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Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent

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Abstract

This paper proposes a model of the effects of perceived justice on customer satisfaction and intent following a service or product failure and a recovery attempt. We tested the model using two field studies that captured customer perceptions over time, and the results largely support the model's path estimates and explanatory power. Study One also supports the hypothesis that procedural and interactional justice are more influential in forming overall firm satisfaction than distributive justice. As hypothesized, satisfaction with recovery was a stronger predictor of the likelihood of spreading positive word-of-mouth (WOM intent) than overall firm satisfaction, and overall firm satisfaction was a stronger predictor of purchase intent than satisfaction with recovery. The results also suggest that satisfaction partially mediates the effects of justice on WOM intent and purchase intent. Finally, we draw on the findings of this study to offer implications for service recovery researchers and managers.

Keywords: Customer satisfaction; Service recovery; Complaint handling; Word of mouth; Purchase intent

Introduction

The *Economist* (2000) reported that customer complaints are rising sharply. While retailers cannot eliminate complaints, they can learn to effectively respond to them. This response, termed service recovery, is defined as the process by which the firm attempts to rectify a service- or product-related failure (Kelley & Davis, 1994). Some researchers suggest that a retailer's response to failures can either reinforce customer relationships (Blodgett, Hill & Tax, 1997; Smith, Bolton & Wagner, 1999) or exacerbate the negative effects of the failure (Hoffman, Kelley & Rotalsky, 1995; Kelley, Hoffman & Davis, 1993). In fact, some assert that it is often a retailer's response to a failure, rather than the failure itself, that triggers discontent (Hoffman et al., 1995; Kelley et al., 1993). Recoveries are critical because customers perceiving poor recovery efforts may dissolve the buyer-seller relationship and purchase elsewhere (Schneider & Bowen, 1999). Such customer turnover can be costly, especially given that it costs more to win new customers than it does to retain current ones (Hart, Heskett & Sasser, 1990; Schneider, White & Paul, 1998). One viable strategy for retaining customers involves recovering fairly from failures (Blodgett et al., 1997).

Despite recent advances, there is still much to learn about service recovery's influence on customer perceptions of justice, satisfaction, and intent. (A brief review of the empirical research on service recovery encompassing these constructs is shown in Appendix A.) Three issues are notable. First, though some research has examined the effects of perceived justice in service recovery (Blodgett, Granbois & Walters, 1993; McCollough, Berry & Yadav, 2000; Smith et al., 1999; Tax, Brown & Chandrashekaran, 1998), the relative effects of the dimensions of justice on two important and distinct aspects of satisfaction (i.e., satisfaction with recovery and overall firm satisfaction) have not been addressed. Given the importance of relationship marketing in ongoing service industries, such analyses are needed to determine if satisfaction gains realized by offering justice in service recovery affect overall firm satisfaction as well. Second, research is needed that examines the mediating effects of satisfaction with recovery and overall firm satisfaction on the relationships between perceived justice and different types of customer intent. Given the distinction between purchase intent and the likelihood of spreading positive word-of-mouth (i.e., WOM intent), research is also needed that examines the relative effects of the satisfaction constructs on these intent constructs. Third, service recov-

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ery assumes that both a failure and a recovery effort have occurred. Ideally, then, researchers need to gauge customer perceptions when the failure and recovery are most salient in their memories. The existing literature is mostly comprised of laboratory (Goodwin & Ross, 1992) or field experiments (Smith et al., 1999; Smith & Bolton, 1998) based on hypothetical scenarios. Other studies report cross-sectional studies in which respondents were asked to "think back" to some past failure (Kelley et al., 1993; Tax et al., 1998). Though these studies have contributed to our understanding of service recovery, it seems evident that field studies are needed that capture customer perceptions as they form over time.

Consistent with Peterson and Wilson (1992), customers need to sufficiently use the service or product following a recovery before they can most accurately rate the outcomes of the service recovery (e.g., satisfaction). However, perceptions regarding recovery processes (e.g., procedures and service agent interactions) are best gauged directly after customers experience those particular processes. As Feldman and Lynch (1988) argue, many perception-based predictor variables are unduly influenced by their measures (i.e., they are "self-generated"). That is, respondents may not have yet developed perceptions and the mere process of measuring them affects their scores. Thus, by considering timing issues throughout the recovery process, predictors and outcomes can be more accurately assessed, leading to a more precise representation of construct relationships. Accordingly, our current study captures customer perceptions as they form over time in order to reduce recall biases common to recovery research.

The purpose of our research is to test a perceived justice and satisfaction-based model of the service recovery process as it takes place over time. We conduct two field studies examining the effects of justice on satisfaction with recovery, overall firm satisfaction, purchase intent, and WOM intent.

Literature review and hypotheses

Perceived justice and outcomes

In the context of services and service recovery, an implicit promise of fairness is salient because it is often difficult for customers to evaluate the service before, and sometimes after, the transaction is made. As Seiders and Berry (1998, p. 8) point out, "Service customers are vulnerable to exploitation; they know it and are unlikely to quickly forget or forgive treatment perceived as unfair." Justice is critical since customer responses to unjust service experiences are generally stronger than those perceived as just (Schneider & Bowen, 1999). It is also important to note that service recovery involves perceptions of justice at different levels. The customer's interaction with firm representatives, the procedures a firm uses to handle complaints, and the outcomes of service recovery all generate perceptions of justice. Consistent with work in social and organizational psychology (Bies & Shapiro, 1987; Greenberg, 1996), service research has taken a three-dimensional approach to perceived justice (i.e., distributive, procedural, and interactional justice).

Distributive justice

Based in social exchange theory, distributive justice focuses on the role of "equity," where individuals assess the fairness of an exchange by comparing their inputs to outcomes to form an equity score (Adams, 1963). An exchange is judged as fair when this equity score is proportional to the scores of referent others, for example, other customers (Deutsch, 1985; Greenberg, 1996). Similar to the work of Tax et al. (1998), we define distributive justice as the extent to which customers feel they have been treated fairly with respect to the *final* recovery outcome. These distributive justice outcomes may represent refunds, discounts, and other forms of atonement offered to customers following a failure. We posit that distributive justice affects two types of satisfaction: satisfaction with recovery and overall firm satisfaction. We define satisfaction with recovery as customer satisfaction with a particular transaction involving a failure and recovery (Smith & Bolton, 1998). Overall firm satisfaction refers to a customer's cumulative satisfaction with all prior exchanges as well as the satisfaction received from the most recent exchange. Thus, overall firm satisfaction is an additive combination of all transaction-satisfaction perceptions (Oliver, 1996). Recent evidence has shown that distributive justice is a predictor of satisfaction with specific service recovery transactions. Smith et al. (1999) found that distributive justice affects service recovery encounter satisfaction for both hotel and restaurant patrons, and Goodwin and Ross (1992) and Tax et al. (1998) found that distributive justice affects satisfaction with complaint handling. Similarly, though the effect of distributive justice on overall firm satisfaction in service failure and recovery has not been examined, some suggest that such an effect is likely. For example, Seiders and Berry (1998) suggest that a key factor affecting overall firm satisfaction is compensating customers fairly when recovering from failures. Thus, two paths from distributive justice are hypothesized in Fig. 1:

H1: Distributive justice positively affects satisfaction with the recovery (γ_{11}).

