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Social exchange and customer service: the relationship between perceived organizational support, leader-member exchange, and customer service behavior

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SOCIAL EXCHANGE AND CUSTOMER SERVICE:
THE RELATIONSHIP BETWEEN PERCEIVED ORGANIZATIONAL SUPPORT,
LEADER-MEMBER EXCHANGE, AND CUSTOMER SERVICE BEHAVIOR

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University
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in

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ABSTRACT

As the economy continues to shift from the production of goods to the delivery of services, one way in which an organization might set itself apart from its competition is through the delivery of high quality customer service. Therefore, a critical question for organizations becomes how to elicit the appropriate level of service from its employees. The purpose of the current study was to propose and test a social exchange based model of customer service. Specifically, it was suggested that the quality of the organization-service employee and manager-service employee relationships would be related to employee customer service behavior through their impact on employee commitment and motivation. Surveys were sent to 348 employees and 945 customers of a large southeastern hospital. Completed surveys resulted in 107 data pairs that were subsequently submitted to structural equation modeling in order to test the proposed model. Results indicated support for several of the proposed relationships. In particular, perceived organizational support and leader member exchange were positively related to organizational and supervisory commitment respectively. Further, organizational commitment was positively related to motivation. Contrary to expectations, however, motivation was not related to perceptions of service quality and satisfaction. Possible explanations for this lack of a significant relationship include a restricted range in both the predictor and the criterion scores and the possibility that a third variable, such as service climate, may be constraining the motivation-performance relationship. Overall, these results suggest that organizations that wish to improve employee commitment and motivation should focus on improving the quality of the employee-supervisor and employee-organization relationships. Limitations, implications, and suggestions for future research are discussed.
INTRODUCTION

Organizations today are faced with increasing competition, both domestic and international, rapid advances in technology, and an older, more diversified, and less skilled workforce (Bassi, Benson, & Cheney, 1996). In this complex business environment, organizations are faced with the difficult task of differentiating themselves from their competition. One way that an organization might distinguish itself from its competitors is through the delivery of quality customer service (Berry, 1995). Consequently, an important issue for these organizations to address is how to elicit and maintain the desired customer service behaviors from their employees (Schneider & Bowen, 1995; Schneider, White, & Paul, 1997).

It has been demonstrated that the way an organization treats employees is reflected in the way that those same employees treat customers (Schneider & Bowen, 1985). Accordingly, it seems to make intuitive sense that the quality of the relationship between the organization and the customer service employee, as well as the quality of the relationship between the manager and the customer service employee, are important factors in understanding the forces that lead to the delivery of quality customer service. Therefore, the purpose of this paper is to explore the connections between both the quality of the organization-employee relationship, as represented by perceived organizational support (POS) and the manager-employee relationship, as represented by leader-member exchange (LMX), and employees’ provision of quality customer service. More specifically, this study will examine the ways in which the quality of these relationships might impact employees’ commitment and motivation to perform the customer service related behaviors that contribute to customer perceptions of service quality. Perceived organizational support (POS) and leader-member exchange (LMX) were chosen for examination in the current study as both are exchange based approaches to understanding organizational behavior. Both of these approaches focus explicitly on the effect that relationship quality, the organization-employee relationship in the
case of POS and the manager-employee relationship in the case of LMX, has on organizationally relevant outcomes.

The following sections provide an overview of the customer service issues created by the shift to a service economy and the consequent importance of the organization-service employee and manager-employee relationships, an overview of a proposed exchange based model of customer service quality that outlines the mechanisms by which POS and LMX quality might influence employees’ delivery of quality customer service, and detailed discussion of the relevant exchange based theories and research in support of the relationships suggested by the model. Relevant hypotheses are also proposed.

Customer Service

The transition to a service economy has important implications for organizations and how they operate (Bowen & Schneider, 1988). To begin with, goods and services differ on several dimensions that impact the way they are delivered. Schneider and Bowen (1984) describe three defining features of services. First, services are intangible in nature. In contrast to products, or goods, that can be touched and possessed, services tend to be experiential in nature (Berry, 1980).

A second distinguishing feature of services is that production and consumption occur simultaneously. Berry suggests that the chain of events involved in the creation and consumption of goods differs from the order of events that occurs in the creation and consumption of services. Goods are generally produced first, then sold, and finally consumed. Services, on the other hand, are generally purchased first, then produced and consumed at the same time. The final defining feature of services according to Schneider and Bowen is that the consumer is often involved in the production and delivery of the service. With respect to goods, consumers typically have little input into the creation of the product they are purchasing. In contrast, consumers often provide input that is necessary for the production and delivery of a service.
These three characteristics of services (i.e., intangibility, simultaneous production and delivery, and customer participation in production and delivery) mean that the customer service employee, who directly interacts with the customer, is critical to the delivery of quality service (Bowen & Schneider, 1998). Schneider and Bowen (1995) suggest that these boundary-spanning employees perform two important functions. First, customer service employees, because of their direct contact with customers, are a crucial source of information about customer expectations and attitudes as well as a source of suggestions for improving the quality of the service and its delivery. Second, and perhaps even more importantly, they represent the organization to the customer. As Schneider and Bowen (1995) point out, for most customers, the service employee is the embodiment of the organization. Consequently, the behavior of the service employee, and the experience that behavior creates for the customer during the service interaction, are critical factors in defining customer’s perceptions of service quality. Given the important roles filled by customer service employees, organizations wishing to deliver quality service must find ways to support and effectively coordinate the behavior of these individuals (Schneider & Bowen, 1992; 1995).

Schneider, White, and Paul (1997) advocate a relationship marketing approach to customer service in which the goal is to move beyond the delivery of high quality service to the establishment of a long term relationship with individual customers. The benefit of forming such relationships stems from the presumably higher levels of customer commitment and retention resulting from such a relationship. The commitment and retention should lead, in turn, to higher profits for the organization. The manner in which customer service employees behave toward an organization’s customers will have a significant impact on the development of these long term relationships.

As previously stated, research on organizational climate has demonstrated that an organization’s treatment of its employees becomes manifest in the way in which those employees subsequently act toward their customers (e.g., Schneider & Bowen, 1985). That is, when
employees reported that their organizations expected, supported, and rewarded quality service, customers reported that they received superior service (Schneider, Parkington, & Buxton, 1980). It seems to follow then, that organizations wishing to form long-term relationships with their customers should first develop quality relationships with their employees in as many ways as possible. As managers are frequently the individuals involved in determining what behaviors are expected, supported, and rewarded, their relationship with customer service employees will be especially important. Given that the way organizations treat their employees is evident in the way that employees treat their customers, the nature of these organization-employee and manager-employee relationships will likely play a key role in the way employees treat their customers. Perceived organizational support and leader-member exchange theory, because of their explicit focus on the quality of the relationships that exist between the organization and its employees and between leaders (or managers) and their followers (in this case, customer service employees), seem to be appropriate concepts for gaining a better understanding of the role of the organization and the leader (or manager) in employee customer service behavior.

Proposed Social Exchange Model of Customer Service Quality

Based on the previous review, the following model, that links POS and LMX quality to customer service behavior through their effect on service employee commitment and motivation, is proposed (see Figure 1). An examination of the model suggests that both exchange relationships are positively related to employee commitment. In the case of POS, it is suggested that the employees become more highly committed to the organization as a result of higher levels of perceived support, while in the case of LMX, it is suggested that employees become more highly committed to the leader, or manager, as a result of higher quality leader-member exchanges. Commitment, in turn, is positively related to employee motivation. The model further suggests that POS and LMX quality are related to customer service quality through their effect on employee
Figure 1: A Model of the Relationship Between Leader-Member Exchange, Perceived Organizational Support, Supervisory and Organizational Commitment, Motivation, and Customer Service Quality.
motivation. Both POS and LMX are proposed to have a direct positive impact on motivation as well as an indirect relationship through their effect on employee commitment. The higher levels of employee motivation associated with higher levels of commitment and higher quality exchanges are suggested to result in a higher level of customer service quality on the part of the employee.

Moving from the left hand side of the model to the right, the following sections of the paper will explore each of the suggested relationships in greater detail. Relevant hypotheses are proposed within each section.

Social Exchange Theory and Research

In order to better understand the relationship of both perceived organizational support (POS) and leader-member exchange (LMX) with employee service behavior, it is important to distinguish between the types of exchange relationships that can develop between two parties. More specifically, it is important to understand the difference between an economic exchange and a social exchange (Blau, 1964). Both types of exchange ideology are based on the expectation of some future return. However, an economic exchange is a quid pro quo relationship in which the expected return is specifically defined. In other words, an economic exchange is a contractually based transaction in which receipt of a given reward is clearly contingent on the performance of a certain behavior. The responsibilities of both parties are finite and enforceable (Organ, 1990). Possibly the best example of an economic exchange is the regular paycheck an employee receives for performing his or her job responsibilities at some agreed upon minimum acceptable level.

In contrast, high quality LMXs and high levels of POS both lead to the development of social exchanges. A social exchange, which is characterized by a high level of trust between the organization or manager and the employee, is less well defined than an economic exchange in terms of the obligations of both parties, with neither the exact means nor timing of the reciprocation being explicitly defined. In other words, the exchange partners in a social exchange simply come to trust,
based on prior experience, that the other side will live up to their side of the bargain at some point in the future (Organ, 1990). Reciprocation within a social exchange can take many forms including increased commitment, extra effort in performing in-role behaviors, and organizational citizenship behavior on the part of the employee, and increased support, resources, and attention on the part of the organization or supervisor (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Konovsky & Pugh, 1994; Liden, Sparrowe, & Wayne, 1997; Organ, 1990; Shore & Wayne, 1993).

Perceived Organizational Support

The concept of perceived organizational support (Eisenberger et al., 1986) suggests that employees form global beliefs concerning the quality of their relationship with their organization. Through the process of making attributions about the way the organization ‘behaves’, employees arrive at an evaluation about the degree to which they believe that the organization supports them, values their contributions, and is concerned with their well-being. In other words, POS represents an employee’s beliefs about the degree of the organization’s affective commitment toward that employee. Individuals with high levels of POS believe that the organization values their well-being, appreciates their contributions, and would help them when problems arise. In contrast, individuals with low levels of POS believe that the organization disregards their best interests, would take advantage of them, and would replace them if possible (Eisenberger et al.).

According to Eisenberger, Fasolo, and Davis-LaMastro (1990), an employee’s evaluation of POS is based on judgments made about various aspects of the organization’s treatment of the employee. They suggest that the frequency and sincerity of praise and approval, as well as other rewards such as pay, promotion, and influence over policies, if those rewards are seen as representing the organization’s evaluation of the employee, may all contribute to an employee’s POS. Consistent with this position, goal setting, performance feedback, discretionary practices that indicate an organizational investment on behalf of the employee (e.g., educational opportunities),
and organizational recognition (e.g., salary increases) have been found to contribute to POS (Hutchison & Garstka, 1996; Shore & Shore, 1995). It is reasonable to assume that all four of these antecedents provide some information to the employee about the organization’s evaluation of his or her contribution.

Perceived support is important as it forms the basis of the social exchange between the employee and the organization. When POS is high, a social exchange develops in which the employee may feel compelled to reciprocate the high level of perceived affective commitment he or she receives from the organization (Wayne, Shore & Liden, 1997). Based on the evaluation of prior treatment, the employee comes to trust that the organization will continue to treat him or her fairly in the future. It is suggested that this trust leads to a higher level of affective commitment on the part of the employee, which in turn may lead to higher levels of both in-role and extra-role behavior.

To date, research on POS has generally followed two main streams, the first focusing on separating POS from related concepts such as organizational commitment, leader-member exchange, and job satisfaction and the second focusing on the antecedents and consequences of POS. With respect to construct validity, it is particularly important to distinguish POS from organizational commitment as the theory suggests that POS contributes to the development of organizational commitment. Several studies provide empirical support for this distinction. Shore and Tetrick (1991) used confirmatory factor analysis with measures of POS, affective and continuance commitment, and satisfaction. The resulting correlation matrices and goodness-of-fit indices indicated that POS could be empirically distinguished from affective and continuance commitment. The results concerning POS and satisfaction were a bit more ambiguous, but the authors argue that the concepts are clearly different from one another and suggest that POS may be an antecedent to satisfaction. In a similar study, Hutchison (1997) examined the relationship
between POS, affective commitment, perceived supervisory support, and organizational
dependability. Results of the confirmatory factor analysis indicated that the five factor model, with
each of the measures loading on a separate factor, produced the best fit for the data, providing
further support for the construct validity of the POS construct.

