DIMENSIONAL ROLES OF JUSTICE ON POST-RECOVERY OVERALL SATISFACTION AND BEHAVIORAL INTENTIONS: TESTS OF CASUAL DINING EXPERIENCES

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ABSTRACT
This study examined dimensional roles of justice on post-recovery overall satisfaction (OS), revisit intention (RI), and word-of-mouth intention (WOM). A 2x2x2 factorial design using experimental scenarios was used to test the proposed relationships. Responses from customers (286) and responses from undergraduate students (266) were used for data analysis. For the customer sample, interactional justice (IJ) and procedural justice (PJ) had positive effects on customer OS and WOM. Only IJ had a positive effect on RI. Distributive justice (DJ) did not have a positive effect on OS, RI, or WOM. For the student sample, IJ and DJ had positive effects on OS, RI, and WOM. However, PJ did not have a positive effect on OS, RI, or WOM. The findings indicate that service providers need to consider dimensional roles of recovery efforts not only in transactional evaluation but also in post-recovery attitudinal and behavioral outcomes. One dimension of justice, such as DJ, should not be highlighted at the cost of other dimensions in recovery efforts.

Keywords: service recovery, perceived justice, post-recovery overall satisfaction, revisit intention, word-of-mouth intention
INTRODUCTION

Customer satisfaction, without doubt, is a focal point in marketing and consumer behavior studies because it is a critical determinant of repeat purchase, word-of-mouth communication, and loyalty behavior (Bearden & Teel, 1983; Reichheld & Sasser, 1990). In the same manner, determining ways to satisfy customers has been a primary focus of businesses (Dunning, Pecotich, & O’Cass, 2004). Despite continuing efforts to satisfy customers, mishaps in performing or delivering service are inevitable (Smith, Bolton, & Wagner, 1999). Dissatisfied customers from initial service/product failure(s) and/or inappropriate responses to complaints are less likely to revisit, more likely to switch to competitors, and more likely to spread negative word of mouth. Losing revenue from dissatisfied customers outweighs the costs of correcting service problems (Fornell & Wernerfelt, 1987; Johnston & Hewa, 1997). This loss of revenue is evident both directly from present customers who switch to competitors, and indirectly from potential customers through negative word of mouth. Further, it costs five times more to attract a new customer than it does to keep an existing one (Hart, Heskett, & Sasser, 1990).

Service providers respond to customer complaints to avoid these negative consequences. Service recovery efforts can act as a buffer against service failure outcomes, if customers perceive recovery efforts as adequate. When the recovery efforts are exceptional, customer attitudinal and behavioral outcomes can be even higher than in a pre-failure evaluation (the “recovery paradox” of McCollough and Bharadwaj, 1992, p. 119). A service failure and subsequent complaint is an opportunity to turn a dissatisfying consumption situation into a satisfying one (Blodgett, Hill, & Tax, 1997; Johnston, 1995) and to build long-term relationships with customers (Blodgett, Wakefield, & Barnes, 1995; Kelley, Hoffman, & Davis, 1993).
However, while incidents that convert dissatisfied customers into loyal customers do exist, more than half of recovery efforts resulted in increased negative evaluations (Hart et al., 1990).

Researchers have suggested that customer dissatisfaction results not from the service failure itself but from service provider response, or lack of response, to the failure (Bitner, Booms, & Tetreault, 1990; Smith & Bolton, 1998; Sundaram, Jurowski, & Webster, 1997). Even when a customer complains about a minor service problem, the situation has the potential to develop into a larger issue if the complaint is ignored or mishandled. Researchers endeavor to understand both instantaneous and indirect consequences of recovery efforts. With advances in service recovery studies, dimensional roles of recovery efforts on recovery satisfaction (what constitutes a successful recovery?) have been explored based on the justice theory. Researchers found that perceived justice determines recovery transactional outcome evaluation (recovery satisfaction). Recovery efforts may well enhance overall satisfaction and behavioral intentions that (in)directly contribute to building long-term relationships with customers. The relative predictability of the dimensions of justice on post-recovery attitudinal and behavioral outcomes has been a concern of researchers and practitioners. Which dimension of justice has a larger impact on post-recovery overall satisfaction and behavioral intentions remains obscure. Further, as discussed in previous recovery studies (e.g., Mattila, 2001; Smith et al., 1999), the relative importance of the dimensions of justice may depend on the nature of service, the customer’s relationship with the organizations, the types of service, and the failure context. Replication of the findings on specific industry (casual dining segment in the study) will provide industry-specific insights into the roles of service recovery. Therefore, the purpose of this study is to examine dimensional roles of justice on post-recovery overall satisfaction (OS), revisit intention (RI), and word-of-mouth intention (WOM) in casual dining restaurants.
REVIEW OF LITERATURE

