

Are All Smiles Created Equal? How Emotional Contagion and Emotional Labor Affect Service Relationships

In this study, the authors examine the effects of two facets of employee emotions on customers' assessments of service encounters. Drawing on emotional contagion and emotional labor theories, they investigate the influence of the extent of service employees' display of positive emotions and the authenticity of their emotional labor display on customers' emotional states and, subsequently, on customers' assessments of the service interaction and their relationship with the service provider. To test the study hypotheses, 223 consumers participated in a simulated service encounter in which actors played the roles of service employees. In a 2×2 factorial design, the employees varied both the extent of their smiling behavior and their emotional labor display by engaging in surface or deep acting. The results show that the authenticity of employees' emotional labor display directly affects customers' emotional states. However, contrary to expectations, the extent of employee smiling does not influence customer emotions, providing no support for the existence of primitive emotional contagion in service interactions. Furthermore, employee emotions exert an influence on customer outcomes that are of interest to marketers.

In general, the interaction between service employees and customers is considered an essential part of both customers' assessments of service quality and their relationship with the service provider (Bitner 1990; Gwinner, Gremler, and Bitner 1998; Parasuraman, Zeithaml, and Berry 1985). Despite the considerable amount of empirical research on service relationships and customer assessments of service quality, several aspects of the service interaction have remained unexplored. An area of particular interest is the role of emotions in service encounters. Although the notion of having a friendly service staff and providing "service with a smile" has become a generally unquestioned mantra for service firms, empirical research about how employees' emotional states affect customers and their

assessments of service encounters has emerged only in recent years.

Two research streams that address the role of emotions in service encounters involve emotional contagion (Hatfield, Cacioppo, and Rapson 1994) and emotional labor (Hochschild 1983). "Emotional contagion" is defined as the flow of emotions from one person to another, with the receiver "catching" the emotions that the sender displays (Schoenewolf 1990). In the context of service interactions, emotional contagion creates a ripple effect of emotions from service employees to customers (Pugh 2001; Tsai and Huang 2002; Verbeke 1997). In other words, employees who smile at customers may be contagious, in that they change the affective state of customers and thus influence customers' perceptions and evaluations of the service encounter. "Emotional labor" refers to service employees' display of expected emotions as a self-regulatory process (Hochschild 1983). When displaying expected emotions to customers, employees can choose between two acting strategies, surface or deep acting, which differ mainly in their extent of authenticity (Grandey 2003).

The purposes of this study are twofold. First, we attempt to extend marketing theory by developing and testing a model of how employee emotions affect customers. Building on emotional contagion and emotional labor theories, we develop a model that enables us to test the differential effects of two facets of employee emotions—employee smiling behavior and authenticity of the emotional labor display—on changes in customer affect in a service setting. We also examine key customer consequences of interest to service firms, including the impact of employee emotions on customer satisfaction, customer-employee rapport, and customers' future loyalty intentions, all of which constitute previously untested relationships.

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A second contribution of this study is our use of an experimental research design that enables us to assess the cause–effect nature of emotional contagion processes more precisely. The extant services literature on emotional contagion has not answered the question whether customers really catch employee emotions. Responding to Pugh’s (2001, p. 1026) statement that “in the absence of a true experimental design, it is not possible to conclude that contagion alone is responsible [for the variation in customer consequences],” our research establishes such causal relationships and fills an important gap in the customer–employee emotions literature.

We first review the concepts that are central to our study, namely, emotional contagion, emotional labor, and customer consequences of service interactions, and then we present a conceptual model and discuss the relationships among the model elements. Next, we describe the design of our experiment, which enables us to examine the relationships of the conceptual model using a two-way repeated measures analysis of variance (ANOVA) and partial least squares (PLS) structural equation modeling. Finally, we present the findings and their implications for services research and management.

The Role of Emotions in Service Interactions

Emotional Contagion

Research on emotional contagion attempts to explain how emotions are transmitted among people in social interactions and how “catching” another person’s emotions affects the dynamics of the social interaction. Emotional contagion can occur at both subconscious and conscious levels (Barsade 2002). That is, the process of emotional contagion can be attributed to people’s “tendency to automatically mimic and synchronize facial expressions, vocalizations, and movements with those of another person and, consequently, to converge emotionally” (Hatfield, Cacioppo, and Rapson 1994, p. 5) and to more conscious social comparison processes between people (Barsade 2002).

With “primitive emotional contagion” (Hatfield, Cacioppo, and Rapson 1994), the transfer of emotions from one person to another is the result of the receiver’s unconscious, emotive processes. This type of emotional contagion is driven by a two-step mimicry process, in which a person (1) spontaneously imitates another person’s facial expressions and other nonverbal cues, which (2) leads the person to experience the corresponding emotions through physiological links. Although the person feels the emotions that result from mimicry, the processes that lead to this emotion are often “subconscious and automatic” (Barsade 2002, p. 648). As a consequence, emotional contagion theories suggest that primitive emotional contagion is spurred by the extent to which the sender displays emotions; a greater emotional display by the sender results in higher levels of emotional contagion in the receiver.

In contrast, “conscious emotional contagion” is based on social comparison processes in which people actively search for emotions as a type of social information (Salan-

cik and Pfeffer 1978). This search activity is considered a fundamental human behavior, which grows particularly strong in situations perceived as ambiguous (Gump and Kulik 1997). Specifically, conscious emotional contagion theory argues that people compare their mood with another person’s mood and adopt the sender’s emotive level when it appears appropriate (Barsade 2002).¹ For example, in the absence of other social information, people visiting an attorney for the first time can be expected to observe the attorney’s emotional display and then to adopt his or her emotions as a result of their desire to search for social information and reduce perceived ambiguity. Unlike primitive emotional contagion, conscious emotional contagion is determined less by the extent to which the sender displays emotions during an interaction (e.g., frequency of smiling) and more by the authenticity with which the emotions are displayed (e.g., genuineness of a smile). When the receiver perceives the sender’s emotional display as fake or disingenuous, he or she will not interpret the emotional display as adequate for reducing perceived ambiguity, so conscious emotional contagion is less likely to occur.

Emotional Labor

The concept of emotional labor, which we consider a potential driver of customers’ emotional states and subsequent assessments of service interactions, refers to the “effort, planning, and control needed to express organizationally desired emotions during interpersonal transactions” (Morris and Feldman 1996, p. 987). Recent management literature has considered emotional labor in an effort to better understand how service organizations can manage employees’ positive displays to customers. Furthermore, it is linked to the existence of either explicit or implicit organizational display rules (Rafaeli and Sutton 1987) that define which emotions employees are expected to display and which they should suppress in the course of interacting with customers.

