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Effects of Justice Theory on Service Recovery Satisfaction on Metro Manila Dine-in Experiences

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Service failure happens, but as studies have shown, the recovery efforts performed by the frontline employees can turn these negative experiences to satisfying ones. This empirical study investigated how these recovery efforts affect customer satisfaction. The primary objective of the study was to determine how justice theory affects recovery satisfaction. Using confirmatory factor analysis, results showed that distributive and interactional justices have significant effects on recovery satisfaction, while results provided weak support for procedural justice. The effect of distributive justice on recovery satisfaction was stronger than interactional justice. Results also showed that satisfaction with the recovery efforts positively and significantly affect the customer's behavioral intentions of repurchase and word-of-mouth communications.

Keywords: service failure, service recovery, justice theory, recovery satisfaction, dine-in experiences

1 Introduction

A customer who is not satisfied with a service has two options, he either complains – to the service provider, to his friends or to a third party (Keaveney, 1995; Bougie, Pieters, & Zeelenberg, 2003) – or stays quiet about his discontentment. Whatever action he takes following a service failure, the result is either the customer switches or stays with the service provider. Since it is more costly to replace a customer than it does to retain one (Hart, Heskett, & Sasser, 2000), restaurant owners should aim to have service recovery programs that would result in the customer's satisfaction. Service recoveries are actions that service firms take to resolve the failure (Zeithaml, Bitner, & Gremler, 2006; Lovelock & Wirtz, 2011) and studies have shown that service recovery programs significantly affects customer satisfaction (i.e., Wirtz & Mattila, 2004; Smith, Bolton, & Wagner, 1999).

The primary objective of this study was to evaluate the effects of service recovery on customer satisfaction in dine-in setting in the Philippines, specifically in Metro Manila. The study examined the influence of the justice theory to the customer's level of satisfaction. Service recovery literature has acknowledged perceived justice as a "key influence in the formation of consumers' evaluative judgments of the recovery process" (Schoefer & Ennew, 2005, p. 261). The justice theory, a concept originally applied to organizational settings, was extended to the services recovery settings and evolved over time (Tax, Brown, & Chandrashekaran, 1998; Smith et al., 1999; Cohen-Charash & Spector, 2001) to a three-dimensional concept, namely distributive, procedural and interactional justices. The distributive justice deals with results or outcomes of a decision, whereas the procedural and interactional justices deal with the process to which the decision was rendered. The former being the process by which outcomes were arrived at and interactional justice pertains to the way the process was delivered (Cohen-Charash & Spector, 2001). This study aimed to determine the influence of each of the dimensions to customer satisfaction. Secondly, the study aimed to determine the impact of satisfaction on behavioral intentions such as repurchase and positive word-of-mouth communications. Finally, this study attempts to provide Philippine restaurant service providers with concrete insights on how customers evaluate a firm's recovery strategies and how these efforts influence customer satisfaction.

The organization of this paper is as follows: the next section shows the conceptual framework of the present study then followed by a review of relevant literature to the research hypotheses. Next section describes the research methodology used to gather the data and followed by the empirical results. The last section discusses the summary and the managerial implications of the results.

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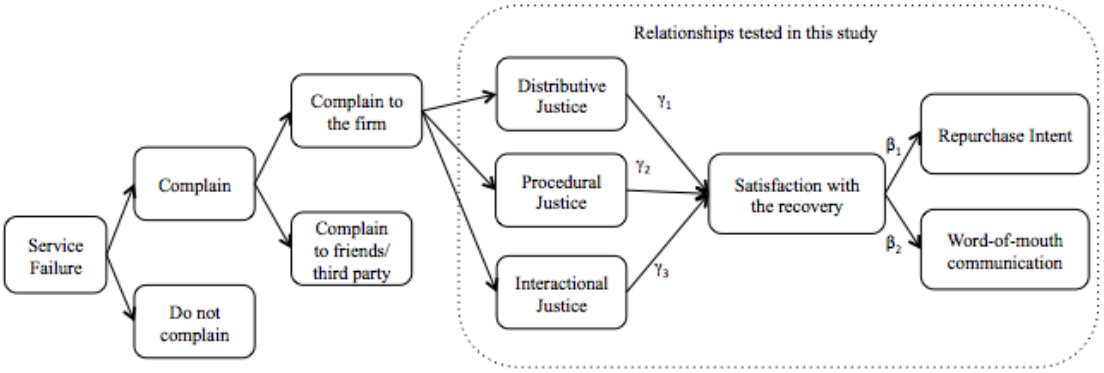
2 Conceptual Framework and Hypothesis Development

Figure 1 shows the conceptual model of the present study. When a service failure occurs, the consumer has the option to either complain or to remain silent. When he opts to complain, he either complains to the service firm or to a third party (i.e., his friends). The service firm only gets the chance to recover from the failure when the consumer opts to call their attention by means of complaining. The justice theory dimensions are used to explain the relationship between the service recovery efforts performed by the employees, satisfaction with the recovery, and the behavioral intentions such as repurchase and favorable word-of-mouth intentions.