Quality, value, and customer satisfaction are barometers of a customer’s behavioral intentions and have been documented as key predictors of business success (Oh, 2001; Weiss, Feinstein, and Dalbor, 2004). This is no exception to restaurant and foodservice operations. Efforts to improve customers’ dining experience allow operators to reveal and recover service problems (Oh, 2001). Mechanisms to help operators enhance service delivery include analysis of customers’ comment cards, direct responses to customers’ complaints, and other devices to generate customers’ feedback. For this study service recovery is defined as the actions and activities that service providers take in response to service defections or failures in service delivery to return “aggrieved customers” to a state of satisfaction (Grönroos, 1988; Zemke & Bell, 1990). Service recovery offers service providers an opportunity to respond immediately to customers’ complaints initiated by encounter failures.

Customer recovery evaluations vary, as do their responses to provider recovery efforts. Yi and La (2004) suggest that an episodic evaluation usually cannot easily destroy cumulative evaluation. However, customers who are very satisfied and repeatedly purchase, originally termed “Apostles” (Jones & Sasser, 1995, p.96) even turn into “Guerrillas,” customers who are the opposite of “Apostles” (Jones & Sasser, 1995), in response to inappropriate handling of their complaints (Miller & Grazer, 2003). Understanding effects of recovery efforts on post-recovery attitudinal and behavioral intentions is critical for business to profit.

Dimensional Roles of Justice

A three dimensional view of justice has been applied to examine how customers respond to recovery efforts. Customers develop justice-based normative recovery expectations and
compare it with recovery performance in the recovery evaluation (Yim, Gu, Chan, & Tse, 2003). In a business exchange relationship, inequity results from a customer perception that the outcome is inadequate to the input (McCollough, Berry, & Yadav, 2000). Distributive justice (DJ) relates to the compensation offered to dissatisfied customers to resolve their complaints (Blodgett et al., 1997; Hoffman & Kelley, 2000). Perceived fairness of DJ is built from provider efforts of atonement. In fact, compensation may be the most effective recovery strategy in recovering service failures in restaurants (Hoffman, Kelley, & Rotalsky, 1995). Studies have provided empirical evidence that perceived fairness of tangible outcomes have a positive effect on recovery evaluation (Boshoff, 1997; Goodwin & Ross, 1992; Hoffman et al., 1995; Smith et al., 1999). Likewise, this study suggests that DJ developed from recovery efforts affects post-recovery OS, RI, and WOM.

H1. Distributive justice has a positive effect on post-recovery overall satisfaction.

H2. Distributive justice has a positive effect on post-recovery revisit intention.

H3. Distributive justice has a positive effect on post-recovery word-of-mouth intention.

Consumers are concerned with the process used to resolve conflicts or dispense rewards in service recovery evaluation (Blodgett et al., 1997; Conlon & Murray, 1996; Ruyter & Wetzels, 2000; Tax, Brown, & Chandrashekaran, 1998). Flexibility, responding in a timely manner, and responsiveness are often mentioned as components of procedural justice (PJ) (Blodgett, Granbois, & Walters, 1993; Tax et al., 1998). PJ also includes policies, procedures, and tools that companies use to support communication with customers and specifically, the time taken to process complaints and to arrive at a decision (Davidow, 2003). Studies have reported that PJ has a significant effect on recovery satisfaction (Smith et al., 1999; Tax et al., 1998). However, when
manipulated as timeliness, PJ did not have a main effect on customer RI and negative WOM (Blodgett et al., 1997). Blodgett et al. (1997) argued that the least significance of PJ among the justice dimensions, if present, might be contributed to the fact that PJ tend to be less tangible than DJ and less vivid than IJ. The argument implies that the scenario effect may contribute to the insignificant relationships. Therefore, this study manipulated PJ in timeliness, responsiveness, and flexibility and proposes that customer perceived fairness of PJ affects post-recovery OS, RI, and WOM.