In general, service employees are expected to align their displayed emotions with organizationally desired emotions through their choice of emotional labor strategies (Hochschild 1983). With regard to specific emotional labor strategies, scholars have drawn on Hochschild’s (1983) distinction between surface acting and deep acting as the primary framework for service employees. In “surface acting,” an employee tries to change only his or her outward behavior to exhibit the required emotions. Thus, surface acting refers to the act of displaying an emotion that is not felt and could involve both suppression of felt emotions and faking of unfeared emotions. For example, when dealing with an angry or annoying customer, an employee may simply put on a smile and pretend to be cheerful and friendly without actually feeling the emotions. In other words, surface acting constitutes the expression of feigned emotions and lacks authenticity (Grandey 2003). With “deep acting,” however, employees express expected (or required) emotions by attempting to create these emotions within themselves. This

¹This type of emotional contagion is sometimes referred to as “emotional comparison” in the literature (e.g., Bartel and Saavedra 2000).

strategy is similar to the method-acting technique developed by Russian director Constantin Stanislavski (1965), in which actors are taught to create self-induced true emotions by using their emotional memory and recalling prior experiences and emotions (Hochschild 1983). As an example of deep acting in the context of service delivery, Hochschild reports on flight attendants who are trained to deal with angry passengers by thinking of them as frightened, first-time fliers. This process enables the flight attendants to change their inner feelings toward the customer from annoyance to pity and sympathy. Thus, the distinction between surface acting and deep acting is conceptually aligned with the “service-as-theater” metaphor, which postulates the interaction between service employees and customers as a dramaturgical interaction in which actors (i.e., employees) perform (i.e., provide service) on stage (i.e., the service environment) in front of an audience (i.e., customers) (Grove and Fisk 1992).

Consequences of Service Interactions

The display of employee emotions and the resultant customer emotions likely affect various outcomes of interest to marketing managers. We focus on three major customer consequences of service interactions that are considered particularly relevant to service companies: customer satisfaction, customer–employee rapport, and customers’ future loyalty intentions.

“Customer satisfaction” is widely regarded as the cognitive assessment of a customer’s emotional experience (Hunt 1993). As Oliver (1981) discusses, satisfaction is consumption specific; that is, it is related to a single consumption experience. This transaction-related characteristic is often considered the main difference between satisfaction and similar evaluative concepts, such as consumer attitude and perceived service quality, which are regularly modeled as overall constructs or general evaluations of a service and are unrelated to a specific consumption episode (Hennig-Thurau and Klee 1997).

“Customer–employee rapport” is “a customer’s perception of having an enjoyable interaction with a service provider employee, characterized by a personal connection between the two interactants” (Gremler and Gwinner 2000, p. 92). As a relational concept applicable to service settings, rapport depends on one or more interactions between employees and customers. Similar to satisfaction, customer–employee rapport represents a customer’s cognitive assessment of an affective state. It also is important to stress that rapport can be cultivated through a single service interaction and does not depend on a shared long-term history. Customer–employee rapport has been identified as a salient issue for service organizations because rapport exerts a strong influence on customer perceptions of service delivery and service organizations (DeWitt and Brady 2003; Gremler and Gwinner 2000).

Finally, customers’ “future loyalty intentions” constitute a central component of service loyalty (Oliver 1997), which itself is defined in various ways. Most definitions focus on a customer’s willingness to visit a particular firm again because of his or her positive emotions and cognitions (Oliver 1999). In empirical research, future intentions repre-

sent a frequently studied component of loyalty, when loyalty is defined and/or measured as future intentions (e.g., Fornell 1992; Rust and Zahorik 1993; Zeithaml, Berry, and Parasuraman 1996). We emphasize future loyalty intentions because we believe that, in general, the future behavior of customers is of more interest to service marketers than current consumer attitudes (i.e., attitudinal loyalty) and/or prior behavior.

A Conceptual Model of the Impact of Employee Emotions on Customers in Service Interactions

The impact of different facets of employees’ emotional displays on customer emotions and their consequences for customers constitute the focus of this research. In Figure 1, we show the conceptual model and the specific hypotheses tested herein. In the following section, we discuss the proposed relationships in detail.

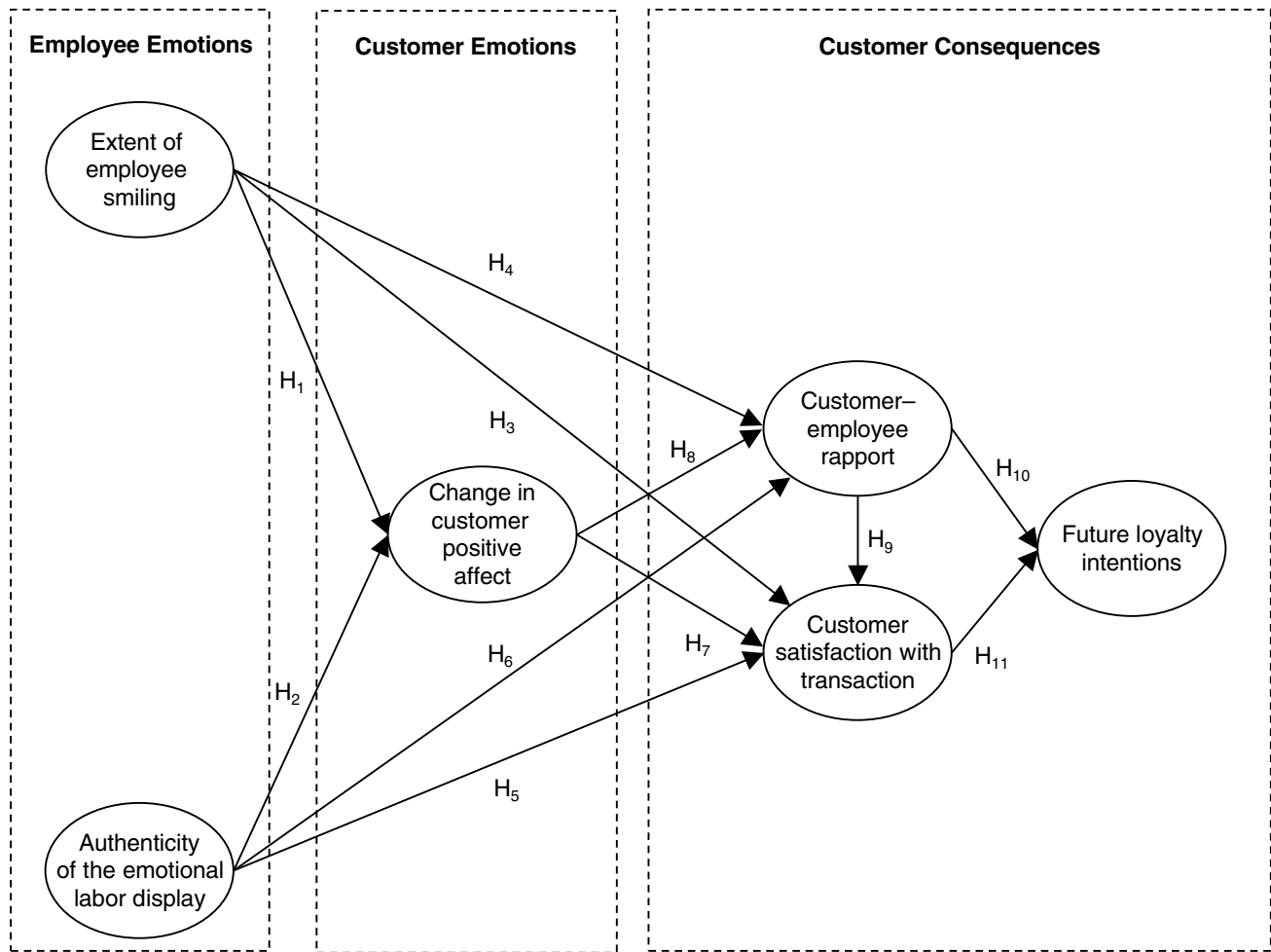
Impact of Employee Emotions on Customer Emotions

