The Roles of Gratitude and Guilt on Customer Satisfaction in Perceptions of Service Failure and Recovery

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Abstract

When service providers make an effort to recover from service failures, customers may respond more favorably at certain times as compared to other times. This article attempts to explain psychological mechanisms underlying this phenomenon. The results of a scenario experiment show that customer perception of successful recovery strategy can boost customer satisfaction to a higher level when customers believe the service failure outcome is due to self-behavior (i.e., have an internal locus of control) as compared to when they believe that is due to providers’ behavior. In this situation, satisfaction is developed via 1) customers’ feelings of gratitude toward the provider’s recovery efforts and 2) their guilt derived from an internal locus of control. Findings provide evidence that both gratitude and guilt can motivate customers to adopt behaviors that encourage cultivation of good relationships with businesses.

Keywords

Customer Satisfaction, Service Failure and Recovery, Gratitude, Guilt, Causal Attribution

1. Introduction

Customers often switch providers after service failures, which is costly to firms (Folkes, 1984). Research suggests that recruiting new customers is more expensive than keeping current ones satisfied (Hart et al., 1990); therefore, service providers work hard to recover from service failures (Webster & Sundaram, 1998). However, not all recovery attempts are effective in every situation, and some may even compound the service failure problem (Kelley et al., 1993), while
others may restore customer satisfaction (Goodwin & Ross, 1992; Hart et al., 1990; Maxham III, 2001) or even increase it beyond its pre-failure level (Hart et al., 1990). In other words, recovery efforts are not uniformly effective (e.g., Magnini et al., 2007; Mattila, 1999; Maxham III & Netemeyer, 2002). The present paper sheds additional light on the research regarding restoration of customer satisfaction in service failure and recovery.

Customer satisfaction, an important concept in the services arena (Spreng et al., 1996), is related to customer retention (Gustafsson et al., 2005) and loyalty (Bolton & Lemon, 1999; Fornell et al., 1996) as well as being an important predictor of other behaviors that benefit service providers (e.g., positive word-of-mouth) (Boulding et al., 1993). Researchers have investigated how service recovery attempts influence customer satisfaction, using expectation disconfirmation paradigm, justice theory, and commitment-trust theory (Magnini et al., 2007). A few researchers have suggested that customer satisfaction results, in part, from affective processes that are operating during a consumption experience (Hunt, 1977; Yi, 1990; Mano & Oliver, 1993; Westbrook, 1987). Although some research has revealed that consumption emotions may influence postconsumption behaviors and reactions such as word-of-mouth, intention to buy and customer loyalty (Nyer, 1997; Soscia, 2007; Diwit et al., 2008; Palmatier et al., 2009), few studies have explored how consumption emotions affect customer satisfaction in service recovery. We suggest that feelings of gratitude and guilt are underlying psychological mechanisms that at least partially explain why recovery efforts sometimes lead to increased customer satisfaction and other times do not.

Gratitude and guilt are both moral effects (McCullough et al., 2001) and are connected to causal attributions (Weiner, 1985). Gratitude is emotional appreciation for benefits that are intentionally delivered by another person (Soscia, 2007; Palmatier et al., 2009). Guilt is an emotion generated when one perceives personal responsibility for one’s action/inaction that violates her/his internal standard of moral well-being (Baumeister et al., 1994; Mosher, 1968; Jones et al., 2000; Ferguson, 1999). Gratitude and guilt have been shown to motivate people to adopt behaviors that support partnerships and cultivation of close relationships even when such behaviors may be costly to them in the short term (Bartlett & Desteno, 2006). Therefore, marketing scholars have begun to investigate the roles of gratitude and guilt in building customer-firm relationships (Soscia, 2007; Palmatier et al., 2009).

Prior research has used attribution theory to investigate feelings of gratitude and guilt separately in post-consumption situations (Soscia, 2007). When customers perceive that high-quality services are provided by companies, they feel grateful and therefore express high repurchase intent. When customers perceive that service failure outcomes are caused by themselves, they feel guilty, which inhibits their tendency to spread negative word-of-mouth (Soscia, 2007). However, researchers have yet to investigate whether gratitude and guilt can coexist and if they do, theorize about how they might influence satisfaction in a service failure and recovery process. On the basis of a reciprocity perspective and attri-
bution theory, the present paper proposes that gratitude and guilt can coexist simultaneously in the context that customers perceive successful recovery efforts and that they believe the service failure was caused by their own fault, which offers providers opportunities to harvest positive customer evaluations and therefore increases customer retention.

In the remainder of this article, we first develop the theoretical framework and hypotheses that depict the influence of the service provider’s recovery strategy and customer locus of control on customers’ satisfaction via mediations of gratitude and guilt. Then, we test these hypotheses with a scenario experiment. All empirical results are presented and discussed. In the end, we conclude the study with discussions of theoretical contribution, managerial implications, limitations of the current research and suggestions for future research.

