Consumer Trust, Value, and Loyalty in Relational Exchanges

The authors develop a framework for understanding the behaviors and practices of service providers that build or deplete consumer trust and the mechanisms that convert consumer trust into value and loyalty in relational exchanges. The proposed framework (1) uses a multidimensional conceptualization for the trustworthy dimensions construct; (2) incorporates two distinct facets of consumer trust, namely, frontline employees and management policies and practices; and (3) specifies value as a key mediator of the trust-loyalty relationship. The authors test the proposed model using data from two service contexts—retail clothing (N = 264) and nonbusiness airline travel (N = 113). The results support a tripartite view of trustworthiness evaluations along operational competence, operational benevolence, and problem-solving orientation dimensions. Moreover, the authors find evidence of contingent asymmetric relationships between trustworthiness dimensions and consumer trust. For frontline employees, benevolent behaviors demonstrate a dominant “negativity” effect (i.e., a unit negative performance has a stronger effect than a unit positive performance), whereas problem-solving orientation has a dominant “positivity” effect (i.e., a unit positive performance has a stronger effect than a unit negative performance). Value completely mediates the effect of frontline employee trust on loyalty in the retailing context and partially mediates the effect of management policies and practices on loyalty in the air travel context. The role of frontline employees is more critical in the retailing context, whereas management practices and policies play the dominant role in the airlines context. Overall, the proposed framework successfully models trust and loyalty mechanisms across the two industries examined in the study, while remaining sensitive to essential contextual differences.
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 fail to reveal 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, in which value serves 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) understanding 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 recency effects by partialing out the effect of satisfaction, a transactional variable capturing customers' experiences during the most recent episode. Fourth, to examine the sensitivity of the proposed model, we use data from two different relational service contexts for empirical testing. In particular, we use data from retail (i.e., major clothing purchase from a frequently visited department store) and service (i.e., nonbusiness travel on a frequently used airline) industries. We begin our discussion with the proposed conceptual model.

A Model of Trustworthy Behaviors and Practices, 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 (Deutsch 1958; Sorrentino et al. 1995) and interorganizational relationships (Moorman, Deshpande, and Zaltman 1993; Morgan and Hunt 1994). 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. Therefore, we used 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.

Facets of Consumer Trust and Trustworthy Behaviors and Practices

As in Figure 1, we conceptualize consumer trust as a multifaceted construct, involving FLE behaviors and MPPs as distinct facets. In the literature, some authors have conceptualized trust in conative or behavioral terms (Ganesan 1994; Mayer, Davis, and Schoorman 1995). Emphasizing behavioral intent, Moorman, Zaltman, and Deshpande
(1992, p. 315) define trust as "a willingness to rely on an exchange partner in whom one has confidence." Other researchers use cognitive or evaluative definitions of trust, arguing that the link between trust evaluations and behavioral response should be open to empirical investigation and likely subject to the influence of other contextual factors (Doney and Cannon 1997; Morgan and Hunt 1994). Adopting this approach, Morgan and Hunt (1994, p. 23) define trust "as existing when one party has confidence in the exchange partner’s reliability and integrity." Therefore, we define consumer trust as the expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises.

Consumers’ trust in the service provider is hypothesized to develop around two distinct facets, FLEs and MPPs. 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 example, 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 that are demonstrated during the service encounter, whereas 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 (Crosby and Stephens 1987; Doney and Cannon 1997; Singh 1991). Crosby and Stephens (1987) conceptualize 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) demonstrates that the consumer’s judgments of satisfaction at three distinct nodes, including the physician, hospital, and insurance provider, achieve discriminant validity.

More important, 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 example, in Crosby and Stephens’s (1987) study, each facet of satisfaction relates to different sets of antecedents (e.g., contact person satisfaction is mostly sensitive to interactional factors) and contributes uniquely to overall satisfaction. Likewise, Macintosh and Lockshin (1997) find that for customers with strong interpersonal ties with a retail salesperson, store loyalty and purchase intentions are influenced more strongly by salesperson trust than by store trust. In contrast, trust in the store was a critical determinant of store loyalty for consumers without such interpersonal ties.

Consequently, trustworthy behaviors and practices are conceptualized distinctly for FLEs (i.e., trustworthy behaviors) and management (i.e., trustworthy practices). We define trustworthiness to include FLE behaviors and MPPs that indicate a motivation to safeguard customer interest. Recognizing that only a subset of the complete domain of observed behaviors and practices is likely to be relevant for the trustworthiness construct, prior 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. Next, 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 and 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, in which we examine the asymmetrical hypotheses 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, in which consumers have the ability to make judgments by processing experience information. In contrast, judgments of trustworthiness and development of trust in "credence" contexts are more likely to approximate bonding and signaling processes, because consumers are unable to obtain experience-based information veridical to the judgment at hand. We allude to this alternative mechanism subsequently.

**Dimensions of Trustworthy Behaviors and 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 example, Mayer, Davis, and Schoorman’s (1995, p. 717) 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. 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, p. 43) goes as far as to say that “competence trust is a prerequisite for the viability of any repeated transaction.” 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) find that perceptions of role competence have a significant effect on the partner’s willingness to invest in the relationship. Doney and Cannon (1997) find that salesperson expertise is 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 FLEs and MPPs. In consumer–service provider exchanges, this operational focus is appropriate because competence judgments are typically based on observation of FLE behaviors and MPPs. For example, 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, although 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). Therefore, 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 MPPs.

H₁: The consumer’s perception of the operational competence evident in FLE behaviors is positively related to FLE trust.

H₂: The consumer’s perception of the operational competence evident in MPPs 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 and MPPs that unambiguously favor the consumer’s interest, even if a cost is incurred in the process. Sako (1992, p. 39) 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.” Benevolent behaviors provide diagnostic evidence of trust because by going beyond the terms of the explicit “contract,” the service provider indicates proconsumer motivations, restraint on self-serving opportunism, and a willingness to assume fiduciary responsibility (Barber 1983; Ganesan and Hess 1997; Morgan and Hunt 1994). Consequently, benevolent behaviors and practices are often regarded 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) demonstrates that altruism, or the perception that the brand has the consumer’s best interests at heart, explains the greatest proportion (40%) 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) finds that the manager’s affective trust in a peer is positively affected by the citizenship or extra-role behaviors.

Extending the preceding research to consumer–service provider exchanges, we propose that consumers form perceptions of operational benevolence separately for FLEs and management on the basis of corresponding behaviors and practices. For example, airline management might provide evidence of operational benevolence by instituting practices that indicate respect for the customers and favor their best interests (e.g., upgrading passengers, providing more leg room). In turn, because operational benevolence is associated with restrained opportunism and building “good-will,” consumers are thought to reciprocate benevolent FLE behaviors (MPPs) by placing greater trust in the FLE (management).

H₃: The consumer’s perception of the operational benevolence evident in FLE behaviors is positively related to FLE trust.

H₄: The consumer’s perception of the operational benevolence evident in MPPs is positively related to MPP trust.