H2: Distributive justice positively affects overall firm satisfaction (γ_{21}).

Procedural justice

In our study, procedural justice refers to the perceived fairness of policies and procedures involving the recovery effort, and there is anecdotal evidence suggesting that procedural justice affects service recovery outcomes. For example, a retailer can provide the customer with a full refund in response to a service failure, but if the customer had to

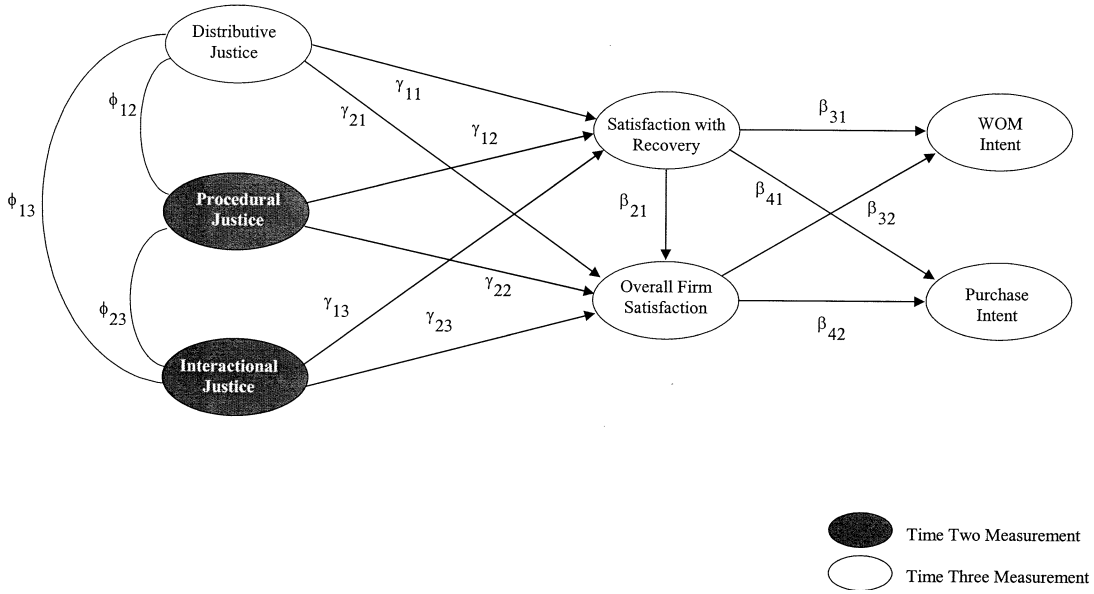

Fig. 1. Hypothesized model.

wait an hour to receive the refund because the retailer's policy requires frontline employees to clear all restitution offers with a department manager, the customer may not deem the process as fair. Since process is an integral part of the product or service offering, retailers can enhance satisfaction with the recovery by engaging in activities that enhance customer perceptions of procedural justice (Seiders & Berry, 1998). This notion has some support as Smith et al. (1999) report a significant effect of procedural justice on service encounter satisfaction, and Tax et al. (1998) report a positive effect of procedural justice on satisfaction with complaint handling.

Though not empirically tested, it seems reasonable that procedural justice can also affect overall firm satisfaction in a failure and recovery context. Both organizational psychologists (Folger & Konovsky, 1989; Greenberg, 1996) and market researchers (Seiders & Berry, 1998) suggest that procedural justice is important in exchanges involving conflict resolution because it enhances the probability of maintaining a long-term overall satisfaction between parties. Furthermore, Tax and Brown (1998) posit that low levels of procedural justice during failures and recoveries can negatively affect overall firm satisfaction. In sum, procedural justice should affect both satisfaction with recovery and overall firm satisfaction.

H3: Procedural justice positively affects satisfaction with the recovery (γ_{12}).

H4: Procedural justice positively affects overall firm satisfaction (γ_{22}).

Interactional justice

We define interactional justice as the extent to which customers feel they have been treated fairly regarding their personal interaction with service agents throughout the recovery process. This conceptualization includes elements of courtesy, honesty, interest in fairness, and effort perceived by the complainant, and it is consistent with the extant service recovery literature (Smith et al., 1999; Tax et al., 1998).

Evaluations of service recovery are heavily influenced by the interaction between customers and service representatives. Smith et al. (1999) found effects of interactional justice on satisfaction with the service recovery encounter, and Tax et al. (1998) report a strong effect of interactional justice on satisfaction with complaint handling. Though the relationship between overall firm satisfaction and interactional justice has not been tested empirically, Spreng, Harell and Mackoy (1995), in a study of customer damage claims for a moving service, found that satisfaction with personnel was the most important determinant of overall firm satisfaction. Similarly, in a qualitative study, Bitner, Booms and Tetreault (1990) report that overall firm satisfaction improves when employees treat customers fairly. It follows that employees can help restore postfailure customer evaluations by treating customers fairly, and these effects seem likely for satisfaction with the recovery and overall firm satisfaction.

H5: Interactional justice positively affects satisfaction with the recovery (γ_{13}).

H6: Interactional justice positively affects overall firm satisfaction (γ_{23}).

Relative effects of justice

Organizational behavior researchers assert that procedural justice and interactional justice may be better predictors of organizational (i.e., holistic) perceptions than distrib-

utive justice (Greenberg, 1996; McFarlin & Sweeney, 1992). It has been shown that procedural justice is more important than outcome fairness in determining the evaluation of the institution that enacted the decision (Brockner & Weisenfeld, 1996). It has also been shown that interactional justice goes beyond a specific decision and strongly affects a longer-term perspective of satisfaction with the organization (Greenberg, 1996). As such, we posit that procedural and interactional justice will be more predictive of overall firm satisfaction than distributive justice.

H7: Procedural justice and interactional justice will have a greater influence on overall firm satisfaction than will distributive justice ($\gamma_{22,}\ \gamma_{23} > \gamma_{21}$).

Satisfaction constructs

Nearly all consumer research has adopted the view of satisfaction as a transaction-specific judgment (Anderson & Fornell, 1994), and most service recovery research has examined satisfaction with a particular complaint handling experience. We feel it is important to examine both satisfaction types for several reasons. First, several scholars note that treating satisfaction as a transaction-specific judgment ignores the importance of overall satisfaction as a process extending across a longer consumption horizon (e.g., Fournier & Mick, 1999). Accordingly, satisfaction with recovery must be considered to more fully account for the development of overall firm satisfaction. Second, the manner in which customers process negative experiences can affect satisfaction judgments. Individuals weigh losses more heavily than gains (Fiske, 1980) and therefore may weigh an unsatisfactory transaction more heavily than a satisfactory one in forming overall firm satisfaction. Third, as previously noted, the perceived justice dimensions should differentially affect overall firm satisfaction. Finally, satisfaction with recovery and overall firm satisfaction are expected to differentially affect two other important outcomes, WOM intent and purchase intent.

