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Is High Recovery More Effective than Expected Recovery in Addressing Service Failure? – A Moral Judgment Perspective

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Abstract

In the context of two distinctive consumer categories and two different product settings this research examines the effects of recovery on recovery performance as a function of consumer moral judgment of service failure. The findings of two studies reveal that consumers' response to recovery anchors on the magnitude of recovery but these responses are adjusted according to consumers' moral judgment of service failure. Specifically, consumers react more positively toward expected recovery than high recovery and these effects are pronounced when consumers are low in moral judgment of service failure. In contrast, when consumers are high in moral judgment of service failure, although high recovery (compared with expected recovery) lessens the likelihood of negative word of mouth this effect does not transfer to repurchase tendency. Product involvement does not provide alternative explanations for the findings. The findings of this research have important and meaningful implications for business providers.

Keywords: Service failure; moral judgment; recovery magnitude; expected recovery; high recovery; recovery performance

Is High Recovery More Effective than Expected Recovery in Addressing Service Failure? – A Moral Judgment Perspective

1. Introduction

Service failure has detrimental effects on both businesses and consumers. When service failure occurs, businesses usually adopt service recovery, the process by which a business attempts to rectify undesirable situations (Kelley & Davis, 1994). Service recovery can minimize the negative effects (Strizhakova, Tsarenko, & Ruth, 2012) and might even bring a valuable return in the form of increased customer satisfaction and retention (Smith & Karwan, 2010).

An important element of service recovery is compensation, hence this research addresses the key question of how much should a business compensate consumers for a service failure in order to maximize recovery performance? Existing evidence is inconsistent. Some studies report that high recovery is more effective in amending consumer dissatisfaction and emotion resulting from service failure (Bradley & Sparks, 2012; Choi & Choi, 2014; Maxham, 2001). Others find that overcompensating can be counterproductive, with Boshoff (2012) reporting that overcompensation produces lower satisfaction than a more moderate recovery and Noone (2012) revealing that low and high recovery cash offers induce similar perceptions of fairness. These contradictory and inconclusive findings suggest that more nuanced influences are at play. Thus, research revealing boundary conditions of recovery magnitude effects is worthwhile not only for theory development but also to provide practical insights as inconsistent findings are unhelpful in attempting to predict consumer response to recovery.

Therefore, the purpose of this research is to enhance understanding and aid theory

development relating to the impact of recovery magnitude (in the form of compensation) on consumer satisfaction and resultant behavioral actions. One particularly novel aspect of the research is the incorporation of consumers' moral judgment of service failure as an important moderator of the impact of recovery magnitude on downstream outcomes. The extant literature investigating the effectiveness of recovery has focused mainly on the comparison standard, such as magnitude of recovery (Bradley & Sparks, 2012; Hocutt, Bowers, & Donovan, 2006; Smith, Bolton, & Wagner, 1999), severity of service failure (Kim & Ulgado, 2012), and/or context of service failure (Harris et al., 2006). What remains largely unknown is the influence of the relative moral standpoint of the consumer on the effects of the comparison dimension and, in particular, the interaction between consumers' moral judgment of service failure and recovery magnitude. This knowledge gap is surprising as not all consumers make the same moral judgment of service failure (Lee & Park, 2010) and individuals' subsequent reasoning and actions are governed by moral standards (Haidt, Koller, & Dias, 1993; Waldmann & Dieterich, 2007).

The research reported here makes several key contributions. First, incorporating an innovative angle, a consumer's moral standpoint in particular, this paper extends existing understanding of service recovery by focusing on the effects of moral judgment of service failure on recovery performance. The lens of moral judgment is important because consumers naturally make a moral judgment concerning poor service (Reeder, Kumar, & Hesson-McInnis, 2002) and are more likely to act on their moral judgments than strong but non-moral attitudes (Skitka, Bauman, & Sargis, 2005; Skitka, Bauman, & Lytle, 2009).

Secondly, to investigate recovery performance, this research uses multiple behavioral outcome variables, including consumer satisfaction with recovery, negative

word-of-mouth (WOM), and post-recovery repurchase intention, thus providing an unusually comprehensive assessment of the impact of service recovery. The research hypotheses are tested using two different products and samples from two distinct target populations, lending rigor to the research design and enhancing generalizability of the research findings.

Thirdly, the research conceptualizes service recovery with reference to expectations rather than the absolute magnitude of the recovery. The predominant approach in existing studies is to focus on the absolute amount of service recovery in the form of compensation offered and to arbitrarily categorize the amount as high, medium, or low, etc. The current research adopts an approach theoretically grounded in the seminal expectancy-disconfirmation theory (Oliver, 1980) and uses expected recovery as a reference point from which to judge the level of service recovery employed.

2. Theoretical background and hypotheses development

2.1 Expectancy-disconfirmation theory, expected recovery, and high recovery

The current research uses expectations-confirmation to classify the magnitude of recovery. Expectancy-disconfirmation theory suggests that satisfaction is a function of a combination of expectations and disconfirmation (Oliver, 1980; Susarla, Barua, & Whinston, 2003) which, in turn, determines behavior (Oliver, 1980). This research extends the logic of expectancy-disconfirmation theory to explain and predict consumers' reactions to recovery. Following the seminal work by Oliver (1980), the core constructs incorporated here are consumers' *expected* recovery and *high* recovery. As with Zeithaml, Berry and Parasuraman (1993), this research defines expected recovery as the anticipated compensation that a business is likely to offer to rectify a service failure, which is perceived as adequate under certain circumstances. High

recovery refers to a range of recovery offers that exceed consumers' anticipation, which results in positive disconfirmation.

Expectancy-disconfirmation theory is the most widely applied framework in explaining satisfaction and behavior and has been used in many fields, including information systems (Venkatesh & Goyal, 2010), consumer behavior (Phillips & Baumgartner, 2002), and service quality (Kettinger & Lee, 2005). Numerous studies to-date suggest that individuals are satisfied when outcomes meet expectations (simple confirmation) or exceed initial expectations (positive disconfirmation) and dissatisfied in the case of negative disconfirmation (Churchill & Surprenant, 1982). For the current research, recovery that meets consumers' anticipation will likely result in simple confirmation and, consequently, satisfied consumers; whereas high recovery exceeding expectation will lead to positive disconfirmation and, consequently, better satisfied or delighted consumers, and more positive behavior. Thus, compared with expected recovery:

H1a: High recovery will lead to increased satisfaction.

H1b: High recovery will reduce negative WOM tendency.

H1c: High recovery will enhance repurchase intention.

2.2 Moral judgments and associated strategies

Moral judgments are evaluations resulting from psychological questions about the morality of minor or major infractions (Turiel, 1983), which tend to be triggered by actions entailing some harm that affects not only the actor but others as well. Moral judgment is guided by internalized beliefs and values (Hume, 1888) and differs from justice, a concept referring to a principle that one should receive no less/more than one deserves (Lerner, 2003). Moral judgment also differs from attributions, which are attempts to explain why an event has occurred (Heider, 1958).

