

# Investigating the Role of Customers' Perceptions of Employee Effort and Justice in Service Recovery: A Cross-Cultural Perspective

## Abstract

**Purpose** – The purposes of this paper are, first, to identify the relationship, if any, between customers' perceptions of justice (functional element) and employee effort (symbolic element) and their effects on satisfaction and loyalty in the context of service recovery and, second, to determine the impact of cross-cultural differences on these relationships.

**Design/methodology/approach** – Survey data from actual customers were gathered in three countries (n = 414) and analyzed using structural equation modeling to test the proposed hypotheses.

**Findings** – The results demonstrate the role of the constructs of perceived employee effort and perceived justice in influencing post-recovery satisfaction and loyalty across cultures. While perceived justice is valued across cultures, customers from feminine (masculine) cultures require more (less) employee effort to influence post-recovery satisfaction positively. Customers from low (high) uncertainty cultures are more (less) willing to give the provider another chance after a service recovery.

**Research limitations/implications** – The study shows that both functional and symbolic elements of service recovery are important determinants of customer satisfaction and loyalty and that their influence can be significant in a cross-cultural context.

**Practical implications** – International service managers must consider the nature of cultural differences in their markets in order to develop and implement tailored recovery strategies that can result in satisfied customers.

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3 **Originality/value** –This study is the first to integrate the functional and symbolic elements of  
4 service recovery, their impact on customers’ behavioral responses, and the influence of cultural  
5 variations.  
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10 **Keywords** Culture, Perceived employee effort, Perceived justice, Service recovery, Customer  
11 satisfaction, Customer loyalty  
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14 **Paper type** Research paper  
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# Investigating the Role of Customers' Perceptions of Employee Effort and Justice in Service Recovery: A Cross-Cultural Perspective

## Introduction

As part of the dynamic evolution of services marketing, the area of service recovery has received increasing attention during the last three decades (e.g., Andreassen, 2001; Bitner *et al.*, 1990; Mattila, 2014). Service recovery, which is concerned with providing satisfactory solutions to customers' problems (Blodgett *et al.*, 1997), consists of the actions a service provider takes in response to service failure (Grönroos, 1988). The effectiveness of a correction after a failure is strategically important, as it determines the customer's satisfaction level, which can affect profits (Zeithaml *et al.*, 1996). An effective correction occurs when the organization responds in a way that overcomes disappointment, restores justice perceptions and enhances customer satisfaction (Smith *et al.*, 1999), and its benefits include positive word-of-mouth, repurchase intentions, and loyalty (Mattila and Patterson, 2004a; 2004b; Patterson *et al.*, 2006; Tax *et al.*, 1998).

Research shows that the personal interactions between customers and employees—that is, the service encounter (Czepiel *et al.*, 1985)—usually determine customer's perceptions of the service itself. There is a high degree of interaction between staff and customers during the service-recovery process. In this context, human interactions are important and employee effort is of significant value in its own right, so an examination of customers' evaluation of employee effort and how it impacts satisfaction after the recovery can show service organizations how to maximize the benefits of effective service recovery (Mohr and Bitner, 1995). However, the service-recovery research is dominated by studies that focus on the construct of perceived

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3 justice, which reflects how fairly the customer feels the organization has treated him or her and  
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5 the effect of that perception on the customer's post-recovery satisfaction (e.g., Chebat and  
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7 Slusarczyk, 2005; Del Rio-Lanza *et al.*, 2009; Jung and Seock, 2017; Maxham and Netemeyer,  
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9 2002). While the services marketing literature largely ignores the role of employee effort, its  
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11 influence is gaining attention as a central element in the link between employees' emotional  
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13 responses and emotional intelligence and that link's influence on the performance of service  
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15 recovery (Kim and Oh, 2012; Lee *et al.*, 2013). Most important, employee effort can impact  
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17 perceptions of justice (Liao, 2007; McQuilken *et al.*, 2013). Therefore, since studies assert the  
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19 importance of understanding customers' perceptions of service quality and their  
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21 interrelationships (Cronin *et al.*, 2000; Ostrom and Iacobucci, 1995), excluding customers'  
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23 perceptions of employee effort from the context of service recovery results in an incomplete  
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25 picture of the determinants of post-recovery satisfaction.  
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31 The challenge of addressing service failures is compounded when a service-provider  
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33 serves customers in multiple countries and cultures, as a successful recovery strategy begins by  
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35 understanding customers' core values (Becker, 2000). Service encounters are social exchanges,  
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37 and customers' perceptions of these processes are heavily influenced by the cultural  
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39 environments that shape their values (e.g., De Matos *et al.*, 2011; Patterson *et al.*, 2016;  
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41 Patterson *et al.*, 2006; Schoefer, 2010). Orsingher *et al.*'s (2010) meta-analysis of studies on  
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43 satisfaction shows that cultural differences explain differences in the relationships between the  
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45 variables related to service recovery. While most cross-cultural studies focus on the effectiveness  
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47 of service-recovery methods, such as compensation and apology (e.g., Mattila and Patterson,  
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49 2004a; 2004b; Nguyen *et al.*, 2012; Patterson *et al.*, 2006; Wong, 2004), others show the  
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51 difficulties service providers have in recognizing the emotions of dissatisfied customers when the  
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3 provider and the customer are culturally mismatched (Tombs *et al.*, 2014). However, the last  
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5 three decades of cross-cultural studies in research on service recovery issues is limited (Burgess  
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7 and Steenkamp, 2006; Steenkamp, 2005; Zhang *et al.*, 2008). Since most of the research in this  
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9 area focuses on the role of perceived justice, any effort that integrates both perceived justice and  
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11 perceived employee effort can help to clarify their interrelationships and their impact on post-  
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13 recovery satisfaction and loyalty.  
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17 Because of increasing globalization, the role of culture and its impact on consumer  
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19 behavior has become pre-eminent in international marketing (De Mooji and Hofstede, 2002;  
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21 Yaprak, 2008). Consequently, as organizations continue to grow through international expansion,  
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23 marketing researchers and managers must understand how customers' perceptions of service-  
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25 recovery actions vary across nations whose cultures, geographic locations, and levels of  
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27 economic development differ (Morgeson *et al.*, 2015). Marketing theories and their practical  
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29 implications rely heavily on findings from studies conducted in the Western world, particularly  
30  
31 the United States, but cross-national and cross-cultural generalizability cannot be assumed.  
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33 Therefore, international marketing research is necessary in order to identify the strategies that  
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35 can be applied globally and those that must be tailored to specific cultural contexts (Burgess and  
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37 Steenkamp, 2006; Steenkamp, 2005).  
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42 The purpose of the present study is to address the gaps in the literature that are related to  
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44 the integration of the symbolic element of perceived employee effort and the functional element  
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46 of perceived justice as determinants of post-recovery satisfaction and loyalty in a cross-cultural  
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48 context by addressing the questions: how do customers in different cultural contexts evaluate  
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50 employee effort and justice, how are employee effort and justice related, and what is their impact  
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52 on post-recovery satisfaction and customer loyalty?  
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3 We make three primary contributions to the literature. First, we expand what we know  
4 about customers' perceptions of employee effort as a determinant of customers' post-recovery  
5 satisfaction and loyalty. Second, we clarify how customers perceive the relationship between  
6 employee effort and justice, and the influence of these two constructs on post-recovery  
7 satisfaction and loyalty. Third, we offer a model of service recovery that takes into account  
8 cultural variations in the global marketplace.  
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17 Our paper is organized as follows: First, we explain our conceptual model and derive our  
18 hypotheses, drawing on the theories of social exchange, equity, motivation, justice, relationship  
19 marketing, and national culture. Next, we explain the methodology of cross-cultural research  
20 before presenting the results of our hypotheses testing. We conclude with a discussion of the  
21 main implications of our findings to theory and management practice, their limitations, and  
22 avenues of research for future studies.  
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### 33 **Conceptual Framework and Hypotheses Development**

