

# The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants

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## Abstract

**Purpose** – The primary objective of this study is to investigate the effects of service recovery on customer satisfaction. Specifically, it examines the perception of “justice” in service recovery and how it affects the level of satisfaction and behavioral outcomes. In addition, the study also explores whether the “recovery paradox” exists.

**Design/methodology/approach** – Data were collected through a survey using a structured questionnaire. The 428 respondents were analyzed according to whether they did or did not make a complaint to the service providers.

**Findings** – The findings showed that the complainants’ level of satisfaction with service recovery was significantly affected by perceived justice. The behavioral outcomes of the complainants in terms of trust, word-of-mouth (WOM) and loyalty were also found to be affected by their satisfaction with the service recovery. *T*-tests confirmed that the levels of trust, WOM and loyalty were significantly higher for those respondents who were satisfied with the service recovery compared with those who were dissatisfied. Further *t*-tests also indicated that respondents who were initially satisfied with the service expressed greater trust and positive WOM compared with the satisfied complainants. Finally, the study showed that dissatisfied complainants would exhibit a lower level of trust and were more likely to engage in negative word-of-mouth behavior compared with those who were dissatisfied initially but chose not to complain.

**Practical implications** – The findings in this paper confirmed the importance of perceived justice in service recovery. Satisfaction with service recovery also leads to a higher level of trust, positive word-of-mouth behavior and, to a lesser extent, the level of loyalty. Finally, the lack of support of the “recovery paradox” effect suggests that successful service recovery alone would not bring customer satisfaction to pre-service failure levels. It is therefore essential to provide service right at the first time.

**Originality/value** – This is a new study on the service provided by mobile phone service providers in an Asian environment. It also reinforces the important of perceive justice in service recovery and debunks the existence of the “recovery paradox” effect.

**Keywords** Customer satisfaction, Complaints

**Paper type** Research paper

An executive summary for managers can be found at the end of this article.

## Introduction

Customer satisfaction is crucial to the survival of any business organization. However, service failures are often unavoidable due to human and non-human errors. Such failures to perform a service inevitably lead to customer dissatisfaction. The consequences can be dire to a service provider. The breakdown in relationship can contribute to a rise in customer complaints, bad word-of-mouth communications and defections. It has been found that a dissatisfied customer may relate his or her bad experience with the service provider to 10 to 20 other people (Zemke, 1999), thus eroding potential patronage of the service provider. It has therefore been recognized that once a service failure occurs, it becomes crucial that service recovery, defined as the action taken by

the service provider to seek out dissatisfaction (Johnston, 1995) and as a response to poor service quality (Grönroos, 1988), be effectively carried out to reduce the damage in relationship and to pacify the dissatisfied customer. It has also been suggested that effective service recovery had led to higher satisfaction compared to service that had been correctly performed on the first time (Ettel and Silverman, 1981; McCollough and Bharadwaj, 1992). This phenomenon of service recovery paradox has also been discussed more recently by McCollough *et al.* (2000), Smith and Bolton (1998) and Tax *et al.* (1998).

The primary objective of this study is to determine the effects of service recovery on customer satisfaction in the mobile phone service industry in an Asian country – Singapore. Specifically, the study would examine the perception of “justice” in service recovery and how it affects the level of satisfaction. Second, it aims to determine the impact of satisfaction on behavioral outcomes of the affected consumers. Third, it proposes to investigate if satisfactory recovery efforts would create greater satisfaction for customers who complained about a service failure compared to those who were satisfied with the service provided in the first place, i.e. whether the service recovery paradox holds true. Finally, it purports to analyze if poor recovery efforts could create greater dissatisfaction for customers who complained (i.e. complainants) compared to those who did

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not complain (non-complainants) but were dissatisfied with the service provided.

In the next section of this paper, we discuss the literature related to service recovery and the application of “justice” theory in service recovery management. The second section proposes the model for testing and explains the methodology adopted. This is followed by a discussion of the main findings. The final section examines the implications of the findings to service providers in general.

## Review of past works

Service recovery refers to the action taken by a service provider to address a customer complaint regarding a perceived service failure (Grönroos, 1988). It is the process by which steps are taken as a result of negative customer perception of initial service delivery. Recovery management is considered to have a significant impact on customers who experienced service failures because they are usually more emotionally involved and observant of service recovery efforts (Berry and Parasuraman, 1991). Understanding service recovery is particularly important for managers as the unique nature of service (inseparability of production and consumption) makes it impossible to ensure 100 percent error-free service (Fisk *et al.*, 1993).

Customers often use the equity theory (Adams, 1965) to evaluate service recovery efforts. Adams (1965) first proposed that people felt fairly treated in social exchange relationship when they perceived their own economic outcomes relative to their inputs are in balance. On the contrary, inequity is said to exist if the perceived inputs and outcomes in an exchange relationship are perceived to be unjust or unfair. As such, the presence of inequity is expected to result in both dissatisfaction and behavior that might provoke actions to bring about a balance. In a service marketing situation, customer inputs could be the costs associated with a service failure such as economic, time, energy, and psychic costs (Hoffman and Kelley, 2000). The outcomes could include specific recovery tactic used such as cash refund, apology, replacement, and so on. The outcomes must be perceived to be fair or just by the customers in order for them to be satisfied with the service recovery. According to Hoffman and Kelley (2000), perceived justice proposes that “the service recovery itself; the outcomes connected to the recovery strategy; and the interpersonal behaviors enacted during the recovery process and the delivery of outcomes are all critical” in service recovery assessment (p. 419). Hence, Tax *et al.* (1998, p. 62) proposed a three dimensional concept of justice:

Distributive justice (dealing with decision outcomes), procedural justice (dealing with decision-making procedures) and interactional justice (dealing with interpersonal behavior in the enactment of procedure and delivery of outcomes).