The second line of POS research has focused on the relationship of POS to organizationally
relevant outcomes. For example, high levels of POS have been found to be positively related to job
attendance (Eisenberger et al., 1990; Eisenberger et al. 1986) and employee innovation (Eisenberger
et al., 1990), and negatively related to turnover intentions (Wayne et al., 1997). POS has also been
shown to have a positive relationship with in-role performance (Armeli, Eisenberger, Fasolo, &
Lynch, 1998; Eisenberger et al., 1990; Lynch, Eisenberger, & Armeli, 1999). For example, Lynch
et al. examined POS in two studies, the first involving a sample of 300 retail employees and the
second involving a sample of 221 employees from a variety of different organizations. In both
samples, the correlation between POS and in-role behavior was significant ($r=.14$ and $.13$
respectively). Similarly, in a sample of police officers, Armeli et al. found a significant correlation
of $r=.17$ between POS and performance.

POS has also been found to be related to organizational citizenship behavior (Lynch et al.,
1999; Shore & Wayne, 1993; Wayne et al., 1997). Although organization citizenship behaviors
(OCBs) represent extra-role behaviors, the relationship between POS and OCB has important
implications for in-role customer service behaviors as many of the citizenship dimensions overlap
considerably with behaviors typically defined as in-role service behaviors. For example,
Parasuraman, Zeithaml, and Berry (1988) identify five dimensions of service quality that include
Assurance (which involves courteous, friendly, and considerate behavior on the part of the service
employee), Reliability (which involves consistent levels of performance and dependability by the
service employee), and Responsiveness (which concerns the willingness of employees to provide
service). These dimensions seem similar in nature and definition to Organ’s (1988) OCB
dimensions of courtesy (checking with others before taking action that would affect them),
generalized compliance (adherence to rules, attendance, punctuality), altruism (assisting others) and
sportsmanship (tolerance or ability to deal with complaints or grievances). This similarity between
OCB dimensions and customer service behaviors may indicate that antecedents, such as POS, that
have been shown to influence OCB may have similar effects on customer service behaviors.

**Leader-Member Exchange**

Before leader-member exchange (LMX) development and it’s implications can be
discussed, it is important to note that there is a distinction drawn within the leadership literature
between leaders and managers (e.g., Schneider, 1987; Zaleznik, 1984). According to Schneider, a
manager is responsible for making sure that everyday operations are running smoothly, while
leaders are responsible for ensuring that the organization is headed in the right direction. In other
words, leaders are typically seen as being the visionaries within an organization. These individuals
typically operate in high level, risk-taking positions, working toward the development of new ideas
and new directions for the organization. Managers on the other hand are typically involved in the
day to day coordination of activities that enable the organization to operate as it should (Zaleznik).
While the name leader-member exchange theory suggests a focus on the relationship between the
leader and the follower, the relationships described in most conceptualizations of leader-member
exchange are actually descriptive of the relationship between managers and their subordinates and,
in fact, much of the research on LMX involves the use of managers and their subordinates as
participants. Consequently, even though the focus of this paper is the manager-employee
relationship, and LMX theory itself seems to be focusing on the manager-employee relationship, the
term leader will be used when leader-member exchange is being explicitly discussed in order to be
consistent with theoretical terminology.
Leader-Member Exchange theory (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975), which deals with the nature of the relationship between leaders and followers, suggests that leaders form different relationships with different subordinates. The basic premise of the theory is that the leader and follower engage in a joint “negotiation” process that determines the role to be filled by each party, as well as the type of relationship that these individuals will have with one another (Graen & Cashman). In turn, the type of relationship that develops between the leader and the subordinate influences a variety of factors (e.g., subordinate goal commitment, organizational commitment, subordinate performance, etc.) important to the individual and the organization (Gerstner & Day, 1998; Klein & Kim, 1998; Nystrom, 1990).

There are two main theories that address LMX development (Liden et al., 1997). The first is a multi-staged model of LMX development proposed by Dienesch and Liden (1986) in which the exchange development process moves from an initial interaction phase through a leader delegation phase to a behavior attribution phase. It is this third phase that ultimately determines the nature and quality of the exchange between leader and subordinate. Similarly, Graen and Scandura (1987) advance a three-phase model to explain how the relationship between leader and follower develops. The three basic stages in the process are known as role taking, role making, and role routinization.

Regardless of the exact manner in which leader-member exchanges develop, the resulting exchanges have typically been divided into two general categories: in-group relationships, or high quality LMXs, and out-group relationships, or low quality LMXs (Graen & Cashman, 1975). Although LMX quality has traditionally been discussed in terms of this dichotomy (i.e., in- versus out-group), Dienesch and Liden (1986) suggest that from a theoretical perspective, LMX quality is actually continuous in nature. That is, the quality of the various relationships between a leader and his or her subordinates is likely cover the full range from very poor to very positive rather than falling along a simple high quality versus low quality distinction. Consequently, for the purposes of
In this paper, LMX quality will be conceptualized and discussed in terms of higher quality relationships and lower quality relationships which are representative of different positions on the continuum as opposed to a simple in-group/out-group dichotomy.

Employees in higher quality LMXs are typically seen by their supervisor as being competent and motivated. Further the supervisor believes that they can be trusted to complete both in-role and extra-role tasks. These higher quality LMXs are characterized by trust, respect, loyalty, and support (Graen & Scandura, 1987; Liden, Wayne & Stillwell, 1993). In other words, these relationships are representative of the social exchange relationship defined earlier in which the leader trades social acceptance in the form of information, latitude, support, and attention for compliance, cooperation, etc. on the part of the follower (Graen & Scandura; Sparrowe & Liden, 1997). In contrast, lower quality LMXs are characterized by “downward influence and role-defined relations” (Liden et al., 1993). Members in lower quality exchanges tend to perform routine and mundane tasks and their relationships are exemplified by a more formal, quid pro quo, economic exchange with the leader (Graen & Scandura; Sparrowe & Liden).

Research supports many of the proposed consequences of exchange quality on both leader and subordinate behavior and attitudes. For example, Dansereau, Graen, and Haga (1975) found that high quality LMXs were characterized by increased leader attention and support. The subordinates in the high quality LMXs also invested more time in the job and had better attitudes toward the job than subordinates in low quality LMXs. Further, a recent meta-analysis indicated that LMX quality is positively related to subordinate competence, satisfaction, commitment, and role clarity and negatively related to subordinate role conflict and turnover intentions (Gerstner & Day, 1997).

Research also indicates that LMX quality is related to the performance of subordinates. For example, Graen, Novak, and Sommerkamp (1982) and Scandura and Graen (1984) examined LMX
quality and performance in the context of a leadership training program designed to enhance LMX quality. They found that subordinate performance increased as LMX quality improved over the course of the training program. In a more direct examination of LMX quality and performance, Settoon, Bennett, and Liden (1996) found that LMX quality was positively related to both in-role and extra-role behavior. Similarly, Wayne et al. (1997) found that employee rated LMX quality was significantly related to leader evaluations of subordinate performance. Finally, in their meta-analysis, Gerstner and Day (1997) found that exchange quality, measured from both the leader’s and the subordinate’s perspectives, was significantly related to leaders’ ratings of subordinate performance. The relationship was strongest between leader perceptions of LMX and performance ratings, possibly indicating that the correlations were inflated due to same-source bias. However, there was also a small, but significant, relationship between exchange quality and objectively measured performance. Although the correlation between LMX and objective performance is small, Gerstner and Day suggest that the relationship warrants further investigation as there are methodological issues involved in the collection of objective measures that may have served to attenuate the strength of the relationship.

Because both POS and LMX involve exchange relationships with the employee, it is important to distinguish POS from LMX. In line with Hutchison’s (1997) finding that POS was a separate and distinct construct from perceived supervisory support, Wayne et al. (1997) used structural equation modeling to examine the relationship between POS and LMX. They found that these two exchange relationships had a different set of antecedents and consequences, thus providing support for the importance of each type of exchange. For example, developmental experiences, promotions, and organizational tenure were significant predictors of POS, whereas liking, expectations, and dyad tenure were significant predictors of LMX. With respect to outcomes, POS was related to affective commitment, intentions to quit, and organizational
citizenship behavior, whereas LMX was related to performance ratings, citizenship behavior, and favor doing for the supervisor.

Summary

Research indicates that employees develop different types of relationships with both their organizations and their leaders and the quality of these relationships has important implications for organizations. High quality relationships are characterized by trust, loyalty, support, commitment, and increased communication (Eisenberger et al., 1990; Hutchison, 1997; Liden et al, 1993). In turn, these high quality relationships have been found to be positively related to a variety of affective outcomes as well as subordinates’ performance (e.g., Armeli et al., 1998; Gerstner & Day, 1997; Lynch et al., 1999; Settoon et al., 1996; Wayne et al., 1997). Given the results suggesting that POS and LMX quality are positively related to performance, it seems important to examine the mechanisms by which the quality of these exchange relationships might influence customer service quality. The previous research on the POS-performance and LMX-performance relationships has been conducted in a variety of settings including police departments (Armeli, et. al., 1998), retail organizations (Lynch et al., 1999), hospitals (Settoon et al, 1996), telephone companies (Duarte, Goodson, & Klich, 1994), and computer companies (Keller & Dansereau, 1995). As customer service quality is representative of performance in a specific context (i.e., a service setting), it seems appropriate to investigate how the quality of the relationship between service employees and their managers impacts the delivery of quality customer service (i.e., service employee performance). It should be noted, that while many of the settings outlined above appear to involve service employees, none of these studies focused explicitly on the relationship between POS or LMX and customer service quality, nor on the mechanisms of that relationship that are the explicit focus of the current study.
Commitment Theory and Research

Through the years organizational commitment has taken a variety of different definitions, particularly with respect to early research, with little consensus among researchers on the exact meaning of this construct (Mowday, Porter, & Steers, 1982; Reichers, 1985). More recently researchers have attempted to refine and extend the construct of organizational commitment by identifying and defining the various bases of commitment (e.g., Meyer & Allen, 1991; O’Reilly & Chatman, 1986). While several taxonomies exist, the three-component model proposed by Meyer and Allen (1991), along with its associated measures, has been the most widely researched conceptualization of organizational commitment (Meyer & Allen, 1997). For this reason, the Meyer and Allen taxonomy will be used to define organizational commitment for the purposes of this study.

In their model, Allen and Meyer (1990) define three separate components of commitment: affective, continuance, and normative. Affective commitment can be defined as “the employee’s emotional attachment to, identification with, and involvement in the organization” (Meyer & Allen, 1991, p. 67). This component of commitment represents the degree to which the individual wants to remain with the organization (Allen & Meyer; Meyer & Allen). Continuance commitment represents the cost to the employee associated with leaving an organization (e.g., loss of pension or other benefits). This aspect of commitment reflects the degree to which an individual needs to remain with the organization. Finally, normative commitment refers to the bond that occurs between an employee and an the organization due to socialization and/or person-organization fit. This component represents the degree to which an individual feels as though he or she ought to remain with the organization (Allen & Meyer; Meyer & Allen).

As stated earlier, POS and LMX are both based in social exchange (Liden et al., 1997; Wayne et al., 1997). According to Lynch et al. (1997), the reciprocation process that occurs in a
social exchange serves to initiate, strengthen, and maintain the interpersonal relationship that exists between the exchange partners. This view of the exchange process most closely aligns with Meyer and Allen’s (1991) definition of affective commitment, so it would seem likely that POS and LMX would be more closely related to this type of organizational commitment than to the continuance or normative bases of commitment. And, in fact, most of the empirical research on the relationship between POS and commitment has focused on affective based commitment.

