



Consumer Trust, Value, and Loyalty in Relational Exchanges

Deepak Sirdeshmukh, Jagdip Singh, and Barry Sabol

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Contemporary thought in marketing recognizes that trust is a critical factor in relational exchanges between consumers and service providers. Most studies have focused on the consequences of perceived trust for outcomes such as loyalty and cooperation. Few have examined company behaviors and practices that build or deplete consumer trust, or the mechanisms by which these behaviors and practices contribute to trust enhancement and/or depletion.

In this study, authors Sirdeshmukh, Singh, and Sabol address this gap in our understanding by modeling trust-building and trust-depletion processes as dynamic and asymmetric. Their framework includes multiple dimensions of trustworthiness—operational competence, operational benevolence, and problem-solving orientation—and incorporates two distinct facets of consumer trust judgments—frontline employees and management policies and practices. In addition, it specifies value as a key mediator of the trust-loyalty relationship.

Study Findings

The model is tested using data from two service contexts—retail clothing and non-business airline travel, and the results find strong support for the conceptual model. Other managerial findings include the following:

- ❑ For frontline employees, benevolent behaviors demonstrate a dominant “negativity” effect (that is, negative performance has a stronger effect than positive performance), while problem-solving orientation has a dominant “positivity” effect (positive performance has a stronger effect than negative performance).
- ❑ Frontline employee behaviors emerge as more critical in the retail industry, while management policies and practices play the dominant role in the airlines industry.
- ❑ The effect of trust on consumer loyalty is conditional on its ability to enhance value. Without net increments in value, investing in consumer trust may do little for the bottom line. Value completely mediates the effect of frontline employee trust on loyalty in the retailing context, and partially mediates the effect of management trust on loyalty in the airlines context.

These results provide compelling evidence to counter conventional beliefs that consumer trust translates directly into loyalty. The conversion of trust to loyalty involves complex processes that depend on (a) how specific trustworthiness dimensions build greater consumer trust in frontline employees, management policies and practices, or both, (b) how increased consumer trust can enhance value for consumers, and (c) how value translates into loyalty. Such processes are sensitive to contextual and industry factors and are likely to involve asymmetric influences. In sum, while there are significant payoffs from building consumer trust in relational exchanges, realizing them is neither straightforward nor inevitable.

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Introduction

The growing importance of relationship marketing has heightened interest in the role of trust in fostering strong relationships. As Berry (1996, p. 42) asserts, “The inherent nature of services, coupled with abundant mistrust in America, positions trust as perhaps the single most powerful relationship marketing tool available to a company.” Likewise, Spekman (1988, p. 79) has observed that trust is the “cornerstone” of long term relationships. Not surprisingly, several conceptual (Nooteboom, Berger, and Noorderhaven 1997; Gundlach and Murphy 1993) and empirical studies (Tax, Brown, and Chandrashekar 1998; Garbarino and Johnson 1999) have posited trust as a key determinant of relational commitment. For instance, Urban, Sultan, and Qualls (2000) propose customer trust as an essential element in building strong customer relationships and sustainable market share. More directly, Reichheld and Scheffer (2000, p. 107) observe that “[t]o gain the loyalty of customers, you must first gain their trust.”

Despite the well-recognized significance of trust building in consumer-firm relationships, few studies have examined company behaviors and practices that build or deplete consumer trust, or the mechanisms by which these behaviors/practices contribute to trust enhancement and/or depletion. Instead, most studies have focused on the consequences of perceived trust for outcomes such as loyalty and cooperation (Garbarino and Johnson 1999; Tax, Brown, and Chandrashekar 1998). Thus, while sufficient evidence exists to suggest that trust matters for critical relational outcomes, fundamental gaps remain in our understanding of the factors that build or deplete consumer trust and the mechanisms that might explain the process of trust enhancement or depletion in consumer-firm relationships.

This research aims to fill the preceding gap in the literature. Specifically, four aspects of our study are noteworthy. First, we distinguish between trustworthiness and trust, develop a multifaceted, multidimensional model of the behavioral components of trustworthiness, and examine their differential effects on consumer trust. The focus on specific behavioral dimensions for two key facets of relational exchanges—frontline employees and management policies and practices—is conceptually appealing because these dimensions and facets are rooted in strong theoretical frameworks and facilitate a fine-grained understanding of their differential effects on consumer trust. Moreover, this focus is managerially useful because it pinpoints those frontline behaviors and management policies and practices that likely are the key drivers of consumer trust.

Second, in mapping the mechanisms that link trustworthy behaviors and practices to consumer trust, we do not limit our conceptualizations to simple, linear relationships. Instead, based on emerging theoretical ideas in social psychology and decision-making research, we postulate contingent asymmetric relationships. Specifically, we allow for the possibility that the trust-building effect of a unit *positive* change in performance on any factor of trustworthy behaviors/practices may not be equivalent to the trust depletion effect produced by a unit *negative*

change in performance. Managerially, this implies that, for some dimensions, negative performance may not deplete consumer trust significantly and positive performance on other dimensions may not build consumer trust. Linear conceptualizations obfuscate such theoretically and managerially interesting asymmetries.

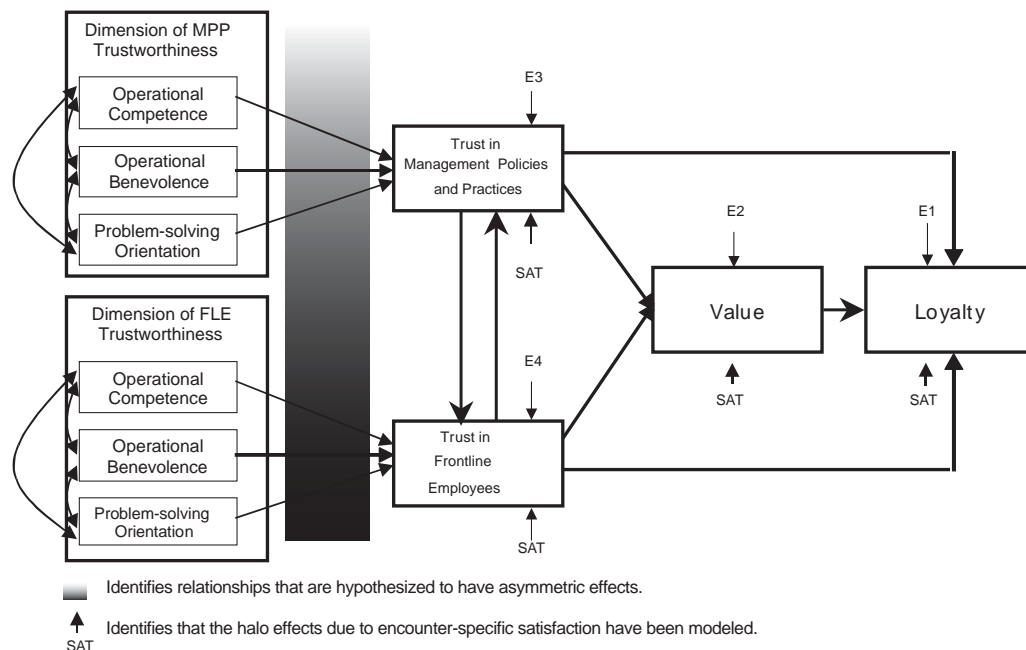
Third, we do not study consumer trust in isolation. Rather, we test a nomological model that proposes interrelationships among consumer trust and loyalty with value serving as a critical mediating variable. This approach provides several advantages including (1) a direct confrontation of the thesis that consumer trust matters in relational exchanges, (2) an understanding of the differential effects of trust facets on value and loyalty, and (3) insights into mechanisms that link consumer trust and loyalty. To enhance the validity of our nomological model, we control for satisfaction, a transactional variable that is likely to confound results.

Fourth, to examine the sensitivity of the proposed model, we utilize data from two different relational service contexts for empirical testing. In particular, we utilize data from retail (i.e., major clothing purchase from a frequently visited department store) and service (i.e., nonbusiness travel on a frequently utilized airline) industries. We begin our discussion with the proposed conceptual model.

A Model of Trustworthy Behaviors/Practices, Consumer Trust, Value, and Loyalty

The conceptual model guiding this research is depicted in Figure 1. The proposed model draws from the diverse research on trust in social relationships (Sorrentino, Holmes, Zanna, and Sharp 1995; Deutsch 1958) and inter-organizational relationships (Morgan and Hunt 1994; Moorman, Deshpandé, and Zaltman 1993). However, we recognize that the distinct characteristics of consumer-firm exchanges including unique structural aspects (Fournier, Dobscha, and Mick 1998), asymmetric relationship motivations (Deighton and Grayson 1995), and desired end states (Gwinner, Gremler, and Bitner 1998) make the direct translation of constructs from other contexts difficult at best and inappropriate at worst. Thus, we utilized caution in translating constructs and adapting conceptualizations based on related literature in consumer behavior. We begin our discussion of the proposed model by conceptualizing consumer trust and distinguishing it from trustworthy behaviors and practices.

Figure 1. The Empirical Model Tested for Estimating the Interrelationships among Trustworthiness, Trust, Value, and Loyalty



Facets of Consumer Trust and Trustworthy Behaviors/Practices

As per Figure 1, we conceptualize consumer trust as a multifaceted construct, involving frontline employees and management policies and practices as distinct facets. In the literature, some authors have conceptualized “trust” in conative or behavioral terms (Mayer, Davis, and Schoorman 1995; Ganesan 1994). Emphasizing behavioral intent, Moorman, Zaltman, and Deshpandé (1992) define trust as “a willingness to rely on an exchange partner in whom one has confidence.” Other researchers utilize cognitive or evaluative definitions of trust, arguing that the link between trust evaluations and behavioral response should be open to empirical investigation and is likely to be subject to the influence of other contextual factors (Doney and Cannon 1997; Morgan and Hunt 1994). Adopting this approach, Morgan and Hunt (1994) define trust “as existing when one party has confidence in the exchange partner’s reliability and integrity.” Thus, we define consumer trust as “the expectations held by the consumer that the service provider¹ is dependable and can be relied upon to deliver on its promises.”

Consumers’ trust in the service provider is hypothesized to develop around two distinct facets, the frontline employee (FLE) and management policies and practices (MPP). In most service contexts, these facets are structurally distinct nodes around which the customer is likely to make independent judgments during the course of a service exchange. For instance, it is plausible for a consumer to trust a retail clothing store’s management but view its salespeople with less trust or, perhaps, with distrust. These differences may occur because the inferential basis of evaluations is different; FLE evaluations are based on observed behaviors demonstrated during the service encounter, while MPP judgments are based on the policies and practices governing the exchange. The inclusion of multiple facets in consumer evaluations of services has been supported by several authors (Doney and Cannon 1997; Crosby and Stephens 1987; Singh 1991). Crosby and Stephens (1987) conceptualized consumers’ overall satisfaction with a service as having three distinct facets including satisfaction with (1) the contact person, (2) the core service and (3) the organization. Likewise, in a medical service context, Singh (1991) demonstrated that the consumer’s judgments of satisfaction at three distinct nodes including the physician, hospital, and insurance provider achieved discriminant validity.

More importantly, the preceding studies demonstrate that a multifaceted conceptualization is not only consistent with data on consumer/buyer judgments, but also more likely to reveal the differential effects of the facets. For instance, in Crosby and Stephens’ study, each facet of satisfaction related to different sets of antecedents (e.g., contact person satisfaction was mostly sensitive to interactional factors) and contributed uniquely to overall satisfaction. Likewise, Macintosh and Lockshin (1997) found that for customers with strong interpersonal ties with a retail salesperson, store loyalty and purchase intentions were influenced more strongly by salesperson trust relative to store trust. By contrast, trust in the store was a critical determinant of store loyalty for those without such interpersonal ties.

Consequently, trustworthy behaviors/practices are conceptualized distinctly for frontline employees (i.e., trustworthy behaviors) and management (i.e., trustwor-

thy practices). We define trustworthiness to include “those frontline employee behaviors and management policies and practices that indicate a motivation to safeguard customer interest.” Recognizing that only a subset of the complete domain of observed behaviors/practices is likely to be relevant for the trustworthiness construct, past research has sought to identify valid and relevant dimensions (Ganesan 1994; Smith and Barclay 1997). Invariably, a multidimensional conceptualization is suggested that includes notions of (1) competence and (2) benevolence. Below, we develop and extend this conceptualization by including problem-solving orientation as the third dimension of trustworthiness. We initially propose hypotheses for direct, linear, symmetric effects of trustworthy behaviors/practices on their corresponding trust facets. Thereafter, we discuss the potential for asymmetries and propose hypotheses for empirical testing. This coheres with our methodological approach where the asymmetrical hypotheses are examined for their incremental contribution to a baseline model of symmetrical effects.