Drawing on emotional contagion and emotional labor theories, we contend that in interpersonal interactions between employees and customers, the likelihood that an employee’s emotions affect customer emotions is facilitated by two key variables: the extent of an employee’s smiling and the authenticity of his or her emotional labor display. Although prior research has found that employees who deliver “service with a smile” increase a customer’s service experience (e.g., Rafaeli and Sutton 1989; Tsai and Huang 2002), little is known about how or why an employee’s display of emotions is related to customer consequences. Emotional contagion theory (Hatfield, Cacioppo, and Rapson 1994) suggests that people’s expression of positive emotions facilitates a corresponding emotional state in others. McHugo and colleagues (1985) demonstrate that exposure to images of smiling faces produces corresponding observed and self-reported emotions in study participants. Furthermore, as we discussed previously, primitive (i.e., subconscious) emotional contagion suggests that the extent of a service employee’s positive emotional display (e.g., amount of smiling) is the key driver of emotional contagion (Hatfield, Cacioppo, and Rapson 1994). Thus, on the basis of the assumption that customers perceive employee smiling, we argue that if an employee increases his or her amount of smiling, customers are more likely to mimic these facial expressions subconsciously during the encounter, thus altering their own emotional state. We use the term “customer positive affect” for this positive emotional state (DeWitt and Liu 2002; Watson and Tellegen 1985).

H₁: High amounts of employee smiling lead to a greater increase in customer positive affect than do low amounts of employee smiling.

We also expect that the authenticity of the service employee’s emotional labor display influences the customer’s emotional state. As we indicated previously, deep acting and surface acting are alternative strategies that

FIGURE 1
A Conceptual Model of Employee and Customer Emotions in Service Interactions



employees use to ensure that their emotional display toward customers conforms to organizational display rules. A key difference between these two emotional labor strategies is the degree of authenticity of the emotional display (Brotheridge and Grandey 2002; Hochschild 1983; Kruml and Geddes 2000). We argue that a high level of authenticity of the employee’s emotional labor display, a main characteristic of deep acting, triggers positive emotions within customers due to their preference for being treated in an honest and authentic way. In contrast, we do not expect such positive customer emotions when the employee’s emotional display is inauthentic, which is a main characteristic of surface acting. Evidence from the social psychological literature on authentic (i.e., Duchenne) smiles and emotion recognition supports this view. For example, Ekman and colleagues (Ekman 1992; Ekman, Davidson, and Friesen 1990; Ekman and Friesen 1982) show that authentic smiles stimulate more positive emotional reactions by respondents than do “faked” smiles. It is argued that this distinction in reactions is due to different neurological bases, in that observers often respond more positively to some subtle facial cues associated with authentic emotional displays, including the

symmetry of the smile or the activation of certain muscle groups around the eyes (Ekman and Friesen 1982; Ekman, Friesen, and O’Sullivan 1988). Thus, customer reactions to authentic emotional displays are likely to be more positive than those to inauthentic displays.

This argument receives additional support from conscious emotional contagion theory (Barsade 2002; Bartel and Saavedra 2000), according to which the lack of authenticity associated with employee surface acting makes it less likely that customers can reduce their service-related ambiguity through the adoption of the employee’s emotions (Grandey et al. 2005; Kruml and Geddes 2000). In the case of deep acting, however, employees summon true and genuine emotions from within and thus display positive emotions to customers that are authentic, enabling those customers to adopt the employee’s emotions consciously—that is, to use the employee’s displayed emotions as a type of social information to reduce the ambiguity associated with the service experience. In other words, the change in customer positive affect should be greater when employees’ emotional labor displays are authentic (i.e., engage in deep acting) than when they are inauthentic (i.e., surface acting):

H₂: A high level of authenticity of the employee's emotional labor display (i.e., deep acting) leads to a greater increase in customer positive affect than does a low level of authenticity of the emotional labor display (i.e., surface acting).

Customer Consequences of Employee Emotions

In addition to the proposed effects on customer positive affect, we also expect that the independent variables (i.e., extent of employee smiling and authenticity of the emotional labor display) directly affect both customer satisfaction with the transaction and customer-employee rapport. Regarding customer satisfaction, customers often interpret an employee's emotional display as part of the service itself (i.e., the notion of service as theater; Grove and Fisk 1992), which suggests that they hold expectations about the display of positive emotions (i.e., smiling) that influence their level of satisfaction (Tsai 2001). Regarding customer-employee rapport, an employee's smiling may be an antecedent of rapport, in that it increases the receiver's enjoyment of the personal interaction (Gillis, Bernieri, and Wooten 1995; Tickle-Degnen and Rosenthal 1990).

H₃: High amounts of employee smiling lead to a greater increase in customer satisfaction with the transaction than do low amounts of employee smiling.

H₄: High amounts of employee smiling lead to a greater increase in customer-employee rapport than do low amounts of employee smiling.