**Perceived Organizational Support**

A large number of studies conducted in a variety of settings supports the previously described relationship between POS and affective commitment, with results indicating significant, positive correlations ranging from .38 to .80 (e.g., Hutchison; 1997; Hutchison & Garstka, 1996; Shore & Tetrick, 1991; Shore & Wayne, 1993; Wayne et al., 1997). In contrast, POS and continuance commitment generally show no significant relationship with correlations typically being small and negative (e.g., Shore & Tetrick; Shore & Wayne). Further, little, if any, empirical research has examined the relationship between POS and normative commitment. Based on these findings, the following is proposed:

Hypothesis 1a: Perceived organizational support will have a direct positive impact on affective organizational commitment.

**Leader-Member Exchange**

The relationship between LMX and organizational commitment is less clear cut than the relationship between POS and organizational commitment. Results from a recent meta-analysis on the correlates of LMX provide some support for the relationship between LMX and organizational commitment (Gerstner & Day, 1997). Using 17 samples with a total sample size of 3,006, Gerstner and Day found a mean sample-weighted correlation of .35, .42 corrected, between LMX and organizational commitment. Although these results must be tempered by the fact that Gerstner and
Day didn’t separate affective and continuance commitment in their meta-analysis, the affective nature of social exchange relationships in general suggests that LMX should be positively related to affective commitment. However, the results of two recent studies examining the antecedents and consequences of POS and LMX within the same study found that POS, but not LMX, was positively correlated with affective commitment (Settoon et al., 1996; Wayne et al., 1997). Thus, while the meta-analytic results tend to support a relationship between LMX and organizational commitment, studies that more directly compare POS and LMX within the same study do not.

While these results seem problematic, they may, in fact, make sense given the nature of social exchange relationships. As mentioned previously, both POS and LMX represent social exchange relationships in which the employee feels an obligation to reciprocate the support received from the exchange partner. However, POS represents the relationship between the organization and the employee, while LMX represents the relationship between the manager and the employee. It makes intuitive sense then, that POS would lead to higher levels of organizational commitment as this type of commitment is one way in which an employee might ‘repay’ the organization for its support. In contrast, commitment to the organization may not represent the best form of ‘repayment’ for a leader’s, or manager’s, support. If the goal of reciprocation is to ‘repay’ the exchange partner, then LMX quality should be more strongly related to supervisory commitment than to organizational commitment. Wayne, et al.’s (1997) finding that LMX, but not POS, was positively related to favor doing on behalf of the supervisor provides tentative support for this perspective. Consequently, the following is proposed:

Hypothesis 1b: Leader-member exchange will have a direct positive impact on supervisory commitment.
Summary

Research was presented in support of the first relationship suggested by the model, the linkage between POS and affective organizational commitment. These studies clearly suggest that POS should be positively related to affective commitment (e.g., Hutchison, 1997; Hutchison & Garstka, 1996). The research for the link between LMX and organizational commitment was not as consistently supportive (e.g., Gerstner & Day, 1997; Settoon et al., 1996; Wayne, et al., 1997). Consequently, it was suggested that LMX would be more closely related to increased supervisory commitment, as the employee’s exchange partner in LMX relationships is the supervisor and not the organization.

The second set of relationships within the proposed model suggest that the employee commitment that occurs as the result of high levels of POS and LMX quality will be positively related to employee motivation. In addition, POS and LMX are proposed to have a direct effect on motivation as well. In the previous section evidence for the links between POS and commitment and LMX and commitment were presented. In the following sections, linkages will be made between commitment, POS, LMX and motivation.

Motivation Theory and Research

While there exists a plethora of motivational theories (Kanfer, 1990), including everything from need-motive-value theories (e.g., equity and justice theories) to cognitive choice theories (e.g., VIE theory) to self-regulation-metacognition theories (e.g., goal setting, self-efficacy), in the most simple analysis motivation can be defined in terms of choice, intensity of effort, and persistence over time. That is, motivation represents choosing to act on a certain task, choosing to expend a given amount of effort toward the completion of that task (intensity), and choosing to persist in expending that effort over time (Campbell and Pritchard, 1976). Consequently, no matter what particular theory of motivation is under consideration, if the approach is effective, intensity of effort
and persistence toward completion of the target task will be high. In turn, this higher level of intensity and persistence should have a positive effect on employee performance, assuming that the requisite levels of ability are present and situational constraints are not prohibitive.

Commitment and Motivation

One of the most important outcomes of organizational commitment is employee motivation. According to Mowday et al. (1982) employees who are highly committed to the organization should be motivated to exert high levels of effort for the organization. Meta-analytic results provide strong support for this contention. Using five studies with an overall sample size of 1,357, Mathieu and Zajac (1990) obtained a mean sample weighted correlation of .47 (.57 corrected) between organizational commitment and overall motivation.

Further evidence in support of the commitment-motivation relationship can be drawn from the goal-setting literature. A basic tenet of goal setting theory holds that in order for goals to be effective in bringing about desired levels of performance, individuals must be committed to those goals (Erez & Zidon, 1984; Locke, Latham & Erez, 1988; Locke & Latham, 1990a). In other words, goal setting as a motivational technique is only effective if an individual actually tries to achieve the goal. In their 1992 meta-analysis of the antecedents and consequences of goal commitment, Wofford, Goodwin, and Premack found a mean effect size \( d \) of .55, .63 corrected, for the relationship between goal commitment and goal attainment. This result points to the important role that commitment plays in motivation. If an employee is committed to a course of action, he or she is likely to put forth effort toward that course of action. In terms of organizational commitment, this suggests that when an employee feels a strong sense of commitment to the organization, he or she will likely be motivated to behave in ways that will benefit the organization. Based on these findings, the following hypotheses are advanced:
Hypothesis 2a: Affective organizational commitment will have a direct positive impact on employee motivation.

Hypothesis 2b: Supervisory commitment will have a direct positive impact on employee motivation.

Perceived Organizational Support, Leader Member Exchange, and Motivation

In addition to the indirect effects that POS and LMX are hypothesized to have on employee motivation through their relationship with employee commitment, it is also possible that POS and LMX may contribute directly to an employee’s motivation. While the focus of this paper is on motivation in general, as opposed to any specific theory of motivation, three theories will be briefly examined in order to demonstrate some of the many ways in which these exchange based relationships might directly influence motivation.

Equity theory. Adams’ equity theory (1963) approach to motivation suggests that individuals are motivated by their desire for fair and equitable treatment. According to the theory, perceptions of equity are based on the comparison of the individual’s input to outcome ratio to the input to outcome ratio of some referent individual. According to Greenberg (1984) individuals who find themselves in a state of inequity are motivated to alleviate the unpleasant feelings associated with the imbalance either through behavioral means (i.e., altering their outputs) or through psychological means (i.e., altering their perceptions of either their inputs or outcomes or their perceptions of the inputs or outcomes of the referent other). Research generally supports the basic tenets of equity theory (Greenberg, 1982; 1988).

With respect to the present study, the factors that contribute to an employee’s POS or LMX quality, such as the amount of communication, feedback, job assignments, and rewards such as pay, may all be considered outcomes. If these outcomes are perceived to be iniquitably distributed, the result could be an increase or a decrease in motivation, depending on the direction of the perceived
inequity, that subsequently influences performance. That is, employees who perceive high levels of support, or who are involved in high quality LMXs, may be more motivated than employees who perceive lower levels of support, or who are involved in lower quality LMXs, due to the perceived imbalance between their input to outcome ratios as compared to those of referent others.

**Self-Efficacy.** According to Bandura (1997), individuals are motivated to behave in certain ways based on their perceptions of self-efficacy. Perceived self-efficacy is an individual’s judgment of his or her ability to complete the necessary actions required to reach a designated level of performance. According to the theory, people are motivated to undertake certain actions when they believe they possess the necessary capabilities for successful performance. There is a wealth of support for the relationship between self-efficacy and work related outcomes such as job attendance (e.g., Frayne & Lathan, 1987; Latham & Frayne, 1989) and job performance (e.g., Eden & Zuk, 1995; Stajkovic & Luthans, 1998; Wood, Bandura, & Bailey, 1990).

Bandura (1997) outlines several sources from which an individual may draw information on which to base judgments of self-efficacy. The first source of efficacy perceptions is actual performance accomplishments within a given domain. One of the basic consequences of LMX quality involves the types of work assignments given to employees. Individuals who are in higher quality LMXs are given more responsibility and are assigned more challenging tasks than individuals involved in lower quality LMXs (Liden et al., 1997). This suggests that employees involved in higher quality exchanges will receive more opportunities to test their abilities and perhaps succeed in new experiences. Further, it is likely that they would also be given more of the support and resources necessary to facilitate their success. Successful performance in turn leads to higher levels of self-efficacy and higher levels of subsequent motivation.

LMX quality should also have an effect on the second source of self-efficacy perceptions: vicarious experience. The high level of trust and credibility that employees involved in higher
quality exchanges afford their leaders makes it more likely that these leaders will be accepted as role models. When these employees subsequently observe their managers (i.e., their role models) taking risks and succeeding (i.e., the vicarious experience), the employees’ personal levels of self-efficacy should be positively affected and they should be more willing to attempt the modeled behaviors themselves.

Finally, increased levels of communication and confidence in an employee’s abilities are both related to higher quality LMXs and higher levels of POS (Eisenberger, et al., 1990; Liden et al., 1997). In addition, these factors may also impact the third source of efficacy perceptions, verbal persuasion. Managers and organizations who communicate more with employees, and show confidence in those employees’ abilities, may be more likely to provide the verbal support and encouragement necessary to increase employees’ efficacy perceptions and subsequent performance attempts.

**Goal Setting.** Most models of the goal setting process (e.g., Locke & Latham, 1990a; 1990b) include three important goal components: goal difficulty, goal commitment, and feedback. Research on these components has been extensive and supportive. The core findings of the research on goal difficulty indicate that there is a positive linear relationship between goal difficulty and performance (Locke & Latham, 1990a; Locke, Shaw, Saari, & Latham, 1981; Mento, Steel, & Karren, 1987; Tubbs, 1986). There is also evidence supporting the relationship between goal commitment and performance (e.g., Wofford et al., 1992). Finally, the feedback-performance relationship is also supported (e.g., Kluger & DeNisi, 1996; Neubert, 1998).

With respect to goal difficulty, high quality LMXs are occupied by employees who are competent and can be trusted to complete both in-role and extra-role tasks. The tasks performed by these individuals typically involve higher levels of challenge and responsibility (Liden et al., 1997) than the tasks performed by employees involved in lower quality LMXs. This suggests that
employees in high quality LMXs are more likely to be assigned difficult and challenging goals which, in turn, should lead to higher levels of performance.

In their model of the antecedents and consequences of goal commitment, Hollenbeck and Klein (1987) suggest that supervisor supportiveness should be related to higher levels of goal commitment. As stated previously, there is a higher level of communication, and a greater exchange of information, between the leaders and employees in higher quality LMXs than in lower quality LMXs (Graen & Scandura, 1987; Liden et al., 1993). This increased flow of information seems to reflect supervisor supportiveness as described by Hollenbeck and Klein, indicating that there should be a positive relationship between LMX quality and goal commitment. POS should also be related to goal commitment, as the frequency and sincerity of communications with the employee that reflect the supportiveness component of Hollenbeck and Klein’s model are also important factors in the development of POS (Eisenberger et al. 1990).

Finally, the increased communication that characterizes higher levels of POS and higher quality LMXs (Eisenberger et al., 1990; Liden et al., 1993) should result in greater feedback about progress toward goals for employees involved in those relationships. Further, because of the heightened level of trust that results from higher levels of POS and LMX quality (Wayne et al., 1997), it is likely that employees in these higher quality relationships will view the organization, and the manager, as trustworthy and credible sources of feedback, thus facilitating the effect of the feedback on employee behavior.

To summarize, three theories of motivation, Equity, Self-Efficacy, and Goal Setting, and their relationships with POS and LMX quality, were discussed to illustrate just some of the possible ways in which POS and LMX might directly impact employee motivation. Given the number of ways that POS and LMX might directly influence equity perceptions, evaluations of self-efficacy, and the components of goal setting theory, it seems reasonable to suggest that POS and LMX will
have a positive influence on employee motivation. Therefore, the following relationships are hypothesized:

Hypothesis 3a: Perceived organizational support will have a direct positive impact on employee motivation.