Figure 1. The Conceptual Model



*Note: Only the enclosed segment (the dotted line) is examined in this paper.

2.1 Service Recovery and Justice Theory

Service recovery refers to the service provider's efforts to "resolve, amend, and restore the loss experienced by customers due to the service failure" (Hess, Ganesan, & Klein, 2003, p. 129). In restaurants, the experience of a customer with the service firm starts when there is an encounter. An encounter happens when a consumer directly interacts with a service firm (Bitner, 1990) and this begins when the customer enters the eating-place and ends when he leaves it. The interaction between a service provider and its customer is a service failure when the encounter ends up being a negative experience. The cause of the negative experience may either be a result of the outcome that a customer actually received or how a customer received the service, such as the manner the service was delivered (Parasuraman, Zeithaml, & Berry, 1985; Smith et al., 1999; Bitner, Booms, & Tetreault, 1990; Keaveney, 1995). In restaurants, the outcome of service failures includes instances wherein the food served does not match the customer's order or took much longer that the expected preparation time to arrive. Other instances would be food served with unwanted objects such as insects, staple wires or hair, or food that are unpalatable because it tastes foul or came uncooked/overcooked. The process of service failure includes instances wherein frontline employees are rude, slow or passive in their interactions with the customer, while paying customers expect them to be courteous and service-oriented.

Service recovery literature has acknowledged perceived justice or fairness as a key influencer to how customers evaluate service recovery efforts (Schoefer & Ennew, 2005; Zeithaml et al., 2006; Lovelock & Wirtz, 2011). The Equity Theory (Adams, 1963) provides the theoretical support to the perceived justice. The theory suggests that in an exchange, if the individual perceives that he is fairly treated and there is a fair distribution of resources (i.e., what he puts in is equal to what he gets out of the encounter), then equity is said to exist and he will be satisfied. In the same manner, if the individual feels that the outcome and process are unfair, then inequity is said to exist.

The Equity Theory was originally used within the psychological or sociological field and was applied in an establishment's organizational work settings (Greenberg, 1987), which has been extended in the service recovery field to measure justice or fairness in handling complaints. Various studies have shown that justice or the perception of fairness of the service encounter is linked with the satisfaction of customers as to how the service employees handle the complaint (Bitner et al., 1990;

Tax et al., 1998; Homburg & Fürst, 2005; Kau & Loh, 2006). An act is perceived by the customer to be just if the overall outcome and process are fair in his view.

In an organizational setting, the two types of subjective perceptions are: fairness of outcome and fairness of the procedure used to determine the outcome (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). These two perceptions are labeled as distributive and procedural justice, respectively. Over time, the interpersonal aspect of procedural justice was separated (Yim, Gu, Chan, & Tse, 2003), which is now referred to as interactional justice. This dimension of justice theory emphasizes the manner in which the process is executed. Hence, the justice concept applied to service recovery evolved into the following dimensions: distributive, procedural and interactional justices (Tax et al., 1998; Smith et al., 1999; Cohen-Charash & Spector, 2001). Distributive justice deals with decision outcomes, whereas procedural and interactional justices deal with the process by which the decision was rendered; the former being the process by which outcomes were arrived at and the latter pertains to the way the process was delivered (Cohen-Charash & Spector, 2001; Tax et al., 1998).

The concept of justice and fairness, through its three dimensions – distributive, procedural and interactional, is "widely accepted as the conceptual foundation for modeling customer assessments and responses to service recovery" (Wirtz, Mattila, & McColl-Kennedy, 2010, p. 655). For example, Wirtz and Mattila (2004) examined the role of the three dimensions in influencing customer satisfaction with service recovery and their consequences. Their findings suggested that "recovery outcomes, procedures and interactional style jointly influence customer perception" (Wirtz & Mattila, 2004, p. 161) and the subsequent behaviors of repurchase and word-of-mouth in hotel and restaurant settings. A similar study by Smith et al. (1999) on hotel and restaurants suggested that the customers' perceptions of the justices are strongly affected by these recovery efforts. In another research, Kau and Loh (2006) examined the perception of justice in service recovery and how it affects satisfaction of customer post-failure in the mobile phone industry. The findings showed that customers view fairness of outcomes to be the most important component to the level of their satisfaction, although with lower impact, customers' view of the fairness of the process significantly affects their level of satisfaction with service recovery.