Problem-solving orientation. Finally, problem-solving orientation is defined as the consumer’s evaluation of FLE and 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 1990) and/or in the postexchange phase (Smith, Bolton, and Wagner 1999; Tax, Brown, and Chandrashekaran 1998) 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) the manner in which service providers approach such problems are critical incidents that provide insight into the character of the service provider (Kelley and Davis 1994; Smith, Bolton, and Wagner 1999). Interest in the problem-solving orientation of service providers can be traced to prior work on the role of service recovery in consumer evaluations. For example, 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) find that failures in the process of service delivery (attributed to the FLE) are a greater cause of dissatisfaction than are tangible problems such as stockouts. Hart, Heskett, and Sasser (1990, p. 151) 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.”

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, p. 179) note that “for service employees, there is a specific need for [problem-solving] training…. [E]ffective recovery skills include hearing the customer’s problems, taking initiative, identifying solutions, and improving.” Calantone, Graham, and Mintu-Wimsatt (1998, p. 21) emphasize the unique aspects of problem solving, noting that it is “characterized by behaviors that are cooperative, integrative, need-focused, and information-exchange oriented.” 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 demon-
strated during routine contexts. Specifically, such behaviors demonstrate the firm’s 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. Consequently, we argue that they cannot be subsumed under the other two dimensions, and we 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 Chandrashekaran (1998) that uses 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 firm, 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 ($\beta = -.70$), though favorable prior experiences dampened this effect.

Drawing on the preceding literature, we posit that in service contexts, consumers garner evidence from FLE behaviors and MPPs that facilitates evaluation of the problem-solving orientation of each facet (i.e., FLEs and MPPs). However, this evidence is not limited to postconsumption service failures and may include problems that the customer faces during the actual service encounter. For example, 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. Therefore,

- $H_3$: The consumer’s perception of the problem-solving orientation evident in FLE behaviors is positively related to FLE trust.
- $H_4$: The consumer’s perception of the problem-solving orientation evident in MPPs is positively related to MPP trust.

Thus far, we have proposed that (1) consumers use evidence from three critical domains of FLE behaviors and MPPs, including operational competence, operational benevolence, and problem-solving orientation, and (2) judgment of trust in the FLE and management is directly affected by consumers’ perceptions of trustworthy behaviors and practices. In developing the hypotheses for asymmetric effects of trustworthy behaviors and practices on trust, we view hypotheses $H_3$ to $H_4$ as the baseline model of linear effects and examine the potential for asymmetries.

**Asymmetric Effects of Trustworthy Behaviors and Practices on Consumer Trust**

Although trust research has mostly focused on linear effects, we propose that trustworthy behaviors and practices may exert asymmetric effects on trust. That is, for any dimension of trustworthy behaviors an 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 (Anderson and Sullivan 1993; Mittal, Ross, and Baldasare 1998). Theoretical support for these predictions has been primarily drawn from Kahneman and Tversky’s (1979) loss-aversion hypotheses 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 multiattribute 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 effects 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 (Oliver 1997; Skowronski and Carlson 1987; Taylor 1991) 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 (1966) dual-factor theory, researchers distinguish between “hygiene” (the dissatisfaction-avoidance factors) and “motivators” (the satisfaction-producing factors). Negative performance on hygiene has a stronger effect on satisfaction than does positive performance, in accord with the negativity effect. In the case of motivators, however, stronger effects are expected for positive performance than for negative performance. Drawing from cue diagnosticity theory, Skowronski and Carlson (1987) note that the perceptual interpretation of performance on an attribute is affected by the person’s neutral point (anchor) for that attribute compared with 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 (Maddox 1981; Swan and Combs 1976). In the context of clothing purchases, Swan and Combs (1976) identify “instrumental” (hygiene) factors—including durability and construction—that are expected to contribute to maintaining satisfaction or to lead to dissatisfaction when performance is poor. Another set of factors, identified as “expressive” (motivators)—including styling and color—is expected to enhance or maintain satisfaction. However, dissatisfaction is not expected to result from poor “expressive”

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3 As we discuss in the “Methods” section, we collected qualitative data (through focus groups and depth interviews) to substantiate inductively the key dimensions of trustworthiness in consumer-firm relationships. Independent judges who were provided with definitions for each dimension coded and sorted data into prespecified dimensions. 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 the total responses into problem-solving orientation for FLEs (23%) and MPPs (23%).

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performance. The results of the study support the predictions based on theory. Even in Mittal, Ross, and Baldasare’s (1998) study that proposes hypotheses solely based on negativity arguments, some evidence of contingent effects is 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 is about threefold larger than for negative performance (.49 versus .17), suggesting a positivity effect.

Although we draw from the preceding literature to propose asymmetric relationships between trustworthy dimensions and trust facets, it is difficult to predict directional hypotheses because of three limitations of prior research. First, to our knowledge, extant trust research (Lewicki, McAllister, and Bies 1998; Singh and Sirdeshmukh 2000) 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 example, Singh and Sirdeshmukh (2000) propose that the absolute magnitude of the influence of competence distrust on prepurchase 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 loss aversion–based hypotheses, ignoring the possibility of contingent effects. For FLE operational benevolence, it is possible that consumers expect FLEs to work for the customers’ best interests (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 an FLE behaves benevolently, a positivity effect is evident. These asymmetrical relationships may be contingent not only on the dimension of trustworthiness but also on the service context. Therefore, we adopt an exploratory perspective and posit nondirectional asymmetrical hypotheses.

H7: FLE (MPP) trust will be affected asymmetrically by a unit positive change in FLE (management) operational competence versus a unit negative change.

H8: FLE (MPP) trust will be affected asymmetrically by a unit positive change in FLE (management) operational benevolence versus a unit negative change.

H9: 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 FLE Trust and MPP Trust

Consumer trust in FLEs is proposed to influence MPP trust directly, consistent with agency theory (Bergen, Dutta, and Walker 1992) and research on the role of causal attributions in judgments (Folkes 1988). According to agency theory, FLEs interact with a customer as agents of the firm, presumably acting within the roles prescribed by management rather than as completely independent entities. Therefore, greater consumer trust in FLEs is likely to generate a 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). Although FLE behaviors are directly observable, the reasons underlying the behaviors must be inferred by consumers. To the extent that the consumer attributes the locus and controllability of the causes underlying FLE behaviors to MPP, FLE trust is likely to influence MPP trust (Folkes 1988). Empirical support is forthcoming from the services literature (Bitter, Booms, and Tetreault 1990; Crosby and Stephens 1987). For example, Crosby and Stephens (1987) demonstrate 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 MPP trust are likely to enhance trust in the FLE.4 Doney and Cannon (1997) argue 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 find support for the proposed reciprocal effects, though salesperson trust had a stronger effect on trust in the firm ($\beta = .77$) than the reverse effect did ($\beta = .52$). In our research, consumers are evaluating providers with which 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 FLE trust; rather, judgments based on observed behaviors are likely to dominate, as proposed previously. Therefore, in the present research context, we posit the following:

$H_{10}$: 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 prior research, consumer trust in the FLE and MPPs is posited to affect consumer loyalty toward the service provider directly. 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 allocating a higher share of the category wallet to the specific service provider, engaging in positive word of mouth (WOM), and repeat purchasing (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, enabling 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).

4We thank a reviewer for suggesting that we investigate this reciprocal relationship.
airline, or hair styling). The mechanisms involving these two types of risk may be different in nature and independent. For example, 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. When 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 to maintain trust, by demonstrating behavioral evidence of their loyalty (Gassenheimer, Houston, and Davis 1998). Thus, with increasing trust in FLE and MPPs, consumers’ loyalty is likely enhanced.