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35 Figure 1 shows the conceptual model, which summarizes the hypotheses. Drawing on social  
36 exchange and equity theories (e.g., Walster *et al.*, 1973), we define a service recovery encounter  
37 as an exchange between an organization and a customer in which a customer experiences a  
38 service failure and an organization attempts to make up for it (Smith *et al.*, 1999). According to  
39 these theories, the exchange should be equitable and fair (Bagozzi, 1975) such that both parties  
40 see reasonably balanced benefits and costs from the exchange. We follow studies that consider  
41 the equity theory framework especially appropriate to service recovery (e.g., Blodgett *et al.*,  
42 1997; Maxham and Netemeyer, 2002; Oliver and Swan, 1989). When a service failure occurs,  
43 customers tend to perceive an inequity, so the organization's ability to restore equity is essential  
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3 to shaping the customer's perception of satisfactory exchange. Studies demonstrate that when  
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5 consumers perceive fairness in the recovery effort, their post-recovery satisfaction increases  
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7 (e.g., Oliver and Swan, 1989; Smith *et al.*, 1999; Tax *et al.*, 1998).  
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10 The exchange between the customer and the provider involves both utilitarian dimensions  
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12 (functional benefits, including money or goods) and symbolic dimensions (psychological  
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14 benefits, including status and empathy) (Bagozzi, 1975). In the context of service recovery,  
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16 Smith *et al.* (1999) recognize two types of failures: an *outcome* failure which involves a  
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18 utilitarian exchange and a *process* failure, related to a symbolic exchange. As the organization  
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20 tries to recover from failure, both dimensions of the service recovery exchange—what is offered  
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22 as compensation and how it is offered in terms of employee interactions with the customer—  
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24 affect the customer's perceptions of the organization's attempt at service recovery (Sparks and  
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26 McColl-Kennedy, 2001) and influences his or her satisfaction with and continued loyalty to the  
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28 company (Blodgett *et al.*, 1997; Tax *et al.*, 1998). Consequently, creating customer satisfaction is  
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30 at the heart of marketing theory and practice, and there is considerable evidence that satisfaction  
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32 is the key to customer retention (Bolton, 1998). Customer retention is a paramount consideration  
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34 in service recovery (Andreassen, 2001); studies like Reichheld and Sasser (1990) find that the  
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36 cost of attracting a new customer is far more expensive than retaining an existing one, so  
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38 building a long-term relationship with existing customers is essential to increasing profitability  
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40 and ensuring the company's long-term survival.  
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46 The purpose of service recovery is to bring the customer from a state of dissatisfaction to  
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48 a state of satisfaction with the hope of strengthening loyalty and retaining the customer  
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50 (Andreassen, 2001). The relationship marketing framework is critical to building such long-term,  
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52 service-based relationships, as it focuses on attracting, maintaining, and enhancing customer  
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3 relationships (Berry, 1995). The intangibility of services makes relationship marketing  
4 particularly important to the field of services marketing, as both focus on enhancing the  
5 company's relationship with existing customers, which increases customers' satisfaction,  
6 commitment, and trust (Tax *et al.*, 1998). Successful service recovery engenders positive  
7 perceptions of employee effort, which increases post-recovery satisfaction (Mohr and Bitner,  
8 1995; Mattila and Patterson, 2004b) and justice or fairness, which also enhances post-recovery  
9 satisfaction (Oliver and Swan, 1989; Smith *et al.*, 1999). Consequently, effective service  
10 recovery, as a relationship marketing tool (DeWitt *et al.*, 2008), should be a critical element of  
11 effects to maintain strong customer-provider relationships (Blodget *et al.*, 1997; Smith and  
12 Bolton, 2002; Tax *et al.*, 1998).

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15 We argue, then, that customers evaluate their perceptions of an organization's service-  
16 recovery effort in terms of two elements: their perceptions of employee effort, which is related to  
17 symbolic or social elements like empathy and status that are derived from the employee's level  
18 of motivation or energy expended in solving the problem, and their perceptions of justice, which  
19 is related to utilitarian or functional elements like compensation. These two elements influence  
20 post-recovery satisfaction and its correlate, loyalty.

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22 We propose a model that examines a) the relationship between customers' perceptions of  
23 employee effort and their perceptions of justice, b) these perceptions as determinants of the post-  
24 recovery satisfaction that affects loyalty, and c) how customers' cultural orientations affect the  
25 model's hypothesized relationships. In addressing the last of these three goals, we take the same  
26 approach as that of Brettel *et al.* (2008), De Matos *et al.* (2011), Mazaheri *et al.* (2011), and  
27 Schoefer (2010), such that not all cultural dimensions and variables are included in each  
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3 hypothesis, but each variable relates back to specific cultural dimensions based on theoretical  
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5 and/or empirical support.  
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### 10 *Perceived employee effort and perceived justice*

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13 The intuitive relationship between the customer's perceptions of employee effort (symbolic  
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15 element) and his or her perceptions of justice (functional element) is that the more the customer  
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17 perceives that the service employee has made a genuine effort to sort out a service failure, the  
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19 more likely the customer is to perceive the recovery outcome as fair and just. Evidence from  
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21 research shows that customers' perceptions of employees' positive behavior in the service  
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23 recovery encounter influences their perceptions of the justice of the outcome (McQuilken *et al.*,  
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25 2013), which enhances satisfaction and repurchase intent (Liao, 2007). How the firm's staff  
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27 treats customers during the recovery process, including their courtesy and empathy (Tax *et al.*,  
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29 1998) and the sensitivity and effort with which they try to solve the problem (Del Río-Lanza *et*  
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31 *al.*, 2009), affects customers' overall perception of justice. Despite its importance, this  
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33 relationship has rarely been tested empirically. We argue that companies should recognize that  
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35 customers value highly motivated employees who make serious efforts to fix service failures and  
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37 that this effort is fundamental to enhancing customers' perceptions of the fairness of the recovery  
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39 effort. Based on this discussion, we propose:  
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45 *H1. There is a positive relationship between perceived employee effort and perceived*  
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47 *justice.*  
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### 52 *Perceived employee effort and post-recovery customer satisfaction*

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3 Based on the distinction the services marketing literature makes between the service (functional)  
4 *outcome* (what the customer receives during the transaction) and the *process* of service delivery  
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6 (how the outcome is transferred to the customer), Mohr and Bitner (1995) argue that the  
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8 functional outcome and the symbolic meaning the consumer gives to the social interaction  
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10 combine to influence the customer's satisfaction with the transaction. Mohr and Bitner (1995)  
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12 draw on theories of motivation, attribution, and equity to operationalize the *process* of service  
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14 delivery through employee effort and develop a scale with which to capture customers'  
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16 perceptions of this factor and its effect on satisfaction.  
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22 The customer's perception of employee effort is a social influence factor that refers to the  
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24 amount of energy that customers perceive an organizations' staff has put into a behavior or series  
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26 of behaviors (Mohr and Bitner, 1995). Bitner *et al.* (1990) report that a large number, 43 percent,  
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28 of unsatisfactory encounters arise from the employee's inability to respond to service failure,  
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30 revealing the importance of customers' perceptions of employee effort during the service-  
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32 recovery encounter since "the service encounter frequently *is* the service from the customer's  
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34 point of view" (Bitner *et al.*, 1990, p. 1). Consequently, employee effort can be so important to  
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36 customers' satisfaction with the service encounter that they "sometimes [have] difficulty seeing  
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38 when effort and outcome were not consistent with each other" (Mohr and Bitner, 1995, p. 251).  
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41 Mohr and Bitner's (1995) findings show that higher levels of customer satisfaction result when  
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43 they perceive a high level of employee effort, independent of the outcome. Later studies (Huang,  
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45 2008; Mattila and Patterson, 2004b) obtain similar results.  
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49 Despite its importance, the service recovery literature largely ignores customers' perceptions  
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51 of employee effort. Walsh *et al.* (2008, p. 986) argue that "during critical incidents, the personal  
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53 interactions between the employee and customer become surrogates for the actual problem"; that  
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3 is, how the staff deals with customers' queries is often more important to customers than the  
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5 causes of the earlier service failures. The importance of the service staff is so high that Bitner  
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7 (1990) suggests they should be appropriately screened, trained, and motivated to understand  
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9 customers' needs and wants. In line with these findings, we argue that a customer's perception of  
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11 employee effort is a symbolic element that affects post-recovery satisfaction, and we expect that:  
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14 *H2. Perceived employee effort is positively associated with post-recovery customer*  
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16 *satisfaction.*  
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### 22 *Perceived justice and post-recovery customer satisfaction*

