



## The Role of Airline Travelers' Pre-Recovery Emotions during the Service Recovery Process

Davoud Nikbin, Mohammad Iranmanesh, Sunghyup Sean Hyun, Rohaizat Baharun & Insin Kim

To cite this article: Davoud Nikbin, Mohammad Iranmanesh, Sunghyup Sean Hyun, Rohaizat Baharun & Insin Kim (2015) The Role of Airline Travelers' Pre-Recovery Emotions during the Service Recovery Process, Journal of Travel & Tourism Marketing, 32:6, 677-691, DOI: 10.1080/10548408.2014.948656

To link to this article: <https://doi.org/10.1080/10548408.2014.948656>



Published online: 02 Mar 2015.



Submit your article to this journal [↗](#)



Article views: 532



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 20 View citing articles [↗](#)

# THE ROLE OF AIRLINE TRAVELERS’ PRE-RECOVERY EMOTIONS DURING THE SERVICE RECOVERY PROCESS

Davoud Nikbin  
Mohammad Iranmanesh  
Sunghyup Sean Hyun  
Rohaizat Baharun  
Insin Kim

**ABSTRACT.** This study examines (1) the relationships between airline travelers’ casual attribution (stability and controllability), pre-recovery emotions, post-recovery emotions, and overall satisfaction; and (2) analyzes the mediating effect of pre-recovery emotions on the relationship between causal attribution and post-recovery emotions. Theoretical hypotheses were derived based on a literature review, and to empirically test the hypotheses, data were collected from 210 airline travelers in Malaysia. These respondents were airline travelers who experienced some service failure and relevant service recovery within the past year. According to the results, the two dimensions of casual attribution both influenced pre-recovery emotions. Pre-recovery emotions were significantly related to positive and negative post-recovery emotions, and post-recovery emotions were significantly related to overall satisfaction. In addition, pre-recovery emotions moderated the relationship between casual attribution and post-recovery emotions. These results have important practical implications.

**KEYWORDS.** Airline travelers, casual attributions, stability, controllability, pre-recovery emotions, post-recovery emotions, customer satisfaction

---

Davoud Nikbin was a Postdoctoral Researcher at the Department of Business Administration, Faculty of Management, Universiti Teknologi Malaysia, 81310, Johor Bahru, Malaysia (E-mail: [nikbin\\_david@yahoo.com](mailto:nikbin_david@yahoo.com)). He has since moved institutions and is now a Lecturer with the Faculty of Business, Multimedia University, 75450, Melaka, Malaysia.

Mohammad Iranmanesh is a PhD student, School of Management, Universiti Sains Malaysia, 11800, Penang, Malaysia (E-mail: [iranmanesh.mohammad@gmail.com](mailto:iranmanesh.mohammad@gmail.com)).

At the time of writing, Sunghyup Sean Hyun was an Associate Professor at the Department of Tourism and Convention, Pusan National University, Busan, Republic of Korea (E-mail: [shyun@pusan.ac.kr](mailto:shyun@pusan.ac.kr)). He has since moved institutions and is now an Associate Professor with the School of Tourism, Hanyang University, Seoul, Republic of Korea.

Rohaizat Baharun is Professor at the Department of Business Administration, Faculty of Management, Universiti Teknologi Malaysia (UTM), 81310, Johor Bahru, Malaysia (E-mail: [m-rohaizat@utm.my](mailto:m-rohaizat@utm.my)).

Insin Kim is Assistant Professor at the Department of Tourism and Convention, Pusan National University, Jangjeon-Dong, San 30, Kumjung-Gu, Busan 609–735 Korea (E-mail: [insinkim@pusan.ac.kr](mailto:insinkim@pusan.ac.kr)).

Address correspondence to: Sunghyup Sean Hyun, School of Tourism, Hanyang University, 17 Haengdang-dong, Seongdonggu, Seoul 133-791, Korea (E-mail: [doctor1977@gmail.com](mailto:doctor1977@gmail.com)).

## INTRODUCTION

With the increasing importance of relationships between service providers and more demanding customers, heterogeneous outcomes of services and the inevitability of service failure represent a challenging concern in the service sector. Therefore, service providers should have a better understanding of consumers' perceptions and responses because it is useful for addressing service failure and strengthening service recovery strategies.

Numerous studies have analyzed service failure and recovery, generally focusing on two main research streams. The first stream has predominantly examined the effect of service recovery on consumer attitudes and behavioral intentions. This stream of research introduced the concept of perceived justice into the model of customer satisfaction with failure/recovery encounters to facilitate an understanding of how recoveries influence customer satisfaction (Blodgett et al. 1997; Goodwin & Ross, 1992; Smith et al. 1999; Tax et al. 1998). The second stream of service failure and recovery research, which has focused on the failure phase, has been given less attention. This stream of research introduced attribution theory to the service failure context and seeks to explain consumer reactions to service failure. It has been found that the way in which consumers perceived failure causality, failure stability, and failure controllability influences their intentions to complain, their satisfaction, their emotional reactions to a firm, and their behavioral intentions toward a firm (Bitner, 1990; Folkes et al. 1987; Folkes, 1984; Hess et al., 2003).

Although service studies are highly cognitive in nature, they have also focused on the role of affective components of customer responses in service settings (Liljander & Strandvik, 1997), but this topic has not received sufficient attention (DeWitt et al., 2008). Emotions are sudden and automatic responses that start to be shaped immediately after a failure while the service provider attempts to cope with the failure through various recovery strategies. Previous studies have generally focused on emotions generated after service recovery, or post-recovery emotions. However, there are emotions that

arise immediately after a service failure, namely those emotions experienced by consumers as a result of assigning some causal attribution to a service failure. A consumer's interpretation of the cause of a service failure is his or her attribution (Priluck & Wisenblit, 2009). Depending on this attribution, consumers tend to respond differently in terms of their emotions. In this regard, the primary objective of this study is to explore the relationship between customers' causal attribution and pre-recovery emotions. To the authors' knowledge, no study has investigated the relationship between customers' failure attribution and pre-recovery emotions. In this regard, the present study contributes to the service failure and recovery literature by employing attribution theory and investigating the relationships between stability and controllability and specific post-failure emotions.

