

## **Employee adaptive and proactive service recovery: A configurational perspective**

### **Abstract**

#### *Purpose*

This exploratory study investigates the configurations that drive employee service recovery. Rather than analyzing the net effects of individual antecedents of service recovery, which is the common approach in the literature, this study uses a configurational approach to investigate how five antecedents (customer service orientation, rewards, teamwork, empowerment, and customer service training) combine to yield employee adaptive and proactive service recovery behaviors.

#### *Design/methodology/approach*

The study collects responses from 90 frontline employees through an online survey. Building on configurational theory, we developed and empirically validated four research propositions by using a fuzzy-set qualitative comparative analysis (fsQCA).

#### *Findings*

Three equifinal configurations of managerial practices result in either employee proactive or adaptive service recovery behaviors. Two of these three configurations result in both adaptive and proactive behaviors. In addition, the findings show that two out of the three configurations that lead to a proactive behavior in service recovery also lead to the simultaneous existence of proactive and adaptive behaviors in service recovery. None of the sufficient configurations require the presence of all managerial practices. These results underscore that managers do not have to act on every single managerial intervention area to promote service recovery.

*Research limitations/implications*

The study advances the knowledge on the antecedents of employee behavior in service recovery by investigating how these antecedents combine to yield different recipes for developing either employee adaptive or proactive behavior in service recovery.

*Practical implications*

The findings provide insights for managers on the different combinations of practices that can be used to develop employee proactive or adaptive behavior in service recovery.

*Originality/value*

This is the first study that relies on a configurational approach to understand the combinations of managerial practices that result in employee proactive and adaptive behaviors in service recovery.

**Keywords**

Employee adaptive service recovery, Employee proactive service recovery, Qualitative comparative analysis, fsQCA

**Paper type**

Research paper

## Introduction

Service recovery comprises all the organizational actions aimed at resolving a failure in the delivery of a service (Van Vaerenbergh and Orsingher, 2016). Service recovery is increasingly important in highly competitive environments (Migacz *et al.*, 2018) because the changing technological landscape allows customers to easily share their service failure and recovery experiences online. This online sharing means that a service failure might change not only one customer's experience but also the experience of other customers.

Thus far, most research has focused on an adaptive perspective of employee service recovery (in response to customers' needs). This perspective acknowledges that successful service recovery can positively affect customer satisfaction in general (De Matos *et al.*, 2007; Fang *et al.*, 2013; Smith and Bolton, 1998) which in turn affects customers' affection, loyalty, and word-of-mouth (cf. Choi and Choi, 2014), perceptions of equity (Andreassen, 2000), the customers' profitability (Cambra-Fierro *et al.*, 2015), and ultimately, business performance (Santos-Vijande *et al.*, 2013). On the other hand, poor service recovery can lead to a customer's displeasure (Martin *et al.*, 2018).

Nevertheless, research on employee proactive service recovery related to anticipating customer problems is very limited (for an exception, see de Jong and de Ruyter, 2004). This employee proactive behavior in service recovery can have a positive impact on the customer's actual behavior, namely better retention rates (de Jong and de Ruyter, 2004).

Given the importance of service recovery, managers need to understand what drives it in order to implement practices that ultimately promote it. In this context, we investigate the recipes of antecedents that lead to either employee adaptive or proactive behavior in service recovery. In this context, this study focuses on the managerial practices that are

among the most investigated in service recovery (Van Vaerenbergh and Orsingher, 2016), namely customer service orientation, rewards, teamwork, empowerment, and customer service training.

This exploratory study aims to address the following research question: Are the configurations of managerial practices that lead to employee adaptive service recovery behavior different from those that lead to employee proactive service recovery behavior? To address this research question, this study uses a fuzzy-set qualitative comparative analysis (fsQCA).

Hence, the contributions of this paper to the service recovery literature are fourfold. First, our study advances the knowledge on the association between managerial practices and employee behavior in service recovery. Specifically, we study the antecedents of service recovery in an innovative way by investigating how they combine to yield different recipes for developing either employee adaptive or proactive behavior. This addresses a gap in the literature that concerns the lack of knowledge regarding the relevant components of a service recovery system (Smith *et al.*, 2010). Second, this study answers a call for further research on the antecedents of an adaptive recovery behavior (de Jong and de Ruyter, 2004) by including customer service orientation, rewards, and customer service training in addition to teamwork and empowerment, which were previously investigated by de Jong and de Ruyter (2004). Third, to the best of our knowledge, this is the first study that analyzes how managerial practices should combine to simultaneously achieve employee adaptive and proactive behaviors in service recovery. Fourth, this study answers a call for further research that compares employee adaptive behavior with employee proactive behavior in service recovery (cf. de Jong and de Ruyter, 2004). This set of theoretical contributions delivers a fresh look into the drivers of employee service recovery and in particular, of adaptive and proactive behaviors. Thus,

investigating sufficient conditions is useful for managers, so that they are aware of the critical components that drive service recovery and ultimately, firm performance (Smith *et al.*, 2010).

## **Conceptual framework of service recovery**

### *Adaptive service recovery*

The literature regards adaptability in service delivery as “the ability of contact employees to adjust their behavior to the interpersonal demands of the service encounter” (Hartline and Ferrell, 1996, p. 55). This ability requires a set of adaptive skills that comprise not only listening but also acknowledging customers’ opinions in order to modify the service delivery if needed (de Jong and de Ruyter, 2004). Adaptability is an important concept because it relates to the customer’s satisfaction with the service encounter (cf. Bitner *et al.*, 1994) and the salesperson’s performance (Spiro and Weitz, 1990). Due to the nature of service delivery, which makes service failure inevitable, the subsequent adaptive service recovery is usually associated with solving specific problems that require an adaptive approach by the employee (de Jong and de Ruyter, 2004). In a service recovery situation, examples of employee adaptive behavior can include “creative problem solving, coping with complex and unpredictable work situations, . . . interpersonal adaptability” (de Jong and de Ruyter, 2004, p. 459) as well as handling emergencies and situations of crisis with minimal work stress (see Pulakos *et al.*, 2000). In this study, the focus is on the adaptability of the interpersonal interaction between the employee and a customer in a service failure and subsequent recovery situation, with adaptive service recovery being broadly defined as “adjusting behavior to optimally respond to customers’ complaints” in a reactive way (de Jong and de Ruyter, 2004, p. 460).

### *Proactive service recovery*

Proactive behavior is related not only to improving the current situation but also creating new circumstances (de Jong and de Ruyter, 2004). Hence, proactive behavior "...involves creating change, not merely anticipating it" (Bateman and Crant, 1999, p. 63). Proactive behavior is important from a customer's viewpoint as 55% of the positive interactions with the service provider are the result of "unprompted and unsolicited employee actions" (Wels-Lips *et al.*, 1998, p. 296). In order to implement a proactive approach, management must take the customers' criticism into account and keep them informed (Miller *et al.*, 2000). In service recovery, proactive behavior is even more relevant as it affects the customer's assessment of the service provider (Johnston, 1995). Alongside management, frontline service workers can be proactive in service recovery by asking for feedback from customers and by identifying and rectifying the sources of the service failure (de Jong and de Ruyter, 2004; Iacobucci, 1998; Van Looy *et al.*, 1998). Hence, in this study a proactive behavior in service recovery is defined as employees taking a "behavioral initiative aimed at improving the current work circumstances" in order to avoid service failure or to enhance recovery in situations in which failure has occurred (cf. de Jong and de Ruyter, 2004, p. 460).