Similarly, we expect that the provision of authentic emotions as part of employee deep acting leads to greater customer satisfaction and rapport than does an inauthentic emotional labor display (i.e., surface acting). Grandey (2003) finds that employees' use of deep acting leads to higher ratings of service delivery than does the use of surface acting, and Grandey and colleagues (2005) report that customer satisfaction is higher when customers perceive employee behavior as authentic. Grandey (2003) also provides support for the direct impact of the type of emotional labor strategy on customer-perceived rapport. In her study, employees' deep acting is related to perceptions of friendliness and warmth, both of which are considered characteristics of rapport (Gremler and Gwinner 2000).

H₅: A high level of authenticity of the employee's emotional labor display (i.e., deep acting) leads to a greater increase in customer satisfaction with the transaction than does a low level of authenticity of the employee's emotional labor display (i.e., surface acting).

H₆: A high level of authenticity of the employee's emotional labor display (i.e., deep acting) leads to a greater increase in customer-employee rapport than does a low level of authenticity of the employee's emotional labor display (i.e., surface acting).

Relationships Between Customer Emotions and Customer Consequences

Theoretical support for the impact of a customer's emotional state on his or her satisfaction comes from service research, which suggests that customer satisfaction with a service encounter is strongly influenced by customer emo-

tions (Oliver 1997). In particular, when customers assess a specific consumption experience (i.e., form their level of satisfaction with the service), they draw strongly on their current emotional state and ask themselves questions such as "How do I feel about it?" Thus, a change in a customer's emotions due to an employee's emotional display should influence the customer's satisfaction. This impact is consistent with the affect-as-information model from social psychology (Schwartz and Clore 1988), which suggests that people rely on their moods as information cues when they make evaluative judgments. Consequently, a change in customer emotions facilitated by an employee's emotional display should lead to a change in customer satisfaction, such that an increase in customer positive affect results in higher levels of satisfaction.

H₇: An increase in customer positive affect has a positive effect on customer satisfaction with the transaction.

We further hypothesize that an increase in customer positive affect as a result of employee emotions will influence customers' perceptions of their rapport with the employee. Specifically, when a customer is "infected" by an employee's positive emotions as a result of a service interaction, the customer likely will enjoy the interaction with the service employee to a greater extent. Because an enjoyable interaction is a key characteristic of customer-employee rapport (Gremler and Gwinner 2000), an increase in customers' positive emotions should ultimately lead to higher levels of rapport.

H₈: An increase in customer positive affect has a positive effect on customer-employee rapport.

The services literature also indicates relationships among customer-employee rapport, customer satisfaction with the transaction, and future loyalty intentions. Specifically, we argue that rapport is positively related to customer satisfaction because an enjoyable interaction with a high degree of customer-employee rapport is usually one in which customers reveal personal information, which enables employees to customize the service offering to the customer's needs (Gremler and Gwinner 2000); both of these elements are considered integral parts of customer satisfaction. Furthermore, we expect that customer satisfaction is positively related to customers' future loyalty intentions through the creation of positive attitudes toward the service provider (Yi 1990), a claim we base on both attitude theory (Fishbein and Ajzen 1975) and exit-voice theory (Hirschman 1970). Finally, because customers who personally like a service employee and have rapport with him or her can be expected to form positive expectations about a future service experience with this employee (Gremler and Gwinner 2000), we propose that customer-employee rapport has a positive relationship to customers' future loyalty intentions.

H₉: Customer-employee rapport is positively related to customer satisfaction with the transaction.

H₁₀: Customer-employee rapport is positively related to customers' future loyalty intentions.

H₁₁: Customer satisfaction with the transaction is positively related to customers' future loyalty intentions.

Methodology

Participants

Participants in the experiment were undergraduate and graduate students from various non-business schools of a medium-sized university. The final sample contained data from 223 participants, 46.8% of whom were women. The mean age of the respondents was 23.5 years ($SD = 3.2$); ages range from 18 to 48 years. Although the use of student samples is sometimes considered a limitation in marketing research, drawing on student samples in experimental designs, especially those involving role playing, is well accepted for examining causal relationships (e.g., Barsade 2002; Surprenant and Solomon 1987).

We contacted participants through the university's Web site and course announcements; they received either a free movie ticket for a local movie theater or a free DVD movie in return for their participation. Before the actual data collection, we conducted a pretest with 32 consumers to assess the adequacy of the study design and the experimental manipulations and to ensure that the psychometric properties of our study measures were adequate.

Procedure

General research design. We informed all participants that a new business model for a personalized movie rental service was being tested at the university. The service was positioned as a new "movie consulting service" for which customers would answer a series of questions about their movie-viewing habits and preferences in a one-to-one consultation with a service employee (unbeknownst to the subject, this employee was a trained actor). Based on their answers, customers would then receive personalized advice for potential movie rentals from the employee. Throughout the duration of the study, professionally designed posters that promoted this new service appeared in various locations at the university. The university also set aside specific facilities to serve as the movie consulting service location for the duration of this study. The layout and interior decoration of these facilities resembled those of actual video rental services (e.g., a service counter, shelves containing movies, movie posters, and life-sized figures announcing current and upcoming movies). Donations of actual DVD and VHS movies and various poster displays from local video rental stores and movie theaters decorated the facilities and thus increased the realism of the servicescape (see Figure 2).

Experimental manipulations. Using a 2×2 between-subjects factorial design, we manipulated the extent of employee smiling (high versus low) and the authenticity of the emotional labor display (high authenticity/deep acting versus low authenticity/surface acting). We randomly assigned participants to one of the four experimental conditions, high smiling/deep acting ($n = 58$), high smiling/surface acting ($n = 52$), low smiling/deep acting ($n = 55$), and low smiling/surface acting ($n = 58$).

Dramaturgy. We used appointments to schedule one participant at a time, which limited waiting time and elimi-

nated potential interactions among the participants. On arrival, each participant filled out a preencounter questionnaire and then immediately entered the video consulting store to begin the service encounter. During the service encounter, participants interacted with the service employee, who engaged them in a conversation by asking a series of specific questions about movie preferences and viewing habits. The service encounter concluded with the employee recommending a specific movie on DVD or VHS, which he or she then handed to the customer. In general, these service encounters lasted between 5 and 10 minutes ($M = 7.5$ minutes).

Actors. The service employees were three trained student actors (two female, one male) whom we specifically recruited for this study and paid for their time. We hired these actors on the basis of their experience in service work, their interest in acting, and their knowledge of motion pictures. Initially, we narrowed the pool of potential candidates down to six people, all of whom then performed in a series of auditions and rehearsals and participated in the pretest of the experiment. On the basis of their performances in these tests, we selected the final three actors and trained them over a period of six weeks.