Trust also influences 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. For this reason, we propose the following:

\[ H_{11}: \text{The consumer's loyalty toward the focal firm will be positively influenced by FLE trust.} \]

\[ H_{12}: \text{The consumer's loyalty toward the focal firm will be positively influenced by MPP trust.} \]

The Mediating Role of Value in the Trust-Loyalty Relationship

We posit an alternative mechanism for the trust-loyalty relationship whereby value mediates the effect of trust on loyalty. Following Zeithaml (1988), we define value 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), and associated costs include monetary and nonmonetary sacrifices (e.g., time, effort) that are needed to maintain the relationship (Houston and Gassenheimer 1987; Zeithaml 1988).

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 (1) consumer actions are guided or “identified” by the underlying goal they are expected to help attain; (2) multiple and sometimes conflicting goals may be operative at any instance; (3) goals are organized hierarchically, with superordinate goals at the highest level and subordinate goals at the lowest level; and (4) consumers regulate their actions to ensure the attainment of goals at the highest level. As such, superordinate goals are desired end states, whereas 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 goal and action identity theories, we posit value as the superordinate consumer goal in relational exchanges. The central role of consumer value has been conceptualized (Houston and Gassenheimer 1987; Neal 1999; Woodruff 1997) and empirically demonstrated (Bolton and Drew 1991; Grisaffe and Kumar 1998) in the marketing literature. As “value-maximizers” (Kotler 2000, p. 32), consumers are thought to consume exchanges with providers that provide maximal value. 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 example, Srivastava, Shervani, and Fahey (1999, p. 172) assert that “the value … experienced by end customers is the driving obsession of organizations.” Holbrook (1994, p. 22, emphasis in original) goes as far as to note that “customer value is the fundamental basis for all marketing activity.”

Value, in turn, is hypothesized to be affected by judgments of FLE and MPP trust. Specifically, trust creates value by (1) providing relational benefits derived from interacting with a service provider that is operationally competent, benevolent toward the consumer, and committed to solving exchange problems and (2) 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 example, in the context of telephone services, Bolton and Drew (1991) find 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 MPPs (e.g., variety, check-cashing policy).

On the basis of self-regulation processes, we posit that value, a superordinate goal, regulates consumer actions at the lower level, including behavioral intentions of loyalty toward the service provider (Carver and Scheier 1990). Consumers 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 by 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 example, Bolton and Drew (1991) report that value is a significant determinant of consumers’ behavior intentions to remain loyal to a telephone service by continuing the rela-

2In a broader context, the consumer’s life values (e.g., happiness, love, security) are the “super-superordinate” goals, and 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.”

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tionship and engaging in positive WOM. 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 through its influence in creating value. This parallels the mediational role of value hypothesized and tested in service quality—loyalty relationships in prior research (Chang and Wildt 1994; Grisaffe and Kumar 1998). For example, Chang and Wildt (1994) 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 though 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 find that though value mostly mediates the effect of quality on positive WOM, quality continues to have residual direct effects on positive WOM that are borderline significant. Similarly, we hypothesize that value partially mediates the relationship between trust and loyalty. Direct effects of trust on loyalty may achieve significance, consistent with H11 and H12, in addition to the mediated effect through value. Therefore,

H13: Consumer loyalty toward the service provider will be positively influenced by value.

H14: Value will be positively influenced by FLE trust.

H15: Value will be positively influenced by MPP trust.

Research Design and Method

Overall Considerations

Two industries, retail (clothing purchases) and services (nonbusiness airline travel), were selected as the exchange context for this research. The use of multiple service categories provides a robust test of model relationships by allowing greater variability in study constructs. By means of multiple-group path analysis procedures, the modeled relationships can be examined simultaneously and compared for equivalence across the two service contexts. This procedure allows for a systematic examination of salient similarities and differences across the service contexts.

The service contexts selected for the study possessed multiple desired characteristics, including (1) experience properties, (2) distinct role of the FLE, (3) consequentiality, and (4) variability in the significance of MPP and FLE. We preferred experience service contexts because such contexts enable consumers to observe and evaluate behaviors of service providers and are consistent with the behavioral focus of the trustworthiness construct. In 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, were less relevant to trust development. On the basis of 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 past 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 past six months. Finally, we preferred service contexts that indicated a distinct role for the FLE and variability in the relative effects of FLE and MPP 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, whereas process customization was more frequently mentioned in the retail context. The latter is likely to heighten the role of FLEs, just as the former is likely to diminish it.

Because of the nascent stage of the consumer trust literature, we used a mix of qualitative and quantitative approaches for data collection. Initially, we employed focus groups and personal interviews to identify salient behavioral domains that underlie consumer judgments of trustworthiness and to generate and refine items for the qualitative phase. Next, we administered cross-sectional surveys with structured questions in two waves. We asked respondents 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 a specific encounter would facilitate recall of exchange characteristics and relational judgments. Similar approaches have been used in services research (Bittner, Booms, and Tetreault 1990; Tax, Brown, and Chandrashekran 1998).

Sample

The sample was randomly drawn from the population of consumers with household annual incomes of $35,000 or higher, who reside 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 1230 respondents for each service category. The cover letter explained the purpose of the study, assured confidentiality of data, and thanked the participant. After the initial section, respondents completed measures pertaining to FLE behaviors, FLE trust, MPPs, MPP trust, value, and loyalty, and finally, respondents answered demographic questions. Four weeks after the initial mailing, a second wave of questionnaires was mailed to all respondents along with a cover letter with a reminder.

Because a random sample includes consumers who may live anywhere on the transactional–relational continuum, we excluded respondents who did not fall within the relational domain, using the frequency (e.g., number of visits/flight) 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 and compute reasonable response rates. In the retail category, the first wave resulted in 182 returned surveys, of which 153 (84%) customers met prequalifying criteria, and the second wave led to 143 responses, of which 93 (65%) customers qualified. Extrapolating to a third mailing and averaging across waves, we imputed a usable response rate of 29% for the retail category (Armstrong and Overton 1977). In the airline travel category, the first wave produced 160 responses, of which 72 (45%) met the prequalifying criteria. Likewise, of the 141 responses in the second wave, 41 (29%) met the prequalifying criteria. Extrapolating to the third wave and averaging across the three waves yielded a qualification rate of 30%, or 378 consumers. With this qualification rate, the 113 usable responses give a usable response rate of 29% (see n. 6).

Sample characteristics are reported in Table 1. A majority of respondents had a college degree or higher, were white, and were married. In the aggregate sample, 45% of respondents were men and 55% were women. However, there was a significant sex imbalance in each service category. Approximately 70% of respondents in the retail sample but only approximately 30% in the airline sample were women. A wave analysis was conducted to examine for profile differences of early and late respondents in each service category. Except for one exception, results indicated no significant demographic differences between the two waves in the retail sample ($\chi^2$ ranging from .53 to 7.9, $p > .1$) or the airline sample ($\chi^2$ 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 ($\chi^2 = 12.75, p < .01$).

**Measurements**

Table 2 provides descriptive statistics, intercorrelations, and reliabilities of study constructs, and the Appendix provides the scale items used.