Overall firm satisfaction represents a cumulative satisfaction with all exchanges. Though there are cases where customers may be dissatisfied with a particular transaction and still remain satisfied with the firm, their satisfaction with recovery should positively affect their perceptions of overall firm satisfaction after the recovery effort. This hypothesis follows theoretically from the additive nature of overall satisfaction (Oliver, 1996).

H8: Satisfaction with recovery positively affects overall firm satisfaction (β_{21}).

Outcomes of satisfaction

WOM intent and purchase intent are salient consequences in the satisfaction/dissatisfaction paradigm (Oliver, 1996). WOM intent is defined as the likelihood that one would favorably recommend a firm's product or service after a failure and recovery effort, and purchase intent refers to the degree to which customers intend to purchase a firm's products/services in the future. We posit that both satisfaction constructs will directly influence WOM intent and purchase intent for two reasons. First, it has been suggested that customers who are highly satisfied with recoveries are "delighted" and desire to tell others about their experience (Schneider & Bowen, 1999). Second, empirical evidence shows a positive relationship between purchase intent and recovery from failure, that is, satisfaction with recovery (Kelley et al., 1993) as well as between overall firm satisfaction and purchase intent (LaBarbera & Mazursky, 1983). Thus, we present the following hypotheses.

H9: Satisfaction with recovery positively affects WOM intent (β_{31}).

H10: Overall firm satisfaction positively affects WOM intent (β_{32}).

H11: Satisfaction with recovery positively affects purchase intent (β_{41}).

H12: Overall firm satisfaction positively affects purchase intent (β_{42}).

Relative effects of satisfaction

While most research reports a positive relationship between satisfaction and WOM intent, some indicate a negative relationship (e.g., Anderson, 1998). A possible explanation for the mixed evidence is that some studies have measured satisfaction as a transactional measure while others have used a global measure. We attempt to clarify this relationship by disentangling transactional satisfaction from overall firm satisfaction. We argue that satisfaction with recovery prompts customers to tell family and friends about their positive experience primarily due to the salience and recency of the experience (Seiders & Berry, 1998). Alternatively, customers who are more globally satisfied with their long-term relationship may not recall a recent positive event that prompts them to recommend the retailer. Thus, we posit that satisfaction with recovery has a greater influence on WOM intent than does overall firm satisfaction.

H13: Satisfaction with recovery will have a greater influence on WOM intent than will overall firm satisfaction ($\beta_{31} > \beta_{32}$).

The relationship between the satisfaction constructs and purchase intent also requires further investigation. Some research suggests that purchase intent is influenced directly by customer satisfaction (LaBarbera & Mazursky, 1983), while others argue that mere satisfaction is not enough to generate purchase intent (e.g., Reichheld, 1996). Again, these results may be partly due to the measurement of satisfaction (i.e., some studies examine overall satisfaction and others examine transactional satisfaction). Consistent with Fournier and Mick (1999), we argue that customers weigh their overall firm satisfaction more heavily than their satisfaction with recovery when forming their purchase intent. That is, a satisfaction assessment that considers all

transactions will be a more powerful predictor of purchase intent than any one single satisfactory transaction. Moreover, given that purchase intent is more akin to customer loyalty than is WOM intent (Oliver, 1996), overall satisfaction should more strongly affect purchase intent than satisfaction with recovery.

H14: Overall firm satisfaction will have a greater influence on purchase intent than will satisfaction with recovery ($\beta_{42} > \beta_{41}$).

Mediation effects

Fig. 1 suggests that the effects of the justice constructs on WOM intent and purchase intent are indirect via their effects on the satisfaction constructs. That is, the effects of justice on WOM intent and purchase intent are mediated by satisfaction. This argument is consistent with the literature that treats satisfaction as the central mediator of postpurchase constructs (Oliver, 1996). Though some research has found limited direct effects of justice on negative word-of-mouth (Blodgett et al., 1997), research has not explored the relationships between justice, satisfaction, and complainant intentions (WOM intent and purchase intent). We hypothesize the following:

H15: The effects of the justice dimensions on WOM intent and purchase intent are mediated by satisfaction with recovery and overall firm satisfaction.

Study One

Sample and procedures

Study One focuses on customers who actively complained about their banking service for the *first time.* We collected customer perceptions from a bank located in the southeastern U.S. at 116 branch locations. Customers completed three questionnaires: one postfailure (Time One), one postrecovery (Time Two), and one about two weeks following the recovery (Time Three).

Time One (Post Service Failure)

1,356 banking customers received a Time One questionnaire after complaining to one of the 116 branches. The survey asked respondents to indicate their opinions regarding their banking failure and respond to basic demographic information. Service agents informed customers that the survey was part of the bank's efforts to improve customer service, and customers were asked to fully participate in the study (i.e., complete all three questionnaires). Once participation was secured, the service agent distributed a Time One questionnaire.

Time Two (Post Service Recovery)

Those who completed the Time One questionnaire were given a Time Two questionnaire following the bank's service recovery effort. This single-page questionnaire asked customers about their interactional and procedural justice perceptions regarding the bank's recovery effort. Given that customers were exposed to most (if not all) of the recovery process (i.e., personal interactions with the bank's employees and recovery policies/procedures) immediately following the service recovery effort, their perceptions of interactional and procedural justice were likely most salient at Time Two. We did not, however, measure distributive justice, satisfaction with recovery, overall firm satisfaction, WOM intent, or purchase intent at this time. Given that customers needed time to actually use their bank account again before accurately assessing whether the bank really fixed the problem, it would have been premature to measure these constructs at Time Two (Feldman & Lynch, 1988; Peterson & Wilson, 1992).

Approximately 70% (957) of the bank's complaints were handled while the customer waited. In these cases, 877 customers completed the Time Two questionnaire on the bank's premises, which represents a 92% on-site response rate. However, 399 complaints could not be handled "on-the-spot," and therefore the bank mailed 399 Time Two questionnaires to customers immediately after addressing the service failure. It should be noted that the bank addressed each of these 399 customers within two days. To help increase the mailing response rate, research assistants reminded the 399 customers (by telephone) to respond. Of the 399 Time Two questionnaires mailed, the bank received 208 usable responses, representing a 52% off-site response rate. Time One and Time Two questionnaires were "matched" by name, resulting in 1,085 usable questionnaire packets—an 80% overall (i.e., on-site and off-site) response rate.