### *Service recovery antecedents*

In this subsection, we explain in detail each of the antecedents, namely customer service orientation, rewards, teamwork, empowerment, and customer service training, which are among the most investigated so far (de Jong and de Ruyter, 2004; Van Vaerenbergh and Orsingher, 2016).

### *Customer service orientation*

Customer service orientation is the extent to which employees perceive their organization as being focused on customer service (Van Vaerenbergh and Orsingher, 2016). While management plays a key role in instituting a service climate (e.g., Borucki and Burke, 1999; Stock and Hoyer, 2005), employees are reactive to hierarchical priorities and to the practices in the work unit (cf. Schneider *et al.*, 1980). Hence, the issues that management pays attention to, the content of their coaching, the way they react to incidents, and the things they control, should influence their subordinates' attitudes and behaviors (Schein, 1990). In this context, employees will only focus on delivering high customer service if they perceive that top management is really committed to service excellence (Boshoff and Allen, 2000). Employees can have difficulty in dealing with complaints if conflict and other unpleasant situations emerge. In these circumstances, the employee is likely to avoid service recovery. However, such behavior might be mitigated by a supportive environment that cultivates a sense of responsibility in serving customers (Smith *et al.*, 2010).

### *Rewards*

Rewards concern the extent to which employees perceive that management rewards their performance in delivering customer service, namely in handling complaints (Babakus *et al.*, 2003). Dealing with dissatisfied customers requires substantial motivation because such interactions frequently involve conflict and unpleasantness that elicits an escape response or alienation from employees (Smith *et al.*, 2010). This is sometimes aggravated when frontline employees have to deal with service failures caused by peers and/or by inadequate systems (Bowen and Johnston, 1999). Therefore, rewards are associated with improved customer satisfaction through employees' increased job satisfaction (Boshoff

and Allen, 2000; Heskett *et al.*, 1994, 2008). Hence, monetary and other rewards communicate to employees the type of behaviors that the firm looks for which thus reinforces good performance in service recovery (Boshoff and Allen, 2000; Bowen *et al.*, 1999). Moreover, such rewards contribute to building employees' job motivation and thus, diligence at working out customer complaints (Bowen and Johnston, 1999). Ultimately, better performance in service recovery is more likely when employees perceive that the organization rewards such performance (Babakus *et al.*, 2003).

### *Teamwork*

Teamwork is another important driver of performance in service recovery (Boshoff and Allen, 2000; de Jong and de Ruyter, 2004). Teamwork concerns the extent to which a group of individuals have interdependent tasks that are part of an entire piece of work and jointly make decisions regarding their job tasks (Cohen *et al.*, 1996). A good team environment is important for motivational reasons. Given that dealing with complaints can be rather unpleasant, peer support may help individuals recover a positive mood (Madjar, 2005). In addition, group peers may share their recovery experiences and provide feedback on one another's ideas and behaviors which facilitates the informal learning that is key for future recovery experiences and in particular for creative, unique complaint solutions (see de Jong and de Ruyter, 2004; Madjar, 2005). Not surprisingly, many studies have documented the link between internal customer satisfaction and external customer satisfaction (e.g., Bowen and Johnston, 1999; Heskett *et al.*, 1994).



### *Empowerment*

Empowerment concerns the extent to which individuals are free and able to make decisions (Forrester, 2000). Empowerment means that tight management guidelines do not limit employees in carrying out their job tasks, which allows them to use their personal resources to make quick decisions in addressing the needs of customers. Empowerment tends to be key in service settings because service tasks are less programable and more ambiguous (Banker *et al.*, 1996). Zeithaml *et al.* (1993) argue that there are three major reasons behind uncertainty in services: the intangibility of services, the heterogeneity in the service needs of customers, and the simultaneous nature of production and consumption. Empowered employees are more confident in their abilities which fuels their creativity in addressing customers' needs (Bowen and Lawler, 1992; Kelley *et al.*, 1996). Accordingly, as management cannot specify the tasks required to ensure customer satisfaction in advance, it needs to empower frontline service employees (Babakus *et al.*, 2003) to generate faster decision-making. Empowerment becomes particularly relevant in service recovery because complaining customers appreciate a fast recovery (Smith *et al.*, 1999). Thus, empowered service employees have more service recovery options with which to address customer dissatisfaction (Smith *et al.*, 2010).

### *Customer service training*

Customer service training refers to the extent to which employees receive job education and instruction, particularly on how to deal with dissatisfied customers (Van Vaerenbergh and Orsingher, 2016). Dissatisfactory encounters are frequently associated with employees' inability or unwillingness to respond to service failures (Bitner *et al.*, 1990). The employees' inability is partly the result of a skills shortage which can be overcome by training (Babakus *et al.*, 2003). Such training should cover both behavioral and job-

related skills (Babakus *et al.*, 2003; Boshoff and Allen, 2000). Both are important for ensuring a successful service recovery. Behavioral training helps ensure that employees listen properly to customer problems, that they are responsive and empathic with dissatisfied and upset customers to neutralize their anger (Boshoff and Allen, 2000), and that they are able to deal with different customer personalities (Bettencourt and Gwinner, 1996). In this way, behavioral training addresses the customers' need for interactional justice. On the other hand, employees' job-related skills might be improved by training employees on categorizing customers based on their needs. Moreover, as complaining customers require procedural and distributive justice, job-related training should also cover knowledge of a firm's procedures as well as its services.

## **Research propositions**

Drawing on configuration theory (Meyer *et al.*, 1993) as well as on the literature on proactive behaviors, this study postulates that adaptive and proactive behaviors in service recovery result from configurations of managerial practices. Organizational configurations refer to commonly occurring sets of organizational attributes (e.g., strategies, processes, and practices, among others) that have an internal logic (Ketchen *et al.*, 1993; Meyer *et al.*, 1993; Miller, 1987). The holistic and ordered nature of such configurations appears key to ensuring organizational performance given the complexity of organizations (Miller, 1987). Treating each organizational attribute or causal condition as independent neglects the "combinatorial complexities" among them (Ragin and Sonnett, 2004, p. 10) and fosters the potential for internal inconsistencies (Venkatraman, 1989). Qualitative comparative analysis (QCA) enables the identification of the complex interdependencies among causal effects (Greckhamer *et al.*, 2008). In an QCA context, a

configuration concerns “a specific set of causal variables on which the synergetic nature among them may lead to an outcome of interest” (Pappas, 2018, p. 1682).