2. Theoretical Framework and Hypotheses

2.1. The Influence of Service Recovery Strategy and Customer Locus of Control on Customer Satisfaction

Customers experience service failures for many reasons, often because of the inherent variability of service quality (Berry, 1995) but at other times because customers have an inadequate understanding of service requirements. An attempt to respond to or rectify service failures is called service recovery (Gronroos, 1988; Maxham III, 2001). The most commonly used recovery strategies are apology, assistance, and/or compensation (Bitner et al., 1990; Hart et al., 1990; Hoffman et al., 1995; Kelley et al., 1993). Typically, customers expect recovery strategies to successfully rectify any losses caused by service failures (Gronroos, 1988). Nevertheless, customers’ and service providers’ interpretations of whether a recovery strategy has successfully resolved a service failure may differ.

Bitner et al. (1990) suggest that the service encounter should be described from the customer’s point of view. We agree with this suggestion that customers interpret their own special needs or requests of a service recovery and make judgments of whether their special needs or requests are being accommodated. Customer satisfaction has been defined as an individual customer’s subjective evaluation of her/his purchase and consumption experience (Westbrook, 1980). In a service recovery context, customer satisfaction refers to an evaluation of the badness/goodness of a service after a recovery effort (Oh, 2003). We argue that only those service recovery strategies that are interpreted and perceived by the customer as successful attempts will increase customer satisfaction.

In addition, a customer’s ultimate response to service failure and recovery is not based solely on the failure or recovery outcome. The causal attributions made by the customer with respect to the failure also influence customers’ reactions (Swanson & Kelley, 2001; Weiner, 2000; Maxham III & Netemeyer, 2002). Customers encountering service failures typically attempt to determine who is responsible for the failure, whether the responsible party could have prevented the failure, and whether the cause of the failure occurs consistently. These attri-
butions have been shown to influence customers’ post-failure judgments (Magnini et al., 2007) and are thought to impact affective and behavioral responses (Folkes, 1988).

Attribution theory suggests that customer’s causal attributions and responses depend almost entirely on their perceptions of control (Magnini et al., 2007). When customers believe they can influence a certain outcome (i.e., have an internal locus of control), their negative reaction towards the firm will be weakened (Wagner et al., 2009). Hence, if customers perceive that the provider has little control over the failure situation, they tend to be forgiving of the provider (Folkes, 1984). In other words, customers’ evaluation of a service firm may depend on their locus of control, i.e., customers’ perceptions of who was the source of failure.

Customers’ causal attribution of a failure to their own actions/inactions may inhibit their negative reactions toward the provider (Wan et al., 2011). Thus, one may argue that recovery may not be necessary in cases of failures that are due to customers’ fault. We suggest, however, that such failures provide opportunities for service providers to build improved relationships with customers. If the provider attempts to recover from a failure caused by the customer, the customer would perceive additional benefits and therefore feel satisfied. For example, the customer might have failed to indicate that she did not want cheese on an entrée, and a restaurant might have served her the dish with cheese included; such a failure could be attributed to the customer. However, if the restaurant replaced the dish at no cost, the customer might be highly satisfied.

We contend that when a recovery effort is perceived as a successful one and the failure is attributed to the customer self, customers will view the recovery effort as an additional benefit and therefore feel more satisfied than when the failure is attributed to the provider.

**H1: Customer perception of a successful recovery strategy increases satisfaction; this effect is enhanced when customers perceive an internal locus of control.**

### 2.2. The Influence of Service Recovery Strategy and Customer Locus of Control on Gratitude

Gratitude is a force or an emotional foundation for maintenance of reciprocal obligations between people (Palmatier et al., 2009). It has been described as having two dimensions: affective and behavioral. The affective component has been defined as “a sense of thankfulness and joy in response to receiving a gift, whether the gift be a tangible benefit from a specific other or a moment of peaceful bliss evoked by natural beauty” (Emmons, 2004). The actions stemming from feelings of gratitude reflect the behavioral component (Palmatier et al., 2009).

Research suggests that gratitude toward another is elicited if and only if the act of the benefactor was under volitional control and was intended to benefit the recipient (Weiner, 1985) and is maximized when the benefit 1) is delivered
only to benefit the recipient (not to enhance the reputation of the benefactor) (Tesser et al., 1968), 2) is delivered deliberately (not accidentally) (Greenberg & Frisch, 1972), and 3) is voluntary (not compulsory) (Goranson & Berkowitz, 1966). For example, Palmatier et al. (2009) suggest that a customer may experience feelings of gratitude when s/he recognizes that benevolence from the company is intentional and its intention is good.