Previous research has found that certain pre-recovery emotions can cause customers to evaluate or assess a service encounter more negatively and maintain a negative feeling state (Taylor, 1994). Thus, this study intends to investigate the relationship between pre-recovery emotions and post-recovery emotions. With regard to post-recovery emotions, most studies have focused on negative emotions following some service recovery, whereas customers may have positive emotions after a good recovery attempt (DeWitt et al., 2008). Therefore, this study focuses on both negative and positive emotions after service recovery and investigates the relationship between pre-recovery and post-recovery emotions. In addition, to the best of the authors' knowledge, no study has analyzed the mediating role of pre-recovery emotions in the context of service failure. In this regard, the present study investigates the mediating effect of pre-recovery emotions on the relationship between causal attribution and post-recovery emotions. Finally, the study extends the literature by measuring positive or negative emotional responses in general instead of focusing on specific emotions such as anger, joy, and sadness. Consequently, the study understands emotions in the recovery process from a more holistic perspective, thereby enabling service providers to be more proactive.

When a service failure occurs, customers can experience a variety of negative emotions. The particular emotional reaction depends on the customer's perception of why the service failure occurred in the first place. Behavioral outcomes associated with service recovery therefore depend directly on the negative emotion experienced and indirectly on the customer's perception of the cause. When marketing managers can frame the cause of service failure in their post-failure communications in a way that reduces customers' negative emotions, recovery satisfaction may be increased, leading in turn to more positive customer response outcomes. Thus, understanding pre-recovery emotions is critical in providing proper recovery strategies and increasing customer satisfaction.

The rest of this paper is organized as follows: the next section provides a review of previous research on causal attribution, emotions, and customer satisfaction in the service recovery context, and a conceptual framework. This is followed by an analysis of the relationships between these variables by testing a set of hypotheses. Finally, the results are presented, and their implications are discussed.

## LITERATURE REVIEW

### *Pre-Recovery and Post-Recovery Emotions*

Researchers have struggled to reach consensus on an accepted definition of emotions and how they are formed (Bourne & Russo, 1988; Liljander & Bergenwall, 2004; Oliver, 1997). Oliver (1997) defines emotions as arousal, stating that they consist of various forms of affect and cognitive interpretations of affect that may be given a single description. Bourne & Russo (1988) contend that emotions are based upon a myriad of factors, some of which are inherent to the person experiencing the emotion, such as biological or cognitive factors. Emotion has also been defined as the mental state of readiness arising from the cognitive appraisal of an event or one's own thoughts (Bagozzi et al. 1999) and analyzed from several perspectives (Watson & Spence, 2007).

Two types of emotions are inherent in the service failure and recovery context. The first category relates to those emotions that are formed immediately following a service failure and are referred to as post-failure or pre-recovery emotions. In a service failure situation, customers do not experience positive feelings; our investigation of post-failure or pre-recovery emotions therefore considers only negative emotions. The second category of emotions experienced by customers arises in response to the evaluation of service recovery strategies. The emotions in this category can be either positive or negative and are referred to as post-recovery emotions.

Emotions represent another important outcome in the service recovery process, although few studies have focused on the role of emotions in service recovery (Schoefer & Ennew, 2005). It is widely known that consumers express emotions such as anger, frustration, joy, and even delight when they experience a service failure and during the service recovery process, and therefore researchers have increasingly focused on the role of emotions in service contexts (McColl-Kennedy & Sparks, 2003). Managing emotions effectively is an essential issue for service providers in the recovery process. According to Bonifield and Cole (2007), anger expressed by consumers has considerable influence on their retaliatory responses toward service providers, and this negative feeling is intensified by inappropriate recovery efforts. Service recovery following a failure is a related but distinct event and can generate emotions influencing consumers' evaluative judgments (Schoefer & Ennew, 2005). Therefore, service providers should have a clear understanding of various antecedents of post-recovery emotions.

Service providers attempt to reduce consumers' negative emotions through their successful recovery from a service failure. Although some studies (Andreassen, 2000; Varela-Neira et al. 2008) have found no significant relationship between negative emotions before service recovery efforts and satisfaction with those efforts, negative emotions such as regret and disappointment have been found to increase dissatisfaction with service providers (Zeelenberg & Pieters, 2004). Smith and Bolton (2002) found that

recovery efforts after a failure causing negative emotions are much more crucial than a failure entailing no negative emotions. For example, some studies have specifically analyzed the effects of anger caused by a service failure (Bougie et al. 2003; Menon & Dubé, 2004; Nguyen & McColl-Kennedy, 2003). Taylor (1994) states that the negative emotions experienced after a service failure create a negative bias in customer evaluations. In other words, customers who experience negative emotions after a service failure assess the service encounter more negatively. This proposition is based on the research of Clark and Isen (1982, p. 78), who suggested that “people in negative states may tend to see the negative side of things and be more pessimistic than usual, and their behavior may reflect these negative expectations and may serve to keep them in the negative feeling state”. Therefore, we imagine that customers who experience negative emotions evaluate service recovery in a more negative way. Stated slightly differently, negative emotions experienced after a service failure have a considerable influence on customers’ post-recovery evaluation, and it is clear that emotions reflect an important component of this post-recovery evaluation. In this regard, the following hypotheses (Hs) are proposed:

- H1: Pre-recovery emotions have a negative effect on post-recovery positive emotions.
- H2: Pre-recovery emotions have a positive effect on post-recovery negative emotions.

Many studies have specifically addressed the relationship between customers’ consumption emotions and their satisfaction in normal service settings and found that customers’ positive emotions have a significant positive effect on their satisfaction, whereas their negative emotions have a significant negative effect on it (e.g. Liljander & Strandvik, 1997; Mattila & Wirtz, 2000; Phillips & Baumgartner, 2002). Studies have also indicated that customers’ positive consumption emotions enhance their satisfaction, trust, and commitment, which in turn increase their repurchase and positive word-of-mouth (WOM) intentions (Bloemer & Odekerken-Schroder, 2002). In sum, customers’

consumption emotions can have a considerable influence on their evaluation of the service process and post-consumption behaviors. However, few studies have examined the role of consumption emotions in customer satisfaction in the context of service recovery (Bougie et al. 2003; del Rio-Lanza et al. 2009; Menon & Dubé, 2004; Schoefer & Ennew, 2005; Smith & Bolton, 2002; Zeelenberg & Pizters, 2004), and therefore there is a need for a better understanding of the role of emotions in the formation of customer satisfaction, particularly in the context of service recovery. In this regard, the following hypotheses are proposed:

- H3: Positive post-recovery emotions have a positive effect on customer satisfaction with service recovery.
- H4: Negative post-recovery emotions have a negative effect on customer satisfaction with service recovery.

