Transforming service employees and climate: A multi-level multi- source examination of transformational leadership in building long-term service relationships

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Abstract:

This longitudinal field study integrates the theories of transformational leadership (TFL) and relationship marketing to examine how TFL influences employee service performance and customer relationship outcomes by transforming both (at the micro level) the service employees' attitudes and (at the macro level) the work unit's service climate. Results revealed that, at the individual level, managers' TFL was positively related to employee service performance, which, in turn, positively predicted customers' expressed intention to maintain a long-term service relationship with the service employee and manager-reported number of the employee's long-term customers measured 9 months later. In addition, the relationship between TFL and employee service performance was partially mediated by employee self-efficacy. Furthermore, store-level TFL was positively associated with store-level service climate, and service climate further enhanced the relationship between individual-level TFL and employee service performance.

Keywords: transformational leadership | service relationships and encounters | service linkage research | employee service performance | service climate

Article:

In a highly competitive environment, one of the most crucial business tenets is customer retention (Colgate & Danaher, 2000). Research has shown that keeping and satisfying current customers is much less costly and more profitable than obtaining new customers (e.g., Reichheld & Sasser, 1990). As a result, relationship marketing, or the set of activities directed toward establishing, developing, and enhancing long-term customer relationships (Gronroos, 1994; Levitt, 1986; Morgan & Hunt, 1994), has garnered growing interest from both research and practice communities. To date, this literature has focused on identifying different types of service relationships (Gutek, 1995; Gutek, Bhappu, Liao-Troth, & Cherry, 1999), demonstrating the benefits of relationship marketing to service companies (e.g., Reichheld & Sasser, 1990), and understanding the motivation for customers to engage in service relationships (e.g., Berry, 1995; Gwinner, Gremler, & Bitner, 1998). Less attention has been paid to *internal organizational determinants* of successful implementation of relationship marketing (Colgate & Danaher, 2000).

Organizational literature, conversely, has not paid enough attention to customer outcomes (Schneider & White, 2004). As a result, we have disjointed knowledge about how to improve customer service. There is, however, a stream of service linkage research (Wiley, 1996) that examines the relationship between the internal management of service organizations and the external customer outcomes (Hartline & Ferrell, 1996; Heskett, Sasser, & Schlesinger, 1997; Johnson, 1996; Liao & Chuang, 2004; Schneider, Ashworth, Higgs, & Carr, 1996; Schneider, Ehrhart, Mayer, & Saltz, 2005; Schneider, White, & Paul, 1998). The premise of this line of research is that front-line employees play a pivotal role in translating organizational functioning into desirable customer outcomes.

Building on the service linkage research, the current study examines transformational leadership (TFL; Bass, 1985) as an aspect of organizational internal functioning and explores the impact of TFL on building customer relationships through its impact on employee service performance. This study aims to extend TFL and customer service research in several ways. First, the integration of leadership with relationship marketing research is important, as it extends the study boundaries of these two research paradigms, offers a critical test of the impact of TFL on organizational effectiveness measures in the context of customer service, and provides a new perspective to relationship marketing on what service organizations can do from within the organization to enhance customer loyalty. Second, we examine how TFL influences employee service performance by delineating the transforming effects leaders may have both (at the micro level) on the individual service employees' attitudes and (at the macro level) on the work unit's service climate. Third, we propose that a positive unit service climate will act as a situational moderator and further enhance the influence of TFL on employee service performance. Figure 1 depicts the proposed conceptual model.
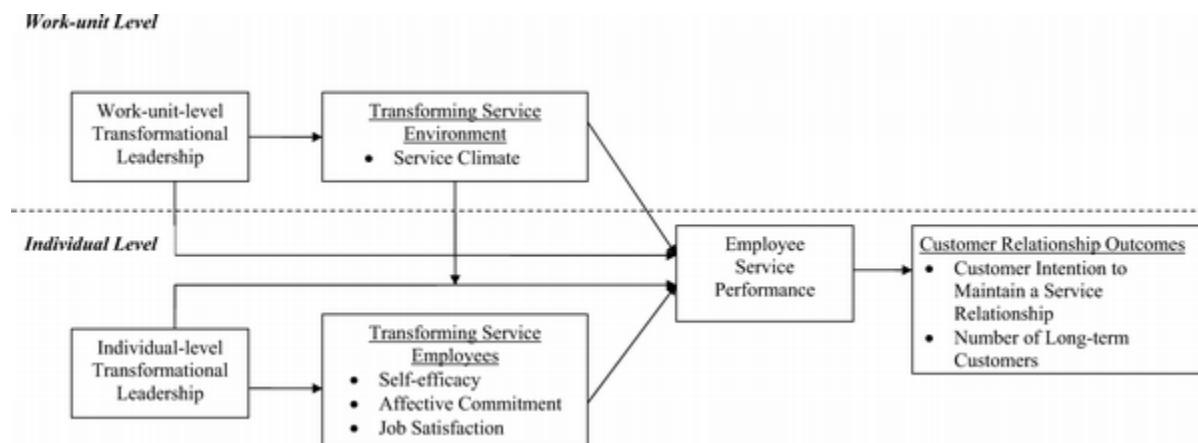

Figure 1. An integrated multilevel model of transformational leadership, employee service performance, and customer relationship outcomes. The dashed line separates work-unit-level constructs and individual-level constructs. Arrows crossing the dashed line represent cross-level relationships with the outcome variables.

TFL and Employee Service Performance

Front-line employees play a critical role in building customer relationships. Their service performance, or the behaviors they display while serving and helping customers to address customer needs and interests (Liao & Chuang, 2004), directly influence customer satisfaction and loyalty. Relationship marketing research suggests that the main motivation for a customer to establish and maintain a long-term service relationship with a service provider is to obtain relational benefits, such as trust, confidence, friendship, fraternization, and personal recognition (e.g., Bendapudi & Berry, 1997; Gwinner et al., 1998); therefore, a key element of service performance involves providing nonstandard, adaptive, and creative service (Gwinner, Bitner, Brown, & Kumar, 2005). In addition, as long-term service relationships are built via social and emotional bonds (Berry, 1995), service employees need to provide warm and personal service by being friendly, helpful, and attentive to customers. Third, it would hurt the trust of customers if service employees engaged in opportunistic behaviors to maximize personal short-term gain; thus, service performance needs to address customers' long-term needs (Gutek et al., 1999).

To date, research examining the antecedents of employee service behaviors has focused on factors such as employee personality, service climate, job characteristics, and human resource management practices (e.g., Borucki & Burke, 1999; Liao & Chuang, 2004; Rogelberg, Barnes-Farrell, & Creamer, 1999). The current study advances this area of research by considering the multilevel effects of TFL on employee service performance.

TFL

According to the theory of TFL (Bass, 1985), transformational leaders display four types of behaviors that enable followers to transcend self-interest and perform beyond expectations: *charisma*, or engaging in behaviors that cause followers to trust, admire, and identify with them; *inspirational motivation*, or articulating a compelling vision of the future that is appealing and inspiring to the followers; *intellectual stimulation*, or encouraging followers to challenge assumptions, reframe problems, and take risks; and *individualized consideration*, or tending to each follower's needs and treating followers on a one-on-one basis. Meta-analytical reviews have demonstrated the importance of TFL in shaping followers' attitudes and behaviors and in achieving desirable organizational outcomes (e.g., Judge & Piccolo, 2004). In the service context, a transformational leader may convey to followers the value and importance of providing superior customer service, increase their enthusiasm in serving customers, instill confidence in them that they can provide high-quality service that they previously considered impossible, encourage them to come up with new and creative ways to serve customers better, help remove obstacles that prevent them from delivering high-quality service, and recognize their individual contribution in customer service. Prior empirical studies conducted in sales showed that TFL was positively associated with follower outcomes (e.g., Dubinsky, Yammarino, Jolson, & Spangler, 1995; MacKenzie, Podsakoff, & Rich, 2001; Yammarino, Dubinsky, Comer, & Jolson, 1997). Therefore, we expect TFL to enhance employee service performance.

We further propose that TFL may function both at the individual level and at the work-unit level. *Individual-level TFL* refers to the leadership behaviors experienced and perceived by an individual employee; it can be viewed as a type of "discretionary stimulus" that transmits to individual employees differentially. *Work-unit-level TFL* refers to the overall pattern of leadership behaviors displayed to the entire work unit; it can be viewed as a type of "ambient

stimulus" that pervades the work unit and is shared among unit members (Hackman, 1992). As we delineate in the following sections, the theoretical rationales for the effects of TFL at different levels differ: Individual-level TFL enhances employee service performance primarily, although not entirely, through transforming the attitudes of individual service employees, whereas work-unit-level TFL enhances service performance partially by transforming the climate of the overall service environment. As these effects involve separate mediating mechanisms, TFL at both levels may explain unique variance in employee service performance. Our multilevel approach corroborates the recommendation to examine the impact of leadership at multiple levels of analysis (e.g., Dansereau & Yammarino, 1998; Podsakoff & MacKenzie, 1995; Yammarino & Bass, 1991). This approach is also consistent with the *contextual model* (Firebaugh, 1980), which examines the joint impact of an individual-level predictor and its aggregate in predicting individual-level outcomes (see Hofmann & Gavin, 1998, for a discussion of this type of multilevel model; see Liao & Rupp, 2005, and Naumann & Bennett, 2000, for example applications of this model to the justice climate research). Therefore, we propose the following:

> *Hypothesis 1:* Individual-level TFL and work-unit-level TFL are both positively related to employee service performance.