When making moral judgments, individuals may focus on outcomes (consequentialism), acting according to moral rules (deontology; Kagan, 1998) or evaluation of the actions, control, and motivations of others (an attribution approach; Heider, 1958; Bartels et al., 2015). Empirical findings reveal that individuals tend to discount moral judgment and associated blame when an agent does not intend to cause the infraction (Young, Nichols, & Saxe, 2010) and does not act with control over their behavior (Shaver, 1985). Given each moral judgment strategy takes a different philosophical approach to explain what is right or wrong (Reidenbach, & Robin, 1988) different judgment strategies may result in divergent moral judgments. For instance, with regard to the horse meat scandal in Europe (Reilly, 2013), some consumers might believe that using horsemeat as a substitute for beef in beef burgers is not a major concern as horsemeat is edible and causes no physical harm to people (consequentialism), thus, morally acceptable; some may believe blending horsemeat with beef is cheating (deontology), thus, utterly wrong; whereas others may judge it morally wrong only if they are able to identify a responsible agent and believe that the behavior is intentional and controllable (attribution).

2.3 Moral judgments and service recovery

Moral judgment is a common feature of everyday life and provides strong guidance to individuals' evaluation and actions (Bartels et al., 2015). Research findings suggest that moral judgments are better predictors of behavior than strong but non-moral attitudes (Skitka, Bauman, & Sargis, 2005; Skitka, Bauman, & Lytle, 2009). Based on these empirical findings, it is rational to propose that consumers' reactions to recovery are likely influenced by their moral judgment of service failure. Prior research has, however, largely overlooked the impact of moral judgment and has instead focused on a number of factors, which affect recovery performance. These factors include: social comparison

(Bonifield & Cole, 2008), service failure type and recovery characteristics (Surachartkumtonkun, Patterson, & McColl-Kennedy, 2013; Gelbrich, Gätke, & Grégoire, 2015; Maxham & Netemeyer, 2002), affective commitment (Evanschitzky, Brock, & Blut, 2011), and culture and causal explanation (Schoefer & Diamantopoulos, 2009). Notably, some attention has also been given to justice/fairness of recovery (Siu, Zhang, & Yau, 2013; Tax, Brown, & Chandrashekar, 1998) and perceived betrayal (Grégoire & Fisher, 2008).

To the best of our knowledge, few studies acknowledge differences in consumers' moral standpoint toward service failure (He & Harris, 2014), an omission the research reported here seeks to rectify. Understanding the effects of consumers' moral judgment of service failure, the original cause of recovery effort, on recovery performance is crucially important because moral judgments are most likely to determine consumers' subsequent reasoning and actions (Bartels et al., 2015). The premise of this research, thus, is that consumers' moral standpoint influences evaluations of recovery justice/fairness and recovery performance (the latter being the focus of the current research).

How will moral judgment of service failure affect consumers' responses to expected versus high recovery? Little research exists in this particular domain but broader literature, such as moral judgment and decision-making literature and well-established ethics literature, sheds some light. This current research depicts an interaction effect of moral judgment of service failure and recovery magnitude on recovery performance. As established above, when consumers believe that a service failure either entails little harm (consequentialism) or is an unintended accident and beyond control (lack of attribution), consumers will not perceive service failure to be morally unacceptable. These consumers are less intent on blaming the business in question and, therefore, are

likely to hold the business concerned accountable for the compensation rather than to punish the business for the failure. A recovery meeting their expectations may well be sufficient to satisfy these consumers. High (compared with expected) recovery may not necessarily make these consumers happier, as there might be multiple moral principles in play. For example, consumers may appreciate that overcompensation is an unexpected gain and they are, consequently, delighted; in the meantime these consumers are very likely to be conscious that this unexpected gain, although a delight to them, is a cost to the business. According to equity theory (Adams, 1965) this unexpected disproportional gain may cause feelings of psychological unease, as punishing the business for unintended outcomes is not what these consumers wish to do which, as a result, would counterbalance the delight resulting from the positive disconfirmation. Therefore, high recovery may not improve the satisfaction of consumers who believe service failure is morally acceptable.

More satisfied consumers normally exhibit a higher repurchase tendency (Oliver, 1980; de Matos, Vieira, & Veiga, 2012). For consumers who perceive service failure as moral, given that satisfaction does not vary between expected and high recovery, this research predicts that high recovery does not significantly increase consumer repurchase intention. Concerning negative WOM this research proposes that high recovery will reduce the likelihood of negative WOM. The rationale for this proposition is that an unexpected gain, at a cost to a business, makes consumers feel obliged not to cause any further damage to the business. Reducing negative WOM is the least the consumers can do for the business to repay for their unexpected gain.

In contrast, consumers who focus on violation of rules are more likely to be suspicious about the business' intentions, and are thus inclined to believe that infractions are less morally acceptable (deontology). According to the moral judgment

literature when individuals view issues in terms of moral wrong, people exhibit moral intolerance (Haidt, Rosenberg, & Hom, 2003; Skitka, Bauman, & Sargis, 2005) and there is little room for compromise (Skitka, Bauman, & Sargis, 2005). Moral issues cannot be traded off with monetary offers (Turiel, 2002). When posed with monetary offers people, instead, adhere to deontological constraints affirming their moral values (Deghani et al., 2010). Thus, when service failure is perceived to be less morally acceptable, high recovery might not result in more favorable outcomes. High (compared with expected) recovery may also increase consumers' suspicion and drive consumers to believe that the business is only trying to "sweeten" a deal aiming to minimize its own damage. In other words, high recovery may lead consumers to believe "you are sorry only because you got caught". With such reasoning in mind, when offered high recovery, consumers are very likely to exhibit lower satisfaction, lessened repurchase intention, and increased negative WOM than when offered the expected recovery, specifically:

H2: Recovery performance is a function of the interaction between recovery offer and consumers' moral judgment of service failure. Specifically (compared with expected recovery):

H2a: When consumers perceive service failure to be moral, high recovery will not significantly increase satisfaction.

H2b: When consumers perceive service failure to be less moral, high recovery will significantly reduce satisfaction.

H2c: When consumers perceive service failure to be moral, high recovery will significantly lessen the likelihood of negative WOM.

H2d: When consumers perceive service failure to be less moral, high recovery will significantly increase the negative WOM tendency.

H2e: When consumers perceive service failure to be moral, high recovery will not significantly increase the repurchase tendency.

H2f: When consumers perceive service failure to be less moral, high recovery will significantly reduce the repurchase tendency.

The overall conceptual model for the research is illustrated in Figure 1.