H4. Procedural justice has a positive effect on post-recovery overall satisfaction.

H5. Procedural justice has a positive effect on post-recovery revisit intention.

H6. Procedural justice has a positive effect on post-recovery word-of-mouth intention.

The third aspect of justice, interactional justice (IJ), evolved from procedural elements of justice (Bies & Moag, 1986). IJ still has to do with process, but it relates to an interpersonal process (Clemmer & Schneider, 1996). IJ is defined as “dealing with interpersonal behavior in the enactment of procedures and the delivery of outcomes” (Tax et al., 1998, p. 62). IJ centers on the way resources or rewards are allocated (Blodgett et al., 1997; Tax et al., 1998). Clemmer and Schneider (1996) listed six principles that customers use when judging IJ: friendliness, bias, honesty, expressions of interest, being sensitive, and politeness (p. 119). One of the most recommended recovery strategies include apology – the minimal recovery strategy that a service provider should incorporate in the recovery process. Researchers have reported that apology communicates concern and empathy to customers (Bell & Zemke, 1987; Hart et al., 1990; McDougall & Levesque, 1999). Accordingly, interpersonal manner in which a service provider deals with complaints diminishes customer inequity judgments and increases justice perception
when efforts are perceived as appropriate. Hence, this study proposes interpersonal manner shown by service providers has a positive effect on post-recovery OS, RI, and WOM.

H7. Interactional justice has a positive effect on post-recovery overall satisfaction.

H8. Interactional justice has a positive effect on post-recovery revisit intention.

H9. Interactional justice has a positive effect on post-recovery word-of-mouth intention.

**METHODOLOGY**

*Research Design and Instrument Development*

Key methodological issues in understanding customer attitudinal and behavioral responses during and/or after service experiences lie in the interpersonal processes, which present a great deal of uncertainty (Bateson & Hui, 1992). Customer responses to consumption experiences often are not easy to measure without direct intervention. Studies, particularly in service recovery context, are challenging because of an induction of service failures. This study employed instead a pencil-and-paper experiment (a 2x2x2 factorial design).

Through a review of literature (e.g., Oh, 2000; Weiss et al., 2004), a failure scenario and eight recovery scenarios were developed. The service failure scenario describes a situation where a diner, during a graduation celebration, complains that he/she was served an “overcooked steak” despite ordering it to be cooked “medium.” Eight recovery scenarios responded to manipulations of a combination of each of the three dimensions of justice into two levels (high and low). Participants were randomly assigned one of the eight recovery scenarios. Table 1 presents descriptions of experimental manipulation of justice dimensions and an example of a recovery scenario. The following scenario is the combination of low IJ, high PJ, and low DJ.
“After you explained the problem to the server, he simply apologized for the problem. He said that he could take care of the problem and removed the steak. After 2-3 minutes, the manager approached you but did not apologize for the problem. She said she was informed about the problem from the server and you didn’t have to re-explain the problem. She did not provide an explanation for the problem. She informed you that another steak would be served. No other compensation was offered. She did not ask if there was anything else that she could do to serve you better.”

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**Take in TABLE 1**

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Multi-measurement items validated in previous studies were identified and modified to fit a restaurant setting. Participants were asked to indicate the extent to which they disagreed or agreed with each evaluation statement using a seven-point Likert-type scale (1 = strongly disagree; 7 = strongly disagree). Internal consistence of the measurement items was estimated using Cronbach’s alpha, and values were well above the suggested cut-off of 0.70 (Nunnally, 1978). Table 2 reports the measurement items of constructs and their reliability.

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**Take in TABLE 2**

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**Sample and Data Collection**

Casual dining restaurant customers composed Group 1. Group 2 included undergraduate students at a Midwestern university. Customer responses were collected during community fund raising events, educational programs, or regular meetings of participating groups. A total of 600 copies of the questionnaires along with postage paid, self-addressed envelopes were distributed
to individuals who showed interest in participating in the study at the end of their meetings or events. A total of 308 questionnaires were returned from members of 15 different organizations. Approximately 7% of the returned surveys were excluded because of incomplete information and improper response to instruction, yielding a 47.67% usable response rate ($n = 286$). In total, 277 student responses were drawn from general elective courses in a hospitality program. As with the process used for customer samples, 11 responses were deleted ($n = 266$). The number of subjects in each cell ranged from 33 to 38 for the customer group and from 31 to 37 for the student group.