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24 The perception of justice refers to the degree to which customers feel an organization has treated  
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26 them fairly when they have complained about a service failure (Maxham and Netemeyer, 2002).  
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28 Justice (or fairness) exists in perception, so it is the individual who decides whether an action is  
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30 fair or just (Mattila, 2014). Justice theory identifies three forms of justice: distributive justice,  
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32 which involves tangible outcomes (e.g., compensation); procedural justice, which relates to the  
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34 methods used; and interactional justice, which refers to how a customer is treated during the  
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36 service recovery process (Blodgett *et al.*, 1997; Smith *et al.*, 1999). These three dimensions of  
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38 justice can be combined into one dimension (e.g., DeWitt *et al.*, 2008), which suggests that  
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40 despite the amount of research on the facets of justice, recent studies are shifting from the  
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42 dimensional view to an overall justice (Ambrose and Schminke, 2009).  
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47 Perceived justice has a positive influence on customers' evaluations of service-recovery  
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49 experiences (Blodgett *et al.*, 1997; Tax *et al.*, 1998), while perceived injustice has a negative  
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51 impact (Balaji *et al.*, 2017). The literature provides ample evidence that, when customers  
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53 experience fair treatment and a good outcome, they tend to perceive a greater level of justice,  
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3 leading to satisfaction with the recovery (e.g., Liao, 2007; Oliver and Swan, 1989; Sabharwal *et*  
4 *al.*, 2010; Smith *et al.*, 1999). Consistent with Oliver and Swan's (1989) findings, Smith *et al.*  
5 (1999) show that a customer's perception of justice accounts for most of the explained variance  
6 in satisfaction with the recovery. Studies find that the distributive justice dimension accounts for  
7 a relatively large percentage of perceived justice's overall effect on satisfaction (e.g., Kau and  
8 Wan-Yiun Loh, 2006; Orsingher *et al.*, 2010; Smith *et al.*, 1999). Based on these studies, we  
9 argue that perceived justice is largely a functional element that influences post-recovery  
10 satisfaction and hypothesize:  
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21 *H3.* Perceived justice is positively associated with post-recovery customer  
22 satisfaction.  
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#### 28 *Post-recovery customer satisfaction and loyalty*

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31 In a seminal work, Oliver (1997) describes customer satisfaction as a positive post-consumption  
32 evaluation. Research shows that satisfaction enhances loyalty (Grønholdt *et al.*, 2000; Homburg  
33 and Giering, 2001; Poon *et al.*, 2004)—that is, the likelihood that a customer will commits to an  
34 organization (Dick and Basu, 1994). Loyalty entails an attitudinal element and a behavioral  
35 element (Ganesh *et al.*, 2000; Garbarino and Johnson, 1999; Oliver, 1999). In the context of  
36 service recovery, studies show that satisfied customers are willing to do business with the service  
37 company again (Liao, 2007; Smith and Bolton, 1998; Smith *et al.*, 1999; Sparks and McColl-  
38 Kennedy, 2001). Furthermore, effective service recovery can strengthen the customer-supplier  
39 relationship leading to higher levels of customer loyalty, as studies find that customers' post-  
40 recovery satisfaction can be higher than their satisfaction before the failure (De Matos *et al.*,  
41 2007; Mattila and Patterson, 2004b; McCollough and Bharadwaj, 1992). Research also suggests  
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3 that the satisfaction-loyalty link is stronger for customers who have experienced an effective  
4 service recovery than it is for those who have never experienced a service failure (Walsh *et al.*,  
5 2008). Therefore, we expect that:  
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10 *H4. Post- recovery satisfaction is positively associated with loyalty.*  
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#### 13 14 15 *Cultural dimensions and service-recovery variables* 16

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18 Marketing scholars increasingly recognize the importance of moderator variables in explaining  
19 apparently established relationships in consumer behavior, especially customer satisfaction and  
20 its correlate, loyalty (e.g., Walsh *et al.*, 2008). Cross-cultural studies in service recovery are  
21 particularly limited, and little is known about the generalizability of findings in this area. We use  
22 Hofstede's (1980) four original cultural dimensions as moderators of the relationships that we  
23 proposed in our first three hypotheses, as we expect that customers' cultural values moderate  
24 their experiences with and evaluations of service failure and recovery (Becker, 2000). We  
25 propose that the value or emphasis that a customer places on employee effort, justice,  
26 satisfaction, and loyalty and the interrelationships of these dimensions are likely to differ based  
27 on the customer's culture, and we propose three hypotheses that reflect the links between these  
28 variables and four cultural dimensions.  
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44 According to Hofstede (1980, p. 25), culture is "the collective programming of the mind  
45 which distinguishes the members of one human group from another." The behavior of  
46 individuals or consumers from various countries and cultures differs based on their cultural  
47 values (Hofstede, 2001). Studies demonstrate that Hofstede's cultural dimensions are useful in  
48 understanding customers' evaluations of service recovery, including their perceptions of justice  
49 (e.g., Mattila and Patterson, 2004a; Patterson *et al.*, 2006), their perceptions of employee effort,  
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3 (Huang, 2008; Mattila and Patterson, 2004b), their post-recovery satisfaction (Maxham and  
4 Netemeyer, 2002), their repurchase intentions (Wong, 2004), and their loyalty to the organization  
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6 (Chebat and Slusarczyk, 2005). We follow the traditional approach (e.g., Brettel *et al.*, 2008;  
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8 Walsh *et al.*, 2015; Wong, 2004) in employing Hofstede's (1980) country scores for  
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10 masculinity/femininity, individualism/collectivism, power distance, and uncertainty avoidance,  
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12 shown in Table I, to test three hypotheses.  
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17       Masculinity/femininity opposes ego goals with social goals. While masculinity is  
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19 characterized by competition, achievement, assertiveness, and success, femininity relates to  
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21 cooperation, helping others, sharing, empathy, and solidarity. Individualism/collectivism refers  
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23 to the degree of interdependence a society maintains among its members. People in individualist  
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25 cultures are expected to take care of themselves, while in collectivist cultures people are  
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27 integrated into groups that protect them in exchange for loyalty. Power distance reflects the  
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29 extent to which the less powerful members expect and accept that power is distributed unequally  
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31 or believe that inequalities should be minimized. Finally, uncertainty avoidance relates to the  
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33 extent to which members of a culture feel threatened by ambiguous or unknown situations.  
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37 Cultures with high levels of uncertainty avoidance maintain rigid codes of belief and behavior,  
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39 while those with low levels have a more relaxed and accepting attitude toward uncertainty.  
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42       We propose that the masculinity/femininity dimension affects customers' perceptions of  
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44 employee effort. According to Hofstede (1983), people in masculine cultures put less emphasis  
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46 on helping others and have lower levels of "service mindedness" than do those in feminine  
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48 cultures, as the latter place more value on relationships, service, caring for others, empathy, and  
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50 solidarity. Consequently, when they report a service failure, customers from feminine cultures  
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52 anticipate that employees should make serious, determined, and significant effort to understand  
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3 and resolve their problems, and perceptions of such employee effort increase customers'  
4 satisfaction (Bitner *et al.*, 1990; Huang, 2008; Mattila and Patterson, 2004b; Mohr and Bitner,  
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8 1995). Therefore, we propose that:

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10 *H5.* The positive relationship between perceived employee effort and post-recovery  
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12 satisfaction is stronger in feminine cultures than it is in masculine cultures.  
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17 The influence of the cultural dimensions on perceived justice is not clear. Studies link  
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19 customers' perceptions of justice to individualism/collectivism and power distance, but the  
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21 results from these studies are mixed (Mattila and Patterson, 2004a; Patterson *et al.*, 2006). The  
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23 link between perceived justice and post-recovery satisfaction is generally established in the  
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25 service recovery literature (e.g., Blodgett *et al.*, 1997; Maxham and Netemeyer, 2002; Smith *et*  
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27 *al.*, 1999; Tax *et al.*, 1998), but only a few studies examine this relationship cross-culturally. The  
28  
29 limited evidence from cross-cultural research seems to indicate that "people's justice perceptions  
30  
31 are determined by similar principles across cultures" (Morris and Leung, 2000, p. 114 ). Studies  
32  
33 found that cultural orientation, i.e., individualism/collectivism, does not influence the  
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35 relationship between perceived justice and post-recovery satisfaction (De Matos *et al.*, 2011;  
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38 Mattila and Patterson, 2004a). Therefore, we expect similar results in this study and hypothesize  
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41 that:

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44 *H6.* Cultural orientation does not moderate the relationship between perceived justice and  
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47 post-recovery satisfaction.  
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51 Finally, people in cultures that score high on uncertainty avoidance tend to be concerned  
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53 with security, as uncertainty creates anxiety (Hofstede, 1980). Therefore, we argue that a high  
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3 level of uncertainty avoidance causes individuals to be less willing to take risks than are those  
4 who have a low level of this dimension because of a greater fear of failure. In the context of  
5 service recovery, a high level of uncertainty avoidance has a negative impact on repurchase  
6 intentions (Wong, 2004) and loyalty because such individuals seek to minimize the potential of a  
7 future service failure. In contrast, customers in cultures with a low level of uncertainty avoidance  
8 are more tolerant of ambiguity and may be willing to give the provider another chance. This  
9 argument is consistent with the finding that East Asian consumers have less tolerance for  
10 uncertain and ambiguous situations than US consumers do (Mattila and Patterson, 2004b).  
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12 Therefore, we expect that:  
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24 *H7.* The positive relationship between post-recovery satisfaction and loyalty is stronger for  
25 customers from cultures characterized by low uncertainty avoidance than it is for  
26 customers from cultures characterized by high uncertainty avoidance.  
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33 Figure 1 illustrates the conceptual model for this study.  
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35 [Take in Figure 1]  
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## 40 **Methodology**

### 41 *Rationale for the choice of industry and countries sampled*

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44 To test our model empirically, we use the mobile phone services industry, which is characterized  
45 by both a high diversity of customers' cultural contexts and extensive personal contact between  
46 employees and customers. The industry has nearly reached the level of commodity—that is, the  
47 suppliers' offerings and support infrastructures are almost identical—so differences between  
48 countries are comparatively easy to isolate (Morgeson *et al.*, 2015).  
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3 We conducted a survey with a sample of customers in the UK, Spain, and Mexico,  
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5 countries that vary in terms of their cultural dimensions, which is important for meaningful  
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7 comparisons (see, e.g., Sekaran, 1983). As Table I shows, the Mexican and UK cultures are  
8  
9 masculine, while the Spanish culture is feminine; the UK is individualist, while Mexico and  
10  
11 Spain are collectivist; and Mexico and Spain score high on both power distance and uncertainty  
12  
13 avoidance, as opposed to the UK's low scores. Beyond Hofstede's scores, although Spain and  
14  
15 Mexico share a common language and similar cultural backgrounds, they differ in their  
16  
17 economic outlook and development. Considering that the growth in the service sector comes  
18  
19 largely from emerging markets (Alam, 2014), the inclusion of Mexico helps us determine the  
20  
21 generalizability of previous findings that are grounded in well-developed economies like that of  
22  
23 the US (Burgess and Steenkamp, 2006). Mexico's developing economy is large and growing,  
24  
25 and the number of mobile phone users, which has increased from 59.1 million in 2011 to 82.0  
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27 million in 2015 (approximately 40% in four years), is expected to rise to 90.7 million in 2020.  
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29 (Statista, 2018). Considering the notable differences in cultural dimensions among the country  
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31 samples, as shown in Table I, we expect customers' perceptions of service recovery to differ  
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33 based on national culture.  
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42 [Take in Table I]  
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#### 45 *Sample and procedure* 46

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48 We obtained a convenience sample of 414 responses from customers who had complained to  
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50 their mobile phone service providers in Mexico (n = 102), the UK (n = 111), and Spain (n = 201)  
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52 during the most recent twelve months. Although the use of real problems meant that the  
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54 respondents would be talking about a variety of issues (e.g., network coverage failure, defective  
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3 handsets, billing errors, long waiting times, rude treatment from staff), using actual experiences  
4 facilitated a more accurate assessment of their perceptions of the organizations' service recovery  
5 processes than a created scenario would have. In our study, as in previous cross-cultural  
6 consumer research, the lack of reliable population data and the absence of suitable sampling  
7 frames makes probability sampling unsuitable (Craig and Douglas, 2000; Malhotra *et al.*, 1996).  
8 Furthermore, because of the cross-cultural nature of our study, we sought sample equivalence to  
9 enhance data comparability (Steenkamp and Baumgartner, 1998). As Reynolds *et al.* (2003, p.  
10 86) explain, "in such studies the key concern is with internal validity and therefore control of  
11 extraneous factors to ensure between-country comparability is of paramount importance. Such  
12 comparability is facilitated by the use of homogeneous samples: these are typically selected via  
13 nonprobabilistic procedures." Therefore, we use nonprobability sampling (e.g., convenience), as  
14 it is the most appropriate strategy for the nature of our research.