Furthermore, we developed a role description for each of the four conditions. All roles required the actors to behave in a customer-oriented manner and avoid the display of negative emotions. For the extent of smiling manipulation, we trained the employees to smile frequently when displaying a high level of smiling and to minimize their smiling when displaying low-level smiling behavior. In line with previous research, we defined smiling as a noticeable upward twist of the employee's lips (Pugh 2001; Sutton and Rafaeli 1988). For the authenticity of the emotional labor display manipulation, we trained the actors in accordance with the characteristics of surface and deep acting, as described in the literature. They read some pertinent introductory literature (e.g., Grandey 2003; Hochschild 1983), and two of the authors then discussed the concepts with the actors for a total of ten hours. Mainly, we drew from the concept of method acting by showing movie excerpts and using teaching techniques associated with method acting. For the surface acting role (i.e., low authenticity of the emotional labor display), the employee was instructed to adapt only his or her outward behavior to the customer's needs but not his or her inner feelings. For deep acting (i.e., high authenticity of the emotional labor display), the employee was instructed to create the appropriate emotions within him- or herself. To teach these actors the skills to do so effectively, we employed specific exercises used in Stanislavski's (1965) acting technique, which are commonly taught to acting students as part of their basic training. These exercises target the development of specific skills for using emotion memories (i.e., remembering and reexperiencing specific emotions) to evoke the required emotions. We continued the training until both the actors and the researchers were satisfied that the actors had mastered a sufficient skill set to enable them to act out the specific roles required for the experiment.

FIGURE 2
Design of the Video Consulting Store



Finally, we developed a standardized service script that consisted of a list of questions about customers' movie-related preferences to ensure that all service encounters would be identical in nature in all respects other than the experimental manipulations (for further details about the service script, see Appendix A). Data collection took place over a period of seven days. Each actor played only one role per day over a time of approximately two-and-a-half hours. We randomly determined the roles in advance, and each actor performed for roughly equal amounts of time in each of the four roles.

Measures

Preencounter questionnaire. Study participants received a questionnaire just before they entered the video rental store, which included four items from Brief and colleagues' (1988) job affect scale to measure preencounter customer positive affect (see also Burke et al. 1989). We dropped two of the original six items (strong and active) because we deemed them to be inappropriate for use by customer respondents. In addition, to conceal the true nature of the study, the preencounter questionnaire contained various

filler items about preferences and consumption behaviors for motion pictures.

Postencounter questionnaire. Participants completed a postencounter questionnaire immediately after the end of the service encounter; it included measures of postencounter customer positive affect, customer-employee rapport, customer satisfaction with the transaction, and future loyalty intentions, as well as demographic variables. We assessed postencounter customer positive affect with the same items used in the preencounter survey and calculated any changes as postencounter customer positive affect less preencounter customer positive affect for each of the four items.² To measure rapport, we used four items from

²There is an ongoing discussion about the problems associated with the use of difference scores (e.g., Peter, Churchill, and Brown 1993). These issues predominantly address the integration of two measures (e.g., service expectations and service performance evaluation) but are less relevant when the same construct is measured at two points in time. Two common concerns about difference scores are that they lack variability and do not differ from the initial level (Tisak and Smith 1994). However, these issues do not

the scale developed by Gremler and Gwinner (2000); we excluded items that implicitly suggest a long-term relationship between the customer and the employee. For customer satisfaction with the transaction, we used five items from the work of Churchill and Surprenant (1982) and Bitner and Hubbert (1994). Finally, we measured future loyalty intentions with four items, three of which we adapted from the work of Zeithaml, Berry, and Parasuraman (1996) and one from the work of Taylor and Baker (1994). We measured all items using seven-point scales, in which higher numbers indicated greater agreement with the construct (for a list of all study items, see Appendix B).

Results

Manipulation Checks

We employed several methods to ensure the validity of our study manipulations. First, unbeknownst to customers, all service encounters were recorded with a hidden digital video camera and transmitted in real time to an adjacent room. Two trained judges (one of the authors and one graduate student) watched each interaction to judge whether it was consistent with the required experimental manipulation. Service encounters that the judges deemed to be inconsistent with the required role were dropped from further analyses. Second, because the authenticity of the emotional labor display manipulation ultimately depends on an employee's self-evaluation, after each service encounter, we asked the service employees whether they believed they had effectively portrayed the desired role. In addition, during the debriefing, one participant guessed the true nature of the study. As a result of these measures, we excluded three service encounters from further analysis, which resulted in 223 usable encounters.

Third, after completion of the study, four graduate students (two male, two female) who were not familiar with the study watched all 223 videotaped service encounters and rated each interaction on several dimensions.³ Specifically, two of the judges separately watched all interactions and recorded (1) the frequency of employee smiles (defined as the number of times the employee noticeably smiled) during each interaction and (2) the duration of each smile (measured in seconds). We transformed these data into a smiles-per-minute measure and a measure of the percentage of time the employee smiled during each encounter, which enabled us to control for service encounter length. The interrater agreement, which we measured with the intraclass correlation coefficient (ICC; Shrout and Fleiss 1979), was high between the two judges for both items (frequency of smiles: ICC = .909, $p < .01$; duration of smiles: ICC = .948, $p < .01$). The ANOVA results also showed that the manipu-

lation of the extent of employee smiling had a significant effect on the frequency of smiles per minute ($M_{\text{high extent}} = 3.5$, $M_{\text{low extent}} = .4$; $F(1, 220) = 386.62$, $p < .01$) and the percentage of time spent smiling ($M_{\text{high extent}} = 35.2\%$, $M_{\text{low extent}} = 1.8\%$; $F(1, 220) = 417.09$, $p < .01$), as intended. We found no significant effect for the authenticity of the emotional labor display on the frequency of smiles ($M_{\text{high authenticity}} = 2.0$, $M_{\text{low authenticity}} = 1.8$; $F(1, 220) = 1.08$, not significant [n.s.]), though it influenced the percentage of time spent smiling ($M_{\text{high authenticity}} = 23.9\%$, $M_{\text{low authenticity}} = 12.6\%$; $F(1, 220) = 18.64$, $p < .01$), which suggests a potential confounding of the manipulations. As Perdue and Summers (1986, p. 323) suggest, providing evidence that the effect sizes for unintended manipulations are substantially smaller than those for the intended manipulations indicates that the experimental manipulations have worked effectively and that statistical significance "should not be of great concern." In our case, the extent of the employee smiling manipulation had a much greater effect on the percentage of time spent smiling (partial $\eta^2 = .656$) than did the authenticity of the emotional labor display manipulation (partial $\eta^2 = .078$), thus providing support for the validity of our experimental manipulation.