Time Three (Two weeks Post Service Recovery)

The Time Three questionnaire assessed distributive justice, satisfaction with the recovery, overall firm satisfaction, WOM intent, and purchase intent. The purpose of the "Time Three" measurement was to help capture these perceptions as they formed across time. A third questionnaire was mailed to 1,085 customers (i.e., those who completed Time One and Time Two) one week subsequent to the recovery effort with hopes of reaching the customer within two weeks postrecovery. The bank encouraged customers to respond by offering incentives. Of the 1,085 Time Three questionnaires distributed, 692 usable responses were collected and matched. Across the entire data collection period, 692 usable questionnaire packets (containing the Time One, Time Two, and Time Three questionnaires) were collected, resulting in a 51% overall response rate.

The average amount of time customers had been clients of the bank was 31.47 months. (Other demographic data for the sample are available upon request). The most common banking problem reported in our study involved nonsufficient checking funds (31%), followed by incorrect debit or credit records (24%), and service overcharges (16%). To examine nonresponse bias, we compared our respondents to

316 first time complainants who *did not* participate in our study. No significant differences were detected among age, gender, and length of customer relationship between our study respondents and this sample of 316.[1]

Measures

Procedural justice was measured with four items adapted from Folger and Konovsky's (1989) scale. A four-item scale measuring interactional justice was also constructed for this research. Two interactional justice items (items 2 and 3 in Appendix B) were adapted from Folger and Konovsky's (1989) research and two items were culled from prior service recovery literature that used a perceived justice framework (Blodgett et al., 1997). The interactional justice items reflected the degree to which firm service agents put forth effort on the complainant's behalf and treated them with respect, courtesy, fairness, and honesty throughout the recovery process. Distributive justice was measured with four items that accounted for customer inputs (e.g., time, effort, hassle, anxiety, cost) and outcomes. All justice items were measured on seven-point "strongly disagree–strongly agree" scales.

Satisfaction with recovery and overall firm satisfaction were measured using three-item scales adapted from prior research (Bitner, 1990) and anchored by either "strongly disagree" to "strongly agree" or "not at all satisfied" to "very satisfied." A three-item measure of WOM intent was developed that reflected a customer's likelihood of spreading positive WOM about the bank to others. A three-item purchase intent measure was also constructed specifically for a banking service. All of the intent items were measured on seven-point scales with the following anchor points: "strongly disagree" to "strongly agree," "very unlikely" to "very likely," and "improbable" to "probable." In sum, for the seven constructs depicted in Fig. 1, 24 measurement items were used. Appendix B shows all measures.[2]

Results

Measurement model

A 24-item, seven-factor covariance structure measurement model was estimated to assess the fit, discriminant validity, and internal consistency among the model's construct measures (Anderson & Gerbing, 1988). In addition to χ^2, model fit was assessed via the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). Values of 0.90 and above have been recommended for CFI and TLI, and values $\leq$ 0.08 have been recommended for RMSEA (Browne & Cudeck, 1993; Hu & Bentler, 1995). As Table 1 shows, the measurement model fit well. Discriminant validity is supported when the average AVE (i.e., AVE represents average variance extracted estimates that assess the amount of variance captured by a construct's measure relative to measurement error) between each pair of constructs is greater than ϕ^2 (i.e., the squared correlation between two constructs). This criterion is considered the most stringent test of discriminant validity and was met for all possible construct pairs (Fornell & Larcker, 1981). Internal consistency was assessed via composite alpha and AVE. Alpha ranged from 0.89 to 0.93 and all AVE estimates were at or above 0.70, levels indicative of strong internal consistency (Fornell & Larcker, 1981). In sum, the measurement model was strongly supported.

Structural model

A structural model was estimated to assess path and explained variance estimates. The *Hypothesized* structural model yielded a good fit (χ^2 = 760.70, df = 238, CFI = 0.96, TLI = 0.95, and RMSEA = 0.06), and as Table 2 shows, eight of 11 paths were significant. Five of six perceived justice paths were significant (H1, H2, H4, H5, and H6), and the satisfaction with recovery → overall firm satisfaction path (H8) was also significant. While the satisfaction with the recovery → WOM intent path (H9) was significant, the overall firm satisfaction → WOM intent path (H10) was nonsignificant. Alternatively, while the satisfaction with the recovery → purchase intent path (H11) was nonsignificant, the overall firm satisfaction → purchase intent path (H12) was significant. The model explained 36% of the variance in satisfaction with recovery, 41% in overall firm satisfaction, 34% in WOM intent, and 36% in purchase intent. In sum, the *Hypothesized* model depicted in Fig. 1 was mostly supported.

Relative effects of justice

H7 posited that procedural and interactional justice would have a greater influence on overall firm satisfaction than distributive justice ($\gamma_{22,}\ \gamma_{23} > \gamma_{21}$). To test this hypothesis, we used a "nested" models approach. We estimated one model in which γ_{22} and γ_{21} were constrained to be equal and another in which γ_{23} and γ_{21} were constrained to be equal. These two models were then compared to the unconstrained original (i.e., *Hypothesized*) model in which the paths were estimated freely. If the χ^2 statistic of the unconstrained model differs from that of the constrained models (those with the equated paths), then support exists for the hypothesis. H7 was supported as $\gamma_{22} > \gamma_{21}$ (χ^2_{diff} = 54.29, df = 1, $p < .01$) and $\gamma_{23} > \gamma_{21}$ (χ^2_{diff} = 4.25, df = 1, $p < .05$).

Relative effects of satisfaction

H13 posited that satisfaction with recovery would have a greater influence on WOM intent than would overall firm satisfaction ($\beta_{31} > \beta_{32}$), and H14 posited that overall firm satisfaction would have a greater influence on purchase intent than would satisfaction with recovery ($\beta_{42} > \beta_{41}$). Again, a nested models approach was used. For H13 we compared a model in which β_{31} and β_{32} were constrained to be equal with an unconstrained model. H13 was supported as $\beta_{31} > \beta_{32}$ (χ^2_{diff} = 86.44, df = 1, $p < .01$). For H14 we

Table 1
Measurement model results

Fit Statistics	χ^2	df	CFI	TLI	RMSEA
Seven-Factor Model: Bank (Study 1)	677.12*	231	.97	.96	.05
Seven-Factor Model: Home (Study 2)	520.34*	231	.96	.95	.06

Internal Consistency						
Factor	Mean (SD)		Composite α		AVE	
	Bank	*Home*	*Bank*	*Home*	*Bank*	*Home*
Distributive Justice (DJ)	4.16 (1.25)	4.21 (1.20)	.90	.90	.70	.69
Procedural Justice (PJ)	4.21 (1.67)	4.33 (1.34)	.91	.91	.71	.72
Interactional Justice (IJ)	4.39 (1.67)	4.54 (1.68)	.93	.94	.77	.80
Overall Firm Satisfaction (OS)	4.44 (1.41)	4.67 (1.35)	.89	.88	.74	.71
Satisfaction with Recovery (SR)	3.96 (1.51)	4.10 (1.59)	.92	.91	.79	.77
Word-of-Mouth Intent (WOM)	3.79 (1.62)	3.97 (1.69)	.91	.91	.78	.77
Purchase Intent (PI)	4.99 (1.56)	5.16 (1.51)	.92	.90	.79	.76

Note: df = degrees of freedom; CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error of approximation; AVE = average variance extracted.