### Dimensions of perceived justice

Distributive justice is concerned primarily with the specific outcome of the recovery effort, i.e. what did the service provider do to pacify the offended customer and whether the consequent outcomes more than offset the costs incurred by the customer (Greenberg, 1990; Gilliland, 1993). Some often quoted distributive outcomes include compensation in the form of discounts, coupons, refund, free gift, replacement, apologies and so on (Blodgett *et al.*, 1997; Goodwin and Ross, 1992; Hoffman and Kelley, 2000; Tax *et al.*, 1998). The

assessment of whether the compensation is fair may be also affected by the customer’s prior experience with the firm, knowledge about how other customers were treated in similar situations and perception of the magnitude of his or her own loss (Tax *et al.*, 1998). Blodgett *et al.* (1997) found that in a retail setting, distributive justice had a significant effect on customers’ repatronage and negative word-of-mouth intentions.

Procedural justice focuses on the “perceived fairness of the policies, procedures, and criteria used by decision makers in arriving at the outcome of a dispute or negotiation” (Blodgett *et al.*, 1997, p. 189). Tax *et al.* (1998) described five elements of procedural justice including process control, decision control, accessibility, timing/speed and flexibility. Laventhal *et al.* (1980) concluded that procedures must be consistent, unbiased and impartial, representative of all parties concerned and based on correct information and ethical standard to be judged fair. It has also been found that procedural justice is important in service recovery as consumers who might be satisfied with the type of recovery strategy offered but still could be unhappy if the process endured to seek redress were unsatisfactory (Kelley *et al.*, 1993). However, Blodgett *et al.* (1997) found that in a retailing setting, procedural justice (timeliness) did not have a significant effect on customers’ repatronage intentions nor their negative word-of-mouth intentions.

Interactional justice focuses on the “fairness of the interpersonal treatment people receive during the enactment of procedures” (Tax *et al.*, 1998, p. 62). They further identified five elements of interactional justice: explanation/causal account, honesty, politeness, effort and empathy. In a service recovery situation, interactional justice would refer to the manner in which the recovery process is operationalized and recovery outcomes presented. This distinction is important as Bies and Shapiro (1987) found that people might view the procedure and outcome to be fair and yet felt being unfairly treated as a result of interactional factors. Other research has shown that the manners in which managers and employees communicate with customers (Clemmer, 1988; Goodwin and Ross, 1992) and efforts taken to resolve conflicts (Mohr and Bitner, 1995) affected customer satisfaction. For instance, when employees apologized for their mistakes, customers often ended up feeling more satisfied. Heskett *et al.* (1997) also confirmed that display of empathy, being polite and willingness to listen to customers were critical elements in service encounters. Blodgett *et al.* (1997) also discovered that interactional justice had the strongest effect on subjects’ repatronage and negative word-of-mouth intentions in their experimental study.

### Behavioral outcomes resulting from satisfaction with service recovery

As discussed in previous section, perceived justice would affect the level of customer’s satisfaction of a service recovery strategy. Blodgett *et al.* (1995) observed that satisfactory or unsatisfactory resolution of the dispute would affect whether the complainant would repatronize the seller (or exit) and whether that person would engage in bad or good word-of-mouth communication. Bitner *et al.* (1990) also found that customers were likely to react positively if initial service failures were followed by amiable recovery. Tax *et al.* (1998) argued that repurchase intentions could be influenced by “structural factors such as switching costs, availability of

alternatives or contractual agreements". As such, they advocated the inclusion of commitment and trust to be the two elements in the study of customer satisfaction. In this study, trust, word-of-mouth intention and consumer loyalty (commitment) would be investigated as consequences of customer satisfaction.

Trust has been a central construct in the study of marketing and customer relationships since its importance was emphasized by Dwyer *et al.* (1987). Research has shown that relationship marketing is built on the foundation of trust (Crosby *et al.*, 1990; Morgan and Hunt, 1994). Trust exists when "one party has confidence in an exchange partner's reliability and integrity" (Morgan and Hunt, 1994, p. 23). Moreover, repeated satisfaction over times would strengthen the perceived reliability of the provider and contribute further to trust formation (Ganesan, 1994). As such, satisfaction with service recovery would lead to the building of trust.

Word-of-mouth (WOM) refers to the informal communication between consumers about the characteristics of a business or a product (Westbrook, 1987). It provides consumers with information about a firm that assist them to decide if they should patronize it (Lundeen *et al.*, 1995; Zeithaml *et al.*, 1993). In a service setting, it is important that if failure occurs steps must be taken to pacify the dissatisfied customers. If not, it is highly likely that they will either exit or engaged in negative WOM to the detriment of the service provider. The end result would be lost sales and profits. On the other hand, consumers who receive fair service recovery are more likely to repatronize the service provider and even engage in positive WOM behavior, thus spreading goodwill for the service provider. Blodgett *et al.* (1997) confirmed that interactional justice had large impact on WOM intentions. As such, satisfaction with service recovery would encourage positive WOM communication.