The other two judges also watched all 223 videotaped interactions and separately provided a global rating of the authenticity of the employee's emotional display for each interaction (on a four-point scale ranging from "not at all authentic" [1] to "very authentic" [4]). Again, interrater agreement was high between the two judges (ICC = .927, $p < .01$). The authenticity of the emotional labor display manipulation had a significant effect on authenticity ratings ($M_{\text{high authenticity}} = 3.8$, $M_{\text{low authenticity}} = 1.2$; $F(1, 220) = 2552.78$, $p < .01$), as intended. The extent of employee smiling also had a significant main effect on authenticity ratings ($M_{\text{high extent}} = 2.7$, $M_{\text{low extent}} = 2.3$; $F(1, 220) = 4.21$, $p < .05$), but the effect size of the authenticity of the emotional labor display manipulation (partial $\eta^2 = .932$) was greater than that of the employee smiling manipulation (partial $\eta^2 = .147$), again providing support for the validity of our experimental manipulation.

Reliability and Validity Assessment

We report the means, standard deviations, and correlation coefficients of all variables in Table 1. To assess the reliability and validity of our measures, we calculated Cronbach's alpha coefficients for each construct. All alpha scores are satisfactory, with no values below .80. In addition, we conducted a confirmatory factor analysis with all multi-item measures in the model. The overall fit statistics for the four-factor model indicate that the model provides an acceptable fit to the data: $\chi^2(129, N = 223) = 333.7$, $p < .01$; comparative fit index = .950; incremental fit index = .950; Tucker-Lewis index = .941; standardized root mean square residual = .048; and root mean square error of approximation = .086.

The average variance extracted is greater than .60 for all constructs, and the composite reliability measures are all greater than .80. We also find support for convergent validity because the t-values for all constructs are significant at $p < .01$ (Anderson and Gerbing 1988). Similarly, we

appear to be critical in our case. Specifically, the standard deviations of the difference scores range from 1.46 to 1.65, and the correlation between the difference score and preencounter affect (-.34), though significant, is smaller than 1.

³We thank the anonymous reviewers for their suggestions of how to use the videotaped encounters to provide additional manipulation checks for this study.

TABLE 1
Descriptive Statistics, Reliability Information, and Correlations

	Number of Items	M	SD	1	2	3	4	5	6
1. Customer positive affect (preencounter)	4	3.70	1.20	.812					
2. Customer positive affect (postencounter)	4	4.41	1.41	.556	.904				
3. Change in customer positive affect	4	.71	1.24	-.336	.596	.806			
4. Customer-employee rapport	4	4.91	1.66	.233	.643	.503	.967		
5. Customer satisfaction with transaction	5	4.69	1.47	.323	.771	.561	.827	.932	
6. Future loyalty intentions	4	5.12	1.56	.269	.662	.486	.696	.798	.940

Notes: N = 223. Values along the diagonal represent Cronbach's alpha internal consistency estimates. All correlations are significant at $p < .01$ (two tailed).

find support for discriminant validity; the squared correlations between each pair of constructs are smaller than the average variance explained of the respective constructs (Fornell and Larcker 1981). Thus, these results indicate the acceptable reliability, convergent validity, and discriminant validity of our measures.

Two-Way Repeated Measures ANOVA

To test H_1 and H_2 , we conducted a two-way repeated measures ANOVA to examine the effects of the extent of employee smiling and the authenticity of the emotional labor display on the change in customer positive affect. The within-subjects factor, customer positive affect, contains two levels: preencounter affect (Time 1) and postencounter affect (Time 2). As Tables 2 and 3 show, the extent of employee smiling has no significant main effect on customer positive affect ($F(1, 217) = 1.5$, n.s.), but the authenticity of the emotional labor display by employees has a significant effect ($F(1, 217) = 35.2$, $p < .01$, partial $\eta^2 = .139$).⁴ The nature of this effect is in the expected direction: Employees who express authentic emotions by engaging in deep acting facilitate customer positive affect to a much greater extent (change in customer positive affect = 1.18, SD = 1.09) than do those who display inauthentic emotional labor by engaging in surface acting (change in customer positive affect = .25, SD = 1.22). This finding holds true not only for the overall composite score of customer affect but also for each of the four emotions (i.e., elated, peppy, enthusiastic, and excited). Thus, we find strong evidence in support of H_2 but not of H_1 . Therefore, we conclude that employees' emotional displays affect customers' emotional states, but this process appears to be driven primarily by the authenticity of the emotional labor display rather than by primitive emotional contagion through employee smiling.

PLS Equation Modeling

Next, we tested all elements of our conceptual model simultaneously with PLS structural equation modeling. As a component-based method, PLS permits the use of nominal data, which we need to assess the effects of smiling and

authenticity (Fornell and Bookstein 1982). Furthermore, as a distribution-free method, PLS has fewer constraints and statistical specifications than covariance-based techniques, such as LISREL.

We operationalized both the extent of employee smiling and the authenticity of the emotional labor display as dichotomous variables (1 = low extent, 2 = high extent; 1 = low authenticity/surface acting, 2 = high authenticity/deep acting, respectively). To estimate the model paths, we used PLS Graph 3.0 and estimated the inner weightings with the path method (Chin 2001). To estimate the predictive power of the model, we applied a blindfolding approach (Fornell and Bookstein 1982). This approach results in Q^2 values of .38 (change in customer positive affect), .67 (customer satisfaction), .81 (rapport), and .72 (loyalty intentions), all of which are significantly different from 0 and therefore indicate that the model has predictive power (Geisser 1974; Stone 1974). The model explains 14.8% of the variance in change in customer positive affect, 47.6% of the variance in rapport, 71.7% of the variance in customer satisfaction with the transaction, and 65.9% of the variance in future loyalty intentions, in further support of its relevance (Chin 1998). All indicator reliabilities are greater than .75, composite reliability is greater than .85 for all constructs, and the average variance explained is greater than .60 in all cases (for more detailed information, see Appendix B). To determine whether the use of a difference score measure for change in positive affect influenced the results, we also analyzed an alternative model with postencounter customer positive affect rather than change in customer positive affect, but we found no differences between the two models.⁵

The PLS results support most of our hypotheses about the inner model relationships and provide convergent validity for the findings of the two-way repeated measures ANOVA (see Table 4).⁶ Specifically, our results show that the authenticity of the employee's emotional labor display

⁴Although we did not formally hypothesize an interaction effect, our examination indicates that both effects are largely independent with no interaction effect ($F(1, 217) = .607$, n.s.). We also investigate the extent to which the results are influenced by the individual employees by controlling for actors in the analysis. This did not change the results.

⁵Significance levels and the direction of the effects for all hypothesized paths are identical to those of the difference score model. The variance explanations for the postencounter model are 11.6% for postencounter customer positive affect, 60.4% for rapport, 78.4% for customer satisfaction, and 66.0% for loyalty intentions.