A fundamental premise of configurational theory is that a certain set of causal factors can produce different outcomes that depend on how they are arranged (Ordanini *et al.*, 2014). Configurational theory contains three major principles: a) an outcome of interest rarely has a single cause, b) causal factors seldom work in isolation from each other, and c) specific causal factors might have different effects depending on how they are arranged (Greckhamer *et al.*, 2008). These principles lead to the equifinality principle (Ordanini *et al.*, 2014) which means that in an organizational context, a certain end state can be attained through alternative combinations of organizational measures or designs (Fiss, 2011). Given this background, we postulate a number of propositions concerning the configurations for adaptive and proactive behaviors in service recovery.

Considering the complexity of organizations (Miller, 1987), configurational theory holds that the presence of an outcome is contingent on a combination of causal factors (e.g., Greckhamer *et al.*, 2008; Miller, 1987). Specifically, single causal factors may be necessary but are not sufficient to achieve a certain outcome. In other words, a single causal factor produces effects in combination with other factors (conjunctural causality, see Ragin, 2008), and hence, an outcome of interest rarely has a single cause (Leischnig and Kasper-Brauer, 2015).

The service recovery literature consistently supports the idea that acting on single managerial variables atrophies performance, and instead, organizations must combine a number of actions in order to maximize performance. Babakus *et al.* (2003, p. 276) argue that “it is the simultaneous implementation of appropriate training, empowerment, and reward structures that makes a significant impact on frontline employees’ affective states

and subsequently on their performance”, and investment in one of those actions in detriment to others can result in failure. Similarly, Smith *et al.* (2010, p. 441) note the importance of adopting a systems approach in which firms need to simultaneously excel in different domains to ensure that they obtain maximal returns from effective service recovery.

The number of organizational attributes indicates that there could be a large, even infinite, number of possible combinations (Meyer *et al.*, 1993). However, the number of configurations among the set of organizational attributes is limited because “of the attributes’ tendency to fall into coherent patterns” (Meyer *et al.*, 1993, p. 1176). In this context, the consideration of the equifinality principle from configurational theory indicates that the same outcome can be achieved through more than one complex configuration (Pappas, 2018). This tenet implies that managers have flexibility in crafting their organization (Gresov and Drazin, 1997). Thus, the concept of equifinality suggests that an effective service recovery system can be obtained through alternative combinations of managerial practices. Babakus *et al.* (2003) argue that management’s commitment to service quality is a prerequisite to service recovery performance as well as its indicators, namely, empowerment, training, rewards, recruitment, and selection. This suggests that there might be some overlap, or redundancy, between such indicators, as each carries the priorities of management to frontline employees. In particular, acting on all these areas might not be needed to ensure that firms have service recovery systems that promote customer satisfaction. In this regard, Liao (2007) determines that among other employee behaviors, the provision of an explanation for a service failure does not contribute to customers’ perceived justice. The related research finds that specific facets of workplace fairness do not always contribute to specific pro-social service behaviors for employees (Bettencourt and Brown, 1997). Hence, we offer the following:

**Proposition 1:** No single antecedent factor (customer service orientation, rewards, teamwork, empowerment, or customer service training) is sufficient to explain either (a) employee adaptive service recovery, or (b) employee proactive service recovery.

**Proposition 2:** Disparate configurations of antecedent factors (orientation, rewards, teamwork, empowerment, and training) are equifinal in leading to (a) employee adaptive behavior or (b) employee proactive behavior in service recovery.

Proactive and adaptive behaviors are two closely related constructs; but each has a distinctive nature (de Jong and de Ruyter, 2004), and hence each may be associated with a distinct set of causal recipes. The research shows that a proactive behavior goes beyond simply adjusting behavior, as it also requires the creation of change (Bateman and Crant, 1999). Specifically, Grant and Ashford (2008, p. 8) define proactive behavior “as anticipatory action that employees take to impact themselves and/or their environments.” Grant and Ashford further argue that proactivity is a process that involves anticipation (envisioning or thinking over a future outcome) and planning (the development of plans for the implementation of one's ideas). This process clearly distinguishes proactivity from a more passive approach which entails reacting to the demands of the environment, no planning to prevent future difficulties, executing what one is asked to do, giving up when one encounters difficulties (Frese and Fray, 2001), and conforming with the status quo (Bateman and Crant, 1999).

Past research indicates that proactive behaviors result from specific constellations of personal and situational factors (e.g., Bateman and Crant, 1999; Grant and Ashford, 2008). Employees that are proactive with customer service take the initiative rather than

waiting to be prompted by customers or others (Raub and Liao, 2012). In such instances, a climate of organizational initiative which demonstrates to employees that personal initiative is expected and backed up, is an antecedent of the employee's proactiveness (Raub and Liao, 2012). However, this climate is not a relevant predictor for the more passive adaptive approach, which is more concerned with being flexible and adaptable (Bateman and Crant, 1999). In a service recovery context, de Jong and de Ruyter (2004) observe some differences in the antecedents of the two behaviors. Moreover, past studies have shown that different forms of proactive behaviors have different antecedents (Wu *et al.*, 2018), which also indicates that the causal recipes for adaptive and proactive behaviors should differ. Hence, the following is proposed:

**Proposition 3:** Causal recipes (or configurations) for service recovery differ between adaptive and proactive service recovery behaviors.

Proactive behaviors are a more demanding approach to jobs (Bateman and Crant, 1999; Grant and Ashford, 2008; Wu *et al.*, 2018). For instance, Frese and Fay (2001, p. 136) argue that:

... the concept of adaptability implies that there is a structure [...] that one can adapt to. However, the epochal changes in the job concept imply that there is often little or no structure that one can adapt to. Therefore, uncertain situations require an active approach to work that helps to identify the present tasks and long-term needs of the organization.

Similarly, there are recurrent statements that proactive behaviors are becoming more important due to the increasingly global and ambiguous work world (e.g., Grant and Ashford, 2008). Such a context increases individuals' responsibilities; individuals must adopt a more proactive approach to their jobs and to the labor market (Frese and Fay,

2001). Past research on employee proactiveness shows that it is partially determined by specific personality and contextual factors (e.g., Bateman and Crant, 1999; Grant and Ashford, 2008; Wu *et al.*, 2018). Following the person–environment fit literature, maximal outcomes are attained when the characteristics of individuals and those of the organization are well matched (e.g., Kristof-Brown and Guay, 2011). Given the more demanding nature of proactive behaviors (Frese and Fay, 2001), it is likely that the causal recipes associated with proactive behaviors involve more ingredients. That is, engendering a proactive approach should demand acting upon a greater number of contextual variables. Hence, we offer the following:

**Proposition 4:** Causal recipes for proactive service recovery behavior should be more demanding than for adaptive service recovery behavior.