Figure 1

3. Study 1: Expected recovery, high recovery, satisfaction, and negative WOM

The purpose of study 1 is to examine the recovery performance as a combined function of moral judgment of service failure and recovery magnitude. Specifically, this study investigates how consumers of distinct moral judgments respond to expected versus high recovery. To operate recovery performance two outcome variables were measured, namely satisfaction with the recovery and negative WOM.

3.1 Method

3.1.1 Pretest

A pretest was conducted involving 10 experts (scholars specializing in moral/ethical issues) and 20 online consumers. The pretest served five purposes: 1) To identify the most common service failures experienced by online consumers of the two selected consumer groups (ordinary consumers and students); 2) to choose the type of service failure that this research aims to investigate; 3) to select the focal products for two main studies; 4) to determine the recovery offers to be tested; and 5) to detect problems.

The service literature recognizes two types of service failure: process and outcome (Bitner, Booms, & Tetreault, 1990; Keaveney, 1995). Process failure refers to the manner in which the service is delivered, whereas outcome failure involves what consumers receive from the service, which can either be the physical goods or

experiences (Parasuraman, Zeithaml, & Berry, 1985). The pretest revealed three main service failures, which are all physical goods related (outcome failure): 1) Minor defects; 2) products turn out to be counterfeits; and 3) promised free gift but failed to deliver. This research investigates a product with minor defects for three main reasons: 1) Counterfeiting is illegal, therefore, consumers are likely to hold similar moral judgment, which is unsuitable for this research; 2) the effect of undelivered free gifts is not as prominent a concern as a defective product; and 3) among many other service failures minor defects is a main concern to online consumers (Frable, 2013). Two products selected for the main studies are badminton rackets (study 1) and vacuum cups (study 2) given that they are familiar to participants and are more likely to be purchased online.

In line with prior studies, the pretest results indicate that 10% of the product price (Bradley & Sparks, 2012) is expected and 20% of the product price (Li, Fock, & Mattila, 2012) is considered to exceed expectations for the chosen products. The pretest reveals, however, in addition to financial compensation consumers would normally also expect psychological recovery (apology). Thus, 10% of the product price plus an apology represents an expected recovery and 20% of the product price plus an apology represents a high recovery in this research.

3.1.2 Participants, design and procedure

Participants comprised 136 online consumers recruited through a local market research company in northeast China. Following Malhotra's (1999) recommendations, 19 cases (five because of inconsistent responses, six due to little variance of responses, and eight for respondents who correctly guessed the purpose of the study) were excluded from the data analysis after data cleaning and screening, which left 117 usable cases (58 males, average age = 30.06, SD = 6.33).

This study adopted a between-subject design. The treatment for this study was the

recovery (expected versus high). Data collection took place in a classroom setting. Participants entered the classroom in groups of six and were randomly assigned to one of the two conditions; they then completed all tasks independently. Upon arrival, participants were given a questionnaire and instructed that information was needed on consumer online shopping behavior. To lessen the possibility of impression management participants were told that there were no right or wrong answers and that their own view was the most valuable, as suggested by Greenwald (1976). Participants first read a service failure scenario as follows:

You purchased a badminton racket online. A few days later the product arrived. Unfortunately, you found that it was a defective product – there was a scratch on the product, although this defect did not affect product performance.

To avoid possible effects of service recovery, moral judgment of service failure was measured immediately after participants' exposure to the service failure scenario. Consumers' true moral judgment of service failure was thus captured rather than their evaluation of recovery justice or fairness. Participants were then presented with either an expected or high recovery, which reads:

You contacted the seller and reported the flaw in this product. The seller apologized for the inconvenience caused. In addition, they offered 10% (or 20% in the high recovery condition) discount, which was refunded to your payment card.

After reading the recovery offer participants rated their satisfaction with the recovery offer and negative WOM and then provided demographic information, indicated their best guess of the purpose of this study, and evaluated the recovery (manipulation check). All participants completed the study within five minutes.

3.1.3 Measures

Moral judgment was measured using a four-item scale ($\alpha = .79$) adapted (ethical aspect)

from Thong and Yap (1998). Satisfaction ($\alpha = .92$) and negative WOM ($\alpha = .88$) were assessed using two three-item scales adopted from Siu, Zhang and Yau (2013) and Blodgett, Hill and Tax (1997). All main constructs (Appendix) were measured on a seven-point Likert scale anchored by 1 to 7 (1 = strongly disagree, 7 = strongly agree). Recovery was measured on a five-point scale (1 = very low, 3 = expected, 5 = very high). The item measuring recovery was: “The recovery offer from the seller is...” Items were reverse coded when necessary. Given that all scales were highly reliable multiple-items were aggregated and averaged to form overall scores of moral judgment, satisfaction, and negative WOM.

3.2 Results

3.2.1 Satisfaction with recovery

Manipulation check results suggest that recovery manipulation is successful ($M_{\text{expected}} = 2.96$, $M_{\text{high}} = 4.04$, $t = 20.82$, $p = .000$). Given that this research predicts a significant interaction between the recovery magnitude and moral judgment of service failure (a continuous variable) the conventional hierarchical regression procedures outlined by Aiken and West (1991) could have been used to analyze the data. Instead, this research used the PROCESS tool (Hayes, 2013) to analyze data for its prominent advantages (center all predictors automatically, compute the interaction term, and provide simple slope analysis results) over the hierarchical regression tools (see Field (2012) for detailed discussion).

Analysis reveals a significant (negative) main effect of recovery magnitude ($\beta = -.65$, 95% CI [-1.15, -.15], $t = -2.58$, $p = .011$), rejecting H1a. Consistent with Boshoff (2012) the negative relationship suggests that high (compared with expected) recovery reduces satisfaction. There is a significant main effect of moral judgment of service failure ($\beta = .69$, 95% CI [.42, .95], $t = 5.14$, $p = .000$). More importantly, there is a significant

interaction effect ($\beta = .65$, 95% CI [.12, 1.17], $t = 2.44$, $p = .016$), indicating that moral judgment moderates the relationship between recovery magnitude and satisfaction with recovery (Table 1), which supports H2.

Table 1

To further clarify the two-way interaction, spotlight analyses were conducted at one standard deviation above and below the mean moral judgment score. The results (Figure 2) reveal that when consumers perceive service failure to be moral, there is a non-significant relationship between recovery magnitude and satisfaction ($\beta = -.04$, 95% CI [-.55, .47], $t = -.16$, $p = .875$). High (compared with expected) recovery, thus, does not improve satisfaction, supporting H2a. When consumers perceive service failure to be less moral, there is a significant (negative) relationship between recovery magnitude and satisfaction ($\beta = -1.26$, 95% CI [-2.12, -.41], $t = -2.92$, $p = .004$), which suggests that high (compared with expected) recovery decreases satisfaction, supporting H2b.