Customer loyalty underlies a commitment to a particular vendor and is often reflected as the continued patronage of the same provider. Customer loyalty is important as the long-term survival of the firm lies in its ability to retain and attract profitable customers. Loyal customers generally possess lower marketing requirements and are deemed to be more profitable than new customers (Dawkins and Reichheld, 1990). Reichheld and Sasser (1990) also reported that a service company could boost profits by 100 percent just by increasing customer retention rate by 5 percent. Retention is believed to be a function of existing customers' level of satisfaction. Other studies have also shown that an important variable that contributes to customer and employee commitment is satisfaction (Kelley and Davis, 1994; Kelley *et al.*, 1993). When a firm develops a good system of resolving customer complaints, it leads to greater customer loyalty (Tax and Brown, 2000). On the other hand, Tax *et al.* (1998) discovered that as dissatisfaction with complaint handling increases, commitment would decrease. Similarly, Andreassen (1999) also affirmed that satisfaction with service recovery had a strong impact on customer loyalty. As such, it can be hypothesized that satisfaction with service recovery would lead to higher consumer loyalty.

### The proposed model

Previous literature on consumer satisfaction/dissatisfaction has focused predominantly on complainants who are dissatisfied with the service recovery process. In contrast, there is a lack of studies on non-complainants who are

satisfied (ordinary satisfied customers) as well as those who are dissatisfied (non-complaining dissatisfied customers) with the service provider. As such, customers in a service setting can be broadly divided into two distinct classes: those who complain (complainants) and those who do not complain (non-complainants). Of the non-complainants, they are either satisfied with the service (ordinary satisfied customers) or dissatisfied with the service provider but did not lodge a complaint (dissatisfied non-complainants). Of the complainants, they are either satisfied (satisfied complainants) with the service recovery provided or dissatisfied (dissatisfied complainants). These four types of consumers may experience different service encounters and would be expected to display different levels of satisfaction with the service provider. This satisfaction or dissatisfaction would lead to different behavioral outcomes. Specifically, they would exhibit different levels of trust, WOM intentions and loyalty to the service provider. This research model is illustrated in Figure 1. This study would examine the differences in the behavioral outcomes among the four groups of consumers.

## Method of study

### The sampling process

Data were collected through survey using a structured questionnaire administered to students and the general public. The only condition for the inclusion of respondents was that they must have purchased a mobile phone before. The survey was posted on the internet as it is a convenient, fast and cost-effective means of eliciting responses from respondents (Zikmund, 1999). The survey was posted on a website in Singapore over a month from January to February, 2002. To generate more traffic to the website, subjects were informed of the survey via e-mail. Students from the university database were selected randomly and approached to take part in the survey. Snowball sampling was also used to obtain responses from the non-student population. Subjects were also encouraged to forward the survey to others.

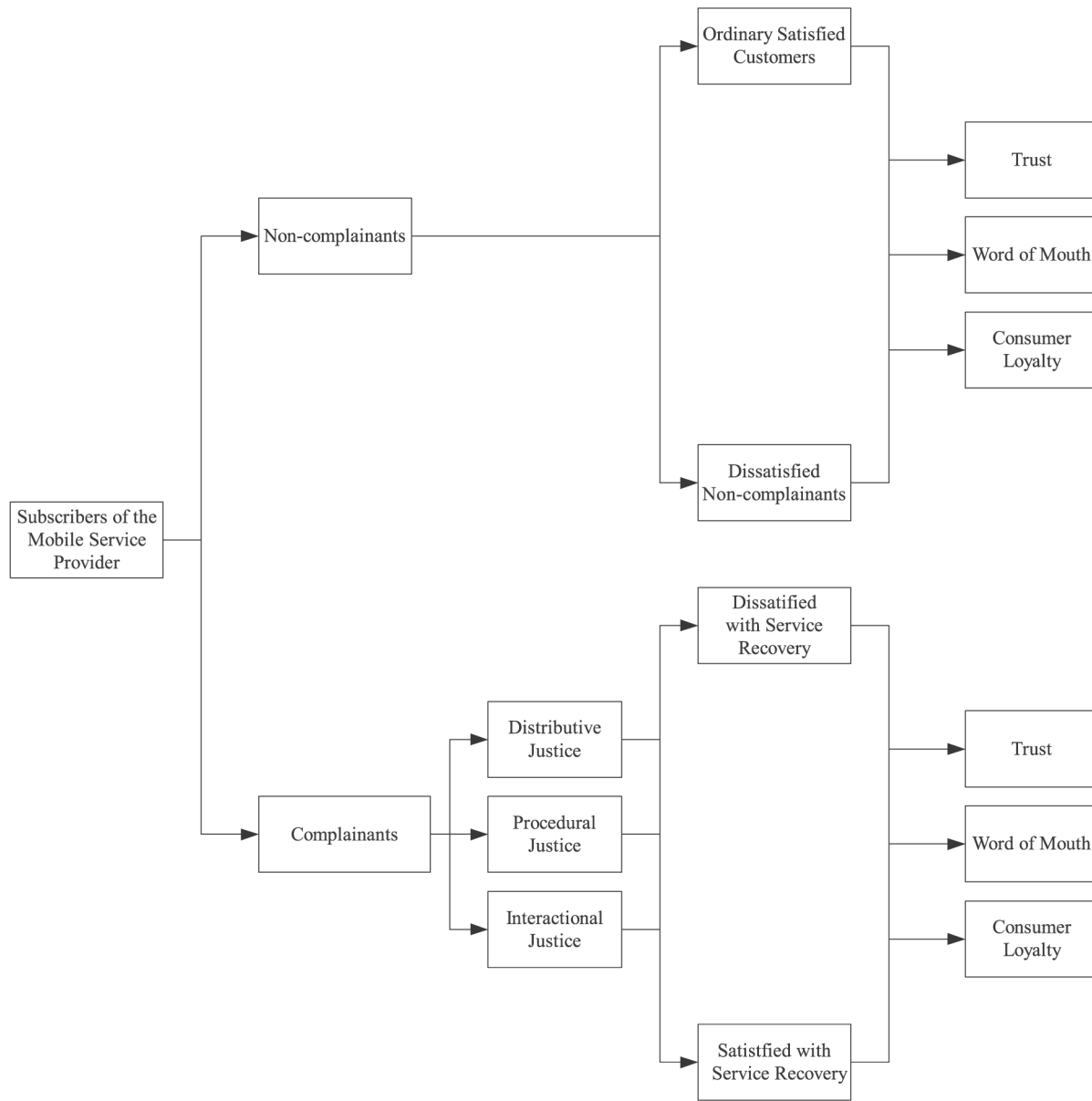
A total of 435 responses were collected. Out of these, seven were rejected because of missing data in the questionnaire. Thus, the total usable sample for analysis was 428. Subsequently, the sample was segregated into two groups. One group comprised of respondents who had experienced service failure and had complained to the mobile service providers (Complainants,  $n = 153$ ). The other group consisted of respondents who did not lodge any complaint with the service provider (non-complainants,  $n = 275$ ).