Individual-Level Leadership: Transforming Service Employees' Attitudes

TFL may influence follower performance by directly influencing the attitudes of individual followers. In developing the self-concept-based motivational theory of TFL and charismatic leadership, Shamir, House, and Arthur (1993) articulated that leaders increase the intrinsic motivation of followers by linking goals and efforts to followers' valued aspects of self-concepts. Through their verbal and symbolic behaviors, transformational leaders increase followers' self-efficacy, identification with their work unit, internalization of group values, and enjoyment in their task or role, which, in turn, act as powerful motivational forces to enhance follower performance (Bono & Judge, 2003; Shamir, Zakay, Breinin, & Popper, 1998). Applying this theory to relationship marketing, we argue that the unique requirement of providing customized, long-term-oriented, and personal service performance determines that three types of employee attitudes that TFL nourishes are especially important: employee self-efficacy, affective commitment, and job satisfaction.

Furthermore, according to the individual-differences view of leadership (e.g., Hall & Lord, 1995; Yammarino & Dubinsky, 1994), employees' attitudes are determined by their differential perceptions and cognitive categorizations of leadership behaviors (Yammarino et al., 1997). This perspective has received strong empirical support from prior work that found that the effects of TFL on employee attitudes manifested at the individual instead of the group or other level of analysis (e.g., Avolio & Yammarino, 1990; Mumford, Dansereau, & Yammarino, 2000; Yammarino & Dubinsky, 1994; Yammarino, Spangler, & Dubinsky, 1998). Therefore, we focus on the effects of individual-level TFL when examining its relationship with individual employees' attitudes.

Employee self-efficacy

Self-efficacy is an individual's belief in his or her ability to successfully perform tasks (Bandura, 1977). TFL theory (Bass, 1985) and the self-concept-based motivational leadership theory (Shamir et al., 1993) have consistently emphasized that a major goal of transformational leaders is to enhance followers' sense of self-worth and confidence via behaviors such as delegating responsibilities to followers, expressing confidence in subordinates, setting high performance expectations, and encouraging subordinates to come up with new and creative ideas. Isaksen (1983) also argued that leaders' behaviors yielding trust, genuineness, empathy, respect, and warmth may contribute to employees' general and task-specific efficacy beliefs. Supporting these arguments, prior studies found that TFL significantly predicted followers' self-efficacy (Dvir, Eden, Avolio, & Shamir, 2002; Kark, Shamir, & Chen, 2003).

Self-efficacy is important for employee service performance. The sense of personal mastery, or "can do" attitude, associated with enhanced self-efficacy is an important motivational factor (Conger & Kanungo, 1988). It affects both the initiation and the persistence of the individual's effort, especially in the face of obstacles and uncertainty (Bandura, 1977), which are common in provision of nonstandard, customized service. In addition, it has been found that self-confidence and independence are among the key personal characteristics that relate to creativity (Barron & Harrington, 1981); thus, self-efficacious employees may be more creative in coming up with novel solutions to meet the unique needs of a customer. Indeed, meta-analytic reviews have provided strong evidence for the positive relationship between self-efficacy and job performance (Stajkovic & Luthans, 1998). This relationship has also been found for customer service employees (e.g., Hartline & Ferrell, 1996). Thus, we expect self-efficacy to act as a mediator for the relationship between TFL and service performance.

Employee affective commitment

A transformational leader may also enhance employee service performance by increasing employee affective commitment. *Affective commitment* refers to an employee's emotional attachment to, identification with, and involvement in the organization (Meyer & Allen, 1997). According to the self-concept-based motivational theory of leadership (Shamir et al., 1993), social identification and value internalization are the central motivational processes through which TFL influences follower performance. Transformational leaders cause service employees to be emotionally attached to them, identify with organizational values and goals, and behave consistently with these values and goals. Previous research shows that TFL is positively associated with followers' affective commitment (Bycio, Hackett, & Allen, 1995) and identification and attachment (Shamir et al., 1998) to the group.

Affective commitment has been shown in a meta-analytical review to be positively associated with employee performance (Riketta, 2002). Although few studies in this regard examined employee service performance in terms of helping and interacting with customers, we argue that affective commitment is especially important for service employees to have in building long-term customer relationships. Employees with a high level of affective commitment embrace the organization's values of providing superior service and identify with the organization's goal of achieving customer satisfaction and loyalty. This commitment transfers into employee effort to provide warm and personalized service to customers. In addition, a highly affectively committed employee plans to remain in the organization as long as circumstances permit (Mowday, Steers,

& Porter, 1979); this long-term orientation makes the employee keep the long-term interest of the organization in mind and causes him or her to be less likely to engage in opportunistic behavior to maximize personal short-term gain at the cost of the organization. As a result, committed employees are more attentive to customers' long-term goals and interests, a key element of service performance. Therefore, we argue that affective commitment acts as an important mechanism through which TFL influences employee service performance.

Employee job satisfaction

Shamir et al. (1993) argued that one key motivational mechanism for the effect of TFL on follower performance to occur is through its effects on followers' relationships with their task or role. Employee job satisfaction reflects such relationships. A recent meta-analysis showed a strong positive relationship between TFL and follower job satisfaction ($\rho = .58$; Judge & Piccolo, 2004). This relationship should generalize to the service context; a transformational leader may be able to make the challenging job of providing customized, personal, and long-term-orientated service more enjoyable.

There are several reasons why job satisfaction is especially important in determining employee service performance. First, providing nonstandard, customized service implies that employees need to exercise their discretion in deciding what behaviors to undertake to best serve customers' diverse needs. This complex and autonomous job nature creates an uncertain, "weak situation" in which job satisfaction has a strong potential to affect behaviors (Judge, Thoresen, Bono, & Patton, 2001). Second, service employees need to appropriately display socially desired emotions during service encounters, such as being friendly and attentive (Hochschild, 1983). The emotional display of the service employees is especially important in building long-term service relationships with customers, because customers seek rapport and emotional bonding in such relationships (Berry, 1995). Employees who are more satisfied with their job are more likely to have positive moods and emotions at work and therefore are more likely to genuinely feel and display positive emotions while interacting with customers (Grandey, 2003). Third, as positive moods are associated with creative problem solving (Isen & Baron, 1991), employees who enjoy their job are more likely to come up with new ideas to customize their service delivery. Thus, we expect job satisfaction to act as a mediator for the relationship between TFL and employee service performance. In sum, we propose the following:

> *Hypothesis 2:* Employee self-efficacy, affective commitment, and job satisfaction partially mediate the individual-level relationship between TFL and employee service performance.

In this hypothesis, we propose a partial rather than a full mediation because there may be other mediation mechanisms separate from the self-concept-based motivational processes. For example, leader–member exchange (Graen & Uhl-Bien, 1995; Wang, Law, Hackett, Wang, & Chen, 2005) may also mediate the individual-level effect of TFL on employee performance.

Work-Unit-Level Leadership: Transforming Service Context

In addition to shaping followers' attitudes at the individual level, TFL may influence follower performance by transforming the general climate of the service environment at the work-unit level. This latter function of transformational leaders has received much less attention in TFL research. Barling, Loughlin, and Kelloway (2002) were among the first to examine such function and showed that TFL reduced occupational injuries partially through its effects on establishing a safety climate. Extending this research to the customer service context, we argue that TFL may create a positive service climate to enhance employee service performance.

Service climate refers to employees' shared perception of the policies, practices, and procedures concerning customer service; it constitutes the tone and atmosphere in which the employees work (Schneider et al., 1998). Because employees' climate perceptions are more likely to be shaped by their immediate organizational context (Schneider, 1983), leadership of the immediate supervisor may serve as "a key filter in the interpretations that provide the basis for subordinates' climate perceptions" (Kozlowski & Doherty, 1989, p. 547). Transformational leaders, in particular, may be powerful agents in transforming the work unit's service climate. By behaviors such as articulating a compelling vision of customer service, inspiring enthusiasm and optimism about winning customer loyalty, serving as employees' charismatic role model in service, encouraging new ways of serving customers, and recognizing employees' individual needs and contributions, transformational leaders may clearly communicate to service employees that organizational policies, practices, and procedures are focused on providing high-quality service and, hence, fostering a positive service climate.

As climate is a social–cognitive construct inferred from "procedures as pattern" (Zohar, 2000; Zohar & Luria, 2004), employees in a work unit assess whether the leader's public behaviors "converge into an internally consistent pattern" (Zohar, 2000, p. 588) in terms of emphasizing or deemphasizing service. It would hinder the emergence of a positive service climate if a leader's behaviors encouraged and rewarded good service on one occasion or for one employee yet discouraged and ignored good service on another occasion or for another employee. As a result, service climate is determined by the overall pattern of leadership behaviors displayed to the entire work unit instead of the one-on-one leadership behaviors perceived by each individual. We thus focus on the relationship between work-unit-level TFL and service climate.