Figure 2

3.2.2 Negative WOM

Analysis reveals no main effect of recovery magnitude ($\beta = .38$, 95% CI [-.01, .78], $t = 1.92$, $p = .058$), which indicates that negative WOM does not vary between high and expected recoveries, rejecting H1b. There is a significant main effect of moral judgment of service failure ($\beta = -.80$, 95% CI [-1.03, -.57], $t = -6.90$, $p = .000$). As predicted there is a significant interaction effect ($\beta = -1.01$, 95% CI [-1.45, -.57], $t = -4.54$, $p = .000$), indicating that moral judgment moderates the relationship between the recovery magnitude and negative WOM (Table 2), supporting H2.

Table 2

Spotlight analyses results (Figure 3) reveal that when consumers perceive service failure to be moral, there is a significant (negative) relationship between recovery

magnitude and negative WOM ($\beta = -.57$, 95% CI [-1.12, -.02], $t = -2.07$, $p = .041$). High (compared with expected) recovery thus lessens negative WOM, supporting H2c. When consumers perceive service failure to be less moral, there is a significant (positive) relationship between recovery magnitude and negative WOM ($\beta = 1.34$, 95% CI [.74, 1.93], $t = 4.44$, $p = .000$), which suggests that high (compared with expected) recovery increases negative WOM, supporting H2d.

Figure 3

3.3 Study 1 Discussion

Study 1 reveals that consumers' moral judgment of service failure moderates the role of recovery magnitude on behavioral response. As predicted when service failure is considered as less moral, a high (compared with an expected) recovery reduces satisfaction and increases negative WOM. These findings suggest that for consumers who perceive service failure to be less moral, overcompensation is counterproductive. In contrast, when service failure is perceived to be moral, a high recovery, although not improving satisfaction, lessens negative WOM.

One intriguing and important research question, thus, is whether high recovery will result in repurchase intention, a more down-stream behavioral variable which is a better predictor of consumption. Answers to this question will provide more effective guidance to service failure management. One could also argue that the findings of study 1 may stem from differences in participants' perceived product involvement rather than from recovery magnitude or moral judgment of service failure, as involvement influences individuals' cognitive and behavioral activities (Petty, Cacioppo, & Schumann, 1983). If, by chance, the product concerned is high involvement to consumers who perceive service failure to be less moral (but low involvement to consumers who perceive service failure to be moral), then product involvement could

provide an alternative explanation for the findings.

4. Study 2: Expected recovery, high recovery, satisfaction, and intention

The objective of study 2 is threefold: 1) It converges on the correlational findings of study 1 by investigating the effects of recovery and moral judgment of service failure using an alternative product and a different consumer category; 2) it examines the interaction effects of recovery magnitude and moral judgment on satisfaction as well as a more downstream behavioral variable, repurchase intention, respectively; and 3) it tests whether product involvement provides an alternative explanation.

4.1 Method

4.1.1 Participants, design, and procedure

Eighty-seven undergraduates of a large university in northeast China participated in study 2 in exchange for a monetary incentive of RMB20 each. Seven cases (two incomplete questionnaires, three participants who correctly guessed the purpose of this study, two with little variance of responses) were excluded from data analysis, which gave us 80 useable questionnaires. Two outliers were replaced with mean values following Field's (2012) recommendations. Of these 80 respondents 27 were male and 53 were female and with an age range of 18 to 24, inclusive.

The design, procedure and measures were identical to study 1, except for four differences: 1) Undergraduate students were participants rather than ordinary consumers, 2) vacuum cups were used instead of badminton rackets, 3) repurchase intention was measured, and 4) product involvement was captured.

As with study 1 the expected and high recovery conditions were induced. All participants finished the study within five minutes.

4.1.2 Measures

Moral judgment ($\alpha = .73$) and satisfaction ($\alpha = .86$) were measured using the same scales as in study 1. Repurchase intention ($\alpha = .76$) was assessed using a three-item scale (Blodgett, Hill, & Tax, 1997). Product involvement ($\alpha = .83$, item 2 was excluded due to low item-to-total correlation) was measured using a 10-item scale (Zaichkowsky, 1986). All constructs (Appendix) were assessed using a seven-point Likert scale anchored by 1 to 7 (1 = strongly disagree, 7 = strongly agree). Items were reverse coded when necessary. Given that all measures were highly reliable, multiple-items were aggregated and averaged to form the overall scores.

4.2 Results

4.2.1 Satisfaction with recovery

The PROCESS tool was used to analyze the data. Analysis reveals no main effect of recovery magnitude ($\beta = .09$, 95% CI [-.33, .51], $t = .42$, $p = .678$), rejecting H1a. There is no main effect of moral judgment ($\beta = .06$, 95% CI [-.12, .25], $t = .70$, $p = .484$). As predicted, there is a significant interaction effect ($\beta = 1.21$, 95% CI [.85, 1.56], $t = 6.81$, $p = .000$), indicating that the relationship between recovery magnitude and satisfaction with recovery is moderated by moral judgment (Table 3), which supports H2. Product involvement has no significant effect on recovery performance ($\beta = -.08$, 95% CI [-.35, .19], $t = -.59$, $p = .558$), suggesting that product involvement does not provide an alternative explanation.

Table 3

Spotlight analyses results (Figure 4) reveal that when consumers perceive service failure to be moral, there is a significant (positive) relationship between recovery magnitude and satisfaction ($\beta = 1.25$, 95% CI [.63, 1.87], $t = 3.99$, $p = .000$), which suggests that high (compared with expected) recovery improves satisfaction, rejecting H2a. Thus, high recovery does make student subjects who consider service failure to

be moral better satisfied. This result, although inconsistent to study 1, is interesting and provides empirical evidence for the possibility that unexpected financial gain (high recovery) may outplay an individual's moral concern (an extra cost to the business) when the individual's moral judgment of a situation (service failure in this study) is relatively high. As with the study 1 results, when consumers perceive service failure to be less moral, there is a significant (negative) relationship between recovery magnitude and satisfaction ($\beta = -1.07$, 95% CI [-1.62, -.62], $t = -4.76$, $p = .000$), which suggests that high recovery will decrease satisfaction, supporting H2b.

Figure 4

4.2.2 Repurchase intention

Analysis reveals no main effect of recovery magnitude ($\beta = -.26$, 95% CI [-.59, .08], $t = -1.52$, $p = .133$), rejecting H1c. There is a significant main effect of moral judgment ($\beta = .48$, 95% CI [.33, .64], $t = 6.18$, $p = .000$). There is a significant interaction effect ($\beta = .34$, 95% CI [.05, .64], $t = 2.35$, $p = .021$), indicating that the relationship between recovery magnitude and repurchase intention is moderated by moral judgment (Table 4), supporting H2. Product involvement has no significant effect on recovery performance ($\beta = .07$, 95% CI [-.15, .29], $t = .62$, $p = .539$).