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31 We employed a face-to-face questionnaire that asked participants to rate measures of  
32 employee effort, justice, satisfaction with the recovery, and loyalty to the provider. The data  
33 collection took place over a two-week period at two large urban shopping malls in the three  
34 countries during scheduled times (morning, afternoon and evening), seven days a week.  
35 Interceptions occurred near the mall entrances and exits to reduce sampling bias and to obtain a  
36 mix of respondents, as suggested by Kok and Fon (2014). The mall intercept is a popular method  
37 in marketing research (see Bush and Hair, 1985) and has been used in similar studies (e.g.,  
38 Keillor *et al.*, 2007). The mall-intercept method was appropriate for our use because it enabled  
39 interviewers to screen potential respondents for their eligibility and to seek clarification if  
40 needed. We defined our target population as adults who had experienced a service failure episode  
41 with their mobile phone service providers, placed a complaint, and received a response from the  
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3 firm. Shoppers were approached randomly by trained research assistants and invited to complete  
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5 a short, self-administered questionnaire. The research assistants asked them two screening  
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7 questions to determine whether they had experienced a service failure episode with their mobile  
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9 phone service provider and whether they had placed a complaint and had received a response  
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11 from the firm. The research assistants collected data from a similar mix of adult males and  
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13 females with a goal of 100-200 customers in each country.  
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17 We used four strategies—sample matching, translation equivalence, pre-tests, and data  
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19 equivalence—to ensure comparability of data, a fundamental issue in cross-cultural research.  
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21 Matching samples were necessary in order to rule out demographic differences as alternative  
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23 explanations for our results (Lonner and Berry, 1986). Most of the participants were young  
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25 adults between eighteen and thirty-five years of age (Mexico 77%, Spain 66%, the UK 68%),  
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27 and these was approximately equal participation between males (Mexico 40%, Spain 52%, the  
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29 UK 47%) and females. To ensure translation equivalence, we translated the questionnaire into  
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31 Spanish for use in Spain and Mexico through an iterative process of translation and back-  
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33 translation by a team of bilingual speakers (Brislin *et al.*, 1973). We used a concept-driven,  
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35 rather than a translation-driven, approach (Erkut *et al.*, 1999), which required a  
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37 bilingual/bicultural research team with native researchers from each country to check for  
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39 linguistic nuances (Barnard, 1982).  
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45 We pre-tested the questionnaires (Douglas and Craig, 2007) to detect any ambiguity,  
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47 improve the sequencing and wording of the items, and ensure that all the items worked well in  
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49 actual use (Brislin, 1986). In two pre-tests, we employed thirty people—ten in each country—  
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51 who matched the characteristics of the target population but did not form part of the main  
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53 sample. Besides filling in the questionnaire, the tests' respondents were asked whether they  
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3 understood the directions for completing the survey, whether the wording in each question and  
4 the place to mark responses were clear, and how long it took to answer. They were also asked to  
5 provide any ideas for improving the questionnaire. After the first pre-test, the questionnaire was  
6 refined, and a second pre-test was conducted with a different group of ten respondents in each  
7 country, who voiced no issues regarding the revised questionnaire, its wording, or format, so it  
8 was deemed ready for use on the main sample. Finally, we conducted invariance tests to verify  
9 empirically the data's equivalence, which is crucial to the validity and reliability of findings in  
10 cross-cultural studies (Salzberger and Sinkovics, 2006).  
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### 24 *Measurement*

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26 All items were measured on a seven-point Likert scale that ranged from (1) strongly disagree to  
27 (7) strongly agree. Perceived employee effort was measured with three items adapted from Mohr  
28 and Bitner (1995), and perceived justice was measured with seven items adapted from Blodgett  
29 *et al.* (1997) and Smith *et al.* (1999). Following DeWitt *et al.* (2008), we combined the three  
30 dimensions of justice (distributive, procedural, and interactional) into a single perceived justice  
31 construct. To measure post-recovery satisfaction, we used two items adapted from Reynolds and  
32 Beatty (1999). Finally, we measured loyalty using five items adapted from Garbarino and  
33 Johnson (1999) (behavioral loyalty) and Ganesh *et al.* (2000) (attitudinal loyalty). As with our  
34 measurement of perceived justice, we combined the two dimensions of loyalty into a single  
35 loyalty construct. All measurement scales items are shown in the Appendix.  
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## 52 **Results**

### 53 *Reliability and validity*

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3 Table II presents the means, standard deviations, correlation coefficients, Cronbach's alpha  
4 coefficients, and average variance extracted (AVE) of our service-recovery measurement scales,  
5 both combined for all countries and separately for each one. Our results indicate that the  
6 respondents in all three countries used the full range of each scale, for the most part, with an  
7 acceptable standard deviation. Cronbach's alpha coefficients ranged between 0.83 and 0.93, well  
8 above the 0.70 threshold criterion (Kline, 2000), which indicates satisfactory reliability for all  
9 constructs in all samples. To establish convergent validity, we computed the AVE following the  
10 approach Fornell and Larcker (1981) suggest, which uses the R package semTools  
11 (Pornprasertmanit *et al.*, 2016). The AVE is the amount of variance in indicator variables that a  
12 construct explains. Values above 0.50 are recommended to ensure that the measurement error  
13 variance is not larger than the variance of the construct itself. As Table II shows, the AVE was  
14 above the 0.50 threshold for all constructs and countries, which indicates convergent validity.  
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31 Conversely, discriminant validity is established if a construct's AVE is larger than the  
32 squared correlation between any two constructs. Table II shows that discriminant validity was  
33 established both in the pooled dataset and in each of the countries. However, we note that two of  
34 the path coefficients for the UK sample on Table II are high. We tested for and found  
35 discriminant validity using the two tests Fornell and Larcker (1981) recommend for discriminant  
36 validity: the strict test that requires a construct's AVE to be larger than the squared correlation  
37 between any two constructs, and a more lenient test that requires that the correlation between any  
38 pair of constructs is less than 1. Anderson and Gerbing (1988) advocate the use of this more  
39 lenient test. In our case, the calculation of the stricter test is as follows: In the UK, the AVE for  
40 post-recovery satisfaction = 0.86, and the correlation between post-recovery satisfaction and  
41 perceived justice = 0.82. Therefore,  $0.82^2 = 0.67$ ;  $0.86 \text{ AVE} > 0.67$ . The AVE for perceived  
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3 justice = 0.67, and the correlation between perceived justice and post-recovery satisfaction =  
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5 0.82. Therefore,  $0.82^2 = 0.67$ ;  $0.67 \text{ AVE} = 0.67$ . While the AVE in the first case is greater than  
6  
7 the squared correlation, we acknowledge that it is borderline in the second case but nevertheless  
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9 satisfies the more lenient test's requirement that the correlation between the pair of constructs is  
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11 less than 1 ( $0.67 < 1$ ) (Anderson and Gerbing, 1988; Fornell and Larcker, 1981).  
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15 [Take in Table II]  
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### 18 *Results of the model analyses*