Furthermore, we argue that a work unit's service climate may have a cross-level, top-down influence on an individual employee's service performance. A goal-specific organizational climate signals how things ought to be done and helps employees determine what behavior is appropriate in a given work environment, thus molding employees' behavior toward the specific goal of the organization (Schneider, 1983). In the service context, a positive service climate may help employees perceive that superior service is expected, desired, and rewarded, thus providing a strong motivational force for employees to deliver better service. Indeed, prior research has found that store service climate is positively associated with individual employees' service performance (Liao & Chuang, 2004). Thus, we expect service climate to act as a mediator through which work-unit-level TFL influences employee service performance. Because TFL may influence employee performance through other mechanisms, such as by implementing store-level practices that directly enhance employees' knowledge, skills, and abilities in customer

service (hence, their service performance), we propose a partial mediation rather than a full mediation.

> *Hypothesis 3:* Work-unit-level service climate partially mediates the relationship between work-unit-level TFL and individual-level employee service performance.

Service Climate as a Situational Enhancer of Leadership Effects

Next, we propose that a positive service climate may act as a *situational enhancer* (Howell, Dorfman, & Kerr, 1996) and further strengthen the influences of individual-level TFL on employee service performance. The strategic focus of service climate is to send behavioral signals to the employees about the imperatives of the service setting (Schneider et al., 2005). Therefore, a positive service climate provides the specific goals for TFL, directs employees' attention to what leaders say and do in addressing these goals, and thus underscores providing superior service and building long-term customer relations as the strategic focus.

To date, no study has examined the interaction between service climate and TFL. However, one study is relevant in supporting our proposition. Hofmann, Morgeson, and Gerras (2003) examined safety climate as a moderator for the individual-level relationship between leader–member exchange and subordinate safety citizenship behavior. They found that when there was a positive safety climate, high-quality leader–member exchange resulted in subordinates' expanded safety citizenship role definitions, which were positively related to safety citizenship behaviors. Hofmann et al. demonstrated that the specific climate within a work unit served to emphasize or deemphasize certain content-specific role expectations for employees when they responded to leaders' influences. Similarly, a positive service climate provides a strategic focus and content for TFL behaviors. The interaction between the two creates a synergy and more effectively directs employee behaviors toward achieving superior customer service. Therefore, we propose the following:

> *Hypothesis 4:* Work-unit-level service climate moderates the effect of individual-level TFL on employee service performance, such that the effect is stronger when there is a positive service climate.

Employee Service Performance and Customer Relationship Outcomes

Growing evidence supports the positive impact of employee service behaviors on desirable customer outcomes (Liao, 2007; Liao & Chuang, 2004; Schneider et al., 2005). However, prior studies of employee service performance have ignored the specific type of service interactions being studied. Building on the work of Gutek (1995; Gutek et al., 1999; Gutek, Cherry, Bhappu, Schneider, & Woolf, 2000), we focus on the one-on-one service relationship between the service provider and the matched customer.

Gutek (1995) developed a social relationships–based framework of service delivery mechanisms that included three types of interactions: service relationships, pseudorelationships, and service encounters. *Service relationships* occur when the customer has repeated contact with the same provider. In service relationships, "customer and provider can get to know each other as role

occupants and sometimes as acquaintances or even friends" (Gutek et al., 1999, p. 219). For example, a customer is said to have a service relationship with his or her hair stylist if this is the person he or she regularly sees for hair service. *Pseudorelationships* occur when a customer interacts with a different provider each time but within the same service organization. *Service encounters* refer to the one-time-only, sporadic interactions between customers and service providers in which customers interact with different providers from different service organizations each time.

Although service organizations may choose to attract, serve, and retain customers through any or all of these service delivery mechanisms, a service relationship with a specific service provider is at the core of relationship marketing. Gutek et al. (1999) found that customers who received service via a service relationship had a higher satisfaction level with their service experience and a higher frequency of service consumption than customers who received service via service encounters or pseudorelationships.

In a competitive market, customers have the ultimate power in deciding whether to maintain a service relationship with a service provider. We argue that employee service performance directly influences this decision. Previously, we have argued that key elements of employee service performance include providing customized, personal, and long-term-oriented service. Superior service performance provides relational benefits of trust, confidence, social bonds, and personal recognition to customers and thus increases customers' commitment to a long-term service relationship (e.g., Gwinner et al., 1998, 2005). Therefore, employees with better service performance are more successful in building better customer relationships and winning more long-term customers. We propose the following:

> *Hypothesis 5:* Employee service performance is positively related to customers' intention to maintain a long-term service relationship with the employee and to the number of long-term customers of the employee.

In sum, we propose that TFL influences employee service performance by transforming both employee attitudes at the individual level and service climate at the work-unit level, that service climate enhances the effect of individual-level TFL on service performance, and that employee service performance, in turn, influences customer relationship outcomes.

Method

Participants and Procedures

We tested the proposed theoretical framework using data collected in two phases from a sample of hairstylists as well as their managers and customers in Taiwan. It is both likely and important for hairstylists to develop long-term, dyadic service relationships with customers (Gutek, 1995). Therefore, this sample provides a unique opportunity to study the impact of leadership and employee service performance on customer relationship outcomes. In addition, the use of information obtained from multiple sources at multiple levels in a longitudinal design allows us to reduce common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Phase 1

In the first phase, all of the 451 hairstylists and the 112 store managers of the 112 salons of a Taiwan franchise salon chain were invited to participate in the study. Trained graduate-level research assistants administered manager and hairstylist surveys at each salon. The hairstylists answered questions about their assessment of the store manager's TFL behaviors, their attitudes, and the service climate of the store. The store managers evaluated the service performance of each hairstylist. To ensure confidentiality, we set up a central collection box for survey drop-off, and we also provided respondents with the option of mailing the surveys directly to us using a prepaid return envelope. With the headquarters' support, we obtained a high response rate: Ninety-seven percent of the 449 stylists and 98% of 112 managers responded. We had a final usable sample of 420 hairstylists and 110 store managers from 110 salons. Of the store managers, 75% were female, the average age was 31 years, and tenure was 4.3 years. Of the hairstylists, 94% were female, the average age was 26 years, and tenure was 3.2 years.

Phase 2: Longitudinal sample

Nine months later, we collected the measures of customer relationship outcomes from the customers and the store managers. Trained graduate-level research assistants approached customers randomly to fill out a brief survey after the customers had received their hair service on a visit. This approach avoided the selection bias that might have occurred had we had the hairstylists or the store managers decide which customers to survey. Customers answered questions about their intention to maintain a long-term service relationship with the hairstylist who had served them on that particular visit. To increase the accuracy of customer assessment, we only included the stylists who had at least two matched customer evaluations in this step of analysis. We obtained 715 customer evaluations for 243 of the hairstylists from 97 stores who participated in Phase 1 of the study. Customer evaluations for the other stylists were missing because these stylists were not available when the research assistants visited the store or had left the store. This represents a 58% retention rate from Phase 1 of the study, a rate comparable to what has been reported in other longitudinal studies (e.g., Cable & DeRue, 2002). To examine whether this sample of 243 hairstylists differed significantly from the sample of 177 hairstylists who participated in Phase 1 but had no matched customer evaluations, we conducted t tests of sample means of all the study variables. We found that the two samples had different scale means for only two measures: The sample of the 243 hairstylists had a higher level of job satisfaction (mean difference = .19), $t(418) = 2.25$, $p < .05$, and a higher level of manager-rated employee service performance (mean difference = .44), $t(418) = 2.77$, $p < .01$. Therefore, we had a range restriction for these two variables in the sample of 243 hairstylists.

In addition to customer evaluations, at Phase 2 we asked each store manager to report the number of long-term customers served by each hairstylist on a typical day. This information was obtained for 335 stylists from 101 stores of those who participated at Phase 1, representing an 80% retention rate from Phase 1 of the study. Nonresponses were primarily due to the unavailability of the store managers or the stylists' turnover. We examined whether this sample of 335 hairstylists differed significantly from the sample of 85 hairstylists who participated in Phase 1 only. We found that the sample of 335 hairstylists had a higher level of manager-rated

employee service performance (mean difference = .50), $t(418) = 2.67$, $p < .01$, indicating a range restriction on the service performance variable in this sample.

Phase 2: Cross-sectional sample

At Phase 2, we found that new employees had been hired since Phase 1 data collection. To make up for the dropouts and to increase the sample size, we invited the new hires to fill out the measures used in the Phase 1 hairstylist survey and asked the managers to provide service performance evaluations for them. At the same time, we collected evaluations from multiple customers for each of these stylists. Altogether, we were able to match 347 customer evaluations to 128 new hairstylists' self-reported measures and manager-rated service performance and match manager-reported number of long-term customers to 116 stylists' self-reported measures and manager-rated service performance. We tested Hypothesis 5 using both the longitudinal sample and the combined sample, which included the longitudinal sample and the cross-sectional sample.