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 used four focus groups made up of specific combinations of sex (male, female) and household income level (<$35,000, >$35,000). Thereafter, we conducted in-depth interviews lasting 90 minutes each with 12 consumers who met prespecified criteria to refine the operational items. We developed a card-sorting exercise in which each card contained 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. On the basis of the results of in-depth interviews, we developed a set of operational measures for trustworthy FLE behaviors and MPPs along three dimensions—operational competence, operational benevolence, and problem-solving orientation—and retained them for the subsequent pretesting phase. Items generated were pretested by five judges, who evaluated them for wording/meaning and consistency with corresponding definitions of the dimensions. On the basis of this feedback, items were

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**TABLE 1**

**Demographic Profile of the Respondents**

<table>
<thead>
<tr>
<th>Age (in Years)</th>
<th>Retirement</th>
<th>Airline</th>
<th>Sex</th>
<th>Retirement</th>
<th>Airline</th>
<th>Level of Education</th>
<th>Retirement</th>
<th>Airline</th>
<th>Ethnicity</th>
<th>Retirement</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–24</td>
<td>1.2</td>
<td>1.7</td>
<td>Male</td>
<td>30.2</td>
<td>71.2</td>
<td>High school</td>
<td>17.0</td>
<td>6.0</td>
<td>White</td>
<td>93.4</td>
<td>94.0</td>
</tr>
<tr>
<td>25–34</td>
<td>15.1</td>
<td>9.3</td>
<td>Female</td>
<td>69.8</td>
<td>28.8</td>
<td>Some college</td>
<td>28.2</td>
<td>19.7</td>
<td>African American</td>
<td>5.4</td>
<td>4.2</td>
</tr>
<tr>
<td>35–44</td>
<td>26.5</td>
<td>26.3</td>
<td></td>
<td></td>
<td></td>
<td>College degree</td>
<td>35.5</td>
<td>46.2</td>
<td>Other</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>45–54</td>
<td>28.6</td>
<td>25.4</td>
<td></td>
<td></td>
<td></td>
<td>Graduate school</td>
<td>19.3</td>
<td>28.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55+</td>
<td>28.6</td>
<td>37.3</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Household Size (Number of People)</th>
<th>Annual Household Income</th>
<th>Retirement</th>
<th>Airline</th>
<th>Retirement</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>77.2</td>
<td>80.5</td>
<td>1</td>
<td>10.5</td>
<td>11.1</td>
<td>Less than $35,000</td>
</tr>
<tr>
<td>Single</td>
<td>9.7</td>
<td>6.8</td>
<td>2</td>
<td>32.5</td>
<td>41.0</td>
<td>$35,000–$44,999</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>8.9</td>
<td>10.2</td>
<td>3</td>
<td>17.1</td>
<td>15.4</td>
<td>$45,000–$54,999</td>
</tr>
<tr>
<td>Widow/widower</td>
<td>4.2</td>
<td>2.5</td>
<td>4</td>
<td>23.3</td>
<td>21.4</td>
<td>$55,000–$64,999</td>
</tr>
<tr>
<td>&gt;6</td>
<td>4.3</td>
<td>3.4</td>
<td></td>
<td>12.3</td>
<td>7.7</td>
<td>$65,000–$94,999</td>
</tr>
</tbody>
</table>

Notes: All numbers are in percentages.
### TABLE 2
Reliabilities and Intercorrelations for the Study Constructs

<table>
<thead>
<tr>
<th></th>
<th>Management</th>
<th>Employee</th>
<th>MPP Trust</th>
<th>FLE Trust</th>
<th>Value</th>
<th>Loyalty</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOC</td>
<td>MOB</td>
<td>MPS</td>
<td>EOC</td>
<td>EOB</td>
<td>EPS</td>
<td>Trust</td>
</tr>
<tr>
<td>Operational competence (MOC)</td>
<td>.77/.73</td>
<td>.62</td>
<td>.61</td>
<td>.69</td>
<td>.65</td>
<td>.45</td>
<td>.68</td>
</tr>
<tr>
<td>Operational benevolence (MOB)</td>
<td>.54</td>
<td>.90/.86</td>
<td>.70</td>
<td>.69</td>
<td>.79</td>
<td>.62</td>
<td>.78</td>
</tr>
<tr>
<td>Problem-solving orientation (MPS)</td>
<td>.46</td>
<td>.74</td>
<td>.87/.74</td>
<td>.64</td>
<td>.75</td>
<td>.66</td>
<td>.69</td>
</tr>
<tr>
<td>Operational competence (EOC)</td>
<td>.51</td>
<td>.68</td>
<td>.56</td>
<td>.70</td>
<td>.84/.81</td>
<td>.77</td>
<td>.78</td>
</tr>
<tr>
<td>Operational benevolence (EOB)</td>
<td>.37</td>
<td>.63</td>
<td>.63</td>
<td>.51</td>
<td>.59</td>
<td>.72/.82</td>
<td>.62</td>
</tr>
<tr>
<td>Problem-solving orientation (EPS)</td>
<td>.49</td>
<td>.66</td>
<td>.63</td>
<td>.57</td>
<td>.67</td>
<td>.54</td>
<td>.96/.96</td>
</tr>
<tr>
<td>Value</td>
<td>.39</td>
<td>.49</td>
<td>.33</td>
<td>.40</td>
<td>.51</td>
<td>.40</td>
<td>.53</td>
</tr>
<tr>
<td>Loyalty</td>
<td>.19</td>
<td>.42</td>
<td>.39</td>
<td>.38</td>
<td>.40</td>
<td>.44</td>
<td>.51</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.42</td>
<td>.46</td>
<td>.38</td>
<td>.41</td>
<td>.51</td>
<td>.43</td>
<td>.61</td>
</tr>
</tbody>
</table>

*The alpha reliabilities are on the diagonal, and estimates for the retail context are presented first.
**The intercorrelations for the retail context are below the diagonal, and the corresponding correlations for the airline context are above the diagonal. All values are significant at p = .05.*
either modified or dropped. The resulting instrument included 16 items each for MPPs and FLE behaviors.

We performed two further analyses 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, we used exploratory factor analysis (EFA) to analyze items separately 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% of the variance extracted, corresponding closely with the hypothesized dimensions of competence, operational benevolence, and problem solving. However, the 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 they were dropped from further analysis. Likewise, EFA of the FLE behavior items yielded a three-factor solution that accounted for 73% of the variance extracted. This coheres with our hypothesis of three dimensions of employee trustworthiness—operational competence, operational benevolence, and problem-solving orientation. We retained the 9 items that demonstrated acceptable loading on their hypothesized factor (>3) and no significant cross-loading 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; problem-solving orientation maintained its distinctiveness, and 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 MPPs and FLE 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 (1) the measurement model fitted the data reasonably well, (2) the loadings on hypothesized factors were significant and large, (3) each factor yielded reliabilities exceeding .70, and (4) the intercorrelation among the factors (dimensions) produced evidence of discriminant validity. This measurement model (displayed in Figure 2) produced the following fit statistics: $\chi^2 = 216.2, \text{degrees of freedom (d.f.)} = 120, \text{comparative fit index (CFI)} = .99, \text{normed fit index (NFI)} = .98, \text{normed fit index (NNFI)} = .99, \text{root mean square residual (RMSR)} = .04, \text{and root mean square error of approximation (RMSEA)} = .047, \text{(90% confidence interval [CI] of .037 to .057).}$ 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.