Measurement Model Correlation Matrix							
	DJ	PJ	IJ	OS	SR	WOM	PI
1. DJ	**1.00**	*.13*	*.34*	*.43*	*.66*	*.43*	*.32*
2. PJ	.11	**1.00**	*.22*	*.49*	*.15*	*.32*	*.35*
3. IJ	.28	−.07	**1.00**	*.48*	*.24*	*.44*	*.40*
4. OS	.25	.55	.24	**1.00**	*.34*	*.35*	*.55*
5. SR	.55	.08	.37	.27	**1.00**	*.58*	*.16*
6. WOM	.28	.12	.25	.14	.58	**1.00**	*.13*
7. PI	.23	.33	.34	.59	.08	−.01	**1.00**

Note: The top half of the diagonal shows ϕ correlations for the home study (Study 2, in *italics*) and the bottom half shows ϕ correlations for the bank study (Study 1).
*$p < .01$

compared a model in which β_{42} and β_{41} were constrained to be equal with an unconstrained model. H14 was supported as $\beta_{42} > \beta_{41}$ ($\chi^2_{\text{diff}} = 138.21$, df = 1, $p < .01$).

Mediation effects

To examine the mediating effects of satisfaction on the justice—WOM intent/purchase intent links (H15), we estimated models consistent with Baron and Kenny (1986) and Holmbeck (1997). Four conditions for mediation were examined. The first condition is satisfied if the independent variables (justice dimensions) affect the mediators (satisfaction constructs). The second condition is satisfied if the mediators affect the dependent variables (WOM intent and purchase intent). Both of these conditions were met by the paths estimated in the *Hypothesized* model of Table 2. That is, H1–H6 and H9–H12 were mostly supported. The third condition is satisfied if the independent variables (justice dimensions) affect the dependent variables (WOM intent and purchase intent). Thus, we estimated a model with only direct paths from justice to WOM intent and purchase intent—a *Direct* model ($\chi^2 = 1537.03$, df = 243, $p < .01$, CFI = 0.90, TLI = 0.89, and RMSEA = 0.08). All direct paths were significant ($p < .05$) with standardized coefficients ranging from 0.09 to 0.35, thus satisfying the third mediating condition.[3]

The fourth mediating condition is satisfied if the direct paths from the independent variables (justice dimensions) to the dependent variables (WOM intent and purchase intent) become nonsignificant (i.e., full mediation) or reduced (partial mediation) when the paths from the independent variables to the mediators (satisfaction constructs) are included in the model (i.e., the *Full* model in Table 2). The fit of the *Full* model ($\chi^2 = 719.61$, df = 232, $p < .01$, CFI = 0.96, TLI = 0.96, and RMSEA = 0.06) was better than the fit of the *Hypothesized* model ($\chi^2_{\text{diff}} = 41.09$, df = 6, $p < .01$), indicating that the satisfaction constructs do not fully mediate *all* the effects of the justice dimensions on WOM intent and purchase intent. Still, a closer inspection of these two models reveals that three of the direct paths (distributive justice → WOM intent, distributive justice → purchase intent, and interactional justice → WOM intent) became nonsignificant, supporting *full* mediation, and the other three direct paths (procedural justice → WOM intent, procedural justice → purchase intent, and interactional justice → purchase intent) were diminished, supporting *partial* mediation. Thus, we removed the three nonsignificant direct paths from the full model and estimated a *Partially Mediated* model. This model ($\chi^2 = 724.98$, df = 235, $p < .01$, CFI = 0.96, TLI = 0.95, and RMSEA = 0.06) was better

Table 2
Structural model results

Fit Statistics *Hypothesized Paths*	CS Path Estimates Bank: Study One			CS Path Estimates Home: Study Two		
	Hypothesized	*Full*	*Partially Mediated*	*Hypothesized*	*Full*	*Partially Mediated*
H1: Distributive justice → satisfaction with recovery (γ_{11})	.47**	.48**	.48**	.65**	.65**	.65**
H2: Distributive justice → overall firm satisfaction (γ_{21})	.09*	.09*	.09*	.26**	.25**	.26**
H3: Procedural justice → satisfaction with recovery (γ_{12})	.06	.05	.05	.07	.06	.06
H4: Procedural justice → overall firm satisfaction (γ_{22})	.55**	.55**	.55**	.40**	.39**	.39**
H5: Interactional justice → satisfaction with recovery (γ_{13})	.24**	.24**	.24**	.02	.00	.00
H6: Interactional justice → overall firm satisfaction (γ_{23})	.25**	.23**	.23**	.32**	.29**	.29**
H8: Satisfaction with recovery → overall firm satisfaction (β_{21})	.07*	.07*	.07*	.03	.04	.04
H9: Satisfaction with recovery → WOM intent (β_{31})	.58**	.59**	.57**	.52**	.51**	.48**
H10: Overall firm satisfaction → WOM intent (β_{32})	−.02	.04	.04	.19**	.06	.06
H11: Satisfaction with recovery → purchase intent (β_{41})	−.07	.07	.07*	−.04	.17**	.17**
H12: Overall firm satisfaction → purchase intent (β_{42})	.62**	.48**	.48**	.58**	.37**	.40**
Distributive justice → WOM intent (γ_{31})	—	−.08	—	—	−.04	—
Distributive justice → purchase intent (γ_{41})	—	.02	—	—	.07	—
Procedural justice → WOM intent (γ_{32})	—	.08*	.07	—	.18**	.18**
Procedural justice → purchase intent (γ_{42})	—	.08*	.08*	—	.10*	.09
Interactional justice → WOM intent (γ_{33})	—	.06	—	—	.27**	.27**
Interactional justice → purchase intent (γ_{43})	—	.21**	.22**	—	.16**	.17**
R^2—Satisfaction with recovery	.36	.36	.36	.44	.44	.44
R^2—Overall firm satisfaction	.41	.40	.40	.48	.45	.45
R^2—WOM intent	.34	.36	.35	.38	.49	.49
R^2—Purchase intent	.36	.41	.41	.33	.41	.40

Note: CS = Completely Standardized. *$p < .05$; **$p < .01$

fitted than our original *Hypothesized* model ($\chi^2_{diff} = 35.72$, df = 3, $p < .01$), but was not better fitted than the *Full* model ($\chi^2_{diff} = 5.37$, df = 3, $p > .10$). These analyses collectively indicate that satisfaction either *fully* or *partially* mediates the relationships between the justice dimensions and WOM intent/purchase intent.

In sum, the model was supported in Study One, as were the hypothesized relative and mediating effects. To more fully test the model we conducted a second study with a sample of new homebuyers. Given the diverse nature of the samples (i.e., homebuyers vs. bank customers) and the variation of the product-service continuum, Study Two assesses the model's generalizability.