When customers perceive that recovery strategies successfully correct the failure and fulfill their consumption needs, they will perceive benevolence from the provider and therefore feel grateful. Nevertheless, the benefits of the service recovery are delivered after a customer has suffered a service failure. Customers’ perceptions of whether the benevolence was intentional and whether the intention was good could be complicated by her/his causal attribution of the failure. When a customer perceives that an extra effort has been made by the company to improve the customer-firm relationship, and that the benefits s/he receives is what s/he needs, s/he will be engaged in attributions of the motives of the company (Palmatier et al., 2009). When customers perceive an internal locus of control, they tend to believe that successful recovery attempts cost service providers an extra effort with a good intention, which will make customers feel grateful. In contrast, when customers perceive that the service provider had control over the failure, they tend to believe that the service provider has an obligation to correct the situation and deliver the benefits; the benefits will not be considered an extra effort and will not be likely to result in strong feelings of gratitude. Therefore, when customers perceive successful recovery efforts, their feelings of gratitude will be intensified if they perceive an internal locus of control.

H2: Customer perception of a successful recovery strategy increases feelings of gratitude; this effect is enhanced when customers perceive an internal locus of control.

2.3. The Influence of Service Recovery Strategy and Customer Locus of Control on Guilt

Guilt is elicited when one perceives that s/he was able to control her/his own behavior that caused the failure but did not do so (Weiner, 1985). Prior research supports controllability-guilt association and suggests that guilt-related affects (guilt, regret, and/or remorse) are associated with failure due to lack of effort (Brown & Weiner, 1984; Covington & Omelich, 1984; Jagacinski & Nicholls, 1984). When one feels personally responsible for a negative action, guilt is likely to be elicited (Izard, 1977). More precisely, individuals may blame themselves when they have the cognitive capacity to understand that they had the control over their own action/inaction that caused the failure (Hoffman, 1976). Hence, when customers perceive an internal locus of control after experiencing a service failure, they may feel guilty.

Customers’ feelings of guilt about a service failure outcome will likely be enhanced by a successful recovery effort. When customers perceive additional benefits from a successful recovery attempt for a failure that was due to their
own fault, they are likely to perceive an extra cost to the service providers, which would add to their feelings of guilt (as compared with when they perceive no control).

H3: Customer perception of an internal locus of control increases feelings of guilt; this effect is enhanced when customers perceive a successful recovery strategy.

2.4. The Influence of Gratitude and Guilt on Customer Satisfaction

As consumption emotions, gratitude and guilt may influence customer satisfaction because of their valence of positivity or negativity (Hunt, 1977; Yi, 1990; Mano & Oliver, 1993; Westbrook, 1987). As moral emotions, gratitude and guilt may influence customer satisfaction through adaptive actions (Bartlett & DeSteno, 2006); they motivate cooperation and prosocial actions and help detect and remediate welfare imbalance between relationship partners (Bartlett & DeSteno, 2006) and both can arise from similar conditions. However, the meanings of the adaptive actions derived from gratitude and guilt are different.

Gratitude, one of the subordinate-level emotions, is a representative member of the positive emotion category (Ruth, Brunel, & Ottes, 2002). Research in psychology suggests that gratitude may be considered a prosocial affect (McCullough et al., 2001) or an “empathic emotion” (Lazarus & Lazarus, 1994). Gratitude often causes prosocial behavior in response to beneficial actions of other people (McCullough et al., 2001) and is thought to initiate a psychological pressure or a sense of obligation to repay the favor (Palmatier et al., 2009; Becker, 1986). Research has found that feelings of gratitude motivate consumers to reward firms for their extra efforts (Morales, 2005) and charitable giving (Dawson, 1988), with rewards taking the form of positive word-of-mouth (Sosica, 2007) and increased purchase (Palmatier et al., 2009). Gratitude appears to be a key force in the development and maintenance of cooperative relational bonds between the firm and consumers (Palmatier et al., 2009).

Since gratitude is associated with positive effect, an individual who feels grateful may perceive pleasantness and enjoyableness in the situation (Ruth et al., 2002). Satisfaction judgments can be influenced by emotions (Westbrook, 1987), and increased gratitude may therefore lead to higher satisfaction because of more favorable and positive affect. On the other hand, grateful individuals may attempt to take actions in response to the beneficial actions of others, or to reward benefactors (McCullough et al., 2001). The actions derived from feelings of gratitude, such as expressing one’s gratitude and giving in return, contribute to the establishment of the chain of reciprocity, so that the relationship will be established (Bartlett & DeSteno, 2006; Emmons & McCullough, 2003) or enhanced over time (Emmons & Shelton, 2002; Harpham, 2004; Komter, 2004). Therefore, grateful customers may have increased positive evaluation of the service provider and be more inclined to express their gratitude for successful recovery attempts.
On the basis of the forgoing discussion, successful recovery efforts may elicit feelings of gratitude and therefore increase customer satisfaction; feelings of gratitude may at least partially explain why recovery efforts may impact customer satisfaction. When customers perceive that the service failure is caused by their own behaviors, their feelings of gratitude will be intensified and therefore higher satisfaction as compared to when they perceive no control.

