

# THE NEGATIVE EFFECTS OF FAILED SERVICE RECOVERIES\*

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# THE NEGATIVE EFFECTS OF FAILED SERVICE RECOVERIES

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## ABSTRACT

Research has shown that more than half of attempted recovery efforts fail, producing a ‘double deviation’ effect. Surprisingly, these double deviation effects have received little attention in marketing literature. This paper examines what happens after these critical encounters, which behavior or set of behaviors the customers are prone to follow and how customers’ perceptions of the firm’s recovery efforts influence these behaviors. For the analysis of choice of the type of response (complaining, exit, complaining and exit, and no-switching), we estimate multinomial Logit models with random coefficients (RCL). The results of our study show that magnitude of service failure, explanations, apologies, perceived justice, angry and frustration felt by the customer, and satisfaction with service recovery have a significant effect on customers’ choice of the type of response. Implications from the findings are offered.

*Keywords:* Double deviations, consumer complaining behavior (CCB), multinomial logit models with random coefficients (RCL), service recovery.

*JEL Classification:* M31; G21

## RESUMEN

La investigación ha mostrado que más de la mitad de los intentos de recuperación tras el fallo de un servicio fracasan, lo que produce un efecto de ‘desviación doble’. Sorprendentemente, estos efectos de desviación doble han recibido muy poca atención en la literatura de marketing. Este trabajo analiza qué ocurre tras estos encuentros críticos, ¿qué comportamiento o conjunto de comportamientos tienden a seguir los clientes? y ¿cómo afectan a estos comportamientos las percepciones de los clientes acerca del problema y de los esfuerzos de recuperación de la empresa?. Para el análisis del tipo de respuesta (queja, abandono, queja y abandono, y no cambiar de entidad), estimamos modelos Logit multinomiales con coeficientes aleatorios (RCL). Los resultados de nuestro estudio muestran que la magnitud del fallo inicial, las explicaciones y disculpas recibidas tras el mismo, la justicia percibida en la gestión de la queja, la frustración y el enfado que siente el cliente y la satisfacción con el proceso de recuperación, tienen un efecto significativo en la elección de los clientes del tipo de respuesta de queja. Finalmente, se ofrecen implicaciones para la gestión.

*Palabras clave:* desviación doble, comportamiento de queja del consumidor, modelos Logit multinomiales con coeficientes aleatorios (RCL), recuperación del servicio.

## **1. Introduction**

Nowadays, customers are acting in a more demanding way in their interaction with service providers due to the increased abundance of choices. In response, many providers are directing their strategies towards increasing customer satisfaction and loyalty through improved service quality. But service failures or mistakes are not completely unavoidable even for the best service company. Therefore, the effective management of consumer responses to service failure becomes very important, especially in highly competitive markets. However, research has shown that more than half of attempted recovery efforts only reinforce dissatisfaction (Hart et al., 1990). Poor service recoveries exacerbate already low customer evaluations following a failure, producing a 'double deviation' effect (Bitner et al., 1990; Hart et al., 1990; Johnston and Fern, 1999; Mattila, 2001). Bitner et al. (1990, p.80) define a 'double deviation' as a perceived inappropriate and/or inadequate response to failures in the service delivery system. Thus, double deviation scenarios represent consumption experiences where customers are doubly faced with a service failure, the initial service failure and the failed service recovery. Surprisingly, the consequences of these double deviation effects –which seem to be quite common- have received little attention in marketing literature. As stated by Davidow (2003, p.245): 'Complaint handling is judged not by satisfaction with the organizational response, but by postcomplaint customer behavior such as repurchase intentions and word-of-mouth activity. More research is necessary to determine the direct effect of organizational responses on postcomplaint customer behavior [...] We need to be able to trace a clear line between an organization's response to a complaint and the impact that response has on postcomplaint customer behaviors. Only by quantifying the effects of each response dimension on postcomplaint customer behavior will we be able to plan efficient and effective.' The purpose of this paper, then, is to examine the behaviors or set of behaviors that customers are prone to follow after a double deviation scenario, and which is the influence of customers' perceptions of the firm's recovery efforts on customers' choice of the behavior (or set of behaviors) they adopt after a double deviation scenario. To address this gap, we develop and empirically test a model based on the existing consumer complaining behavior (CCB) literature and service recovery literature.

## **2. Theoretical background**

### **2.1. *Postcomplaint Customer Behavior (PCB)***

As stated by Blodgett and Granbois (1992), the confirmation/disconfirmation paradigm provides the conceptual foundation upon which the study of CCB is built (see Oliver, 1980). In general, confirmation/disconfirmation is an evaluative process whereby a consumer compares a product's performance to one's prior expectations of the product/brand. Confirmation occurs when a product performs as expected. Positive disconfirmation occurs when a product performs better than the consumer expected, while negative disconfirmation occurs when the product does not perform up to customer's expectations. Negative disconfirmation, in turn, leads to dissatisfaction. A number of studies have supported the confirmation/disconfirmation paradigm (e.g., Oliver, 1980). Bearden and Teel (1983), in particular, applied this paradigm in the context of customer satisfaction/dissatisfaction and its effect on complaining behavior. Their findings support the expectations > disconfirmation > dissatisfaction > complaining behavior relationship.

However, dissatisfaction is a necessary, but not sufficient, condition for complaining behavior (Day, 1984; Day et al., 1981). Day (1984) stated that dissatisfaction is motivational in nature and that high levels of dissatisfaction cause people to consider complaining, but in and of itself, does not cause complaining behavior. Rather, given dissatisfaction, the decision to complain is also contingent upon situational and personal factors. Hirschman's (1970) theory of exit, voice, and loyalty provides the conditions that lead to complaining behavior. In the consumer complaining behavior context, Hirschman's (1970) framework explains why some consumers complain to the seller (i.e., voice) while others decide never to shop there again (i.e., exit). Hirschman viewed complaining behavior as an alternative mechanism to the forces of competition; one that can correct the deteriorating performance of an individual firm. This alternative mechanism is manifested in exit (i.e., a dissatisfied customer takes his/her business to another firm) and voice (i.e., a complaint to the seller or to anyone else who cares to listen). Hirschman pointed out that exit is particularly detrimental because the offending firm never finds out what it is doing wrong.