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21 We used structural equation modeling (SEM) to examine the set of hypothesized relationships.  
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23 First, we used the R package MVN and the Henze-Zirkler's test, which is recommended for  
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25 sample sizes of more than 100, to determine whether the data was multivariate normally  
26  
27 distributed (Korkmaz *et al.*, 2014). This test was significant, indicating that the data is not  
28  
29 multivariate normally distributed ( $HZ = 1.25, p < 0.001$ ). Therefore, following Rosseel (2012),  
30  
31 we used the robust standard error estimation and the Satorra-Bentler scaled model test statistics  
32  
33 (e.g., Chou *et al.*, 1991) for SEM and measurement equivalence testing. We conducted additional  
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35 data analyses using the R package latent variable analysis (lavaan, version 0.5-20; Rosseel 2012)  
36  
37 and semTools (version 0.4-11; Pornprasertmanit *et al.*, 2016).  
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43 We computed four models—one model of the combined data and one of each country—  
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45 to test the hypothesized set of relationships. As Table III shows, the four data sets fit the baseline  
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47 model well (Van de Schoot *et al.*, 2012). We followed a conservative approach by allowing only  
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49 the four endogenous factors and none of the items or residuals to correlate.  
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53 [Take in Table III]  
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3 A certain level of measurement equivalence or measurement invariance must be  
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5 established in order to conduct meaningful comparisons across groups (e.g., comparison of path  
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7 coefficients), to test our hypotheses regarding cultural effects, and to allow for the assumption of  
8  
9 a similar comprehension of the constructs across all cultures (Steenkamp and Baumgartner,  
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11 1998). The levels of equivalence are often considered hierarchical; testing for a stricter level of  
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13 invariance is usually meaningful only if previous levels have been established. For the purpose  
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15 of our research, it is sufficient to establish the first three levels of measurement invariance—  
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17 configural, weak or metric, and strong or scalar invariance—in order to establish that the number  
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19 of factors, the factor loadings, and the item intercepts are invariant across groups (Davidov *et al.*,  
20  
21 2014; Hirschfeld and von Brachel, 2014). Wu *et al.* (2007) provide several examples of the  
22  
23 importance of invariance. For example, if the factor loadings are not invariant, then a factor score  
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25 of X is associated with different item scores across groups. Therefore, “cross-group inequality of  
26  
27 factor loadings can be understood as the difference in factor score calibration with regard to the  
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29 unit of measurement” (Wu *et al.*, 2007, p. 10).  
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35 In particular, scalar invariance must be established before the path coefficients and the  
36  
37 means of latent variables can be meaningfully compared. Although extant research offers several  
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39 recommendations for the cut-off criteria between the models (Chen, 2007; Cheung and  
40  
41 Rensvold, 2002), we followed Cheung and Rensvold’s (2002) recommendation that equivalence  
42  
43 is established if the difference between two models remains  $CFI \leq 0.01$ . As Table IV shows,  
44  
45 configural and metric invariance was established, but scalar invariance was not. If measurement  
46  
47 equivalence is not established, extant research suggests unconstraining (freeing) one or more  
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49 items based on the modification indices (Byrne *et al.*, 1989; Yoo and Donthu, 2002). After we  
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51 removed the constraints of equal intercepts for two items of the justice scale, scalar invariance  
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3 was established ( $\Delta\text{CFI} = 0.008$ ), allowing us to compare the three path coefficients across  
4  
5 countries. These results are presented in Table IV.  
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9 [Take in Table IV]  
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12 We estimated  $R^2$  values in order to assess our model's explanatory power. Our results  
13  
14 show  $R^2 = 0.38$  across the pooled sample, 0.21 in Mexico, 0.37 in Spain, and 0.54 in the UK (all  
15  
16  $p < 0.001$ ). In the context of human behavior, these values indicate that our model provides  
17  
18 satisfactory explanatory power (Cohen, 1988). We argue that the large  $R^2$  range, from 0.21 to  
19  
20 0.54, is in line with our arguments for cross-cultural moderation, as explained in our discussion  
21  
22 section regarding *H7*.  
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26 Table V presents the results of our hypotheses testing. The results suggest that the  
27  
28 patterns of relationships proposed in our hypotheses are borne out empirically. In support of *H1*,  
29  
30 we found a significant strong relationship between perceived justice and perceived employee  
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32 effort (0.72,  $p < 0.001$ ) for both the overall sample and individual countries. The coefficients for  
33  
34 individual countries were close to each other, ranging between 0.69 and 0.76. We also found  
35  
36 support for *H2*, as the relationship between perceived employee effort and post-recovery  
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38 satisfaction was significant for the overall sample (0.16,  $p < 0.05$ ), but at the individual country  
39  
40 level, the path coefficient was significant only for Spain (0.26,  $p < 0.01$ ). We found a significant  
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42 and strong link between perceived justice and post-recovery satisfaction (0.78,  $p < 0.001$ ) for  
43  
44 both the overall sample and individual countries, whose path coefficients ranged between 0.70  
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46 and 0.88, with the largest value being that for the UK. These results provide support for *H3*.  
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51 *H4* was also supported, as the overall sample showed a significant and strong relationship  
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53 between post-recovery satisfaction and loyalty, with a path coefficient of 0.72 ( $p < 0.001$ ). The  
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3 path coefficients for individual countries were also significant and strong, ranging between 0.48  
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5 and 0.85, again with the largest value for the UK.  
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10 [Take in Table V]  
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14 To test our last three hypotheses regarding the cultural moderators, we used Brettel *et*  
15 *al.*'s (2008) formula to compare the path coefficients. Table V shows the path coefficients, the  
16 differences between the cultural groups, and these differences' significance. As expected, the  
17 results for *H5* show that the effect of perceived employee effort on post-recovery satisfaction  
18 was positive and significant and strong only in the feminine Spanish culture (0.26,  $p < 0.05$ ),  
19 while it is insignificant in the masculine Mexican and UK cultures. The difference between  
20 Spain and the UK is large and marginally significant (0.27,  $p \leq 0.07$ ), but there is no difference  
21 between Spain and Mexico. These results provide partial support for *H5*, at least when the more  
22 conservative criterion of significance is applied. Results also show support for *H6*'s proposition  
23 that cultural orientation does not influence the relationship between perceived justice and post-  
24 recovery satisfaction, since there were no significant differences among the countries. Finally,  
25 results for *H7* show that the effects of post-recovery satisfaction and loyalty were numerically  
26 larger in the low uncertainty-avoidant British culture than they were in the high uncertainty-  
27 avoidant cultures of Mexico and Spain. However, these differences were statistically significant  
28 between the UK and Mexico (0.37,  $p < 0.05$ ), which provides partial support for *H7*. An  
29 unexpected significant difference was found between the two highly uncertainty-avoidant  
30 cultures of Mexico and Spain (0.23,  $p < 0.05$ ), which is discussed in the next section.  
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## 56 **Discussion and Implications**