H4: Customer perception of a successful recovery strategy increases satisfaction via feelings of gratitude (positively); this effect is enhanced when customers perceive an internal locus of control.

Guilt is another subordinate-level emotion, but it is negatively valenced (Ruth et al., 2002). Despite its negative valence, guilt serves a positive or adaptive function in helping individuals achieve their goals and meet their interests through signaling events as contrary to moral expectations (Campos & Barrett, 1984; Mauro, Sato, & Tucker, 1992). Individuals respond to guilt in a relatively constructive way because they tend to blame themselves and take responsibility for their actions (Tangney, 1995). For example, individuals who feel guilty may actively seek a behavior or an action to correct or control the consequences of her/his prior action/inaction, such as an apology or reparation (Ferguson & Stegge, 1995; Lindsay-Hartz, 1984). This is because guilt is associated with feelings of remorse, regret and empathic concern (Dahl, Honea, & Manchanda, 2003).

Only a few marketing studies have given attention to guilt (Dahl et al., 2003; Hagtvedt & Vanessa, 2016). In the marketing literature, guilt appears to be correlated to impulsive buying (Rook, 1987), overspending (Pirisi, 1995), and compulsive consumption (O’Guinn & Faber, 1989) and is an important factor in the effectiveness of sales promotions (Strahilevitz & Myers, 1998), rewards programs (Kivetz & Simonson, 2002), and direct marketing (Sugarman, 1999). Research also reveals that guilt can inhibit complaint behaviors and the sharing of negative word-of-mouth (Soscia, 2007).

In summary, customers’ guilt appears to be a positive motivator for purchasing and for establishing a good customer-firm relationship, which will lead customers to take actions to correct or control consequences of their prior behavior (Ferguson & Stegge, 1995; Lindsay-Hartz, 1984). For example, the customer may attempt to amend the standard of evaluation of the service and rationalize it accordingly. The customer will not make a satisfaction judgment solely on the basis of the initial expected outcome of the service. If s/he feels guilty, s/he may intentionally reduce the expectation to a reasonable level for the service provider in the situation. Hence, customers’ satisfaction evaluation of the service tends to be more positive when their feelings of guilt cause them to adjust their expectation of the service.

We suggest that guilt mediates the influence of customers’ causal attributions on their satisfaction judgment. When customers perceive an internal locus of control, they feel guilty because of their assumed lack of effort to prevent failures; therefore, they express higher satisfaction because their expectation of a
service has been reduced by their feelings of guilt. When they perceive a successful recovery attempt, they will perceive an extra cost to the service providers, and their feelings of guilt will be intensified, which may inhibit negative evaluations towards the provider.

**H5:** Customer perception of an internal locus of control increases satisfaction via feelings of guilt (positively); this effect is enhanced when customers perceive a successful recovery strategy.

### 3. Method

These five hypotheses were tested by a scenario experiment with a $2 \times 2$ between-subject factorial design. We first conducted a pretest to test the realism of the scenarios and evaluate the manipulations of service recovery strategy (unsuccessful vs. successful recovery) and customer locus of control (customer control vs. provider control). Then, the main study using the tested scenarios was conducted. The interaction effects of service recovery strategy and customer locus of control on satisfaction ($H_1$), gratitude ($H_2$) and guilt ($H_3$) were analyzed using MANOVA. Finally, we adopted the bootstrapping test suggested by Preacher and Hayes (2004) to verify the mediation effects of gratitude ($H_4$) and guilt ($H_5$).

#### 3.1. Pretest

Fifty-five undergraduate students (female = 24, male = 31) from a Midwestern university in the U.S. participated in the pretest, which featured a $2 \times 2$ between-subject factorial design. Sudman (1976) and Churchill Jr. (1995) suggest that a sample of 20 to 50 elements for each subgroup is necessary for a comparative analysis, while Kardon and Ledolter (2020) suggest that using smaller sample sizes is permissible for a pretest. Given this is a pretest, we argue that this small sample size is acceptable. Subjects received class credit for their participation in the study. Scenarios were used in an experiment in which the two factors were manipulated (see Appendix 1). The carpet cleaning service used as the context for the study was deemed relevant to our subject pool of undergraduate students.

**Procedure.** Participants were randomly assigned to a service failure scenario and a recovery scenario and were asked to imagine themselves as the customer in the scenario while reading it. After the service failure scenario had been read (Scenario I-1 or Scenario I-2), a questionnaire of the participant’s attribution of locus of control was administered. Subjects then read the recovery scenario (Scenario II-1 or Scenario II-2), after which they were queried.