## **Method**

### *Data collection and sample*

The unit of analysis in this study is the employee, as this study focuses on the actions taken by frontline employees in a service recovery context. The empirical data for this study comes from an online survey of employees at a money transfer company. The company makes financial transactions with countries in Europe, Africa, South America, and North America, and has physical branches in two European countries and in two African countries. The target population of this study consists of all frontline employees working for this company in Portugal. These employees include frontline employees from the twenty independently managed branches/stores of the company, and remote frontline employees that make transactions through email and phone calls and respond to customer problems and complaints. The company has 100 employees in Portugal, from which 90

are frontline employees. To collect the data, an email with a link to the questionnaire was sent to the 90 frontline employees. The email introduced the overall topic of the study, informed the respondents that there were no right or wrong answers, and ensured confidentiality and anonymity. To increase the response rate, a three-step procedure was followed (initial e-mail out, plus two follow-ups). In total, we obtained 81 usable questionnaires for a response rate of 90%.

Of the respondents, 51.9% operated at the branch level, with the remaining being remote frontline employees. The average time with the company was 3.39 years with a standard deviation of 5.69 years (minimum: 1 year; maximum: 49 years), and the average time in their current function was 2.87 years with a standard deviation of 3.73 years (minimum: 0.5 years; maximum: 25 years). In terms of gender, 65% were female. The respondents' mean age was 34 years with a standard deviation of 9 years.

### *Measures*

We drew on the literature to operationalize all latent constructs (cf. Churchill, 1979). All items were measured using seven-point Likert-type scales anchored by one (strongly disagree) and seven (strongly agree). Proactive recovery behavior and adaptive recovery behavior were measured with the six-item scales adapted from de Jong and de Ruyter (2004). Customer service orientation was captured with five items adapted from Boshoff and Allen (2000) who extended those in Narver and Slater (1990). The five items used to measure both rewards and customer service training were adapted from Boshoff and Allen (2000). The four items used to measure teamwork were also adapted from de Jong and de Ruyter (2004). Empowerment was measured through a five-item scale adapted



from Boshoff and Allen (2000) who build on Hayes (1994) but with one item being dropped in the purification stage. The appendix presents the measures for the constructs.

#### *Measurement reliability and construct validity*

To verify the factor structure of the constructs, two confirmatory factor analyses (CFAs) that used maximum likelihood (ML) estimations were conducted by using AMOS 22. Due to the small sample size and to assess construct convergence within similar sets of measures, we divided the constructs into two related groups (cf. Augusto and Coelho, 2009; Hult *et al.*, 2004) and performed a separate CFA for each group. The first group comprises all conditions (customer service orientation, rewards, teamwork, empowerment, and customer service training), and the second group comprises the outcome variables (employee adaptive behavior and proactive behavior). The overall fit for the five-factor CFA model (see Model 1 in the Appendix) is considered adequate:  $\chi^2 = 323.038$  (df = 217;  $p < 0.001$ ),  $\chi^2/\text{df} = 1.489$ , CFI = 0.944, TLI = 0.935, IFI = 0.945, RMSEA = 0.078, and standardized RMR = 0.066. The CFA for the outcome conditions (see Model 2 in the appendix) also presents a reasonable fit:  $\chi^2 = 74.350$  (df = 49;  $p < 0.001$ ),  $\chi^2/\text{df} = 1.517$ , CFI = 0.955, TLI = 0.939, IFI = 0.956, RMSEA = 0.080, and standardized RMR = 0.062. Moreover, the standardized factor loadings, which are summarized in the appendix, are significant at  $p < 0.001$  and generally above 0.7 (Hair *et al.*, 2010). The Cronbach's alpha and the composite reliability (CR) values (Table I), exceed 0.7 for all constructs (Bagozzi and Yi, 1988) with the average variances extracted (AVE) also exceeding 0.5 (Bagozzi and Yi, 1988). These results provide evidence of the reliability and convergent validity of the constructs. To evaluate discriminant validity, we performed a series of chi-square difference tests (1 d.f.) (Bagozzi *et al.*, 1991). Thus, for

each possible pair of constructs, we ran a CFA model in which the correlations between the paired constructs were fixed to one and another in which the correlations were freely estimated. The differences between the chi-square statistics for the constrained and unconstrained models obtained for each possible pair of constructs were all significant at  $p < 0.001$ . In addition, we applied the procedure suggested by Fornell and Larcker (1981). We tested whether the square root of the AVE of each construct — shown on the diagonal of Table I — was higher than the correlations between all constructs. This condition was satisfied for all constructs. Taken together, these results provide evidence of discriminant validity. Table I summarizes the correlations between the seven variables and the descriptive statistics.

**Insert Table I here**

#### *Common method bias*

Since this study uses self-reported data and all questions were presented to the same set of respondents, common method bias (CMB) can constitute a threat to the validity of our results (Podsakoff *et al.*, 2003). In order to safeguard against this bias, we took procedural and statistical remedies (Podsakoff *et al.*, 2003). This study ensured respondents' anonymity to reduce evaluation apprehension; relied on concise, simple, and specific items; placed the outcome variables after the conditions in the survey; and randomized the measurement order. In addition, we used two statistical approaches to assess CMB. First, the Harman's single-factor test was performed. The non-rotated solution from the exploratory factor analysis produced seven factors that explained 76% of the variance in the data, with the first factor accounting for 36% of the variance in the data, which is

below the 50% cut-off point. Second, we used the procedure followed by Chaudhuri and Ligas (2009) which consists of comparing “simpler” CFA models with more complex ones. According to this procedure, if common method variance exists, it is expected that a simpler CFA model fits the data as well as or better than a more complex one. We ran a series of CFA models and performed Chi-square difference tests to compare simpler models with more complex ones. The results from these tests show that the model fit increases significantly for more complex models. For example, when we compare the predicted five-factor model with a four-factor model (merging teamwork with customer service orientation) the Chi-square difference is 92.69 ( $p < 0.00$ ). Taken together, these results provide evidence that CMB is not a critical issue in this study.

## **Data analysis**

We use a fuzzy-set qualitative comparative analysis (fsQCA) to probe the propositions. A qualitative comparative analysis is essentially a qualitative approach (Vis, 2012). The literature on this technique frequently uses “causality” terminology (such as “causal factors” or “causal asymmetry”) (e.g., Ragin, 2008; Woodside, 2014). Hence, causality language is frequently used in the analysis of results but without really indicating causation, as is the case in experimental settings. FsQCA is a set-theoretic method that empirically examines the relation between all possible combinations of binary states (i.e., absence and presence) of its predictors and the outcome variables (i.e. adaptive and proactive service recovery behaviors in our study) (Fiss, 2011). Fuzzy-set qualitative comparative analysis starts by defining the property space where all possible combinations of antecedents of an outcome are identified. In this study, the property space for the outcomes consists of all combinations of binary states (presence or absence) of the

five managerial practices that we analyze: customer service orientation, rewards, teamwork, empowerment, and customer service training (i.e.  $2^5 = 32$  combinations).

#### *Calibration of fuzzy sets*

Two foundational elements that characterize fsQCA are that it conceptualizes cases as set theoretical configurations and that it calibrates the membership of cases into sets (Misangyi *et al.*, 2017). Thus, after the definition of the property space, the original variables (conditions and outcomes) need to be transformed to reflect the extent to which each employee, based on their perceptions, is a member of the different sets that reflect the configurations of the managerial practices.