The customer respondents consisted of 60.5% female ($n = 173$) and 38.5% male ($n = 110$). The sample was primarily Caucasian/white (84.3%, $n = 241$). The age category of 45 to 54 accounted for the highest (22.7%) numbers of respondents and the 65 and over group was the lowest (9.4%). The mean age of the student participants was 21.33 years ($SD = 2.14$). The age of the student respondents ranged from 18 to 38, but the age between 18 and 22 accounted for 83% of student respondents. The student respondents consisted of 57% female ($n = 152$) and 40% male ($n = 107$). Participants were majoring in more than 30 different fields. Approximately 40% of the respondents were hospitality majors (106 respondents).

Both groups of participants were asked to name a restaurant that they had visited. Over 50 different casual dining restaurants were identified by the respondents. Since their attitude about service and food quality may have potential effects on dependent variables, $2 \times 2 \times 2$ multivariate analysis of covariance tests (MANCOVAs) were run for each group. Restaurants were grouped first based on their brand (frequency of less than six were set as others) and were set as a covariate. The MANCOVA test indicated that the multivariate main effect of named restaurants was not significant at $p = .05$ (Wilks' lambda = .997, $F_{3, 275} = .266$, $p = .850$) for the customer group. For the student group the multivariate main effect of named restaurants was
significant (Wilks' lambda = .944, $F_{3, 255} = 4.20$, $p = .002$). Further analysis did not find univariate main effects of named restaurants on dependent variables at $p = .05$.

DATA ANALYSIS AND RESULTS

Manipulation and Confounding Check

Realism of the failure and recovery scenarios was measured on a 7-point scale with the following items: “I think that a similar problem would occur to someone in real life (1 = very unlikely to 7 = very likely)” and “I think the situations given in the scenario are 1 = very unrealistic to 7 = very realistic.” Participants perceived both type of the scenarios as highly realistic. Table 3 lists means and standard deviations of realism of scenarios.

Take in TABLE 3

Participants in both customer and student groups perceived the high condition more favorably than the low condition in each manipulated dimension as intended at $p = 0.001$, ensuring convergent validity (see Table 4). For example, the mean of the high condition of DJ is significantly higher than the mean of low condition of DJ at $p = 0.001$.

Take in TABLE 4
Discriminant validity is established if none of the manipulations of the independent variables confound one another (Blodgett et al., 1997; Cook & Campbell, 1979; Perdue & Summers, 1986). No two- (except one, see note in Table 5) and three-way interaction effects had significant confounding effects on other independent variables; however, the main effects of manipulated factors had significant effects on other independent variables. When confounding is present, Perdue and Summers (1986) suggested that researchers evaluate the degree of confounding to see if it is serious enough for results to be misleading. An indicator of effect size, $\omega^2$, was calculated to assess the proportion of variance in the dependent variable accounted for by each main and interaction effect (Perdue & Summers, 1986). The effect sizes for other variables were much smaller than the effect size of the variable that was intended to be manipulated (see Table 5). For example, in the customer sample, manipulation of IJ accounted for 23% of the variance of IJ, 8.7% for PJ, and 5% for DJ. Therefore, the minimal to moderate $\omega^2$ were acceptable for both customer and student samples (Perdue & Summers, 1986).

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**Take in TABLE 5**

**Hypotheses Testing**

The results of regression analyses indicate that IJ and PJ had significant positive effects on OS ($b = 0.28$, $p < 0.001$, and $b = 0.22$, $p < 0.01$, respectively) for the customer group. The dimensions of justice accounted for more than 31% of the explained variation in OS. Surprisingly enough, DJ had no significant effect on customer OS. For the student group, IJ ($b = 0.31$, $p < 0.001$) and DJ ($b = 0.26$, $p < 0.01$) had significant effects on OS. The dimensions of
justice accounted for 45% of the explained variation in OS. IJ was the strongest predictor of OS for both groups. Tables 6 and 7 present the results of regression analyses for the customer group and the student group, respectively.