In sum, research in CCB to date suggests that consumer complaint behavior is a complex phenomenon. Early empirical studies did not distinguish between the different types of complaining behaviors. Rather, these studies operationalized complaining

behavior as a single, dichotomous variable (i.e. complained / did not complain). This approach has two limitations. First of all, it implicitly assumes that the effects of any given determinant are equal across the different types of complaining behaviors. Obviously, this approach provides only limited insight into which type of complaint/response is more likely, given certain levels of each determinant. Secondly, research that treats complaining behavior as a unidimensional variable does not recognize that some complaining behaviors (i.e. negative word-of-mouth, exit) are largely dependent on the outcome of the redress seeking episode.

To overcome these limitations, several researchers have investigated the effects of various determinants across specific types of complaining behaviors and have proposed alternative taxonomies, schema and definitions for examining this kind of behavior (e.g., Day and Landon, 1977; Hirschman, 1970; Richins, 1983; Singh, 1988). Hirschman (1970) classified responses to dissatisfaction as exit (switch provider), voice (complaints to friends, sellers, consumer organizations) or loyalty (do nothing). Day and Landon's (1977) hierarchical typology distinguished between behavioral and non-behavioral responses at the first level and between public (e.g., seek redress, take legal actions) and private actions (e.g., switch provider, warn friends) at the second. Richins (1983) was the first to compare the effects of several possible determinants across different types of complaining behaviors, specifically two types of complaining behaviors, negative word-of-mouth and complaining. Singh (1988) developed a three-dimensional typology that discriminated among CCB responses (voice, exit and negative WOM) on the basis of the object toward which the response was directed (e.g., third parties, sellers/manufacturers and family/friends).

However, previous conceptualizations did not recognize that complaining behavior is actually a dynamic process, and that *once a consumer seeks redress*, subsequent (post)complaining behaviors are then mostly dependent upon the consumer's level satisfaction/dissatisfaction with the retailer's response to the complaint. Therefore, we propose that to determine how customers' perceptions of the firm's recovery efforts influence postcomplaining customer behavior (PCB), it is necessary that the different complaining behaviors are operationalized as separate, distinct, dependent variables. This would help our understanding of the structure of dissatisfaction responses and the factors that influence these responses. It should be pointed out that consumers are not restricted to one type of complaining behavior. The options are not mutually exclusive and any dissatisfied customer may engage in multiple responses. Rather, some consumers might choose to complain to the seller *and*

complain to friends, or complain (to the seller and/or to friends) *and* switch provider (Blodgett and Granbois, 1992). We consider four possible responses of PCB in our work that summarize, in a simplistic manner, previous CCB classifications: no action, complaint behavior (to the company and/or to relatives and friends), exit behavior (switch provider), and complaint *and* exit behavior (both simultaneously). We believe that these types of response have different -harmful- consequences for firms and therefore, they should be analyzed separately. By doing so, we can better determine which variables lead to which complaining behaviors in double deviation contexts, and the relative magnitude and direction of these effects.

## **2.2. *Antecedents of PCB in double deviation scenarios***

To determine the antecedents of PCB in double deviation scenarios, we examine previous research in complaining behavior and service failure and recovery encounters. Previous research has tried to explain complaining behavior in terms of market factors (e.g., monopoly vs. competitive markets; Hirschman, 1970), consumer factors (e.g., demographics and lifestyle, beliefs and attitudes, personality, emotions; Day and Landon, 1977; Singh, 1990; Westbrook, 1987), or seller and service factors (e.g., importance of the problem, recovery strategies; Blodgett and Granbois, 1992; Richins, 1983). This study is focused on complaining behavior following an initial complaint which has not been resolved (i.e., a double deviation). This means that the main determinants of PCB will be strongly related to the company's actions and policies implemented to deal with the customer complaint (seller and service factors) as well as to customer's perceptions of them (consumer factors).

Therefore, selected determinants of complaining are examined to determine if some customers are more prone to stay, to complain, to exit or to complain and exit, simultaneously. We consider the following explanatory variables: magnitude of service failure, recovery strategies (apologies and explanations), perceived justice, recovery-related emotions (anger with service recovery) and satisfaction with service recovery.

*Magnitude of service failure.* Hirschman (1970) was the first to assess that consumers would be more likely to voice their complaints when dissatisfied with an 'important' product. After that, many researchers have analyzed the effects of magnitude of the failure (also called severity of the failure/dissatisfaction problem), on a service failure/recovery encounter context (e.g., Hess et al., 2003; Smith and Bolton, 2002; Smith et al., 1999). Previous results indicate that complaining (to the seller and/or

to friends and relatives) and switching behavior increase when problems are more severe (Richins, 1985). Thus, we propose that magnitude of service failure may impact distinct postcomplaint customer behaviors differently.

*Recovery strategies.* From a process perspective, an organization's response to a service failure entails an exchange situation, in which a sequence of events, beginning with a complaint, generates a process of interaction that leads to a decision and outcome (Tax et al., 1998). A central element of this process is the action taken by the organization (recovery strategy) to respond to the initial service failure. Recently, Davidow (2003) has divided the organizational responses to service failure into six separate dimensions: timeliness (perceived speed to handle a complaint), facilitation (firm's procedures to handle complaints), redress (benefits received from the firm in response to the complaint), apology (acknowledgment by the firm of the complainant's distress), credibility (explanation for the problem), and attentiveness (interpersonal communication between organizational representative and the customer). Davidow's (2003) classification facilitates to determine the importance of each recovery attribute to customer evaluations of the organization's recovery effort. In this study, we center on two of the previous dimensions, apology and explanation, as two recovery strategies that recent research has claimed that deserve more attention (Davidow, 2003; Mattila and Patterson, 2004)<sup>1</sup>. Based on previous studies, we propose that apology and explanation may impact distinct postcomplaint customer behaviors differently.