Measures

We obtained the traditional Chinese version of the TFL measures directly from the publisher of these measures. The remaining measures were originally in English; thus, two-way translations were performed by two bilinguals with English and Chinese proficiencies to ensure equivalency of meaning (Brislin, 1980).

Individual-level TFL

To measure employees' individually experienced and perceived leadership behaviors, we asked the hairstylists to rate the store manager's TFL behaviors using Bass and Avolio's (2000) Multifactor Leadership Questionnaire (Form 5X—Short; 0 = *not at all*, 4 = *frequently, if not always*). Meta-analysis has shown that the four dimensions of TFL are very highly correlated (at .93 after correction for unreliability) and thus empirically hard to separate from each other (Judge & Piccolo, 2004). In the current data, we conducted a principal factor analysis of the 20 items and found only one factor with an eigenvalue greater than 1.0. Therefore, as have others (e.g., Barling et al., 2002; Judge & Bono, 2000), we created an index of TFL.

Store-level TFL

To assess the overall pattern of the leadership behaviors displayed to the store as a whole, we averaged across store employees' evaluations of the store manager's TFL to form the store-level TFL score.

Service climate

The store's service climate was measured with the seven-item Global Service Climate Scale (Schneider et al., 1998). The stylists responded to a 5-point scale (1 = *poor*, 5 = *excellent*) on the basis of their observations on aspects such as "the recognition and rewards employees receive for the delivery of superior work and service." Service climate is formed via a bottom-up emergence

process (Kozlowski & Klein, 2000) and has been theorized and tested at the work-unit level of analysis in the literature (e.g., Liao & Chuang, 2004; Schneider et al., 1998, 2005). Therefore, we aggregated individual employees' climate perceptions to the store level to form the measure of service climate.

Self-efficacy

The 10-item Personal Efficacy Beliefs Scale (Riggs & Knight, 1994) was used to assess the stylists' self-efficacy. The stylists were asked to answer in reference to their own work skills and ability to perform their job using a 6-point scale (1 = *strongly disagree*, 6 = *strongly agree*). An example item is "I have confidence in my ability to do my job."

Affective commitment

An employee's affective commitment was measured with the shortened, nine-item version of Mowday et al.'s (1979) Organizational Commitment Questionnaire. This scale was developed to measure attitudinal or affective commitment. Participants responded on a 5-point scale (1 = *strongly disagree*, 5 = *strongly agree*) to items such as "I find that my values and the store's values are very similar."

Job satisfaction

Overall job satisfaction of the stylists was evaluated with the three-item scale (1 = *strongly disagree*, 7 = *strongly agree*) by Cammann, Fichman, Jenkins, and Klesh (1983). An example item is "All in all, I am satisfied with my job."

Employee service performance

We used the seven-item service performance measure by Liao and Chuang (2004). These authors adapted their measures from Borucki and Burke (1999) and provided construct validity evidence for this scale using a sample of restaurant employees. We slightly changed the wording of the items and added two items to fit the hair service setting and to emphasize the customization and long-term orientation aspects of service performance. We also dropped the item "Approaches customers quickly," which was deemed inapplicable in hair service, as customers typically either have an appointment or wait in line to be served. The eight items we used were as follows: "Finds out what customers need by asking good questions and listening attentively to customers," "Is friendly and helpful to customers," "Cuts, trims, and/or shapes customers' hair satisfactorily," "Points out and relates hair style features to customers' needs," "Suggests hair styles customers might like but do not think of," "Explains a hair style's features and benefits to address customers' concerns," "Analyzes customers' hair and other features to determine the appropriate hair style," and "Helps customers make long-term decisions, even though this might come at the expense of short-term performance"; the last item was adapted from Bagozzi, Willem, and Gavino (2003). Store managers provided their evaluations for each hairstylist on an 11-point Likert scale (1 = *completely unsatisfactory*, 11 = *extremely good*).

Customer intention to maintain service relationship with the stylist

Gutek et al. (2000) used one statement to determine whether a customer had a service relationship with a hair service provider: "I have a regular stylist I normally see for service" (p. 329). On the basis of this statement, we developed a four-item scale to assess a customer's intention to maintain a service relationship with a stylist: "I will regard this hairstylist as my primary stylist," "I will continue to see this hairstylist for hair service," "I will use the service of this hairstylist on a regular basis," and "I will maintain a long-term service relationship with this hairstylist." Customers rated their level of agreement with the statements on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). We aggregated the evaluations for the same stylist from multiple customers to the stylist level because we are interested in how the overall service performance of a stylist influences the average customer relations the stylist has with his or her customers.

Number of long-term customers served per day by the hairstylist

We asked the store managers to report, on the basis of their best assessment, on a typical weekday and weekend day, respectively, the number of long-term customers served by a hairstylist. The weekday and weekend numbers were averaged. The salons have a company-wide recognized term for long-term customers: *Lao-Dian.* Lao-Dian customers typically visit the salon on a regular basis, they come to a store and right away pick their preferred stylist, and they are well recognized by members of the store given their familiarity with the store's service and with the requested stylist and given their manner of interaction with the stylists.

Analysis Strategy

Our theoretical model is multilevel in nature, consisting of constructs spanning both the individual-employee level and store level of analysis. In addition, the data are hierarchical, with the stylists and customers nested in different stores. Therefore, we conducted hierarchical linear modeling (HLM) analyses to test the hypotheses. HLM explicitly accounts for the nested nature of the data and can simultaneously estimate the impact of factors at different levels on individual-level outcomes while maintaining appropriate levels of analysis for the predictors (Bryk & Raudenbush, 1992). We grand-mean centered the Level 1 predictors. This centering approach facilitates the interpretation of the HLM results, ensures that the Level 1 effects are controlled for during testing of the incremental effects of the Level 2 variables, and lessens multicollinearity in Level 2 estimation by reducing the correlation between the Level 2 intercept and slope estimates (Hofmann & Gavin, 1998; Raudenbush, 1989).

Results

The descriptive statistics, internal consistency reliabilities, and intercorrelations of all study variables are presented in Table 1.

Table 1. Descriptives, Individual-Level Intercorrelations, and Internal Consistency Reliability

Variable	Longitudinal sample M	SD	Combined sample M	SD	1	2	3	4	5	6	7	8	9
1. Individual-level transformational leadership	3.09	0.81	3.12	0.81	.94/.94	.59*	.33*	.10*	.33*	.31*	.14*	.01	−.05
2. Store-level transformational leadership[a]	3.14	0.48	3.13	0.47	.59*	.94/.94	.56*	.05	.24*	.23*	.10*	.13*	−.05
3. Service climate[a]	3.55	0.36	3.54	0.36	.35*	.56*	.91/.91	.05	.29*	.27*	.05	.04	.07
4. Self-efficacy	3.71	0.64	3.70	0.66	.13*	.04	.03	.80/.80	.19*	.31*	.19*	.05	.10*
5. Affective commitment	4.82	0.88	4.79	0.88	.36*	.24*	.30*	.20	.77/.78	.66*	.08	.11*	.05
6. Job satisfaction	3.68	0.56	3.66	0.57	.34*	.21*	.28*	.34*	.65*	.89/.90	.16*	.09	.01
7. Employee service performance	7.78	1.62	7.75	1.64	.18*	.12*	.07	.19*	.15*	.21*	.96/.96	.15*	.20*
8. Customer intention to maintain a service relationship[b]	6.15	0.77	6.00	0.81	.05	.18*	.07	−.02	.08	.01	.13*	.98/.97	.10
9. No. long-term customers served per day	10.43	8.59	9.61	8.26	.00	−.08	.06	.08	.06	.04	.26*	.07	—

Note. Employees provided ratings of Variables 1–6, store managers provided ratings of Variables 7 and 9, and customers provided ratings of Variable 8. Correlations below the diagonal are for the longitudinal sample, in which Variables 1–7 were measured at Phase 1 and Variables 8 and 9 were measured at Phase 2. Correlations above the diagonal are for the combined sample, which included both the longitudinal sample and the cross-sectional sample; in the cross-sectional sample, all variables were collected at Phase 2. Cronbach's alphas are in italics on the diagonal; the values to the left of the slash are for the longitudinal sample, and the values to the right are for the combined sample.
[a] Store means of this variable were assigned to employees of the same store to calculate the individual-level correlations. [b] Evaluations for the same employee from multiple customers were aggregated to the employee level.
* $p < .05$.