7Reasonable models that effectively reproduce the observed variance–covariance matrix are characterized by CFI, NFI, and NNFI values exceeding .95; RMSR values less than .05; and RMSEA of .08 or lower with the upper CI not exceeding .10 (Marsh, Balla, and Hau 1996).
TABLE 3
Confirmatory Factor Analysis of Management and FLE Trustworthinessa

<table>
<thead>
<tr>
<th>Construct/Item</th>
<th>MPPs Loadingb</th>
<th>t-Valuec</th>
<th>FLE Behaviors Loadingb</th>
<th>t-Valuec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpComp1</td>
<td>.74</td>
<td>13.2</td>
<td>.76</td>
<td>17.4</td>
</tr>
<tr>
<td>OpComp2</td>
<td>.67</td>
<td>12.2</td>
<td>.72</td>
<td>17.7</td>
</tr>
<tr>
<td>OpComp3</td>
<td>.86</td>
<td>13.0</td>
<td>.74</td>
<td>18.5</td>
</tr>
<tr>
<td>Operational Benevolence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OpBen1</td>
<td>.75</td>
<td>17.7</td>
<td>.68</td>
<td>17.0</td>
</tr>
<tr>
<td>OpBen2</td>
<td>.81</td>
<td>18.4</td>
<td>.85</td>
<td>18.8</td>
</tr>
<tr>
<td>OpBen3</td>
<td>.77</td>
<td>16.6</td>
<td>.70</td>
<td>13.0</td>
</tr>
<tr>
<td>Problem-Solving Orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ProbSolv1</td>
<td>.70</td>
<td>13.3</td>
<td>.57</td>
<td>11.9</td>
</tr>
<tr>
<td>ProbSolv2</td>
<td>.81</td>
<td>17.8</td>
<td>.79</td>
<td>18.4</td>
</tr>
<tr>
<td>ProbSolv3</td>
<td>.81</td>
<td>14.0</td>
<td>.52</td>
<td>10.2</td>
</tr>
<tr>
<td>Goodness-of-Fit Statistics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>216.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.f.</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNFI</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMRR</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>.047</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(90% CI)</td>
<td>.037−.057</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

aThe estimates reported are from the ERLS (iteratively reweighted generalized least squares) procedure using EQS.
bThis is the standardized loading estimate from the ERLS procedure.
cBased on one-tailed tests: for t-values greater than 1.65, $p < .05$; for t-values greater than 2.33, $p < .01$.

(Δ$\chi^2$ ranges from 46.5 to 376.2, d.f. = 1, $p < .01$). 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 alphas of .91, .84, and .72, respectively, for the retailing context and .87, .81, and .82, respectively, 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.

MPP and FLE trust. Measures of MPP and FLE trust were adapted from extant research (Ganesan 1994; Morgan and Hunt 1994). Both measures were operationalized by four items assessed by ten-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 MPP trust and FLE trust scales were .96 or higher for both retail and airline contexts (Table 2).

Value. We adapted the measure of value from existing value research (Dodds, Monroe, and Grewal 1991; Grisaffe and Kumar 1998). We measured the value construct 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 ($\alpha \geq .90$ 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 interitem reliability in both contexts ($\alpha \geq .94$).

Method of Analysis
We examined the proposed hypotheses 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:

\[
Y_1 = \beta_{01} + \beta_1 Y_3 + \beta_{11} X_1 + \beta_{21} X_2 + \beta_{31} X_3 + \beta_{41} DX_1 + \beta_{31} DX_2 \\
+ \beta_{51} DX_3 + \epsilon_1,
\]

\[
Y_2 = \beta_{02} + \beta_2 Y_3 + \beta_{12} Z_1 + \beta_{22} Z_2 + \beta_{32} Z_3 + \beta_{42} DZ_1 + \beta_{32} DZ_2 \\
+ \beta_{52} DZ_3 + \epsilon_2,
\]

\[
Y_3 = \beta_{03} + \beta_3 Y_1 + \beta_{13} Y_2 + \epsilon_3,
\]

\[
Y_4 = \beta_{04} + \beta_4 Y_1 + \beta_{14} Y_2 + \epsilon_4,
\]

where $Y$ is a vector of dependent variables, and $Y_1$, $Y_2$, $Y_3$, and $Y_4$ correspond to FLE trust, MPP trust, value, and loyalty, respectively. The vectors $X$ and $Z$ represent independent variables; $X_1$, $X_2$, and $X_3$ correspond to the operational competence, operational benevolence, and problem-solving

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.

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orientation dimensions of FLE trust; and \(Z_1, Z_2,\) and \(Z_3\) are the corresponding trustworthy dimensions for MPP trust. Note that the asymmetric effects are examined by the use of the dummy variable indicated by \(D\) in the equations. The dummy variable (\(D\)) 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., \(\beta_{41}\) 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., \(\beta_{11}\) in the \(Y_1\) equation for FLE competence). 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 \(\beta_{12}\) and \(\beta_{21}\) 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) cutoff points, and (3) recency effects. Because the modeled equations have common variables (e.g., the dependent variable in one equation appears as an independent variable in another), we reasoned that the use of standard multiple regression analysis would risk a mis specification 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. Instead, a simultaneous analysis of the modeled equations is necessary to account for correlated error terms and produce unbiased coefficients. To do so, we used path analysis with the software EQS. This approach allows a simultaneous estimation of all hypothesized relationships, including multiple group analysis across service contexts (to be discussed). Although we considered the use of latent-variable structural equation modeling, the inclusion of asymmetric terms made this choice less reasonable given the sample sizes involved. Nevertheless, 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 the data based on a \(\chi^2\) statistic and fit indices including NNFI, CFI, and RMSEA (Marsh, Balla, and Hau 1996).

Determining appropriate cutoff points is a relevant concern in defining the asymmetric terms. In developing the dummy variables, it is necessary to define a point on the trustworthy response scale that would separate the positive and negative domains. Although some researchers have used an absolute cutoff 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 Zeit haml, 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, we obtained the cutoff points by (1) standardizing the scores for each dimension and (2) coding the dummy variable as 1 for evaluations greater than zero and as 0 otherwise. Note that because the mean of a standardized score is zero, the preceding dummy coding approach ensures that cutoff points are based on the distribution of scores for each dimension. Moreover, we derived the cutoff points separately for each service context 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 recent 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 overrepresented in surveys (Peterson and Wilson 1992), the recency effects due to satisfaction may be significant. To reduce this bias, 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 partia lling the effect of satisfaction. This procedure has precedence in the literature (Crosby and Stephens 1987).