*Perceived justice.* Building upon the foundations of equity theory (Adams, 1965), the literature in social psychology and organizational behavior suggests that individuals who are involved in conflicts or disputes base their perceptions of justice on several factors. In the context of complaining behavior, customers evaluate fairness with the service recovery by three perceived factors: outcomes, procedural and interaction (Smith et al., 1999; Tax et al., 1998). Distributive justice refers to the perceived outcome of the firm's recovery effort, procedural fairness involves the policies and rules by which recovery effort decisions are made, and interactional justice focuses on the manner in which the service recovery process is implemented (Tax et al., 1998). Prior research has demonstrated that the subsequent behavior of complainants is dependent, in large part, on their perceptions of justice (Blodgett and Anderson, 2000; Berry and

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<sup>1</sup> Indeed, Bitner et al. (1990) identify apology and explanation as two of the three key elements for a successful recovery: "sincere apologies, compensatory actions, and explanations can dissipate anger and dissatisfaction (p. 81)."

Parasuraman, 1991; Hart et al., 1990). Specifically, theory and previous research indicate that higher levels of distributive, interactional, and procedural justice will lead to more favorable repatronage intentions and a decreased likelihood of negative word-of-mouth (Blodgett et al., 1997). Additionally, complainants who perceive that justice is not served are likely to become even angrier, to engage in negative word of mouth, and to exit (Blodgett et al., 1993; Blodgett et al., 1997; Tax et al., 1998). Therefore, we propose that the three dimensions of perceived justice affect PCB.

*Recovery-related emotions.* Following Bagozzi et al. (1999), our interest in this study refers to emotions, as a mental state that arises in response to customers' appraisals for specific situations of relevance to them -such as a service failure encounter and the subsequent recovery efforts-. Appraisal theories (e.g., Roseman, 1991) contend that it is not events *per se* that determine emotional responses, but evaluations and interpretations of events. Thus, negative events in service contexts are thought to produce emotions, and these to have a direct effect on behavior (e.g., Bougie et al., 2003). In this line, we follow recent research showing that the customer's perception of the way in which service recovery is managed may provoke an emotional response (secondary or recovery-related emotions) (Casado-Díaz et al., 2007; Chebat and Slusarczyk, 2005; Schoefer and Ennew, 2005). From the wide range of specific negative emotions that can be related to failed service encounters, we focus on anger as the most frequent emotional reaction elicited by service failures (Bougie et al., 2003; Weiner, 2000; Zeelenberg and Pieters, 2004). In a recent work, Bonifield and Cole (2007) apply Lerner and Keltner's (2000) appraisal-tendency framework to show how anger and regret have different influences on consumer post-purchase behaviors after a service failure. Consequently, we propose that recovery-related emotions and specifically anger with service recovery, can affect the way the customer responds to a failed service recovery encounter (i.e., double deviation scenario).

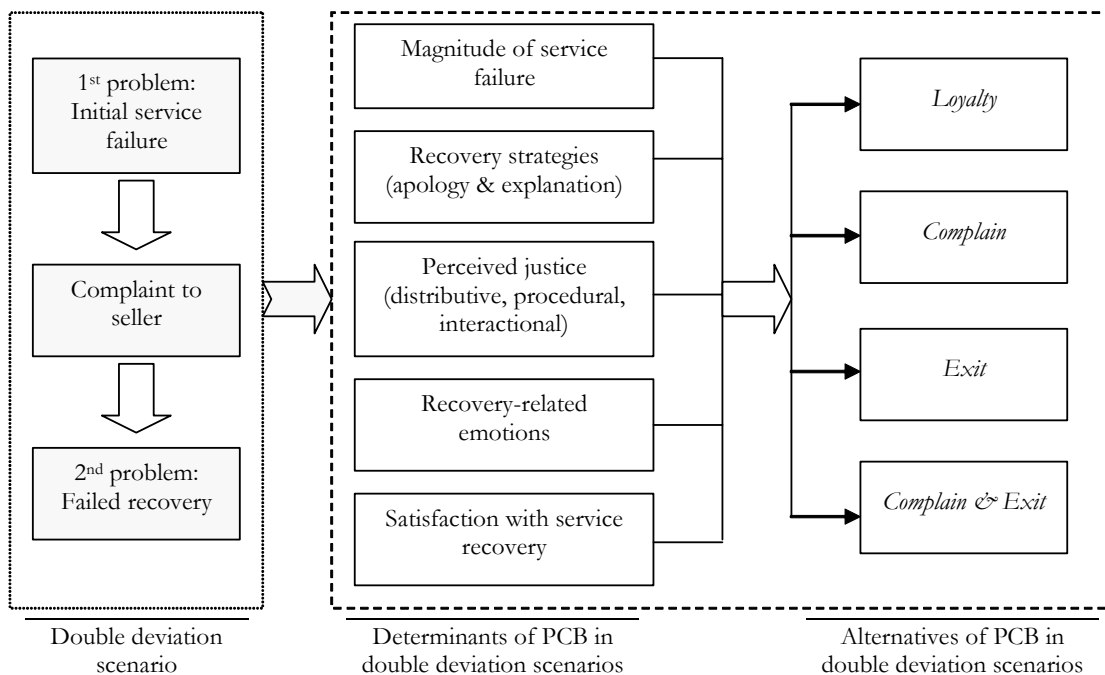
*Satisfaction with service recovery.* In the context of the confirmation/disconfirmation theory (Oliver, 1977), the process of complaining satisfaction or dissatisfaction follows the same pattern one would find for initial dissatisfaction with the service (*primary dissatisfaction*). In this process, it is assumed that consumers will generally have (1) expectations of the outcomes of complaining, (2) observations of the firm's response, (3) willingness to compare this response to their expectations (complaint disconfirmation), and (4) the motivation to form judgments of *secondary satisfaction or dissatisfaction* (i.e., satisfaction with service recovery) (Oliver, 1997). Several studies have examined the association between customer



satisfaction and CCB. Abundant literature supports the commonsense expectation that satisfied customers are more likely to stay with their existing providers and less likely to complain than are dissatisfied customers (Fornell and Wernerfelt, 1987; Oliver, 1997; Szymanski and Henard, 2001). Past research has found evidence that complainers who are satisfied with the recovery response have higher repurchase intentions than those who were satisfied and did not complain (Gilly, 1987). Halstead and Page (1992) found that satisfaction with service recovery led to higher repurchase intentions for dissatisfied customers. Finally, satisfaction/dissatisfaction has been found to be an antecedent to word-of-mouth behavior (Spreng et al., 1995; Yi, 1990). Therefore, we propose that satisfaction arising from recovery can affect postcomplaint customer behavior (Kelley and Davis, 1994; Tax et al., 1998).