⁶We generated the t-values through a bootstrapping procedure with 223 resamples with 100 cases each (Fornell and Bookstein 1982).

TABLE 2
Results of the Two-Way Repeated Measures ANOVA

Independent Variable	d.f.	Overall Customer Positive Affect		Elated		Peppy		Enthusiastic		Excited	
		F	Partial η^2	F	Partial η^2	F	Partial η^2	F	Partial η^2	F	Partial η^2
Extent of employee smiling (SMILE)	1	1.549		2.708		1.309		.190		1.179	
Authenticity of the emotional labor display (AUTH)	2	35.175*	.139	23.565*	.098	12.943*	.057	16.185*	.070	31.388*	.128
SMILE \times AUTH	2	.607		.348		.938		.002		1.049	
Error	217	(.666)		(1.193)		(1.095)		(1.010)		(1.181)	

* $p < .01$.

Notes: We calculate the overall composite score for customer positive affect as the mean value of the four emotion items. Values in parentheses are mean square terms.

TABLE 3
Means and Standard Deviations for Customer Positive Affect

		Customer Positive Affect		
		Time 1: Preencounter	Time 2: Postencounter	Change in Customer Positive Affect
Extent of employee smiling	High extent	3.72 (1.21)	4.54 (1.38)	.82 (1.26)
	Low extent	3.69 (1.20)	4.30 (1.44)	.61 (1.21)
Authenticity of the emotional labor display	High authenticity	3.71 (1.20)	4.87 ^a (1.28)	1.18 ^b (1.09)
	Low authenticity	3.70 (1.21)	3.95 ^a (1.40)	.25 ^b (1.22)

Notes: Standard deviations are shown in parentheses. Values with the same superscript are significantly different from each other at $p < .001$; all other values do not significantly differ.

has a strong and significant impact on the change in customer positive affect—high authenticity through deep acting results in a significantly greater increase in the change in customer positive affect than does low authenticity through surface acting—but the extent of employee smiling does not significantly influence the change in customer positive affect.

The extent of employees' smiling and the authenticity of their emotional labor display both have a significant, direct impact on customer–employee rapport, in support of H_4 and H_6 , but they do not affect customer satisfaction, which fails to support H_3 and H_5 . The PLS results also show that change in customer positive affect has a significant effect on both customer satisfaction with the transaction and customer–employee rapport, in support of H_7 and H_8 , respectively. Rapport positively influences customer satisfaction (in support of H_9), and customer satisfaction positively influences future loyalty intentions (in support of H_{11}). Contrary to our expectations, rapport has no direct relationship to future loyalty intentions, leading us to reject H_{10} . However, the total effect of rapport on loyalty intentions is strong and significant as a result of the strong impact of rapport on satisfaction (for a listing of all total effects, see Table 4).

Discussion

What We Have Learned

The purpose of this study was to develop and experimentally test a conceptual model of how employee emotions influence customers in service encounters. We apply a two-way repeated measures ANOVA and PLS structural equation modeling to data collected from a sample of 223 consumers. The results of this research provide several important contributions to the literature.

First, we fill an important gap in the service marketing literature by providing empirical evidence that an employee's emotional display can trigger changes in a customer's affective state. Our study is the first to provide a direct test of emotional contagion and its related processes in service interactions, and the controlled experimental design of our study enables us to test causal effects between different facets of an employee's display of emotions and the customer's state.

Second, our findings suggest that the authenticity of the employee's emotional labor display, rather than the extent of smiling, influences the customer's emotions and perceptions. Respondents in our study who encountered authentic employees (i.e., those who engaged in deep acting) were far more likely to adopt the emotions of that employee than were those who interacted with inauthentic employees (i.e., those who engaged in surface acting). This finding contributes to the emotional labor literature in that our study is the first to provide evidence that different types of emotional labor (i.e., deep versus surface acting) differentially influence the customer experience during service encounters. Furthermore, our findings contribute to the emotional contagion literature by contradicting the dominant belief that emotional contagion in service settings is based mainly on mimicry effects (i.e., primitive contagion processes; see, e.g., Pugh 2001). Although mimicry effects occur within extremely short time frames (often less than one second) and thus might affect the receiver's emotions for a short period, our results suggest that their impact fades during the course of a service encounter. That is, primitive emotional contagion might occur in the early phases of service encounters, but it does not remain throughout the completion of the encounter, because postencounter emotions do not appear to be influenced by mimicry effects.

Third, our findings provide support for the affect-as-information theory, which links customer emotions to satisfaction (Schwartz and Clore 1988); the results show that both the customer's postencounter emotional state and change in positive affect lead to increased customer satisfaction. An increase in customer positive affect also influences customer satisfaction indirectly through customer–employee rapport. Because satisfaction is positively related to customers' future loyalty intentions, employees' emotional displays appear to play important roles in a service firm's long-term success and have significant impacts on key customer outcomes.

Fourth, we could not replicate Grandey and colleagues' (2005) results of a direct relationship between emotional labor and customer satisfaction. In our study, the two paths from the extent of employee smiling and the authenticity of the emotional labor display to customer satisfaction are not significant. Therefore, our results suggest that such effects are of an indirect nature, with customer–employee rapport being the main driver of customer satisfaction. Thus, the

TABLE 4
Path Coefficients from PLS Analysis

Hypothesis	Impact of	On	Path Coefficient	t-Value	Total Impact	Hypothesis Supported?
H ₁	Extent of employee smiling	Change in customer positive affect	.070	1.081	.070	No
H ₂	Authenticity of the emotional labor display	Change in customer positive affect	.375*	4.572	.375	Yes
H ₃	Extent of employee smiling	Customer satisfaction with transaction	-.046	-1.081	.014	No
H ₄	Extent of employee smiling	Customer-employee rapport	.194*	2.752	.217	Yes
H ₅	Authenticity of the emotional labor display	Customer satisfaction with transaction	-.055	-1.100	.384	No
H ₆	Authenticity of the emotional labor display	Customer-employee rapport	.453*	6.654	.574	Yes
H ₇	Change in customer positive affect	Customer satisfaction with transaction	.206*	3.041	.453	Yes
H ₈	Change in customer positive affect	Customer-employee rapport	.323*	5.041	.323	Yes
H ₉	Customer-employee rapport	Customer satisfaction with transaction	.765*	11.380	.765	Yes
H ₁₀	Customer-employee rapport	Future loyalty intentions	.109	1.342	.651	No
H ₁₁	Customer satisfaction with transaction	Future loyalty intentions	.720*	7.491	.720	Yes

* $p < .05$.

link between authenticity of the emotional labor display and customer satisfaction is not as direct as previously thought but instead is mediated by the extent to which customers perceive that rapport with the service employee exists. A possible explanation of this finding is that whereas the construct of rapport focuses mainly on the interaction with the employee, satisfaction also captures the customer's assessment of other aspects of the service encounter, such as the design of the servicescape (i.e., "I like how the video store looks") and outcome qualities (i.e., "I like the movie I was given by the employee").