### The questionnaire

The initial portion of the questionnaire requested respondents to provide background information regarding their mobile phone purchases. This included the name of the service provider, price plan chosen, and month and year of purchase. This was followed by a series of questions relating to different aspects and overall satisfaction with the service provider. The objective of soliciting such information was to help the respondents to recall their service experience and find out their level of satisfaction with their respective service provider.

In section 2, a question was asked to screen out respondents who had complained to the mobile service providers versus those who did not. The latter group was asked to proceed to another section to fill up questions regarding their level of

Figure 1 The research model



trust, WOM behavior and loyalty towards the mobile service providers. On the other hand, if respondents had complained to the service providers, they had to report the details of their recent complaint experience. Such details included the medium used to lodge the complaint (e.g. phone, in person or e-mail), the problem that led to the complaint (e.g. billing and payment issues, customer problems etc.), and the personnel to whom the complaint was made (e.g. manager, customer service personnel, retail employees etc.).

Questions in section 3 measured the three dimensions of perceived justice. Both interactional and procedural justice were measured using multi-item scales. Politeness (Blodgett *et al.*, 1997), effort, empathy (Parasuraman *et al.*, 1988) and explanation (Bies and Shapiro, 1987) were used to measure interactional justice. As for procedural justice, accessibility (Bitner *et al.*, 1990), timing (Taylor, 1994) and process

control (Goodwin and Ross, 1992) were used to measure this dimension. The multi-items used by this study are similar to those adopted by Tax *et al.* (1998). As for distributive justice, this study only used items that reflected broad evaluations of the fairness of outcomes. These included questions on whether the outcome met the complainant’s needs. These items were built on measures used in other marketing studies (Clemmer, 1988; Oliver and Swan, 1989). Next, the constructs “satisfaction with service recovery” (Crosby *et al.*, 1990), “trust” (Tax *et al.*, 1998), “word-of-mouth” (Blodgett *et al.*, 1997; Walker and Harrison, 2001) and “consumer loyalty” (Dick and Basal, 1994; Fornell, 1992) were measured with items adapted specifically for this research study.

The last section of the survey asked respondents to provide information about their demographic characteristics. This

information included gender, education, age, ethnic group, type of residence, monthly income and occupation.

The questionnaire was pre-tested among a group of 20 potential respondents but no major problems were detected. Several minor modifications were made to ensure clarity of the items in the final version of the questionnaire.

## The main findings

The data were analyzed using SPSS. The profiles of the respondents would first be presented in this section, followed by results of the statistical analysis.

### Profiles of respondents

Table I shows the demographic characteristics of the respondents in total as well as in separate groups as complainants and non-complainants. There were almost equal number of males and females in the sample. The majority of the respondents were at least tertiary educated. In terms of age distribution, almost seven out of ten (or 68 percent) were 20 to 24 years old. About 10 percent were aged 30 or older. About three out of five in the sample (or 60.3 percent) earned less than S\$1,000 a month. This is not surprising as about half the respondents were students. Those making S\$3,000 or more a month accounted only for about 8