### *Casual Attributions*

According to Folkes (1984), attribution theory posits that people are rational information processors and that their actions are influenced by causal inferences. Attribution is an individual’s effort to allocate some responsibility for a given event. Previous studies have shown that when there is a failure, customers often search for explanations for the cause of the failure (Bitner, 1990; Folkes, 1984; Folkes et al. 1987) and make their causal attribution to determine the reason for the failure (Weiner, 2000). Attribution is made for both positive and negative outcomes, but negative events such as service or product failures generally elicit the highest level of attribution activity (Folkes, 1984). There are situations such as service encounters in which something unexpected or negative happens, and in such a case, customers infer or attribute some blame and try to allocate responsibility for the event (Folkes, 1988; Weiner, 2000). Weiner (1980) classified major causes of product failures into three categories or dimensions: the locus of control, stability, and controllability.



### *Locus of Control*

The locus of control refers to whether the cause of a failure is located in the customer or the service provider (Hess et al., 2003). For example, when there is a failure such as a delivery failure, customers make attributions to determine the responsibility of the salesperson (Mallalieu, 2005). When a failure is related to the firm, customers tend to feel that they deserve a refund and an apology (Folkes, 1984). On the other hand, the more the cause is related to the customer, the more likely he or she is to do nothing when dissatisfied (Oliver, 1997). The locus of control derives from Heider's (1958) work on attribution theory (Mallalieu, 2005).

Although the locus attribution is important in some failure events, many researchers have excluded this attribution because most causes are perceived by customers to originate from service providers, not from customers, making the locus attribution unambiguous and thus less relevant in most situations (Bitner, 1990; Folkes et al. 1987; Hess et al., 2003; Smith et al. 1999). Because of this study's focus on failures occurring within organizations, the study ignores the locus of control and focuses exclusively on controllability and stability.

### *Stability*

Stability refers to whether service failure causes are perceived as relatively permanent and unchanging or as temporary and fluctuating (Folkes, 1982). When a salesperson is perceived to be responsible for a failure, customers may further assess the reason for the failure and attribute it to either a stable or unstable cause (Mallalieu, 2005). For example, when a hotel customer is allocated the wrong room due to a problem with the hotel's computer system, it can be rated as a failure with a stable cause. In contrast, if the problem is due to the fact that the front desk associate is in the initial stages of training, it can be rated as a failure with an unstable (temporary) cause (Magnini et al. 2007). Failures with stable causes recur more frequently than those whose causes are not

stable, and thus they create considerable problems for firms. Customer attributions of unstable causes can lead to uncertainty about future outcomes, whereas stable ones lead customers to expect the same outcome in the future (Weiner, 2000).

### *Controllability*

Controllability refers to the extent to which a focal party perceives a cause to be volitional or non-volitional (Hess et al., 2003). This attribution involves the customer's beliefs about whether the service provider can influence or prevent a failure from occurring (Hamilton, 1980; Weiner, 2000). When customers perceive the cause of a failure to be external and not controllable, they are not likely to blame other entities such as the manufacturer or retailer, but when the cause is perceived to be controllable and internal, they are likely to blame the service provider, becoming angry and wanting to hurt it (Folkes, 1984).

The service sector is labor intensive and thus does not produce identical outcomes (as in the case of the manufacturing sector), and therefore service failures are inevitable for service providers. In other words, it is not possible to ensure a 100% error-free service (Berry, 1980; Fisk et al. 1993). A service failure can be defined as the situation in which the prospective outcome of a service process or the process itself cannot be accomplished by the service provider and thus cannot meet the customer's former expectations before taking the service from that provider (Parasuraman et al. 1985; Spreng et al. 1995). To address service failures in an effective manner, recovery strategies and their effects should be carefully analyzed by service providers.

It is well known that consumer responses are not based simply on outcomes. The inferred reason, or attribution, for what occurs can influence how the consumer responds. Attribution theory suggests that consumers make judgments about cause-and-effect relationships that influence their subsequent emotions, attitudes, and behaviors based on controllability and stability, two dimensions of causal attribution (Choi &

Mattila, 2008; Hess et al., 2003; Tsiros et al. 2004; Weiner, 1985). Therefore, attribution theory generally posits that consumers' emotional responses to a service failure are influenced by their causal explanations for the failure and that causal attribution implies negative affective reactions (Hess et al., 2003). This is consistent with Bagozzi et al.'s (1999) contribution from cognitive appraisal theory in that they highlight that emotions arise in response to individuals' appraisal of something of relevance to their well-being. Previous research has clearly demonstrated that attributions of controllability and stability are related to several important affective and behavioral outcomes (Folkes, 1988; Hess et al., 2003; Tsiros et al. 2004). Folkes (1988) found that when consumers perceive a failure to be controllable by the service provider, they are likely to feel anger. In the same vein, Harrison-Walker (2012) highlighted that when a service failure is interpreted by the customer as being controllable by the service provider, it can be perceived as deliberate and unjustified and the customer is likely to experience anger. In addition, prospect theory and mental accounting principles suggest that losses from service failures are weighed more heavily than gains (Kahneman & Tversky, 1979; Smith et al. 1999; Thaler, 1985). Therefore, the more stable and controllable the service problem, the more likely the customer is to show negative emotions. This highlights the destructive effect of stable and controllable service failures. Based on this discussion, the following hypotheses are proposed:

- H5: Stability is positively related to customers' pre-recovery emotions.  
 H6: Controllability is positively related to customers' pre-recovery emotions.

According to cognitive appraisal theory (Bagozzi et al. 1999), negative emotions after a service failure are not produced by the event itself but by customers' evaluation of its causes. In the initial stages, consumers take part in customers' evaluation and emotions after service recovery (Nguyen & McColl-Kennedy, 2003). This indicates that pre-recovery emotions influence the relationship between the

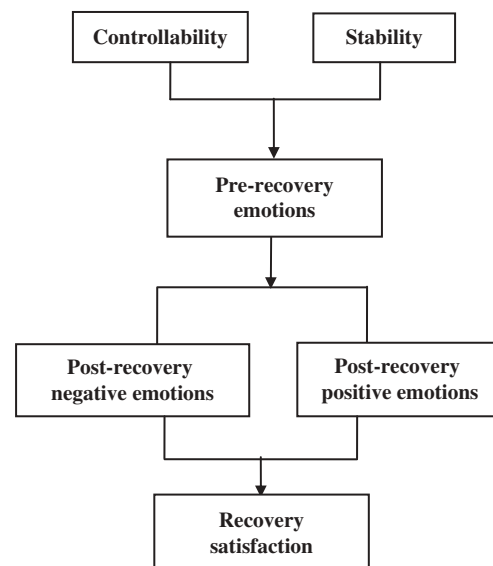
causal attribution of a service failure and post-recovery emotions. In this regard, the following hypotheses are proposed:

- H7: Pre-recovery emotions mediate the relationship between the stability of a service failure and post-recovery positive emotions.  
 H8: Pre-recovery emotions mediate the relationship between the controllability of a service failure and post-recovery positive emotions.  
 H9: Pre-recovery emotions mediate the relationship between the stability of a service failure and post-recovery negative emotions.  
 H10: Pre-recovery emotions mediate the relationship between the controllability of a service failure and post-recovery negative emotions.