Only IJ had significant positive effects on RI for the customer group ($b = 0.18, p < 0.05$). The dimensions of justice accounted for 17% of the explained variation in customer RI. For the student group, DJ and IJ had significant main effects on RI ($b = 0.27, p < 0.01$, and $b = 0.21, p < 0.05$, respectively). The dimensions of justice accounted for about 28% of the explained variation in students’ RI. Unlike for the customer group, DJ was the strongest predictor of RI in the student group.

PJ and IJ had significant effects on customer WOM ($b = 0.24, p < 0.01$, and $b = 0.18, p < 0.05$, respectively). The dimensions of justice accounted for over 20% of the explained variation in customer WOM. For the student group, IJ and DJ had significant effects on their WOM ($b = 0.33, p < 0.001$, and $b = 0.22, p < 0.05$, respectively). The dimensions of justice accounted for over 33% of the explained variation in student WOM. IJ was the strongest predictor of WOM for both groups.

In summary, hypotheses 1, 2, and 3 were not supported in the customer sample but were supported in the student sample. Hypotheses 4 and 6 were supported for the customer sample, but not for the student sample. Hypothesis 5 was not supported for either the customer sample or student sample. Hypothesis 7, 8, and 9 were supported for both the customer sample and the student sample.

Take in TABLE 6
Take in TABLE 7

CONCLUSION

DJ has been the strongest predictor of transactional evaluation of recovery efforts (recovery satisfaction) in many studies (e.g., Boshoff, 1997; Mattila, 2001; Smith et al., 1999). Hoffman et al. (1995) found that compensation (e.g., free food, discounts, coupons) was rated the most effective recovery strategy in restaurants. Unlike findings in transactional evaluation, DJ, in this study, had no significant effects on post-recovery OS, RI, and WOM for the customer group. The findings may indicate that compensating customers with monetary atonement may be effective to mitigate negative effects of the transaction; however, such compensation is not positively related to customer overall satisfaction and behavioral intentions. Consistent with prior research, this study confirmed students attach importance to monetary compensation in evaluating service recovery (Smith & Bolton, 2002). DJ had significant effects on OS, RI, and WOM for the student group.

Researchers have suggested that IJ has a more pervasive influence on customer evaluation of recovery fairness than equity information (Collie, Sparks, & Bradley, 2000). IJ also was the strongest predictor of overall satisfaction (Tax et al., 1998) and revisit intention (Blodgett et al., 1997) among the three justice dimensions. As in previous findings, IJ was the determinant predictor of OS and RI for the customer groups (IJ was also significant for WOM, but its relative importance followed PJ). It is notable that IJ had a greater influence than DJ on student OS and WOM. The findings indicate that the manner of interpersonal treatment in
recovering dissatisfying experiences plays a key role not only in mitigating negative evaluations but also in enhancing OS, RI, and WOM. Reducing psychological discomfort (inequity) through interpersonal relations during the recovery process is significant to building relationships with customers.

Procedural justice in this study was manipulated in terms of timeliness (time taken to hear the decision), flexibility (whether the server is allowed to make decisions on recovery efforts or not), and responsiveness (appropriate communication between the server and the manager so that the customer did not have to explain the problem again) in recovery process. Unlike many previous studies, where PJ did not have a direct effect on satisfaction, PJ had significant effects on OS and WOM in the customer group. PJ had the most determinant effect on WOM for the customer group. The results emphasize the importance of empowering employees (allowing frontline employees to recover service failures) to recover service failures. They are the ones who can tell what the problem was initially and can recover the failure most effectively, which may, subsequently, positively influence customers’ attitudinal and behavioral intention. However, PJ was not a significant predictor of student OS, RI, and WOM. It seems that students care less about timing and procedures in resolving problems.

Although the three dimensions of justice are considered to be independent, the complainers’ overall perceptions of justice and their subsequent behavior stem from the combination of all three dimensions (Blodgett et al., 1997). Previous studies have reported that the three dimensions of justice together account for a large portion of variance (over 60%) in service recovery evaluation (Mattila, 2001; Smith et al., 1999). This study shows that customer perception of fairness in recovery efforts also influences OS, RI, and WOM, except DJ for the customer group. Findings suggest that service providers need to consider dimensional roles of
recovery efforts not only in transactional evaluation but also in post-recovery attitudinal and behavioral outcomes. One dimension of justice, such as distributive justice in this study, should not be highlighted at the cost of other dimensions in recovering efforts.