Readers will note that our discussion of the development of trustworthiness cognitions in the following sections is in the context of “experience” services where consumers have the ability to make judgments by processing experience information. By contrast, in “credence” contexts, judgments of trustworthiness and development of trust are more likely to approximate bonding and signaling processes since consumers are unable to obtain experience-based information veridical to the judgment at hand. We allude to this alternative mechanism later in this paper.

Dimensions of Trustworthy Behaviors/Practices and Their Effects on Trust

Operational Competence. The expectation of consistently competent performance from an exchange partner has been noted as a precursor to the development of trust in a variety of business relationship contexts. For instance, Mayer, Davis, and Schoorman’s (1995) conceptual model includes ability or “that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain” as a key element of trustworthiness (p. 717). Likewise, Smith and Barclay (1997) define role competence as the degree to which partners perceive each other as having the skills, abilities, and knowledge necessary for effective task performance. Sako (1992) goes as far as to say that, “competence trust is a prerequisite for the viability of any repeated transaction” (p. 43). Empirically, competence-related dimensions have been found to exert a strong influence on trust in diverse contexts. For selling alliances in the computer industry, Smith and Barclay (1997) found that perceptions of role competence had a significant effect on the partner’s willingness to invest in the relationship. Doney and Cannon (1997) found that salesperson expertise was a significant predictor of the buyer’s trust in the salesperson.

We extend the preceding discussion by focusing on the notion of operational competence in service exchanges. By operational competence, we imply the competent execution of visible behaviors as an indication of “service in action” (e.g., response speed) and distinguish it from the inherent competence (e.g., knowledge) of frontline employees/management policies and practices. In consumer-service provider exchanges, this operational focus is appropriate because competence judgments are typically based on observation of frontline employee behaviors and/or management

policies and practices. For instance, a retail salesperson may possess the knowledge or ability required to perform his or her role but unless this knowledge is translated into observable behaviors (e.g., helping the consumer in finding a desired style of clothing), it is less likely to be processed as an indication of trustworthiness. Likewise, while management may be technically competent, consumers would likely lack information to make competency judgments unless it is indicated by visible practices (e.g., providing enough check-out counters to reduce wait times). Thus, we propose that consumer judgments of operational competence are a critical determinant of trust and are drawn from the relevant domains of FLE behaviors and management policies and practices (MPP).

H_{1a}: The consumer's perception of the operational competence evident in FLE behaviors is positively related to FLE trust.

H_{1b}: The consumer's perception of the operational competence evident in management policies and practices (MPP) is positively related to MPP trust.

Operational Benevolence. Operational benevolence is defined as behaviors that reflect an underlying motivation to place the consumer's interest ahead of self-interest. Our notion of "operational benevolence" recognizes that simply having a benevolent motivation is not sufficient; rather, this motivation needs to be operationalized in visible FLE behaviors/management policies and practices that unambiguously favor the consumer's interest even if a cost is incurred in the process. Sako (1992) refers to this dimension as "goodwill trust" and notes that, unlike competence trust, a benevolent partner "can be trusted to take initiatives [favoring the customer] while refraining from unfair advantage taking" (p. 39). Benevolent behaviors provide diagnostic evidence of trust because by going beyond the terms of the explicit "contract," the service provider indicates pro-consumer motivations, restraint on self-serving opportunism, and a willingness to assume fiduciary responsibility (Barber 1983; Morgan and Hunt 1994; Ganesan and Hess 1997). Consequently, benevolent behaviors/practices are often seen as "extra-role" actions that are performed at a cost to the service provider with or without commensurate benefits. Empirical findings generally corroborate the influence of operational benevolence in the development of trust (Hess 1995; Smith and Barclay 1997). In a study of consumer trust in a brand, Hess (1995) demonstrated that altruism, or the perception that the brand has the consumer's best interests at heart, explained the greatest proportion (40 percent) of variance in trust. Smith and Barclay (1997) report that character (including operational benevolence) has a significant impact on investment in buyer-seller relationships. Likewise, McAllister (1995) found that the manager's affective trust in a peer was positively affected by the citizenship or extra-role behaviors.

Extending the preceding research to consumer-service provider exchanges, we propose that consumers formulate perceptions of operational benevolence separately for FLEs and management based on corresponding behaviors and practices. For instance, airline management might provide evidence of operational benevolence by instituting practices that indicate respect for the customer and favor their best interest (e.g., upgrading passengers, providing more leg-room). In turn, because operational benevolence is associated with restrained opportunism and building

“goodwill,” consumers are thought to reciprocate benevolent FLE behaviors (management policies and practices) by placing greater trust in the FLE (management).

H_{2a}: The consumer’s perception of the operational benevolence evident in FLE behaviors is positively related to FLE trust.

H_{2b}: The consumer’s perception of the operational benevolence evident in management policies and practices is positively related to MPP trust.

Problem-solving Orientation. Finally, problem-solving orientation is defined as the consumer’s evaluation of FLE/management motivations to anticipate and satisfactorily resolve problems that may arise during and after a service exchange. It is recognized that (1) problems often arise during the course of service delivery (Bitner, Booms, and Tetreault 1990; Zeithaml and Bitner 2000) and/or in the post-exchange phase (Tax, Brown, and Chandrashekar 1998; Smith, Bolton, and Wagner 1999) because of service heterogeneity (e.g., large variance in service delivery) and intangibility (e.g., quality can be reliably judged only after experience), and (2) how service providers approach such problems are critical incidents that provide insight into the character of the service provider (Smith, Bolton, and Wagner 1999; Kelley and Davis 1994). Interest in problem-solving orientation of service providers can be traced to earlier work on the role of service recovery in consumer evaluations. For instance, Goodwin and Ross (1992) suggest that problem-solving perceptions are affected by the nature and promptness of company effort. Likewise, Smith, Bolton, and Wagner (1999) found that failures in the process of service delivery (attributed to the FLE) were a greater cause of dissatisfaction compared to tangible problems such as stock-outs. Hart, Heskett, and Sasser (1990) note that “every customer’s problem is an opportunity for the company to prove its commitment to service [and build trust]—even when the company is not to blame” (p. 151).

The services literature offers conceptual and empirical evidence to suggest that problem-solving orientation is a distinct factor in consumer judgments. Zeithaml and Bitner (2000) note that “for service employees, there is a specific need for [problem solving] training. . . . [E]ffective recovery skill includes hearing the customer’s problems, taking initiative, identifying solutions, and improvising” (p. 179). Calantone, Graham, and Mintu-Wimsatt (1998) emphasize the unique aspects of problem solving, noting that it is “characterized by behaviors that are cooperative, integrative, needs-focused, and information-exchange oriented” (p. 21). Levesque and McDougall (2000) go so far as to suggest that problem-solving contexts involve unique “exchanges” that occur within the context of the larger consumer-firm relationship.

As such, behaviors that demonstrate a problem-solving orientation are related to, but distinct from, those demonstrated during routine contexts. Specifically, such behaviors demonstrate the ability and motivation to sense and resolve customer problems during and after exchange episodes. Although operational competence and operational benevolence are likely to be implicated during problem solving, they are not likely to capture the unique cognitive judgments that arise during and after problem resolution.² Consequently, we argue that they cannot be subsumed

under the other two dimensions and propose problem-solving orientation as a distinct dimension of trustworthiness. Surprisingly, the role of problem-solving orientation has not been examined in most trust research to date. One exception is a study by Tax, Brown, and Chandrashekar (1998) that utilizes the justice literature to propose that fairness in problem solving is crucial to consumer evaluations of satisfaction and trust in a range of service industries (e.g., bank, telecommunications, health care insurer). Their results indicate that first-time customers' dissatisfaction with problem handling was strongly and directly related to trust in the service organization ($\beta = -.73$). This was also evident for existing customers ($\beta = -.70$), although favorable prior experiences dampened this effect.

Drawing upon the above literature, we posit that in service contexts consumers garner evidence from FLE behaviors and management policies and practices that facilitate evaluation of the problem-solving orientation of each facet (i.e., frontline employees and management policies and practices) of the service provider. However, this evidence is not limited to post-consumption service failures but may include problems that the customer may face during the actual service encounter. For instance, during the course of a flight, a distressed airline passenger may require assistance from a flight steward in contacting family on the ground. Similarly, airline policies and practices for locating and retrieving lost baggage may provide critical evidence of trustworthiness. Consequently, we posit that consumers are alert to evidence of problem-solving orientation throughout the process of service consumption and use this evidence to formulate trust judgments. Thus:

H_{3a}: The consumer's perception of the problem-solving orientation evident in FLE behaviors is positively related to FLE trust.

H_{3b}: The consumer's perception of the problem-solving orientation evident in management policies and practices is positively related to MPP trust.

Thus far, we have proposed that consumers (a) utilize evidence from three critical domains of FLE behaviors and MPP including operational competence, operational benevolence, and problem-solving orientation, and (b) judgment of trust in the FLE and management is directly affected by their perceptions of trustworthy behaviors/practices. In developing the hypotheses for asymmetric effects of trustworthy behaviors/practices on trust, we view hypotheses H₁ to H₃ as the baseline model of linear effects and examine the potential for asymmetries.

Asymmetric Effects of Trustworthy Behaviors/Practices on Consumer Trust

Although trust research has mostly focused on linear effects, we propose that trustworthy behaviors/practices may exert asymmetric effects on trust. That is, for any dimension of trustworthy behaviors/practices, negative versus positive performance may have a differential impact on consumer trust. The limited research in marketing proposing asymmetric effects has primarily argued for negativity, or the dominance of negative over positive information in judgments (Mittal, Ross, and Baldasare 1998; Anderson and Sullivan 1993). Theoretical support for these predictions have been primarily drawn from Kahneman and Tversky's (1979) loss-

aversion hypothesis, and from Wyer and Gordon's (1982) notion of distinctive coding of negative events in memory. Empirical support for these theoretical predictions has been found in several streams including multi-attribute judgments (Kahn and Meyer 1991), effects of performance on disconfirmation (Mittal, Ross, and Baldasare 1998), effects of disconfirmation on customer satisfaction (Anderson and Sullivan 1993) and effect of service quality on behavioral consequences (Zeithaml, Berry, and Parasuraman 1996).

We extend this work by drawing on research in norm theory (Herzberg 1966) and cue diagnosticity in social judgments (Taylor 1991; Skowronski and Carlston 1987; Oliver 1997) to propose "contingent" asymmetric effects where either negativity or positivity effects may be observed. In accord with the classic need satisfaction theories such as Herzberg's dual-factor theory, researchers distinguish between "hygienes"—the dissatisfaction-avoidance factors, and "motivators"—the satisfaction-producing factors. Negative performance on hygienes has a stronger effect on satisfaction relative to positive performance in accord with the negativity effect. In the case of motivators, however, stronger effects are expected for positive performance relative to negative performance. Drawing from cue diagnosticity theory, Skowronski and Carlston (1987) note that the perceptual interpretation of performance on an attribute is affected by the individual's neutral point (anchor) for that attribute relative to other attributes. If past performance indicates that positive (negative) performance is the norm, then negative (positive) performance on that attribute may carry a greater weight in subsequent judgments. As such, this view rejects the notion that negativity effects are pervasive and argues that both negativity and positivity effects are plausible "contingent" on the nature of the attribute. Several authors have found support for this contingency hypothesis (Swan and Combs 1976; Maddox 1981). In the context of clothing purchases, Swan and Combs (1976) identified "instrumental" (hygiene) factors—including durability and construction—that were expected to contribute to maintaining satisfaction or to lead to dissatisfaction when performance was poor. The second set of factors identified as "expressive" (motivators)—including styling and color—were expected to enhance or maintain satisfaction. However, dissatisfaction was not expected to result from poor "expressive" performance. Results of the study supported the predictions based on theory. Even in Mittal, Ross, and Baldasare's study that proposed hypotheses solely based on negativity arguments, some evidence of contingent effects was obtained. In their analysis of automobile satisfaction, Mittal, Ross, and Baldasare report that, for the attribute of "interior roominess," the regression coefficient for positive performance was about threefold larger than for negative performance (.49 versus .17), suggesting a positivity effect.