### Conceptual Model

The conceptual model investigated in this study is shown in Figure 1. This study proposes that causal attributions (stability and control) that consumers make when service failures occur are related to their pre-recovery or post-

FIGURE 1. Conceptual Model



failure emotions. Furthermore, it was proposed that the negative emotions experienced following a service failure affect consumers' post-recovery emotions, both positive and negative. In addition, post-recovery emotions were hypothesized to affect recovery satisfaction. Finally, it was proposed that pre-recovery emotions mediate the relationship between causal attributions and post-recovery emotions.

## METHODOLOGY

### *Survey instrument*

The first draft of the survey instrument was developed based on a comprehensive literature review, findings from focus groups, and in-depth interviews with managers/employees of the Kuala Lumpur International Airport, Malaysia, and airline passengers. A pilot study was then conducted to assess the internal consistency of the measurement items. Pilot data were collected from a convenience sample of 40 Universiti Sains Malaysia students because of the complexity of obtaining the airport's permission for a survey of airline passengers. A reliability analysis (Cronbach's alpha) was conducted for all constructs. Cronbach's alpha for all constructs exceeded the cut-off value of 0.7, indicating sufficient reliability (Nunnally & Bernstein, 1994). Based on the results of the pilot test, and feedback from marketing scholars in the field of tourism, the final version of the survey instrument was developed. Each construct in the conceptual model was measured using multiple items, and all items were measured on a 7-point Likert-type scale ranging from "strongly agree" (7) to "strongly disagree" (1).

The questionnaire included five sections: (1) failure attribution (stability and controllability); (2) pre-recovery emotions; (3) post-recovery emotions; (4) recovery satisfaction; and (5) demographic information. Selected measurement items must ensure the content validity of the measurement. Therefore, to ensure content validity, the measurement items were adapted mainly from previous research. More specifically, the scale for failure attribution was

adapted from previous studies in psychology and marketing (Bulman & Wortman, 1977; Hess et al., 2003; Russell, 1982). A 7-point scale was used to measure the stability and controllability of service failure. With regard to service failure stability, respondents were asked to respond to the statement: "In your opinion, this service problem is: temporary/permanent, changing over time/unchanging over time, and occurring frequently/occurring infrequently". Regarding service failure controllability, respondents were asked to respond to the statement: "The cause of the failure is likely to be: highly controllable/not at all controllable, not at all preventable/definitely preventable, and highly intended/unintended". Pre-recovery emotions were considered to be those emotions experienced before confronting a service recovery attempt, and indicated by "being angry, in a bad mood, upset, sad, and annoyed". The respondents were asked to indicate the extent to which they agreed with these emotions on a 7-point Likert-type scale ranging from "completely disagree" (1) to "completely agree" (7), adapted from Schoefer and Diamantopoulos (2008). The measures of positive (joyful, happy, proud, a warm feeling, being valued) and negative (being angry, in a bad mood, upset, sad, annoyed) post-recovery emotions were adapted from Schoefer and Diamantopoulos (2008). Recovery satisfaction captured airline passengers' satisfaction after service recovery and was measured using items adapted from Brown et al. (1996) and Maxham and Netemeyer (2002). The respondents were asked to rate their level of agreement using a 7-point Likert-type scale (1 = completely disagree, and 7 = completely agree). The items in this section were: "I am satisfied with the manner in which the service failure was resolved"; "This airline's response to the service failure was better than expected"; "I now have a more positive attitude toward this airline"; "Regarding this particular event, I am satisfied with this airline's recovery effort"; and "Overall, I am satisfied with the service I received". Finally, the last part of the questionnaire included items covering the respondents' demographic background.



### ***Survey Procedure and Sampling***

Data were collected through the questionnaire in the departure hall of Kuala Lumpur International Airport (Kuala Lumpur, Malaysia) based on the airport authority's permission. The respondents were expected to complete the questionnaire more willingly at this location because they were generally accustomed to waiting for their flights in the airport lounge. The survey was administered during morning, afternoon, and evening hours on a continual basis during the one-month survey period in June 2013. All respondents claimed that they had flights with the airline and had encountered at least one failure in the past year. In addition, their context familiarity was expected to enhance their study involvement and motivation. Using consumers engaged in service acts can better ensure realism and increase external validity, and the type of service considered in this study provided an appropriate setting for the failure considered. In this study, non-probability convenience sampling was employed. Because there was no list of airline passengers with service failure experiences, probability sampling could not be used. A screening question was employed to determine whether the respondents encountered any service failure with an airline in the past year. A total of 1000 questionnaires were distributed to airline passengers, and among these, 950 responses were obtained. However, based on a number of filtering questions in the questionnaire, some respondents were not eligible for completing the questionnaire or had experienced a service failure more than a year ago, and therefore they were excluded from further analysis, leaving a total of 229 responses. In addition, some respondents left many questions unanswered and thus were excluded from the analysis. As a result, a total of 210 responses were available for the final analysis, reflecting a 21% response rate.

### ***DATA ANALYSIS***

Structural equation modeling (SEM) based on the partial least squares (PLS) method was employed to estimate the theoretical model (Ringle et al. 2005) because the PLS method

is suitable for identifying key constructs (Hair et al. 2010). Based on Henseler et al. (2009), a two-step approach was employed in the data analysis. The first step involved the analysis of the measurement model, and the second step the testing of structural relationships between latent constructs. Thus, a two-step approach was taken to establish the reliability and validity of the measures before assessing the structural relationships in the model.

## ***RESULTS***

### ***Respondent Profile***

In terms of age, those respondents aged between 40 and 49 years (31.9%) formed the largest group, followed by those aged between 30 and 39 years (30.5%). There were more males (113, 53.8%) than females (97, 46.2%). In terms of marital status, a majority of the respondents were married (52.4%), followed by those who were single (44.8%), and divorced (2.9%). In terms of the education level, a majority of the respondents had a bachelor's degree (49.0%), followed by a master's degree (20.0%), a certificate/diploma (18.6%), a high school degree or less (9.0%), a doctorate degree (1.4%), and a professional certificate (1.9%). This implies that most respondents had a high level of education. In terms of their ethnicity, a majority were Malays (43.3%), followed by Chinese (35.7%), Indians (19.0%), and others (1.9%). Finally, in terms of income, most had a monthly income between MYR 3001 and 6000 (23.3%).