Table 2. Hierarchical Linear Modeling Results: Effects of Transformational Leadership (TFL) on Employee Service Performance

Level and variable	Self-efficacy (M1)	Affective commitment (M2)	Job satisfaction (M3)	M4	M5	M6	M7	M8	Self-efficacy (M9)
Level 1									
Intercept	3.79**	2.62**	3.48**	6.97**	6.42**	7.05**	6.64**	6.64**	3.92**
Individual-level TFL	0.13**	0.22**	0.38**	0.32**	0.15*	0.31**	0.15*	0.15*	0.13**
Self-efficacy					0.46**		0.45**	0.44**	
Affective commitment					0.11		0.11	0.14	
Job satisfaction					0.11		0.10	0.08	
Level 2									
Store-level TFL	−0.09	−0.08	−0.26*	0.25	0.31	0.49	−0.19	−0.02	−0.08
SC	0.05	0.36**	0.60**		0.11	0.36	−0.45	−0.29	0.04
Store-level TFL × SC[a]						−0.08	0.15	0.11	
Cross-level									
Individual-level TFL × SC						0.42*	0.31*	0.31*	0.16†
Self-Efficacy × SC								−0.02	
Affective Commitment × SC								0.45	
Job Satisfaction × SC								−0.16	

| | Self-efficacy (M1) | Affective commitment (M2) | Job satisfaction (M3) | Employee service performance | | | | | Self-efficacy (M9) |
Level and variable				M4	M5	M6	M7	M8	
n (Level 1)	420	420	420	420	420	420	420	420	420
n (Level 2)	110	110	110	110	110	110	110	110	110
Model deviance[b]	814.96	601.28	994.21	1,498.06	1,461.73	1,493.51	1,459.24	1,458.02	812.78

Note. In all models, Level 1 variables were grand-mean centered. Entries corresponding to the predicting variables are estimations of the fixed effects, γs, with robust standard errors. These measures were collected at Phase 1. M = model; SC = service climate.

[a] This between-stores interaction term was included for Models 6–8 to ensure that the observed cross-level interaction was not spurious. [b] Deviance is a measure of model fit; the smaller the deviance is, the better the model fits. Deviance = –2 × log-likelihood of the full maximum-likelihood estimate.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

Table 3. Hierarchical Linear Modeling Results: Effects of Employee Service Performance on Customer Relationship Outcomes

| | Longitudinal sample[a] | | | | Combined sample[b] | | | |
| | Customer intention to maintain a service relationship[c] | | No. long-term customers served per day | | Customer intention to maintain a service relationship[c] | | No. long-term customers served per day | |
Level and variable	M1A	M2A	M3A	M4A	M1B	M2B	M3B	M4B
Level 1								
Intercept	6.13**	5.23**	10.40**	10.78*	5.97**	4.76**	9.43**	9.89**
Employee service performance	0.06*	0.05*	1.27**	1.56**	0.08**	0.09**	1.34**	1.25**
Individual-level TFL		–0.12		–0.74		–0.17*		–0.75
Self-efficacy		–0.06		0.22		–0.05		1.09*
Affective commitment		0.10		–0.43		0.02		–0.77
Job satisfaction		–0.01		0.44		0.06		0.24
Level 2								
Store-level TFL		0.37*		–0.18		0.40**		–0.24
SC		–0.06		–0.23		–0.16		–0.59
Cross-level								
Individual-level TFL × SC		–0.01		–0.37		–0.23		0.00
n (Level 1)	243	243	335	335	371	371	451	451
n (Level 2)	97	97	101	101	106	106	106	106
Model deviance	551.78	543.54	2,175.73	2,080.81	870.05	842.76	2,914.48	2,774.63

Note. Variables are grand-mean centered at Level 1. Entries corresponding to the predicting variables are estimations of the fixed effects, γs, with robust standard errors. Models 1A, 3A, 1B, and 3B served as direct tests of Hypotheses 5 and 6 with different samples, and Models 2A, 4A, 2B, and 4B showed that the effect of employee service performance on customer relationship outcomes persisted after various individual- and store-level factors were controlled for. M = model; TFL = transformational leadership; SC = service climate.

[a] In the longitudinal sample, all the predictors were measured at Phase 1, and the dependent variables were measured at Phase 2. [b] The combined sample included the longitudinal sample and the cross-sectional sample, for which both the predictors and the dependent variables were measured at Phase 2. [c] For the longitudinal sample, 715 customers provided ratings of their intention to maintain a service relationship; for the combined sample, 1,062 customers provided these ratings. Evaluations for the same employee from multiple customers were aggregated to the employee level.

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

Aggregation Statistics

We checked the viability of the constructs formed via aggregation: store-level TFL and service climate (aggregated across multiple employees of the same store), and stylist-level customer intention to maintain a long-term service relationship with the stylist (aggregated across multiple customers of the same stylist). Following James, Demaree, and Wolf (1984) and Kozlowski and Hults (1987), we assessed interrater agreement by computing James et al.'s $rwg(j)$, which adjusted for a slight negative skew in the expected variance. We obtained mean values of .85 for TFL, .91 for service climate, and .84 for customer intention to maintain a long-term service relationship. We then conducted one-way analyses of variance and found significant between-groups variance for all of these variables. We further obtained the following intraclass correlation (ICC1) and reliability of group mean (ICC2) values: TFL, .17 and .44; service climate, .25 and .55; and customer intention to maintain a long-term service relationship, .20 and .42. These values are comparable to the median ICC values of aggregated constructs reported in the organizational literature (see Bliese, 2000; Schneider et al., 1998) and in prior studies of TFL (e.g., Bono & Judge, 2003; Chen & Bliese, 2002). The relatively low ICC2 values suggest that it may be difficult to detect emergent relationships using group means (Bliese, 2000); however, they should not prevent aggregation if aggregation is justified by theory and supported by high $rwg(j)$ and significant between-groups variance (Chen & Bliese, 2002; Kozlowski & Hattrup, 1992). Therefore, we proceeded with aggregation, acknowledging that the relationships between the aggregated measures with low ICC2 and the other study variables might be underestimated. To increase the representativeness of an aggregated measure, we calculated its mean before dropping any cases with incomplete information.

HLM Results

Table 2 presents the HLM results testing the multilevel effects of TFL on employee service performance. Hypothesis 1 predicts that TFL is positively related to employee service performance. The results in Model 4 reveal that individual-level TFL significantly predicted employee service performance ($\hat{\gamma} = 0.32$, $p < .01$), whereas the effect for store-level TFL was not significant. Therefore, Hypothesis 1 was partially supported.

Hypothesis 2 proposes that employee attitudes partially mediate the relationship between individual-level TFL and employee service performance. We followed the four-step test procedures for mediation described in Kenny, Kashy, and Bolger (1998) and controlled for store-level TFL in the analyses. As a first step, individual-level TFL needs to be related to service performance, which was supported in our testing of Hypothesis 1 above. In the second step, we found that individual-level TFL was significantly related to self-efficacy ($\hat{\gamma} = 0.13$, $p < .01$; Model 1), commitment ($\hat{\gamma} = 0.22$, $p < .01$; Model 2), and job satisfaction ($\hat{\gamma} = 0.38$, $p < .01$; Model 3), thus meeting the second requirement, that individual-level TFL needs to be related to the mediators.[1] In testing Steps 3 and 4, we included both TFL and the mediators in the

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[1] To ensure that individual-level TFL predicted employee attitudes beyond the effects of store-level TFL, we included both individual- and store-level TFL in predicting the attitudes. We found that individual-level TFL predicted all of the attitudes after we controlled for store-level TFL ($\hat{\gamma} = .13$, .22, and .38, $p < .01$, for self-efficacy, commitment, and satisfaction, respectively). In addition, store-level TFL did not have a significant, direct relationship with employee attitudes ($\hat{\gamma} = -.07$, .06, and $-.03$, $p > .10$, for self-efficacy, commitment, and

regression. We found that self-efficacy was significantly related to service performance ($\hat{\gamma} =$ 0.46, $p < .01$; Model 5), that commitment and job satisfaction were not significantly related to service performance, and that the effect of individual-level TFL remained significant but was reduced in magnitude ($\hat{\gamma} = 0.15$, $p < .05$; Model 5) compared with the effect in Step 1. Therefore, self-efficacy partially mediated the individual-level effect of TFL on service performance, providing partial support to Hypothesis 2; a Sobel (1982) test confirmed that the indirect effect was significant ($z = 2.10$, $p < .05$).

We followed a similar procedure in testing Hypothesis 3, which predicts that store-level service climate mediates the relationship between store-level TFL and individual employee service performance. In Step 1, we found that store-level TFL was not significantly related to employee service performance (Model 4). However, it may have a distal relationship with employee service performance; hence, the main effect may be weak or nonsignificant even though an indirect effect may exist (Kenny et al., 1998; Shrout & Bolger, 2002). Therefore, we proceeded to test the remaining steps. In the test of Step 2, because service climate was a store-level outcome variable, it was appropriate to assess the effect of TFL on service climate at the store level in a regular ordinary least squares (OLS) analysis. The results revealed that store-level TFL positively predicted service climate ($\beta = .39$, $p < .01$; adjusted $R2 = .22$). Then, in Step 3 and Step 4, we included service climate as a Level 2 predictor in HLM together with store-level TFL and other individual-level variables specified in Model 5. The results revealed that service climate did not significantly predict employee service performance; therefore, Hypothesis 3 is not supported.