Table 4

Spotlight analyses results (Figure 5) review that when consumers perceive service failure to be moral, there is a non-significant relationship between recovery magnitude and repurchase intention ($\beta = .08$, 95% CI [-.54, .56], 95% CI [-.41, .57], $t = .31$, $p = .759$), thus, high (compared with expected) recovery does not improve repurchase tendency, supporting H2e. When consumers consider service failure to be less moral, there is a significant (negative) relationship between recovery magnitude and repurchase intention ($\beta = -.59$, 95% CI [-.96, -.21], $t = -3.12$, $p = .003$), which suggests

that high (compared with expected) recovery will decrease repurchase tendency, supporting H2f.

Figure 5

4.3 Study 2 Discussion

Using a different product and respondents of a distinct consumer category, study 2 provides consistent evidence for the moderation effects of moral judgment of service failure on the relationship between recovery magnitude and recovery performance. Study 2 further advances the service recovery and moral judgment literature in three main aspects: 1) It provides additional empirical evidence that overcompensation is counterproductive when consumers perceive a service failure to be less moral, as manifested in reduced repurchase tendency, a more downstream variable, 2) using the results from student samples (Krupnikov & Levine, 2014) to demonstrate when moral judgment of service failure is more positive, overcompensation may result in improved satisfaction; however, these effects do not seem convertible to repurchase action, and 3) it rules out the possibility that product involvement might provide alternative explanations to the findings.

5. Theoretical and marketing implications

The most intriguing findings of this research are (1) recovery performance is a function of interaction between the recovery magnitude and consumers' moral judgment of service failure, (2) when consumers perceive service failure to be less moral, overcompensation (higher than expected recovery) is counterproductive, (3) when consumers perceive service failure to be moral, overcompensation reduces the likelihood of negative WOM, and (4) when consumers perceive service failure to be moral, high recovery may result in higher satisfaction of consumers who are sensitive

to monetary gains which, however, does not tend to convert to behavioral intention.

This study makes significant contributions to the service recovery literature and the moral judgment literature. The extant literature investigating whether recovery magnitude determines recovery performance reveals contradictory findings. While a large number of studies report a positive relationship between the recovery magnitude and performance (Hocutt, Bowers, & Donovan, 2006; Maxham, 2001), a number of studies suggest the opposite (Noone, 2012) and provide empirical evidence that overcompensation is counterproductive (Boshoff, 2012; Garrett, 1999). This research is the first to take account of the effects of the moral aspects of service failure on recovery performance, which offers a significant conceptual contribution. The findings define boundary conditions for the relationship between recovery magnitude and recovery performance, thus cultivating a more exciting theory of the dynamic effects of service recovery and opening up an entire spectrum of investigation concerning moral aspects of service failure, recovery strategy, and subsequent performance.

According to the moral judgment literature judging whether something is morally right or wrong is guided by internalized beliefs and values (Hume, 1888); individuals, thus, do not trade off moral issues with monetary offers (Turiel, 2002). This research is one of the few which provides empirical evidence of prominent effects of consumers' moral standpoints on recovery performance, therefore advancing the moral judgment literature (Deghani et al., 2010). The current research also extends existing literature by identifying specific circumstances under which consumer satisfaction with recovery does not convert to repurchase intention.

The findings of this research also have important managerial implications. To reap the maximum recovery performance, practitioners should handle recovery according to consumers' moral judgment of service failure, as moral standing determines actions

(Turiel, 1983) including, as this research has discovered, consumers' reaction to the recovery. When dealing with consumers who believe that service failure is less morally acceptable, businesses should aim to meet rather than overly exceed consumer expectations as, according to the findings, a recovery meeting a consumer's expectations (compared with recovery offer exceeding expectations) will result in better outcomes, higher satisfaction, lessened negative WOM, and increased repurchase intention. In other words, monetary offers exceeding expectation, although more costly, generate less favorable responses than expected compensation, which means financial compensation higher than expectation is a waste of business resources. How practitioners should deal with consumers who perceive service failure to be morally acceptable, for example consumers who trust that the failure is an unintended accident, depends on what practitioners want to achieve by offering recovery. If practitioners' primary objective is to retain consumers, then recovery meeting expectations will work just as well as recovery exceeding expectation. However, if practitioners aim to minimize the negative effect of WOM, recovery exceeding expectations will be more effective (compared with recovery meeting expectations), which is particularly important for online retailing. The findings of this research highlight, for the first time in service recovery literature, that the key to success in implementing a recovery strategy is for practitioners to fully appreciate expected recovery as well as consumers' moral standpoint of service failure, which may vary across consumers of different categories and distinct culture backgrounds.

The expectancy literature suggests a positive relationship between satisfaction and behavioral intention (de Matos et al., 2012). One would automatically assume that the higher the satisfaction with recovery the higher the re-patronage tendency will be. Smith, Bolton and Wagner (1999) is one of the few studies which finds no support for

the notion that re-patronage intentions become increasingly favorable at higher levels of satisfaction with the recovery. In the same vein, the findings of this current research imply that satisfaction with recovery may not always be a good predictor of recovery performance. Should practitioners want to monitor recovery performance, measuring more downstream variables such as negative WOM and repurchase intention might provide more reliable results than satisfaction with recovery. This is particularly true if target consumers believe that service failure is morally acceptable. When target consumers believe that service failure is less morally acceptable, satisfaction with recovery is a good predictor of recovery performance.

6. Limitations and future research

While this research establishes the effects of consumers' moral judgment of service failure on recovery-specific satisfaction (satisfaction with recovery) and behavioral tendency, this research does not investigate how an individual's moral standpoint might influence transaction-specific satisfaction (Oliver, 1981), cumulative satisfaction (Oliva, Oliver, & MacMillan, 1992), and overall attitude toward the business provider. Service recovery provides consumers with new information and experience, which should inform both transaction-specific satisfaction and cumulative satisfaction. Prior studies demonstrate a link between service recovery satisfaction and cumulative satisfaction and re-patronage intentions (Smith, Bolton, & Wagner, 1999); thus, we predict that the interaction effects observed in this research are likely to carry over to transaction-specific and cumulative satisfaction, as well as subsequent overall attitude toward the business. Needless to say, this line of research has invaluable implications since, if overcompensation also leads to reduced transaction-specific and/or cumulative satisfaction and, thereafter, increased negative attitude, the counterproductive effect of

overcompensation will be likely to spread to other products/services the business offers which, in turn, will be a bigger worry.

This research investigated three outcome variables: Satisfaction with recovery, negative WOM, and repurchase intention. An important question remaining unanswered is whether the results of this research are convertible to actual repurchase behavior. The extant literature has suggested that the mechanism which links consumer satisfaction to behavior is extremely complex (Bolton & Lemon, 1999); moreover, intermediate links between stated purchase intention and actual purchase behavior is not always stable particularly for low involvement items (Morrison, 1979). Thus, future research needs to explore the interaction effects of moral judgment and recovery magnitude on actual repurchase behavior.