Table I Demographic characteristics of respondents

Characteristics	Number	Total (%)	Group 1 (%)	Group 2 (%)
<b>Gender</b>				
Male	218	50.9	35.8	64.2
Female	210	49.1	35.7	64.3
<b>Education level attained</b>				
Secondary and below	28	6.5	39.3	60.7
Junior college	104	24.3	32.7	67.3
Polytechnic diploma	82	19.2	35.4	64.6
University degree and/or above	203	47.4	36.9	63.1
Others	11	2.6	36.4	63.6
<b>Age group</b>				
15-19	15	3.5	33.3	66.7
20-24	291	68	32.6	67.4
25-29	77	18	39.0	61.0
30-34	16	3.7	43.8	56.2
35-39	7	1.6	57.1	42.9
≥ 40	22	5.2	54.5	45.5
<b>Personal monthly income</b>				
≤ \$999	258	60.3	34.5	65.5
\$1,000-\$1,999	57	13.3	33.3	66.7
\$2,000-\$2,999	79	18.5	34.2	65.8
\$3,000-\$3,999	24	5.6	58.3	41.7
\$4,000 and above	10	2.3	40	60
<b>Occupation</b>				
Student	222	51.9	33.3	66.7
White-collar jobs	194	45.3	38.1	61.9
Blue-collar jobs	12	2.8	41.7	58.3

Notes: Group 1 refers to the complainants ( $n = 153$ ); Group 2 refers to the non-complainants ( $n = 275$ ); Total consists of all the respondents ( $n = 428$ )

percent of the sample. All in all, the sample consisted mainly of students, in the age group of 20-24 and making less than S\$1,000 a month. When the two groups (complainants versus non-complainants) were compared, no significant differences were detected in most of the demographic characteristics, with the exception of income where those earning S\$3,000 or more were observed to be more likely to lodge a complaint.

### Factor analysis

Factor analysis was conducted on 32 statements related to the three dimensions of perceived justice. Principal axis factoring with varimax rotation was employed. The Bartlett test of sphericity confirmed that factor analysis was appropriate. The value of the KMO statistics was 0.943 that fell within the meritorious range of a good model. Four factors were extracted and explained 64.2 percent of the variance. Table II shows the factors extracted and the associated loadings. The Cronbach's alpha values for these factors were all around 0.90 thus confirming that these variables had high reliability.

The first factor extracted was procedural justice. This factor uncovered only one dimension for procedural justice similar to that found by Tax *et al.* (1998). Two factors were extracted for interactional justice. One was related to statements measuring explanation and effort while the other was concerned with empathy and politeness. The last factor referred to the outcomes of the service recovery and was clearly labeled as distributive justice.

Similarly, factor analysis was also conducted on the statements measuring behavioral outcomes (Table III). The KMO statistics was 0.939. Three factors were extracted with loadings ranging from 0.467 to 0.781. The factors extracted explained 72.56 percent of the total variance. The Cronbach alpha values ranged from 0.763 to 0.845, thus suggesting that these constructs had high internal consistency. The three factors were labeled as hypothesized: word-of-mouth, consumer loyalty and trust.

### Perceived justice on satisfaction and behavioral outcomes

Multiple regression analyses were first used to establish the relationship between perceived justice and customer satisfaction. This was followed by an examination of how satisfaction could have impacted on customer's behavioral outcomes. Specifically, all the different aspects of perceived justice (procedural, interactional and distributive) were regressed on satisfaction with service recovery. Subsequently, the impact of satisfaction on trust, WOM and consumer loyalty would be established. The complete results are tabulated in Table IV.

The  $R^2$  of the first regression model is 0.809, suggesting a very good fit of the model. This confirms that the complainants' level of satisfaction with service recovery was significantly affected by the four dimensions of perceived justice (procedural, empathy and politeness, explanation and effort and distributive). The values of VIF (variance inflation factor) ranged from 2.58 to 3.65 indicating the non-existence of collinearity. The standardized coefficients were respectively 0.221, 0.187, 0.196 and 0.395. These confirm that distributive justice makes the strongest contribution to satisfaction with service recovery while interactional justice contributes less. This finding is similar to that discovered by Mattila (2001) in that distributive justice was found to have greater impact on satisfaction with problem handling in the

Table II Factor and reliability analysis of the dimensions of justice

	Factor loadings
<b>1. Procedural justice – PROC (Factor 1 explains 49.66 percent of total variance; Cronbach's alpha = 0.910)</b>	
I was not given the opportunity to tell my side of the story	0.691
It was difficult to determine where to lodge my complaint	0.690
They did not let me explain the events which led to my complaint	0.659
They were very slow in responding to my complaint	0.592
The mobile service provider made it easy for me to voice my complaint	0.588
It was hard for me to figure out to whom I should complain in the company	0.551
I got a chance to tell them my problems	0.532
The complaint process was easy to access	0.530
They listened to my entire complaint	0.526
The time taken to resolve the problem was longer than necessary under the conditions	0.485
The arrangement for handling customers who are waiting to be served worked poorly	0.474
<b>2. Explanation and effort – EXP_EFF (Factor 2 explains 5.75 percent of total variance; Cronbach's alpha = 0.90)</b>	
They told me why the service had failed in the first place	0.683
The employees seemed very interested in helping me	0.613
I was given a reasonable explanation as to why the original problem occurred	0.608
The employees did not tell me the cause of the service failure	0.601
They tried hard to resolve the problem	0.539
No reason was given for the poor service that I had received	0.534
The employees were attentive in providing good service	0.531
<b>3. Empathy and politeness – EMP_POL (Factor 3 explains 4.97 percent of total variance; Cronbach's alpha = 0.898)</b>	
The employees were courteous to me	0.789
I felt that I was treated rudely	0.718
The employees were not polite to me	0.582
The employees showed little kindness or understanding	0.569
The employees listened politely to what I had to say	0.478
They seemed to be very concerned about my problem	0.422
The employees seemed very understanding about the problems I had experienced	0.418
<b>4. Distributive justice – DISTRI (Factor 4 explains 3.88 percent of total variance; Cronbach's alpha = 0.907)</b>	
In resolving the complaint, they gave me what I needed	0.747
I did not receive what I required	0.699
The result of the complaint was not up to expectation	0.625
Taking everything into consideration, the result was quite fair	0.613