### ***Measurement Model Evaluation***

The PLS test of the reflective measurement models has three major elements: (1) the reliability of individual items; (2) the internal consistency of the whole scale; and (3) discriminant validity. The reliability of individual items was assessed by examining factor loadings of each measure on its corresponding construct. Hair et al. (2010) suggested accepting items with loadings greater than or equal to 0.7. In this study, all loadings associated with each scale

TABLE 1. Measurement Model Evaluation

Constructs	Items	Factor loadings	CR	AVE
Stability (ST)	ST1	0.859	0.883	0.715
	ST2	0.891		
	ST3	0.784		
Controllability (CO)	CO1	0.917	0.894	0.809
	CO3	0.881		
Pre-recovery emotions (P.EM)	P.EM1	0.897	0.922	0.703
	P.EM2	0.899		
	P.EM3	0.887		
	P.EM4	0.749		
	P.EM5	0.748		
Positive emotions (PEM)	PEM1	0.942	0.917	0.691
	PEM2	0.864		
	PEM3	0.791		
	PEM4	0.811		
	PEM5	0.734		
Negative emotions (NEM)	NEM1	0.852	0.927	0.716
	NEM2	0.879		
	NEM3	0.818		
	NEM4	0.841		
	NEM5	0.841		
Recovery satisfaction (RS)	RS2	0.913	0.897	0.685
	RS3	0.746		
	RS4	0.832		
	RS5	0.812		

Notes. CR = composite reliability; AVE = average variance extracted.

exceeded 0.7 (Table 1), indicating sufficient reliability.

Internal consistency was assessed using the composite reliability of the internal scale, which is similar to Cronbach's alpha. All six latent variables satisfied Hair et al.'s (2010) guidelines for internal consistency (see Table 1). Internal consistency can also be evaluated using the average variance extracted (AVE), a measure of the variance accounted for by an underlying variable. The AVE exceeded 0.5 for all variables, satisfying Fornell and Larcker (1981) and

providing further support for internal consistency (see Table 1).

Two approaches were taken to assess the discriminant validity of the constructs. First, cross-loadings of the indicators were evaluated. Here no indicator loaded significantly higher on an opposing construct (Hair et al. 2010). Second, Fornell and Larcker's (1981) criterion was employed, and the square root of each latent construct's AVE was evaluated to determine whether it exceeded its correlation with remaining constructs. Table 2 shows the correlation matrix of the constructs and the squared root of the AVE. Each construct met this requirement, indicating sufficient discriminant validity for all constructs.

### Assessment of the Structural Model

With the satisfactory results for the measurement model, the structural model was evaluated to verify the relationships between the constructs through the method. The explanatory power of the research model was examined based on the total explainable variation ( $R^2$ ) of the model.  $R^2$  values of 0.02, 0.13, and 0.26 for endogenous latent constructs of the structural model are considered to be weak, moderate, and substantial respectively. The model explained 19.9% of the variance. The percentages of  $R^2$  values for negative emotions, positive emotions, and pre-recovery emotions were 10.4%, 6.6%, and 8.9% respectively. Therefore, the proposed model was found to sufficiently reflect customer satisfaction with service recovery. In addition to the estimation of  $R^2$ , the predictive relevance in Stone (1974) and Geisser (1975) was

TABLE 2. Discriminant Validity Coefficients

	CO	NEM	P.EM	PEM	RS	ST
Controllability (CO)	<b>0.899</b>					
Negative emotions (NEM)	0.249	<b>0.846</b>				
Pre-recovery emotions (P.EM)	0.238	0.323	<b>0.839</b>			
Positive emotions (PEM)	-0.253	-0.195	-0.258	<b>0.831</b>		
Recovery satisfaction (RS)	-0.226	-0.254	-0.082	0.409	<b>0.828</b>	
Stability (ST)	0.214	0.225	0.227	-0.255	-0.194	<b>0.846</b>

considered for an additional assessment of the model fit. This technique represents the adequacy of the model to predict each latent construct's manifest indicators. Stone–Geisser  $Q^2$  (cross-validated redundancy) values were computed to examine this predictive relevance based on the blindfolding procedure in PLS. Based on the guidelines in Chin (2010), a  $Q^2$  value greater than 0 implies the predictive relevance of a model. All  $Q^2$  values ranged significantly above 0, demonstrating the endogenous constructs' strong predictive power.

In order to test whether path coefficients differed significantly from 0,  $t$ -values were calculated using nonparametric bootstrapping (Efron & Tibshirani, 1993; Wetzels et al. 2009) with 5000 resamples (Table 3). As shown in Figure 2, all direct effects were significant, providing support for H1–H6. Stability ( $\beta = 0.185, p < 0.01$ ) and controllability ( $\beta = 0.198, p < 0.01$ ) had direct positive effects on pre-recovery emotions, providing

support for H1 and H2 respectively. Pre-recovery emotions had a negative effect on positive post-recovery emotions ( $\beta = -0.258, p < 0.001$ ), and a positive effect on post-recovery negative emotions ( $\beta = 0.323, p < 0.001$ ), thus providing support for H3 and H4 respectively. Positive post-recovery emotions ( $\beta = 0.373, p < 0.001$ ) had a positive effect on customer satisfaction, whereas negative post-recovery emotions ( $\beta = -0.181, p < 0.01$ ) had a negative effect, providing support for H5 and H6 respectively.

In order to estimate indirect effects, many studies have employed the Sobel test. A major limitation of the Sobel test is that it requires the assumption of a normal distribution of the sample (Hayes, 2009), whereas the distribution of the  $ab$  sample tends to be asymmetric with non-zero values for skewness and kurtosis (Stone & Sobel, 1990). According to Hayes (2009), tests that assume this normality should not be used to assess indirect effects. Hayes (2009) suggested

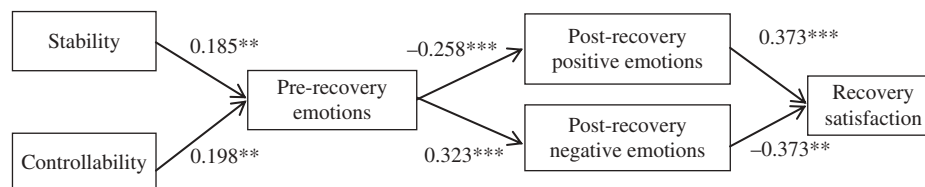
TABLE 3. Path Coefficients and Hypothesis Testing

Hypothesis	Relationship	Path coefficient	Std. error	$t$ -value	Support
Direct effects					
H1	ST $\rightarrow$ P.EM	0.185	0.073	2.551**	Yes
H2	CO $\rightarrow$ P.EM	0.198	0.065	3.069**	Yes
H3	P.EM $\rightarrow$ PEM	-0.258	0.067	3.855***	Yes
H4	P.EM $\rightarrow$ NEM	0.323	0.060	5.405***	Yes
H5	PEM $\rightarrow$ RS	0.373	0.058	6.497***	Yes
H6	NEM $\rightarrow$ RS	-0.181	0.062	2.940**	Yes
Indirect effects					
H7	ST $\rightarrow$ P.EM $\rightarrow$ PEM	-0.048	0.025	1.882*	Yes
H8	CO $\rightarrow$ P.EM $\rightarrow$ PEM	-0.051	0.020	2.496**	Yes
H9	ST $\rightarrow$ P.EM $\rightarrow$ NEM	0.060	0.028	2.156*	Yes
H10	CO $\rightarrow$ P.EM $\rightarrow$ NEM	0.064	0.025	2.547**	Yes

Notes. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$  (one-tailed).