This study found discrepancies between the customer sample and the student sample in dimensional role of justice on OS, RI, and WOM exists. For example, while DJ was not a significant factor in customer attitudinal and behavioral outcomes, DJ was a significant factor in student attitudinal and behavioral outcomes. In addition, PJ was a significant determinant of customer OS and WOM; however, PJ was not a significant factor for any attitudinal and behavioral outcomes in the study. The findings may indicate that care should be taken in generalizing study findings derived from student subjects for customers.

**LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDY**

This study discussed the relative importance of justice on indirect consequences of recovery outcome variables. As other researchers has discussed (e.g., Hoffman & Kelley, 2000; Mattila, 2001; Smith et al., 1999), the relative predictability may depend on the nature of service; it is industry specific. For example, unlike findings in this study, DJ was a better predictor of retail satisfaction and PJ was a better predictor of repatronage intention (Teo & Lim, 2001). Therefore, applicability of study findings is limited to industry-specific recovery practices.

This study did not consider situational and attributional factors that potentially change the results of the study findings. For example, magnitude of service failure and criticality of service consumption have a negative effect on outcome evaluations (Mattila, 1999; Smith & Bolton, 1998; Sundaram et al., 1997; Webster & Sundaram, 1998). Customer judgments of causal attribution may influence their subsequent attitudinal and behavioral responses (Folkes,
Koletsky, & Graham, 1987; Weiner, 1980). For example, when customers think similar failures will happen in the future, their overall satisfaction and revisit intention will be low (Blodgett et al., 1993; Smith & Bolton, 1998). Therefore, future studies may incorporate situational and attributional factors to understand the moderating effects of these factors in the evaluation of service recovery efforts.

Finally, this study incorporates scenario experimentation. The experimental approach used in this study is justified for controlling extraneous variables (Bitner et al., 1990; Blodgett et al., 1997; Cook & Campbell, 1979) and preventing undesirable response biases due to memory lapses (Smith & Bolton, 1998; Smith et al., 1999). Respondent emotional responses to failures and recoveries may, to a large extent, be weaker in scenarios than in actual consumption situations (Hess, Ganesan, & Klein, 2003; Smith & Bolton, 2002). Further, relative predictability of the individual dimensions of justice may be significantly affected by the function of the script on which the manipulations were imposed (Greenberg, 1993).
REFERENCES


<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interactional Justice</strong></td>
<td>The server simply apologized.</td>
<td>The server sincerely apologized.</td>
</tr>
<tr>
<td></td>
<td>The manager did not apologize for the problem.</td>
<td>The manager apologized for the problem.</td>
</tr>
<tr>
<td></td>
<td>The manager did not provide an explanation for the problem.</td>
<td>The manager provided an explanation for the problem.</td>
</tr>
<tr>
<td></td>
<td>The manager did not ask if there was anything else that she could do to serve you better.</td>
<td>The manager asked if there was anything else that she could do to serve you better.</td>
</tr>
<tr>
<td><strong>Procedural Justice</strong></td>
<td>The server said that he could not do anything about the problem and would get a manager to resolve it.</td>
<td>The server said that he could take care of the problem and took the dish back.</td>
</tr>
<tr>
<td></td>
<td>After 10 minutes, the manager approached you.</td>
<td>After 2-3 minutes, the manager approached you.</td>
</tr>
<tr>
<td></td>
<td>The manager asked you what the problem was, and you had to explain again what the problem was.</td>
<td>The manager knew the problem, and you didn’t have to re-explain the problem.</td>
</tr>
<tr>
<td><strong>Distributional Justice</strong></td>
<td>Another steak was served. No compensation was offered.</td>
<td>Another steak was served. 100% discount on the item was offered.</td>
</tr>
</tbody>
</table>
### TABLE 2. Measurement items and Reliability