Figure 1 provides an overview of the constructs and relationships under study.

**FIGURE 1. Model of postcomplaint customer behavior (PCB) in double deviation scenarios**



### 3. Research design

#### 3.1. Methodology

Considering the multidimensional nature of complain behavior and the aim to test and explain through sundry variables the existence of simultaneous responses, we regard that the most appropriate method is based on the estimation of Multinomial Logit Models with random coefficients (RCL) due to its ability to deal with the unobserved heterogeneity of consumers, by assuming that the coefficients of the variables vary among consumers; and its flexibility, which allows representation of different correlation patterns among alternatives.

This model allows us to avoid assuming that the whole consumer sample has the same set of parameter values, as it considers unobserved heterogeneity of consumers in parameter estimations. Hence, the utility of alternative  $i$  for consumer  $t$  is defined as:

$$U_{it} = X_{it}\beta_t + \varepsilon_{it} \quad (1)$$

where  $X_{it}$  is a vector that represents the attributes of the product line and the characteristics of consumers;  $\beta_t$  is the vector of coefficients of these attributes of product lines and characteristics for each individual  $t$  which represent personal tastes; and  $\varepsilon_{it}$  is a random term that is iid extreme value. This specification of the RCL model allows coefficients  $\beta_t$  to vary over decision makers with density  $f(\beta)$ , which means that it differs from the traditional Logit model in which  $\beta$  is fixed. As  $\beta_t$  is not observable, the non-conditional probability is the integral of  $P_i(i/\beta_t)$  over all the possible values of  $\beta_t$ :

$$P_i = \int_{\beta_t} \frac{\exp\left\{\sum_{h=1}^H x_{ih}\beta_{th}\right\}}{\sum_{j=1}^J \exp\left\{\sum_{h=1}^H x_{jh}\beta_{th}\right\}} \phi(\beta_t | b, W) d\beta_t \quad (2)$$

where  $J$  is the number of alternatives and  $\phi$  is the density function of  $\beta_i$ , assuming that  $\beta_i$  is distributed as a Normal with average  $b$  and variance  $W^2$ . However, the above integral does not give a closed solution, which means that its estimation requires the application of simulation techniques (Train, 2001). This circumstance explains why this model has not been widely used in marketing until relatively recently (Erdem et al., 2002). To realize the draws of the density function we use the Halton sequences method, which it is found better than random draws as it reduces error (Hensher, 2001; Munizaga and Alvarez-Daziano, 2001; Train, 1999).

### **3.2. *Sample, data and variables***

We select the banking industry to test our proposed model because it is a kind of services industry high in experience and credence properties, where failures are quite common (Chebat and Slusarczyk, 2005). Moreover, banking products are highly diffused in the consumer market (almost all households have some type of banking product), which means that the probability of unsatisfactory experiences resulting in complaints is quite high. In fact, the banking sector receives the greatest number of complaints according to Spanish consumer organizations (Ortega, 2003).

The data were collected via a self-reported questionnaire administered to 2,000 households that were members of the regional branch of a consumer organization (UCE). We employed the critical incident technique (CIT), which has been used previously in numerous marketing and management studies (e.g., Bitner et al., 1990; Keaveney, 1995). In fact, Gremler (2004) assesses that in investigations of service failure and recovery and customer switching behavior, CIT appears to be a particularly useful method, especially in service research. We defined a critical incident as the most recent problem of special relevance that a customer had experienced during his/her relationship with his/her main bank. The information obtained with this methodology allowed us to detect failed recoveries and thus, to analyze double deviation scenarios. Respondents were told to report a critical service incident in dealing with banks, and then to answer some structured questions about the manner in which the problem was handled and other issues. From the four hundred seventy two questionnaires returned, fifty-nine questionnaires were unusable due to incomplete responses and not explicitly

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<sup>2</sup> A significant variance estimation implies the superiority of the Random coefficients Logit model over the Multinomial Logit model (Train, 2003).

assess having complained to the firm, and two hundred and eleven reported no problem. This left a total sample size of 202. In brief, we classified 165 questionnaires as double deviation ones<sup>3</sup>. From these, 40% opted for *complain*, 9.1% for *complain and exit*, 48.5% for *exit only* and 2.4% chose *no-switching*.

Finally, multiitem scales were developed based on survey questions used in prior research (e.g., Hess et al., 2003; Mattila, 2001; Richins, 1997; Smith and Bolton, 2002; Smith et al., 1999; Taylor, 1994; Tax et al., 1998). In all cases, responses were captured through 5-point scales. Magnitude of service failure was measured on two scales (“not at all important/very important”; “not at all severe/very severe”; coefficient alpha=0.89). Recovery strategies and perceived justice were measured through scales ranging from strongly agree to strongly disagree. Apology was measured through the question: “The employees and/or the director apologized for my problem” and explanation through the question: “The explanations I was given were adequate”. Distributive justice was measured through two questions: “The outcome I received was fair”, and “I got what I deserved” (coefficient alpha=0.88). Procedural justice was measured through two questions: “The length of time taken to solve my problem was adequate”, and “The bank/branch office showed adequate flexibility in dealing with my problem” (coefficient alpha=0.72). Interactional justice was measured through two questions: “The employees were appropriately concerned about my problem”, and “The employees gave me the courtesy and respect I was due” (coefficient alpha=0.78). Recovery-related emotion of anger with service recovery was made up of six items, “angry”, “annoyed”, “powerless”, “frustrated”, “irritated”, and “deceived”. Customers were asked to rate the six items according to how they felt about the service recovery.

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<sup>3</sup> We employed the following procedural to classify the remaining 202 questionnaires as representing a double deviation scenario. First, we used a measure of recovery disconfirmation, i.e. the degree to which a customer’s expectations about service recovery were met, adopted from Oliver (1980) and Oliver et al. (1997). Ratings were collected with a 5-point scale ranging from 1 (much worse than expected), 3 (as expected), to 5 (much better than expected). The answers falling into 4 or 5 were considered successful recoveries (9 of the 202 questionnaires showed this pattern of response). The answers falling into 1, 2, and 3 points in this scale (193 questionnaires), were considered for the subsequent detection of the double deviation scenarios. At this stage, we employed an opened question that collected ‘should’ expectations, i.e. what the firm should have done in order to restore initial satisfaction. We crossed this qualitative measure with the recovery disconfirmation one (1, 2, and 3 points only) to assess that a failed recovery had occurred. The combination of both the quantitative and the qualitative measures confirmed that all questionnaires with scores 1 or 2 in the recovery disconfirmation scale were representatives of double deviation scenarios (108 of the 193 questionnaires). Additionally, for the questionnaires with a neutral score of 3 (85 of the 193 questionnaires) in the recovery disconfirmation scale, only those that specifically reported the importance of improving recovery activities (‘should’ expectations in the opened question) were classified as double deviations (73 of the 193 questionnaires). Finally, we check for incongruence in the dependent variable, thus eliminating 16 responses.