In this present study, the perception of the customer with the outcomes and the process by which the outcomes were arrived at influence the level of satisfaction with the service recovery. For instance in the restaurant setting, if the dish served to the customer is unpalatable (i.e., overcooked), the customer expects the service employee to offer some kind of compensation (distributive justice), either by replacing the meal or by waiving the bill. In this instance, the customer expects the service employee to apologize, to be courteous (interactional justice) and to quickly resolve the problem (procedural justice). In the customer's mind, since he is a paying customer, the output of the service recovery (outcome and the process) should match the input, which was the service failure.

2.2 The Justice Dimensions and Hypothesis Development

Distributive justice is mainly concerned with the fairness of the outcome of the recovery effort (Tax et al., 1998). Zeithaml et al. (2006) asserted that customers expect outcomes that match the level of their dissatisfaction and that customers expect "equality" – that is they want to be compensated for the inconvenience they experienced due to the service firm's failures. For instance, when customers order soup, they expect their order to be delivered hot and cleared of "unwanted objects" (such as hair or insects). According to the distributive justice, if the soup came with unwanted objects in it, to recover, the consumer expects the service firm to compensate him/her, which may include replacements, reduced charges (Zeithaml et al., 2006, Wirtz & Mattila 2004), refunds, price discounts, upgraded services, and offer of free products or services (Kelley, Hoffman, & Davis, 1993; Tax et al., 1998). Smith et al. (1999) found that in both hotel and restaurant settings, distributive justice had significant effects on satisfaction with the service recovery, and the findings of Mattila (2001) with the restaurant setting also showed this relationship. Results of Maxham and Netemeyer (2002) in the banking and home construction sales and servicing have suggested that the fairness of the outcome influences satisfaction. Lastly, the results of Tax et al. (1998) have proposed a positive effect of distributive justice on satisfaction on complaint handling. Therefore, it is hypothesized that (Figure 1):

Hypothesis 1: Distributive justice positively affects satisfaction with the recovery (γ_1)

Procedural justice is primarily concerned with the perceived fairness of the procedures involved in the recovery effort (Maxham & Netemeyer, 2002) or the means by which the ends were accomplished (Tax et al., 1998). The customers expect fairness not only in the outcome but also in the complaint process in terms of policies, rules, and timeliness (Zeithaml et al., 2006). Procedural fairness may include speed (Smith et al., 1999, Wirtz & Mattila, 2004) or quick action on the complaint, fair treatment of customers (Bitner, 1990) and absence of hassle (Zeithaml et al., 2006). This dimension of justice is meaningful because its goal is to resolve conflict (Tax et al., 1998); in fact, service recovery literature has suggested that acting fast and offering an apology are often sufficient to make amends (Hart et al., 1990; Tax et al., 1998; Wirtz & Mattila, 2004). This suggests that in the case of a service failure, a service firm that takes the shortest possible time to respond and resolve customer complaint is favored.

From the point of the view of the customer, a delay in resolving the failure may mean that the frontline employee has forgotten about him, especially when he sees other customers being served first by that frontline employee. For instance, if the reservation of a customer is cancelled without notice, the frontline employee should immediately offer a free drink while customer is waiting for the next available table. A quick recovery process without additional hassle to the customer is perceived to be fair and may turn the negative experience around. In both restaurant and hotel settings, customer satisfaction is enhanced with a quick recovery response to a service failure (Smith et al., 1999). In the mobile service industry, procedural justice had a significant effect on customer's satisfaction with the service recovery (Kau & Loh, 2006). Lastly, the results of Tax et al. (1998) showed a positive effect of procedural justice on satisfaction on complaint handling. Against this background, it is hypothesized that:

Hypothesis 2: Procedural justice positively affects satisfaction with the recovery (γ_2)

Lastly, the interactional justice dimension refers to the customer's perceived fairness of the interpersonal treatment he received during the performance of procedures (Tax et al., 1998). Interactional justice may include treating customers politely, showing concern, empathy and honesty (Zeithaml et al., 2006; Tax et al., 1998), and offering an apology (Smith et al., 1999, Wirtz & Mattila, 2004). In the experimental research of Wirtz and Mattila (2004) in a restaurant setting, their results suggested that offering an immediate apology positively affects customer satisfaction and other behavioral intentions whether or not the customer received any compensation for the failure; and consistently lowers satisfaction in the absence of an apology. For instance, when the customer complains of wrong order, it is to the customer's satisfaction for the frontline employee to first offer an apology instead of justifying the mistake. The results of Tax et al. (1998), Maxham and Netemeyer (2002) & Rio-Lanza, Vazquez-Casielles, & Diaz-Martin (2009) supported the view that procedural justice has positive effect on satisfaction on complaint handling. Therefore, it is hypothesized that:

Hypothesis 3: Interactional justice positively affects satisfaction with the recovery (γ_3)