While we draw from the preceding literature to propose asymmetric relationships between trustworthy dimensions and trust facets, it is difficult to predict directional hypotheses due to three limitations of past research. First, to our knowledge, extant trust research (Singh and Sirdeshmukh 2000; Lewicki, McAllister, and Bies 1998) has not empirically examined propositions regarding the proposed asymmetry in the underlying mechanisms. As a result, confidence in the conceptual arguments remains tentative until a base of empirical support is built. Second, these studies primarily discuss asymmetry in the consequences of trust versus distrust

(rather than the determinants of trust). For instance, Singh and Sirdeshmukh (2000) propose that the absolute magnitude of the influence of competence distrust on pre-purchase expectations would be greater than competence-based trust. Asymmetric influences of trust determinants have not been proposed or empirically tested to date. Third, this stream of work has focused on a loss aversion-based hypothesis, ignoring the possibility of contingent effects. For the case of FLE operational benevolence, it is possible that consumers expect FLEs to work for the customers' best interest (e.g., "after all, that is what they are hired for") so that a negativity effect may be more plausible. Alternatively, the FLE may be so closely associated with self-serving or profit-making interests (e.g., in the case of automobile retailing) that when a FLE behaves benevolently, a positivity effect is evident. Clearly, these asymmetrical relationships may not only be contingent on the dimension of trustworthiness but also on the service context. Thus, we adopt an exploratory perspective and posit nondirectional asymmetrical hypotheses.

H₄: FLE (MPP) trust will be affected asymmetrically by a unit positive change in FLE (management) operational competence versus a unit negative change.

H₅: FLE (MPP) trust will be affected asymmetrically by a unit positive change in FLE (management) operational benevolence versus a unit negative change.

H₆: FLE (MPP) trust will be affected asymmetrically by a unit positive change in FLE (management) problem-solving orientation versus a unit negative change.

Reciprocal Relationship Between Frontline Employee Trust and Management Trust

Consumer trust in frontline employees is proposed to directly influence management trust, based on agency theory (Bergen, Dutta, and Walker 1992) and research on the role of causal attributions in judgments (Folkes 1988). As per agency theory, FLEs interact with customers as agents of the firm, presumably acting within the roles prescribed by management rather than as completely independent entities. Thus, greater consumer trust in FLEs is likely to generate higher level of consumer trust in the management—the principal that apparently controls and determines the behaviors of the agent. Likewise, attribution theory proposes a related mechanism whereby consumers attribute FLE trust in part to management involvement in FLE hiring, training, service culture, and other practices (Heskett, Sasser, and Schlesinger 1997). While FLE behaviors are directly observable, the reasons underlying the behaviors have to be inferred by consumers. To the extent that the consumer attributes the locus and controllability of the causes underlying FLE behaviors to management, FLE trust is likely to influence management trust (Folkes 1988). Empirical support is forthcoming from the services literature (Crosby and Stephens 1987; Bitner, Booms, and Tetreault 1990). For instance, Crosby and Stephens (1987) demonstrated that satisfaction with the contact employee contributes to the customers' judgment of the core service.

The literature also offers support for a reciprocal relationship such that consumers' judgments of management trust are likely to enhance trust in the FLE.³ Doney and Cannon (1997) argued that when customers have limited knowledge of the salesperson, their trust in the firm is likely to have a direct impact on trust in the salesperson through a process of affect transfer. The authors found support for the proposed reciprocal effects although salesperson trust had a stronger effect on trust in the firm ($\beta = .77$) compared to the reverse effect ($\beta = .52$). In our research, consumers are evaluating providers with whom they are in a relational exchange (i.e., they have experience and familiarity with the provider and its employees). In such contexts, the process of affect transfer is less likely to determine frontline employee trust; rather, judgments based on observed behaviors are likely to dominate as proposed earlier. Thus, in the present research context, we posit:

H₇: FLE trust will have a reciprocal influence on MPP trust such that the direct effect of FLE trust on MPP trust is larger than the reciprocal influence.

Consumer Trust and Loyalty

Consistent with past research, consumer trust in FLE and management policies and practices is posited to directly impact consumer loyalty towards the service provider. Consumer loyalty is indicated by an intention to perform a diverse set of behaviors that signal a motivation to maintain a relationship with the focal firm including share of the category wallet allocated to the specific service provider, engaging in positive word-of-mouth (WoM), and repeat purchase (Zeithaml, Berry, and Parasuraman 1996).

The proposed relationship between consumer trust and loyalty is supported by reciprocity arguments. When providers act in a way that builds consumer trust, the perceived risk with the *specific service provider* is likely reduced, allowing the consumer to make confident predictions about the provider's future behaviors (Mayer, Davis, and Schoorman 1995; Morgan and Hunt 1994). Here, we distinguish between relational risk (i.e., perceived risk within the relational exchange context) and industry risk (i.e., perceived risk in a specific industry such as medical, airline, or hair styling). The mechanisms involving these two types of risk may be different in nature and independent. For instance, industry risk is likely to moderate rather than mediate the trust-loyalty relationship within an exchange. While recognizing the potential role of industry risk, we focus on relational risk for the purposes of our study. In instances where service providers' behaviors and practices reduce relational risk, the reciprocity literature argues that consumers are likely to act "cooperatively" toward such a trustworthy service provider in order to maintain trust, by demonstrating behavioral evidence of their loyalty (Gassenheimer, Houston, and Davis 1998). Thus, with increasing trust in FLE and management policies and practices, consumers' loyalty is likely enhanced.

Trust also impacts loyalty by affecting the consumer's perception of congruence in values with the provider (Gwinner, Gremler, and Bitner 1998). When there is perceived similarity in values between the firm and the consumer, the consumer's embeddedness in a relationship is enhanced, promoting reciprocity and contributing to relational commitment. Gwinner, Gremler, and Bitner (1998) demonstrate

that such value congruence is significantly related to the consumer's loyalty and satisfaction. Thus, we propose:

H₈: The consumer's loyalty toward the focal firm will be positively influenced by FLE trust.

H₉: The consumer's loyalty toward the focal firm will be positively influenced by MPP trust.

The Mediating Role of Value in the Trust-Loyalty Relationship

We posit a second mechanism for the trust-loyalty relationship whereby value mediates the effect of trust on loyalty. Following Zeithaml (1988), value is defined as the consumer's perception of the *benefits* minus the costs of maintaining an ongoing relationship with a service provider. Relational benefits include the intrinsic and extrinsic utility provided by the ongoing relationship (Gwinner, Gremler, and Bitner 1998; Neal and Bathe 1997) while associated *costs* include monetary and nonmonetary sacrifices (e.g., time and effort) that are needed to maintain the relationship (Zeithaml 1988; Houston and Gassenheimer 1987).

Goal and action identification theories provide a conceptual framework for hypothesizing the mediating role of value in relational exchanges (Carver and Scheier 1990; Vallacher and Wegner 1987). Together, these theories posit that (a) consumer actions are guided or "identified" by the underlying goal that they are expected to help attain, (b) multiple and sometimes conflicting goals may be operative at any instance, (c) goals are organized hierarchically with superordinate goals at the highest level and subordinate goals at the lowest level, and (d) consumers regulate their actions to ensure the attainment of goals at the highest level. As such, superordinate goals are desired end states, while focal and subordinate goals serve instrumental roles. Bagozzi and Dholakia (1999) and Bagozzi (1992) have recently discussed the significance of goal and action identification theories for consumer behavior. We supplement and extend this work to the study of relational exchanges.

Using the perspective of the goal and action identity theories, value is posited as the superordinate consumer goal in relational exchanges.⁴ The central role of consumer value has been conceptualized (Neal 1999; Woodruff 1997; Houston and Gassenheimer 1987) and empirically demonstrated (Grisaffe and Kumar 1998; Bolton and Drew 1991) in the marketing literature. As "value-maximizers" (Kotler 2000), consumers are thought to consummate exchanges with providers that provide maximal value (p. 32). The key role of value is also notable in calls for building "consumer-value-centric" organizational processes and competencies (Heskett, Sasser, and Schlesinger 1997; Srivastava, Shervani, and Fahey 1999). For instance, Srivastava, Shervani, and Fahey (1999) assert that "the value ... experienced by end customers is the driving obsession [of organizations]" (p. 172). Holbrook (1994) goes as far as to say that, "customer value is the *fundamental basis* for all marketing activity" (p. 22; emphasis original).

Value, in turn, is hypothesized to be affected by judgments of FLE and management trust. Specifically, trust creates value by (a) providing relational benefits

derived from interacting with a service provider who is operationally competent, benevolent toward the consumer, and committed to solving exchange problems, and (b) reducing exchange uncertainty and helping the consumer form consistent and reliable expectations of the service provider in ongoing relationships. Although no empirical study has examined this hypothesis, indirect support is forthcoming from the service quality literature. For instance, in the context of telephone services, Bolton and Drew (1991) found a positive association between global service assessment (“easy to do business with”) and value. Kerin, Jain, and Howard (1992) report a similar effect on value in a retail context using a composite measure of FLE friendliness and store management policies and practices (e.g., variety, check-cashing policy).

Based on self-regulation processes, we posit that value, a superordinate goal, would regulate consumer actions at the lower level, including behavioral intentions of loyalty toward the service provider (Carver and Scheier 1990). Individuals are expected to regulate their actions—that is, engage, maintain, or disengage behavioral motivation—to the extent that these actions lead to attainment of superordinate goals. Accordingly, consumers are hypothesized to indicate behavioral intentions of loyalty toward the service provider as long as such relational exchanges provide superior value. Otherwise, the consumer is motivated to disengage, demonstrating lack of loyalty. By focusing on behavioral motivation, we recognize that in some circumstances individual choice may be constrained due to switching costs, market constraints, or other impediments such that, while the behavioral motivation exists, the consumer is unable to disengage. The notion that value drives loyalty, albeit imperfectly, has substantial support among marketing practitioners (Neal 1999) and scholars alike (Chang and Wildt 1994). For instance, Bolton and Drew (1991) report that value was a significant determinant of consumers’ behavior intentions to remain loyal to a telephone service by continuing the relationship and engaging in positive word-of-mouth. Empirical support for this linkage is also established in different contextual settings by Chang and Wildt (1994) and Grisaffe and Kumar (1998).

Because loyalty is regulated by the consumer’s superordinate goal of value, we posit that trust will affect loyalty via its influence in creating value. This parallels the mediational role of value hypothesized and tested in service quality-loyalty relationships in past research (Chang and Wildt 1994; Grisaffe and Kumar 1998). For instance, Chang and Wildt report that value mediates the perceived quality-loyalty link in the context of personal computers and apartments. However, Grisaffe and Kumar’s (1998) research indicates that while value may be a significant mediator of the service quality-loyalty relationship, it does not imply that value fully mediates the effect of quality. In their study of office products and financial services, the authors found that, while value mostly mediated the effect of quality on positive word-of-mouth, quality continued to have residual direct effects on positive word-of-mouth that were borderline significant. Similarly, we hypothesize that value partially mediates the relationship between trust and loyalty. Direct effects of trust on loyalty may achieve significance as per H_8 and H_9 , in addition to the mediated effect via value. Thus:

H₁₀: Consumer loyalty toward the service provider will be positively influenced by value.

H₁₁: Value will be positively influenced by FLE trust.

H₁₂: Value will be positively influenced by MPP trust.

Research Design and Method

Overall Considerations

The service contexts selected for the study possessed multiple desired characteristics including (a) experience properties, (b) distinct role of frontline employee, (c) consequentiality, and (d) variability in the significance of MPP and FLE. We preferred “experience” service contexts because such contexts allow consumers to observe and evaluate behaviors of service providers and are consistent with the behavioral focus of the trustworthiness construct. By contrast, in credence contexts, trust development is likely affected by signals that convey credibility and bonding given the consumer’s inability to interpret and process behavioral evidence (Bergen, Dutta, and Walker 1992; Singh and Sirdeshmukh 2000). We preferred “consequential” service contexts because we reasoned that less consequential and relatively risk-free exchanges were more likely to evidence transactional characteristics and therefore, a priori, less relevant to trust development. Based on some evidence from the qualitative work and our judgments, we asked consumers to focus on exchanges with a retail store that involved at least a \$50 purchase in the last visit, and at least two visits over the last six months. If consumers could not come up with exchanges that satisfied the preceding qualifying criteria, they were excluded. Likewise, for airline travel, we asked consumers to focus on exchanges with an airline company for which they have a frequent flyer account and made at least one nonbusiness trip during the prior six months. Finally, we preferred service contexts that indicated a distinct role for the FLE and variability in the relative effects of FLE and management trust. We reasoned that relationships with the FLE could range from “close” to “distant” and this might influence the relative effect of FLE trust. Recently, Gupta (1999) reported that reliability was more frequently mentioned as a key factor in the airline context, while process customization was more frequently mentioned in the retail context. The latter is likely to heighten the role of FLE, just as the former is likely to diminish it.