Ratings were collected with 5-point scales from 1 (not at all) to 5 (very much). Exploratory factor analysis (EFA) for this variable revealed two primary factors. The first factor included items “angry”, “annoyed”, and “irritated”, whereas the second factor included items “powerless” and “frustrated”. These two factors were labeled “anger with service recovery” (coefficient alpha=0.92) and “frustration with failed service recovery” (coefficient alpha=0.88), respectively, following Roseman’s (1991) appraisal theory of emotions. The sixth item, “deceived”, loaded on both factors and it was eliminated for further analysis (Hair et al., 1999). Finally, satisfaction with service recovery was measured through 3 bipolar scales (“pleased/displeased”; “satisfied/dissatisfied”; “happy/unhappy”; coefficient alpha=0.91). Each multiitem scale was computed by averaging the responses on the corresponding single-item scales. It is important to note that the averaging of the single-item scales was done for practical reasons and does not theoretically imply that the obtained measures are unidimensional in nature (Estelami, 2000).

#### **4. Results**

The estimated model is shown in Table 1. Before carrying out the estimation, we test for collinearity among variables by calculating the variance inflation factor (VIF) for each of the coefficients. They are well below the cut off figure of 10 recommended by Neter et al. (1985). With regard to the results shown in Table 1, it is important to stress that the significance of parameter  $b$  indicates the average effect of the dimension analyzed, and that the significance of the parameter of standard deviation  $SD(\beta)$  shows that the effect of this dimension is different for each individual (which evidences the existence of heterogeneity and the superiority of the RCL model over the standard Logit model).

In general terms, we observe that *complain* is positively influenced by the variables magnitude of service recovery, explanation, anger and satisfaction with service recovery; and negatively affected by apology and procedural justice. The alternative *exit* is positively impacted by interactional justice and negatively influenced by explanation and apology. Finally, the alternative *complain & exit* is positively affected by explanation, distributive justice and satisfaction with service recovery and negatively influenced by frustration. Next, we examine each variable separately.

Concerning the magnitude of service failure, the results show a significant impact on the alternative *complain*. Consumers are more likely to voice their complaints when dissatisfied with an ‘important’ product, in line with Hirschman (1970). These customers are probably very angry and frustrated with the firm and feel a need to tell friends and relatives. Regarding the recovery strategies, the variable explanation shows positive signs for the alternatives *complain* and *complain & exit* and a negative sign for the alternative *exit*, suggesting that individuals perceiving to receive non-adequate explanations tend to complain irrespective of their final decision to stay or switch. Note that they do not tend to merely *exit* without claiming. The variable apology evidences negative signs for alternatives *complain* and *exit*, meaning that incorrect apologies lead customers to choose the alternative *complain & exit*.

Concerning the perceived justice, procedural and interactional justice show an influence on the choice model. Distributive justice has a significant and positive parameter for alternative *complain & exit*, procedural justice is negatively related to *complain* and interactional justice shows a positive influence on *exit*. This means that greater injustice is associated with a greater probability of *exit* and *complain & exit*, as higher values of these variables represent higher levels of perceived injustice. This result is in line with other studies showing that if justice is not served, complainants are likely to become even angrier, to engage in negative word of mouth, and to exit (Blodgett et al., 1993; Blodgett et al., 1997; Tax et al., 1998). In fact, note that the negative effect of procedural justice implies that individuals’ perceived injustice is not merely redressed by complaining only.

Regarding the recovery-related emotions, angry shows a significant and positive coefficient for alternative *complain*, and frustration is negatively related to *complain & exit*. These results indicate that as negative emotions increase, customers go mainly for *complain* (they want everybody knows). This negativity creates a state of strong emotional tension which motivates the individual to want to inflict injury on the *provocateur* (Berkowitz, 1962). Only when the customer believes that has inflicted sufficient injury on the company (the source of frustration), will he/she stop feeling angry. Thus, complaining behavior of *complaining* is perceived by the complainer as a means of restoring equity to his or her relationship with the company.

**TABLE 1. Determinants of the choice of type of response (standard errors)**

	Complain	Exit	Complain & Exit
<i>Magnitude of service failure (MAG)</i>	2.163 <sup>b</sup>	-0.804	-0.929
	(0.784)	(1.103)	(0.657)
<i>SD(MAG)</i>	4.882	6.437	1.815
	(3.302)	(5.653)	(2.145)
<i>Explanation (Expl)</i>	2.321 <sup>d</sup>	-0.776 <sup>b</sup>	4.414 <sup>c</sup>
	(1.357)	(0.244)	(1.897)
<i>SD(Expl)</i>	15.027	0.492	18.162
	(26.796)	(0.522)	(14.818)
<i>Apology (Apol)</i>	-1.596 <sup>a</sup>	-1.633 <sup>b</sup>	-0.213
	(0.411)	(0.554)	(0.771)
<i>SD(Apol)</i>	4.136	0.536	4.846
	(3.789)	(0.338)	(4.603)
<i>Distributive justice (DJ)</i>	1.066	2.111	2.096 <sup>a</sup>
	(0.777)	(1.739)	(0.349)
<i>SD(DJ)</i>	6.113	11.100	2.717
	(11.209)	(15.718)	(3.710)
<i>Procedural justice (PROCJ)</i>	-2.259 <sup>c</sup>	-5.323	0.151
	(1.065)	(3.461)	(0.735)
<i>SD(PROCJ)</i>	1.643	32.501	1.727
	(0.845)	(25.095)	(1.304)
<i>Interactional justice (IJ)</i>	-0.756	1.014 <sup>d</sup>	0.774
	(0.504)	(0.553)	(0.751)
<i>SD(IJ)</i>	2.586	1.064	2.617
	(2.461)	(1.009)	(2.221)
<i>Anger (Ang)</i>	1.172 <sup>c</sup>	-0.005	-0.670
	(0.483)	(0.537)	(0.570)
<i>SD(Ang)</i>	0.460 <sup>d</sup>	2.596	1.123
	(0.264)	(2.558)	(0.766)
<i>Frustration (Frus)</i>	-0.283	0.267	-1.792 <sup>a</sup>
	(0.783)	(0.739)	(0.388)
<i>SD(Frus)</i>	0.608	1.438 <sup>c</sup>	0.319
	(0.482)	(0.615)	(0.222)
<i>Satisfaction with service recovery (SAT)</i>	2.334 <sup>a</sup>	0.761	1.036 <sup>c</sup>
	(0.479)	(1.455)	(0.479)
<i>SD(SAT)</i>	0.432 <sup>d</sup>	5.471	0.649 <sup>c</sup>
	(0.235)	(3.964)	(0.326)
<i>Constant</i>	-0.759 <sup>a</sup>	-0.807	-1.916
	(0.864)	(0.739)	(0.374)
<i>SD</i>	2.090	1.239	2.148
	(2.074)	(1.024)	(1.343)

