the method of obtaining variability in the independent variables (manipulations vs. perceptions), and the stimuli used (controlled video vignettes vs. real-life encounters). The differences between the two studies suggest the generalizability of the effects of authenticity.

Friendliness is a key dimension of service quality (Parasuraman et al., 1987; Tsai & Huang, 2002), and in both studies perceptions of the service provider's friendliness were influenced by the authenticity (manip-

ulated or perceived) of the service provider's displays. Our results are consistent with the laboratory research on Duchenne smiles that has shown that people feel less positively about a person displaying inauthentic smiles vs. authentic smiles. Our results extend this research into a more realistic encounter that is both a social and an economic transaction. When service providers do not seem sincere in their expressions it is less likely to create a positive impression in the customer; instead, a false smile may seem manipulative and the employee's impression management attempt fails (Ashforth & Humphrey, 1993; Grove & Fisk, 1989; Jones & Pittman, 1980). This effect was demonstrated in both the lab and field studies. Study 2 further demonstrated that this effect was less likely if the observer can attribute the phony expression to external demands (busyness) rather than internal characteristics of the employee. Contextual effects have not been examined, to our knowledge, within the Duchenne smile research, and the findings suggest there may be boundary conditions on the effect of authenticity.

The results of both studies supported that authenticity not only influenced impressions of the service provider as a friendly person but also appraisals of the overall service encounter beyond other established predictors. Given the relationship of customer satisfaction with key bottom-line outcomes (Athanasopoulos et al., 2001; Bolton & Lemon, 1999), this result demonstrates the importance of authenticity as a unique characteristic of service delivery. In particular, authenticity acted as an extra-role behavior (Grandey & Brauburger, 2002), enhancing service satisfaction when other required elements were performed well. Thus, given acceptable levels of task performance, authenticity had an additive effect on overall satisfaction, and even a busy environment did not reduce its effect. This supports the value of skilled "actors" or impression managers as service personnel: employees who can successfully engage in smiles that seem genuine are more likely to create satisfied customers than those who just follow the instructions to smile. Thus, our results support Hochschild's (1983) proposal that "employers are wise to want workers to be sincere, to go well beyond the smile that's 'just painted on'" (p. 33).

## Limitations and future directions

The specific limitations of each study can be found in the discussions following Study 1 and Study 2. Below, we discuss questions our studies cannot answer to provide directions for future research.

Future studies need to examine the processes by which authenticity influences satisfaction. Previous researchers have not found effects for mimicry and emotional contagion (Surakka and Hietanen, 1998), and we found that appraisals of friendliness and competence did

not fully explain the effect of authenticity on satisfaction. Other types of appraisals are associated with Duchenne smiles that may explain the relationship—for example, the trustworthiness or warmth of the individual.

It is the exception, rather than the rule, to have a job that requires negative displays (Wharton, 1993). Similarly, it would be an odd circumstance for a service worker to need to fake a negative emotion (Ashforth & Tomiuk, 2000; Wharton & Erickson, 1993). Thus, we focused on the most common situation, namely, authentic and inauthentic *positive* displays, which allows us to generalize to a wide population of service jobs. Future research needs to examine how observers respond to negative displays when they are required (e.g., bill collectors; Sutton, 1991) and when it is deviant behavior (e.g., service worker showing a bad mood; Fisk & Grandey, 2003).

Interestingly, support was not found for the negative relationship between busyness and service delivery (friendliness, task performance) found previously (Pugh, 2001; Rafaeli, 1989). Given the financial rewards associated with positive displays for restaurant servers (Tidd & Lockard, 1978), they may be more motivated to maintain a friendly demeanor during busy working situations than the bank tellers and grocery store clerks examined previously. Future research should examine if financial rewards influence authentic displays and vice versa.

Another factor that we did not take into account is the difference between one-time service *encounters* and service *relationships* where the employee and customer have repeated encounters (see Gutek, Bhappu, Liao-Troth, & Cherry, 1999). It seems likely that authenticity would have even more impact in established employee–customer relationships since it would have more meaning for the social exchange, thus our results using service encounters may be conservative.

### *Practical implications*

Previous research has shown the value of “service with a smile” on customer attitudes and intentions (Pugh, 2001; Tsai & Huang, 2002). Our results supported that the effect of positive displays was weakened if the smiles seemed phony. Even in short, one-time service encounters, the authenticity of the service employee’s smile makes a difference to the customer. Service training handbooks train employees to “Smile!” despite true feelings, as stated in the opening quote. There are two ironies here. First, organizational efforts to manufacture desired emotions often result in the unintended effect of service workers behaving *in* authentically (Ashforth & Tomiuk, 2000), such that a false smile occurs because of negative reactions to the monitoring and enforcement of the display (Rafaeli & Sutton, 1987). Second, focusing on meeting display rules may take cog-

nitive resources away from engaging in the task performance (Richards & Gross, 1999; Sideman & Grandey, 2003). If display rules are going to be enforced, rigorous task *and* emotional skill training are necessary. Techniques are available to regulate mood via cognitive reappraisals (Totterdell & Parkinson, 1999). Alternatively, rather than putting the onus on the employee to create an authentic display, management would benefit from inspiring authentic positive emotions in workers through positive leadership (George, 1991) or increased autonomy (Spector & Jex, 1991). Overall, our research supports that “service with a smile” is not a sufficient requirement for service excellence. Provided tasks are performed well, a truly happy worker, or at least a worker who can appear to be truly happy, provides the most satisfying service encounter.

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