Because of the nascent stage of the consumer trust literature, we utilized a mix of qualitative and quantitative approaches for data collection. Initially, we employed focus groups and personal interviews to identify salient behavioral domains underlying consumer judgments of trustworthiness and to generate/refine items for the quantitative phase. Next, cross-sectional surveys with structured questions were administered in two waves. Respondents were asked to identify a specific, recent service exchange encounter with a provider that met qualifying criteria and to complete the survey with that relational exchange in mind. Although the unit of analysis is the relational exchange between a consumer and service provider maintained across multiple episodes, we reasoned that cueing a specific encounter would facilitate recall of exchange characteristics and relational judgments. Similar approaches have been used in services research (Bitner, Booms, and Tetreault 1990; Tax, Brown, and Chandrashekar 1998).

Sample

The sample was randomly drawn from the population of individuals with household annual incomes of \$35,000 or higher, residing within the metropolitan area of a large city in the Midwest. Questionnaires containing the measures, accompanied by a cover letter and a stamped return envelope were mailed to 1,230 respondents for each service category. The cover letter explained the purpose of the study, assured confidentiality of data, and thanked the participant. Following the initial section, respondents completed measures pertaining to frontline employee behaviors, frontline employee trust, management policies and practices, management trust, value, and loyalty, followed by demographic questions. A second wave of questionnaires was mailed to all respondents along with a cover letter with a reminder, four weeks after the initial mailing.

Because a random sample includes consumers who may lie anywhere on the transactional-relational continuum, it is important to exclude respondents who do not fall within the relational domain for the purposes of our study. We devised a procedure to do so by using the frequency (e.g., number of visits/flights) and level of commitment (e.g., amount spent/frequent flier account). We used data from respondents who did not meet these criteria and extrapolation methods to estimate the number of “disqualified” respondents in order to compute reasonable response rates. In the retail category, the first wave resulted in 182 returned surveys of which 153 (84 percent) customers met prequalifying criteria and the second wave led to 143 responses with 93 (65 percent) customers qualifying. Extrapolating to a third mailing and averaging across waves, a usable response rate of 29 percent⁵ was imputed for the retail category (Armstrong and Overton 1977). In the airline travel category, the first wave produced 160 responses, of which 72 (45 percent) met the prequalifying criteria. Likewise, of the 141 responses in the second wave, 41 (29 percent) met the prequalifying criteria. Extrapolating to the third wave and averaging across the three waves yielded a qualification rate of 30 percent or 378 consumers. Using this qualification rate, the 113 usable responses give a usable response rate of 29 percent (see Note 5).

Sample characteristics are reported in Table 1. A majority of respondents had a college degree or higher, were white and married. In the aggregate sample, 45 percent of respondents were male and 55 percent were female. However, there was a significant gender imbalance in each service category with about 70 percent of respondents in the retail sample being female while only about 30 percent in the airline sample were female. A wave analysis was conducted to examine for profile differences of early and late respondents in each service category. With one exception, results indicated no significant demographic differences between the two waves in the retail sample (χ^2 ranging from .53 to 7.9, $p > .1$) or the airline sample (χ^2 ranging from .16 to 10.10, $p > .1$). In the airline sample, the education level of wave 1 respondents was significantly higher than for wave 2 respondents ($\chi^2 = 12.75, p < .01$).

Table 1. Demographic Profile of the Respondents (all numbers are in percentages)

	Age (in years)		Gender		Level of Education		Ethnicity				
	Retail	Airline	Retail	Airline	Retail	Airline	Retail	Airline			
18-24	1.2	1.7	Male	30.2	71.2	High School	17.0	6.0	White	93.4	94.0
25-34	15.1	9.3	Female	69.8	28.8	Some College	28.2	19.7	African American	5.4	4.2
35-44	26.5	26.3				College Degree	35.5	46.2	Other	1.2	1.8
45-54	28.6	25.4				Graduate School	19.3	28.1			
55+	28.6	37.3									

	Marital Status		Household Size (number of people)		Annual Household Income			
	Retail	Airline	Retail	Airline	Retail	Airline		
Married	77.2	80.5	1	10.5	11.1	Less than \$35,000	8.7	2.5
Single	9.7	6.8	2	32.5	41.0	\$36,000-\$44,999	15.3	11.4
Divorced/Separated	8.9	10.2	3	17.1	15.4	\$45,000-\$54,999	16.9	12.3
Widow/Widower	4.2	2.5	4	23.3	21.4	\$55,000-\$64,999	12.8	15.8
			5	12.3	7.7	\$65,000-\$94,999	27.3	25.5
			> 6	4.3	3.4	\$95,000 and over	19.0	32.5

Measurements

Table 2 provides descriptive statistics, intercorrelations, and reliabilities of study constructs, while the appendix provides the scale items utilized.

Table 2. Reliabilities and Intercorrelations for the Study Constructs

	Intercorrelations ^{a,b}										
	MANAGEMENT			EMPLOYEE			Management Trust	Employee Trust	Value	Loyalty	Satisfaction
	MOC	MOB	MPS	EOC	EOB	EPS					
MANAGEMENT											
Operational Competence (MOC)	.77/.73	.62	.61	.69	.65	.45	.68	.61	.61	.49	.46
Operational Benevolence (MOB)	.54	.90/.86	.70	.69	.79	.62	.78	.67	.61	.58	.56
Problem-solving Orientation (MPS)	.46	.74	.87/.74	.64	.75	.66	.69	.63	.59	.60	.46
EMPLOYEE											
Operational Competence (EOC)	.61	.62	.54	.91/.87	.76	.67	.77	.75	.63	.64	.54
Operational Benevolence (MOB)	.51	.68	.56	.70	.84/.81	.77	.78	.76	.65	.62	.52
Problem-solving Orientation (EPS)	.37	.63	.63	.51	.59	.72/.82	.62	.73	.54	.50	.40
Management Trust	.49	.66	.63	.57	.67	.54	.96/.96	.85	.72	.65	.63
Employee Trust	.49	.68	.59	.69	.76	.60	.84	.96/.97	.65	.54	.56
Value	.39	.49	.33	.40	.51	.40	.53	.55	.92/.92	.66	.55
Loyalty	.19	.42	.39	.38	.40	.44	.51	.52	.56	.90/.94	.43
Satisfaction	.42	.46	.38	.41	.51	.43	.61	.59	.52	.48	.94/.96

^a The alpha reliabilities are on the diagonal with estimates for the retail context presented first.

^b The intercorrelations for the retail context are below the diagonal, while the corresponding correlations for the airline context are above the diagonal. All values are significant at $p = .05$.

Trustworthy Practices and Behaviors. Although previous studies have operationalized the construct of trustworthy behaviors along multidimensional facets, they are

exclusively limited to interorganizational contexts (Kumar, Scheer, and Steenkamp 1995; McAllister 1995). To extend this work to the consumer context and obtain contextually meaningful operational items, we initially utilized four focus groups made up of specific combinations of gender (male, female) and household income level (<\$35,000, >\$35,000). Thereafter, in-depth interviews lasting 90 minutes each were conducted with 12 consumers meeting prespecified criteria to refine the operational items. A card-sorting exercise was developed with each card containing an operational item of trustworthy behavior or practice retained from focus group analysis. “Think aloud” data provided by consumers yielded insight into interpretations of operational items and guided their refinement. Based on results of in-depth interviews, a set of operational measures for trustworthy frontline employee behaviors and management policies and practices were developed along three dimensions—operational competence, operational benevolence, and problem-solving orientation—and retained for the subsequent pretesting phase. Items generated were pretested via evaluation by five judges for wording/meaning and consistency with corresponding definitions of the dimensions. Based on this feedback, items were either modified or dropped. The resulting instrument included 16 items each for management policies and practices and employee behaviors.

Two further analyses were performed on the pooled retailing and airline data to ensure that the operational items for trustworthy behaviors and practices had acceptable reliability as well as convergent and discriminant validity. First, exploratory factor analysis (EFA) was utilized to separately analyze items for each facet. For the MPP items, EFA yielded a three-factor solution based on the “breaks in eigenvalues” criterion. Together the three factors accounted for 76 percent of the variance extracted, corresponding closely with the hypothesized dimensions of competence, operational benevolence, and problem solving. However, results showed that 7 of 16 items were inadequate. These measures did not demonstrate a dominant loading on the hypothesized factor ($< .3$) and/or had significant cross-loadings ($> .3$), and were dropped from further analysis. Likewise, EFA of the employee behavior items yielded a three-factor solution that accounted for 73 percent of the variance extracted. This coheres with our hypothesis of three dimensions of employee trustworthiness—operational competence, operational benevolence, and problem-solving orientation. The 9 items demonstrating acceptable loading on their hypothesized factor ($> .3$) and no significant cross-loading were retained for further analysis.

Before proceeding to the next step of analyses, we conducted additional procedures to further establish the robustness of the three-factor solution. In particular, our procedures focused on the problem-solving dimension. We reasoned that, if problem-solving orientation was not a distinct dimension, forcing a two-factor solution should show that problem-solving collapses into one or the other dimension. Conversely, if the other two dimensions collapse into each other and problem solving retains its distinction, this would support our contention that problem-solving orientation is a distinct aspect of consumer judgments. Results supported the latter, with problem-solving orientation maintaining its distinctiveness while the remaining factors collapsed into one for the FLE as well as MPP facets.

Second, we estimated a restricted factor analysis (RFA) model simultaneously for the management policies and practices and employee behavior items wherein the items were allowed to load on their hypothesized factor and the cross-loadings were restricted to zero. In addition, we allowed the latent factors to correlate freely. We reasoned that our hypotheses for the validity of trustworthiness facets and dimensions would be supported if (a) the measurement model fitted the data reasonably well, (b) the loadings on hypothesized factors were significant and large, (c) each factor yielded reliabilities exceeding .70, and (d) the intercorrelation among the factors (dimensions) produced evidence of discriminant validity. This measurement model (displayed in Figure 2) produced the following fit statistics: $\chi^2 = 216.2$, $df = 120$, CFI = .99, NFI = .98, NNFI = .99, RMR = .04, and RMSEA = .047 (90 percent CI of .037 to .057).⁶ Moreover, the loadings on hypothesized factors are significant and substantively “large” (see Table 3). Each factor yielded composite reliability exceeding .70 (Fornell and Larcker 1981). The intercorrelation among the management and employee dimensions ranges from .89 to .54, and constraining this correlation to unity invariably produced a significant change in the goodness-of-fit statistic ($\Delta\chi^2$ ranges from 46.5 to 376.2, $df = 1$, $p < .01$).⁷ This suggests that the hypothesized measurement model of Figure 2 fits the data reasonably well, and the posited dimensions and facets evidence acceptable reliability, and convergent and discriminant validity. The Cronbach reliabilities of the management dimensions of operational competence (three items), operational benevolence (three items), and problem-solving orientation (three items) were .77, .90, and .87 respectively for the retail context, and .73, .86, and .74 respectively for the airline context. Likewise, the employee dimensions produced corresponding α s of .91, .84, and .72 respectively for the retailing context, and .87, .81, and .82 for the airline context.

Notwithstanding the adequate measurement properties of the three-dimensional operationalization and the correspondence between our conceptual definitions and operational items, we note the need to conduct further psychometric work in developing the trustworthiness construct. In particular, the items capturing problem-solving orientation bear further refinement and cross-validation across service contexts.

Management and Employee Trust. Measures of management and FLE trust were adapted from extant research (Ganesan 1994; Morgan and Hunt 1994). Both measures were operationalized by four items assessed by 10-point semantic differential scales (very undependable/very dependable, very incompetent/very competent, very low integrity/very high integrity, very unresponsive to customers/very responsive to customers). Alpha reliabilities of the management trust and employee trust scales were .96 or higher for both retail and airline contexts (Table 2).