Hypothesis 4 proposes a positive cross-level interaction between individual-level TFL and store service climate in predicting employee service performance. In Model 6, we regressed the slope estimates for individual-level TFL obtained from Level 1 on service climate at Level 2 to test this interaction (Bryk & Raudenbush, 1992). Furthermore, as one may find spurious cross-level interactions if between-groups interactions are not controlled for (Hofmann & Gavin, 1998), we included the Store-Level TFL × Service Climate interaction at Level 2. The results revealed that after we controlled for the main effects of TFL and service climate, the between-stores TFL × Service Climate interaction was not significant, whereas the cross-level interaction was significant ($\hat{\gamma} = 0.42$, $p < .05$). These results provide support for Hypothesis 4 and suggest that a positive store-level service climate enhanced the individual-level influence of TFL on employee service performance. To examine whether the interaction effect was mediated by the individual-level employee attitude variables specified in this study, we followed the procedures of testing

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satisfaction, respectively). We then added service climate to Level 2, a factor that potentially has a more proximal relationship with these attitudes than store-level TFL. We reported these results in Models 1–3 in Table 2. Again, we found that individual-level TFL predicted all of the three employee attitudes, and the effects remained practically unchanged compared with those in the previous step. In addition, a somewhat unexpected finding is that store-level TFL had a significant negative relationship with job satisfaction ($\hat{\gamma} = -.26$, $p < .05$). To further understand this negative relationship, we took the relationship between store-level TFL and service climate into account and calculated the total effect of store-level TFL on job satisfaction, which included the direct effect with controls for service climate and the indirect effect via the transmission of service climate, just as one would do in a path analysis. Because store-level TFL was positively related to service climate ($\beta = .39$, $p < .01$), the total effect of store-level TFL on job satisfaction was $-.03$ (i.e., $-.26 + .39 \times .60$), which remained negative, but with a much smaller magnitude. Overall, the results suggest that individual-level TFL, as opposed to store-level TFL, had significant, proximal relationships with employee attitudes.

"mediated moderation" specified in Baron and Kenny (1986, p. 1179). The results, as presented in Model 7 through Model 9, suggest that, at the .10 significance level, the interaction effect was partially mediated by employee self-efficacy.

Hypothesis 5 proposes that employee service performance is positively related to customer relationship outcomes. We tested these hypotheses using both the longitudinal sample, in which service performance was measured at Phase 1 and customer outcomes were measured at Phase 2, and the combined sample, which included the longitudinal sample and the cross-sectional sample, for which all variables were measured at Phase 2. As reported in Table 3, the hypothesis received full support in both samples, suggesting that the results were robust and stable in samples of different sizes. That is, a stylist's service performance positively predicted customers' intention to maintain a long-term service relationship with the stylist ($\hat{\gamma} = 0.06$, $p < .05$, Model 1A; $\hat{\gamma} = 0.08$, $p < .01$, Model 1B) and manager-reported number of long-term customers of the stylist ($\hat{\gamma} = 1.27$, $p < .01$, Model 3A; $\hat{\gamma} = 1.34$, $p < .01$, Model 3B). These effects persisted after various antecedents of employee service performance were accounted for (see Models 2A, 4A, 2B, and 4B). Furthermore, Sobel (1982) tests revealed that the indirect effect of individual-level TFL through the transmission of employee service performance on customer intention was significant at the .10 level for the longitudinal sample ($z = 1.81$, $p < .10$) and significant at the .05 level for the combined sample ($z = 2.91$, $p < .05$) and that the indirect effect on number of long-term customers was significant at the .01 level for both samples ($z = 3.51$, $p < .01$; $z = 3.64$, $p < .01$, respectively).

Additional Analyses

To further examine the robustness of the results obtained from the HLM analyses, we tested the hypotheses pooling respondents across stores using two additional methods: (a) OLS regressions, and (b) regressions with a cluster correction of the error covariance matrix (Rogers, 1993). Although OLS ignores the nesting nature of the data and thus may produce biased estimators of standard errors, OLS might be more stable in small samples and more robust against model misspecification than HLM (James & Williams, 2000) and therefore useful for checking purposes. The cluster method adjusts the estimated variance–covariance structure of the error terms to account for the interdependence among observations from the same store and heterogeneous errors across stores (see Glomb & Liao, 2003; Liao, Arvey, Butler, & Nutting, 2001; Milton & Westphal, 2005). We found that the pattern of results from the OLS regressions and the regressions with the cluster correction for both the longitudinal sample and the combined sample was highly consistent with that from the HLM analyses, providing additional confidence in our statistical inferences.

Discussion

Integrating TFL and relationship marketing research, the present study examines the impact of TFL on employee service performance and customer relationships outcomes. A key contribution of the current study is that we were able to bring together the multiple stakeholders of a service organization's profit chain (Heskett et al., 1997)—managers, employees, and customers—and simultaneously examine the manager–employee interface, the employee attitudes–employee performance interface, and the employee–customer interface. Our study demonstrates that an

integration of the management, psychology, and marketing literatures may enhance our knowledge of how leadership, employee performance, and the psychological processes within the organization influence customer relationship outcomes. In particular, the findings contribute to the leadership and service management literatures in the following ways.

First, we extend and test the TFL theory in the service context. Earlier TFL research was predominantly conducted in educational and military contexts (Lowe, Kroeck, & Sivasubramaniam, 1996) and was recently extended to business sectors. Adding to this literature, the current study shows that individual-level TFL was positively related to employee service performance, which, in turn, positively predicted customers' decision to maintain a service relationship and the number of long-term customers assessed 9 months later. This finding is consistent with the service linkage research, which has demonstrated that, through front-line employees' service behaviors, internal organizational management transforms into desirable external customer outcomes.

Second, we delineate how TFL is related to employee service performance. Applying the self-concept-based motivational theory of TFL (Shamir et al., 1993) to relationship marketing, in which the key is to provide customized, personal, and long-term-oriented service, we propose that TFL may enhance employee service performance in part by transforming, at the individual level, the attitudes of service employees. We found that, as expected, TFL was positively related to employee self-efficacy, affective commitment, and job satisfaction. However, only self-efficacy was significant in predicting service performance when all three attitudes were considered simultaneously; it partially mediated the influences of TFL on service performance. Our findings suggest that employee self-efficacy played a dominant role relating to employee service performance among the attitudinal variables considered.

Third, integrating leadership with organizational climate research, we propose that TFL may also enhance employee service performance by transforming the store's service climate. Indeed, we found that store-level TFL was positively related to the service climate in the store. This is an important finding because extant TFL theory has focused on its effects in terms of transforming individual followers, whereas we have shown that transformational leaders may be capable of transforming the environment to form a positive service climate. However, we found that service climate did not have a significant relationship with individual employee service performance. This finding is inconsistent with Liao and Chuang (2004), who found service climate to be positively associated with individual employee service performance. Liao and Chuang used employees' self-ratings to assess service performance and conducted the study in restaurants, where service performance was relatively standard and routine, whereas we used supervisory ratings of service performance in a setting where service is more personal and customized. We call for future research to examine how study design and research setting features may influence the relationship between service climate and employee service performance.

Service climate, conversely, moderated the relationship between individual-level TFL and employee service performance. Proposing and detecting this cross-level interaction effect is another important extension of the TFL and service climate literatures, because both areas of research have generally focused on their main effects. The current study advances our understanding of when TFL and service climate contribute the most to employee service

performance. Our results suggest that better employee service performance may be achieved when TFL behaviors are accompanied by enforcement of a positive service climate; service climate provides a strategic focus for TFL behaviors and enables transformational leaders to be more effective in directing employee behaviors toward achieving high-quality service. These results also corroborate the findings of Schneider et al. (2005) regarding the important role of service leadership in influencing citizenship behaviors toward customers and provide empirical support to the notion that strategically focused leadership behaviors have stronger effects than generic leadership behaviors on employee attitudes and behaviors in achieving a specific strategic goal.

Fourth, the current study also extends the growing but still limited body of linkage research in customer service. We have added TFL as an important antecedent to the chain of employee attitudes → employee service performance → customer outcomes. In addition, prior studies have predominantly examined the linkage between employee performance and customer outcomes at the aggregated business unit level of analysis; our study extends the literature to the individual service provider level of analysis by matching customer relationship outcomes directly to individual employee's service performance.

Last, a few methodological strengths increase the confidence in our results. First, acquiring information from three distinct sources and assessing customer relationship outcomes at a later time reduced common method bias (Podsakoff et al., 2003). Second, having trained research assistants randomly approach customers instead of having managers or employees choose which customers to provide the evaluations avoided selection bias in this regard. Third, matching multiple customers' evaluations to a single service employee reduced measurement errors. Fourth, using HLM adequately accounted for the hierarchical nature of the model and the data. Finally, our findings, using data from Taiwan, are largely consistent with the service and leadership theories developed and tested primarily in the United States. Thus, our study contributes to the literature by demonstrating the external validity of these theories in a non-U.S. setting.

Limitations and Future Research

Our findings should be considered in light of a few limitations. First, our sample includes the stores of a single salon chain with uniform pricing and advertising practices and similar store features. The compatibility across stores is a strength because it rules out the extraneous and confounding effects due to different products, services, prices, market niches, promotion strategies, and so on. However, the generalizability of the results needs to be examined in future replications in other service settings. Nonetheless, these results are largely consistent with the hypotheses developed on the basis of extant TFL and service research and thus may not be sample specific.