Hypothesis 3b: Leader-member exchange will have a direct positive impact on employee motivation.

Motivation and Performance

The final relationship suggested by the proposed model is a linkage between employee motivation and customer service quality (i.e., performance). Most theories of job performance suggest that performance can best be described as being a multiplicative function of motivation and ability (Maier, 1955). In its simplest form the relationship can be expressed as $P = f(M \times A)$. Although this simple formula can be expanded upon in many ways (e.g., Campbell, McCloy, Oppler, & Sager, 1993; Noe, 1986), the basic premise remains that motivation is an important, and widely researched, component in the prediction of performance (Campbell & Prichard, 1976, Kanfer, 1990). Research cited in the previous motivational sections on the effectiveness of equity, self-efficacy, and goal setting approaches (e.g., Greenberg, 1982, Locke & Latham, 1990a, Stajkovic & Luthans, 1998; Tubbs, 1986; Wood et al., 1990) provides a wealth of support for the role of motivation in employee performance. Therefore, the following hypothesis is proposed:

Hypothesis 4: Employee motivation will have a direct positive impact on employee customer service quality.
METHOD

Participants

Survey packets were distributed to 348 service providers (e.g., Registered Nurses, Licensed Practical Nurses, Nursing Assistants, Radiology and EEG Technicians, Respiratory and Physical Therapists) employed by a large regional medical center located in the southeastern United States. A minimum of two customers per each service employee were also surveyed, resulting in a total distribution of 945 customer surveys. Response to the initial mailing was less than anticipated, resulting in 88 matched pairs of surveys. In order to increase the sample size, two waves of follow up letters were sent to employees and customers who had not responded to the initial mailing. At the end of the three mailings, surveys had been completed and returned by 207 of the service providers for a response rate of 59.5%. The majority of the service respondents were female (87.9%) and the average age was 37.5 years. Average tenure within the organization was 5.9 years. Of the customers surveyed, 186 surveys were completed and returned for a response rate of 19.7%. The majority of the customer respondents were also female (58.6%) and the average age for these respondents was 59.2 years. Average length of the relationship with the hospital was 8.7 years. Matching of the employee and customer surveys returned resulted in a total of 107 service provider-customer dyads.

Procedure

A survey methodology was utilized for data collection in the current study. As confidentiality issues prevented direct access to employee and patient files, the sponsoring organization provided a list of employees engaged in the provision of customer service. For each employee listed, the organization also supplied the names and addresses for at least two customers who had direct, personal contact with the service provider. Prior to these lists being generated, the critical importance of obtaining a random and representative sample of employees and customers
was discussed with the appropriate individuals within the organization. While this does not completely guarantee that the sample was obtained in an unbiased manner, the participating organization did agree to select the service providers and their customers in a random fashion.

Each of the identified participants was asked to take part in the current study via a cover letter that accompanied the survey packets. The cover letter (see Appendices A and B for service employee and customer letters respectively) contained a brief explanation of the study, an assurance of confidentiality, and instructions for returning the completed survey materials. Identification numbers were assigned to each employee-customer pair in order to correctly match the supervisor and customer responses on the measures. Further, to protect the integrity of the results, customer surveys contained the service employee’s name so that the customer could focus on the appropriate contact with the organization when completing the survey. All participants were assured of the absolute confidentiality of their responses despite these identifying marks. If more than one customer response was received for a given employee, one survey was chosen at random for analysis in the current study.

The service employee packets, containing the measures of POS, LMX, organizational and supervisory commitment, and general motivation described below, were assembled and sealed by the researcher for distribution through the hospital’s internal mail system. The customer survey packets, which contained measures of service quality and customer satisfaction, were mailed directly to the customers at the addresses provided by the hospital. Participants returned their completed surveys directly to the researcher via prepaid, self-addressed envelopes included in the survey packets.
Measures

Perceived Organizational Support

Employees’ perceptions regarding the amount of support that they receive from their organization were measured with the 8-item short version (see Appendix C) of Eisenberger et al.’s (1986) 36-item Survey of Perceived Organizational Support (SPOS). A series of confirmatory factor analyses provide support for the construct validity of the 8-item SPOS differentiating it from other constructs such as affective and continuance commitment (Shore & Tetrick, 1991), job satisfaction (Eisenberger, Cummings, Armeli, & Lynch, 1997), perceived supervisory support, and organizational dependability (Hutchison, 1997). In addition, the 8-item scale has been shown to be unidimensional with internal reliability estimates (Cronbach’s alpha) of .90 and higher (Eisenberger, et al, 1997; Hutchinson, 1997). Items are rated on a 5-point Likert type scale with anchors ranging from strongly disagree to strongly agree. A sample item from the scale is “My organization cares about my opinions.” Cronbach’s alpha for the 8-item measure in the current study was .89.

Leader-Member Exchange

The quality of the leader-member relationship was assessed with Graen et al.’s (1982) 7-item LMX measure (see Appendix D). In their recent review of LMX development over the last twenty-five years, Graen and Uhl-Bien (1995) recommend use of the LMX-7 over other measures of LMX, as the longer, more recently developed measures were “highly correlated with the more concise 7-item LMX and produced the same effects” (p. 236). Additionally, reliability estimates (Cronbach alpha) for the seven item measure typically range from .80 to .90. Further evidence of the reliability of the LMX-7 can be found in the meta-analysis conducted by Gerstner and Day (1997). They reported an alpha level of .89 for the LMX-7 measure when LMX was measured from the employee’s perspective. A sample item is “Do you know where you stand with your
manager...do you usually know how satisfied your manager is with what you do?” Items are rated on a 5-point Likert-type scale and the response choices for this item range from “rarely” to “very often”. Reliability (Cronbach’s alpha) for the 7-item measure in the current study was .91.

Organizational Commitment

Employees affective organizational commitment was assessed using the 6-item revised affective commitment scale (see Appendix E) developed by Meyer, Allen, and Smith (1993). Meyer and Allen (1997) state that coefficient alpha estimates for this measure are almost always .70 or higher, with a median reliability (over 40 estimates) of .85. Construct validity is also supported, with results of confirmatory factor analyses indicating that affective commitment can be empirically distinguished from the other bases of commitment (Allen & Meyer, 1990; Meyer, Allen, & Gellatly, 1990; Shore & Tetrick, 1991) as well as from other related constructs such as job satisfaction, POS (Shore & Tetrick), and occupational commitment (Meyer, Allen, & Smith, 1993). A sample item from the scale is “I would be happy to spend the rest of my career in this organization.” Items were originally rated on a 7-point Likert-type scale with anchors ranging from “strongly disagree” to “strongly agree”. A 5-point Likert-type scale, utilizing the same anchors, was used in order for the rating scale to be consistent with the other measures in the survey packet. Coefficient alpha was .84 in the current study.

Supervisory Commitment

While there are many established measures of organizational commitment, studies examining supervisor commitment have often used one item measures (e.g., “How committed are you to your supervisor”) to assess commitment to the supervisor (e.g., Becker, 1992; Cobb & Frey, 1996). In addition to this single item, four items from the Allen and Meyer (1990) scale of affective organizational commitment described in the previous paragraph were adapted for use in measuring supervisory commitment in the present study (see Appendix F). For example, the original item “I
really feel as if this organization’s problems are my own” was reworded to read “I really feel as if this supervisor’s problems are my own.” Two items that do not translate well from the original scale (i.e., “I would be very happy to spend the rest of my career with this organization” and “I do not feel ‘emotionally attached to this organization’) were eliminated. Reliability in the present study was .78.

Motivation

In addition to a single item that directly asks about employee motivation (i.e., I am motivated to deliver quality customer service), motivation was assessed using the 5-item intensity subscale from Brown and Leigh’s (1996) measure of effort (see Appendix G). A sample item from this subscale is “When I work, I do so with intensity.” Items from the original scale were rated on a 7-point Likert-type scale with anchors ranging from strongly agree to strongly disagree. To be consistent with the other measures in the survey packet, a 5-point Likert-type scale with the same anchors as the original 7-point scale was used. Acceptable scale reliabilities have been obtained for the intensity subscale (.82 and .83). Coefficient alpha in the current study for the 6-item scale was .90.

Customer Service Quality and Satisfaction

Relevant customer service dimensions from the SERVQUAL, the most widely used measure designed to assess customer perceptions of service quality (Lapierre, 1996; Parasuraman et al., 1988; Parsuraman, Berry, & Zeithaml, 1991), were used to assess customer perceptions of service quality (see Appendix H). These four dimensions have been labeled and defined as follows (Parasuraman et al., 1988, p. 23): Reliability (“ability to perform the promised service dependably and accurately”), Responsiveness (“willingness to help customers and provide prompt service”), Assurance (“knowledge and courtesy of employees and their ability to inspire trust and confidence”), and Empathy (“caring, individualized attention the firm provides its customers”). As
it does not relate to the direct customer service behaviors that are the focus of this study, but rather to the physical characteristics of the service setting, the tangibles dimension (“Physical facilities, equipment, and appearance of personnel) was not be used in the current study.

Utilizing five independent samples that included two banks, two insurance companies and a telephone company, Parasuraman et al. (1991) found a consistent five-factor structure for the SERVQUAL measure. Additionally, coefficient alpha estimates for the four scales of interest across the samples were as follows: Reliability .88 to .92, Responsiveness .88 to .93, Assurance .87 to .91, and Empathy .85 to .89.

A sample item from the SERVQUAL is “Employees of XYZ are always willing to help you.” In the original scale, items were rated on a 7-point Likert-type scale with anchors ranging from “strongly disagree” to “strongly agree” In order to be consistent with the other measures in this study, service quality was measured using a 5-point Likert-type scale with the same anchors. Further, the instructions were modified slightly to ask the respondent to think about the particular service employee to whom their survey responses were to be matched. For example, instead of saying “The following set of statements relate to your feelings about XYZ company’s customer service. For each statement, please show the extent to which you believe XYZ has the feature described by the statement.”, the instructions were modified to read “Please consider your most recent experience with XYZ Company. The following set of statements relate to your feelings about the particular service employee named in the cover letter that accompanied this survey. For each statement, please show the extent to which you believe that particular service employee exhibited the feature described by the statement.” Coefficient alpha reliabilities for the four scales as used in the current study were .94, .93, .95, and .96 respectively.

In addition to the measures of perceived service quality, customers’ satisfaction with their service provider was also assessed using the 4-item satisfaction scale developed by Barnard (2001).
This 4-item measure (see Appendix I) was created by adapting two single-item measures of satisfaction (Goodwin & Ross, 1992; Schmidt & Allscheid, 1995) and adding two additional items that were created by the author through a process of subject matter expert review. A sample item from the scale is “I feel that the service provided by my service provider at (company name) meets or exceeds my expectations.” Coefficient alpha for the four items as used in the current study was .97.
RESULTS

Overview of Analyses

Structural equation modeling (SEM) was used to test the hypothesized model. Within the SEM approach, the causal relationships in the proposed model are represented by a series of structural equations that are then tested simultaneously in order to determine how well the model represents the data. Testing of the hypothesized model typically involves a two step process. The first step is to conduct a confirmatory factor analysis (CFA) of the measurement model in order to substantiate the factor structure of the measures as used. In other words, we are testing to see if the items designed to measure a particular latent variable (e.g., POS) actually measure that variable (Byrne, 1998). Once the factors have been appropriately identified the fit of the hypothesized structural model can then be tested. This second step, the test of the full structural model, examines the relationships among the latent variables to determine whether or not the hypothesized model represents a good fit for the data.