Value. The measure of value was adapted from existing value research (Grisaffe and Kumar 1998; Dodds, Monroe, and Grewal 1991). The value construct was measured using four items that included the benefits obtained from the relational exchange given the prices paid, the time spent, and the effort involved in maintaining a relationship with the focal provider ($\alpha = .92$ for both contexts).

Loyalty. The loyalty measure was drawn from extant services literature (Zeithaml, Berry, and Parasuraman 1996) and included four items measuring the share of category wallet, intention to recommend, and likelihood of repeat purchase ($\alpha > .90$ in both contexts).

Satisfaction. Three items were included to measure episode-specific consumer satisfaction with the last experience (highly unsatisfactory/highly satisfactory, very unpleasant/very pleasant, terrible/delightful). These measures, intended to capture a transactional evaluation, were adapted from satisfaction research (Spreng, MacKenzie, and Olshavsky 1996). The scale demonstrated satisfactory inter-item reliability in both contexts ($\alpha \geq .94$).

Table 3. Confirmatory Factor Analysis of Management and Employee Trustworthiness^a

Construct/Item	Management Practices		FLE Behaviors	
	Loading ^b	t-value ^c	Loading ^b	t-value ^c
<u>Operational Competence</u>				
OpComp ₁	.74	13.2	.76	17.4
OpComp ₂	.67	12.2	.72	17.7
OpComp ₃	.86	13.0	.74	18.5
<u>Operational Benevolence</u>				
OpBen ₁	.75	17.7	.68	17.0
OpBen ₂	.81	18.4	.85	18.8
OpBen ₃	.77	16.6	.70	13.0
<u>Problem-solving Orientation</u>				
ProbSolv ₁	.81	17.8	.79	18.4
ProbSolv ₂	.81	14.0	.52	10.2
ProbSolv ₃				
Goodness-of-fit Statistics				
χ^2		216.2		
Df		120		
NFI		.98		
NNF I		.99		
CFI		.99		
RMR		.04		
RMSEA		.047		
(90% Confidence Interval)		.037-.057		

^aThe estimates reported are from the ERLS (iteratively reweighted generalized least squares) using EQS.

^bThis is the standardized loading estimate via the ERLS procedure.

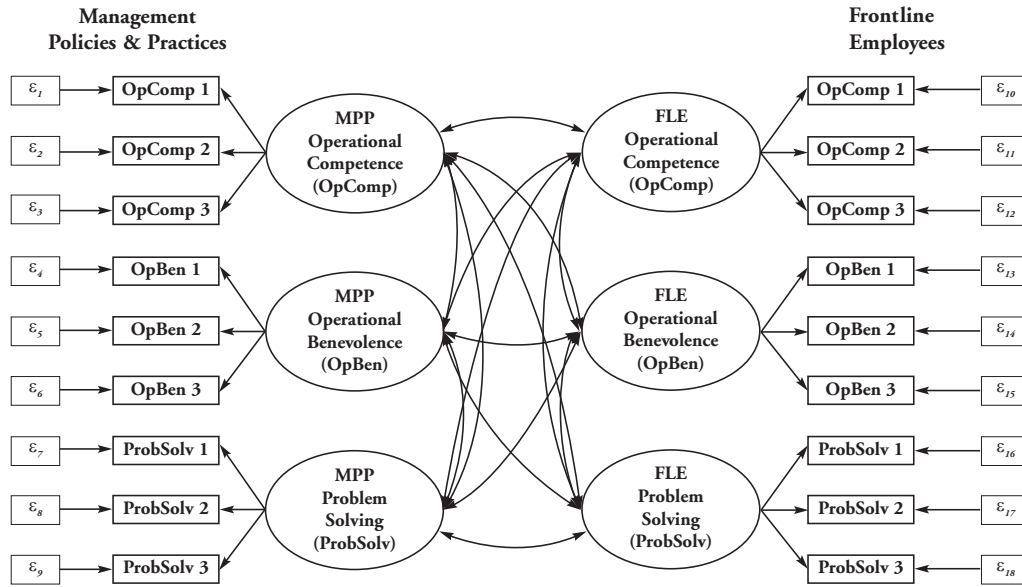
^cBased on one-tailed tests: t-values > 1.65 → $p < .05$; and t-values > 2.33 → $p < .01$.

Method of Analysis

The proposed hypotheses were examined by introducing dummy variable terms in a regression-like equation for each dependent variable. Because of multiple dependent variables, the analytical method was based on simultaneous estimation of the following system of equations:

$$\begin{aligned}
Y_1 &= \beta_{01} + \beta_1 Y_2 + \beta_{11} X_1 + \beta_{21} X_2 + \beta_{31} X_3 + \beta_{41} D X_1 + \beta_{51} D X_2 + \beta_{61} D X_3 + \varepsilon_1 \\
Y_2 &= \beta_{02} + \beta_2 Y_1 + \beta_{12} Z_1 + \beta_{22} Z_2 + \beta_{32} Z_3 + \beta_{42} D Z_1 + \beta_{52} D Z_2 + \beta_{62} D Z_3 + \varepsilon_2 \\
Y_3 &= \beta_{03} + \beta_{13} Y_1 + \beta_{23} Y_2 + \varepsilon_3 \\
Y_4 &= \beta_{04} + \beta_{14} Y_1 + \beta_{24} Y_2 + \beta_{34} Y_3 + \varepsilon_4
\end{aligned}$$

Figure 2. The Measurement Model Utilized for the Consumer Trustworthiness Construct



Where \mathbf{Y} is a vector of dependent variables with Y_1 , Y_2 , Y_3 , and Y_4 corresponding to FLE (frontline employee) trust, MPP (management policies and practices) trust, value, and loyalty respectively. The vectors \mathbf{X} and \mathbf{Z} represent independent variables with X_1 , X_2 , and X_3 corresponding to the operational competence, operational benevolence, and problem-solving orientation dimensions of FLE trust, while Z_1 , Z_2 , and Z_3 are the corresponding trustworthy dimensions for MPP trust. Readers will note that the asymmetric effects are examined by the use of the dummy variable indicated by \mathbf{D} in the above equations. The dummy variable (\mathbf{D}) is coded so that it takes on a value of zero for all nonpositive values of the corresponding trustworthy dimension; otherwise, it is coded as unity. As such, the estimated coefficients for expressions with dummy variables (e.g., β_{41} in the Y_1 equation for FLE competence) indicate the incremental effect of the respective trustworthy dimension over and above its linear effect (e.g., β_{11} in the Y_1 equation for FLE competence). Clearly, the asymmetric hypothesis would be rejected if the corresponding coefficient estimated for the dummy variable is not significantly different from zero (Cohen and Cohen 1983). Finally, the reciprocal relationship between FLE and MPP trust is captured by the coefficients β_1 and β_2 in the Y_1 and Y_2 equations respectively. These coefficients are identified because the three

trustworthiness dimensions of FLE trust serve as its instrumental variables, and likewise for MPP trust.

In estimating the preceding equations, we were sensitive to three methodological concerns that could interfere in drawing valid inferences: (1) simultaneity, (2) cut-off points, and (3) halo effects. Because the modeled equations have common variables (e.g., dependent variable in one equation appears as independent variable in another), we reasoned that the use of standard multiple regression analysis would risk a misspecification bias. This may occur because multiple regression analysis estimates the coefficients for each equation independently (of other equations) assuming that the error terms are uncorrelated. When multiple equations share common variables, this assumption is not warranted. To avoid this misspecification error and implement a simultaneous analysis of the modeled equations, we utilized path analysis with the software EQS. The use of path analysis with EQS has several advantages including modeling for “restricted” models with systematic constraints on proposed relationships. These restricted models can be evaluated for their “fit” to data based on a χ^2 statistic, incremental fit indices including nonnormed-fit-index (NNFI), comparative-fit-index (CFI), and root mean square error of approximation (RMSEA) (Marsh, Balla, and Hau 1996).

Second, determining appropriate cut-off points is a relevant concern in defining the asymmetric terms. While some researchers have utilized an absolute cut-off point regardless of the dimension considered (e.g., midpoint of scale provided), this approach is problematic for several reasons. First, the data obtained on most response scales have at best interval properties such that absolute points do not have identical interpretation across different dimensions. Second, consistent with Zeithaml, Berry, and Parasuraman (1996), the notion of “positive” and “negative” evaluations is conceptually defined relative to certain norms. That is, a “positive” evaluation on a given dimension occurs when the provider is judged to exceed the norm for that dimension; otherwise consumers are likely to make a “negative” evaluation. Such norms are likely to vary with the trustworthy dimension considered. To account for this, the cut-off points were obtained by (a) standardizing the scores for each dimension, and (b) coding the dummy variable as 1 for evaluations greater than zero, and a 0 otherwise. Moreover, the cut-off points were derived separately for each service context so as to avoid confounding between asymmetric and industry effects.

Finally, we were sensitive to the possibility of recency effects. One particular recency effect of interest is encounter-specific satisfaction. Responses from consumers who are very satisfied with a specific exchange with the service provider might inflate the observed correlations and overemphasize the influence of trust factors on value and loyalty. To the extent that more satisfied consumers tend to be over-represented in surveys (Peterson and Wilson 1992), the recency effects due to satisfaction may be significant. In order to reduce this effect, we modeled this effect by including satisfaction as an independent variable in each of the four hypothesized equations. Because path coefficients are partial effects, this procedure ensures that the coefficients are estimated after partialling the effect of satisfaction. This procedure has precedence in the literature (Crosby and Stephens 1987).

Results

The proposed model was fitted simultaneously to the airline travel and retail samples using multiple group path analysis. Initially, all paths were held invariant across the two datasets and a fully restricted model was estimated. Subsequently, based on the lagrange multiplier test, paths with significant test statistics were sequentially released until further freeing up of constraints failed to enhance model fit. The resultant coefficients and fit statistics are presented in Table 4. Based on the statistical test for the goodness-of-fit, the hypothesized model fits the data adequately ($\chi^2 = 97.3$, $df = 87$, $p > .21$). Consistent with this, other indicators of fit, including the relative indices (e.g., normed fit index (NFI) = .99; comparative fit index (CFI) = .99) and absolute indicators of fit (e.g., root mean square error of approximation (RMSEA) = .02, 90 percent CI = .00-.037; SRMR = .03), indicate that the proposed model is a reasonable explanation of observed covariances among the study constructs. In addition, the non-normed fit index (NNFI) that is thought to provide an indicator of balance between explanation and parsimony exceeds .99, indicating that the hypothesized model strikes an appropriate balance between these competing goals. Likewise, the proposed model explains a reasonable proportion of the variances in the dependent variables including FLE trust ($R^2 = .75, .77$), MPP trust ($R^2 = .75, .83$), value ($R^2 = .40, .63$), and loyalty ($R^2 = .40, .48$).⁸ Taken together, this suggests that the hypothesized model is a reasonable fit to the aggregate data, and the estimated coefficients can be validly examined to reveal interrelationships among the modeled constructs.

Table 4 provides the estimated coefficients from the multi-group path analysis. As per H_{1a} , H_{2a} , and H_{3a} , each dimension of FLE trustworthy behaviors including operational competence ($\beta_{OpBen} = .22$), operational benevolence ($\beta_{OpBen} = .43$), and problem-solving orientation ($\beta_{ProbSolv} = .11$) has a significant, direct effect on FLE trust (all with $p < .05$). In addition, these effects are invariant across retailing and airline contexts. By contrast, for the MPP facet, trustworthy practices and policies are neither uniformly significant nor achieve invariance across contexts. For the retailing context, operational competence ($\beta_{OpComp} = .10$) and problem-solving orientation ($\beta_{ProbSolv} = .25$) significantly influence MPP trust (all with $p < .05$), while operational benevolence does not ($\beta_{OpComp} = .02$). For the airline context, however, operational competence ($\beta_{OpComp} = .10$) and operational benevolence ($\beta_{OpComp} = .29$) have a significant effect on MPP trust, while problem-solving orientation does not ($\beta_{ProbSolv} = .12$). Thus, across both contexts, only the effect of operational competence is invariant. This provides mixed support for H_{1a} , H_{2a} , and H_{3a} .