*a=prob<0.1%; b=prob<1%; c=prob<5%; d=prob<10%*

Finally, satisfaction with service recovery shows positive and significant parameters for alternatives *complain* and *complain & exit*. That is, as customers feel dissatisfied with the firm's response to the problem, they are more likely to choose the alternatives *complain* and *complain & exit*. As long as the firm has not been able to solve the complaint to the customers' satisfaction, they are likely to react with this harmful response by deciding to change provider and letting everybody knows.

All together, these results show a desire to hurt the firm's business from customers who suffer double deviation situations. Dissatisfied customers engage in several different behaviors -*complain*, *exit*, and *complain & exit*- in response to their perception of the severity of the problem and the firm's complaint handling. These findings are in line with previous research indicating that complete switching behavior usually occurs only after multiple dissatisfying experiences such as the double deviation ones (Blodgett and Anderson, 2000).

## **5. Conclusions**

This work has proposed and empirically analyzed a model centered on double deviation scenarios, that is, failed recoveries following initial service failures. Failures in the production and/or delivery of services are inevitable in almost all service organizations, but the recovery process should be under control in all of these organizations. Double deviation events result in the magnification of negative evaluations by customers that prompt behavioral responses that translate directly into losses for service firms.

Our field study based on a cross-sectional sample of 165 dissatisfied banking customers provides compelling evidence of the potentially damaging impact of service failures followed by ineffective or non-existent service recoveries (e.g., lost customers who additionally tell everybody about the problems experienced). Our results show that, in general, double deviation scenarios move customers to follow the most harmful responses to the firm -*exit* and *complain & exit*- in order to vent the anger, frustration and dissatisfaction felt for the (perceived) unfair event. Moreover, the findings of the present study add to previous research that illustrates the importance of an efficient recovery process for companies (e.g., Davidow, 2003; Hess et al., 2003; Smith y Bolton, 2002; Smith et al., 1999; Tax et al., 1998). However, we propose a new approach to this issue by presenting the harmful consequences of failed recoveries in a



real setting. That is, we examine the postcomplaint customer behavior in double deviation scenarios applied to a banking customers' dataset.

The results obtained have significant implications for management. Dissatisfied complaining customers expect apologies and a good explanation of what has happened, that is, that the company empathizes with their situation and makes an effort in trying to recover them. Obviously, many times a solution is impossible, but good explanations and apologies could restore in a large extent firm's image from the customer's viewpoint and could also have an immediate and palliative effect on customer's frustration and anger. Even when many customers may be wrong, the company should try to give sufficient explanations in order to mitigate initial anger and dissatisfaction, or at least not to enhance them further. Managers should try to develop better recovery systems in terms of the perceived outcome of the firm's recovery effort, the policies and rules by which recovery effort decisions are made, and the manner in which the service recovery process is implemented. Moreover, negative emotions such as anger and frustration could also be controlled by monitoring the service process activities surrounding the service recovery.

Additionally, our empirical results highlight some of the reasons for customers who suffer double deviations to switch providers and, therefore, they could be used as a guide of how to prevent similar situations from happening –e.g., to apologize and to give sufficient explanations when dealing with relevant problems to avoid anger, frustration and dissatisfaction-. Due to the increased abundance of choice, the risk of losing customers in retail banking is increasing (Roos, 2002). Thus, these results could be helpful for new market entrants and competitors that capture the *switchers* that should try to avoid making the same mistakes. But it could be also helpful for the companies that have lost those customers. Research has shown that a firm has a 20% to 40% chance of successfully repeat-selling to a lost customer and only a 5% to 20% chance of successfully closing the sale on a brand new customer (Griffin and Lowenstein, 2001). Recent studies, therefore, are focusing on the *re-initiation* and management of relationships with customers who have defected from a firm (Thomas et al., 2004). Thomas et al. (2004) centre on the reacquisition pricing strategy (e.g., lowering the price to reacquire a customer). We believe that if the recovery process was the main trigger for customers to switch, then the pricing strategy may not be sufficient for reacquisition. Managers involve in the process of winning back customers that have suffered a double deviation should conduct regain analysis and actions to restore the lost confidence in the recovery process.

In sum, the damage caused by the failed recovery appears to be quite important and reinforces the need for firms to have policies and procedures in place in order to keep such failures to a minimum. Hence, the service provider who is faced with this critical situation should have information for taking decisions in two main directions: to avoid/diminish the effect of the double deviation scenario and/or to act on the explanatory variables to try to regain the customer that has experienced an unsuccessful recovery.