The appropriateness of the measurement and full structural models is assessed using various fit statistics provided in the statistical output. A number of fit statistics are available for use in evaluating fit and these statistics can be divided into two broad categories: absolute fit indices and incremental fit indices. Absolute measures of fit, which include the Goodness-of-Fit index (GFI), the root mean square of approximation (RMSEA), and the standardized root mean squared residual (SRMR), assess how well the hypothesized model fits the obtained data set. Incremental fit indices, on the other hand, evaluate the degree to which the proposed model improves upon the fit of a baseline model, typically the null model in which all of the observed variables are assumed to be completely uncorrelated (Hu & Bentler, 1999). Examples of incremental fit indices include the Normed Fit Index (NFI), the Comparative Fit Index (CFI), and the Tucker-Lewis Index (TLI, also known as the Non-Normed Fit Index, NNFI).
Unfortunately, the choice of which metrics to use when evaluating the fit of a given model is somewhat subjective as the current state of the literature does not provide the user with an unambiguous set of indicators and critical values (Vandenberg & Lance, 2000). Recently, however, it has been suggested that a variety of fit statistics should be used in conjunction with one another when evaluating fit. For example, Hu and Bentler (1999) propose two combinational rules for evaluating model fit and suggest that use of these rules will result in acceptable levels of Type I and Type II errors. The first rule suggests that the hypothesized model be rejected when the NNFI or CFI is less than .96 and the SRMR is greater than .09. The second rule is based on the RMSEA and the SRMR and suggests that the model be rejected if the RMSEA is greater than .06 and the SRMR is greater than .09. Finally, when the sample size is less than 250, Hu and Bentler suggest that using the CFI in combination with the SRMR is preferable to using either the NNFI or RMSEA in combination with the SRMR.

Similarly, Vandenberg and Lance (2000) suggest using four indices to evaluate fit, two absolute indices (RMSEA, SRMR) and two incremental indices (NNFI, and the Relative Noncentrality Index, RNI), based on consistent research findings concerning the ability of these measures to discriminate between well fitting and poor fitting models. With respect to appropriate critical values for these indices, Vandenberg and Lance suggest that the criteria set forth by Hu and Bentler (1999) may be too stringent and suggest using the more conventionally accepted values of .90 or greater for the NNFI and RNI, .08 or lower for RMSEA, and less than .10 for the SRMR. Based on these recommendations, the traditionally recognized critical values for the RMSEA, SRMR, NNFI, and the CFI, with a particular emphasis on the SRMR and the CFI, will be used in the current study to evaluate the fit of the proposed models.

In addition to examining the appropriateness of the structural model in terms of fit statistics, the fit of the hypothesized structural model is also evaluated via a comparison to both the
appropriate measurement model and possible alternative structural models (Joreskog & Sorbom, 1993). A significant change in chi-square indicates a significant improvement (or decrement) in fit between the two models being examined.

When using SEM to estimate the fit of a model, a small sample size can be problematic. If the ratio of parameters to sample size is large, the parameter estimates may not be stable and the estimation of standard errors and fit statistics may be negatively impacted (Hayduk, 1987). As the size of the matched service employee-customer sample on which the structural model was to be tested was only N = 107, it was particularly important to minimize the number of parameters estimated. As suggested by Williams and Anderson (1994), one way in which this can be done is through the creation of ‘testlets’. In the testlet approach, randomly chosen groups of items (i.e., testlets) are created. These testlets are then used in place of the individual scale items as indicators for the latent variable they are meant to predict, thereby reducing the number of parameters in the model. For example, rather than estimating measurement and structural models containing LMX1 through LMX7 as individual indicators of the latent variable LMX, two LMX testlets were created by combining LMX 7, 2, and 3 and LMX 1, 4, 5, and 6, respectively. Two testlets, each consisting of two to four individual scale items, were randomly created for each of the employee latent variables (LMX, POS, supervisory commitment, organizational commitment, and motivation) and the customer service latent variables (responsiveness, reliability, assurance, empathy, and satisfaction). In addition to reducing the number of parameters in the model, a critical advantage of using the testlet approach over the item-level indicator approach is that the use of testlets increases indicator reliabilities and the stability of the construct measurement.

Measurement Model

As outlined above, the first step in examining the fit of the proposed model was to determine the appropriate measurement model for the data. Within the originally hypothesized model there
were five employee factors (POS, LMX, organizational commitment, supervisory commitment, and motivation) and five customer factors (four service quality measures from the SERVQUAL and a customer satisfaction measure). Consequently, a confirmatory factor analysis was conducted on the testlets created for these ten measures in order to determine whether each testlet loaded appropriately, and significantly, on its respective latent variable (i.e., did the testlets created for POS load on the POS factor, the testlets created for LMX on the LMX factor, etc.). Because previous research has demonstrated that the factor structure of the SERVQUAL measure does not always replicate exactly across new settings (Lapierre, 1996), several alternative factor structures for the customer service and satisfaction measures were also tested. As the factor structure of the employee measures was better known and consistently more stable than that of the SERVQUAL measure (e.g., Gerstner & Day, 1997; Hutchison, 1997; Wayne, et al., 1997), these five factors were retained as hypothesized within each of the alternative measurement models tested. The alternative models, which were based on commonly found factor structures for the SERVQUAL, were as follows:

1. 5-Service factor Model: In this model each of the four SERVQUAL subscales (reliability, responsiveness, assurance and empathy) were kept distinct from one another and from the satisfaction measure.

2. 3-Service Factor Model: The reliability and responsiveness subscales were combined to form a single ‘functional’ factor and assurance and empathy were combined to form a single ‘personal’ factor consistent with previous research findings. The two resulting service quality factors were then tested along with the customer satisfaction variable.

3. 2-Service Factor Model: The four SERVQUAL subscales were collapsed into a single service quality factor which was tested in combination with the satisfaction variable.
4. 1-Service Factor Model: The four SERVQUAL subscales and the satisfaction measure were combined into a single service factor.

Fit statistics for the four measurement models tested can be found in Table 1. With respect to the originally hypothesized 5-service factor model, it should be noted that the model did not converge after 1000 iterations, indicating a particularly bad fit for the data. Thus, only the results for the 3-, 2- and 1-service factor models are reported. In all three models, each of the testlets loaded appropriately, and significantly, on its intended factor. Looking next at the fit statistics, the 3-service factor and 2-service factor models represent an acceptable fit for the data with all fit statistics being within acceptable ranges (RMSEA ≤ .08, SRMR < .10, NNFI and CFI > .90). Thus, both of the decision rules suggested by Hu and Bentler (1999), using the more traditionally accepted critical values, are satisfied. In addition, the majority of the fit-statistics for the 1-factor model are also acceptable, with only the RMSEA of .10 being greater than the acceptable level of .08. Consequently, the decision rule most appropriate for small sample sizes (SRMR<.10 and CFI >.90) is satisfied. Examination of the chi-square values, however, indicates that the 3-service factor model is a significantly better fit for the data than both the 2-service factor and 1-service factor models ($\Delta \chi^2 (7) = 47.09, p < .05$ and $\Delta \chi^2 (13) = 109.08, p < .05$, respectively). Based on these findings, the 3-service factor model was used in the following test of the hypothesized structural model. The means, standard deviations, reliabilities, and intercorrelations for all measures are presented in Table 2.

Finally, as all the responses on the employee and customer sides of the model came from a single source (the service provider and customer respectively), common method bias is an area of concern. In order to evaluate this potential threat, single-factor models were tested for both the employee and customer measures. A well-fitting, single-factor model that improves upon the fit of the appropriate measurement model would indicate that common method bias is a potentially
<table>
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<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>NNFI</th>
<th>CFI</th>
<th>$\Delta \chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-service factor model$^a$</td>
<td>199.82</td>
<td>142</td>
<td>.06</td>
<td>.05</td>
<td>.96</td>
<td>.97</td>
<td>n/a</td>
</tr>
<tr>
<td>2-service factor model$^b$</td>
<td>246.91</td>
<td>149</td>
<td>.08</td>
<td>.05</td>
<td>.94</td>
<td>.96</td>
<td>47.09*</td>
</tr>
<tr>
<td>1-service factor model$^c$</td>
<td>308.90</td>
<td>155</td>
<td>.10</td>
<td>.04</td>
<td>.92</td>
<td>.94</td>
<td>109.08*</td>
</tr>
<tr>
<td>1-employee factor$^d$</td>
<td>560.48</td>
<td>164</td>
<td>.15</td>
<td>.10</td>
<td>.83</td>
<td>.85</td>
<td>360.66*</td>
</tr>
</tbody>
</table>

Note: RMSEA = root mean square error of approximation, SRMR = standardized root mean squared residual, NNFI = non-normed fit index, CFI = comparative fit index. $^a$ = model includes three service factors (functional, personal, and satisfaction) with five employee factors (POS, LMX, organizational commitment, supervisory commitment, and motivation), $^b$ = model includes two service factors (quality and satisfaction) and five employee factors, $^c$ = model includes one service factor and five employee factors, $^d$ = model includes three service factors (functional, personal, and satisfaction) and one employee factor. * = $p<.05$
Table 2
Means, Standard Deviations, Reliabilities, and Correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LMX</td>
<td>3.97</td>
<td>.70</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>POS</td>
<td>3.44</td>
<td>.71</td>
<td>.50*</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SC</td>
<td>3.83</td>
<td>.71</td>
<td>.75*</td>
<td>.39*</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>OC</td>
<td>3.66</td>
<td>.72</td>
<td>.35*</td>
<td>.61*</td>
<td>.44*</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>MOT</td>
<td>4.27</td>
<td>.48</td>
<td>.16*</td>
<td>.18*</td>
<td>.16*</td>
<td>.19*</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>FUNC</td>
<td>4.10</td>
<td>.95</td>
<td>-0.09</td>
<td>.05</td>
<td>-0.03</td>
<td>.04</td>
<td>.09</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>PERS</td>
<td>4.26</td>
<td>.89</td>
<td>-0.09</td>
<td>.01</td>
<td>-0.02</td>
<td>.04</td>
<td>.11</td>
<td>.94*</td>
<td>.98</td>
</tr>
<tr>
<td>8</td>
<td>SAT</td>
<td>4.22</td>
<td>1.08</td>
<td>-0.06</td>
<td>.07</td>
<td>-0.01</td>
<td>.04</td>
<td>.12</td>
<td>.90*</td>
<td>.93*</td>
</tr>
</tbody>
</table>

Note: LMX=Leader Member Exchange, POS=Perceived Organizational Support, SC = supervisory commitment, OC = organizational commitment, MOT = motivation, FUNC = functional, PERS = personal, SAT = satisfaction. Coefficient alpha reliabilities reported on the diagonal. * = p<.05
serious problem. As was discussed above, the single-service factor model did not provide the best fit for the service measures. The fit statistics for the single-employee factor model (one employee factor tested in conjunction with the three retained service factors) can be seen in Table 1. As was the case with the customer data, the fit statistics suggest that this one-employee factor model does not fit the data well and the change in chi-square indicates that it is a significantly worse fit for the data than the appropriate measurement model ($\Delta \chi^2 (22) = 360.66, p<.05$). Consequently, it would appear that common method bias is not a considerable problem within the current study.

Full Structural Model

Once the appropriate measurement model has been determined, the next step in SEM is to test the full structural model that includes both the appropriate measurement model and the hypothesized relationships among the latent variables. LISREL fit statistics for the proposed social exchange based model of customer service can be found in Table 3. These indices indicate that this model was not a completely appropriate fit for the data. While the NNFI (.95), CFI (.96), and RMSEA (.07) were within the acceptable range, the SRMR (.12) exceeded its appropriate critical value (.10). Thus, neither decision rule suggested by Hu and Bentler (1999), using traditional critical values, was met. Additionally, only two of the hypothesized relationships, LMX to supervisory commitment and POS to organizational commitment were significant (see Figure 2). Finally, when the fit of the structural model was compared to the fit of the appropriate measurement model, the change in chi-square was significant ($\Delta \chi^2 (16) = 46.06, p<.05$), indicating that adding the structural paths to the measurement model resulted in a decrement in fit.