Table III Factor and reliability analysis of behavioral outcomes

	Factor loadings
<b>1. Word of mouth (Factor 1 explains 54.42 percent of total variance; Cronbach's alpha = 0.845)</b>	
Although I use this mobile service provider, I recommend others not to use it	0.781
I complain to my friends and relatives about this mobile service provider	0.608
My recommendations about this mobile service provider would have been positive	0.561
I have only good things to say about this mobile service provider	0.537
<b>2. Consumer loyalty (Factor 2 explains 9.26 percent of total variance; Cronbach's alpha = 0.793)</b>	
I will continue to stay with this mobile service provider	0.758
I would not change mobile service provider even after my contract expires	0.689
In the near future, I intend to use more of the services provided by this mobile service provider	0.565
I consider myself to be a loyal customer of this mobile service provider	0.523
<b>3. Trust (Factor 3 explains 6.26 percent of total variance; Cronbach's alpha = 0.763)</b>	
I believe the mobile service provider can be relied on to keep its promises	0.701
I believe that this mobile service provider is trustworthy	0.569
I feel pretty negative about this mobile service provider	0.467

Table IV Model testing for complainants using multiple regression ( $n = 153$ )

Dependent variable	Independent variable	$\beta$	Beta	$p$ -value	$R^2$	$F$ -value	Sig.
<b>Regression 1</b>							
Satisfaction	PROC	0.303	0.221	0.000	0.809	156.391	0.00
	EMP_POL	0.244	0.187	0.006			
	EXP_EFF	0.243	0.196	0.005			
	DISTR1	0.399	0.395	0.000			
<b>Regression 2</b>							
Trust	Satisfaction	0.740	0.752	0.00	0.565	195.999	0.00
<b>Regression 3</b>							
WOM	Satisfaction	0.677	0.746	0.00	0.556	189.167	0.00
<b>Regression 4</b>							
Consumer loyalty	Satisfaction	0.406	0.506	0.00	0.256	51.86	0.00

case of restaurant and dry-cleaning service. However, her result in the case of hair styling service indicated that interactional justice was more important in explaining satisfaction.

The remaining three linear regression analyses confirmed the significant relationship between satisfaction and trust, WOM and loyalty respectively. For trust and WOM, the  $R^2$  values were respectively 0.565 and 0.556. Moreover, the complainants' level of trust ( $\beta = 0.752$ ,  $p < 0.005$ ) and WOM behavior ( $\beta = 0.746$ ,  $p < 0.05$ ) were significantly affected by their level of satisfaction with service recovery provided by the mobile phone service firm. Similarly, the extent of loyalty was also significantly related to their level of satisfaction, although the weight was not as large as those of trust and WOM behavior. In this case, the  $R^2$  was only 0.256 indicating the satisfaction was able to explain only 25.6 percent of the variance. Nevertheless, the beta coefficient of 0.506 was still significant at  $p < 0.05$ .

#### Behavioral outcomes of complainants and non-complainants

Table V shows the differences in mean values between complainants who were satisfied with the service recovery and those who were dissatisfied. The satisfied complainants ( $n = 90$ ) were found to have significantly higher mean values in trust, WOM and loyalty compared to their counterparts who were dissatisfied with the service recovery ( $n = 52$ ). The  $t$ -tests were found to be significant at the  $p < 0.00$  level.

Table VI shows the  $t$ -test results of the differences in mean values in trust, WOM and loyalty between the satisfied complainants and those who were initially satisfied with the service and therefore did not need to make a complaint (ordinary satisfied customers). The ordinary satisfied customers ( $n = 216$ ) were found to have greater trust and

positive WOM of the mobile phone service provider than the satisfied complainants. As such, the "recovery paradox" does not hold here. However, there was no significant difference in the mean values between these two groups in their loyalty or commitment (3.536 versus 3.529 at  $p = 0.459$ ).

Table VII depicts a comparison of the differences between dissatisfied complainants ( $n = 52$ ) and the non-complainants who were also dissatisfied but did not lodge any complaints ( $n = 56$ ) in their post-service behaviors. The latter group (dissatisfied non-complainants) displayed a greater degree of trust (mean value of 2.80) compared to those of the dissatisfied complainants (mean value of 2.47), although both at a low level of trust (below 3.00). The difference between the two groups was significant. Similarly, the same observation was found to be true for WOM behavior. The dissatisfied non-complainants reported a mean value of 2.78 compared to 2.40 for the dissatisfied complainants. The  $t$ -test showed the difference to be significant. It is therefore evident that dissatisfied complainants would exhibit lower level of trust and more likely to engage in negative WOM behavior. However, there was no significant difference between the two groups in the extent of their loyalty to the mobile phone service providers (2.65 versus 2.68 with  $t = 0.14$ ;  $p = 0.451$ ).