<table>
<thead>
<tr>
<th>Measurement items</th>
<th>Distributive Justice&lt;sup&gt;a, b&lt;/sup&gt; (α = .93 &amp; .92)</th>
<th>Procedural Justice&lt;sup&gt;a&lt;/sup&gt; (α = .92 &amp; .91)</th>
<th>Interactional Justice&lt;sup&gt;a, b&lt;/sup&gt; (α = .96 &amp; .95)</th>
<th>Overall Satisfaction&lt;sup&gt;c&lt;/sup&gt; (α = .97 &amp; .98)</th>
<th>Revisit Intention&lt;sup&gt;a, b&lt;/sup&gt; (α = .95 &amp; .95)</th>
<th>Word of Mouth Intention&lt;sup&gt;a&lt;/sup&gt; (α = .97 &amp; .97)</th>
</tr>
</thead>
</table>
|                                      | • Although this event caused me problems, the restaurant’s efforts to resolve it resulted in a very positive outcome of me.  
• Given the inconvenience caused by the problem, the outcome I received from the restaurant was fair.  
• The service recovery outcome that I received in response to the problem was more than fair.  
• Given the circumstances, I feel that the restaurant offered adequate compensation. | • Despite the hassle caused by the problem, the restaurant responded quickly.  
• I feel the restaurant responded in a timely fashion to the problem.  
• I believe the restaurant has fair policies and practices to handle problems.  
• With respect to its policies and procedures, the employee(s) handled the problem in a fair manner. | • In dealing with the problem, the restaurant personnel treated me in a courteous manner.  
• During effort to resolve the problem, the restaurant employee(s) seemed to care about the customers.  
• The restaurant employee(s) were appropriately concerned about my problem.  
• While attempting to solve the problem, the restaurant personnel considered my views. | • I am satisfied with my overall experience with the restaurant.  
• As a whole, I am happy with the restaurant.  
• Overall, I am pleased with the service experiences with this restaurant. | • I would dine out at this restaurant in the future.  
• There is likelihood that I would eat at this restaurant in the future.  
• I will not eat at this restaurant in the near future. | • I will spread positive word-of-mouth about this restaurant.  
• I will recommend this restaurant to my friends.  
• If my friends or relatives were looking for a restaurant, I would tell them to try at this restaurant. |

Source of measurements:  
<sup>a</sup> Maxham & Netemeyer (2002),  
<sup>b</sup> Blodgett et al. (1997),  
<sup>c</sup> Oliver & Swan (1989)  
Cronbach’s alpha is listed for customer group first and followed by student group.
TABLE 3. Realism of Scenarios

<table>
<thead>
<tr>
<th>Scenario Type</th>
<th>Customers Mean (SD)</th>
<th>Students Mean (SD)</th>
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</thead>
<tbody>
<tr>
<td>Failure Scenario</td>
<td>5.87 (1.15)</td>
<td>5.94 (1.09)</td>
</tr>
<tr>
<td>Recovery Scenarios</td>
<td>5.42 (1.38)</td>
<td>5.64 (1.14)</td>
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</table>
### TABLE 4. Convergent Validity of Manipulation

<table>
<thead>
<tr>
<th>Manipulation</th>
<th>Dependent Variable</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perceived IJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactional Justice (IJ)</td>
<td>High</td>
<td>5.68 (5.17)</td>
<td>1.09 (1.29)</td>
<td>104.50 (34.11)</td>
<td>.000 (.000)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>4.24 (4.26)</td>
<td>1.55 (1.37)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural Justice (PJ)</td>
<td>Perceived PJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>5.74 (5.57)</td>
<td>1.05 (0.95)</td>
<td>159.91 (33.66)</td>
<td>.000 (.000)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>3.94 (3.96)</td>
<td>1.55 (1.47)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distributive Justice (DJ)</td>
<td>Perceived DJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>5.62 (5.36)</td>
<td>1.07 (1.06)</td>
<td>100.41 (83.14)</td>
<td>.000 (.000)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>4.22 (4.06)</td>
<td>1.49 (1.42)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Values enclosed in parentheses represent those of the student group.
TABLE 5. Discriminant Validity of Manipulations

<table>
<thead>
<tr>
<th>Manipulations</th>
<th>Perceived IJ</th>
<th>Perceived PJ</th>
<th>Perceived DJ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$p$</td>
<td>$\omega^2$</td>
<td>$p$</td>
</tr>
<tr>
<td>Interactional Justice (IJ)</td>
<td>.000</td>
<td>.230</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td>(.236)</td>
<td>(.000)</td>
</tr>
<tr>
<td>Procedural Justice (PJ)</td>
<td>.000</td>
<td>.058</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td>(.070)</td>
<td>(.000)</td>
</tr>
<tr>
<td>Distributive Justice (DJ)</td>
<td>.000</td>
<td>.082</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td>(.094)</td>
<td>(.000)</td>
</tr>
</tbody>
</table>