While this research provides empirical evidence that moral judgment of service failure underpins recovery performance of high as opposed to expected recovery, one should note that the recovery in this research refers to a combination of psychological and financial compensation. One intriguing question arises: How well will consumers respond to only psychological recovery compared with recovery containing both psychological and financial compensation (high versus expected)? Financial compensation, regardless of being high or expected, causes economic constraint to the cash flow of businesses, whereas psychological recovery does not result in financial loss, thus it could be a better measure, which deserves research attention.

References:

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Eds.), *Advances in experimental social psychology*. Vol. 2. (pp. 278-299). New York: Academic Press.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: testing and interpreting interactions*. Newbury Park, CA: Sage.
- Bartels, D. M., Bauman, C. W., Cushman, F. A., Pizarron, D. A., & McGraw, A. P. (2015). Moral judgment and decision making. In G. Keren, & G. Wu (Eds.), *The Wiley Blackwell handbook of judgment and decision making*. Chichester, UK: Wiley.
- Bitner, M. J., Booms, B. H., & Tetreault, M. S. (1990). The service encounter: Diagnosing favorable and unfavorable incidents. *Journal of Marketing*, *54*(1), 71-84.
- Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on postcomplaint behavior. *Journal of Retailing*, *73*(2), 185-210.
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, *36*(2), 171-186.
- Bonifield, C., & Cole, C. A. (2008). Better him than me: Social comparison theory and service recovery. *Journal of the Academy of Marketing Science*, *36*(4), 565-577.
- Boshoff, C. (2012). Can service firms overdo service recovery? An assessment of non-linearity in service recovery satisfaction. *South African Journal of Business Management*, *43*(3), 1-12.
- Bradley, G., & Sparks, B. (2012). Explanations: If, when, and how they aid service recovery. *Journal of Services Marketing*, *26*(1), 41-51.
- Choi, B., & Choi, B. (2014). The effects of perceived service recovery justice on customer affection, loyalty, and word-of-mouth. *European Journal of Marketing*, *48*(1/2), 108-131.
- Churchill Jr., G. A., & Surprenant, C. (1982). An investigation into the determinants of consumer satisfaction. *Journal of Marketing Research*, *19*(4), 491-504.
- Deghani, M., Scott, A., Rumen, I., Sonya, S., & Douglas, M. (2010). Scared values and conflict over Iran's nuclear program. *Judgment and Decision Making*, *5*(7), 540-546.
- De Matos, C. A., Vieira, V. A., & Veiga, R. T. (2012). Behavioural responses to service encounter involving failure and recovery: The influence of contextual factors. *Service Industries Journal*, *32*(14), 2203-2217.
- Evanschitzky, H., Brock, C., & Blut, M. (2011). Will you tolerate this? The impact of affective commitment on complaint intention and postrecovery behavior. *Journal of Service Research*, *14*(4), 410-425.
- Field, A. (2012). *Discovering statistics using IBM SPSS statistics*. (3th ed.). London: Sage Publications Ltd.
- Frale, F. (2013). Know before you click the risks of online buying. *Nation's Restaurant News*, *47*(11), 22.
- Garrett, D. E. (1999). The effectiveness of compensation given to complaining consumers: Is more better? *Journal of Consumer Satisfaction, Dissatisfaction and Complaining*, *12*, 26-34.
- Gelbrich, K., Gäthke, J., & Grégoire, Y. (2015). How much compensation should a firm offer for a flawed service? An examination of the nonlinear effects of compensation on satisfaction. *Journal of Service Research*, *18*(1), 107-123.
- Greenwald, A. G. (1976). Within-subject designs: To use or not to use? *Psychological Bulletin*, *83*(2), 314-320.

- Grégoire, Y., & Fisher, R. J. (2008). Customer betrayal and retaliation: When your best customers become your worst enemies. *Journal of the Academy of Marketing Science*, 36(2), 247-261.
- Haidt, J., Rosenberg, E., & Hom, H. (2003). Differentiating diversities: Moral diversity is not like other kinds. *Journal of Applied Social Psychology*, 33(1), 1-36.
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? (Cover Story). *Journal of Personality and Social Psychology*, 65(4), 613-628.
- Harris, K. E., Grewal, D., Mohr, L. A., & Bernhardt, K. L. (2006). Consumer responses to service recovery strategies: The moderating role of online versus offline environment. *Journal of Business Research*, 59(4), 425-431.
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis a Regression-Based Approach*. New York: Guilford Press.
- He, H., & Harris, L. (2014). Moral disengagement of hotel guest negative WOM: Moral identity centrality, moral awareness, and anger. *Annals of Tourism Research*, 45, 132-151.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Hocutt, M. A., Bowers, M. R., & Donovan, D. T. (2006). The art of service recovery: Fact or fiction? *Journal of Service Marketing*, 20(3), 199-207.
- Hume, D. (1888). *A treatise of human nature*. In L. A. Selby-Bigge (Eds.), Oxford University Press.
- Kagan, S. (1998). *Normative ethics*. Boulder, CO: Westview Press.
- Keaveney, S. M. (1995). Customer switching behavior in service industries: An exploratory study. *Journal of Marketing*, 59(2), 71-82.
- Kelley, S. W., & Davis, M. A. (1994). Antecedents to customer expectations for service recovery. *Journal of the Academy of Marketing Science*, 22(1), 52-61.
- Kettinger, W. J., & Lee, C. C. (2005). Zones of tolerance: Alternative scales for measuring information systems service quality. *MIS Quarterly*, 29(4), 607-623.
- Kim, N., & Ulgado, F. M. (2012). The effect of on-the-spot versus delayed compensation: The moderating role of failure severity. *Journal of Service Marketing*, 26(3), 158-167.
- Krupnikov, Y., & Levine, A. (2014). Cross-Sample Comparisons and External Validity. *Journal of Experimental Political Science*, 1, 59-80.
- Lee, E. J., & Park, J. K. (2010). Service failures in online double deviation scenarios: Justice theory approach. *Managing Service Quality*, 20(1), 46-69.
- Lerner, M. J. (2003). The justice motive: Where social psychologists found it, how they lost it, and why they may not find it again. *Personality and Social Psychology Reviews*, 7(4), 388-399.
- Li, C., Fock, H., & Mattila, A. S. (2012). The role of cultural tightness-looseness in the ethics of service recovery. *Journal of Global Marketing*, 25(1), 3-16.
- Malhotra, N. K. (1999). *Marketing research: An applied orientation*. (3th ed.). London: Prentice-Hall International, Inc.
- Maxham III, J. G. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research*, 54(1), 11-24.
- Maxham III, J. G., & Netemeyer, R. G. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of Marketing*, 66(4), 57-71.
- Morrison, D. G. (1979). Purchase intentions and purchase behavior. *Journal of Marketing*, 43(2), 65-74.