ST: stability; CO: controllability; P.EM: pre-recovery emotions; RS: recovery satisfaction; NEM: negative emotions.

FIGURE 2. Partial Least Squares Analysis of the Model for Direct Effects



the bootstrapping procedure as an alternative method for testing indirect effects. It should be noted that *t*-values for indirect effects are obtained by dividing the indirect effect (*ab*) by the standard error (SE) of the indirect effect. The SE is the standard deviation of repeated bootstrap estimates of the indirect effect. As shown in Table 3, all *t*-values of indirect effects exceeded 1.645 and were significant, providing support for H7–H10. That is, stability and controllability had indirect negative effects on positive post-recovery emotions and indirect positive effects on negative post-recovery emotions through pre-recovery emotions.

## DISCUSSION AND IMPLICATIONS

This study extends the literature on service recovery by using both pre- and post-recovery emotions. According to the results, both stability and controllability had significant effects on pre-recovery emotions, which in turn had significant effects on both positive and negative post-recovery emotions. Stability and controllability were related to both positive and negative post-recovery emotions indirectly through pre-recovery emotions. In this regard, the study contributes to the literature on service failure and recovery by exploring various antecedents of pre-recovery emotions by considering causal attribution. In addition, the study examines the relationship between pre-recovery emotions and post-recovery evaluations, including post-recovery emotions, as well as the mediating effect of pre-recovery emotions on the relationship between casual attribution and post-recovery emotions.

The results indicate that both stability and controllability were positively related to negative emotions experienced after a service failure but that controllability had a greater effect, which highlights the importance of preventing controllable failures from occurring in the first place. These results are consistent with Bagozzi et al.'s (1999) cognitive appraisal theory. They highlighted that emotions occur in response to the appraisal one makes of something of relevance to one's well-being. This suggests that it is not the event or service failure itself but the

evaluation that one makes about the cause of the service problem that induces emotions. Therefore, airline passengers' attribution of the controllability and stability of the cause of a service failure is an antecedent of their negative emotional reactions.

As expected, pre-recovery emotions had significant effects on positive and negative post-recovery emotions. This is noteworthy in that it highlights significant negative effects of pre-recovery emotions. The significant relationship between pre-recovery emotions and positive post-recovery emotions is inconsistent with the findings of Ozgen and Kurt (2012), who found no such significant relationship. These results highlight that negative emotions experienced after a service failure have a considerable influence on customers' post-recovery evaluation and that emotions are crucial components of this post-recovery evaluation. The significant relationship between pre-recovery emotions and post-recovery evaluations is consistent with the findings of Zeelenberg and Pieters (2004), who found that negative emotions before service recovery, such as regret and disappointment, increase the level of dissatisfaction with the service provider.

This study provides some useful insights by testing the mediating effect of pre-recovery emotions on the relationship between casual attribution and post-recovery emotions. In this sense, consumers' attributions about the controllability and stability of the cause of a service failure are expected to be an antecedent of their negative emotional responses, which in turn have a negative effect on their post-recovery emotions such that the stronger the negative emotion after a service failure, the more (less) likely the negative (positive) post-recovery emotion. This suggests that the greater the negative emotion experienced after a stable and controllable failure, the more (less) likely the customer is to show negative (positive) post-recovery emotions. This finding is new and highlights negative consequences of pre-recovery emotions from a stable and controllable failure.

The results obtained from this study offer a number of important implications for service firms. From a theoretical perspective, this

study deals with the relationship between consumers' casual attributions and pre-recovery emotions in the service failure and recovery context. This study found that two dimensions of casual attributions (stability and controllability) do not equally contribute to consumers' pre-recovery emotions. Therefore, this study adds to the body attribution theory research by studying the unique relationship between casual attributions and pre-recovery emotions. Moreover, this study extended the literature by determining that stable and controllable service failures can be very destructive, and what companies can do to prevent such failures in order to avoid pre-recovery negative emotions. Another important theoretical contribution of this study deals with the mediating effect of pre-recovery emotions. In contrast to previous empirical studies, which have typically examined post-recovery emotions, this study investigated the mediating role of pre-recovery emotions in the relationship between casual attributions and post-recovery emotions (both positive and negative), thus adding to the body of literature on service failure and recovery.

From a managerial perspective, the results have important implications for managers and regulators in the airline industry. At the micro-level, airline managers should first be committed to the delivery of services of superior quality and then ensure that all employees clearly understand the importance of delivering high-quality services for the future of the firm and their jobs. In addition, airlines should employ effective recovery strategies that are likely to be perceived as fairer options by consumers to reduce their negative post-recovery emotions. This is particularly important in reducing the level of dissatisfaction caused by a stable and controllable service failure.

The results provide additional support for the importance of casual attribution, namely stability and controllability. The significant relationships between casual attribution and pre-recovery emotions as well as post-recovery emotions suggest that airlines should make every effort to avoid service failures that occur frequently and are controllable by the airline, and focus their investment on these areas to retain customers. According to Hess et al. (2003),

failures with stable and controllable causes are obvious targets for problem-solving for successful service providers. Therefore, high-quality service providers should avoid the types of failures produced by stable and controllable causes. In addition, it is important for airlines to carry out appropriate service recovery actions such as apologizing, explaining, and offering compensation to alleviate negative effects of causal attribution on emotions and satisfaction. Service recovery strategies should reinforce the halo effect of attribution on emotions and behavioral intentions. Therefore, through such recovery strategies, airline managers need to make customers feel the failure is because of causes not related to and under control by the airline itself. Such recovery strategies may entail apologizing, compensating customers for their loss, explaining why the failure is not under the airline's control and thus is not a stable one, and assuring customers that the failure will not recur.