Study Two

Sample and procedures

We contacted a new home construction, sales, and servicing firm to survey customers subsequent to a *first-time* product failure and recovery attempt. The homebuilder constructs and sells homes for second-time homebuyers and retirement adult homebuyers in more than 215 communities across 12 states. On average, the homeowners in these communities reside in their homes for approximately 5.6 years before moving. In a given year, the homebuilder constructs and sells more than 7,000 new homes to qualified buyers. All new home customers in this sample received a one-year home warranty, which covered 100% of parts and labor pertaining to any construction defects. When defects or problems occur, the homebuilder sends a qualified technical support representative to the site to resolve the problem. Consistent with Study One, this data collection involves administering a questionnaire at three separate time periods: 1) postfailure; 2) postrecovery; and 3) two weeks after the recovery effort. The three questionnaires were distributed to the customers at their homes.

Time One (Post Service Failure)

Given a failure and complaint, a customer service agent recorded the complaint and dispatched a technical service agent to the customer's home. Once the technical service agent arrived, the agent notified the customer of a study designed to improve customer service efforts. Agents also told customers that the study consisted of three parts and customers were asked to complete all three parts. Once they agreed to fully participate, the service agent distributed a Time One questionnaire that assessed perceptions of the failure and gathered demographic information. A total of 746 Time One surveys were distributed.

Time Two (Post Service Recovery)

Similar to Study One, complainants who completed the Time One questionnaire were given a Time Two questionnaire following the homebuilder's service recovery effort.

The Time Two questionnaire asked customers about their interactional and procedural justice perceptions regarding the homebuilder's recovery effort. Technical service agents distributed the Time Two questionnaire to the homeowner's residence after the service recovery efforts. Time One and Time Two questionnaires were matched by name, resulting in 617 usable questionnaire packets—an 83% "Time Two" response rate.

Time Three (Two weeks Post Service Recovery)

The Time Three questionnaire assessed distributive justice, satisfaction with recovery, overall firm satisfaction, WOM intent, and purchase intent. This third questionnaire was hand-delivered by the homebuilder's service agents to the 617 homeowners (i.e., those who completed both Time One and Time Two questionnaires) approximately two weeks following the recovery effort. Of the 617 Time Three questionnaires distributed, 339 usable responses were collected, resulting in a 45% overall response rate across the entire data collection period.

Across customers, the average length of relationship with the homebuilder was 7.68 months. (All other demographic data for the sample are available upon request.) The homebuilder's policy regarding complaints stated that a technical service representative would visit the home to assess the problem within two days. A 24-hr phone number also existed for emergencies. The most common home complaints were electrical problems (38%), plumbing breakdowns (31%), and craftsmanship complaints (17%). The homebuilder provided us with a database of 100 *nonstudy* complainants to examine nonresponse bias. No significant differences were detected among age, gender, and length of relationship between our respondents and these nonstudy complainants.[4]

Results

Measurement and structural models

We adapted the measures from Study One by slightly changing the wording to appropriately reflect a home setting rather than a bank setting. (See Appendix B.) We first estimated a 24-item, 7-factor measurement model. As Table 1 shows, this model adequately fit the data, and its measures had high internal consistency and passed a stringent test of discriminant validity. The *Hypothesized* structural model also showed acceptable fit (χ^2 = 589.56, df = 238, CFI = 0.95, TLI = 0.94, and RMSEA = 0.07) and, as shown in Table 2, 7 of the 11 hypothesized paths were significant. The model explained 44% of the variance in satisfaction with recovery, 48% in overall firm satisfaction, 38% in WOM intent, and 33% in purchase intent. In sum, the model was mostly supported.

Relative effects of justice

To test H7, we again used a "nested" models approach by estimating a model in which γ_{22} and γ_{21} were constrained to be equal, and a model in which γ_{23} and γ_{21} were constrained to be equal. These two models were then compared to the unconstrained model. H7 was not supported as $\gamma_{22} = \gamma_{21}$ (χ^2_{diff} = 0.98, df = 1, ns) and $\gamma_{23} = \gamma_{21}$ (χ^2_{diff} = 0.13, df = 1, ns).

Relative effects of satisfaction

To test H13, we compared a model in which β_{31} and β_{32} were constrained to be equal with an unconstrained model. H13 was supported as $\beta_{31} > \beta_{32}$ (χ^2_{diff} = 7.88, df = 1, $p <$ .01). To test H14, we similarly compared a model in which β_{42} and β_{41} were constrained to be equal with an unconstrained model. H14 was also supported as $\beta_{42} > \beta_{41}$ (χ^2_{diff} = 48.23, df = 1, $p <$ .01).

Mediation effects

We again estimated alternative models to examine the mediating effects of satisfaction on the relationship between justice and intent (H15). As with Study One, the first two mediating conditions were met through the estimation of the *Hypothesized* model. The third mediation condition was met as all paths from the justice dimensions to WOM intent and purchase intent were significant in a *Direct* model (χ^2 = 941.60, df = 243, $p <$ .01, CFI = 0.90, TLI = 0.88, and RMSEA = 0.09; standardized coefficients ranging from 0.19 to 0.30, $p <$ .05). A *Full* model was estimated to examine the fourth condition for mediation (χ^2 = 534.91, df = 232, $p <$ .01, CFI = 0.95, TLI = 0.94, and RMSEA = 0.06). This model was better fitted than the *Hypothesized* model (χ^2_{diff} = 54.65, df = 6, $p <$ .01), indicating that full mediation of *all* justice constructs was not supported. Still, in the *Full* model, two of the direct paths (distributive justice → WOM intent and distributive justice → purchase intent) became nonsignificant, supporting *full* mediation. Also, the other four direct paths (procedural justice → WOM intent, procedural justice → purchase intent, interactional justice → WOM intent, and interactional justice → purchase intent) were diminished, supporting *partial* mediation. We again removed the two nonsignificant direct paths from the full model and estimated a *Partially Mediated* model (χ^2 = 536.88, df = 234, $p <$ .01). This model was better fitted than our original *Hypothesized* model (χ^2_{diff} = 52.68, df = 4, $p <$ .01, CFI = 0.94, TLI = 0.94, and RMSEA = 0.06), but was not better fitted than the *Full* model (χ^2_{diff} = 1.97, df = 2, $p >$ .10). These analyses indicate that satisfaction either *fully* or *partially* mediates the relationship between the justice dimensions and WOM intent/purchase intent.