**Results**

We fitted the proposed model simultaneously to the airline travel and retail samples using multiple-group path analysis. Initially, we held all paths invariant across the two data sets and estimated a fully restricted model. Subsequently, on the basis of the Lagrange-multiplier test, we sequentially released paths with significant test statistics until further freeing up of constraints failed to enhance model fit. The resultant coefficients and fit statistics are presented in Table 4. On the basis of the statistical test for the goodness of fit, the hypothesized model fits the data adequately (\(\chi^2 = 97.3, d.f. = 87, p > .21\)). Consistent with this, other indicators of fit, including the relative indices (e.g., NFI = .99, CFI = .99) and absolute indicators of fit (e.g., RMSEA = .02, 90% CI = .00-.037; standardized root mean square residual = .03), indicate that the proposed model is a reasonable explanation of observed covariances among the study constructs. In addition, the NFI, which 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 (\(R^2 = .40, .48\)).9 Taken together, this suggests

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9 For each construct, the \(R^2\) values for the retail sample are followed by values for the airline sample.
<table>
<thead>
<tr>
<th>Dependent Variable: Trust in FLEs</th>
<th>Retail</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>Coefficient</td>
<td>(t-Value)</td>
</tr>
<tr>
<td>MPP Trust</td>
<td>.16 (.19)</td>
<td>.16 (.19)</td>
</tr>
<tr>
<td>Operational competence</td>
<td>.22 (.32)</td>
<td>.22 (.32)</td>
</tr>
<tr>
<td>Operational benevolence</td>
<td>.43 (.57)</td>
<td>.43 (.57)</td>
</tr>
<tr>
<td>Problem-solving orientation</td>
<td>.11 (.16)</td>
<td>.11 (.16)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.14 (.31)</td>
<td>.14 (.31)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variable: Trust in MPPs</th>
<th>Retail</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>Coefficient</td>
<td>(t-Value)</td>
</tr>
<tr>
<td>FLE Trust</td>
<td>.56 (.73)</td>
<td>.56 (.73)</td>
</tr>
<tr>
<td>Operational competence</td>
<td>.10 (.18)</td>
<td>.10 (.18)</td>
</tr>
<tr>
<td>Operational benevolence</td>
<td>.02 (.2)</td>
<td>.02 (.2)</td>
</tr>
<tr>
<td>Problem-solving orientation</td>
<td>.25 (.32)</td>
<td>.25 (.32)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.17 (.43)</td>
<td>.17 (.43)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variable: Value</th>
<th>Retail</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>Coefficient</td>
<td>(t-Value)</td>
</tr>
<tr>
<td>FLE trust</td>
<td>.38 (.33)</td>
<td>.38 (.33)</td>
</tr>
<tr>
<td>MPP trust</td>
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<td>.07 (.6)</td>
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<tr>
<td>Satisfaction</td>
<td>.27 (.47)</td>
<td>.27 (.47)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variable: Loyalty</th>
<th>Retail</th>
<th>Airline</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>Coefficient</td>
<td>(t-Value)</td>
</tr>
<tr>
<td>FLE trust</td>
<td>.04 (.09)</td>
<td>.04 (.09)</td>
</tr>
<tr>
<td>MPP trust</td>
<td>.22 (.23)</td>
<td>.22 (.23)</td>
</tr>
<tr>
<td>Value</td>
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<td>.40 (.61)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.09 (.14)</td>
<td>.09 (.14)</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Goodness-of-Fit Statistics</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Chi-square (p-value)</td>
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</tr>
<tr>
<td>d.f.</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>NNFI</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>RMSR</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
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<td></td>
</tr>
<tr>
<td>(90% CI)</td>
<td>(.000-0.037)</td>
<td></td>
</tr>
</tbody>
</table>

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

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

Values are in parentheses. Based on one-tailed tests: for t-values greater than 1.65, p < .05; for t-values greater than 2.33, p < .01. Significant coefficients are in bold.

Values are in parentheses. Based on two-tailed tests: for t-values greater than 1.96, p < .05. Significant coefficients are in bold.

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 multiple-group path analysis. Consistent with H1, H2, and H3, each dimension of FLE trustworthy behaviors, including operational competence (βOpComp = .22), operational benevolence (βOpBen = .43), and problem-solving orientation (βProbSolv = .11), has a significant, direct effect on FLE trust (all with p < .05). In addition, these effects are invariant across retailing and airline contexts. In contrast, for the MPP facet, trustworthy practices and policies neither are uniformly significant nor achieve invariance across contexts.

For the retailing context, operational competence (βOpComp = .10) and problem-solving orientation (βProbSolv = .25) significantly influence MPP trust (all with p < .05), but operational benevolence does not (βOpBen = .02). For the airline context, however, operational competence (βOpComp = .10) and operational benevolence (βOpBen = .29) have a significant effect on MPP trust, but problem-solving orientation does not (βProbSolv = .12). Thus, across both contexts, only the effect of operational competence is invariant. This provides mixed support for H2, H4, and H6.

Moreover, the results in Table 4 provide some support for H7 to H9, wherein we had hypothesized asymmetric effects of trustworthy behaviors and practices on their cor-
responding trust facets. For FLE trust, operational benevo-

lence (Δβ_{FLE,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 (Δβ_{FLE,ProbSolv} = .17, p < .10). 
These asymmetric effects for FLE behaviors were invariant 
across retailing and airline contexts. For MPP trust, a differ-

ent pattern of asymmetric effects emerged. For the retail 
context, only the change coefficient for operational com-

petence was borderline significant (Δβ_{FLE,Comp} = -.18), whereas 
for airlines, none of the MPP dimensions achieved significance 
for asymmetrical effects. Taken together, this offers partial 
support for H8 and H9 for FLE trust and H7 for MPP trust. 

In accord with H10, FLE trust positively influences MPP 
trust regardless of context, though the influence is sub-

stantially stronger for the retail context (β_{FLE} = .56, p < .01) than 
for the airline context (β_{FLE} = .40, p < .01). The reciprocal 
relationship is also supported, as the effect of MPP trust on 
FLE trust is significant and invariant across contexts (β_{MPP} = 
.16, p < .05). However, as hypothesized, the direct effect of 
FLE trust is at least twofold stronger than the reciprocal ef-

fect of MPP trust (β_{FLE} versus β_{MPP} = .40 versus .16, p < .01). 

In addition, the two facets—FLE and MPP trust—were 
posed to directly affect consumer loyalty after we controlled 
for the mediating influence of value (H11 and H12). Our find-
ings in Table 4 provide support for H13, but not H11. That is, 
regardless of context, FLE trust has a minimal effect 
(β_{FLET} = .04) and MPP trust has a significant effect on loyalty 
(β_{MPP,Tr} = .22 p < .05). These trust facets significantly 
influence value as well, in accord with H14 and H15. However, 
these relationships vary by context. For the retailing context, 
value is strongly and positively affected by perceptions of 
FLE trust (β_{FLET} = .38, p < .01) but minimally influenced 
by MPP trust (β_{MPP,Tr} = .07). In contrast, in the airlines con-

text, value is strongly influenced by MPP trust (β_{MPP,Tr} = 
.50, p < .01) but unaffected by FLE trust perceptions 
(β_{FLET} = .08). This provides mixed support for H14 and H15. 

Finally, regardless of context, value significantly affects 
loyalty (β_{FLE} = .40, p < .01), in support of H13. 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 affects loyalty. Specifically, for 
the retailing context, value appears to mediate the effect of 
FLE trust on loyalty, whereas for the airlines context, the 
effect of MPP trust on loyalty is partially mediated by value. 