Second, we measured customer outcomes several months after we collected the information on leadership, employee attitudes, and service performance. This longitudinal design is a merit because it reduces common method bias and facilitates the testing of the temporal relationships between customer outcomes and the other study variables. However, as with any study conducted over multiple phases, we had a less than ideal retention rate. As a result, we did not

have customer evaluations for every employee. The comparison of the Phase 1 and Phase 2 samples showed that the employees who participated in both phases had a higher level of job satisfaction and manager-rated service performance than those who participated in Phase 1 only. Therefore, we might have a restriction of range on these variables in Phase 2. We might have a similar problem with the customers' reported relationships outcomes; although customers were approached randomly by research assistants, we might not have data from the very dissatisfied customers who had quit using the service. The restriction of range in both the independent and the dependent variables could have caused the relationships we observed to be weaker than they might be in a more diverse sample. Therefore, our results, although significant, provide a conservative estimate of the relationships among employee attitudes, employee service performance, and customer relationship outcomes and may be less generalizable to employees with a very low level of job satisfaction and performance.

Third, TFL, employee attitudes, and service climate perceptions were assessed by employees' self-report within one time period; thus, the observed relationships might have been inflated by common-source bias. Although common-source bias was not a problem in the prediction of employee service performance, which was rated by managers, method variance might still be present because a common survey method was used in data collection. However, the differential relationships and, in some cases, the lack of significant relationships suggest that the results were not driven by method variance (George & Bettenhausen, 1990). Nonetheless, future research should strive to measure predictors, mediators, and outcomes from different rating sources, at different time periods, and in different data formats (e.g., survey, experiment, archival data, observation, interview) to minimize common-method bias.

Another promising avenue for future research is to examine the role of leadership and employee service performance in other types of service interactions, such as the pseudoservice relationship (Gutek, 1995; Gutek et al., 1999). In this study, we have focused on the service relationship developed between customers and a specific hairstylist. The results should generalize to other, similar service professions, such as medical care service, law service, personal banking service, accounting service, and so on, in which maintaining a long-term service relationship with an individual service provider is critical in customer retention. In some service settings, however, a pseudorelationship may be more pertinent. For example, when shopping at supermarkets or dining at restaurants, customers may not develop a personal relationship with a specific cashier, baker, waiter, or cook but identify with the products and service of a specific store, thereby developing a pseudorelationship with the store. In this case, it might be not the individual performance of an employee but the overall performance of the employees in the store that influences customer outcomes (Liao & Chuang, 2004). Future research should clarify the level of analysis and the mechanisms through which leadership and employee performance affect customer–store pseudorelationships. Theories of leadership and group effectiveness (e.g., Kozlowski, Gully, McHugh, Salas, & Cannon-Bowers, 1996), methodologies for testing multilevel homology (e.g., Chen, Bliese, & Mathieu, 2005), and prior multilevel studies on both individual and team performance (e.g., Chen, Thomas, & Wallace, 2005; DeShon, Kozlowski, Schmidt, Milner, & Weichmann, 2004) may inform these research pursuits.

Implications for Management

This study offers significant implications for customer service organizations for which customer retention is a key determinant of organizational success. Our results show that employee service performance was positively related to customer relationship outcomes. Therefore, more management attention may be directed toward improving employee service performance. Whereas past research has shown that store-level human resources practices and service climate were related to employee service performance (e.g., Liao & Chuang, 2004; Schneider et al., 1998), we found that individual employee perceived and experienced TFL was positively related to employee service performance. Thus, joining Yammarino et al. (1997), we recommend that managers develop an interpersonally oriented TFL style, especially when the size of the work unit is small. Research has shown that managers can be taught to become transformational leaders (Barling, Weber, & Kelloway, 1996; Dvir et al., 2002). Practices such as an open discussion with the managers about what specific behaviors TFL entails, group training with role playing to show the managers how to engage in these behaviors, goal setting that motivates managers to apply these behaviors when interacting with employees, and obtaining feedback from employees may help managers develop a TFL style.

In addition, the positive interaction between service climate and TFL suggests that management may create a positive service climate to further enhance the effects of TFL on employee service performance. Management efforts in areas such as selecting and training employees to have the required knowledge and skills to deliver quality service, measuring and tracking service quality, rewarding employees for excellent service performance, and providing employees with the necessary technology and resources to delivery high-quality service may help generate a positive climate for service (Schneider et al., 1998).

Our findings also highlight the importance of enhancing employee self-efficacy; we found that more confident employees provided better service. Our study suggests that TFL may play an important role in improving employee self-efficacy. In addition, other managerial interventions, such as job design that enhances employee perceived skill variety, task identity, task significance, autonomy, and feedback from the job (Hackman & Oldham, 1974), may also serve to increase employees' sense of self-efficacy.

In conclusion, the current study integrates and extends the theories of TFL and relationship marketing and provides a comprehensive picture linking the internal and external stakeholders of a service organization. The results suggest that transformational leaders may play an important role in building long-term service relationships by transforming both the attitudes of the front-line service employees and the service climate of the work unit. We hope this study encourages more researchers and practitioners to cross disciplinary and functional boundaries to gain a better understanding of service management.

References

Avolio, B. J., & Yammarino, F. J. (1990). Operationalizing charismatic leadership using a level of analysis framework. *Leadership Quarterly*, *1*, 193–208.

Bagozzi, R. P., Willem, V., & Gavino, J. C. (2003). Culture moderates the self-regulation of shame and its effects on performance: The case of salespersons in the Netherlands and the Philippines. *Journal of Applied Psychology*, *88*, 219–233.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*, 191–215.

Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology*, *87*, 488–496.

Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, *81*, 827–832.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.

Barron, F., & Harrington, D. M. (1981). Creativity, intelligence, and personality. In M. R.Rosenzweig & L. W.Porter (Eds.), *Annual review of psychology* (pp. 439–476). Palo Alto, CA: Annual Reviews.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M., & Avolio, B. J. (2000). *Manual for the Multifactor Leadership Questionnaire (Form 5X)*. Redwood City, CA: Mindgarden.

Bendapudi, N., & Berry, L. (1997). Customers' motivations for maintaining relationships with service providers. *Journal of Retailing*, *72*, 223–247.

Berry, L. L. (1995). Relationship marketing of services—Growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, *23*, 236–245.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J.Klein & S. W. J.Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 349–381). San Francisco: Jossey-Bass.

Bono, J. E., & Judge, T. A. (2003). Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, *46*, 554–571.

Borucki, C. C., & Burke, M. J. (1999). An examination of service-related antecedents to retail store performance. *Journal of Organizational Behavior*, *20*, 943–962.

Brislin, R. W. (1980). Translation and content analysis of oral and written material. In H. C.Triandis & J. W.Berry (Eds.), *Handbook of cross-cultural psychology* (*Vol. 2*, pp. 349–444). Boston: Allyn & Bacon.

Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models*. Newbury Park, CA: Sage.

Bycio, P., Hackett, R. D., & Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, *80*, 468–478.

Cable, D. M., & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, *87*, 875–884.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983). Assessing the attitudes and perceptions of organizational members. In S.Seashore, E.Lawler, P.Mirvis, & C.Cammann (Eds.), *Assessing organizational change: A guide to methods, measures, and practices* (pp. 71–138). New York: Wiley.

Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, *87*, 549–556.

Chen, G., Bliese, P. D., & Mathieu, J. E. (2005). Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organizational Research Methods*, *8*, 375–409.

Chen, G., Thomas, B., & Wallace, J. C. (2005). A multilevel examination of the relationships among training outcomes, mediating regulatory processes, and adaptive performance. *Journal of Applied Psychology*, *90*, 827–841.

Colgate, M. R., & Danaher, P. J. (2000). Implementing a customer relationship strategy: The asymmetric impact of poor versus excellent execution. *Journal of the Academy of Marketing Science*, *28*, 375–387.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, *13*, 471–482.

Dansereau, F., & Yammarino, F. J. (1998). *Leadership: The multiple-level approaches: Classical and new wave*. Greenwich, CT: Elsevier Science/JAI Press.

DeShon, R. P., Kozlowski, S. W. J., Schmidt, A. M., Milner, K. R., & Weichmann, D. (2004). A multiple goal, multilevel model of feedback effects on the regulation of individual and team performance in training. *Journal of Applied Psychology*, *89*, 1035–1056.

Dubinsky, A. J., Yammarino, F. J., Jolson, M. A., & Spangler, W. D. (1995). Transformational leadership: An initial investigation in sales management. *Journal of Personal Selling and Sales Management*, *15*, 17–29.

Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, *45*, 735–744.

Firebaugh, G. (1980). Groups as contexts and frog ponds. In K. H.Roberts & L.Burstein (Eds.), *Issues in aggregation* (pp. 43–52). San Francisco: Jossey-Bass.

George, J. M., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology*, *75*, 698–709.

Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influences, reciprocal and individual effects. *Academy of Management Journal*, *46*, 486–496.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, *6*, 219–247.

Grandey, A. A. (2003). When the "show must go on": Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, *46*, 86–96.

Gronroos, C. (1994). From marketing mix to relationship marketing: Towards a paradigm shift in marketing. *Marketing Decision*, *32*, 4–20.

Gutek, B. A. (1995). *The dynamics of service: Reflections in the changing nature of customer/provider interactions*. San Francisco: Jossey-Bass.