**Measures.** The manipulation of customer locus of control (customer control = 0, provider control = 1) was checked by using a three-item, five-point bi-polar scale adapted from Wagner, Hennig-Thurau and Rudolph (2009). Participants were then asked whether they felt the carpet being dirty in the scenarios “occurred because of something ABC company did/occurred because of something
I (the customer) did (reversed), “was caused by me (the customer)/was caused by ABC company”, or “was totally because of me (the customer)/was totally because of ABC company.” Alpha for the measure was acceptable (α = 0.89).

In addition, a single-item, five-point scale was used to check the manipulation of a service recovery strategy (unsuccessful recovery = 0, successful recovery = 1). The participants were asked if they agreed that the situation in the apartment was resolved successfully.

**Manipulation checks.** Manipulation checks revealed that participants in a successful recovery condition rated the situation as resolved more successfully than participants in an unsuccessful recovery condition did (M(successful recovery) = 4.93 vs. M(unsuccessful recovery) = 2.39; F (1, 54) = 29.86, p < 0.01). Similarly, participants correctly identified source of service failure depending on the condition to which they were assigned (M(customer control) = 2.05 vs. M(provider control) = 3.41; F (1, 54) = 18.16, p < 0.01).

Confounding check results revealed that the manipulation of service recovery strategy had no main effect on the measures of customer locus of control, and the manipulation of customer locus of control had no main effect on the measure of service recovery strategy. Moreover, no interaction effect of the manipulations on both measures of customer locus of control and service recovery strategy emerged. These results suggest that no confounding appears to be present (Perdue & Summers, 1986). Therefore, it seems likely that the main study could detect whether customer locus of control and service recovery strategy have their hypothesized directional effects using the manipulations in this study.

**Realism.** To investigate the realism of the scenarios, a “realism check” item is included in the questionnaire (Darley & Lim, 1993). Participants were asked to rate their agreement with the statement “The above mentioned situation at the hotel could be true in life” (a single-item, seven-point scale). A one-sample t-test showed that participants’ mean realism score was significantly higher than the scale’s midpoint of 4.00 (M = 6.19, SD = 0.83, t (54) = 19.44, p < 0.01). Hence, data supported the conclusion that the realism of the scenarios was acceptable.

### 3.2 Main Study

Using the same scenarios as used in the pretest, the main study was conducted to test the theoretical framework proposed earlier. A 2 × 2 between-subject factorial design lab experiment was conducted with 149 undergraduate students (female = 77, male = 72) from a Midwestern university in the US. There are approximately 37 to 38 subjects in each subgroup of this factorial design experiment, which is an adequate sample size for a comparative analysis according to Sudman (1976) and Churchill Jr. (1995). Subjects received class credit for their participation in the study.

**Procedure.** Participants were randomly assigned to read the service failure scenario followed by the recovery scenario. Participants were asked to imagine themselves as the customer in the scenario to which they were assigned. After participants had read both the service failure scenario and the recovery scenario,
a questionnaire was administered.

**Measures.** Gratitude was measured using a five-point, three-item scale adapted from Palmatier et al. (2009). The items were, “If this happened to me, I would be grateful to the company for their response;” “If this happened to me, I would be thankful to the company for responding the way they did;” “If this happened to me, I would appreciate what the company did in this situation.”

Guilt was measured using a five-point, six-item scale adapted from Jones, Schratter and Kugler (2000). The items were: “I did something that I believe that was wrong in the situation, which makes me feel guilty;” “I did something that I believe that was wrong in the situation, which makes me feel regret;” “I cannot help but think that I did something bad in the situation;” “At that moment, I do not feel particularly guilty about anything that I have done in the situation (reversed);” “I did something that I believe that was wrong in the situation, which makes me think that I would like to change it;” “I would like to go back and rectify the wrong that I have done in the situation.”

Satisfaction was measured using a five-point, three-item scale adapted from Maxham III and Netemeyer (2002). The items were: “The company provided a satisfactory resolution;” “I am not satisfied with the company’s handling of the situation (reversed);” “I am satisfied with the response provided by the company.”

Responses to the items of each measure, on a scale from 1 (strongly disagree) to 5 (strongly agree), were highly correlated (gratitude, $\alpha = 0.98$; guilt, $\alpha = 0.94$; satisfaction, $\alpha = 0.93$) and were averaged to provide three single indexes of participants’ gratitude, guilt, and satisfaction.