One advantage to using SEM is that it allows for the testing of potential alternative models in order to determine which provides the best fit for the data. With respect to the hypothesized structural model, an alternative model that included only an indirect relationship between POS and
### Table 3

**Full Structural Model - Hypothesized and Alternate Model Fit Indices**

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>NNFI</th>
<th>CFI</th>
<th>$\Delta \chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MM</td>
<td>199.82</td>
<td>142</td>
<td>.06</td>
<td>.05</td>
<td>.96</td>
<td>.97</td>
<td>n/a</td>
</tr>
<tr>
<td>Hypothesized SM</td>
<td>245.88</td>
<td>158</td>
<td>.07</td>
<td>.12</td>
<td>.95</td>
<td>.96</td>
<td>46.06*</td>
</tr>
<tr>
<td>Alternate SM</td>
<td>246.86</td>
<td>160</td>
<td>.07</td>
<td>.12</td>
<td>.95</td>
<td>.96</td>
<td>47.04*</td>
</tr>
<tr>
<td>Revised SM</td>
<td>206.95</td>
<td>158</td>
<td>.05</td>
<td>.06</td>
<td>.97</td>
<td>.97</td>
<td>7.13</td>
</tr>
</tbody>
</table>

Note: MM = measurement model, SM = structural model, RMSEA = root mean square error of approximation, SRMR = standardized root mean squared residual, NNFI = non-normed fit index, CFI = comparative fit index. * = $p<.05$
Figure 2. Test of Hypothesized Exchange Based Model of Customer Service. LMX=Leader Member Exchange, POS=Perceived Organizational Support, SC = supervisory commitment, OC = organizational commitment, MOT = motivation, FUNC = functional, PERS = personal, SAT = satisfaction. * = p<.05
LMX and motivation, as opposed to both a direct and indirect relationship as proposed in the original model, was examined. The fit statistics for this alternative model can be found in Table 3.

Looking at the fit statistics for the alternative model, we see that the fit statistics for this model were nearly identical to those for the hypothesized model. As with the hypothesized model, the NNFI and CFI were both greater than .90, the RMSEA was less than .08, and the SRMR was greater than .10. Thus, once again, the results were mixed and neither decision rule was met. Within this model three paths were significant: LMX to supervisory commitment, POS to organizational commitment, and organizational commitment to motivation (see Figure 3). Finally, the change in chi-square indicated that the alternative model was a significantly worse fit for the data than the initial measurement model ($\Delta \chi^2 (18) = 47.04, p < .05$).

Clearly, neither the hypothesized model nor the suggested alternate model represented an adequate fit for the data. Further, an examination of the fit statistics and the change in chi square did not indicate that either of the structural models was a better fit than the other. As neither of the models tested represented a good fit for the data, the next step in establishing an appropriate structural model was to explore the areas of misfit within the original models. One way in which this can be done is to examine the modification indices provided in the LISREL output. When looking at these indices, a determination about the appropriateness of making a suggested change in the model must be made. If the respecification can be justified from a theoretical perspective, then it is generally acceptable to proceed. If, however, the change is not meaningful, it should not be made and the researcher should move on to the next highest modification index and repeat the process (Byrne, 1998).

As the two paths that differentiated the hypothesized model from the alternative model were not significant, the modification indices for the alternate model, the more parsimonious of the
Figure 3: Test of Alternate Structural Model. Direct Paths from LMX and POS to motivation removed. LMX=Leader Member Exchange, POS=Perceived Organizational Support, SC = supervisory commitment, OC = organizational commitment, MOT = motivation, FUNC = functional, PERS = personal, SAT = satisfaction. * = p<.05
structural models tested, were examined. These indices suggested that allowing several of the variables in the model to correlate would improve the fit of the model. Previous research has demonstrated that these variables tend to be correlated (Settoon, et al., 1996, Gerstner & Day, 1997), consequently a revised model that incorporated the following changes was tested:

1. POS and LMX were allowed to freely correlate
2. Organizational and supervisory commitment were allowed to freely correlate

Fit statistics (see Table 3) indicate that the revised structural model represented a good fit for the data with all fit statistics at acceptable levels (RMSEA = .05, SRMR = .06, NNFI = .97, CFI = .97, ). In this case, the change in chi-square was not significant (Δχ² (16) = 7.13, p > .05), indicating that the addition of the structural paths did not result in a decrement in fit from the measurement model. Finally, within this model, three of the hypothesized paths, POS to organizational commitment, LMX to supervisory commitment, and organizational commitment to motivation, were significant (see Figure 4).

Summary of Results

A series of confirmatory factor analyses was conducted in order to examine the factor structure of the SERVQUAL and customer satisfaction measures as used in the current study. Results indicated that a 3-service factor (functional, personal, and satisfaction) model was the best fit for the current data. Structural equation modeling was then conducted on the social exchange based model of customer service proposed in the current study along with a single alternative model. An examination of the fit statistics and the changes in chi-square relative to the appropriate measurement model indicated that neither of the structural models represented a good fit for the data. An analysis of the modification indices within the LISREL output indicated that there were some potential areas of misfit within the models. Two revisions were made based on the modification indices: the first allowing LMX and POS to correlate and the second allowing
Figure 4: Test of Revised Structural Model. LMX and POS; OC and SC; and FUNC, PERS, and SAT allowed to correlate. LMX=Leader Member Exchange, POS=Perceived Organizational Support, SC = supervisory commitment, OC = organizational commitment, MOT = motivation, FUNC = functional, PERS = personal, SAT = satisfaction. * = p<.05
supervisory and organizational commitment to correlate. This revised model represented a good fit for the data and did not result in a significantly worse fit for the data than the measurement model alone.

With respect to the hypotheses advanced in the current study, the path from POS to organizational commitment was significant within the revised model, thus providing support for Hypothesis 1a (Perceived Organizational Support has a direct positive impact on affective organizational commitment). Similarly, the path from LMX to supervisory commitment was significant, thus providing support for Hypothesis 1b (Leader-member exchange has a direct positive impact on supervisory commitment). Finally, the path from organizational commitment to motivation was significant. Thus, Hypothesis 2a (affective organizational commitment has a direct positive impact on employee motivation) was also supported. The path from supervisory commitment to motivation was not significant, therefore Hypothesis 2b (supervisory commitment has a direct positive impact on employee motivation) was not supported. The remaining hypotheses were also not supported. That is, results from the tests of the various structural models failed to indicate a significant relationship between either POS or LMX and motivation (hypotheses 3a and 3b) or between motivation and service (hypothesis 4). A summary of the results relative to each hypothesis can be found in table 4.
Table 4

Summary of Results by Hypothesis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Perceived organizational support will have a direct positive impact on affective organizational commitment.</td>
</tr>
<tr>
<td>1b</td>
<td>Leader-member exchange will have a direct positive impact on supervisory commitment.</td>
</tr>
<tr>
<td>2a</td>
<td>Affective organizational commitment will have a direct positive impact on employee motivation.</td>
</tr>
<tr>
<td>2b</td>
<td>Supervisory commitment will have a direct positive impact on employee motivation.</td>
</tr>
<tr>
<td>3a</td>
<td>Perceived organizational support will have a direct positive impact on employee motivation.</td>
</tr>
<tr>
<td>3b</td>
<td>Leader-member exchange will have a direct positive impact on employee motivation.</td>
</tr>
<tr>
<td>4</td>
<td>Employee motivation will have a direct positive impact on customer perceptions of customer service quality and satisfaction.</td>
</tr>
</tbody>
</table>
DISCUSSION

The goal of the current study was to propose and test a social exchange based model of customer service. Specifically, the focus was the ways in which the quality of the employee-manager and employee-organization relationships might impact employees’ commitment and motivation to perform the service related behaviors that contribute to customer perceptions of service quality and satisfaction. The following sections will provide an overview and explanation of the findings relative to each of the relationships suggested by the hypothesized model, a discussion of the limitations of the current study, the practical implications of these findings, and suggestions for future research.

Findings

The proposed social exchanged based model of customer service and an alternative model were tested and found to represent an inadequate fit for the data. An examination of modification indices led to a revised model in which two pairs of variables, POS and LMX and supervisory and organizational commitment, were allowed to correlate. This model provided a good fit for the data and did not represent a decrement in fit from the appropriate measurement model. The significant paths within the model provided support for several, but not all, of the hypotheses advanced in the current study.

Hypothesis 1

The significant paths within the revised model provide support for hypotheses 1a and 1b concerning direct positive relationships between POS and organizational commitment and LMX and supervisory commitment respectively. The significant path from POS to organizational commitment within the revised model is consistent with previous research results indicating significant, positive correlations between POS and organizational commitment that range from .38 to .80 (e.g., Hutchison; 1997; Hutchison & Garstka, 1996; Shore & Tetrick, 1991; Shore & Wayne,
These findings suggest that employees who perceive themselves to be in a higher quality relationship with the organization (i.e., a high degree of perceived organizational support) are in turn more committed to the organization than those who perceive themselves to be in a lower quality relationship with the organization.

With respect to the relationship between LMX and supervisory commitment, it was suggested that POS and LMX represent two different social exchange relationships in which an employee is involved. In the case of POS, the exchange partner is the organization and increased levels of organizational commitment would seem to be the most appropriate way of ‘repaying’ the organization for its support in the case of a high quality relationship. LMX, on the other hand, represents an exchange relationship between the supervisor and the employee. In this relationship an increase in organizational commitment may not be the most appropriate means of ‘repayment’. Consequently, it was suggested that an increased level of supervisory commitment would be a more appropriate means of ‘repaying’ the supervisor in the case of higher quality LMXs. The significant path from LMX to supervisory commitment within the current model represents a meaningful contribution as it provides empirical support for the suggestion that employees are involved in exchange relationships with both the organization and the supervisor and that reciprocation within these distinct relationships follows different paths (i.e., organizational commitment in the case of POS and supervisory commitment in the case of LMX).

Hypothesis 2

Hypothesis 2a concerning the direct positive relationship between organizational commitment and employee motivation was also supported within the revised model. The finding of a significant path from organizational commitment to motivation within the current model is consistent with previous meta-analytic results indicating a mean sample weighted correlation of .47 (.57 corrected) between organizational commitment and overall motivation (Mathieu & Zajac, 1993; Wayne et al., 1997).
Consistent with theory and previous research, this finding supports the critical relationship between commitment and motivation. That is, when an individual is committed to a particular behavior or course of action, he or she is likely to put forth effort in that direction. Conversely, when commitment is low, or absent, the employee is less likely to be motivated.

Contrary to expectations, however, the relationship between supervisory commitment and employee motivation (hypothesis 2b) was not supported. A possible explanation for this non-significant finding lies within the nature of the exchange relationship. As stated earlier, an increased level of supervisory commitment is one way in which an employee might ‘repay’ the supervisor for his or her support. In turn it was suggested that this increased level of supervisory commitment would be positively related to an employee’s motivation to provide quality customer service. However, it is possible that customer service may not be a top priority for any given supervisor. In this case, it would make sense that the increased level of supervisory commitment resulting from a high quality exchange would not necessarily be related to an employee’s motivation to provide quality service. Rather, the increased supervisory commitment would likely be more strongly related to an employee’s motivation in other areas of performance that are of greater importance to the supervisor. In other words, a high quality LMX should lead to stronger commitment to the supervisor which in turn should be related to increased motivation to perform in the areas that are important to the supervisor. If service quality is a high priority for the supervisor, then one would expect that increased supervisory commitment would be related to motivation to provide quality service. If service quality is not a high priority for the supervisor, then the relationship between supervisory commitment and motivation to provide quality service may be less tenable. This is important as it indicates once again, indirectly at least, that employees form different types relationships with the supervisor and the organization and that these relationships have different consequences within the work setting. That is, higher quality relationships, and the
commitment that results from these relationships, may in fact be related to motivation, but that motivation will likely be linked to aspects of performance that are most important to the exchange partner.

**Hypothesis 3**

With respect to hypotheses 3a and 3b, which involved the direct relationships of POS and LMX to motivation, results indicated that the hypothesized model (Figure 2) that contained these relationships was an inadequate fit for the data. Further, within that model neither of the direct paths between POS (hypothesis 3a) and LMX (hypothesis 3b) and employee motivation was significant. Thus neither hypothesis 3a nor 3b was supported.