Moreover, the results in Table 4 provide some support for H_4 - H_6 wherein we had hypothesized asymmetric effects of trustworthy behaviors/practices on its corresponding trust facet. For FLE trust, operational benevolence ($\Delta\beta_{OpBen} = -.26$, $p < .01$) produced a significant change coefficient for positive evaluations. In addition, a borderline effect was obtained for positive evaluations of FLE problem-solving orientation ($\Delta\beta_{ProbSolv} = .17$, $p < .10$). Interestingly, these asymmetric effects for FLE behaviors were invariant across retailing and airline contexts. For management

Table 4. Estimated Coefficients for the Impact of Trustworthy FLE Behaviors and Management Practices on Consumer Trust, Value, and Loyalty^{a,b}

Dependent Variable: / R ² /Independent Variable	Retail		Airline	
	Coefficient (<i>t</i> -value) ^c	Δ for positive performance ^d	Coefficient (<i>t</i> -value) ^c	Δ for positive performance ^d
Dependent Variable: Trust in Frontline Employees				
R ²	.75		.77	
Management Practices Trust	.16 (1.9)		.16 (1.9)	
Operational Competence	.22 (3.2)	-.01 (-.1)	.22 (3.2)	-.01 (-.1)
Operational Benevolence	.43 (5.7)	-.26 (-2.1)	.43 (5.7)	-.26 (-2.1)
Problem Solving	.11 (1.6)	.17 (1.5)	.11 (1.6)	.17 (1.5)
Satisfaction	.14 (3.1)		.14 (3.1)	
Dependent Variable: Trust in Management Practices				
R ²	.75		.83	
Frontline Employee Trust	.56 (7.3)		.40 (5.0)	
Operational Competence	.10 (1.8)	-.18 (-1.5)	.10 (1.8)	.03 (.3)
Operational Benevolence	.02 (0.2)	.04 (.4)	.29 (3.5)	.04 (.4)
Problem Solving	.25 (3.2)	-.12 (-1.1)	.12 (1.4)	-.12 (-1.1)
Satisfaction	.17 (4.3)		.17 (4.3)	
Dependent Variable: Value				
R ²	.40		.63	
Employee Trust	.38 (3.3)		.08 (.6)	
Management Trust	.07 (.6)		.50 (3.9)	
Satisfaction	.27 (4.7)		.27 (4.7)	
Dependent Variable: Loyalty				
R ²	.40		.48	
Employee Trust	.04 (.09)		.04 (.09)	
Management Trust	.22 (2.3)		.22 (2.3)	
Value	.40 (6.1)		.40 (6.1)	
Satisfaction	.09 (1.4)		.09 (1.4)	
Goodness-of-fit Statistics				
Chi-square (p-value)		97.3 (.21)		
Df		87		
NFI		.99		
NNFI		.99		
CFI		.99		
RMR		.03		
RMSEA		.02		
(90% Confidence Interval)		(.000 -.037)		

^a The estimates reported are from the ERLS (iteratively reweighted generalized least squares) procedure using EQS.

^b The results are based on "multiple-group" analyses where the nomological model was estimated simultaneously in the "airline" and "retail" samples. Coefficients that differed significantly ($p < .05$) across the groups are italicized.

^c *t*-values in parenthesis. Based on one-tailed tests: t -values $> 1.65 \Rightarrow p < .05$; and t -values $> 2.33 \Rightarrow p < .01$. Significant coefficients are in bold.

^d *t*-values in parenthesis. Based on two-tailed tests: t -values $> 1.96 \Rightarrow p < .05$. Significant coefficients are in bold.

trust, a different pattern of asymmetric effects emerged. For the retail context, only the change coefficient for operational competence was borderline significant ($\Delta\beta_{\text{OpComp}} = -.18$) while for airlines none of the MPP dimensions achieved significance for asymmetrical effects. Taken together, this offers partial support for H_5 and H_6 for FLE trust, and H_4 for management trust.

In accord with H_7 , FLE trust positively influences management trust regardless of context, although the influence is substantially stronger for the retail context ($\beta_{\text{FLE}} = .56$, $p < .01$) relative to the airline context ($\beta_{\text{FLE}} = .40$, $p < .01$). The reciprocal relationship is also supported, as the effect of management trust on FLE trust is significant and invariant across contexts ($\beta_{\text{MPP}} = .16$, $p < .05$). However, as hypothesized, the direct effect of FLE trust is at least two-fold stronger compared to the reciprocal effect of MPP trust (β_{FLE} versus $\beta_{\text{MPP}} = .40$ versus $.16$, $p < .01$).

In addition, the two facets—FLE and MPP trust—were posited to directly affect consumer loyalty after controlling for the mediating influence of value (H_8 and H_9). Our findings in Table 4 provide support for H_9 but not H_8 . That is, regardless of context, FLE trust has a minimal effect ($\beta_{\text{FLETrust}} = .04$), while management trust has a significant effect on loyalty ($\beta_{\text{MPPTrust}} = .22$, $p < .05$). These trust facets significantly influence value as well, in accord with H_{11} and H_{12} . However, these relationships vary by context. For the retailing context, value is strongly and positively affected by perceptions of FLE trust ($\beta_{\text{FLETrust}} = .38$, $p < .01$) but minimally influenced by MPP trust ($\beta_{\text{MPPTrust}} = .07$). By contrast, in the airlines context, value is strongly influenced by MPP trust ($\beta_{\text{MPPTrust}} = .50$, $p < .01$) but unaffected by FLE trust perceptions ($\beta_{\text{FLETrust}} = .08$). This provides mixed support for H_{11} and H_{12} .

Finally, regardless of context, value significantly affects loyalty ($\beta_{\text{Val}} = .40$, $p < .01$) providing support for H_{10} . Taken together, this supports the hypothesized partial mediating role of value, as the trust facets have significant influence on value, and value in turn significantly impacts loyalty. Specifically, for the retailing context, value appears to mediate the effect of FLE trust on loyalty, while for the airlines context the effect of MPP trust on loyalty is partially mediated by value.

To further test this partial mediation hypothesis, a model that excluded the value construct was estimated. We reasoned that partial mediation by value was supported if (a) FLE and MPP trust had a significant and substantial effect on loyalty in the retail and airlines context respectively, and (b) this effect declined significantly when value was introduced into the model. In the model that excluded value, FLE trust yielded a significant effect on loyalty in the retail context ($\beta = .32$, $p < .05$) while MPP trust produced a similar significant effect on loyalty in the airlines context ($\beta = .66$, $p < .01$). When value is introduced as a partial mediator, the corresponding effects for FLE and MPP trust are $\beta = .04$, $p > .50$ and $\beta = .22$, $p < .05$ respectively, thus supporting the partial mediation hypothesis.

Discussion and Implications

This study aimed to (a) utilize a multidimensional and multifaceted model for the behavioral components of trustworthiness in consumer–firm exchange relationships, (b) examine the asymmetric influence of trustworthiness dimensions on facets of consumer trust, (c) empirically test the linkage between consumer trust and loyalty with value as a partial mediator, and (d) explore variations in these relationships across industry contexts. Previous studies have examined neither the antecedents of consumer trust nor the mediated influence of trust on loyalty. Consequently, our study can directly address many questions that have remained largely untested but hold significant interest for theory and practice. What front-line behaviors and management policies and practices contribute to trust building and, conversely, trust depletion? Is the depletion effect—reduction in consumer trust due to a unit drop in trustworthiness behavior/practices—symmetrically equivalent to the building effect—the gain due to a unit increase in trustworthiness behavior/practices? Does consumer trust translate into loyalty? If so, what is the magnitude of this conversion effect (i.e., from trust to loyalty) and what role does value play in this conversion? Are these effects robust to varying satisfaction levels in individual encounters? Do the results depict variability across service contexts? Our study offers clear and compelling answers to these questions. Nevertheless, we recognize that a single, cross-sectional study can only offer initial insights. In this light, we first discuss the limitations of our work and follow it up with a discussion of the key findings.

Limitations

This study is subject to several limitations. First, the study may have limited generalizability due to the regional sampling plan utilized. Readers will note that we randomly sampled from a list of households residing in zip codes within the selected SMSA. We selected this SMSA because of the location of our affiliated university, presuming that respondents were more likely to comply with a request from a recognized institution. This might have biased the responses in an unspecified manner. In addition, the size of the airline sample is relatively small mainly because of a lower qualifying rate. This is consistent with the expectation that, in a random sample, consumers are more likely to have shopped at least twice at a retail clothing store in the last six months, than to have traveled on an airline for a non-business trip. Nevertheless, replication studies in different service contexts and with varying sampling procedures would provide greater confidence in our results. Second, as a cross-sectional study, the findings may be biased due to common method variance and spurious cause-effect inferences. Common method variance is known to inflate correlations, resulting in overestimating the influence of hypothesized predictors. However, our focus is on the differential pattern of results in terms of asymmetric effects and mediation pathways. Because method variance is “common” affecting all relationships equally, it is likely to work against detection of differential effects. Moreover, we provided a partial control over common variance by partialling out the effect of satisfaction on all constructs of this study. This

reduces the bias due to at least one source of common variance. We recognize that drawing cause-effect inferences from cross-sectional data is essentially tenuous, and agree that longitudinal studies are needed to establish the hypothesized sequence of effects. Third, while we employed several procedures to refine and adapt operational measures for the trustworthiness constructs, more work is needed to establish their psychometric properties. Our qualitative and quantitative procedures inform us that operationalizations from interorganizational contexts cannot be easily adapted to the consumer-firm contexts. Future researchers should regard our operationalizations as starting points for further conceptualizations of the trustworthiness constructs. In particular, it is useful to explore the role of corporate reputation and responsibility in defining the trustworthiness construct and the formation of trust judgments. Yet, given the acceptable evidence of reliability and convergent and discriminant validity of the reported measures, it appears that the procedures utilized in the present study were successful.

Fourth, we recognize that the hypothesized model does not include individual dispositional variables that are likely to moderate the specified relationships. One such dispositional variable that is worthy of pursuit in future research involves individual sensitivity to trust judgments. For some individuals, a high level of trust is necessary for consummating exchanges while others may not regard relational trust as highly important. Fifth, alternative procedures for examining asymmetric effects may be examined. Our approach is based on using cut-off points and estimating the incremental coefficients for the positive domain of the asymmetrical relationship. Alternatively, cubic polynomials can be utilized to assess asymmetries without relying on cut-off points. Finally, because of the small sample size and inclusion of asymmetric effects, we utilized a path model with simultaneous estimation of modeled equations but without control over measurement error. Measurement error is known to bias path coefficients. While procedures for incorporating measurement error in complex nonlinear equations have become available recently, they demand large sample sizes. In addition, data about the performance of these procedures are lacking. Future researchers attempting to replicate or extend the present work may find it useful to examine the potential of these procedures.

Trustworthiness Dimensions and Facets

This study offers support for the proposed multifaceted, multidimensional model of consumer trustworthiness. This support is based on several converging pieces of empirical evidence. First, the dimensions evidence acceptable psychometric properties of reliability and convergent and discriminant validity. Without exception, the operational items load significantly on their posited dimension. Moreover, a constrained model that restricted all cross-loadings to zero reproduced the observed variance-covariances reasonably well, thereby supporting the validity of the trustworthiness dimensions. Conversely, a model that constrained intercorrelations between the facets or among the dimensions to unity produced an ill-fitting model that significantly deteriorated the correspondence between the data and model. This enhances our confidence in the discriminant validity of the trustworthiness facets and dimensions. Second, the trustworthiness dimensions and facets demonstrate nomological validity via a differential pattern of effects. For instance, the

management facet of trust had a significant effect on loyalty in both contexts ($\beta_{\text{MPPTrust}} = .22$), while the effect of the frontline employee facet was nonsignificant ($\beta_{\text{FLETrust}} = .04$). More interestingly, the MPP facet has a significant effect on value in the airline industry ($\beta_{\text{MPPTrust}} = .50$), but not so for the retailing context ($\beta_{\text{MPPTrust}} = .07$). The opposite pattern emerges for the FLE facet ($\beta_{\text{FLETrust}} = .08$ and $.38$ for airline and retailing respectively). This differential pattern of effects would likely be obfuscated by an aggregate construct of company trust. Third, because separate antecedents of FLE and MPP are modeled, we are able to examine the reciprocal relationships among the two trust facets. Evidently, management trust spills over to affect trust in the frontline employee, in accord with the transfer hypothesis. However, this transfer effect is relatively weak compared to the strong and robust influence of consumers' FLE trust on their trust in the management regardless of context. These dynamic, reciprocal relationships are also obfuscated in an aggregated trust construct. Likewise, the trustworthiness dimensions depict a clear pattern of differential asymmetric effects on their respective facets (to be discussed). Taken together, we appear to have sufficient evidence to conclude that operational competence, operational benevolence, and problem-solving orientation are distinct dimensions of perceived trustworthiness that are evaluated separately by the consumer for the MPP and FLE facets in relational service exchanges.