- Noone, B. M. (2012). Overcompensating for severe service failure: Perceived fairness and effect on negative word-of-mouth intent. *Journal of Services Marketing*, 26(5), 342-351.
- Oliva, T. A., Oliver, R. L., & MacMillan, I. C. (1992). A catastrophe model for developing service satisfaction strategies. *Journal of Marketing*, 56(3), 83-95.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 57(3), 25-48.
- Parasuraman, A., Zeithaml Valerie A. and Berry, Leonard L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41-50.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(2), 135-146.
- Phillips, D. M., & Baumgartner, H. (2002). The role of consumption emotions in the satisfaction response. *Journal of Consumer Psychology*, 12(3), 243-252.
- Reeder, G. D., Kumar, S., & Hesson-McInnis, M. S. (2002). Inferences about the morality of an aggressor: The role of perceived motive. *Journal of Personality and Social Psychology*, 83(4), 789-803.
- Reidenbach, R. E., & Robin, D. P. (1988). Some initial steps toward improving the measurement of ethical evaluations of marketing activities. *Journal of Business Ethics*, 7(11), 871-879.
- Reilly, A. (2013). Eyewitness accounts – The horsemeat scandal erupts. *The Guardian*, December 29.
- Schoefer, K., & Diamantopoulos, A. (2009). A typology of consumers' emotional response styles during service recovery encounters. *British Journal of Management*, 20(3), 292-308.
- Shaver, D. G. (1985). A longitudinal study of moral development at a conservative, religious liberal arts college. *Journal of College Student Personnel*, 26(5), 400-404.
- Siu, N., Zhang, T., & Yau, C. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, 114(4), 675-686.
- Skitka, L. J., Bauman, C. W., & Lytle, B. L. (2009). Limits on legitimacy: Moral and religious convictions as constraints on deference to authority. *Journal of Personality and Social Psychology*, 97(4), 567-578.
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895-917.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36(3), 356-372.
- Smith, J. S., & Karwan, K. R. (2010). Empirical profiles of service recovery systems: The maturity perspective. *Journal of Service Research*, 13(1), 111-125.
- Strizhakova, Y., Tsarenko, Y., & Ruth, J. A. (2012). "I'm mad and I can't get that service failure off my mind": Coping and rumination as mediators of anger effects on customer intentions. *Journal of Service Research*, 15(4), 414-429.
- Surachartkumtonkun, J., Patterson, P. G., & McColl-Kennedy, J. R. (2013). Customer rage back-story: Linking needs-based cognitive appraisal to service failure type. *Journal of Retailing*, 89(1), 72-87.

- Susarla, A., Barua, A., & Whinston, A. B. (2003). Understanding the service component of application service provision: An empirical analysis of satisfaction with ASP services. *MIS Quarterly*, *27*(1), 91-123.
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing*, *62*(2), 60-76.
- Thong, J. Y. L., & Yap, C. S. (1998). Testing an ethical decision-making theory: The case of softlifting. *Journal of Management Information Systems*, *15*(1), 213-237.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, England: Cambridge University Press.
- Turiel, E. (2002). *The culture of morality: Social development, context, and conflict*. Cambridge, England: Cambridge University Press.
- Venkatesh, V., & Goyal, S. (2010). Expectation disconfirmation and technology adoption: Polynomial modeling and response surface analysis. *MIS Quarterly*, *34*(2), 281-303.
- Waldmann, M. R., & Dieterich, J. H. (2007). Throwing a bomb on a person versus throwing a person on a bomb: Intervention myopia in moral intuitions. *Psychological Science*, *18*(3), 247-253.
- Young, L., Nichols, S., & Saxe, R. (2010). Investigating the neural and cognitive basis of moral luck: It's not what you do but what you know. *Review of Philosophy and Psychology*, *1*(3), 333-349.
- Zaichkowsky, J. L. (1986). Conceptualizing involvement. *Journal of Advertising*, *15*(2), 4-34.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, *21*(1), 1-12.

Table 1 Recovery, moral judgment, and satisfaction

<i>Model</i>	<i>F</i>	<i>Sig.</i>	β	<i>t</i>	<i>p</i>
	13.18	0.000			
Constant			4.28	32.75	.000
Recovery offer (centered)			-0.65	-2.58	.011
Moral judgment (centered)			0.69	5.14	.000
Recovery offer* Moral judgment			0.65	2.44	.016

Table 2 Recovery, moral judgment, and negative WOM

<i>Model</i>	<i>F</i>	<i>Sig.</i>	β	<i>t</i>	<i>p</i>
	36.67	0.000			
Constant			3.90	29.29	.000
Recovery offer (centered)			0.38	1.92	.058
Moral judgment (centered)			-0.80	-6.90	.000
Recovery offer* Moral judgment			-1.01	-4.54	.000

Table 3 Recovery, moral judgment, and satisfaction

<i>Model</i>	<i>F</i>	<i>Sig.</i>	β	<i>t</i>	<i>p</i>
	13.37	.000			
Constant			4.29	7.30	.000
Recovery offer (centered)			0.09	0.42	.675
Moral judgment (centered)			0.06	0.70	.484
Recovery offer* Moral judgment			1.21	6.81	.000
Product involvement			-0.08	-0.59	.558

Table 4 Recovery, moral judgment, and intention

<i>Model</i>	<i>F</i>	<i>Sig.</i>	β	<i>t</i>	<i>p</i>
	10.61	0.000			
Constant			3.36	7.07	.000
Recovery offer (centered)			-0.26	-1.52	.133
Moral judgment (centered)			0.48	6.18	.000
Recovery offer* Moral judgment			0.34	2.35	.021
Product involvement			0.07	0.62	.539