In addition, the results show that pre-recovery emotions are significantly related to post-recovery emotions. This suggests that airlines should identify, understand, and attend to emotions that passengers can manifest after a service failure. By doing so, airlines can adjust their recovery strategies by aiming to smoothe such emotions and thus better manage service failures and complaints, which can enhance customer satisfaction. In this regard, airlines should provide their employees with effective training to help them demonstrate sufficient empathy toward passengers in the case of a service failure. When an employee has the ability to show empathy, he or she can put himself or herself in the place of passengers and take on their emotions as his or her own. Service employees should be trained to assess emotions and make appropriate efforts to recover services in each particular failure scenario. In addition, during service recovery, airlines should focus on both positive and negative emotions simultaneously. Instead of directing attention only to reducing the intensity of negative emotions, managers should make efforts to foster positive emotions and should not overlook the fact that their strategies need to vary according to the type of emotion.



## LIMITATIONS AND FUTURE RESEARCH

This study has some limitations. First, the study focuses only on one service industry (airline industry) in one country, and therefore any generalization of the findings to other service industries and countries should be made with caution. In this regard, future research should replicate this study by considering a wider range of service industries and countries. Second, the study employs convenience sampling for a sample of 210 responses. Future research can address this limitation by employing a larger sample and provide a more comprehensive understanding. Third, the results may reflect some respondent memory bias because of the use of a cross-sectional survey. In this regard, future research should adopt a longitudinal design and employ a scenario-based experiment instead of a survey. However, according to Vázquez-Casielles et al. (2007), both a longitudinal study and an experimental design are necessary to properly test causality. The longitudinal study allows data collection at different points in time, and the experimental design facilitates control of common method bias, which is likely in studies such as the present one. Finally, future research may consider some significant moderating variables between the pre-recovery and post-recovery emotions such as perceived justice with service recovery dimensions. Furthermore, future research could even investigate other customer behavioral intentions to arrive at a more comprehensive depiction of the issue.

## REFERENCES

- Andreassen, T. W. (2000). Antecedents to satisfaction with service recovery. *European Journal of Marketing*, 34(1/2), 156–175. doi:10.1108/03090560010306269
- Bagozzi, R. P., Wong, N., & Yi, Y. (1999). The role of culture and gender in the relationship between positive and negative affect. *Cognition and Emotion*, 13, 641–672. doi:10.1080/026999399379023
- Berry, L. L. (1980). Services marketing is different. *Business*, 30, 24–29.
- Bitner, M. J. (1990). Evaluating service encounters: The effects of physical surroundings and employee responses. *Journal of Marketing*, 54, 69–82. doi:10.2307/1251871
- Blodgett, J. G., Hill, D. J., & Tax, S. S. (1997). The effects of distributive, procedural, and interactional justice on post-complaint behavior. *Journal of Retailing*, 73(2), 185–210. doi:10.1016/S0022-4359(97)90003-8
- Bloemer, J., & Odekerken-Schroder, G. (2002). Store satisfaction and store loyalty explained by customer- and store-related factors. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 15, 68–80.
- Bonifield, C., & Cole, C. (2007). Affective responses to service failure: Anger, regret, and retaliatory versus conciliatory responses. *Marketing Letters*, 18, 85–99. doi:10.1007/s11002-006-9006-6
- 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. doi:10.1177/0092070303254412
- Bourne, L., & Russo, N. (1988). *Psychology-behavior in context*. New York, NY: W.W. Norton and Company, Inc.
- Brown, S. W., Cowles, D. L., & Tuten, T. L. (1996). Service recovery: Its value and limitations as a retail strategy. *International Journal of Service Industry Management*, 7(5), 32–46. doi:10.1108/09564239610149948
- Bulman, R. J., & Wortman, C. B. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. *Journal of Personality and Social Psychology*, 35, 351–363. doi:10.1037/0022-3514.35.5.351
- Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and application* (pp. 645–689). New York, NY: Springer.
- Choi, S., & Mattila, A. (2008). Perceived controllability and service expectations: Influences on customer reactions following service failure. *Journal of Business Research*, 61(1), 24–30. doi:10.1016/j.jbusres.2006.05.006
- Clark, M. S., & Isen, A. M. (1982). Toward understanding the relationship between feeling states and social behavior. In A. H. Hastorf, & A. M. Isen, (Eds.), *Cognitive social psychology* (pp. 73–108). New York, NY: Elsevier.
- del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2009). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, 62(8), 775–781. doi:10.1016/j.jbusres.2008.09.015
- Dewitt, T., Nguyen, D., & Marshall, R. (2008). Exploring customer loyalty following service recovery: The mediating effects of trust and emotions. *Journal of Service Research*, 10, 269–281. doi:10.1177/1094670507310767
- Efron, B., & Tibshirani, R. J. (1993). *An introduction to the bootstrap*. New York, NY: Chapman & Hall.