To test this partial mediation hypothesis further, we esti-

mated a model that excluded the value construct. We 
reasoned that partial mediation by value was supported if (1) 
FLE and MPP trust had a significant and substantial effect 
on loyalty in the retail and airlines context, respectively, and (2) 
this effect declined significantly when value was intro-

duced into the model. In the model that excluded value, FLE 
trust yielded a significant effect on loyalty in the retail con-

text (β = .32, p < .05), and MPP trust produced a similar 

significant effect on loyalty in the airlines context (β = .66, p < 
.01). When value is introduced as a partial mediator, the cor-

responding effects for FLE and MPP trust are β = .04, p > 
.50, and β = .22, p < .05, respectively, in support of the par-

tial mediation hypothesis.

Discussion and Implications

In this study, we aimed to (1) use a multidimensional and 
multifaceted model for the behavioral components of trust-

worthiness in consumer–firm exchange relationships, (2) 
examine the asymmetric influence of trustworthiness 

dimensions on facets of consumer trust, (3) empirically 
test the linkage between consumer trust and loyalty with 
value as a partial mediator, and (4) 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 FLE behaviors and MPPs con-

tribute to trust building and, conversely, trust depletion? Is 
the depletion effect (reduction in consumer trust due to a 
unit drop in trustworthiness behavior and practices) sym-

metrically equivalent to the building effect (the gain due to 
a unit increase in trustworthiness behavior and practices)? 
Does consumer trust translate into loyalty? If so, what is the magnitude of this conversion effect, 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 offer only initial insights. In this light, we first dis-

cuss the limitations of our work and follow it up with a dis-

cussion of the key findings.

Limitations

This study is subject to several limitations. First, the study 
may have limited generalizability because of the regional 
sampling plan used. Note that we randomly sampled from 
a list of households residing in Zip codes within the selected 
standard metropolitan statistical area. We selected this sta-

tistical area because of the location of our affiliated univer-
sity, 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 addi-
tion, 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 nonbusiness trip. Nevertheless, replication stud-

ies in different service contexts and with varying sampling 
procedures would provide greater confidence in our results.

Second, because this was a cross-sectional study, the 
findings may be biased by common method variance and 
spurious cause/effect inferences. Common method variance 
is known to inflate correlations, resulting in overestima-
tions of the influence of hypothesized predictors. However, 
our focus is 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 com-

mon variance by partialling out the effect of satisfaction on 
all constructs of this study. This reduces the bias due to at

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least one source of common variance. We recognize that drawing cause/effect inferences from cross-sectional data is essentially tenuous, and we agree that longitudinal studies are needed to establish the hypothesized sequence of effects.

Third, although 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 used 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 further research involves individual sensitivity to trust judgments. For some people, a high level of trust is necessary for consuming exchanges, but 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 cutoff points and estimating the incremental coefficients for the positive domain of the asymmetrical relationship. Alternatively, cubic polynomials can be used to assess asymmetries without relying on cutoff points. Finally, because of the small sample size and inclusion of asymmetric effects, we used a path model with simultaneous estimation of modeled equations but without control over measurement error. Measurement error is known to bias path coefficients. Although 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 dimensions. 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 through a differential pattern of effects. For example, the management facet of trust had a significant effect on loyalty in both contexts ($\beta_{\text{MPP Trust}} = .22$), but the effect of the FLE facet was nonsignificant ($\beta_{\text{LET Trust}} = .04$). The MPP facet has a significant effect on value in the airline industry ($\beta_{\text{MPP Trust}} = .50$) but not in the retailing context ($\beta_{\text{MPP Trust}} = .07$). The opposite pattern emerges for the FLE facet ($\beta_{\text{LET Trust}} = .08$ 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, MPP trust spills over to affect trust in the FLE, in accord with the transfer hypothesis. However, this transfer effect is relatively weak compared with 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 subsequently). Taking these findings 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 (Smith, Bolton, and Wagner 1999; Tax, Brown, and Chandrashekaran 1998). Finally, our approach can provide managerial insights for targeted intervention efforts because of its focus on specific FLE behaviors and MPPs.

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 FLE 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 (see Reichheld and Schechter 2000). Second, the robustness of the three trustworthiness dimensions should be evaluated by further replications and extensions. In particular, although we posit problem-solving orientation as another dimension of trust, further analysis of problem solving versus routine episodes may be pursued for a better understanding of 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 the ΔPositive columns in Table 4). The coefficient for positive change is derived by adding it to the baseline coefficient, and the latter serves as the estimated effect for a negative change. On the basis of 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.

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 (β_{OpCom} = .22). This suggests that FLE competence contributes equally to trust building and depletion. As such, FLE operational competence is both a motivator and a hygiene factor, because losses and gains matter equally. In contrast, FLE operational benevolence depicts negativity effects whereby its trust-depletion effect is significant and large (β_{OpBen} = .43) but its trust-enhancing effect is relatively weak but significant (β_{OpBen} = .17). As such, FLE operational benevolence is more of a hygiene factor than a motivator. This result supports current speculation that though 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 subsequently), 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 (β_{ProbSol} = .11), the trust-building effect is more substantial (Δ_{ProbSol} = .28). As such, a unit positive change in FLE problem-solving orientation boosts FLE trust strongly. Thus, problem-solving orientation is a motivator, because its motivating effects significantly exceed its hygiene effects. This coheres with the growing recognition that problem solving is instrumental in shaping trust judgments (Tax, Brown, and Chandrashekaran 1998) and supports Hart and Johnson’s (1999) speculation that this dimension holds significant managerial relevance for building consumer trust.

A weaker pattern of asymmetric effects emerges for MPP 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 (β_{OpBen} = .02). In contrast, for the airline context, MPP operational benevolence has equivalent and significant depletion and enhancing effects (β_{OpBen} = .29). As such, MPP operational benevolence is both a hygiene factor and a motivator in the airline context but is largely impotent in the retailing context. However, operational competence has a significant depleting effect for MPP trust such that a unit negative change produces substantial declines in MPP trust in both contexts (β_{OpCom} = .10). In contrast, a unit positive change yields a substantially lower and nonsignificant effect on MPP trust for the retailing context (β_{OpCom} = −.08), but it yields a significant effect for the airlines context that is equivalent to the negativity effect (β_{OpCom} = .10). As such,

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*The coefficients for positive and negative performance are displayed for each dimension. Findings are invariant for retailing and airline contexts.*
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 (β_{ProbSolv} = .25), but its effects in the airlines context are nonsignificant. Thus, problem-solving orientation is both a hygiene factor and a motivator for the retailing context but is 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. Specific FLE behaviors and MPPs 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 further 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 the way these mechanisms vary across industry contexts are more likely to emerge if researchers adopt approaches along the lines of those employed in this study. At the same time, this study must be viewed as an initial step that encourages future researchers to explore the broad scope and diverse nature of asymmetric mechanisms that involve trust and its dimensions, as proposed by Singh and Sirdeshmukh (2000), Lewicki, McAllister, and Bies (1998), and others. Concurrently, our results suggest that trust judgments are not bound by the rule of negativity effects rooted in loss-aversion arguments. Rather, either positivity or negativity effects may emerge depending on the consumer norms for a given dimension. Further research into the formation and stability of trustworthiness norms and their role in trust mechanisms is warranted.