Satisfaction is as an experience at a particular point in time (Zeithaml et al., 2006). Random House Webster defines satisfaction as an occurrence when a person attains a sense of contentment with the experience. Customer satisfaction is crucial to the survival of any firm because customer satisfaction is correlated with the firm's profitability (Fornell, Johnson, Anderson, Cha, & Bryant, 1996) since the outcomes of customer satisfaction are customer loyalty and favorable word-of-mouth (Bitner et al., 1990; Zeithaml et al., 2006). Purchase intent refers to the extent to which customers intend to patronize the service firm in the future after a failure and recovery effort, and word-of-mouth intent refers to the likelihood that a customer would favorably recommend the service firm after a failure and recovery effort (Maxham & Netemeyer, 2002). Other researches have supported the significant relationships between satisfaction and the behavioral intents (see Wirtz & Mattila, 2004; Kau & Loh, 2006; Maxham & Netemeyer, 2002). Therefore, it is hypothesized that:

Hypothesis 4: Satisfaction with the recovery positively affects customer's repurchase intent (β1)

Hypothesis 5: Satisfaction with the recovery positively affects customer's word-of-mouth intent (β2)

3 Method and Measurement

3.1 Sampling and Data Collection

The recall approach was used to examine the relationship between customer perception of justice and their satisfaction with the service recovery. The recall approach is deemed appropriate since the respondents themselves have experienced the event, unlike in scenario approach or role-playing where participants may not be truly engaged (Kernbach &Schutte, 2005).

A structured survey was designed to evaluate the actions, attitudes, and efforts of the service employee in the recovery attempt and to gauge how the performance of the service employee affects the behavioral intentions of the customers. The respondents were asked to describe a particular instance that relates to either an outcome or process failure in a restaurant setting (casual, upscale casual or fine-dining, not quick service restaurants such as fast food eating places). The service failure incident must have been an experience encountered within six months prior to the date of the fieldwork of the study (Tax et al., 1998; Specht, Fichtel, & Meyer, 2007). The respondents were cautioned not to identify the underlying reason for the failure to avoid response bias due to reinterpretation and rationalization. These questionnaires were disseminated to graduate students and the general community in Metro Manila. To ensure comparability and reduce noise arising from different service settings, this study focused on collection of data from the restaurant setting in Metro Manila.

Purposive and snowball sampling were used to collect data. The use of random sampling would have generated a majority of unusable questionnaires given the qualification items. The nature of the study alone would disqualify a lot of respondents if random sampling were used. For instance, although service failure is inevitable, it does not mean that service failure will happen every time a respondent eats at a restaurant. There is a huge probability that a respondent does not experience a service failure within six months prior to the administration of the survey for this study.

A total of 300 questionnaires were collected, of which 12 were rejected because of missing data in the questionnaire. Thus, only 288 samples were used for analysis.

The questionnaire

To quantify the justice theory dimensions – distribution, procedural and interactional – items from various studies (such as Wirtz & Mattila, 2004; Chebat & Slusarczyk, 2005; Smith et al., 1999) were adapted (see Appendix A for the items). To measure the perceived actions, attitudes and efforts of the frontline employees in the course of service recovery, the questionnaire used a seven-point Likert scale response format, which ranged from 'strongly disagree' (1) to 'strongly agree' (7). The numbers in between were unlabelled.

The first section of the questionnaire (see Appendix A) served as the qualifier. The prospective respondent must have had experienced a service failure in a restaurant setting within six months prior to the administration of the questionnaire.

Questions addressed in Part I were structured to measure the variables of justice theory and satisfaction to test the relationship hypothesized in this study. Questions asked in Part II of the questionnaire addressed the respondents' behavioral intentions after the service failure. Finally, Part III of the questionnaire collected the respondents' demographic information of the respondents including gender, age, marital status, educational attainment, occupation and income.

3.2 Measurement and Treatment of Data

Distributional, procedural and interactional justices were each measured with three items adapted from the works of Wirtz and Mattila (2004), Chebat and Slusarczyk (2005) and Smith et al. (1999). A seven-point Likert scale used on the items had measured the respondent's perception of the service employee's performance, ranging from strongly disagree (1) to strongly agree (7). To measure the respondents' satisfaction with recovery efforts, repurchase and word-of-mouth intents, a five-point Likert scale was used.

The methods of statistical analysis used in this study were confirmatory factor analysis (CFA) for the nine items in the questionnaire and the multiple regressions for the hypotheses. Since the items were from previous studies with reliability and validity test results, and the observed variables were assigned to a single factor (construct) based on the justice theory, a confirmatory factor analysis was used instead of an exploratory factor analysis. Structural equation modeling (SEM) is the statistical model used to examine the relationships among the constructs.

To assess the validity of the measurement model, several goodness-of-fit statistics were determined, including Chi-square, Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI) and Comparative Fit Index (CFI), and goodness of fit (GFI).