**4. Results**

**Customer satisfaction.** MANOVA results indicate main effects of service recovery ($M_{\text{successful recovery}} = 4.50$ vs. $M_{\text{unsuccessful recovery}} = 2.70$; $F (1, 145) = 234.80, p < 0.01$) and customer locus of control ($M_{\text{customer control}} = 4.17$ vs. $M_{\text{provider control}} = 2.94$; $F (1, 145) = 83.16, p < 0.01$) on customer satisfaction. Consistent with prior findings, successful recovery resulted in greater satisfaction, and perceived customer control versus provider control inhibited negative evaluations. These main effects were qualified by a significant interaction between service recovery and customer locus of control ($F (1, 145) = 36.6, p < 0.01$). Since the hypothesis called for a specific pattern of results, a contrast test was performed. Results are shown in Figure 1, which depicts that satisfaction was highest when a successful recovery accompanied a failure attributed to the customer as compared to any other condition ($M_{\text{customer control & successful recovery}} = 4.63$ vs. $M_{\text{customer control & unsuccessful recovery}} = 3.53$, $t = 6.08, p < 0.01$; $M_{\text{provider control & successful recovery}} = 4.26$, $t = 2.56, p < 0.05$, and $M_{\text{provider control & unsuccessful recovery}} = 1.74$, $t = 23.72, p < 0.01$). These findings support H1.

**Gratitude.** MANOVA results reveal a main effect on gratitude. Higher feelings of gratitude were reported with a successful recovery versus an unsuccessful
one (\(M_{\text{successful recovery}} = 4.55, M_{\text{unsuccessful recovery}} = 2.59; F = 261.9, p < 0.01\)). This main effect was qualified by a significant interaction effect between service recovery and customer locus of control (\(F (1, 145) = 42.2, p < 0.01\)). Since the hypothesis called for a specific pattern of results, a contrast test was performed. Results shown in Figure 2 do not support the prediction that successful recovery strategy will result in an increased level of gratitude when the customer perceives an internal locus of control. Contrasts revealed no significant difference between successful recovery from a failure caused by the customer and that from a failure caused by the service provider (\(M_{\text{customer control & successful recovery}} = 4.64\) vs. \(M_{\text{provider control & successful recovery}} = 4.39; t = 1.46, p > 0.05\)). Thus, data only support the main effect of service recovery strategy on gratitude; H2 is partially supported.

**Guilt.** Only a main effect of customer locus of control (customer control vs. provider control) on feelings of guilt was significant, according to MANOVA results (\(M_{\text{customer control}} = 3.87\) vs. \(M_{\text{provider control}} = 1.87; F = 175.0, p < 0.01\)). No interaction effect was found between service recovery and customer locus of control (\(F (1, 145) = 0.05, p > 0.05\)). Results are shown in Figure 3, which depicts that participants reported more guilt when the failure was attributed to the customer rather than to the provider, while this influence of customer locus of control on guilt was not enhanced by the service provider’s successful recovery strategy. Thus, data only support the main effect of customer locus of control on guilt; H3 is partially supported.

**Mediation effects of gratitude and guilt.** Using the bootstrapping test (Preacher & Hayes, 2004), the mediation analysis confirmed that gratitude mediated the influences of service recovery (successful recovery vs. unsuccessful recovery) on customer satisfaction, partially supporting H4. Results also indicate that guilt mediated the influence of customer locus of control (customer control vs. provider control) on customer satisfaction, partially supporting H5.
First, the mediators (gratitude and guilt) were regressed on customer locus of control, service recovery and their interaction (Table 1). Results show that all main effects and the interaction effects on gratitude are significant ($\beta = -1.85$, $t = -10.43$, $p < 0.01$; $\beta = 1.19$, $t = 7.52$, $p < 0.01$; $\beta = 1.60$, $t = 6.50$, $p < 0.01$). In addition, customer locus of control significantly influences guilt ($\beta = -0.730$, $p < 0.01$), while the effect of service recovery and the interaction effect of customer locus of control and service recovery were absent.

Next, customer satisfaction was regressed on customer locus of control and service recovery (Table 1). Customer locus of control, service recovery and their interaction significantly influence customer satisfaction ($\beta = -1.79$, $t = -10.53$, $p < 0.01$; $\beta = 1.10$, $t = 7.19$, $p < 0.01$; $\beta = 1.43$, $t = 6.05$, $p < 0.01$).
Finally, customer locus of control, service recovery, their interaction term and the mediators were simultaneously used as predictors of customer satisfaction. Results shown in Table 1 indicate that all the main effects of customer locus of control and service recovery and the interaction effect remain significant, but the magnitude of these effects decreased (β = −0.51, t = −2.86, p < 0.01; β = 0.48, t = 3.38, p < 0.01; β = 0.57, t = 2.75, p < 0.01). Moreover, the direct influences of gratitude and of guilt on customer satisfaction are all significant (β = 0.54, t = 8.15, p < 0.01; β = 0.16, t = 2.64, p < 0.01).