Finally, several limitations of this study must be recognized. First, we limit our analysis to specific variables (e.g., explanations and apologies). Future research should try to determine whether additional variables (e.g., attributions regarding the recovery, personality, switching costs) affect PCB in double deviation scenarios. Second, our results suggest that double deviation scenarios are troublesome in a highly competitive and mature market such as the banking industry. Future research could also explore whether the pattern of responses found in this research at the individual level is influenced by industry characteristics (e.g., high vs. low level of competition) and market conditions (e.g., mature markets such as financial industries vs. growing markets such as the mobile industry or low-cost airlines). Third, the sample used, members of a consumer organization, could have introduced some bias in the results obtained. Future work incorporating different subjects and/or service settings is needed to validate the results of this investigation. Finally, we have assumed that customers' complaints are 'legitimate' or 'fair' in nature, that is, that customers have not knowingly complained without a cause. However, a range of studies have acknowledged the existence of illegitimate complaining behavior (for a review see Reynolds and Harris, 2005). For a more complete understanding of service failure and failed recovery encounters, further research should incorporate the motives and intentions of complainers to control for the effects of illegitimate complaining behavior.

To conclude, we hope that further conceptual and empirical development will enrich research and practice concerned with the consequences of double deviation scenarios.

## References

- ADAMS, J.S. (1965): Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 2, pp. 267-299). New York, NY: Academic Press.
- BAGOZZI, R.P., GOPINATH, M., & NYER, P.U. (1999): The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27 (2), 184-206.
- BEARDEN, W.O., & TEEL, J.E. (1983): Selected determinants of consumer satisfaction and complaint reports. *Journal of Marketing Research*, 20 (February), pp. 21-28.
- BERKOWITZ, L. (1962): *Aggression: a social psychological analysis*. New York, NY: McGraw-Hill.
- BERRY, L.L., & PARASURAMAN, A. (1991): *Marketing services: competing through quality*. New York, NY: The Free Press.
- BITNER, M. J., BOOMS, B. H., & TETREAULT, M. S. (1990): The service encounter: diagnosing favorable and unfavorable incidents. *Journal of Marketing*, 54 (January), 71-84.
- BLODGETT, J.G., & ANDERSON, R.D. (2000): A bayesian network model of the consumer complaint process. *Journal of Service Research*, 2 (4), 321-338.
- BLODGETT, J.G., & GRANBOIS, D.H. (1992): Toward an integrated conceptual model of consumer complaining behavior. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 5, 93-103.
- BLODGETT, J.G., GRANBOIS, D.H., & WALTERS, R.G. (1993): The effects of perceived justice on complainants' negative word-of-mouth behavior and repatronage intentions. *Journal of Retailing*, 69 (4), 399-428.
- BLODGETT, J.G., HILL, D.J., & TAX, S.S. (1997): The effects of distributive, procedural, and interactional justice on postcomplaint behavior. *Journal of Retailing*, 73 (2), 185-210.
- BONIFIELD, C., & COLE, C. (2007): Affective responses to service failure: anger, regret, and retaliatory versus conciliatory responses. *Marketing Letters*, 18, 85-99.
- BOUGIE, R., PIETERS, R., & ZEELENBERG, M. (2003): Angry customers don't come back, they get back: the experience and behavioral implications of anger and dissatisfaction in services. *Journal of the Academy of Marketing Science*, 31 (4), 377-393.
- CASADO-DÍAZ, A.B., MÁR-RUIZ, F.J., & KASPER, H. (2007): Explaining satisfaction in double deviation scenarios: the effects of anger and distributive justice. *International Journal of Bank Marketing*, 25 (5), 292-314.

- CHEBAT, J.C., & SLUSARCZYK, W. (2005): How emotions mediate the effects of perceived justice on loyalty in service recovery situations: an empirical study. *Journal of Business Research*, 58, 664-673.
- DAVIDOW, M. (2003): Organizational responses to customer complaints: what works and what doesn't. *Journal of Service Research*, 5 (3), 225-250.
- DAY, R.L. (1984): Modeling choices among alternative responses to dissatisfaction. In T.C. Kinnear (Ed.), *Advances in Consumer Research* (Vol. 11, pp. 496-499). Ann Arbor, MI: Association for Consumer Research.
- DAY, R.L., GRABICKE, K., SCHAETZLE, T., & STAUBACH, F. (1981): The hidden agenda of consumer complaining. *Journal of Retailing*, 57 (Fall), pp. 86-106.
- DAY, R.L. & LANDON, E.L. (1977): Towards a theory of consumer complaining behavior. In C. Lamb, & P. Dunn (Eds.), *Theoretical developments in marketing* (pp. 211-215). Chicago, IL: American Marketing Association.
- ERDEM, T., SWAIT, J., & LOUVIERE, J. (2002): The impact of brand credibility on consumer price sensitivity. *International Journal of Research in Marketing*, 19, 1-19.
- ESTELAMI, H. (2000): Competitive and procedural determinants of delight and disappointment in consumer complaint outcomes. *Journal of Service Research*, 2 (3), 285-300.
- FORNELL, C., & WERNERFELT, B. (1987): Defensive marketing strategy by customer complaint management: a theoretical analysis. *Journal of Marketing Research*, 24 (November), 337-346.
- GILLY, M.C. (1987): Postcomplaint processes: from organizational response to repurchase behavior. *Journal of Consumer Affairs*, 21 (Winter), 293-313.
- GREMLER, D.D. (2004): The critical incident technique in service research. *Journal of Service Research*, 7 (1), 65-89.
- GRIFFIN, J., & LOWENSTEIN, M.W. (2001): *Customer winback: how to recapture lost customers –and keep them loyal*. San Francisco: Jossey-Bass.
- GRÖNROOS, C. (1988): Service quality: the six criteria of good perceived service quality. *Review of Business*, 9 (Winter), 10-13.
- HAIR, J.F. JR., ANDERSON, R.E., TATHAM, R.L. & BLACK, W.C. (1999): *Análisis multivariante, 5ª edición*. Madrid: Prentice Hall Iberia.
- HALSTEAD, D., & PAGE, T.J. (1992): The effects of satisfaction and complaining behavior on consumer repurchase intentions. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 5, 1-11.