Gutek, B. A., Bhappu, A. D., Liao-Troth, M., & Cherry, B. (1999). Distinguishing between service relationships and encounters. *Journal of Applied Psychology*, *84*, 218–233.

Gutek, B. A., Cherry, B., Bhappu, A. D., Schneider, S., & Woolf, L. (2000). Features of service relationships and encounters. *Work and Occupations*, *27*, 319–352.

Gwinner, K. P., Bitner, M. J., Brown, S. W., & Kumar, A. (2005). Service customization through employee adaptiveness. *Journal of Service Research*, *8*, 131–148.

Gwinner, K. P., Gremler, D. D., & Bitner, M. J. (1998). Relational benefits in service industries: The customer's perspective. *Journal of the Academy of Marketing Science*, *26*, 101–114.

Hackman, J. R. (1992). Group influences on individuals in organizations. In M. D.Dunnette & L. M.Hough (Eds.), *Handbook of industrial organizational psychology* (*Vol. 3*, pp. 199–267). Palo Alto, CA: Consulting Psychologists Press.

Hackman, J. R., & Oldham, G. R. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects* (Tech. Rep. No. 4). New Haven, CT: Yale University, Department of Administrative Sciences.

Hall, R. J., & Lord, R. G. (1995). Multi-level information processing explanations of followers' leadership perceptions. *Leadership Quarterly*, *6*, 265–287.

Hartline, M. D., & Ferrell, O. C. (1996). The management of customer-contact service employees: An empirical investigation. *Journal of Marketing*, *60*, 52–70.

Heskett, J., Sasser, W. E., Jr., & Schlesinger, L. (1997). *The service profit chain: How leading companies link profit and growth to loyalty, satisfaction, and value*. New York: Free Press.

Hochschild, A. R. (1983). *The managed heart*. Los Angeles: University of California Press.

Hofmann, D. A., & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management*, *24*, 623–641.

Hofmann, D. A., Morgeson, F. P., & Gerras, S. J. (2003). Climate as a moderator of the relationship between leader–member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology*, *88*, 170–178.

Howell, J. P., Dorfman, P. W., & Kerr, S. (1996). Moderator variables in leadership research. *Academy of Management Review*, *11*, 88–102.

Isaksen, S. G. (1983). Toward a model for the facilitation of creative problem solving. *Journal of Creative Behavior*, *17*, 18–31.

Isen, A. M., & Baron, R. A. (1991). Positive affect as a factor in organizational behavior. *Research in Organizational Behavior*, *13*, 1–53.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, *69*, 85–98.

James, L. R., & Williams, L. J. (2000). The cross-level operator in regression, ANCOVA, and contextual analysis. In K. J.Klein & S. W. J.Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 382–424). San Francisco: Jossey-Bass.

Johnson, J. (1996). Linking employee perceptions to customer satisfaction. *Personnel Psychology*, *49*, 831–852.

Judge, T. A., & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. *Journal of Applied Psychology*, *85*, 751–765.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, *89*, 755–768.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*, 376–407.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, *88*, 246–255.

Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D.Gilbert, S. T.Fiske, & G.Lindzey (Eds.), *Handbook of social psychology* (*Vol. 1*, pp. 233–265). New York: McGraw-Hill.

Kozlowski, S. W. J., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. *Journal of Applied Psychology*, *74*, 546–553.

Kozlowski, S. W. J., Gully, S. M., McHugh, P. P., Salas, E., & Cannon-Bowers, J. A. (1996). A dynamic theory of leadership and team effectiveness: Developmental and task contingent leader roles. In G. R.Ferris (Ed.), *Research in personnel and human resources management* (*Vol. 14*, pp. 253–305). Greenwich, CT: JAI Press.

Kozlowski, S. W. J., & Hattrup, K. (1992). A disagreement about within-group agreement: Disentangling issues of consistency versus consensus. *Journal of Applied Psychology*, *77*, 161–167.

Kozlowski, S. W. J., & Hults, B. M. (1987). An exploration of climates for technical updating and performance. *Personnel Psychology*, *40*, 539–562.

Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J.Klein & S. W. J.Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 3–90). San Francisco: Jossey-Bass.

Levitt, T. (1986). *The loyalty effect*. Cambridge, MA: Harvard Business School Press.

Liao, H. (2007). Do it right this time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures. *Journal of Applied Psychology*, *92*, 475–489.

Liao, H., Arvey, R. D., Butler, R. J., & Nutting, S. M. (2001). Correlates of work injury frequency and duration among firefighters. *Journal of Occupational Health Psychology*, *6*, 229–242.

Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, *47*, 41–58.

Liao, H., & Rupp, D. E. (2005). The impact of justice climate and justice orientation on work outcomes: A cross-level multifoci framework. *Journal of Applied Psychology*, *90*, 242–256.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly*, *7*, 385–425.

MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, *29*, 115–134.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace*. Thousand Oaks, CA: Sage.

Milton, L., & Westphal, J. (2005). Identity confirmation networks and cooperation in workgroups. *Academy of Management Journal*, *48*, 191–212.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, *658*, 20–38.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, *14*, 224–247.

Mumford, M. D., Dansereau, F., & Yammarino, F. J. (2000). Followers, motivations, and levels of analysis: The case of individualized leadership. *Leadership Quarterly*, *11*, 313–340.

Naumann, S. E., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal*, *43*, 881–889.

Podsakoff, P. M., & MacKenzie, S. B. (1995). An examination of substitutes for leadership within a levels-of-analysis framework. *Leadership Quarterly*, *6*, 289–328.

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879–903.

Raudenbush, S. W. (1989). "Centering" predictors in multilevel analysis: Choices and consequences. *Multilevel Modeling Newsletter*, *1*, 10–12.

Reichheld, F. F., & Sasser, W. E., Jr. (1990). Zero defections: Quality comes to services. *Harvard Business Review*, *68*, 105–111.

Riggs, M. L., & Knight, P. A. (1994). The impact of perceived group success–failure on motivational beliefs and attitudes: A causal model. *Journal of Applied Psychology*, *79*, 755–766.

Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior*, *23*, 257–266.

Rogelberg, S. G., Barnes-Farrell, J. L., & Creamer, V. (1999). Customer service behavior: The interaction of service predisposition and job characteristics. *Journal of Business and Psychology*, *13*, 421–435.

Rogers, W. H. (1993). sg17: Regression standard errors in clustered samples.*Stata Technical Bulletin*, *13*, 19–23. (Reprinted in *Stata Technical Bulletin Reprints, 3*, 88–94)

Schneider, B. (1983). Interactional psychology and organizational behavior. In L. L.Cummings & B. M.Staw (Eds.), *Research in organizational behavior* (*Vol. 5*, pp. 1–31). Greenwich, CT: JAI Press.

Schneider, B., Ashworth, S., Higgs, A. C., & Carr, L. (1996). Design, validity, and use of strategically focused employee attitude surveys. *Personnel Psychology*, *49*, 695–705.

Schneider, B., Ehrhart, M. G., Mayer, D. M., & Saltz, J. L. (2005). Understanding organizational-customer linkages in service settings. *Academy of Management Journal*, *48*, 1017–1032.

Schneider, B., & White, S. S. (2004). *Service quality: Research perspectives*. Thousand Oaks, CA: Sage.

Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Test of a causal model. *Journal of Applied Psychology*, *83*, 150–163.

Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 577–593.

Shamir, B., Zakay, E., Breinin, E., & Popper, M. (1998). Correlates of charismatic leader behavior in military units: Subordinates' attitudes, unit characteristics, and superiors' appraisals of leader performance. *Academy of Management Journal*, *41*, 387–409.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *74*, 422–445.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S.Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). Washington, DC: American Sociological Association.

Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, *124*, 240–261.

Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal*, *48*, 420–432.

Wiley, J. W. (1996). Linking survey results to customer satisfaction and business performance. In A. I.Kraut (Ed.), *Organizational surveys: Tools for assessment and change*. San Francisco: Jossey-Bass.

Yammarino, F. J., & Bass, B. M. (1991). Person and situation views of leadership: A multiple levels of analysis approach. *Leadership Quarterly*, *2*, 121–139.

Yammarino, F. J., & Dubinsky, A. J. (1994). Transformational leadership theory: Using levels of analysis to determine boundary conditions. *Personnel Psychology*, *47*, 787–811.

Yammarino, F. J., Dubinsky, A. J., Comer, L. B., & Jolson, M. A. (1997). Women and transformational and contingent reward leadership: A multiple-levels-of-analysis perspective. *Academy of Management Journal*, *40*, 205–222.

Yammarino, F. J., Spangler, W. D., & Dubinsky, A. J. (1998). Transformational and contingent reward leadership: Individual, dyad, and group levels of analysis. *Leadership Quarterly*, *9*, 27–54.

Zohar, D. (2000). A group-level model of safety climate: Testing the effects of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology*, *85*, 587–596.

Zohar, D., & Luria, G. (2004). Climate as a social–cognitive construction of supervisory safety practices: Scripts as proxy of behavior patterns. *Journal of Applied Psychology*, *89*, 322–333.