Chi-square (χ^2) was the primary measure to test the closeness of fit between the observed and estimated covariance matrices, however, it may not be suitable as a goodness-of-fit measure because the χ^2 value increases as sample size and the number of observed variables increase, even if the differences between matrices are identical (Hair, Black, Babin, Anderson, & Tatham, 2010). To make allowance for this problem, CMIN/DF (the ratio of chi-square to degrees of freedom) was computed. A threshold of less than 3 is recommended for CMIN/DF (Biza-Khupe, 2012). The RMSEA establishes a hypothesis of close fit between the model and population (Yang, Watkins, & Marsick, 2004). NFI is a relative fit index that compares the estimated model to a baseline model (Yang et al., 2004), while CFI is an incremental fit index that compares the fit of the estimated model and some alternative baseline model (Hair et al., 2010). Hair et al. (2010) suggests thresholds of RMSEA < .07 with CFI ≥ .92.

To test for the convergent validity of the scale, the size of the factor loading and t-values were analyzed. Variance-extracted estimates were computed to test the validity of the latent construct; these estimates assess the amount of variance that is explained by the underlying factor with respect to variance due to measurement error (Hair et al., 2010).

To test for discriminant validity, the CFA fit indices of a one-factor model was compared with the modified three-factor model. Finally, to assess the internal consistency of the items for each scale in the questionnaire, Cronbach's alpha was used.

3.3 Descriptive Statistics

Table 1 presents the demographics of the respondents. With the sample of 288 and 95% confidence level set, the margin of error was 5.77% [based on the formula: $n = z^2(pq)/e^2$]. Of the 288 respondents, 169 were females; 221 were single, 65 were married and one ws separated. The age ranged from 20 to 72 years, with a median age of 30.5. Almost two-thirds (188 respondents) of the respondents in this study were between 20 to 29 years old. This was not surprising since the sampling frame of the study were the graduate students.

Only one of the 288 respondents didn't finish college. Of the 287, 30 finished graduate school (master's degree), 23 finished medicine or PhD, four respondents finished law, and 217 are currently taking graduate courses (either masters in business administration, finance or law). A little more than a third (37.8%) of the respondents belonged to the less-than ₱25,000.00 average monthly income bracket. This was expected since most of the working respondents (75.3%) are still in graduate school. A fifth (20.8%) of the respondents had an average monthly income of more than ₱70,000.00 while the others fell within the range of ₱25,001 to ₱55,000 income brackets. More than a third of the respondents (37.2%) eat in restaurants at least once a week, almost a fifth (19.1%) eat out at least five times a month and a little more than a fifth (22.6%) eat in restaurants at least once a month.

Service failures experienced by the respondents were as follows: 76% was related to service delivery system failure (i.e., there were unwanted matters in the food served like hair and insects, food was unpalatable because it was either spoiled, uncooked or overcooked, delivery of food took longer than expected or as promised, and food served was not appetizing); 16% was related to customer

needs and requests not granted (i.e., service employees have forgotten their orders and food served did not match their orders); and seven percent was related to unsolicited employee actions (i.e., reckless or rude employees).

Table 1. Demographics of the Respondents (N=288)

Characteristic	Frequency Value	Percent
Gender		
Male	119	42.0
Female	169	58.0
Marital Status		
Single	221	76.7
Married	65	22.6
Separated	1	0
No answer	1	0
Age		
20 – 29	188	65.3
30 – 39	44	15.3
40 – 49	42	14.6
50 – 59	12	4.2
above 60	2	0
Education		
Vocational	1	0
College	230	79.9
Graduate School	34	11.8
PhD / M.D.	23	8.0
Monthly Income (₱)		
Below ₱25,000	109	37.8
₱25,001 – 40,000	76	26.4
₱40,001 – 55,000	30	10.4
₱55,001 – 70,000	13	4.5
above ₱70,000	60	20.8
Number of people in the party		
1	2	0
2	59	20.5
3	50	17.4
4	81	28.1
5	50	17.4
More than 5	46	16
Frequency of eating out		
Less than once a month	10	3.5
At least once a month	65	22.6
At least once a week	107	37.2
At least 5x a month	55	19.1
More than 5x a month	50	17.4
No answer	1	0.

4 Results

AMOS 19 was used to perform the confirmatory factor analysis (CFA). Table 2 summarizes the results. The magnitude of the standardized regression weights ranged from 0.676 to 0.952 with all significant loadings (all t-values were greater than 3.0, $p < .001$). These results showed that all indicators were effectively measuring its respective underlying concept (Anderson & Gerbing, 2009). The results provided support to the convergent validity of the scale (Hair et al., 2010; Babakus, Yavas, Karatepe, & Avci, 2003). Furthermore, the computed average variance-extracted estimates (reliability at 0.56, responsiveness at .63, and assurance at 0.75) suggest adequate convergence. The variance-extracted estimates assessed the amount of variance that is explained by the underlying factor with respect to variance due to measurement error. The threshold to suggest adequate convergence, which also provides support that the latent constructs are valid, is 0.50. (Hair et al., 2010).