- HART, C.W.L., HESKETT, J.L., & SASSER, W.E., JR. (1990): The profitable art of service recovery. *Harvard Business Review*, 68 (July-August), 148-57.
- HENSHER, D. (2001): The valuation of commuter travel time savings for car drivers in New Zealand: evaluating alternative model specifications. *Transportation*, 28, 101-118.
- HESS, R.L., JR., GANESAN, S., & KLEIN, N.M. (2003): Service failure and recovery: the impact of relationship factors on customer satisfaction. *Journal of the Academy of Marketing Science*, 31 (2), 127-145.
- HIRSCHMAN, A.O. (1970): Exit, voice and loyalty: responses to decline in firms, organizations and states. Cambridge, MA: Harvard University Press.
- JOHNSTON, R., & FERN, A. (1999): Service recovery strategies for single and double deviation scenarios. *The Service Industries Journal*, 19 (2), 69-82.
- KEAVENEY, S.M. (1995): Customer switching behavior in service industries: an exploratory study. *Journal of Marketing*, 59 (April), 71-82.
- KELLEY, S.W., & DAVIS, M.A. (1994): Antecedents of customer expectations for service recovery. *Journal of the Academy of Marketing Science*, 22 (1), 52-61.
- LAZARUS, R.S. (1999): Stress and emotion: a new synthesis. New York: Springer.
- LERNER, J.S., & KELTNER, D. (2000): Beyond valence: toward a model of emotion-specific influences on judgement and choice. *Cognition and Emotion*, 14, 473-493.
- MATTILA, A.S. (2001): The impact of relationship type on customer loyalty in a context of service failures. *Journal of Service Research*, 4 (2), 91-101.
- MATTILA, A.S., & PATTERSON, P.G. (2004): Service recovery and fairness perceptions in collectivist and individualist contexts. *Journal of Service Research*, 6 (4), 336-346.
- MUNIZAGA, M. & ÁLVAREZ-DAZIANO, R. (2001): Mixed logit versus nested logit and probit. Working Paper, Santiago de Chile: Departamento de Ingeniería Civil, Universidad de Chile.
- NETER, J., WASSERUSAN, W. & KUTNER, M. (1985): *Applied Linear Statistical Models: Regression Analysis of Variance and Experimental Design*. Irwin.
- OLIVER, R.L. (1977): Effect of expectation and disconfirmation on postexposure product evaluations: an alternative interpretation. *Journal of Applied Psychology*, 62 (August), pp. 480-486.
- OLIVER, R.L. (1980): A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17 (November), 460-469.
- OLIVER, R.L. (1997): Satisfaction: a behavioral perspective on the consumer. New York: McGraw-Hill.

- OLIVER, R.L., RUST, R.T., & VARKI, S. (1997): Customer delight: foundations, findings, and managerial insight. *Journal of Retailing*, 73 (3), 311-336.
- ORTEGA, P. (2003): El calvario de los consumidores. *El País*, 30th November, 28-30.
- REYNOLDS, K.L., & HARRIS, L.C. (2005): When service failure is not service failure: an exploration of the forms and motives of “illegitimate” customer complaining. *Journal of Services Marketing*, 19 (5), 321-335.
- RICHINS, M.L. (1983): Negative word-of-mouth by dissatisfied consumers: a pilot study. *Journal of Marketing*, 47 (Winter), 68-78.
- RICHINS, M.L. (1985): The role of product importance in complaint initiation. In R.L. Day, & Hunt, H.K. (Eds.), *Proceedings of the Conference on Consumer Satisfaction, Dissatisfaction and Complaining Behavior*. Bloomington, IN: Indiana University Press.
- RICHINS, M.L. (1987): A multivariate analysis of responses to dissatisfaction. *Journal of the Academy of Marketing Science*, 15 (3), 24-31.
- RICHINS, M.L. (1997): Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24, 127-146.
- ROSEMAN, I.J. (1991): Appraisal determinants of discrete emotions. *Cognition and Emotion*, 5, 161-200.
- ROOS, I. (2002): Methods of investigating critical incidents: a comparative review. *Journal of Service Research*, 4 (3), 193-204.
- SCHOEFER, K., & ENNEW, C. (2005): The impact of perceived justice in consumers’ emotional responses to service complaint experiences. *Journal of Services Marketing*, 19 (5), 261-270.
- SINGH, J. (1988): Consumer complaint intentions and behavior: definitional and taxonomical issues. *Journal of Marketing*, 52, 93-117.
- SMITH, A.K., & BOLTON, R.N. (2002): The effect of customers’ emotional responses to service failures on their recovery effort evaluations and satisfaction judgments. *Journal of the Academy of Marketing Science*, 30 (1), 5-23.
- SMITH, A.K., BOLTON, R.N., & WAGNER, J. (1999): A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36 (3), 356-372.
- SPRENG, R.A., HARRELL, G.D., & MACKOY, R.D. (1995): Service recovery: impact on satisfaction and intentions. *Journal of Services Marketing*, 9 (1), 15-23.
- SZYMANSKI, D.M., & HENARD, D.H. (2001): Customer satisfaction: a meta-analysis of the empirical evidence. *Journal of the Academy of Marketing Science*, 29 (1), 16-35.

- TAX, S.S., BROWN, S.W., & CHANDRASHEKARAN, M. (1998): Customer evaluations of service complaint experiences: implications for relationship marketing. *Journal of Marketing*, 62 (April), 60-76.
- TAYLOR, S. (1994): Waiting for service: the relationship between delays and evaluations of service. *Journal of Marketing*, 58 (April), 56-69.
- THOMAS, J.S., BLATTBERG, R.C., & FOX, E.J. (2004): Recapturing lost customers. *Journal of Marketing Research*, 41 (February), 31-45.
- TRAIN, K.E. (1999): Mixed logit models for recreation demand. In J. Herringes & C. Kling (Eds.), *Valuing Recreation and the Environment*. Northampton, MA: Edward Elgar.
- TRAIN, K.E. (2001): Halton sequences for mixed logit. Working Paper, Berkeley: University of California.
- TRAIN, K.E. (2003): *Discrete choice models with simulation*. Cambridge: Cambridge University Press, CA.
- WEINER, B. (2000): Attributional thoughts about consumer behavior. *Journal of Consumer Research*, 27 (December), 382-387.
- WESTBROOK, R.A. (1987): Product/consumption-based affective responses and postpurchase processes. *Journal of Marketing Research*, 24 (August), pp. 258-270.
- YI, Y. (1990): A critical review of consumer satisfaction. In V.A. Zeithmal (Ed.), *Review of Marketing*, 4. Chicago, IL: America Marketing Association, 68-123.
- ZEELLENBERG, M. & PIETERS, R. (2004): Beyond valence in customer dissatisfaction. A review and new findings on behavioral responses to regret and disappointment in failed services. *Journal of Business Research*, 57, 445-455.