These results suggest that POS and LMX have their effects on motivation only indirectly through their effect on commitment. Although the bivariate correlations indicate that LMX and POS are significantly correlated with both commitment and motivation, in a full structural model that examines these direct and indirect relationships simultaneously, it seems to be the case that the strength of the relationship between POS and organizational commitment and LMX and supervisory commitment accounts for the majority of the variance amongst the variables, leaving little variance left for the relationships between POS, LMX, and motivation. As such, it is not surprising that these two direct relationships would not be significant within the full model.

**Hypothesis 4**

Perhaps most importantly for the current study, none of the paths from motivation to the service variables was significant within any of the structural models tested. Thus, hypothesis 4, which suggested that there would be a direct positive relationship between motivation and customer service quality and satisfaction was also not supported. This seems particularly problematic given the large body of literature that suggests that motivation is positively and significantly related to

There are at least three possible explanations for the failure to find a significant relationship in the current study. First, an examination of the motivation and service quality and satisfaction ratings shows a fairly limited range of scores, with the large majority falling at 4 or higher on a 5-point scale (86% for motivation, 68% for functional -- the combined responsiveness and reliability subscales, 81% for personal -- the combined empathy and assurance subscales, and 84% for satisfaction). This restriction in range on both the predictor and criterion variables can be expected to decrease the chances of finding a significant relationship between employee motivation and customer perceptions of service quality (i.e., performance) should such a relationship actually exist.

A second possible explanation for the lack of a significant relationship between employees’ motivation and customers’ ratings of service quality lies within the nature of the criterion measures. Although the SERVQUAL and satisfaction measures were reviewed with the sponsoring organization prior to distribution in order to examine their appropriateness in a hospital setting, it may be the case that customers were taking into consideration factors beyond the employee behaviors that were the intended focus of the current study. Failure to include, or measure, these factors may have contributed to the misspecification of the hypothesized model. For example, although the SERVQUAL is the most widely used measure of service quality, Iacobucci, Ostrom, and Grayson (1995) have suggested that customers’ perceptions of service quality, as measured by the SERVQUAL, may have more to do with organizational practices and processes than with the actual quality of the interaction between the service provider and the customer. If the SERVQUAL is measuring aspects of the service encounter that have little or nothing to do with the specific service related behaviors performed by the employee, then it makes sense that an employee’s motivation and subsequent behavior would not necessarily be related to this criterion measure.
Similarly, with respect to customer satisfaction, it has been shown that customers’ ratings of satisfaction may also be influenced by factors unrelated to the interaction with the service employee. For example, in an internal study within a telecommunications company it was found that customer ratings of satisfaction were at times more highly related to pricing structures than to service provider behavior (E.P. Braverman, personal communication, September 20, 2001). It is possible that a similar effect may be occurring within the present study. For example, it may be that satisfaction, or even perceptions of service quality, relate more to the final outcome of the service encounter than to the nature of the service exchange itself. The customers in the current sample were hospital patients, so perhaps a positive outcome (e.g., improved health, a successful procedure) is driving satisfaction, or perceptions of quality, to a greater extent than the service related behaviors exhibited by the employee during the service interaction. If, in fact, customers are focusing on aspects of service other than the behaviors that occur during the service encounter when forming their perceptions of satisfaction, it seems unlikely that employee motivation would be related to those perceptions.

Another potential explanation for the non-significant relationships between motivation and service quality and satisfaction within the current study is the existence of additional, unmeasured variables that might influence the motivation-performance relationship. As stated previously, performance can be stated as a function of motivation and ability (i.e., \( P = f(M \times A) \)). It has been suggested, however, that this formula be expanded to include many of the other factors (e.g., organizational constraints) that also play a role in performance (Campbell, McCloy, Oppler, & Sager, 1993). If such variables do exist, this would suggest that the motivation-performance relationship only holds under certain circumstances.

One potential variable which could be constraining the motivation-service quality relationship is the climate for customer service which exists within the organization. It is possible
that motivation under differing service climates operates in much the same way as individual
differences operate in strong versus weak situations. For example, a recent study examining the
relationship between personality and contextual performance suggested that conscientiousness was
more highly related to performance when there were weak situational cues than when there were
strong situational cues (Beaty, Cleveland, & Murphy, 2001). Climate can be defined as the
policies, practices, and procedures that are expected, supported, and rewarded within an
organization (Schneider, 1990). If these policies, practices, and procedures related to customer
service create a ‘strong’ situation, it is possible that the relationship between motivation and
performance (i.e., quality service) would be attenuated under these conditions. Conversely, in the
absence of a strong climate for service, motivation might be more highly related to performance.

Summary

To summarize the findings across the various models tested, it appears that the quality of the
employee-organization (POS) and employee-manager (LMX) relationships does positively impact
employee commitment to the organization and the supervisor, respectively. These findings support
previous research and theory and as such, are not surprising. In turn, organizational, but not
supervisory, commitment impacts an employee’s motivation to provide quality customer service.
As suggested above, this may be due to the nature of the exchange relationships and the importance
of service quality to the supervisor. Finally, contrary to expectations, motivation was not positively
related to customers perceptions of service quality. Possible explanations for this lack of a
significant relationship include a restriction in range in both the motivation and service variables,
potential problems with the nature of the criterion measure, and the possibility of additional,
unmeasured variables which influence or constrain the motivation-performance relationship.
Limitations

Despite their significance within the revised model, the relationships between POS and LMX and commitment and between organizational commitment and motivation should be interpreted cautiously for a number of reasons that are detailed more specifically in the following paragraphs.

Sample Size

The models advanced in the current study were tested on a relatively small sample size of 107 employee-customer pairs. While this number exceeds the minimum number suggested for structural equation modeling (Ding, Velicer, & Harlow, 1995), parameter estimates become more stable and accurate as the sample size increases (Schumacker & Lomax, 1996). Even though the testlet approach used in the current reduces the number of parameters to be estimated, in addition to improving indicator reliabilities and the stability of the construct measurement, which should alleviate some concern with respect to the small sample size, the ratio of subjects per parameter estimated still remains small.

Common Method Bias

A single source, the employee, provided the ratings for the LMX, POS, commitment, and motivation measures on the employee side of the model, while a second source, the customer, provided the ratings for all of the service variables on the customer side of the model. This raises the possibility of common method bias. To address this problem, models with a single employee factor and a single service factor were tested via a series of confirmatory factor analyses. If common method bias was the driving force underlying the significant relationships between these variables, the single factor models would provide a better fit for the data than a measurement models containing the individual constructs. In this case, the single factor models did not provide a
better fit for either the employee side variables or the customer side variables, suggesting that method bias is not likely to be a significant threat to the current results.

**Modification Indices**

While the use of modification indices to improve upon a model’s fit is common within structural equation modeling research (Byrne, 1998), using these indices capitalizes on chance. Consequently any conclusions drawn from these models must be interpreted cautiously and they must be validated on a separate sample before a final determination can be made about the appropriateness of the model (MacCallum, Roznowski, & Newcowitz, 1992).

**Criterion Measures**

As mentioned previously, the SERVQUAL is a widely used measure of service quality. However, given the inconsistent factor structure (e.g., Babakus & Boller, 1992; Carman, 1990) and research findings suggesting that perceptions of service quality may have more to do with organizational factors than with service provider behavior (Iacobucci, Ostrom, & Grayson, 1995), the construct validity, and consequently the usefulness, of the SERVQUAL as a measure of service quality might be called into question.

**Implications**

The findings of the current study suggest that organizations that wish to increase employee commitment to both the organization and the supervisor, as well as employee motivation, should focus on improving the quality of the exchange relationships in which the employee is involved. For example, with respect to LMX quality, research indicates that supervisors can be trained to improve the nature of their relationships with individual employees (Graen, Novak & Sommerkamp, 1982, Scandura & Graen, 1984). As such, organizations may want to examine the quality of LMX relationships throughout the organization in order to pinpoint potential deficiencies and to institute training programs designed to improve supervisory skills in critical areas, such as
improved communication and feedback, that lead to higher quality relationships. Similarly, an organization may want to examine the way in which it communicates with its employees, both formally and informally, in order to determine whether or not those messages convey the intended levels of support on the part of the organization.

Another way in which the quality of the POS and LMX relationships may be improved is through principals of organizational justice. Recent research has demonstrated that LMX and POS mediate the relationships between organizational justice and organizationally relevant outcomes such as performance, organizational commitment, organizational citizenship behavior (OCB), and job satisfaction. For example, Masterson, Lewis, Goldman, and Taylor (2000) found that procedural justice perceptions (i.e., an individual’s judgments about the fairness of formal practices and procedures related to organizational decisions and outcomes) were positively related to POS and, in turn, POS was positively related to job satisfaction, commitment and OCB. They further found that perceptions of interactional justice (i.e., an individual’s judgments about the quality of the interpersonal treatment received during an exchange) were positively related to LMX and that LMX was positively related to job satisfaction and supervisor-directed OCB. These findings would suggest that another way in which organizations might improve POS and LMX quality is by focusing on critical aspects of procedural and interactional justice within the organizational and supervisory relationships with the employee.

The lack of a significant relationship between supervisory commitment and motivation and between motivation and performance may also have implications for organizations and supervisors. These potential implications must be advanced tentatively, however, and should be investigated in future research in order to more fully support their viability. For example, as suggested above, the non-significant relationship between supervisory commitment and motivation to provide quality service may indicate that service quality is not an important goal for a particular supervisor. This
would suggest that organizations should insure that aspects of performance deemed critical from the organization’s perspective are given the appropriate emphasis at the supervisory level as well. With respect to the non-significant relationship between motivation and performance, it may be the case that some variable not included in the current study is influencing the relationship between motivation and performance. For example, it was suggested that a climate for service may constrain the motivation-performance relationship, such that motivation is only related to performance when perceptions of an organizational climate for service are low. If future research supports this position, then organizations wishing to provide high quality service could focus on strengthening the policies, practices, and procedures relative to service that are expected, rewarded, and supported within the organization.

To summarize, results from the current study indicate that employees’ perceptions of the quality of their relationships with the organization and the supervisor are significantly related to organizational and supervisory commitment, and to subsequent motivation in the case of organizational commitment at least. This would suggest that organizations wishing to increase commitment and the resulting motivation to provide quality service should focus on ways in improving the relationships between the organization and the employee and between the supervisor and the employee. Training and organizational justice procedures were advanced as two possible means for improving employee perceptions of POS and LMX. Finally, tentative suggestions regarding the importance of organizational alignment of practices were advanced based on the non-significant findings relative to supervisory commitment and motivation and motivation and performance.

Future Research

Future research could be conducted to address the limitations outlined above. For example, a larger sample size is needed in order to stabilize parameter estimates, to obtain a less restricted
range of motivation and service variable scores, and to examine the fit of the original and modified models. Additionally, further research could also focus on the nature of the service quality and satisfaction variables in order to determine whether or not these measures adequately represent the constructs of service quality and satisfaction. Efforts could be made to determine what additional factors, beyond service provider behaviors, might be contributing to customers perceptions of quality and satisfaction.

Future research could also examine the potential explanations advanced above for the lack of a significant relationship between motivation and service quality and satisfaction, assuming valid construct measurement can be obtained. That is, models that contain potential moderators of the motivation-performance relationship could be advanced and tested. Similarly, the congruence between the organization’s and supervisor’s goals and priorities might be measured, or held constant where possible, in order to examine whether or not supervisory commitment is related to motivation to provide quality service when this is a priority for the supervisor as well as the organization.

Conclusion

It seems likely that service quality will continue to be an important key for organizations wishing to differentiate themselves from their competition. Consequently, it seems reasonable to suggest that organizations continue to seek ways in which to positively impact the quality of the service provided by their employees. Although the exchange based model of service tested in the current study did not provide empirical support for the linkage between the quality of exchange relationships and subsequent perceptions of service quality and satisfaction, the model did suggest that the quality of exchange relationships positively impacts commitment and motivation, components typically important to subsequent performance. Limitations of the current research (e.g., use of modification indices, small sample size) dictate caution in drawing definitive
conclusions about the relationship, or lack thereof, between exchange quality and service quality. As some of the hypothesized relationships were supported, and others were not, future research is needed to further examine and expand upon the exact nature of these relationships.
REFERENCES


APPENDIX A

EMPLOYEE COVER LETTER

Dear Participant,

Allow me to introduce myself. My name is Lisa Polly and I’m currently conducting research for my doctoral dissertation at Louisiana State University. The purpose of my study is to examine the relationship between customer service employees and their customers. I’m hoping that you will take the time to help me with this research by completing the attached survey. While it may appear long, it should only take about ten minutes to complete. Your time and assistance would be greatly appreciated. Completion of this survey constitutes your informed consent to participate in this study.