The regression analysis only supports that gratitude mediates the main effect of service recovery on satisfaction and that guilt mediates the main effect of customer locus of control on satisfaction. Although the data suggest that gratitude could mediate the interaction effect of locus of control and service recovery on satisfaction, contrast analysis did not indicate the expected difference between a successful recovery from a failure caused by the customer and that from a failure caused by the service provider. Hence, it is not meaningful to further explore whether gratitude is a significant mediator of this interaction effect. In addition, data do not indicate a significant interaction effect of customer locus of control and service recovery on guilt, which suggests that guilt is not a mediator of this interaction effect on satisfaction.

An additional bootstrapping test suggested by Preacher and Hays (2004) was conducted to confirm the possible mediation effects suggested by the regression analysis. Results based on 1000 resamples reveal a significant indirect effect of service recovery, mediated by gratitude, with 95% confident interval (0.35, 0.97), when we controlled for customer locus of control and customer locus of control × service recovery. The results also reveal a significant indirect effect of customer locus of control on customer satisfaction, mediated by guilt, with 95% confident interval (−0.53, −0.09), when we controlled for service recovery and customer locus of control × service recovery. These results support the arguments that gratitude mediates the main effect of service recovery on customer satisfaction.

| Table 1. The regression analysis results of the mediation effect test. |
|---------------------------------------------------------------|
| **Antecedents** | **Mediators** | **Consequents** (not controlling mediators) | **Consequents** (controlling mediators) |
|                | Gratitude | Guilt |                | Gratitude | Guilt |                | Gratitude | Guilt |                | Gratitude | Guilt |                |
| Customer Locus of Control | −1.85** | 0.18 | −1.79** | 0.20 | −1.79** | 0.17 | −0.51** | 0.18 |
| Service Recovery | 1.19** | 0.16 | −0.21 | 0.18 | 1.10** | 0.15 | 0.48** | 0.14 |
| Customer Locus of Control × Service Recovery | 1.60** | 0.25 | −0.06 | 0.28 | 1.43** | 0.24 | 0.57* | 0.21 |
| Gratitude | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Guilt | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 0.16 |

Note: β: unstandardized coefficients; **: p < 0.01; *: 0.01 < p < 0.05.
and that guilt mediates the main effect of customer locus of control on customer satisfaction. Thus, H4 and H5 are partially supported.

5. Discussion and Implications

The present paper attempted to shed light on research that investigates the roles of consumption emotions on customer satisfaction in service failure and recovery process. We focused on two emotions, gratitude and guilt, that will seemingly work to motivate individuals to adopt behaviors that support close relationships (Bartlett & Desteno, 2006). Moreover, the present study also hopes to add to the service recovery literature by incorporating a process explanation of post-recovery satisfaction that involves feelings of gratitude and guilt, which underlie consumers’ reactions.

We found evidence of two situational antecedents that could restore customer satisfaction in service failure and recovery. One is customers’ perception of recovery service, which may successfully or unsuccessfully deal with service failures. The other is customer locus of control, i.e., customer perception of who was responsible for the failure. Our results show that successful recovery efforts and customer perception of internal locus of control increase customer satisfaction and that this increase is driven in part by the consumer-based emotions of gratitude and guilt. These findings echo results of previous research, in which customers’ reactions were found to be based not only on a successful recovery but also on their causal attributions (Magnini et al., 2007) and the finding that customers’ perception of themselves as the source of failure inhibited unfavorable evaluations (Wan et al., 2011).

The major contribution of this research is in the joint investigation of the roles played by gratitude and guilt in affecting satisfaction outcomes. While past research has studied these two emotions individually, we argue that feelings of gratitude and guilt can coexist in service situations related to failures and recovery from failures, and thus should be studied simultaneously. This idea is consistent with research in consumer psychology that finds that mixed emotions can coexist peacefully (Williams & Aaker, 2002). The novelty of our findings is that gratitude and guilt both affect post-recovery satisfaction, but in different paths.

The finding that successful recovery efforts elicit feelings of gratitude is consistent with research reporting that gratitude occurs when service providers produce service outcomes that are congruent with customers’ consumption goals (Soscia, 2007). It is also consistent with the work of Palmatier et al. (2009) who reported that customers feel grateful for perceived benefits from investments in relationships. That is, when customers concluded that benefits are intentionally delivered by service providers (e.g., successful recovery efforts), they feel grateful. Our research extends these findings to a more complex situation involving service failure and recovery.

Our findings also show that when customers attribute the failure to themselves, feelings of guilt are elicited, especially when they perceive that they had control and could have prevented the failure from happening. This finding par-
allels Soscia’s (2007) finding that guilt accompanies customer-induced failures; customers feel guilty because of their actions or inactions that caused the failure. When they perceive that they were able to control the situations but did not, they tend to admit that they have done something wrong and consequently feel guilty. However, the expectation that guilt will be enhanced by a successful recovery that accompanies an internal locus of control was not supported. In other words, service providers’ recovery efforts will not make customers feel guilty in such situations no matter how much extra the effort is. This is puzzling because customers seem to expect a recovery even when they were at fault. The reason for this discrepancy is not clear, and future research is needed to explain it.