#### Discussion and conclusion

Our findings in this study confirm that distributive justice is significantly and positively related to satisfaction with service recovery. In fact, it has the largest impact on satisfaction suggesting that customers view fairness of outcomes in the provision of mobile phone services to be the most important component. This finding is consistent with results of previous studies where distributive justice was found to have the greatest impact on customer satisfaction (Clemmer, 1993; Mattila, 2001). The two dimensions of interactional justice

Table V Independent samples  $t$ -test for complainants (dissatisfied vs satisfied)

Variables	Complainants Dissatisfied ( $n = 52$ )		Complainants Satisfied ( $n = 90$ )		$t$ -test $t$ -value	1-tailed $p$ -value
	Mean	SD	Mean	SD		
Trust	2.474	0.908	3.693	0.675	-9.107	0.00
Word-of-mouth	2.399	0.786	3.567	0.650	-9.539	0.00
Consumer loyalty	2.683	0.797	3.536	0.565	-7.432	0.00

Table VI Independent samples *t*-test for complainants (satisfied) vs non-complainants (satisfied)

Variables	Complainants Satisfied ( <i>n</i> = 90)		Non-complainants Satisfied ( <i>n</i> = 216)		t-test	
	Mean	SD	Mean	SD	t-value	1-tailed <i>p</i> -value
Trust	3.693	0.675	3.866	0.5263	−2.406	0.009
Word-of-mouth	3.567	0.650	3.735	0.482	−2.500	0.007
Consumer loyalty	3.536	0.565	3.529	0.528	0.103	0.459

Table VII Independent samples *t*-test for complainants (dissatisfied) vs non-complainants (dissatisfied)

Variables	Complainants Dissatisfied ( <i>n</i> = 52)		Non-complainants Dissatisfied ( <i>n</i> = 56)		t-test	
	Mean	SD	Mean	SD	t-value	1-tailed <i>p</i> -value
Trust	2.474	0.908	2.8036	0.746	−2.064	0.021
Word-of-mouth	2.399	0.786	2.781	0.650	−2.741	0.004
Consumer loyalty	2.683	0.797	2.665	0.654	0.124	0.451

were also found to have significant but lower impact on customer satisfaction. Similarly, procedural justice also played a significant role in influencing the level of satisfaction with service recovery.

Analysis of the data also indicated that satisfaction with service recovery is positively related to trust. This finding is consistent with that discovered by Tax *et al.* (1998). As such, remedying a service failure could help to reinstall the trust of customers on the service provider. Similarly, satisfaction with service recovery also leads to positive word-of-mouth behavior. This is important as positive word-of-mouth not only helps to attract new customers but also assists in the creation of positive image about the firm concerned. Finally, satisfaction with service recovery also reinforces consumer loyalty and commitment. However, the extent of the impact of satisfaction on loyalty is found to be not as strong as that on trust and word-of-mouth behavior. This could be due to factors other than satisfaction with service recovery. Additional research may need to be embarked to identify these other important factors.

This study also shows that behavioral outcomes in terms of trust, word-of-mouth and loyalty are higher for complainants who are satisfied compared to those who are dissatisfied. The former group reported significantly higher mean values of trust and word-of-mouth behavior. This finding is consistent with that reported by Andreassen (2001). However, the extent of trust and positive word-of-mouth behavior are both higher for customers who are satisfied originally with the service as opposed to those who were satisfied after they lodged complaints with the service providers. This finding which is similar to that reported by Maxham (2001), Zeithaml *et al.* (1996), Smart and Martin (1993) and Fornell (1992) does not support the concept of “recovery paradox”. This lack of “recovery paradox” effect suggests that service providers must aim to provide service right on the first occasion and not hope to rely on recovery efforts to remedy service failures. Such efforts could not restore customer trust and positive word-of-mouth to the pre-service failure levels. As such, service providers must strive to identify potential service pitfalls and design remedies before service failure could affect the customers (Hoffman *et al.*, 1997; Zeithaml

and Bitner, 1996). Finally, the level of trust and positive word-of-mouth for complainants who are dissatisfied with the service recovery are found to be lower than customers who are dissatisfied with the service in the first place but did not lodge any complaints. This emphasizes that service recovery should not be neglected and bad service recovery efforts might lead to more detrimental consequences such as loss of trust and bad publicity through negative word-of-mouth communications.

What are the implications of our findings? First, the importance of perceived justice in service recovery cannot be overlooked. In the case of the provision of mobile phone service, it is noted that in cases of service failures, customers are more particular of the outcomes although they also care for interactional as well as procedural justice. Some of the outcomes looked out by the respondents were “provision of free time”, “provision of a replacement set of the mobile phone being serviced”, “showing proof that customers were correctly billed instead of asking them to purchase a detailed billing” and so on. Similarly, management of the procedure of service recovery and deployment of trained and skilled personnel to handle customer complaints are important to ensure satisfaction with the service recovery. This point is reinforced by the finding of Clemmer and Schneider (1996) that customers would be more satisfied when employees were polite and friendly.

Second, satisfaction with service recovery also leads to higher level of trust in the mobile phone providers and willingness on the part of customers to engage in positive word-of-mouth communications. These two elements are crucial in the attraction of new customers and retention of existing customers. Another finding worthy of note is that although satisfaction with service recovery does contribute to customer loyalty or commitment, the impact is not as strong as that on trust and word-of-mouth behavior. This implies that service providers must be prepared to explore other factors that could contribute to higher customer loyalty.