- Fisk, R. P., Brown, S. W., & Bitner, M. J. (1993). Tracking the evolution of the services marketing literature. *Journal of Retailing*, 69(1), 61–103. doi:10.1016/S0022-4359(05)80004-1
- Folkes, V. S. (1982). Communicating the reasons for social rejection. *Journal of Experimental Social Psychology*, 18(3), 235–252. doi:10.1016/0022-1031(82)90052-X
- Folkes, V. S. (1984). Consumer reactions to product failure: An attributional approach. *Journal of Consumer Research*, 10, 398–409. doi:10.1086/208978
- Folkes, V. S. (1988). Recent attribution research in consumer behavior: A review and new directions. *Journal of Consumer Research*, 14(4), 548–565. doi:10.1086/209135
- Folkes, V. S., Koletsky, S., & Graham, J. L. (1987). A field study of causal inferences and consumer reaction: The view from the airport. *Journal of Consumer Research*, 13, 534–539. doi:10.1086/209086
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388. doi:10.2307/3150980
- Geisser, S. (1975). The predictive sample reuse method with applications. *Journal of the American Statistical Association*, 70(350), 320–328. doi:10.1080/01621459.1975.10479865
- Goodwin, C., & Ross, I. (1992). Consumer responses to service failures: Influence of procedural and interactional fairness perceptions. *Journal of Business Research*, 25(2), 149–163. doi:10.1016/0148-2963(92)90014-3
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis*. 7th ed. Upper Saddle River, NJ: Prentice Hall.
- Hamilton, L. (1980). Intuitive psychologist or intuitive lawyer? Alternative models of the attribution process. *Journal of Personality and Social Psychology*, 39(5), 767–772. doi:10.1037/0022-3514.39.5.767
- Harrison-Walker, L. J. (2012). The role of cause and affect in service failure. *Journal of Services Marketing*, 26(2), 115–123. doi:10.1108/08876041211215275
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420. doi:10.1080/03637750903310360
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20, 277–319.
- Hess Jr., R. L., 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. doi:10.1177/0092070302250898
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291. doi:10.2307/1914185
- Liljander, V., & Bergenwall, M. (2004). *Consumption-based emotional responses related to satisfaction*. Helsinki, Finland: Swedish School of Economics and Business Administration, Department of Marketing.
- Liljander, V., & Strandvik, T. (1997). Emotions in service satisfaction. *International Journal of Service Industry Management*, 8(2), 148–169. doi:10.1108/09564239710166272
- Magnini, V. P., Ford, J. B., Markowkis, E., & Honeycutt, E. P. (2007). The Service Recovery Paradox: Justifiable Theory or Smoldering Myth?. *Journal of Services Marketing*, 21(3), 213–225. doi:10.1108/08876040710746561
- Mallalieu, L. (2005). An examination of the role of customer attributions in understanding trust loss and recovery in buyer-seller relationships. *Supply Chain Forum: An International Journal*, 6(2), 68–80.
- Mattila, A., & Wirtz, J. (2000). The role of preconsumption affect in postpurchase evaluation of services. *Psychology and Marketing*, 17(7), 587–605. doi:10.1002/(SICI)1520-6793(200007)17:7<587::AID-MAR2>3.0.CO;2-3
- Maxham, J., & Netemeyer, R. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of Marketing*, 66(4), 57–71. doi:10.1509/jmkg.66.4.57.18512
- McColl-Kennedy, J. R., & Sparks, B. A. (2003). Application of fairness theory to service failures and service recovery. *Journal of Service Research*, 5(3), 251–266. doi:10.1177/1094670502238918
- Menon, K., & Dube, L. (2004). Service provider responses to anxious and angry customers: Different challenges, different payoffs. *Journal of Retailing*, 80, 229–237. doi:10.1016/j.jretai.2003.11.002
- Nguyen, D. T., & McColl-Kennedy, J. R. (2003). Diffusing customer anger in service recovery: A conceptual framework. *Australasian Marketing Journal (AMJ)*, 11(2), 46–55. doi:10.1016/S1441-3582(03)70128-1
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York, NY: McGraw-Hill.
- Ozgen, O., & Kurt, S. D. (2012). Pre-recovery and post-recovery emotions in the service context: A preliminary study. *Managing Service Quality*, 22(6), 592–605. doi:10.1108/09604521211287561
- Parasuraman, A., Zeithaml, V., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41–50. doi:10.2307/1251430
- Phillips, D. M., & Baumgartner, H. (2002). The role of consumption emotions in the satisfaction response. *Journal of Consumer Psychology*, 12(3), 243–252. doi:10.1207/S15327663JCP1203\_06

- Priluck, R., & Wisenblit, J. (2009). The impact of exchange lineage on customers' responses to service debacles and subsequent recovery. *Services Marketing Quarterly*, 30, 365–376. doi:10.1080/15332960903199109
- Ringle, C. M., Wende, S., & Will, S. (2005). SmartPLS 2.0 (M3) Beta, Hamburg. Retrieved from <http://www.smartpls.de>
- Russell, D. (1982). The causal dimension scale: A measure of how individuals perceive causes. *Journal of Personality and Social Psychology*, 42(6), 1137–1145. doi:10.1037/0022-3514.42.6.1137
- Schoefer, K., & Diamantopoulos, A. (2008). Measuring experienced emotions during service recovery encounters: Construction and assessment of the ESRE scale. *Service Business: An International Journal*, 2, 65–81. doi:10.1007/s11628-007-0024-0
- Schoefer, K., & Ennew, C. (2005). The impact of perceived justice on consumers' emotional responses to service complaint experiences. *Journal of Services Marketing*, 19(5), 261–270. doi:10.1108/08876040510609880
- 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. doi:10.1177/03079450094298
- 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), 356–373. doi:10.2307/3152082
- Spreng, R. A., Harrell, G. D., & Mackoy, R. D. (1995). Service recovery: Impact on satisfaction and intentions. *Journal of Services Marketing*, 9, 15–23. doi:10.1108/08876049510079853
- Stone, C. A., & Sobel, M. E. (1990). The robustness of estimates of total indirect effects in covariance structure models estimated by maximum likelihood. *Psychometrika*, 55, 337–352. doi:10.1007/BF02295291
- Stone, M. (1974). Cross-validated choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological)*, 36(2), 111–147.
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing*, 62, 60–76. doi:10.2307/1252161
- Taylor, S. (1994). Waiting for service: The relationship between delays and evaluations of service. *Journal of Marketing*, 58(2), 56–69. doi:10.2307/1252269
- Thaler, R. (1985). Mental accounting and consumer choice. *Marketing Science*, 4(3), 199–214. doi:10.1287/mksc.4.3.199
- Tsiros, M., Mittal, V., & Ross Jr, W. T. (2004). The role of attributions in customer satisfaction: A reexamination. *Journal of Consumer Research*, 31(2), 476–483. doi:10.1086/422124
- Varela-Neira, C., Vázquez-Casielles, R., & Iglesias-Argüelles, V. (2008). The influence of emotions on customers' cognitive evaluations and satisfaction in a service failure and recovery context. *The Service Industries Journal*, 28(4), 497–512. doi:10.1080/02642060801917612
- Vázquez-Casielles, R., del Río-Lanza, A. B., & Díaz-Martín, A. M. (2007). Quality of past performance: Impact on consumers' responses to service failure. *Marketing Letters*, 18, 249–264. doi:10.1007/s11002-007-9018-x
- Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing*, 41(5/6), 487–511. doi:10.1108/03090560710737570
- Weiner, B. (1980). *Human motivation*. New York, NY: Holt, Rinehart & Winston.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573. doi:10.1037/0033-295X.92.4.548
- Weiner, B. (2000). Attributional thoughts about consumer behavior. *Journal of Consumer Research*, 27(3), 382–387. doi:10.1086/317592
- Wetzels, M., Odekerken-Schröder, G., & Van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 33(1), 177–195.
- Zeelenberg, M., & Pieters, R. (2004). Beyond valence in customer satisfaction: A review and new findings on behavioral responses to regret and disappointment in failed services. *Journal of Business Research*, 57, 445–455. doi:10.1016/S0148-2963(02)00278-3

SUBMITTED: January 26, 2014

FINAL REVISION SUBMITTED:

June 13, 2014

ACCEPTED: July 14, 2014

REFEREED ANONYMOUSLY