Table 2. CFA Results, Cronbach's Alpha and Average Extracted Variance

Measurement	Standardized Coefficient*	Squared Multiple Correlations	Cronbach Alpha (STATA 12)	Average Extracted Variance**
*x*1 ← Distributive	.68	0.46	0.81	0.56
*x*2 ← Distributive	.74	0.54		
*x*3 ← Distributive	.82	0.67		
*x*4 ← Procedural	.89	0.79	0.83	0.63
*x*5 ← Procedural	.76	0.58		
*x*6 ← Procedural	.73	0.53		
*x*7 ← Interactional	.84	0.71	0.89	0.75
*x*8 ← Interactional	.80	0.63		
*x*9 ← Interactional	.95	0.91		

Notes: Please see appendix A for the items *x*1 to *x*9.
* *t-values significant at p < .001*
** *formula of average extracted variance is the summation of the squared correlation of all items belonging to one latent variable over the total number of items belonging to that latent variable.*

To test for scale reliability, Cronbach's alphas were obtained from STATA 12. The computed Cronbach coefficient alphas range from 0.81 – 0.89 (see Table 2), which suggested a good internal consistency of the three scales. George & Mallery (2003) suggested the following rules of thumb of Cronbach's Alpha: "__ > 0.90 – excellent; ___ > 0.80 – good; ___ > 0.70 – acceptable; ___ > 0.60 – questionable; ___ > 0.50 – poor; and ___ < 0.50 – unacceptable". All the squared multiple correlations of the scale items ranged from 0.46 to 0.91, which suggested that the measured variances were sufficiently explained by the underlying construct. For instance, in the case of x1 (i.e., the employee offered to compensate for the failure), the underlying concept (i.e., distributive justice) explained 45.7% of the variance of *x*1.

Table 3 gives the fit indices of the measurement models. The normed χ^2 (χ^2/df = 2.267) of the three-factor model was acceptable, which suggested an acceptable fit for the CFA model. The value of the RMSEA, an absolute fit index, was 0.066—below the 0.07 guideline (Hair et al., 2010). The RMSEA provides additional support for model fit. For the incremental fit index, CFI exceeded the guideline cutoff of 0.92; therefore, the result suggests a good model fit, or in other words, more than 90% of the joint amount of variance and covariance of the data could be accounted for by the model being tested (Yang et al., 2004)

Table 3. Fit Indices for Measurement Model

Fit Index	Three–Factor	One–Factor
χ^2	99.744	548.665
df	44	35
χ^2/df	2.267	15.676
RMSEA	0.066	0.226
NFI	0.959	0.748
CFI	0.977	0.759

Note: RMSEA = root mean square error of approximation; NFI = normed fit index; CFI = comparative fit index; GFI = goodness-fit-index.

To test for discriminant validity, the correlations between the three latent variables were set to one. This test assumed that there is only one latent concept underlying all the items. The fit indices are shown in Table 3 under One–Factor. The goodness-of-fit indices were as follows: χ^2/DF = 15.676,

RMSEA = 0.226, NFI = 0.748 and CFI = 0.759. The fit of the one-factor model was significantly different from the three–factor model; hence, the discriminant validity was supported (Hair et al., 2010).

Figure 2, Table 2, and Table 4 show the results of the hypothesis testing. The estimates of the structural coefficients were in standardized value. This means that the output-standardized value is a change in one variable given a change in another, both measured in standard-deviation units (STATA SEM Manual). All of the path coefficients were statistically significant and positive in direction. The results suggest that dimensions of justice theory – namely, distributive, procedural and interactional – have direct significant effects on the customer's level of satisfaction with the service recovery. Among the three dimensions, distributive has the greatest effect on satisfaction (coefficient of 0.512, $p < .001$) followed by interactional (coefficient of 0.243, $p < .001$) then finally procedural (coefficient of 0.157, $p < .10$). Therefore, the results provide strong support for hypotheses 1 and 3 while only weak support for hypothesis 2. The results also suggest that the customer's level of satisfaction with the service recovery has a significant and positive effect on the behavioral intentions – namely, repurchase and word-of-mouth communication. The path coefficient of satisfaction with service recovery to repurchase intent is 0.64 ($p < .001$) and to word-of-mouth communication, 0.61 ($p < .001$). Both path coefficients are statistically significant at the 0.001 levels, which means the results strongly support hypotheses 4 and 5.