Several advantages accrue from a well-specified and fine-grained conceptualization of trustworthiness. It addresses a clear gap in the literature on developing the consumer trustworthiness construct and responds to calls by several researchers who have argued for the centrality of this construct in understanding consumer loyalty (Hart and Johnson 1999). In addition, the inclusion of, and support obtained for, the problem-solving orientation dimension coheres with findings from recent research in service relationships that has underscored its critical role in building lasting relationships (Tax, Brown, and Chandrashekar 1998; Smith, Bolton, and Wagner 1999). Finally, our approach can provide managerial insights for targeted intervention efforts due to its focus on specific frontline behaviors and management policies and practices.

Nevertheless, fruitful areas for further examination of the trustworthiness construct can be identified. First, the psychometric validity of the trustworthiness facets and dimensions across other nonconventional contexts needs to be established. It is conceivable that, in certain contexts (e.g., a dentist engaged in private practice), the frontline employee may be virtually indistinguishable from management and therefore a single facet may suffice. Alternatively, with the rapid growth of e-commerce, technology may emerge as an additional facet of evaluation (cf. Reichheld and Shefter 2000). Second, the robustness of the three trustworthiness dimensions should be evaluated by further replications and extensions. In particular, while we posit problem-solving orientation as another dimension of trust, further analysis of problem solving versus routine episodes may be pursued to better understand the process by which trustworthiness cognitions develop and are stored. Finally, more work is needed to establish the distinct influence of trustworthiness dimensions and facets. As an initial step, we partialled out the effect of satisfaction. Other constructs may be similarly considered in order to reveal the distinctive influence of trustworthiness dimensions and facets.

Asymmetric Effects of Trustworthiness Dimensions

In extending the current trust literature, we hypothesized asymmetric effects for the trustworthiness dimensions and tested these hypotheses by estimating a baseline effect coefficient and evaluating the statistical significance of the incremental coefficient for positive trustworthiness perceptions (see Δ positive columns in Table 4). The coefficient for positive change is derived by adding it to the baseline coefficient, while the latter serves as the estimated effect for a negative change. Based on these derivations, we plotted the effects separately for each trust facet and industry in Figure 3. These plots help clarify our numerical results and guide our discussion.

Figure 3. The Effects of Trustworthiness Dimensions on Consumer Trust in Retail and Airline Contexts

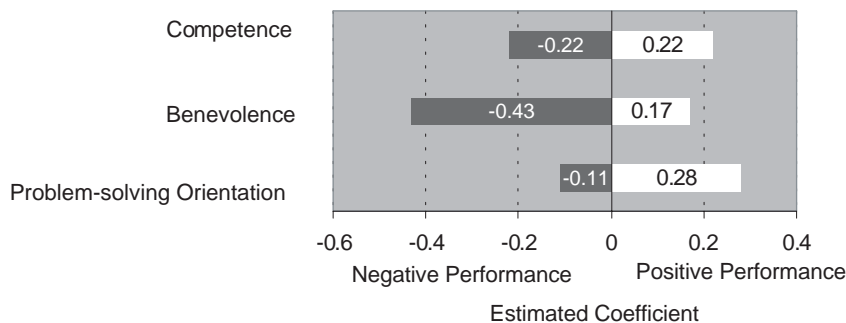


Figure 3a. Effects of frontline employee trustworthiness on FLE trust

The coefficients for positive and negative performance are displayed for each dimension. Findings are invariant for retailing and airline context.

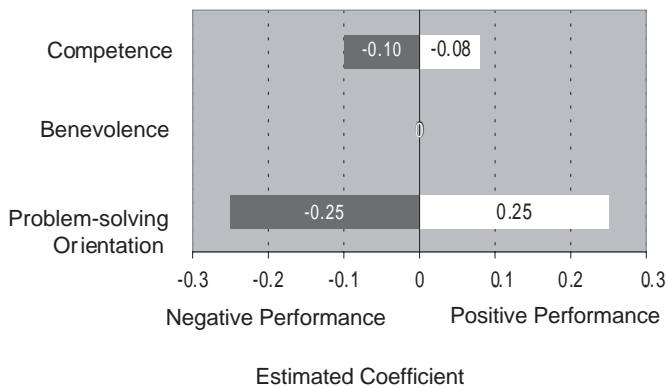


Figure 3b. Effects of management policies and practices trustworthiness on MPP trust in the retailing context.

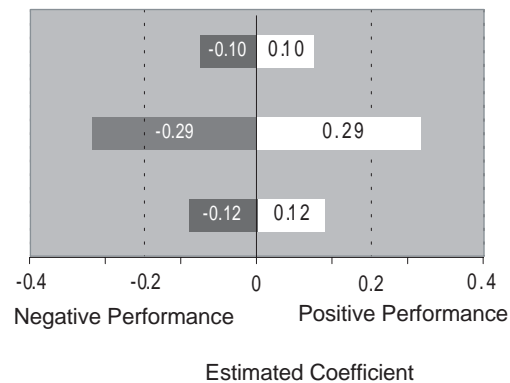


Figure 3c. Effects of management policies and practices trustworthiness on MPP trust in the airline context.

Overall, a clear and compelling pattern of asymmetric effects for FLE trust is evident in Figure 3 (panel a) that is invariant to contextual factors. In particular, the effect of operational competence on FLE trust perceptions is significant but invariant across the positive and negative performance domains. This suggests that FLE competence contributes equally to trust building and depletion. As such, FLE operational competence is both a “motivator” and “hygiene” factor as losses and

gains matter equally. By contrast, FLE operational benevolence depicts negativity effects whereby its trust depletion effect is significant and large but its trust-enhancing effect is relatively weak but significant. As such, FLE operational benevolence is more of “hygiene” factor than a “motivator.” This result supports current speculation that, while subordinating self-interest to consumers’ best interest *may* help build trust, marketers’ actions driven by self-interest that perceptibly subordinate consumer interest are *surely* going to deplete trust. To the extent that trust depletion in turn reduces loyalty (to be discussed), this depletion effect can have significant bottom line consequences. Finally, in accord with cue diagnosticity theory and counter to loss-aversion arguments, *positivity* effects emerged for the FLE problem-solving orientation. Although the “depletion” effect due to a unit negative change is significant, the “trust-building” effect is more substantial. As such, a unit positive change in FLE problem-solving orientation boosts FLE trust strongly. Thus, problem-solving orientation is a “motivator” with its motivating effects significantly exceeding its “hygiene” effects. This coheres with the growing recognition that problem solving is instrumental in shaping trust judgments (Tax, Brown, and Chandrashekar 1998) and supports Hart and Johnson’s (1999) speculation that this dimension holds significant managerial relevance for building consumer trust.

A weaker pattern of asymmetrical effects emerges for management trust that is disparate across the two contexts (see Figure 3, panels b and c). For the retailing context, weak effects are obtained for MPP operational benevolence. By contrast, for the airline context, MPP operational benevolence has equivalent and significant depletion and enhancing effects. As such, MPP operational benevolence is both a “hygiene” and “motivator” in the airline context, but largely impotent in the retailing context. However, operational competence has a significant “depleting” effect for management policies and practices trust such that a unit *negative* change produces substantial declines in MPP trust in both contexts. In contrast, a unit *positive* change yields a substantially lower and nonsignificant effect on MPP trust for the retailing context, but a significant effect for the airlines context that is equivalent to the negativity effect. As such, operational competence is a “hygiene” factor for the retailing context, but serves a “motivator” role as well in the airlines context. Finally, MPP problem-solving orientation has significant and equivalent trust building and trust depletion effects for the retailing context, but its effects in the airlines context are nonsignificant. Thus, problem-solving orientation is both a “hygiene” and a “motivator” for the retailing context but largely impotent in the airlines context.

Overall, two broad conclusions can be drawn from the pattern of results obtained. First, it appears theoretically meaningful and pragmatically useful to examine the antecedents of consumer trust. Clearly, specific FLE behaviors and management policies and practices can be conceptualized and psychometrically measured for investigation of their differential effects on consumer trust. Managerial initiatives and interventions for enhancing consumer trust can also be developed. Second, we appear to have sufficient evidence to conclude that future research should reconsider employing linear formulations of the effects of trustworthiness dimensions on trust. Fine-grained insights into the asymmetric mechanisms of trust building and

depletion, and how these mechanisms vary across industry contexts are more likely to emerge by adopting approaches along the lines of those employed in this study.

The Mediating Role of Value in Trust-Loyalty Relationships

Unlike much past research, we proposed that the effect of trust on loyalty is partially mediated by value. Our conceptual rationale was based on two arguments. First, we posited that, while the direct effect of trust on loyalty presumes that trust is intrinsically beneficial, the mediated effect assumes that trust benefits are conditional on producing value. Second, we had noted that value is a superordinate goal in market exchanges and, consequently, its effect on loyalty would be dominant and would serve as a key mediator of the trust-loyalty relationship.

Our results provide initial empirical evidence to sort through the preceding propositions. Value emerges as the consistent, significant, and dominant determinant of consumer loyalty, regardless of the service category ($\beta_{\text{Val}} = .40$). Specifically, although trust in management policies and practices has a significant direct effect on loyalty, this influence is relatively weak compared to the effect of value ($\beta_{\text{MPPtrust}} = .22$ cf. $\beta_{\text{Val}} = .40$). The direct effect of FLE trust is nonsignificant ($\beta_{\text{FLEtrust}} = .04$). This suggests that consumers' evaluation of value in relational exchanges appears to carry greater weight in loyalty judgments although consumers find it inherently preferable to maintain long term relationships with service providers whose policies and practices they can trust.

Our results also establish that value partially mediates the effect of trust on loyalty judgments. This is because, in the retailing context, FLE trust has a significant effect on value, and value in turn influences loyalty. Because the direct effect of FLE trust on loyalty is minimal after controlling for value in the retailing context, it is clear that value completely mediates the effect of FLE trust. This is also substantiated by the results from a model that excludes value (see Note 8). Likewise, for the airlines context, value appears to partially mediate the influence of MPP trust because (a) MPP trust has a significant direct effect on value ($\beta_{\text{MPPtrust}} = .50$), (b) MPP trust has a significant direct effect on loyalty ($\beta_{\text{MPPtrust}} = .22$), and (c) the direct effect on loyalty is significantly smaller than its effect when value is omitted ($\beta_{\text{MPPtrust}} = .66$; Note 8). However, value does not mediate the influence of MPP and FLE trust in retailing and airline contexts respectively. To the extent the mediated effects are significant (e.g., for MPP trust in airlines) or dominant (e.g., for FLE trust in retailing), these results suggest that the effect of trust on loyalty is conditional on its ability to enhance value. Without net increments in value, consumer trust is "good" to create but apparently does little good for the bottom line.

Taken together, these results suggest caution against blanket assertions common in popular press about the purported power of "total" trust in creating consumer loyalty (Hart and Johnson 1999). Our results provide compelling data to counter conventional beliefs that consumer trust converts directly into loyalty and indicate that such beliefs are overly simplistic and probably misleading. As such, managers are well advised to forsake "blind" investments in trust-building activities, hoping that trust in and of itself produces loyalty. Instead, a careful assessment is needed that provides a full accounting of trust conversion mechanisms. Our results reveal

that the conversion of trust to loyalty involve complex, multiple loop processes that require understanding (a) how specific trustworthiness dimensions can build greater consumer trust in either the MPP or FLE, or both, (b) how increased consumer trust can enhance value for the consumers, and (c) how value translates into loyalty. Our results also suggest that such understandings are sensitive to contextual/industry factors and likely to involve asymmetric influences. In sum, while there are significant payoffs from building consumer trust in relational exchanges, realizing them is neither straightforward nor inevitable.