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3 Our findings show that we can obtain a fuller picture when we integrate the functional (perceived  
4 justice) and the symbolic (perceived employee effort) elements of service recovery as  
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6 determinants of post-recovery satisfaction and loyalty. While the functional element (e.g.,  
7  
8 compensation) is a practical matter, the symbolic element (e.g., empathy) says something about  
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10 the company's values. This integration addresses research that calls for the combined  
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12 examination of customers' perceptions of service quality in order to clarify their relationships  
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14 (Cronin *et al.*, 2000; Ostrom and Iacobucci, 1995). We also address calls for more international  
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16 and cross-cultural research in marketing that focuses on emerging markets (Burgess and  
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18 Steenkamp, 2006; Steenkamp, 2005), particularly in the area of service recovery (De Matos *et*  
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20 *al.*, 2011; Mattila and Patterson, 2004a; Zhang *et al.*, 2008).  
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26 This paper contributes to the literature in services marketing, with implications for  
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28 international marketing, by focusing on service recovery and cross-cultural consumer behavior.  
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30 Our study is the first to provide empirical, cross-cultural evidence of the relationship between  
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32 customers' perceptions of employee effort and justice. It is also the first to provide cross-cultural  
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34 evidence of the influence of these perceptions on post-recovery satisfaction and loyalty. By  
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36 providing evidence of the cross-cultural generalizability of this set of relationships, this study  
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38 helps international marketers to tailor and communicate their service-recovery strategies to  
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40 specific cultural contexts in order to restore satisfaction after service recovery and reinforce  
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42 loyalty.  
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46 Overall, our findings provide support for all seven of our hypotheses and are consistent  
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48 with other studies in service recovery. The result for *H1* demonstrates empirically for the first  
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50 time the direct link between perceived employee effort, as conceptualized by Mohr and Bitner  
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52 (1995), and perceived justice. While the literature does not report on this link, our result is  
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3 consistent with previous research (Del Río-Lanza *et al.*, 2009; Liao, 2007; McQuilken *et al.*,  
4 2013) that measures employee effort differently than it is measured in the present study. This  
5 finding indicates that the more effort an employee makes to resolve a service failure, the more  
6 likely the customer is to consider the outcome to be fair.  
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12 A major finding in our study is that the more effort or energy an employee is perceived to  
13 exert to resolve a failure, the more likely the customer is to be satisfied with the service recovery.  
14 This result provides support to *H2* and is in line with the limited number of studies that examine  
15 this relationship (Bitner *et al.*, 1990; Mattila and Patterson, 2004b; Mohr and Bitner, 1995). The  
16 link between perceived employee effort and post-recovery satisfaction is important to both  
17 theory and management. The literature ignores the perceived employee effort construct, focusing  
18 instead on customers' perceptions of justice. However, perceived employee effort is the symbolic  
19 element that represents the manner in which the outcome is transferred to the customer, from  
20 which the customer derives meaning (Mohr and Bitner, 1995)—that is, how the staff deals with  
21 customers' concerns is often more important to customers than are the causes of the earlier  
22 service failures (Walsh *et al.*, 2008). For management, our finding is critical to successful service  
23 recovery, since the customer often has difficulty seeing when employee effort and outcome are  
24 not consistent (Mohr and Bitner, 1995), and a large proportion of unsatisfactory encounters arise  
25 from the employee's inability to respond to the service failure (Bitner *et al.*, 1990).  
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45 We also find that perceived justice is positively associated with post-recovery satisfaction  
46 (*H3*), a finding that is consistent with prior studies (Liao, 2007; Maxham and Netemeyer, 2002;  
47 Oliver and Swan, 1989; Sabharwal *et al.*, 2010; Smith *et al.*, 1999). Furthermore, we find a direct  
48 link between post-recovery satisfaction and loyalty (*H4*), which suggests that satisfied customers  
49 are willing to do business with the service company again as shown in previous research (Liao,  
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3 2007; Smith and Bolton, 1998; Smith *et al.*, 1999; Sparks and McColl-Kennedy, 2001). In other  
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5 words, effective service recovery processes decrease the chance that customers will switch to  
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7 other providers and that such processes can often increase the possibility of cultivating long-  
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9 lasting relationships, as suggested in DeWitt *et al.* (2008) and Walsh *et al.* (2008). The main  
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11 theoretical implication from these findings is that perceived employee effort (symbolic element)  
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13 and perceived justice (functional element) are interrelated and have a direct impact on post-  
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15 recovery satisfaction and loyalty. Investigating the two factors simultaneously can provide  
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17 broader, more meaningful insights and a more complete explanation than is possible when  
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19 perceived justice is used alone, as is the case in most service recovery studies.  
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24         Taken together, the three cultural-orientation-related hypotheses are supported in terms of  
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26 their influence (or lack of influence) on the proposed relationships. In support of *H5*, we found  
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28 that cultural orientation strengthens the relationship between perceived employee effort and post-  
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30 recovery satisfaction, and in support of *H7*, we found that cultural orientation also strengthens  
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32 the relationship between post-recovery satisfaction and loyalty. We also found support for *H6*,  
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34 which proposes that cultural orientation does not moderate the relationship between perceived  
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36 justice and post-recovery satisfaction. Our findings for *H5* show that cultural orientation  
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38 influences the relationship between perceived employee effort and post-recovery satisfaction and  
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40 suggest that feminine cultures like that of Spain, where relationships, caring for others, and  
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42 empathy are paramount, attach more importance to the amount of effort an employee expends in  
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44 trying to recover a service failure than do masculine cultures like the UK, as they are more  
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46 focused on monetary success than on helping others (Hofstede, 1983). However, *H5* is partially  
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48 supported because we found no significant difference between Spain and Mexico (masculine).  
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3 Similarly, we found that cultural orientation strengthens the relationship between post-  
4 recovery satisfaction and loyalty, as *H7* proposes. Our results suggest that UK customers are  
5 more likely to give providers a second chance than are those in more uncertainty-avoidant  
6 cultures (e.g., Spain and Mexico), who are likely to seek to decline a second chance in order to  
7 minimize the potential for service failure in the future, negatively affecting loyalty. This result is  
8 consistent with Mattila and Patterson (2004b) and Wong (2004). However, *H7* is partially  
9 supported, as the differences were statistically significant only for the comparison between the  
10 UK and Mexico.  
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21 We found an unexpected difference in the relationship between post-recovery satisfaction  
22 and loyalty between Spain and Mexico. This result can be explained using Morgeson *et al.*'s  
23 (2015) study, which finds that the relationship between satisfaction and loyalty is significantly  
24 weaker in emerging markets than it is in developed economies because customers in emerging  
25 markets are more sensitive to prices and instability in personal income. Therefore, although  
26 Spain and Mexico are similarly high in uncertainty avoidance, this cultural dimension is  
27 exacerbated in Mexico because of its economic conditions, as "both price tolerance and  
28 repurchase intention might be determined less by customers' sense of satisfaction fulfillment and  
29 more by uncertainty surrounding their economic situation" (Morgeson *et al.*, 2015, p. 7). Finally,  
30 our results indicate that cultural orientation has no effect on the positive relationship between  
31 perceived justice and post-recovery satisfaction, so *H6* is supported. This result suggests that the  
32 concept of justice is likely to be universal and that perceived justice predicts post-recovery  
33 satisfaction, irrespective of the cultural environment, which is in line with De Matos *et al.* (2011)  
34 and Mattila and Patterson (2004b), among others. Our findings help fill a gap in the literature, as  
35 cross-cultural research on this set of relationships is limited.  
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### *Managerial implications*

Managers should recognize that customers value highly motivated employees whom they perceive as exerting a significant level of effort to correct a failure, and this perceived effort is crucial to enhancing customers' perceptions of justice in the recovery. Understanding this link can help companies differentiate themselves using their service recovery efforts. In an international context, this study suggests that effective service providers are those who recognize the nature of differences in customers' cultural values and tailor their recovery strategies accordingly. While all of the countries in our sample place significant value on justice, our findings indicate that customers from masculine cultures like those of the UK and Mexico emphasize their perceptions of fairness and justice (the functional element) in the service-recovery process. Therefore, customers from these cultures may be likely to be satisfied with redress in the form of financial compensation, whereas customers from feminine cultures like that of Spain, who place a higher emphasis on interpersonal relationships, are also concerned with how they are treated, as demonstrated by the time and effort employees devote to solving their problems. Companies may consider, for example, allocating call-center employees who deal with such cultures more time to solve customers' problems and giving them more training in empathizing with the customer. This finding helps to address the tendency of cross-cultural research to focus solely on tangible aspects of service recovery (Keillor *et al.*, 2007).

Service providers should also be aware that customers from cultures with high levels of uncertainty avoidance, such as Mexico and Spain, are less willing than are those from low uncertainty-avoidant cultures like the UK to give the provider another chance after a service failure, even if they are satisfied with the recovery. Therefore, providers who operate in cultures

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3 should work to reduce service failures, especially if they operate in emerging markets, such as  
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5 that of Mexico, where customers' uncertainty avoidance is compounded by an economic  
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7 situation that increases their sensitivity to prices and instability in personal income. As the  
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9 service sector's growth is likely to come from emerging economies, and little is known about  
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11 how firms interact with customers in such economies (Alam, 2014), mobile phone providers in  
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13 particular may need to look closely at pricing strategies and service availability to remain  
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15 competitive.  
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19 Our findings suggest that international managers should monitor and address failures in  
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21 service recovery that result from an overly standardized or globalized approach to agent training.  
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23 For example, call-center staff members who are trained to follow a standardized script for  
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25 complaints may be destined to fail in dealing with customers from a culture other than that on which  
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27 the original script is based. Empathy with customers and knowledge about their cultural  
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29 backgrounds are critical to effective service recovery and, ultimately, customer satisfaction and  
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31 loyalty.  
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### 34 35 36 37 38 *Limitations and future research directions*