Discussion

Summary

With the exceptions of the procedural justice → satisfaction with recovery path in both studies, and the interac-

tional justice → satisfaction with recovery path of Study Two, all justice to satisfaction paths were significant across studies (H1–H6). We also hypothesized that procedural and interactional justice would have stronger effects on overall firm satisfaction than would distributive justice (H7). This hypothesis was supported in Study One, but not in Study Two. This could be due to the difference between a pure service failure (banking) and a more product-oriented failure (home). Home customers valued distributive justice as much as procedural and interactional justice when deriving overall firm satisfaction, while customers experiencing banking failures valued higher levels of procedural and interactional justice when forming overall firm satisfaction perceptions. Consistent with Seiders and Berry (1998), it may be more difficult for customers to evaluate the fairness of outcomes in pure service industries, and therefore they weigh *process* variables more heavily. Still, given that most of the paths from justice to satisfaction were significant across our studies, recovery researchers should attempt to account for the relative influences of *all* justice dimensions in future research.[5]

We hypothesized that satisfaction with recovery would have a positive influence on overall firm satisfaction (H8). This path was significant, but weak, in Study One, and nonsignificant in Study Two. Explanations for the weak effects may lie in the length of a complaint-free relationship between buyer and seller and/or the dominance of the justice dimensions. Bank customers had been with the bank for an average of 31.47 months without complaining. New homeowners had been in their homes without problems for an average of 7.68 months. Thus, customers who have not had failures over a period of time with a given provider may weigh satisfaction with recovery for a first time failure less in deriving their overall firm satisfaction and weigh the time period without a failure more heavily. The other explanation lies in the dominance of justice affecting overall satisfaction. In both studies, the justice dimensions were more strongly (or as strongly) related to overall firm satisfaction than was satisfaction with recovery. These results not only reinforce our position that the perceived justice of one-time service recovery attempts can have a pronounced affect on overall firm satisfaction, but also highlight the need to study both types of satisfaction in the recovery process.

Hypotheses 10–13 showed consistent results across both studies. Satisfaction with recovery had a strong influence on WOM intent (H9), and overall firm satisfaction had a strong influence on purchase intent (H12). These results suggest that customers who are satisfied with service recovery efforts are willing to recommend the failing firm to friends and those who are satisfied overall with the firm are likely to repurchase. However, the relationships between satisfaction with recovery and purchase intent (H11), and overall firm satisfaction and WOM intent (H10) were nonsignificant or weak across both studies. Thus, while satisfactory recoveries may increase the likelihood that customers will recommend a retailer, they may not be enough to increase customers' intent to repurchase. Customers experiencing satisfactory recoveries may still choose not to repurchase, perhaps due to a desire for variety, a lack of need, or a lack of funds. Similarly, though overall satisfaction with a firm affects purchase intent, it may not affect WOM intent. Still, given the importance of WOM intent in creating new customers, and the importance of repurchase intent in retaining existing customers (Hart et al., 1990; Kelley et al., 1993), it seems beneficial for retailers to consider how both satisfaction with the recovery and overall firm satisfaction affect these different types of intent. Consistent with H13 and H14, the data here suggest that satisfaction with recovery is the stronger route to WOM intent, and overall firm satisfaction is the stronger route to purchase intent.

Managerial implications

While our research suggests that retailers should strive to offer customers fair outcomes, procedures, and personal interactions, it also suggests avenues for affecting customer intent. Retailers offering refunds and discounts (i.e., distributive justice) following product or service failures can likely increase satisfaction with recoveries and indirectly affect WOM intent. However, managers should not discount the importance of procedural and interactional justice. Beyond their direct effects on overall satisfaction, procedural and interactional justice also directly affected WOM and purchase intent (in other words, these forms of intent are not totally mediated by satisfaction). Notwithstanding, it appears that distributive justice is a key antecedent of satisfaction with recoveries and WOM intent. As such, in durable good industries where repurchases are less frequent and recommendations are vital, it may prove beneficial for retail managers to offer proportionately more distributive justice.

Our studies also suggest that retailers offering procedural and interactional justice following failures may increase overall firm satisfaction and *indirectly* affect purchase intent. As such, it appears that fair policies and procedures, as well as courteous employee interactions, influence more enduring customer perceptions of overall firm satisfaction and purchase intent. Although retailers should strive to provide distributive justice, they may see the greatest impact on purchase intent by concentrating on procedural and interactional justice. Managers in a transaction-based industry may be able to effectively recover by simply offering fair levels of compensation. However, in ongoing service relationships where long-term loyalty is a cornerstone of success, it may prove beneficial for managers to focus more on procedural and interactional justice in recovery strategies.

We also offer implications for service and durable good failures. Our results suggest that distributive justice is more pronounced in forming satisfaction with recovery perceptions among durable good complainants (home sample) than service complainants (bank sample), and interactional justice is more influential in forming satisfaction with recovery perceptions among service complainants than durable good

complainants. These findings suggest that durable good complainants are relatively more concerned with redress outcomes than with their customer service interactions. As such, durable good managers may benefit from investing proportionately more dollars in either fixing the failure (or offering compensation) than in customer service training. Although the direct effects of procedural and interactional justice on WOM intent and purchase intent indicate that all elements of justice are important, procedural and interactional justice seem particularly pronounced in service industries. Service policies and employee-customer interactions are often seen as an integral part of the service offering (Schneider et al., 1998). When forming perceptions of satisfaction with recovery, service complainants seem to weigh policies and buyer-seller interactions more heavily than durable good complainants weigh such process variables. As such, perhaps service managers would benefit by investing proportionately more dollars in improving employee communication skills than they would by offering expensive compensation to complainants.

Limitations and future research

While our results help broaden our understanding of customer responses to service failures and recoveries, certain limitations are of note. First, several psychologically based individual difference variables, as well as one's propensity to complain, could affect the relationships in our model. For example, the relationships between justice and satisfaction could be affected by a customer's assertiveness or aggressiveness (Richins, 1983). Do such traits influence the likelihood of complaining? Such individual difference variables may also account for those who completed the entire study and those who did not.

Second, certain contextual variables could affect the relationships tested in our model. For instance, the perceived severity of the failure (Smith et al., 1999) and the degree to which the customer holds the firm responsible for the failure (Seiders & Berry, 1988) could affect the strength of the relationships found in our model. Thus, future research that includes these variables may help broaden our understanding of customer responses to complaint handling.

Third, our studies focus only on customers who initiated a complaint. As such, it remains unclear whether customers initiating complaints respond to recovery efforts differently than customers receiving retailer-initiated recoveries. Future research could investigate settings where firms uncover and resolve failures *before* customers complain. Would such proactive practices create positive affect beyond satisfaction, such as customer "delight"?

Fourth, perhaps the time lapse between our data collection periods partially accounted for the relationships between justice and satisfaction, as well as between the two satisfaction constructs. Given that overly short intervals may artificially inflate relations among constructs, and overly long intervals may attenuate the true relation among constructs, it remains worthwhile to better understand how various time intervals between measurements can alter relationships in longitudinal field studies. While the retailers in this research indicated that all redress efforts were completed before the Time Three surveys were administered, it remains unclear how relationships would change if we employed a different timing strategy.