Fifth, although we find that customer-employee rapport is a driver of satisfaction, our results also suggest that rapport does not exert a direct influence on customer loyalty. Although previous marketing research has postulated such a direct relationship (Gremler and Gwinner 2000), our study suggests that the interplay among rapport, satisfaction, and future loyalty intentions may be more complex than previously believed.

What We Still Need to Learn

Although our findings expand the extant knowledge on emotions in service encounters, we recognize several limitations that must be taken into account when generalizing our results. The design of our experiment provides insight into the transfer of employee emotions in one specific service domain—an innovative video rental service—but it remains unclear whether findings would be similar for other services. Another limitation is that we focus on positive emotions because they are most relevant (and desired) in the service delivery context. However, similar ripple effects may occur for negative emotions. For example, anger and frustration displayed by employees may transfer to customers and negatively affect their service experience. Further research should address this issue by testing whether effects similar to those we find apply equally to the flow of negative emotions in the service delivery context.

Because participants in our study engaged in a service that was unfamiliar to them, their emotional processes were completely independent of any prior service interactions. However, in many real-life services, relationships between employees and customers have been established over a series of encounters, which might influence the emotional flow in future service transactions. Another avenue for further research would be to test the cross-cultural stability of our findings. Given that cultural norms about service delivery and smiling behavior in general vary across cultures, additional research should examine the extent to which cultural variables influence the interplay of employee emotional displays and customer variables in service deliveries.

What Marketing Managers Should Do

This study illustrates that the emotions displayed by frontline employees are an important driver of the relationships

between service employees and customers. The transfer of positive emotions from employees to customers can enable firms to establish high levels of customer-employee rapport, customer satisfaction, and future loyalty intentions, all key objectives of relationship marketing.

Our finding that customer affect is driven mainly by the authenticity of the emotional labor display, rather than the extent of employee smiling, has important implications for service marketers. First, it contradicts the common mantra in service organizations that service with a smile and friendly service staff inevitably pay off and serve as a competitive advantage. The commonly advocated "Smile!" policy that is currently in place in many firms may be a less useful strategy than is generally believed. Rather, our results indicate that the authenticity of the emotional display by frontline staff and the sincerity with which staff interacts with customers may be much stronger drivers of service outcomes than policies that require people to smile at any cost but do not provide them with the tools to create and display seemingly real emotions when they serve customers. Simply hiring low-paid service workers with limited qualifications and motivation and requiring them to smile at customers as part of their job description may not deliver the desired results, whereas the display of authentic feelings by service employees—facilitated by the use of deep acting—is likely to be more effective for positively influencing customer satisfaction and related service outcomes.

Second, in terms of managing frontline employees, the provision of authentic feelings is a far more challenging task than simply smiling at customers. Such strategy may require increased managerial emphasis on identifying and hiring talented and qualified frontline employees. Managers also may need to provide additional training for frontline staff that teaches them how to engage in deep acting. One such approach uses a perspective-taking technique, which puts employees in the customers' shoes and thereby increases their ability to adopt a customer's viewpoint (Parker and Axtell 2001). For example, flight attendant trainees can be taught strategies to deal with irate customers, such as imagining that something traumatic has happened in these customers' lives or by pretending that they are children (Hochschild 1983).

Third, our results confirm that the emotions customers experience during service encounters play crucial roles and directly affect the success of service relationships. Because customer emotions appear to be key drivers of rapport with employees and, ultimately, customer satisfaction and loyalty intentions, service organizations may benefit from focusing their attention on increasing positive customer emotions. This recommendation is consistent with emerging literature on customer delight (Rust and Oliver 2000), which stresses the emotional component of customers' service evaluations.

APPENDIX A
Summary of Service Script

- Step 1. As soon as the customer enters the video consulting store and steps toward the service counter, the employee makes eye contact with the customer and welcomes him or her to the store.
- Step 2. The employee briefly introduces the nature of the movie consulting business and its service offerings following a standardized script. The employee points out that this service is currently being tested and thus is free of charge to the customer.
- Step 3. The employee asks a series of standardized questions about the customer's movie-viewing habits and preferences. These questions follow a standardized order and cover the following topics: (1) preferences for specific movie genres, (2) preferences for happy endings, (3) importance of film directors in influencing choice of movies, (4) preferences for specific film directors, (4) preferences for specific lead actors and actresses, and (5) preferences for a movie's country of origin. During this process, the employee takes brief notes while the customer answers all questions.
- Step 4. Following the set of standardized questions, the employee briefly reviews his or her notes and summarizes the customer's responses.
- Step 5. The employee proceeds to recommend a specific movie to the customer on the basis of the customer's responses. The employee briefly introduces the movie using a standardized script. If the customer has already seen this movie or is not interested for other reasons, the employee recommends up to two additional movies.
- Step 6. When the movie choice is finalized, the employee asks the customer for his or her choice of DVD or VHS format, and the employee hands the movie to the customer. The customer is thanked for his or her business and leaves the video consulting store.

APPENDIX B
List of Items and Goodness-of-Fit Measures of PLS Analysis

Change in Customer Positive Affect (Composite Reliability [CR] = .871, Average Variance Extracted [AVE] = .627)	
At this moment, I feel ...	
elated.	.794
peppy.	.760
enthusiastic.	.800
excited.	.813
Customer Satisfaction with Transaction (CR = .948, AVE = .784)	
I am delighted by this service experience.	.922
This service experience really helped me to find a good movie.	.764
This service experience was a great one.	.863
I am satisfied with this specific service experience.	.939
I really liked this service experience.	.928
Customer–Employee Rapport (CR = .977, AVE = .913)	
In thinking about my relationship with this person, I enjoyed interacting with this employee.	.949
This employee created a feeling of "warmth" in our relationship.	.958
This employee related well to me.	.947
I was comfortable interacting with this employee.	.969
Future Loyalty Intentions (CR = .956, AVE = .846)	
The next time I need the services of a video store, I will choose this company.	.936
I will say positive things about this service provider to other people.	.922
I plan to visit this service provider in the next years.	.922
I will recommend this service provider to someone who seeks my advice.	.898

Notes: Numbers in the right-hand column are coefficients of determination.

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