Figure 2. Estimates Between Dimensions of Justice Theory, Satisfaction with Service Recovery and Behavioral Intentions

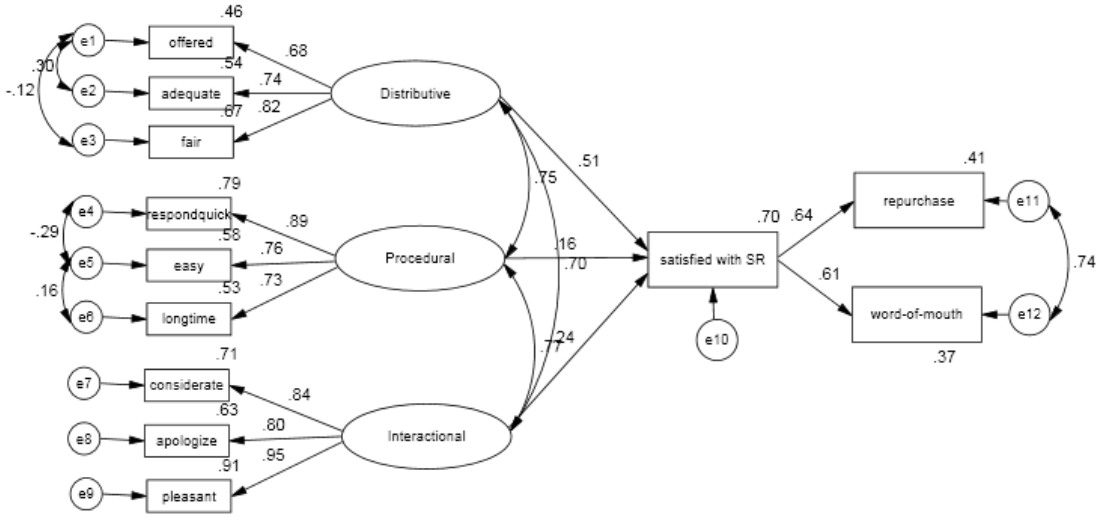


Table 4. Coefficient Estimates

Measurement	Standardized Coefficient	*t* – values
*y*1 ← Distributive	.512	*5.44**
*y*1 ← Procedural	.157	*1.76***
*y*1 ← Interactional	.243	*3.39**
*y*2 ← *y*1	.640	*14.11**
*y*3 ← *y*1	.611	*13.07**

Notes: *y*1 = satisfaction with service recovery efforts; *y*2 = repurchase intent; *y*3 = word-of-mouth intent

* *t-values significant at p < .001*

** *t-values significant at p < .10*

5 Discussion and Implications

The present study examined the influence of justice theory to the customer's level of satisfaction with service recovery and the behavioral intentions. The results suggest that customer's perception of recovery outcome and the process by which these outcomes were made positively affect customer's satisfaction with the recovery efforts. These findings are consistent with previous studies in service failure and recovery (Tax et al., 1998; Matilla, 2001; Maxham & Netemeyer, 2002; Kau & Loh, 2006, Wirtz & Matilla, 2004; Rio-Lanza et al., 2009).

Results of this present study also show that the influence of the outcome (distributive justice) of the recovery efforts to the level of satisfaction of the customer for that specific encounter outranks the process (procedural and interactional) of the outcome. Findings of Smith et al. (1999) & Nikbin, Ismail, Marimuthu, & Jalalkamali (2010) support this result. The respondents of Smith et al. (1999) were hotel and restaurant customers while Nikbin et al. (2010) were the airline customers. These findings imply that tangible recovery efforts, such as offering 'fair' compensation, are crucial to the customer's post-failure satisfaction.

However, the results of this current study are not in agreement with the findings of Rio-Lanza et al. (2009) and Maxham and Netemeyer (2002). The results of Rio-Lanza et al. (2009) indicate that the process of the outcome on actual service recovery situations in the cellular-telephone service, specifically procedural justice, influences customer satisfaction the most. The difference in results could be attributed to the nature of the industry under study. Unlike the restaurant industry, telecommunication service can be categorized under full service. This argument is consistent with the conclusion made by Maxham and Netemeyer (2002). In their paper, two industries different in nature – the banking industry (full service) and a new home construction sales and servicing (more product oriented) – were focused on. Their findings suggest that the process, procedural and interactional justices, has stronger effects on satisfaction than does distributive justice in the banking industry, but not on the new home construction sales and servicing. They suggest that the difference in results could be due to the nature of the industry (full service versus service with a more product-oriented industry). Interestingly, the results of this present study show that while the data strongly support hypotheses 1 and 3, it only provided weak support to hypothesis 2. For this sample of respondents, the outcome of the recovery effort and the behavior of the frontline employees as they deliver the recovery efforts strongly influence the customer's satisfaction with the recovery efforts. However, though it still positively affects the level of satisfaction, the quickness of the process is not as crucial as the outcome and behavior of the server. Possible reason for this is that the respondents in this study were with a group when the service failure happened. On the average, the number of people in the respondent's group was 4.54 (see Table 1 for the number of people with the respondent when the service failure and recovery happened). According to Maister (1985), in his classic paper on the psychology of waiting, he suggests that waiting alone feel longer than waiting with a group because one finds some comfort knowing that he is not alone waiting. Also, the group conversation tends to distract people from the time passed on waiting. Almost 80% of the respondents for this present study had at least two other people in their group. Another reason probably is that the respondents were not in any hurry. Fifty percent of the respondents in this present study experienced the failure and recovery during dinnertime (133 respondents) and after dinnertime (12 respondents).