This study is being conducted for research purposes only and in order for the results of my study to be valid and useful, it is important that you feel comfortable enough to be honest and open in your responses. For that reason I would like to take a moment to assure you that all of your responses will be held in absolute confidence. The way that my study is designed requires me to match answers from your survey to answers provided by customers you have assisted. The identification number on your survey will only be used to match your responses to those of your customers (who have a number that is identical to yours at the top of their survey).

In order to assist your customers in completing their surveys, your name does appear on the cover letter that accompanies those survey packets. However, to insure your privacy, the master list that allowed me to match your customers’ surveys to yours was destroyed once the survey packets were assembled and sealed. In other words, I have no way of associating a given number with a particular employee. Further, the instructions for the customer survey packet explicitly state that the cover letter should be destroyed once the survey is completed. It will NOT be returned to me along with the customer’s survey responses. Additionally, no one in your organization will ever see your individual survey responses. I am the only person who will have access to those results. To guarantee this, I’ve enclosed a stamped, self-addressed envelope so that you may return the completed survey directly to me.

An overall summary of the findings from my study will be presented to [insert organization name], but no individual responses, or identifying information, will be included in the data. That is, no one individual’s responses will be reported. Only the average scores across all participants, along with the general relationships that exist between employee and customer surveys, will be part of the final report. A copy of the results will be provided to you as well, if you are interested in seeing them. If I could show these results to you now, you would see that there is no possible way for anyone in your organization to identify you or your responses from the data. You have my complete assurance that I will protect your privacy.

If you have any questions or concerns about this study, please feel free to contact me or my advisor, Irv Lane:
Appendix A - Cont.

Lisa Polly                     Irv Lane, Chairman
Department of Psychology       Department of Psychology
Louisiana State University     Louisiana State University
Baton Rouge, LA 70803          Baton Rouge, LA 70803
225-819-2540                   225-388-4122

Thank you for agreeing to participate in this study. Your assistance is greatly appreciated. Please return the completed survey to me in the enclosed envelope by [insert date].

Sincerely,

Lisa M. Polly
Dear Participant,

Allow me to introduce myself. My name is Lisa Polly and I’m currently conducting research for my doctoral dissertation at Louisiana State University. The purpose of my study is to examine the relationship between customer service employees and their customers. I’m hoping that you will take the time to help me with this research by completing the attached survey. While it may appear long, it should only take about five minutes to complete. Your time and assistance would be greatly appreciated. When completing the enclosed survey, please consider your most recent experience with [insert service employee name] at [insert organization name]. Completion of this survey constitutes your informed consent to participate in this study.

This study is being conducted for research purposes only and in order for the results of my study to be valid and useful, it is important that you feel comfortable enough to be honest and open in your responses. For that reason I would like to take a moment to assure you that all of your responses will be held in absolute confidence. The way that my study is designed requires me to match answers from your survey to the survey answers provided by [insert employee name]. The identification number on your survey will only be used to match your responses to those of your service provider (who has a matching number on his or her survey). I have no way of associating a given number with a particular customer or employee. Additionally, no one at [insert organization name] will ever see your individual survey responses. I am the only person who will have access to those results. To guarantee this, I’ve enclosed a stamped, self-addressed envelope so that you may return the completed survey directly to me. In order to protect the privacy of your service provider, this cover letter should NOT be returned with your survey responses.

An overall summary of the findings from my study will be presented to [insert organization name], but no individual responses, or identifying information, will be included in the data. That is, no one individual’s responses will be reported. Only the average scores across all participants, along with the general relationships that exist between employee and customer surveys, will be part of the final report. A copy of the results will be provided to you as well, if you are interested in seeing them. If I could show these results to you now, you would see that there is no possible way for anyone to identify you or your responses from the data. You have my complete assurance that I will protect your privacy.

If you have any questions or concerns about this study, please feel free to contact me or my advisor, Irv Lane:

Lisa Polly                                                   Irv Lane, Chairman  
Department of Psychology                   Department of Psychology  
Louisiana State University                    Louisiana State University  
Baton Rouge, LA 70803                          Baton Rouge, LA 70803  
225-819-2540                                   225-388-4122
Appendix B - Cont.

Thank you for agreeing to participate in this study. Your assistance is greatly appreciated. Please return the completed survey to me in the enclosed envelope by [insert date].

Sincerely,

Lisa M. Polly
APPENDIX C

MEASURE OF PERCEIVED ORGANIZATIONAL SUPPORT

As you read each question, please consider your relationship with your organization and then circle the response that best represents your feelings.

1. My organization cares about my opinions.

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree

2. My organization cares about my well-being.

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree

3. My organization considers my goals and values.

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree

4. Help is available from my organization when I have a problem.

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree

5. My organization would forgive an honest mistake on my part.

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree

6. If given the opportunity, my organization would take advantage of me. (R)

   1. Strongly disagree  
   2. Disagree      
   3. Neither Agree 
   4. Agree        
   5. Strongly Agree
Appendix C - Cont.

7. My organization shows little concern for me. (R)

<table>
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<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
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8. My organization is willing to help me if I need a special favor.

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<th>Disagree</th>
<th>Neither Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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Items marked with an (R) are reverse coded.
APPENDIX D

MEASURE OF LEADER-MEMBER EXCHANGE

As you read each question, please consider your relationship with your manager and then circle the most appropriate response for each item.

1. Do you know where you stand with your manager...do you usually know how satisfied you manager is with what you do?
   - Rarely
   - Occasionally
   - Sometimes
   - Fairly Often
   - Very Often
   
   1                         2                           3                          4                           5

2. How well does your manager understand your job problems and needs?
   - Not a bit
   - A little
   - A fair amount
   - Quite a bit
   - A great deal
   
   1                         2                           3                          4                           5

3. How well does your manager recognize your potential?
   - Not at all
   - A little
   - Moderately
   - Mostly
   - Fully
   
   1                         2                           3                          4                           5

4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your manager would use his/her power to help you solve problems in your work?
   - None
   - Small
   - Moderate
   - High
   - Very High
   
   1                         2                           3                          4                           5

5. Again, regardless of the amount of formal authority your manager has, what are the chances that he/she would “bail you out,” at his/her expense?
   - None
   - Small
   - Moderate
   - High
   - Very High
   
   1                         2                           3                          4                           5

6. I have enough confidence in my manager that I would defend and justify his/her decision if he/she were not present to do so?
   - Strongly disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree
   
   1                         2                           3                          4                           5

7. How would you characterize your working relationship with your manager?
   - Extremely Ineffective
   - Worse than Average
   - Average
   - Better than Average
   - Extremely Effective
   
   1                         2                           3                          4                           5
APPENDIX E

MEASURE OF AFFECTIVE ORGANIZATIONAL COMMITMENT

As you read each question, please consider your relationship with your ORGANIZATION and then circle the most appropriate response for each item.

1. I would be very happy to spend the rest of my career in this organization.

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<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
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2. I really feel as if this organization’s problems are my own.

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<th>Strongly disagree</th>
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<th>Nor Disagree</th>
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3. I do not feel like “part of the family” at my organization. (R)

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<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
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4. I do not feel “emotionally attached” to this organization. (R)

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<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
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5. This organization has a great deal of personal meaning for me.

<table>
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<th>Strongly disagree</th>
<th>Disagree</th>
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6. I do not feel a strong sense of belonging to my organization. (R)

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(R) indicates that the item is reverse scored.
APPENDIX F

MEASURE OF AFFECTIVE SUPERVISORY COMMITMENT

As you read each question, please consider your relationship with your SUPERVISOR and then circle the most appropriate response for each item.

1. I am committed to my supervisor.

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<tr>
<th>Strongly disagree</th>
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2. I really feel as if this supervisor’s problems are my own.

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<th>Strongly disagree</th>
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3. I do not feel like “part of the team” with this supervisor. (R)

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<th>Strongly disagree</th>
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4. Working with this supervisor has a great deal of personal meaning for me.

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5. I do not feel a strong sense of loyalty to my supervisor. (R)

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(R) indicates that the item is reverse scored.
APPENDIX G

BROWN AND LEIGH’S MEASURE OF EFFORT - WORK INTENSITY SUBSCALE

As you read each question, please consider the customer service aspects of your job and then circle the most appropriate response for each item.

1. When there’s a job to be done at [insert organization name], I devote all my energy to getting it done.

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<th>Strongly disagree</th>
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2. When I work at [insert organization name], I do so with intensity.

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3. I work at my full capacity in all of my job duties at [insert organization name].

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4. I strive as hard as I can to be successful in my work at [insert organization name].

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5. When I work at [insert organization name], I really exert myself to the fullest.

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<th>Strongly disagree</th>
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6. I am motivated to provide quality customer service at [insert organization name].

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APPENDIX H

SERVQUAL

Please consider your most recent service experience with the service provider named in the cover letter that accompanied this survey and then circle the most appropriate response for each question.

Reliability:

1. When my service provider promised to do something by a certain time, he/she did so.

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2. When I had a problem, this service provider showed a sincere interest in solving it.

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3. This service provider performed the service right the first time.

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<th>Strongly disagree</th>
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<th>Nor Disagree</th>
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4. This service employee provided services at the time he/she promised to do so.

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5. My service provider insisted on error-free records.

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Responsiveness:

1. My service provider let me know exactly when services would be performed

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<th>Strongly disagree</th>
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</table>
Appendix H - Cont.

2. My service provider gave prompt service.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. My service provider was willing to help me.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
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<td>5</td>
</tr>
</tbody>
</table>

4. My service provider wasn’t too busy to respond to my requests.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
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<td>5</td>
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</tbody>
</table>

Assurance:

1. The behavior of my service employee instills confidence.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
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<td>5</td>
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</tbody>
</table>

2. I feel safe in my transactions with this service employee.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</tbody>
</table>

3. My service provider was consistently courteous.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
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<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>5</td>
</tr>
</tbody>
</table>

4. My service provider had the knowledge needed to answer my questions.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</tbody>
</table>
Appendix H - Cont.

Empathy:

1. My service provider gave me individual attention.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

2. My service provider at XYZ is available at convenient times.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>5</td>
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</tr>
</tbody>
</table>

3. My service provider at XYZ gave me personal attention.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
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</table>

4. My service provider at XYZ had my best interests at heart.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
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</table>

5. My service provider at XYZ understood my specific needs.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
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</table>
APPENDIX I

BARNDARD (2001) 4-ITEM CUSTOMER SATISFACTION MEASURE

1. I am satisfied with my service provider at XYZ as a provider of services.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
<th>Nor Disagree</th>
<th>Agree</th>
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</tr>
</tbody>
</table>

2. Overall, I am satisfied by the service I received from my service provider at XYZ.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
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<th>Agree</th>
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</tr>
</tbody>
</table>

3. All things considered, I find that my service provider at XYZ delivers satisfactory service.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither Agree</th>
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</tbody>
</table>

4. I feel that the service provided by my service provider at XYZ meets or exceeds my expectations.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
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</table>
VITA

Lisa Michelle Polly, originally of Jackson, Mississippi, graduated from Blacksburg High School before enrolling at Virginia Polytechnic Institute and State University in the beautiful mountains of southwest Virginia. Graduating in 1991 with a bachelor of arts degree in liberal arts, Lisa then attended the University of West Florida where she studied psychology for two years before being accepted into the doctoral program in industrial and organizational psychology at Louisiana State University in the fall of 1993.

Lisa completed her master of arts degree in the spring of 1995. Other highlights of her graduate experience include the completion of an internship with Rockwell Semiconductor Systems in Newport Beach, California, and participation in several presentations during the annual conferences for the Society of Industrial and Organizational Psychology.

Lisa currently resides in Virginia and is looking forward to a successful career in consulting.