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40 The limitations of the study and directions for future research are discussed as follows. First, our  
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42 study focuses on one sector (the mobile phone market) and so the findings are relevant to this  
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44 context. Future research could apply our model in other sectors to extend our findings. Some  
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46 service sectors that may be of interest are the banking, hospital, insurance, travel, and hotel  
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48 industries, which have different contextual and competitive characteristics, but entail a high level  
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50 of human interaction between customers and company's staff, as in the case of the mobile phone  
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52 market. Second, data came from three samples (Mexico, the UK, and Spain), and hence  
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3 replications across other cultural groups and regions (e.g., Middle East, Asia, Africa) will be  
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5 needed to strengthen the robustness of our conclusions and/or identify differences. Third, our  
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7 model does not include the severity of the failure as a variable. Although we follow most  
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9 service-recovery studies in holding the magnitude of the failure constant (Weun *et al.*, 2004),  
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11 some studies find that, when customers perceive the failure as severe, their perceptions and  
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13 evaluations of the service recovery effort are affected (e.g., Smith *et al.*, 1999; Weun *et al.*,  
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15 2004). Therefore, to clarify this issue, severity of the failure should be included in future  
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17 research. Finally, as with most existing research in the area, our study employed convenience  
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19 sampling to measure customers' intentions to remain with or leave their provider after a service  
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21 failure and recovery event. To further validate our findings, future research could move beyond  
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23 convenience sampling by testing our model with a list of cases (made available by service  
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25 providers) of customers, who have actually remained loyal or defected following a service  
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27 recovery event.  
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**Table I.**  
Value scores of cultural dimensions

Country	Masculinity	Individualism	Power distance	Uncertainty avoidance
Mexico	69	30	81	82
Spain	42	51	57	86
United Kingdom	66	89	35	35

**Note:** Scores run between 0-100; 86 = highest; 30 = lowest (Hofstede 1980).

**Table II.**  
Descriptive statistics, correlations, reliability, convergent and discriminant validity

Country	Constructs	M	SD	$\alpha$	AVE	JUS	EFF	SAT
All countries	JUS	3.72	1.45	0.93	0.67			
	EFF	3.74	1.47	0.90	0.76	0.66		
	SAT	3.70	1.78	0.88	0.80	0.81	0.66	
	LOY	3.59	1.44	0.83	0.56	0.55	0.41	0.61
Mexico	JUS	3.71	1.37	0.92	0.62			
	EFF	3.71	1.44	0.89	0.74	0.68		
	SAT	3.70	1.61	0.80	0.67	0.75	0.64	
	LOY	3.68	1.48	0.87	0.62	0.40	0.34	0.44
Spain	JUS	3.27	1.36	0.92	0.63			
	EFF	3.55	1.52	0.88	0.72	0.63		
	SAT	3.21	1.68	0.88	0.80	0.79	0.68	
	LOY	3.33	1.38	0.81	0.51	0.54	0.40	0.59
UK	JUS	4.54	1.35	0.93	0.67			
	EFF	4.09	1.34	0.93	0.84	0.70		



SAT	4.58	1.77	0.92	0.86	0.82	0.61	
LOY	3.97	1.42	0.83	0.59	0.61	0.45	0.74

**Notes:** JUS: Perceived justice; EFF: Perceived employee effort; SAT: Post-recovery satisfaction; LOY: Loyalty; M: Mean; SD: Standard deviation;  $\alpha$ : Cronbach's alpha, AVE: Average variance extracted.

**Table III.**  
Fit indices of baseline model

Countries	$\chi^2$	df	p	CFI	TLI	RMSEA	SRMR
All countries	216.20	115	0.000	0.98	0.98	0.05	0.04
Mexico	174.63	115	0.000	0.94	0.93	0.07	0.08
Spain	149.21	115	0.029	0.98	0.98	0.04	0.05
UK	168.58	115	0.001	0.96	0.96	0.07	0.06

**Note:** CFI: Comparative Fit Index, TLI: Tucker-Lewis Index, RMSEA: Root Mean Square Error of Approximation, SRMR: Standardized Root Mean Square Residual.

**Table IV.**  
Tests of the measurement equivalence of the key measurement variables

Test	$\chi^2$	$\Delta \chi^2$	df	CFI	RMSEA	$\Delta$ CFI	$\Delta$ RMSEA
Configural	631.07	--	345	0.968	0.057	--	--
Metric	666.15	35.08	371	0.965	0.058	0.003	0.001
Scalar	745.96	79.81	397	0.951	0.065	0.013	0.008
Scalar (partial)	589.84		393	0.957	0.062	0.008	0.004

**Note:** CFI is confirmatory fit index, RMSEA is root mean square of error approximation,  $\Delta$  represents the differences between the current and the previous model, partial is the model fit after two items have been unconstrained. Scalar (partial) is the model fit after two items have been unconstrained.

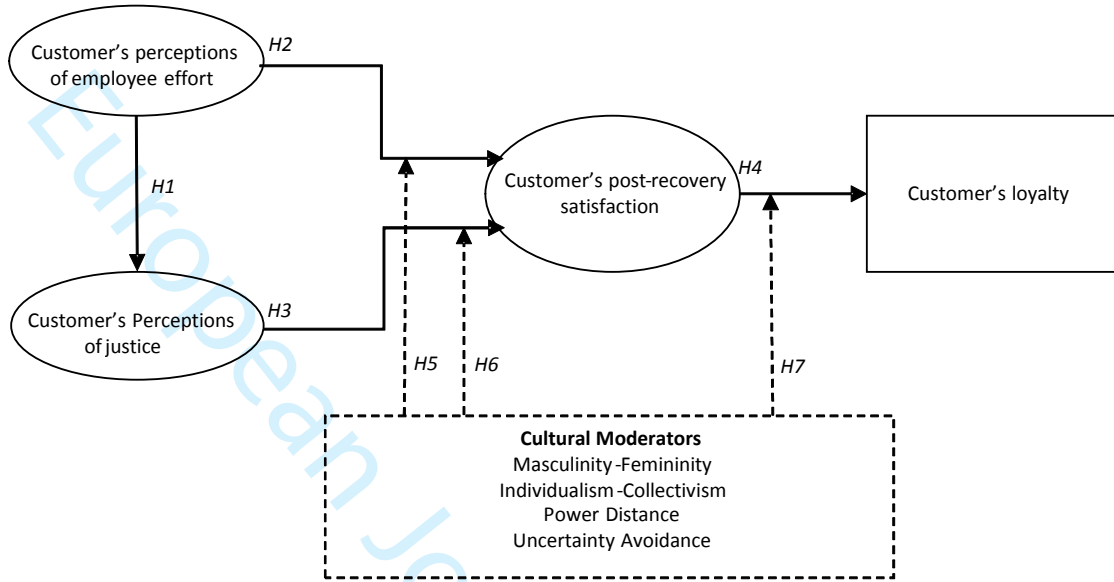
**Table V.**  
Path coefficients with standard errors, and group comparisons

Path Coefficients	Differences
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Path	All Countries	Mexico	Spain	UK	Mexico Versus Spain	Mexico Versus UK	Spain Versus UK
EFF→JUS	0.72*** (0.14)	0.76*** (0.25)	0.69*** (0.20)	0.73*** (0.21)	0.07	0.03	-0.04
EFF→SAT	0.16* (0.07)	0.21 (0.21)	0.26** (0.10)	-0.01 (0.10)	-0.05	0.22	0.27^
JUS→SAT	0.78*** (0.07)	0.72*** (0.21)	0.70*** (0.09)	0.88*** (0.12)	0.02	-0.16	-0.18
SAT→LOY	0.72*** (0.05)	0.48*** (0.13)	0.71*** (0.08)	0.85*** (0.08)	-0.23*	-0.37*	-0.14

**Notes:** Standard errors are in brackets. JUS: Perceived justice; EFF: Perceived employee effort; SAT: Post-recovery satisfaction; LOY: Loyalty. ^:  $p \leq 0.07$ ; \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ ; \*\*\*:  $p < 0.001$ , one-tailed.

**Figure 1.**  
Conceptual model of customer's perceptions of service recovery in a cross-cultural context



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