The calibration of the data requires that the original variables be transformed into a set of membership scores that can range from zero (full exclusion from a set) to one (full inclusion) (Ragin, 2008). This process requires the specification of three qualitative anchors: the threshold for full non-membership in a set (i.e., zero), the threshold for full membership in a set (i.e., one), and the crossover point (i.e., 0.5) (Ragin, 2008). For all variables, we apply the direct method of calibration to express the degree of membership (see Ragin, 2008, p. 89–98).

We drew on previous literature that used multiple-item Likert type scales to assess the degree of adoption of each managerial practice as well as the degree of adaptive and proactive behaviors (e.g., Ashill *et al.*, 2005; Babakus *et al.*, 2003; Boshoff and Allen, 2000; de Jong and de Ruyter, 2004). For example, de Jong and de Ruyter (2004) assessed the degree of adaptive and proactive behaviors in service recovery as well as the degree of adoption of managerial practices based on the responses of employees to multiple-item scales. They measured these responses on a seven-point scale ranging from one (strongly

disagree) to seven (strongly agree). As such, in this study we calibrate the degree of membership of each managerial practice as well as the degree of adaptive and proactive behaviors in service recovery by using the original points of the seven-point Likert-type scales. Following previous studies (e.g., Frösén *et al.*, 2016; Leischnig *et al.*, 2015; Ordanini *et al.*, 2014; Pappas, 2018), the three qualitative anchors for all variables stem from the points of the Likert-type scales. For all managerial practices, the thresholds for full membership in a set are fixed at the rating of six (“agree”), the crossover point is fixed at the rating of four (“neither agree nor disagree”), and the thresholds for full non-membership in a set are fixed at the rating of two (“disagree”). As an example, employees who “agreed” with the statements for customer service orientation were specified as fully in the fuzzy set, while employees who “disagreed” with the statements for customer service orientation were specified as fully out of the fuzzy set. Employees who “neither agreed nor disagreed” with the statements for customer service orientation were specified as neither fully in nor fully out of the set. The same applies for the other managerial practices.

For the outcome variables, we apply a stricter rule for calibration. The thresholds for full membership in a set are fixed at the rating of seven, the thresholds for full non-membership are fixed at the rating of three, and the crossover point is fixed at the rating of five.

#### *Analysis of sufficient conditions*

The next step in applying fsQCA is the assessment of the subset relations: the evaluation to discern which managerial practice (or combination of managerial practices) can act as a necessary or sufficient condition for either an adaptive or a proactive behavior in service

recovery. Although the analysis of sufficient conditions is the core of fsQCA, and also the focus of our study, the fsQCA literature recommends that sufficient conditions should always be preceded by the identification of necessary conditions (Schneider and Wagemann, 2010). A causal condition can be considered as necessary if it is always present when the outcome occurs (Ragin, 2008). From a set-theoretical point of view, this condition means that the instances of an antecedent condition constitute a superset of the instances of the outcome. Conventionally, a condition is considered “necessary” for an outcome if its consistency score exceeds the thresholds of 0.9 (Ragin, 2008). The results of the analysis of necessity (see Table II) show that none of the five managerial practices are necessary conditions for either behavior.

**Insert Table II here**

An antecedent condition (or a combination of conditions) is considered sufficient for the outcome if for each case, the fuzzy membership score of the condition (or combination of conditions) does not exceed the fuzzy membership score of the outcome (Fiss, 2011). This scoring means that the instances of an antecedent condition (or combination of antecedent conditions) constitute a subset of the instances of the outcome.

The analysis of sufficiency occurs in three sequential steps (Fiss, 2011; Ragin, 2008). In the first step, we construct a data matrix known as a “truth table.” The truth table maps all logically possible causal combinations (here  $2^5 = 32$ ) that can empirically occur in the fuzzy sets under study (Ragin, 2008). Based on the set membership scores for each managerial practice, each empirical case is assigned to a particular row of the truth table

that distinguishes configurations that are associated with the outcome from all possible configurations of managerial practices. Since fsQCA can produce only one truth table in an analysis, the sufficient conditions for the adaptive and proactive service recovery behaviors are identified in two separate analyses.

In the second step, the number of rows of the truth table are reduced based on two criteria: a frequency threshold (the minimum number of cases required for a configuration to be considered) and a consistency threshold (the minimum consistency level of a configuration) (Fiss, 2011; Ragin, 2008). We set the minimum frequency threshold at two for both outcomes, which ensures that more than 80% of the empirical cases are part of the analysis (Ragin, 2008). With respect to consistency, we first select all configurations that have two or more cases and apply a consistency threshold of 0.8 (Ragin, 2008) to them. Second, following recent studies (Forkmann *et al.*, 2017; Misangyi and Acharya, 2014), we also inspect the proportional reduction of inconsistency (PRI) and eliminate the configurations that have a PRI lower than 0.75 (Ragin, 2006). This procedure avoids simultaneous subset relations of antecedent combinations in both the outcome and its negation (Schneider and Wagemann, 2012), which provides a more stringent approach (Ragin, 2006).

In the final step, the configurations in the truth table are logically reduced by using its algorithm as implemented in the fsQCA software program (Ragin *et al.*, 2006). This algorithm is based on Boolean algebra and incorporates an analysis of counterfactual cases which relates to the evaluation of plausible outcomes of theoretical combinations that lack empirical instances (Fiss, 2011; Ragin, 2008). Based on differences in the counterfactual analysis, fsQCA reports three different solutions: the complex, the intermediate, and the parsimonious solutions. The complex solution presents the configuration(s) that are sufficient for the outcome without any counterfactual analysis.

The counterfactual analysis includes “easy” and “difficult” counterfactuals. While easy counterfactuals refers to “situations in which a redundant condition is added to a set of causal conditions that by themselves lead to the outcome” (Fiss, 2011, p. 403), difficult counterfactuals refer to “situations in which a condition considered redundant is removed from a set of causal conditions that by themselves lead to the outcome” (Fiss, 2011, p. 403). The distinction between the other two solutions is based on the fact that the parsimonious solution includes all simplifying assumptions regardless of whether they are based on easy or difficult counterfactuals, while the intermediate solution only includes simplifying assumptions based on easy counterfactuals. The analysis of these two solutions categorizes the causal conditions as either “core” or “peripheral” in the configurations (see Fiss, 2011, p. 403). Peripheral conditions are only part of the intermediate solution, while core conditions appear in both the intermediate and parsimonious solutions. This study presents the fuzzy-set intermediate solutions produced by the fsQCA software in the configurations tables and distinguishes between core and peripheral conditions following the notation suggested by Ragin (2008), which several recent studies have also followed (e.g., Forkmann *et al.*, 2017; Frösén *et al.*, 2016; Leischnig *et al.*, 2015; Pappas, 2018).