Industry Variability in Trust Mechanisms

Our results support the generalizability of the conceptual model as indicated by its goodness-of-fit to the data from two different service contexts (see Table 4). In addition, several of the estimated path coefficients achieve invariance across the service contexts, suggesting that underlying processes are stable and consistent. In all, 15 of the 22 hypothesized paths are estimated to be invariant. More significantly, several critical mechanisms appear to be robust to service context including determinants of (a) loyalty, and (b) FLE trust. That is, the linkages between loyalty determinants (i.e., MPP trust, FLE trust, value) and loyalty are consistent across service contexts; likewise for the asymmetric mechanisms that link FLE trustworthiness and trust. Finally, the proposed model explains a significant amount of variance in dependent variables ranging from .40 to .83. Overall, this suggests that the conceptual model provides a generalizable, meaningful, and reasonable foundation for the study of consumer trust and loyalty mechanisms across different service settings.

At the same time, the proposed model helps pinpoint important differences across the two service contexts. Specifically, our results suggest that management policies and practices are more critical to trust and loyalty mechanisms in airlines, while FLE behaviors play a more central role in a retail clothing context. This is consistent with some work in the popular literature that underscores the significance of frontline functions such as “personalization” and “prompt attention” in retail business (e.g., *Nation's Business*, June 1993, p. 22) and of management policies and practices such as “overbooking,” and “schedule convenience” in airline travel (Ostrowski, O'Brien, and Gordon 1993). Thus, within the context and limitations of our study, we can recommend that, to provide value to consumers and win their loyalty, retailers may want to strategically focus on FLE effectiveness and trustworthiness. For airlines, the strategic thrust must keep management policies and practices in focus as consumers rely heavily on judgments of airline management trustworthiness to determine value in relational exchanges and reciprocate with loyalty accordingly. Overall, we appear to have converging evidence to suggest that we are unlikely to find simple and profound insights into trust and loyalty mechanisms that remain unperturbed by contextual variability.

Concluding Notes

Contemporary thought in marketing recognizes that trust is a critical factor in relational exchanges between consumers and service providers. While our findings cohere with this basic thought, we refine and extend the literature in several important ways. By modeling trust building and depletion processes our approach rejects static notions of trust and embraces a dynamic, asymmetric view where all “good” behaviors/practices do not always build trust, and the potential for trust depletion is imminent. By including multiple dimensions of trustworthiness including operational competence, operational benevolence, and problem-solving orientation along two distinct facets of trust judgments, our modeling offers fine-grained insights into trust building and trust depletion processes. This refines and extends contemporary understanding of trust dynamics to provide theoretical and managerial insights. Moreover, by including value as a mediator of the trust-loyalty effect, our study identifies mechanisms that mediate the conversion of trust into loyalty. This rejects simplistic views that payoffs from efforts to build trust are inevitable and allows us to empirically test theory-driven hypotheses about the mechanisms that govern these payoffs. Consequently, our study calls for a shift in the kind of questions that managers and researchers should entertain about the role of trust in relational exchanges. Instead of asking “Is it important to have trust?” or “Does trust matter?” our study argues for questions such as “How can one build trust?” “What actions will deplete trust?” and “What factors mediate and/or moderate the influence of trust on loyalty?” While our study only begins to scratch the surface of these inquiries, the insights obtained indicate several fruitful avenues for future research. By pursuing these avenues, future researchers can shed further light on the effect of trust in consumer-firm relationships and the mechanisms that underlie its influence on key consequences including value and loyalty. These efforts, in turn, have the potential to help managers unlock the payoffs from trust and win consumer loyalty, while at the same time alerting them to behaviors and practices that will likely deplete consumer trust and erode consumer loyalty.

Appendix 1. Operational Measures for the Retail Context

FLE Behaviors (5 pt. scale, Strongly disagree-Strongly agree)

The (store) employees . . .

Operational Competence ($\mu_R = 3.67$, $\sigma_R = .8$)

Work quickly and efficiently

Can competently handle most customer requests

Can be relied upon to know what they are doing

Operational Benevolence ($\mu_R = 3.79$, $\sigma_R = .8$)

Act as if they value you as a customer

Can be relied upon to give honest advice even if they won't make sale

Treat you with respect

Problem-solving Orientation ($\mu_R = 3.28$, $\sigma_R = .7$)

Don't hesitate to take care of any problems you might have with clothing items purchased at the store

Go out of their way to solve customer problems

Are willing to bend company policies to help address customer needs

Management Practices and Policies (5 pt. scale, Strongly disagree-Strongly agree)

The store . . .

Operational Competence ($\mu_R = 3.61$, $\sigma_R = .9$)

Is organized so as to make it easy to pick your clothing selection

Is generally clean and free of clutter

Keeps checkouts staffed and moving so you don't have to wait

Operational Benevolence ($\mu_R = 3.49$, $\sigma_R = .8$)

Has policies that indicate respect for the customer

Has policies that favor the customer's best interest

Acts as if the customer is always right

Problem-solving Orientation ($\mu_R = 3.56$, $\sigma_R = .8$)

Has practices that make returning items quick and easy

Goes out of the way to solve customer problems

Shows as much concern for customers returning items as for those shopping for new ones

Satisfaction (10 pt. scale, $\mu_R = 7.29$, $\sigma_R = 1.8$)

How satisfying was your last shopping experience at this store?

Highly unsatisfactory/Highly satisfactory

Very unpleasant/Very pleasant

Terrible/Delightful

Trust in Management Practices (10 pt. scale, $\mu_R = 7.84$, $\sigma_R = 1.6$)

I feel that this store is:

Very undependable/Very dependable

Very incompetent/Very competent

Of very low integrity/Of very high integrity

Very unresponsive to customers/Very responsive to customers

Trust in Frontline Employees (10 pt. scale, $\mu_R = 7.38$, $\sigma_R = 1.7$)

I feel that the employees of this store are:

Very undependable/Very dependable

Very incompetent/Very competent

Of very low integrity/Of very high integrity

Very unresponsive to customers/Very responsive to customers

Value (10 pt. scale, $\mu_R = 7.28$, $\sigma_R = 1.5$)

Please evaluate the store on the following factors

For the prices you pay for clothing items at this store, would you say shopping at this store is a:

“Very poor deal” to “Very good deal” 10 pt. scale

For the time you spent in order to shop at this store, would you say shopping at this store is:

“Highly unreasonable” to “Highly reasonable” 10 pt. scale

For the effort involved in shopping at this store, would you say shopping at this store is:

“Not at all worthwhile” to “Very worthwhile” 10 pt. scale.

How you would rate your overall shopping experience at this store?

“Extremely poor value” to “Extremely good value” 10 pt. scale.

Loyalty (10 pt. scale, Very unlikely-Very likely, $\mu_R = 6.98$, $\sigma_R = 2.1$)

How likely are you to:

Do most of your future shopping at this store?

Recommend this store to friends, neighbors, and relatives?

Use this store the very next time you need to shop for a clothing item?

Spend more than 50 percent of your clothing budget at this store?

Appendix 2. Operational Measures for the Airline Context

FLE Behaviors (5 pt. scale, Strongly disagree-Strongly agree)

The (airline) employees . . .

Operational Competence ($\mu_A = 3.76$, $\sigma_A = .7$)

Work quickly and efficiently

Can competently handle most customer requests

Can be relied upon to know what they are doing

Operational Benevolence ($\mu_A = 3.58$, $\sigma_A = .8$)

Act as if they value you as a customer

Can be relied upon to give accurate information in the event of flight delays or cancellations

Treat you with respect

Problem-solving Orientation ($\mu_A = 3.31$, $\sigma_A = .8$)

Don't hesitate to take care of any problems that might arise during flight

Go out of their way to solve customer problems

Are willing to bend company policies to help address customer needs

Management Practices and Policies (5 pt. scale, Strongly disagree-Strongly agree)

The airline . . .

Operational Competence ($\mu_A = 3.51$, $\sigma_A = .8$)

Has fast, efficient check-in procedures

Keeps its airplanes clean and free of clutter

Has fast, efficient baggage claim service

Operational Benevolence ($\mu_A = 3.23$, $\sigma_A = .8$)

Has practices that indicate respect for the customer

Favors the customer's best interest

Acts as if the customer is always right

Problem-solving Orientation ($\mu_A = 3.14$, $\sigma_A = .9$)

Makes every effort to get you to your final destination as quickly as possible when there are delays or cancellations

Goes out of the way to solve customer problems

Shows as much concern for customers in economy class as it does for customers in first/business class

Satisfaction (10 pt. scale, $\mu_A = 6.83$, $\sigma_A = 1.8$)

How satisfying was your last experience with this airline?

Highly unsatisfactory/Highly satisfactory

Very unpleasant/Very pleasant

Terrible/Delightful

Trust in Management Practices (10 pt. scale, $\mu_A = 7.24$, $\sigma_A = 1.7$)

I feel that this airline is:

Very undependable/Very dependable

Very incompetent/Very competent

Of very low integrity/Of very high integrity

Very unresponsive to customers/Very responsive to customers

Trust in Frontline Employees (10 pt. scale, $\mu_A = 7.44$, $\sigma_A = 1.8$)

I feel that the employees of this airline are:

Very undependable/Very dependable

Very incompetent/Very competent

Of very low integrity/Of very high integrity

Very unresponsive to customers/Very responsive to customers

Value (10 pt. scale, $\mu_A = 6.54$, $\sigma_A = 1.8$)

Please evaluate the airline on the following factors...

For the prices you pay for traveling with this airline, would you say travelling on this airline is a:

“Very poor deal” to “Very good deal” 10 pt. scale

For the time you spent in order to travel with this airline, would you say travelling on this airline is:

“Highly unreasonable” to “Highly reasonable” 10 pt. scale

For the effort involved in traveling with this airline, would you say travelling on this airline is:

“Not at all worthwhile” to “Very worthwhile” 10 pt. scale.

How you would rate your overall experience with this airline?

“Extremely poor value” to “Extremely good value” 10 pt. scale.

Loyalty (10 pt. scale, Very Unlikely-Very Likely, $\mu_A = 7.30$, $\sigma_A = 2.1$)

How likely are you to:

Do most of your future travel on this airline?

Recommend this airline to friends, neighbors, and relatives?

Use this airline the very next time you need to travel?

Take more than 50 percent of your flights on this airline?

Notes

1. Unless otherwise specified, the term “service provider” is used in this paper to refer to the service organization as an entity. When appropriate, distinct facets including company management and frontline employees are identified and referred to separately.
2. As we discuss later in the methods section, we collected qualitative data (via focus groups and depth interviews) to inductively substantiate the key dimensions of trustworthiness in consumer-firm relationships. Data were coded and sorted into pre-specified dimensions by independent judges provided with definitions for each dimension. The notion that problem-solving orientation may be a salient and distinct factor in consumers’ trust judgments was evident in these codings. Specifically, judges coded a significant number of total responses into problem-solving orientation for FLEs (23 percent) and MPP (23 percent).
3. We thank a reviewer for suggesting that we investigate this reciprocal relationship.
4. In a broader context, the consumer’s life values (e.g., happiness, love, security) are the “super-superordinate” goals while obtaining value in market exchanges is a lower-level goal. Our point is that, *within* a market exchange context, the superordinate goal for most consumers is to obtain maximal value or more aptly “market value.”
5. Non-qualifiers are expected to be represented by late respondents rather than early respondents; hence, an extrapolation to a third mailing is recommended (Armstrong and Overton 1977). A linear extrapolation of wave 1 and wave 2 results lead to an estimate of 50 percent qualified respondents in wave 3. The average qualification rate was thus estimated at 66 percent or 811 customers. Thus, the 246 usable responses translate to a usable response rate of 30 percent. In the airline category, the qualified respondents in the first two waves were 45 percent and 29 percent. Extrapolating to a third wave estimate of 15 percent, the average qualification rate was 30 percent or 378 customers. The 113 responses translate to a usable response rate of 29 percent.
6. The fit statistics provided are as follows: CFI = comparative fit index, NFI = normed fit index, NNFI = non-normed fit index, AOSR = average offdiagonal standardized residual, and RMSEA = root mean square error of approximation. Reasonable models that effectively reproduce the observed variance-covariance matrix are characterized by CFI, NFI, and NNFI values exceeding 0.95, RMR values < .05, and RMSEA of .08 or lower with the upper confidence interval not exceeding .10 (Marsh, Balla, and Hau 1996).
7. We also estimated the measurement model separately for the retailing and airline data. The overall pattern of results was similar with no violation of the conditions for convergent and discriminant validity.

8. For each construct, the R^2 values for the retail sample are followed by values for the airline sample.

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