Figure 1 Conceptual framework

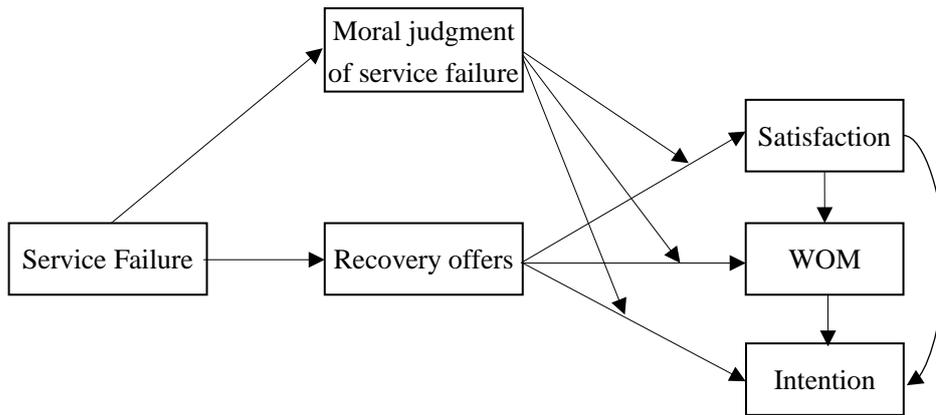


Figure 2 Interaction of recovery and moral judgment on satisfaction

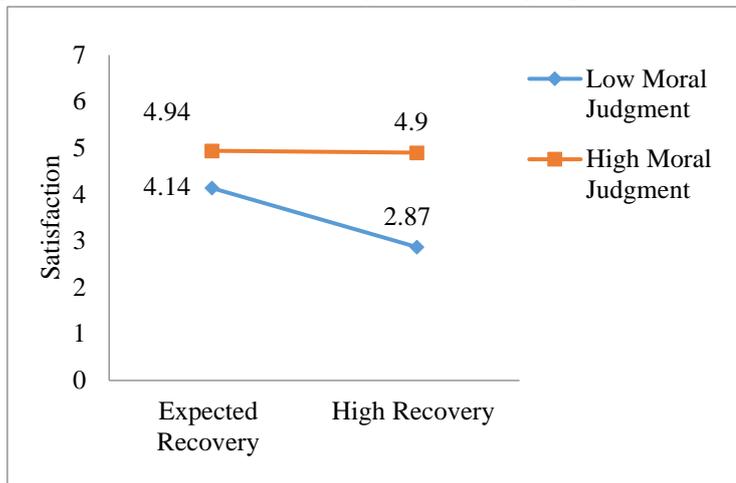


Figure 3 Interaction of recovery and moral judgment on negative WOM

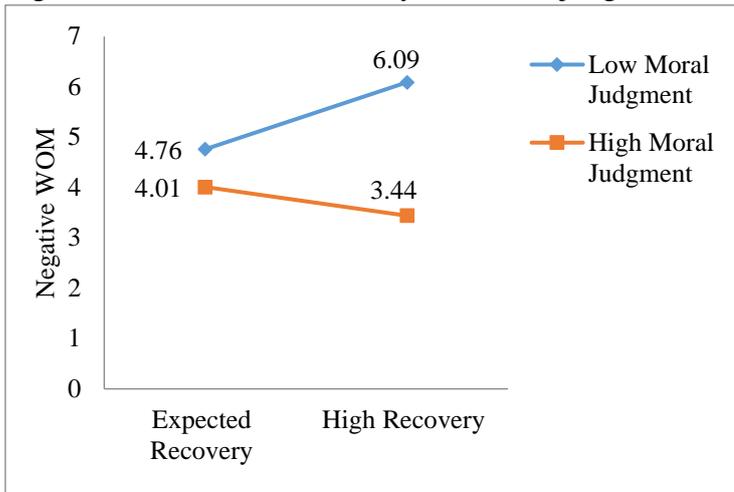


Figure 4 Interaction of recovery and moral judgment on satisfaction

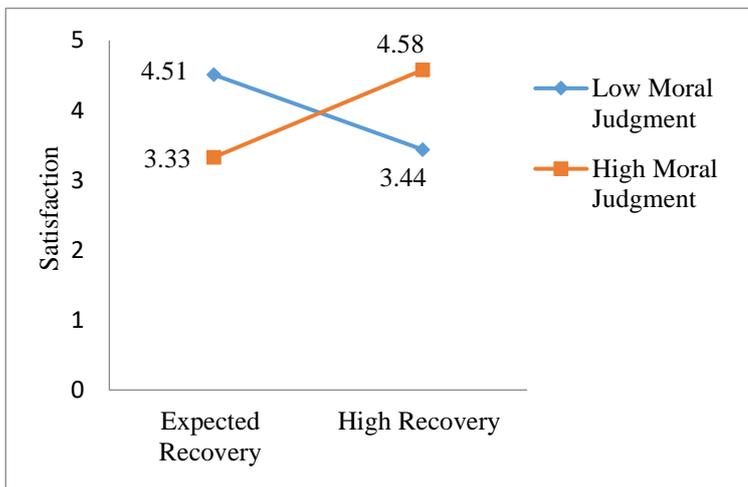
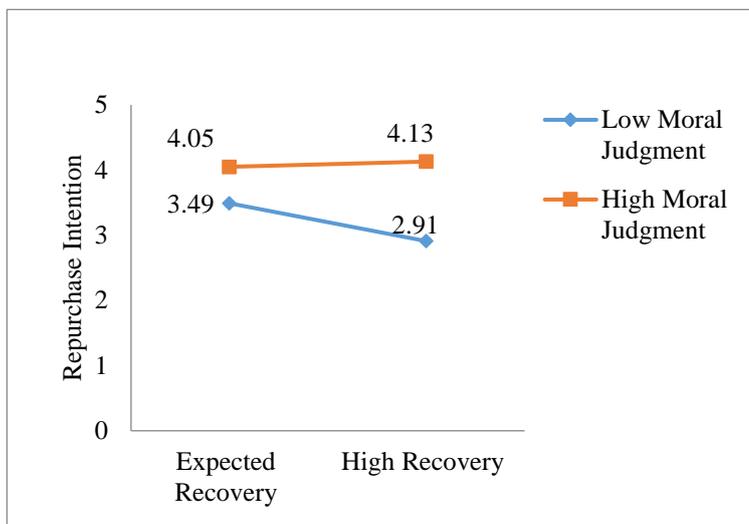


Figure 5 Interaction of recovery and moral judgment on repurchase intention



Appendix Measurements

<i>Moral Judgment</i>	Study 1			Study 2		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
1. The situation that the seller sells the defective product is very ethical.						
2. The situation that the seller sells the defective product is followed the ethical standard.	5.72	0.89	0.79	5.31	1.03	0.73
3. The situation that the seller sells the defective product is very unethical. (R)						
4. The situation that the seller sells the defective product is ethically acceptable.						
<i>Recovery Satisfaction</i>	Study 1			Study 2		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
1. To me, the seller provides me a satisfactory resolution to the problem.						
2. I am not satisfied with how the seller handled my problem. (R)	3.91	1.52	0.92	4.07	1.08	0.86
3. For the particular event, I feel satisfied with the handling.						
<i>Negative WOM</i>	Study 1			Study 2		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
1. I would be very likely to warn my friends and relatives not to buy anything from this seller.						
2. I would complain to my friends and relatives about this seller.	3.45	1.38	0.88	-	-	-
3. I would definitely tell my friends and relatives not to buy from this seller.						
<i>Repurchase Intention</i>	Study 1			Study 2		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
1. I may still buy from this seller in the future.						
2. I would never purchase from this seller again. (R)	-	-	-	3.65	0.87	0.76
3. I would probably buy from this seller in the future.						
<i>Involvement</i>	Study 1			Study 2		
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α
1. This product is important to me.						
2. I get bored when people talk to me about this product. (R) Omitted						
3. This product means a lot to me.						
4. I perceive this product as an exciting product.						
5. I like this product.	-	-	-	3.98	0.85	0.83
6. This product matters to me.						
7. This product is an interesting product.						
8. This product is great fun.						
9. This product is appealing to me.						
10. I care about this product I buy.						

Notes: (R) = Reverse coded