Furthermore, the results suggest that customer's level of satisfaction positively influences his intentions to repurchase and spread word-of-mouth communication of the firm after service failure and recovery. These results were expected and consistent with other studies (see Oliver, 1980; Matilla, 2001; Homburg & Fürst, 2005; Wirtz & Mattila, 2004; Maxham & Netemeyer, 2002; Kau & Loh, 2006). The findings of this present study also contribute to the pool of existing knowledge on the antecedents and consequences of customer satisfaction with service recovery efforts. Although all the dimensions of the justice theory positively influence the level of the customer satisfaction with the recovery effort, not all dimensions are significant at the 0.05 levels. The profile of the Filipino respondents may contribute to this conclusion.

Since it is more profitable to keep current customers than attracting new ones, restaurant owners should invest in their service recovery practices. Past studies have shown that a customer who is satisfied with the recovery efforts would continue to patronize the restaurant despite the failure and would engage to word-of-mouth communication. Good or bad, customers would talk about it to their

families, friends and third parties. Therefore, restaurant owners should take the time to develop policies and practices on how to handle failure and recovery situations.

This present study also suggests that management needs to recognize the vital role of frontline employees in customer satisfaction in the recovery process. Frontline employees are crucial in the recovery process because they are responsible for interpreting and understanding the needs of the customers in real time (Zeithaml et al., 2006). This implies that restaurant owners do not only develop policies and practices but should invest in training their frontline employees. Training should include interpersonal skills, behavioral and values formation since the interactional justice dimension significantly affects customer's level of satisfaction with the recovery efforts.

6 Conclusion

Service failure happens, but as studies have shown, the recovery efforts performed by the frontline employees can turn these negative experiences to satisfying ones. This empirical study investigated how these recovery efforts affect customer satisfaction. The primary objective of the study was to determine how the perception of fairness in the outcome and process of the service recovery affects satisfaction. Confirmatory factor analysis results showed that the perceived fairness of the outcome and the attitude of the frontline employees as they perform the recovery process have significant effects on recovery satisfaction, while results provided weak support for the process of recovery. The effect of distributive justice on recovery satisfaction was stronger than interactional justice. Results also showed that satisfaction with the recovery efforts positively and significantly affect the customer's behavioral intentions of repurchase and word-of-mouth communications.

This research has two limitations that are viable prospects for future research. First, the research used a recall approach to gather data. Tax et al. (1998) argue that recall bias could influence the results since the actual experience may be different from the recollection process. It is, however, proposed in this present paper that since the answers of the respondents are now post-reflections of what they can currently say about their experience with the restaurants, their responses are more reflective of their true thoughts and feelings toward the restaurant. For example, when asked if they would continue to patronize the eating-place, their answer to that question is not based on some future behavior but on their actual behavior – whether they had come back to that eating-place since or they finally dropped that restaurant from their evoked set. Nevertheless, a possible extension to this research is the use of a field study with actual service failures to capture the thoughts and feelings of the respondents during that encounter real-time. Another option to consider if finances are not a hindrance is to use a field experiment with the cooperation of selected restaurants.

The use of purposive and snowballing sampling may be a second limitation; therefore, the results of the study may have limited generalizability and should be tested in the future.

A third area of future research is to replicate and extend the study to include other service industries (i.e., pure service such as consulting, financial services, accounting services versus services with tangible elements such as hotels, airlines, hair stylist) to establish generalizability across service industries in the Philippines.

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Appendix

Questionnaire Items

Distributive Justice	
*x*1	The employee offered to compensate for the failure.
*x*2	The compensation is adequate.
*x*3	The results I received from the complaint were fair.
Procedural Justice	
*x*4	The employee responded quickly to our complaints.
*x*5	It was easy to complain.
*x*6	The length of time taken to resolve my problem was longer than necessary I.
Interactional Justice	
*x*7	The employee was considerate and courteous.
*x*8	The employee apologized for the service failure.
*x*9	The employee was quite pleasant to deal with.