Finally, an article in the *Investor's Business Daily* advocates that managers should involve employees in developing a customer service program (Cooper, 2001). Perhaps retailers can enhance customer service by first selecting employees that share the firm's values and then treating these employees fairly. There is some limited, anecdotal evidence suggesting that when employees share the customer–oriented values of a firm and feel they have been treated fairly, they take "ownership" of customer complaints and go out of their way to resolve them (Bowen, Gilliland & Folger, 1999). It would be useful to examine key antecedents (e.g., cynicism) and consequences (e.g., job satisfaction, job performance, organizational citizenship) of employee justice. It would also be useful to determine if employee justice "spills over" to good customer service, creating a "justice in–justice out" culture where employees "go the extra mile" to resolve customer complaints.

Notes

1. We also obtained responses from 276 noncomplainant bank customers. There were no significant differences on overall firm satisfaction, purchase intent, and WOM intent between these customers and the sample used in Study One
2. Two pretests were undertaken to develop and refine measures for our studies. We first conducted a cross-sectional field study pretest with 114 Internet service customers. We culled items from prior research to capture perceptions of the model's constructs and conducted confirmatory factor analysis to assess their psychometric properties. In the second pretest, hypothetical scenarios were used that depicted failure and recovery situations in the banking industry and new homebuilding. This pretest further refined the scales and yielded internally consistent and valid measures. Results are available upon request.
3. The *Direct* model we estimate includes the satisfaction constructs (mediators) in the model, but without paths from the justice constructs (independent variables) to the satisfaction constructs, and without paths from the satisfaction constructs to WOM intent/purchase intent (dependent variables). Our *Direct* model, then, is a seven-construct model where all possible relations among the constructs are "nested" within the same covariance matrix. In this *Direct* model, the covariation among the satisfaction constructs and the justice constructs, and the covariation

among the satisfaction constructs and WOM intent/purchase intent has not been accounted for, thus decreasing the fit of the model. Another method involves estimating a *Direct* model without the satisfaction constructs (mediators) in the model—a five-construct model with paths from the justice constructs to WOM intent/purchase intent (Holmbeck, 1997). We estimated this five construct *Direct* model. This model fit the data well (Bank: $\chi^2 = 322.39$, df = 126, CFI = 0.98, TLI = 0.97, and RMSEA = 0.05; Home: ($\chi^2 = 265.98$, df = 126, CFI = 0.97, TLI = 0.96, and RMSEA = 0.06), and the path and R^2 estimates for this model were virtually identical to those in the nested *Direct* models we report in the text.

4. We also obtained responses from 128 noncomplainant homeowners. There were no significant differences on overall firm satisfaction, purchase intent, and WOM intent between these customers and the sample used in Study Two.
5. We also assessed the possibility of interactions among the justice constructs, and our results were mixed. That is, some of the interactions among the justice dimensions did affect the satisfaction constructs, while others did not. These analyses are available upon request.

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Appendix A
Representative empirical research on service recovery

Authors	Sample	Design	Notable Findings
McCollough, Berry, and Yadav (2000)	615 airline passengers	Between-subjects experiment with hypothetical scenarios involving airline failures	Distributive and interactional justice affect satisfaction with a particular experience.
Smith, Bolton, and Wagner (1999)	375 undergraduates and 602 hotel customers	Mixed-design experiment with hypothetical scenarios	Distributive, procedural, and interactional justice affect service encounter satisfaction.
Smith and Bolton (1998)	344 undergraduates and 520 hotel customers	Experiment with hypothetical scenarios	Cumulative satisfaction and repatronage intent increase as transactional satisfaction increases.
Tax, Brown, and Chandrashekaran (1998)	257 employees responding as customers	Cross-sectional survey capturing retrospective evaluations of past complaints	Interactional, distributive, and procedural justice affect satisfaction with complaint handling.
Blodgett, Hill, and Tax (1997)	265 consumers recruited from church groups	Quasi-experiment with hypothetical scenarios	Interactional justice can compensate for lower levels of distributive justice.
Blodgett, Granbois, and Walters (1993)	201 university staff employees	Retrospective self-report survey of past dissatisfactory experiences	Overall perceived justice affects negative WOM and repurchase intent.
Kelley, Hoffman, and Davis (1993)	661 retail customers	Classification of Retrospective Critical Incidents	Customers return if they receive effective recoveries.
Goodwin and Ross (1992)	285 undergraduates	Experiment with hypothetical scenarios	Apologies and voice enhance satisfaction and fairness.

Appendix B
Measurement scales

Procedural Justice
1) Despite the hassle caused by the problem, (FIRM NAME) responded fairly and quickly.
2) I feel (FIRM NAME) responded in a timely fashion to the problem.
3) I believe (FIRM NAME) has fair policies and practices to handle problems.
4) With respect to its policies and procedures, (FIRM NAME) handled the problem in a fair manner.
Interactional Justice
1) In dealing with my problem, (FIRM NAME's) personnel treated me in a courteous manner.
2) During their effort to fix my problem, (FIRM NAME's) employee(s) showed a real interest in trying to be fair.
3) (FIRM NAME's) employee(s) got input from me before handling the problem.
4) While attempting to fix my problem, (FIRM NAME's) personnel considered my views.
Distributive Justice
1) Although this event caused me problems, (FIRM NAME's) effort to fix it resulted in a very positive outcome for me.
2) The final outcome I received from (FIRM NAME) was fair, given the time and hassle.
3) Given the inconvenience caused by the problem, the outcome I received from (FIRM NAME) was fair.
4) The service recovery outcome that I received in response to the problem was more than fair.
Overall Firm Satisfaction
1) I am satisfied with my overall experience with (FIRM NAME).
2) As a whole, I am *not* satisfied with (FIRM NAME).*
3) How satisfied are you overall with the quality of (FIRM NAME's) banking service/new home?

(continued on next page)

Appendix B *(continued)*

Satisfaction with Recovery
1) In my opinion, (FIRM NAME) provided a satisfactory resolution to my banking/home problem on this particular occasion.
2) I am *not* satisfied with (FIRM NAME's) handling of this particular problem.*
3) Regarding this particular event (most recent banking problem/most recent home repair), I am satisfied with (FIRM NAME).
Purchase intent (Study One)
1) In the future, I intend to use banking services from (FIRM NAME).
2) If you were in the market for additional banking service, how likely would you be to use those services from (FIRM NAME).
3) In the near future, I *will not* use (FIRM NAME) as my provider.*
Purchase intent (Study Two)
1) If I needed a new home in the future, I would purchase that new home from (FIRM NAME).
2) If you were in the market for an additional home, how likely would you be to purchase it from (FIRM NAME).
3) If I were to purchase a new home in the near future, I *would not* use (FIRM NAME) as my provider.*
WOM Intent (the likelihood of spreading positive word-of-mouth)
1) How likely are you to spread positive word-of-mouth about (FIRM NAME)?
2) I would recommend (FIRM NAME's) banking services/new homes to my friends.
3) If my friends were looking for a banking service/new home, I would tell them to try (FIRM NAME).

Note: Asterisks (*) indicate reverse-coded items.