#### *Analysis of configurations for employee adaptive service recovery behavior*

Table III provides the results from the analysis of sufficiency for an employee adaptive behavior. The solution presented in Table III shows that three configurations exist. All configurations include more than one managerial practice. These findings provide support for Propositions 1a and 2a, which posit that no single managerial practice is sufficient *per se* to achieve employee adaptive behavior in service recovery and that different configurations of managerial practices are equifinal in leading to it. The consistency



scores for each configuration, which refers to the degree to which the empirical cases that share the configuration agree in displaying the outcome (Fiss, 2011) as well as the consistency score of the overall solution, exceed the threshold of 0.8 (Ragin, 2008). The unique coverage, which refers to the proportion of cases explained exclusively by one configuration (Ragin, 2006), is higher than zero for all configurations. Thus, all configurations are empirically relevant. The overall solution coverage, which refers to the joint importance of all configurations (Ragin, 2008), shows that the three configurations explain 74% of the employee adaptive behavior in our sample.

### **Insert Table III here**

Configurations frequently entail core elements that comprise the causal conditions that are strongly related to the desired outcome, while peripheral ones refer to those for which the causal relation with the outcome of interest is weaker (Fiss, 2001).

The findings also indicate that different patterns of core and peripheral conditions occur within configurations that lead to adaptive behavior. The first two configurations indicate that the presence of customer service orientation combined with teamwork (peripheral conditions) can lead to an adaptive service recovery if training (configuration 1) or rewards (configuration 2) are also present. Both training and rewards are core conditions. Configuration 3 indicates that the presence of empowerment, which is the single core condition, combined with the presence of teamwork and with the absences of training and rewards also lead to adaptive service recovery. In sum, the three sufficient configurations for an adaptive service recovery behavior jointly indicate that teamwork is the unique managerial practice present in all sufficient configurations; none of the

managerial practices is a sufficient condition; empowerment and customer service orientation can be either present or irrelevant; and training and rewards can be either present, absent, or irrelevant for the behavior.

*Analysis of configurations for employee proactive service recovery behavior*

The results of the analysis of sufficient conditions for employee proactive service recovery behavior are presented in Table IV. The results show that three equifinal configurations consistently lead to this behavior, and all of them include more than one managerial practice. These findings support Propositions 1b and 2b.

The consistency scores for each configuration as well as the consistency of the overall solution exceed the threshold of 0.8 (Ragin, 2008). All configurations are empirically relevant. The overall solution coverage indicates that the three configurations explain 70% of the employee proactive service recovery behavior in our sample. Table IV shows the different patterns of core and peripheral conditions within the three configurations found for employee proactive service recovery behavior.

**Insert Table IV here**

When comparing these three configurations with those for an adaptive service recovery behavior, we observe that two of them are similar: configurations 1 and 2. The third configuration for proactive behavior combines the presence of empowerment and customer service orientation as core conditions with teamwork as peripheral. This

configuration is more demanding than the third configuration for employee adaptive service recovery behavior. While configuration 3 combines the presence of two managerial practices (empowerment and teamwork) with the absence of two managerial practices (training and rewards), configuration 3 for the proactive service recovery behavior requires the presence of three managerial practices. These results partially support Proposition 3, which posits that configurations for service recovery differ between adaptive and proactive behaviors. Proposition 4, which claims that proactive configurations involve more ingredients than adaptive ones, is also partially supported.

In sum, the three sufficient configurations for employee proactive behavior in service recovery jointly show that customer service orientation and teamwork are present in all sufficient configurations, while none of the five managerial practices alone are sufficient; and empowerment, training, and rewards can be either present or irrelevant for the proactive behavior.

*Analysis of configurations for employee adaptive and employee proactive service recovery behaviors*

Although not offering a specific proposition, this study also analyzes the sufficient configurations for the outcome that reflects the simultaneous presence of highly adaptive and highly proactive service recovery behaviors which is represented as adaptive•proactive where “•” means logical AND. Due to the conjunctive nature of this outcome, we use the intersection rule to determine its fuzzy-set scores (Ragin, 2008, p. 36). Thus, the membership score for each case in the outcome adaptive•proactive is the minimum between the membership score for the set of employee adaptive behaviors and the membership score for the set of employee proactive behaviors. The frequency,

consistency, and PRI thresholds used to perform the sufficiency analysis for this outcome are the same as those used for the employee adaptive and proactive behaviors.

Table V depicts the solution obtained from the analysis of sufficiency for this outcome. Two equifinal configurations (configurations 2a and 3a) exist for adaptive•proactive and both comply with the consistency threshold of 0.8 (Ragin, 2008) and both are empirically relevant. These configurations are similar to configurations 2 and 3 for the proactive service recovery behavior alone.

**Insert Table V here**

#### *Sensitivity analysis*

To explore the robustness of our fsQCA findings, we conducted two different sensitivity analyses. First, we analyzed the sensitivity of our findings to two socio-demographic characteristics: age and gender. For each causal configuration presented in Tables III, IV, and V, we tested the statistical significance of the difference between the consistency measures for male versus female employees, and employees aged less than or equal to 34 years old versus those aged more than 34 years old. The results show that none of the differences are statistically significant which indicates that the sufficient configurations found for the three outcomes are robust across age and gender. Additionally, we checked whether our fsQCA findings are robust across different calibration choices. First, we varied the crossover point between  $\pm 5$  percent for all variables and redid the analyses for the three outcomes. Next, we changed the full membership and full non-membership thresholds (i.e., seven instead of six to be fully in a set and one instead of two to be fully

out) for all conditions in separate analyses. A comparison of the original models with the new ones reveals meaningless differences, which is reassuring regarding the robustness of the results. Taking all sensitivity analysis results into consideration, we can conclude that our fsQCA findings are robust.

## **Discussion**

In recent years, several empirical studies have analyzed the antecedents of the performance in service recovery from different theoretical perspectives. However, these provide inconsistent results (Van Vaerenbergh and Orsingher, 2016). Furthermore, most of these studies focus on the individual net effects of the antecedents. Additionally, only de Jong and de Ruyter (2004) distinguish between adaptive and proactive service recovery behaviors. The present research addresses these gaps and thus is original in its use of fsQCA to investigate the combinations of five managerial practices that result in adaptive and proactive service recovery behaviors, and both types of behavior simultaneously. Accordingly, this study provides a refreshing look into how firms can engineer their managerial efforts to put together an integrative recovery system, which is a matter that has scarcely been researched (Smith *et al.*, 2009) but is key to achieving greater performance (Smith and Karwan, 2010).

Hence, the results from this study add new insights into the limited knowledge on the antecedents of adaptive and proactive service recovery behaviors. These results suggest that *no single* managerial practice *per se* is sufficient for achieving both types of behaviors. Instead, these behaviors are contingent on the presence (or absence) of multiple managerial practices, which supports the arguments of studies that argue that

companies must simultaneously invest in multiple domains to obtain the best results (e.g., Babakus *et al.*, 2003; Smith *et al.*, 2010).

In particular, this study finds three distinct configurations of managerial practices that appear consistently sufficient to achieve high employee *adaptive* service recovery *behaviors*. The results also show three sufficient configurations for high employee *proactive* service recovery *behaviors*. Thus, the principle of equifinality—that multiple paths can lead to the same outcome—applies to both types of service recovery behaviors. Moreover, the presence or absence of either rewards or customer service training, for example, when combined with other managerial practices, appears to predict an adaptive behavior.