The Mediating Role of Value in Trust–Loyalty Relationships

Unlike much prior 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 positied that though 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, exerting a dominant effect on loyalty and serving 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 (β_{Val} = .40). Specifically, although trust in MPPs has a significant direct effect on loyalty, this influence is relatively weak compared with the effect of value (β_{MPPTrust} = .22 versus β_{Val} = .40). The direct effect of FLE trust is nonsignificant (β_{FLETrust} = .04). This suggests that consumers’ evaluation of value in relational exchanges appears to carry greater weight in loyalty judgments, though 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 we controlled 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 n. 8). Likewise, for the airlines context, value appears to partially mediate the influence of MPP trust because (1) MPP trust has a significant, direct effect on value (β_{MPPTrust} = .50); (2) MPP trust has a significant, direct effect on loyalty (β_{MPPTrust} = .22); and (3) the direct effect on loyalty is significantly smaller than its effect when value is omitted (β_{MPPTrust} = .66). However, value does not mediate the influence of MPP and FLE trust in the 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 that are 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, in hopes 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 involves complex, multiple-loop processes that require an understanding of (1) how specific trustworthiness dimensions can build greater consumer trust in MPPs, the FLE, or both; (2) how increased consumer trust can enhance value for the consumers; and (3) how value translates into loyalty. Our results also suggest that such understandings are sensitive to contextual and industry factors and are likely to involve asymmetric influences. In summary, although there are significant payoffs from building consumer trust in relational exchanges, realizing them is neither straightforward nor inevitable.

Theoretically, the construct of value needs further development. Although the services literature has primarily directed attention toward relational benefits, the nature and role of relational costs have until recently remained largely unexplored (Cannon and Homburg 2001). Because consumers attempt to “manage” their relationships with marketers, they also experience significant and diverse relational costs (Fourrier, Dobscha, and Mick 1998). Ironically, these costs are not constant and may decrease or even increase over a relationship with a given provider (e.g., more direct solicitations, information use and privacy concerns). A more complete accounting of value would require a balanced study of the costs and benefits of relationships.
Industry Variability in Trust Mechanisms

The inclusion of multiple service contexts makes possible the testing of the generalizability of our hypothesized model. By generalizability, we do not imply that the estimated path coefficients are necessarily invariant across the two service contexts but that a single conceptual model is an adequate representation of trust mechanisms in both service contexts. However, by imposing parameter constraints, we can examine the sensitivity of path coefficients to contextual variability.

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, which suggests 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 the service context, including determinants of (1) loyalty and (2) FLE trust. That is, the linkages between loyalty determinants (i.e., MPP trust, FLE trust, and 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 MPPs are more critical to trust and loyalty mechanisms in airlines, whereas FLE behaviors play a more central role in a retail clothing context. This is because, compared with the retailing context, for airlines (1) MPP trust has a stronger, dominant effect on value (.50 versus .07); (2) the effect of FLE trust is minimal and nonsignificant (.08 versus .38); (3) whereas MPP trust has a significant effect on loyalty in both contexts, FLE trust has a weaker, less dominant effect on MPP trust (.40 versus .56); and (4) management operational benevolence holds greater potential in consumer trust building (.29 versus .02).

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., Whittemore 1993) and of MPPs such as overbooking and schedule convenience in airline travel (Ostrowski, O'Brien, and Gordon 1993). Therefore, within the context and limitations of our study, we recommend that to provide value to consumers and win their loyalty, retailers should focus strategically on FLE effectiveness and trustworthiness. For airlines, the strategic thrust must keep MPPs and policies 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. Although our findings cohere with this basic thought, we refine and extend the literature in several important ways. By modeling trust-building and trust-depletion processes, our approach rejects static notions of trust and embraces a dynamic, asymmetric view in which all good behaviors and 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 enables 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 if trust is important to have or whether trust matters, our study argues for questions such as “How can firms build trust?” “What actions will deplete trust?” and “What factors mediate and/or moderate the influence of trust on loyalty?” Although our study only begins to scratch the surface of these inquiries, the insights obtained indicate several fruitful avenues for further 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 alerting managers to behaviors and practices that will likely deplete consumer trust and erode consumer loyalty.

Appendix

Operational Measures Used to Measure Study Constructs for Retail and Airline Contexts

FLE Behaviors (five-point scale, “strongly disagree” to “strongly agree”)

The (store) employees …

*Operational Competence (μR = 3.67, σR = .8)*
Work quickly and efficiently.
Can competently handle most customer requests.
Can be relied upon to know what they are doing.

*Operational Benevolence (μR = 3.79, σR = .8)*
Act as if they value you as a customer.
Can be relied upon to give honest advice even if they won’t make a sale.
Treat you with respect.

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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.

MPPs (five-point 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 (ten-point scale, $\mu_R = 7.29, \sigma_R = 1.8$)
How satisfaying was your last shopping experience at this store?
“Highly unsatisfactory”/“highly satisfactory.”
“Very unpleasant”/“very pleasant.”
“Terrible”/“delightful.”

Trust in MPPs (ten-point scale, $\mu_R = 7.84, \sigma_R = 1.6$)
I feel that this store is …
“Very dependable”/“very dependable.”
“Very incompetent”/“very competent.”
“Of very low integrity”/“of very high integrity.”
“Very unresponsive to customers”/“very responsive to customers.”

Trust in FLEs (ten-point scale, $\mu_R = 7.38, \sigma_R = 1.7$)
I feel that the employees of this store are …
“Very dependable”/“very dependable.”
“Very incompetent”/“very competent.”
“Of very low integrity”/“of very high integrity.”
“Very unresponsive to customers”/“very responsive to customers.”

Value (ten-point 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”/“very good deal,” ten-point scale?
For the time you spent in order to shop at this store, would you say shopping at this store is “highly unreasonable”/“highly reasonable,” ten-point scale?
For the effort involved in shopping at this store, would you say shopping at this store is “not at all worthwhile”/“very worthwhile,” ten-point scale?

How would you rate your overall shopping experience at this store? [“extremely poor value”/“extremely good value,” ten-point scale].

Loyalty (ten-point 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% of your clothing budget at this store?

FLE Behaviors (five-point 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.

MPPs (five-point 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 (ten-point scale, $\mu_A = 6.83, \sigma_A = 1.8$)
How satisfaying was your last experience with this airline?
“Highly unsatisfactory”/“highly satisfactory.”
“Very unpleasant”/“very pleasant.”
“Terrible”/“delightful.”

Trust in MPPs (ten-point scale, $\mu_A = 7.24, \sigma_A = 1.7$)
I feel that this airline is …
“Very dependable”/“very dependable.”
“Very incompetent”/“very competent.”
“Of very low integrity”/“of very high integrity.”
“Very unresponsive to customers”/“very responsive to customers.”

**Trust in FLEs (ten-point scale, $\mu_A = 7.44, \sigma_A = 1.8$)**

I feel that the employees of this airline are …
“Very dependable”/“very dependable.”
“Very competent”/“very competent.”
“Of very low integrity”/“of very high integrity.”
“Very unresponsive to customers”/“very responsive to customers.”

**Value (ten-point 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”/“very good deal,” ten-point scale)?

For the time you spent in order to travel with this airline, would you say travelling on this airline is (“highly unreasonable”/“highly reasonable,” ten-point scale)?
For the effort involved in traveling with this airline, would you say travelling on this airline is (“not at all worthwhile”/“very worthwhile,” ten-point scale)?

How would you rate your overall experience with this airline? (“extremely poor value”/“extremely good value,” ten-point scale).

**Loyalty (ten-point 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% of your flights on this airline?

**REFERENCES**


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