Note: Values enclosed in parentheses represent $p$ value and $\omega^2$ of the student group. For the student group, the two-way interaction effect of PJ and DJ on perceived IJ was significant at $p = .001$, but the calculated $\omega^2$ was minimal ($\omega^2 = .026$).
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Unstandardized B</th>
<th>Standardized Beta</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Post-recovery Overall Satisfaction</strong></td>
<td>IJ</td>
<td>.25</td>
<td>.28</td>
<td>3.44***</td>
</tr>
<tr>
<td></td>
<td>PJ</td>
<td>.19</td>
<td>.22</td>
<td>2.73**</td>
</tr>
<tr>
<td></td>
<td>DJ</td>
<td>.12</td>
<td>.13</td>
<td>1.82</td>
</tr>
<tr>
<td>$F = 43.89, p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .32(.31)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Revisit Intention</strong></td>
<td>IJ</td>
<td>.16</td>
<td>.18</td>
<td>2.03*</td>
</tr>
<tr>
<td></td>
<td>PJ</td>
<td>.15</td>
<td>.17</td>
<td>1.92</td>
</tr>
<tr>
<td></td>
<td>DJ</td>
<td>.11</td>
<td>.12</td>
<td>1.49</td>
</tr>
<tr>
<td>$F = 19.93, p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .18(.17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Word of Mouth Intention</strong></td>
<td>PJ</td>
<td>.23</td>
<td>.24</td>
<td>2.82**</td>
</tr>
<tr>
<td></td>
<td>IJ</td>
<td>.17</td>
<td>.18</td>
<td>2.06*</td>
</tr>
<tr>
<td></td>
<td>DJ</td>
<td>.09</td>
<td>.09</td>
<td>0.27</td>
</tr>
<tr>
<td>$F = 25.07, p &lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .21(.20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.

IJ, PJ, and DJ represent interactional justice, procedural justice, and distributive justice, respectively. Values of the variance inflation factors ranged from 2.11 to 2.65, far below suggested cut off value of 10 (Hair, Anderson, Tatham, and Black, 1998).
### TABLE 7. Regression Estimates for the Student Group

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Unstandardized B</th>
<th>Standardized Beta</th>
<th>t-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Post-recovery Overall Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F = 71.97, \ p &lt; .001$</td>
<td>IJ</td>
<td>.31</td>
<td>.31</td>
<td>3.69***</td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .45(.45)</td>
<td>DJ</td>
<td>.29</td>
<td>.26</td>
<td>3.24**</td>
</tr>
<tr>
<td></td>
<td>PJ</td>
<td>.16</td>
<td>.16</td>
<td>1.91</td>
</tr>
<tr>
<td><strong>Revisit Intention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F = 35.24, \ p &lt; .001$</td>
<td>DJ</td>
<td>.28</td>
<td>.27</td>
<td>2.88**</td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .29(.28)</td>
<td>IJ</td>
<td>.21</td>
<td>.21</td>
<td>2.23*</td>
</tr>
<tr>
<td></td>
<td>PJ</td>
<td>.10</td>
<td>.10</td>
<td>1.07</td>
</tr>
<tr>
<td><strong>Word of Mouth Intention</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$F = 44.75, \ p &lt; .001$</td>
<td>IJ</td>
<td>.35</td>
<td>.33</td>
<td>3.59***</td>
</tr>
<tr>
<td>$R^2$ (adjusted $R^2$) = .34(.33)</td>
<td>DJ</td>
<td>.25</td>
<td>.22</td>
<td>2.44*</td>
</tr>
<tr>
<td></td>
<td>PJ</td>
<td>.08</td>
<td>.08</td>
<td>0.87</td>
</tr>
</tbody>
</table>

* $p < .05$.  ** $p < .01$.  *** $p < .001$.  
IJ, PJ, and DJ represent interactional justice, procedural justice, and distributive justice, respectively.  
Values of the variance inflation factors ranged from 3.15 to 3.29.