The results also associate the configurations for adaptive and proactive service recovery with different patterns of core and peripheral conditions (Ashill *et al.* 2005). Depending on the configuration, training, rewards, empowerment, and customer service orientation emerge as core conditions. These results are, to some extent, in line with previous research on service recovery, which is suggestive of the existence of core and peripheral conditions in causal recipes that explain adaptive and proactive behaviors in service recovery. Specifically, de Jong and de Ruyter (2004) determine that different managerial practices have different size effects on service recovery behavior. Similarly, Babakus *et al.* (2003) find that management's commitment to service quality has different size effects on job satisfaction and organizational commitment and that the latter two also have different size effects on service recovery performance. Ashill *et al.* (2005) also find differences in the strength of the relation between different managerial practices and the performance of service recovery. In addition, Liao (2007) finds that different service recovery behaviors have differing relational strengths with customers' perceived justice.

The results also show that for both behaviors, none of the sufficient configurations requires the presence of all managerial practices. As such, managers may not have to act on every possible managerial intervention to promote service recovery. We also note that the results are implicitly aligned with the literature's findings that show a positive relation between several managerial practices, such as empowerment and teamwork, and both behaviors (de Jong and de Ruyter, 2004). While de Jong and de Ruyter (2004) show that several antecedents have an impact on both types of service recovery behaviors, our findings show that indeed multiple, alternative paths can result in both behaviors.

This study further shows that two out of the three configurations overlap, suggesting that these behaviors are distinct but closely related (de Jong and de Ruyter 2004). In particular, the two configurations combine the presence of customer service orientation and teamwork with either customer service training or rewards. A possible explanation for this partial overlap is that as the proactive behavior is a more demanding approach, some of those recipes that facilitate that behavior should also enable adaptive behaviors by default. While de Jong and de Ruyter (2004) also find that there is considerable overlap between the antecedents (but not configurations) of adaptive and proactive service recovery behaviors, this is the only study investigating the configurations. With regard to the remaining configuration, which differs between proactive and adaptive behaviors, the proactive recipe involves the presence of three managerial practices and the adaptive one involves only two (and the absence of customer service training and rewards). Hence, this third configuration for proactive service recovery is more demanding than the configuration for adaptive service recovery as it involves the presence of more managerial practices. This finding fits with the literature that shows that proactive behaviors in general are a more demanding approach to jobs (Wu *et al.*, 2018) and that they require the expenditure of a higher level of effort and self-regulation (Strauss *et al.*, 2017). Hence,

there appears to be causal recipes that are associated with proactive behaviors that do not result in adaptive behaviors, the reason being that each of these should result from specific matches between personal and contextual factors. Hence, a configurational approach such as fsQCA is more appropriate to generate a more nuanced understanding of service recovery behaviors.

The three sufficient configurations obtained for employee adaptive service recovery explain 74% of this behavior, and the managerial practice of teamwork is present in all configurations. Similarly, the three sufficient configurations obtained for proactive service recovery explain 70% of this behavior, and teamwork is also present in all configurations. Thus, teamwork seems to be an almost always necessary condition for both adaptive and proactive behaviors. This is not surprising as solving complaints exposes employees to unfamiliar situations (Babakus *et al.*, 2003). In this context, sharing experiences with peers is likely to be of the greatest help in dealing with complaints.

Customer service orientation also emerges as almost always necessary for proactive service recovery as it is present in all proactive behavior configurations. Customer service orientation is an organizational cultural value and as such, constitutes an overall guide for employee behavior that becomes particularly important in the presence of unstructured tasks (Ouchi, 1979), such as addressing customer complaints. Consequently, Parasuraman (1987) argues that “every time a nonroutine service encounter arises, a firm and its organizational culture are put through a crucial test. If the firm has the ‘right’ culture, it cannot only pass the test with flying colors but also enhance its reputation through invaluable word-of-mouth communication” (p. 41) and that “excellence during the service delivery process requires an unwavering and pervasive organizational commitment to customer satisfaction” (p. 42).



Finally, the study identifies for the first time in the literature two alternative combinations of managerial practices that appear to explain the simultaneous presence of proactive and adaptive behaviors. Customer service orientation and teamwork are present in these two configurations and reinforce the importance of these two managerial practices for service recovery behaviors. Hence, firms that rely on either of these two configurations might be able to ensure that their employees are reactive to customer demands and, in particular, that they are focused on listening and responding appropriately to customer complaints, thereby contributing to customer satisfaction. Additionally, firms can ensure that their employees make proactive efforts which can help to ensure that an organization has a dynamic service recovery system (Michel *et al.*, 2009) with feedback loops that translate into improvements in service delivery that reduce the likelihood of future service failures. Hence, the overall set of results offer an original way of looking at how effective behaviors in service recovery might be engendered by providing information on the combinatorial complexities among causal factors.

### **Managerial implications**

Our results offer some suggestions for future managerial practices with the aim of improving either frontline adaptive or proactive service recovery, or both simultaneously. First, our results suggest that companies can develop an adaptive service recovery behavior in three different ways. Nevertheless, all three require the existence of teamwork. Hence, it appears that managers should primarily promote teamwork and complement it with the provision of customer service training and an orientation toward customer service. Alternatively, teamwork can be combined with rewards and a customer service orientation. Finally, a company might be able to develop an adaptive service

recovery behavior by combining high levels of empowerment and teamwork with the absence of customer service training and service rewards. This combination requires less managerial involvement and is particularly relevant for service companies that have scarce financial resources or that are small, as it enables them to adopt effective recovery behaviors without having to invest in training and rewards for employees.

Considerable emotional distress and suffering follows service failure (Johnson *et al.*, 2011) which drives customers to frequently have strong reactions that require strong and effective recovery efforts (Smith *et al.*, 1999). In this context, a proactive recovery (i.e., a service recovery effort that is initiated by the organization) should have a particular impact on customers' assessments of the service provider (Smith *et al.*, 1999). Moreover, customers' perceptions of service quality are influenced by behaviors of service employees that are unprompted and unsolicited (Bitner *et al.*, 1990). Hence, the promotion of proactive recovery behaviors appears paramount for organizational effectiveness. This study has identified several practices that might help an organization promote spontaneous initiatives by employees to ensure customer recovery satisfaction and to take the initiative in changing existing work practices to avoid recurring service failures (de Jong and de Ruyter, 2004).

Specifically, our results also suggest that teamwork is key to achieving proactive service recovery behavior, but this teamwork needs to be combined with a customer service orientation. In addition to these two managerial practices, service managers should invest either in rewarding employees, or in empowering employees, or in providing customer service training.