Another important contribution of the present study is the finding that although both gratitude and guilt mediate the effects of failure and recovery on customer satisfaction, it appears that only gratitude mediates the influence of successful recovery efforts on customer satisfaction, whereas only guilt mediates the influence of the customer’s causal attribution on customer satisfaction.

In reality, when service providers find that customers are the source of failure, they commonly debate whether to make an effort to recover from such failures. Our results appear to support a notion that a perception of an internal locus of control may inhibit customers’ negative reactions to the failure to begin with. However, an investment in service encounters to recover from failures that were due to customers’ fault is still necessary and beneficial. Without effective recovery strategy, customers’ evaluations will be negative even though the service failure was caused by their own fault. By putting an extra effort into dealing with such failures, successful recovery strategy will be rewarded with high evaluations because of customers’ feelings of gratitude. Hence, coexistence of gratitude and guilt may raise customer satisfaction to a level that is even higher than ones received when attempting to correct failures that were due to providers’ fault, which may enhance customer loyalty and reduce the likelihood of losing existing customers.

6. Limitations and Future Research

The study has limitations that suggest that caution must be used in generalizing the results. First, feelings of gratitude and guilt were measured after our participants read the designed experimental scenarios. Such emotional reactions may not be as strong as those felt in real-world situations. Future research may investigate customer reactions in real-world situations in order to increase the generalizability of the findings. Second, customers’ individual differences, such as their self-referencing abilities, may influence whether they will attribute the failure to themselves. For example, a failure to recognize that they are at fault may lead customers to erroneously blame the service provider, generating less guilt in response to a failure. Another possible individual differences variable is awareness of the locus of causality. People might behave very differently when they are aware/not aware of the fact that they have caused the failure. Future research
may explore such individual factors in order to better understand customers' psychological processes.

Moreover, we examined only the influence of gratitude and guilt on customer satisfaction. Future research may explore behavioral outcomes. For example, in the marketing literature, little has been reported about customers’ behavior of helping employees during service recovery. Gratitude might be important in driving such helping behaviors.

The psychology literature suggests that gratitude is associated with positive affect and guilt with negative affect (Ruth et al., 2002). Therefore, it may be difficult for these emotions to coexist in a consumer, which could cause emotional dissonance (Hochschild, 1983). Consumers are likely to behave in ways that minimize the conflict that these emotions bring (Williams & Aaker, 2002). Such emotional ambivalence elicits internal conflicts and evaluative tension (van Harreveld et al., 2009). This tension triggers customers to engage in more biased information processing, which allows them to shift their evaluation to a more univalent (in case of a service failure, more negative) state. In this case, the simultaneous occurrence of gratitude and guilt might create ambivalence, which in turn could lower satisfaction (Olsen, Wilcox, & Olsson, 2005). Hence, future research may also investigate emotional conflicts related to gratitude and guilt after service recovery attempts.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix 1. Experimental Scenarios

Scenario I-1: The service failure is due to the customer’s behavior
You are moving into a new apartment in two days and hire the ABC cleaning service to clean the carpets in your current apartment. While ABC was cleaning your carpet, you decided to leave your apartment. When you returned to your apartment, you opened the door and walked in wearing your shoes as usual. Suddenly, you realized the carpet was still wet, and your shoes had left several muddy footprints on the carpet. You felt very awful that you soiled your just-cleaned carpet.

Scenario I-2: The service failure is due to the provider’s behavior
You are moving into a new apartment in two days and hire the ABC cleaning service to clean the carpets in your current apartment. While ABC was cleaning your carpet, you decided to leave your apartment. When you returned to your apartment, you opened the door and walked in. As you enter you discover that there are still several muddy footprints on the carpet that the cleaners did not do a good job of removing. You felt very awful that the cleaning company did not do a good job.

Scenario II-1: The provider successfully recovered from the service failure
After debating for some time on what to do about the dirty carpet, you finally decided to call the ABC cleaning service, and complained that the carpet was not cleaned well and still had muddy footprints. ABC apologized and agreed to fix the problem without additional charges. The service workers came back a half an hour later and cleaned the muddy footprint marks. The carpet is now very clean as you expected when you hired ABC.

Scenario II-2: The provider did not successfully recover from the service failure
After debating for some time on what to do about the dirty carpet, you finally decide to call the ABC cleaning service, and complain that the carpet was not cleaned well and still had muddy footprints. ABC apologized and agreed to fix the problem, but only if you pay an additional charge. Moreover, they informed you that they would not be able to come back to clean the carpet for at least a week. The carpet is now not clean as you expected when you hired ABC.