Finally, the lack of support of the “recovery paradox” effect suggests that successful service recovery alone could not bring customer satisfaction to pre-service failure levels. Thus it is imperative for service providers to examine their service



operations to identify potential pitfalls with the objective of providing fail-proof service at the first instant. On the other hand, the fact that the levels of trust, word-of-mouth and customer loyalty are observed to be lower for dissatisfied complainants compared to dissatisfied non-complainants implies that attention must be paid to careful management of service recovery. Failed service recovery would invite greater distrust and negative word-of-mouth from dissatisfied complainants.

A comparison of customers who did not complain shows that of those who were originally satisfied with the service, their levels of trust, word-of-mouth and loyalty were much higher than those who were unhappy with the service but chose not to complain. This is a signal to the service providers that providing satisfactory service is imperative in gaining customer support. Dissatisfied customers who opt to remain silent could be disastrous as behind their silent masks are deep distrust, willingness to pass negative word-of-mouth and dismally low loyalty.

Although the above results have contributed further to our understanding of the relationship between customer satisfaction and the various dimensions of the justice theory as well as the phenomenon of “recovery paradox”, there are certain limitations of our research. This study used a cross sectional design based on retrospective report. Hence, recall bias may influence the results. A longitudinal research approach would be better preferred as it could trace the relationship between the customers and the service providers over time. The extent of trust, word-of-mouth behavior and loyalty would be better determined. Another limitation of this research is the sample used. Although it was expected that an online survey would attract a greater number of younger and better educated respondents, the sample was dominated by students and those aged below 24. Future research should attempt to broaden the sample and thus achieve greater representation of the general population of mobile phone users.

In addition, there are several areas that warrant further investigation. First, it would be beneficial to examine if customers perceive differences in the fairness of various distributive justice rules and which would generate greater effect on trust, word-of-mouth and loyalty. Second, as this research was based on responses from users of mobile phone services, it would be better to investigate if customers of other services would display similar behavior. This is because consumer reactions to service failure and recovery might differ because of the level of involvement in a particular service. For instance, failure in medical service received would be expected to have greater effect on customer satisfaction. Finally, a cross-cultural comparison of customers receiving the same service could be an interesting research avenue for us to explore. For instance, would the phenomenon of the “recovery paradox” be found to exist in one culture and not the other? Similarly, would customers from two different cultures differ significantly in the proportion of complainants and non-complainants? All these and other cultural differences would help service providers who operate across national boundary to be more sensitive and thus adopt culturally acceptable measures in dealing with customer complaints.

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## Executive summary and implications for managers and executives

*This summary has been provided to allow managers and executives a rapid appreciation of the content of the article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.*

Customer satisfaction is crucial to the success of any business. A dissatisfied customer relates his or her bad experience with a service provider to, on average, between 10 and 20 other people. Service recovery – the action the service provider takes in response to poor service quality – must therefore be carried out effectively in order to pacify the dissatisfied customer and reduce the damage in the relationship. Kau and Loh examine service recovery in the Singapore mobile telephone industry.

### Customer perceptions of effective service recovery

Customers must perceive the outcomes to be fair or just if they are to be satisfied with the service provider's attempts at service recovery. Their perceptions will center on the service recovery itself, the outcomes connected to the recovery strategy, and the interpersonal behaviors during the recovery process and the delivery of outcomes. "Distributive justice" deals with the decision outcomes and includes, for example, compensation in the form of discounts, coupons, refunds or free gifts, apologies and so on. "Procedural justice" deals with the service provider's decision-making procedures and includes process control, decision control, accessibility, flexibility, and the timing and speed of decisions. "Interactional justice" deals with interpersonal behavior in the enactment of procedures and delivery of outcomes, and covers the explanation offered by the service provider, and the honesty, politeness, effort and empathy shown by staff.

### Types of customer

Some customers complain and others do not. Those who do not complain may be ordinary, satisfied customers, or dissatisfied non-complainants. The complainants may be

either satisfied with the service recovery provided, or dissatisfied. Kau and Loh examine the differences in behavioral outcomes among these four groups of customers.

### The research results

The research reveals that all the dimensions of perceived justice significantly affect complainants' level of satisfaction with the service recovery. Distributive justice makes the strongest contribution, while interactional justice contributes less. Moreover, customers who are satisfied with the service recovery are more likely to trust the firm, less likely to make harmful comments about it to family and friends and, to a lesser extent, are more likely to be loyal and committed to the firm. Satisfied complainants show significantly higher ratings for trust, word of mouth and loyalty than their counterparts who are dissatisfied with the service recovery. Ordinary, satisfied customers are more likely to trust the firm and talk positively about it to family and friends than are the satisfied complainants. Dissatisfied complainants are less likely to trust the firm and more likely to criticise it to family and friends than are dissatisfied non-complainants, but there is no significant difference between dissatisfied complainants and dissatisfied non-complainants in their level of loyalty to the firm.

### The implications for managers

The findings do not support previous researchers who have claimed the existence of a "recovery paradox" – that effective service recovery can make customers more satisfied than if the service had been provided correctly the first time round. Service providers must therefore strive to identify potential service pitfalls and design remedies before any service failure affects customers. Customers are looking for the right outcome from a firm's service recovery efforts, but they also want the service recovery procedures to be properly managed, and they expect skilled employees to handle their complaints.

*(A précis of the article "The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants". Supplied by Marketing Consultants for Emerald).*

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