If the company wants to achieve proactive and adaptive service recoveries simultaneously, the promotion of teamwork and a customer service orientation needs to

be complemented by rewarding or empowering employees. Hence, regardless of a firm's objectives (i.e., to promote adaptive and/or proactive recovery behaviors), different managerial practices can be used to achieve the desired outcomes. Michel *et al.* (2009) has shown that service recovery concerns the set of organizational actions taken in response to a service failure to recover the satisfaction and loyalty of the customer, to ensure process improvements from a failure incident, and to train and reward employees for meeting these purposes. Hence, a service recovery system should have a dynamic nature (Van Vaerenbergh and Orsingher, 2016). As many organizations fail at improving the service processes underlying service failure, particular attention should be paid to promoting employee proactive service recovery behaviors (Michel *et al.* 2009) which should help in making service recovery a profitable investment. In this context, our results suggest that both types of service recovery behaviors can be attained simultaneously by relying on specific combinations of managerial practices, which ultimately simplifies the managerial function.

### **Limitations and directions for future research**

Although our study provides several contributions to the service recovery literature, it contains some limitations. The first limitation refers to the limited generalizability of our study's results. A fuzzy-set qualitative comparative analysis concentrates on configurations in the data, and the dataset used in this study is from one service industry company. Future research should test the configurations found in this study on employees from other service companies. In particular, services differ in terms of the degree of interpersonal interaction. It is possible that in services with a higher interactional nature that thus involve tasks with greater ambiguity, the role of the explanatory variables used

in this study might change. For example, we would predict that in such settings customer service orientation might be a more relevant managerial domain of action. Customer service orientation can be considered a cultural value (see Parasuraman, 1987), and cultural values constitute broad guides for employee behavior. The internalization of such values enables employees to respond to situations “in a manner consistent with long-term organizational goals and objectives” (Aulakh and Gencturk, 2000, p. 526). This is important for dealing with ambiguous situations (e.g., Mills, 1985), such as those involving service recovery (cf. Babakus *et al.*, 2003), especially in services with a higher interpersonal nature. In these services, specifying in advance the actions that employees should undertake to recover customer satisfaction is more difficult. Despite this limitation, we note that the respondents in this study belong to different departments and to different branches of the company, each having their own autonomous functioning.

A second limitation concerns the antecedent conditions examined. This study has focused on five antecedent factors (customer service orientation, rewards, teamwork, empowerment, and customer service training) to explain employee adaptive and proactive behaviors in service recovery. Because set-theoretic methods are constrained by the sample size in the number of causal conditions they can include due to limited diversity problems (Fiss, 2011), future research might draw on larger samples to consider other antecedent factors. Following the classification of Van Vaerenbergh and Orsingher (2016), such antecedents can be drawn from job demands (e.g., role stressors and customer-related social stressors), job resources (such as servant leadership and supportive technology), and personal resources (such as employee customer orientation, emotional intelligence, and trait competitiveness). In non-routine services that involve a more intensive employee-customer interaction, listening skills and empathy are important

for service recovery (Anderson *et al.*, 1997). Hence, it would be interesting, particularly in high contact services, to combine personal resources with job-related factors.

Since the dependent variable (outcome) and the independent variables (conditions) come from the same respondent, common method bias could be an issue. However, we use a number of procedural remedies that should mitigate such a problem. We also apply statistical techniques that indicate that this bias should not be a relevant issue in this study. Nevertheless, to fully rule out the influence of method variance on the findings, future research should consider collecting data from different respondents, such as supervisors and customers, and objective data. Moreover, it would be interesting to consider variables measured at a higher level in the analysis—namely, supervisors' personal characteristics as well as managerial practices.

**Appendix.** Construct measures, standardized loadings, and *t*-values

Construct and item description	Standardized loadings	<i>t</i> -value
<i>Model 1</i>		
<b>Customer service orientation</b>		
<i>Cronbach's <math>\alpha = 0.89</math>; CR = 0.89; AVE = 0.62</i>		
Our company measures customer satisfaction on a regular basis.	0.78	a
Our company understands its customers' needs.	0.89	8.65
Our company sets objectives in terms of customer satisfaction.	0.68	9.17
Our company attempts to create value for the customers.	0.76	7.16
Our company is totally committed to serving its customers well.	0.81	7.69
<b>Empowerment</b>		
<i>Cronbach's <math>\alpha = 0.86</math>; CR = 0.89; AVE = 0.66</i>		
I do not have to get management approval before I have to handle problems.	0.62	a
I am empowered to solve customer problems.	0.83	5.86
I am encouraged to handle customer problems by myself.	0.86	5.95
I am allowed to do almost anything to solve customer problems.	0.93	6.19
I have control over how I solve customer problems.*	*	*
<b>Customer service training</b>		
<i>Cronbach's <math>\alpha = 0.95</math>; CR = 0.95; AVE = 0.78</i>		
We receive continued training to provide a good service.	0.73	a
We receive extensive customer service training before we come into contact with customers.	0.78	8.92
We are trained to deal with customer complaints.	0.93	8.75
We receive training on dealing with customer problems.	0.97	9.26
We receive training on how to deal with complaining customers.	0.96	9.12

**Rewards**

*Cronbach's  $\alpha = 0.96$ ; CR = 0.96; AVE = 0.83*

If I improve the level of service I offered customers, I will be rewarded.	0.88	a
The rewards I received are based on customers' evaluations of services.	0.82	9.89
I am rewarded for serving customers well.	0.96	14.68
I am rewarded for dealing effectively with customer problems.	0.95	14.08
I am rewarded for satisfying complaining customers.	0.93	13.11

**Teamwork**

*Cronbach's  $\alpha = 0.93$ ; CR = 0.93; AVE = 0.77*

In our team, we help each other in serving the customer.	0.85	a
The mutual support of team members is highly valued.	0.87	10.16
Each team member is personally responsible for the assistance of other members in serving the customer.	0.93	11.49
In our team, members need not formally be monitored with regard to the assistance of colleagues. *	0.87	10.22

*Model 2***Employee adaptive service recovery behavior**

*Cronbach's  $\alpha = 0.86$ ; CR = 0.87; AVE = 0.53*

When I feel that one service recovery effort is not working, I can easily change to another.	0.76	a
My service style may vary from recovery situation to recovery situation.	0.63	5.52
I try to understand how one customer differs from another in service recovery expectations.	0.76	6.66
I feel that it is easy to modify my service approach if the situation calls for it.	0.73	6.38
I feel that each unhappy customer requires a unique approach.	0.73	6.38
I am very sensitive to the needs of our customers.	0.74	6.50

**Employee proactive service recovery behavior***Cronbach's  $\alpha = 0.90$ ; CR = 0.91; AVE = 0.62*

I actively seek out areas for continuous improvement of our service recovery.	0.76	a
I continuously revise service recovery processes.	0.69	6.26
I seek alternative solutions to service recovery problems.	0.89	8.37
I seek innovative solutions to service recovery problems.	0.79	7.36
I address service recovery issues before they become problems.	0.71	6.46
I am constantly on the lookout for improving our service recovery effort.	0.85	8.04

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**Notes:** <sup>a</sup> Indicates that the parameter was fixed at 1.0; \* items deleted during purification phase.



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