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Natalia Araujo Pacheco, Cristiane Pizzutti, Kenny Basso, Yves Van Vaerenbergh,

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# Trust recovery tactics after double deviation: better sooner than later?

Trust recovery  
tactics after  
double  
deviation

Natalia Araujo Pacheco

*IMED Business School, Faculdade Meridional – IMED, Passo Fundo, Brazil*

Cristiane Pizzutti

*School of Management, Universidade Federal do Rio Grande do Sul,  
Porto Alegre, Brazil*

Kenny Basso

*IMED Business School, Faculdade Meridional – IMED, Passo Fundo, Brazil, and*

Yves Van Vaerenbergh

*Department of Marketing, Katholieke Universiteit Leuven, Brussels, Belgium*

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## Abstract

**Purpose** – The purpose of this paper is to examine when (i.e. after a shorter or longer length of time) organizations should offer an apology or a promise of non-recurrence of a failure to recover trust following a failed service recovery (a double deviation).

**Design/methodology/approach** – This paper reports the results of a pilot study with a convenience sample and two experiments with samples from different populations, students and employees of a financial institution in one study and workers recruited through Mechanical Turk in the other.

**Findings** – An apology was most effective to recover trust when offered shortly after the double deviation (e.g. Study 1: after two days; Study 2: immediately and after two days), while making a promise was most effective when offered at a later time after the double deviation (e.g. Study 1: after 30 days; Study 2: after 15 days). Consumers consider an apology offered shortly after the double deviation as a sign of integrity and a promise communicated sometime after the double deviation as a sign of competence.

**Originality/value** – This paper complements prior research that demonstrates the effectiveness of apology and promise as trust recovery tactics. The findings show that managers should carefully consider the time at which they use these tactics to recover trust following a double deviation.

**Keywords** Trust, Apology, Service recovery, Service failures, Timing, Promise

**Paper type** Research paper

## Introduction

Failures are common in the service industry, and they may trigger customer reactions such as anger, switching behaviour or even a desire for revenge (Grégoire *et al.*, 2010; Keaveney, 1995). Service providers should try to recover these failures by offering compensation, apologizing, showing empathy, involving customers, providing explanations, among others (Gelbrich and Roschk, 2011; Hazée *et al.*, 2017; Smith *et al.*, 1999; Wirtz and Mattila, 2004). In practice, however, many service recoveries fail (Michel *et al.*, 2009). The results of the 2017 US National Customer Rage Survey, for example, show that only 21 per cent of complainants were completely satisfied with how organizations are handling their customer complaints, and 51 per cent felt that they received nothing in response to their complaint (Customer Care Measurement and Consulting, 2017). Hence, organizations are missing



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out on significant revenues because of customer churn and negative word of mouth (Van Vaerenbergh and Orsingher, 2016).

Despite its prevalence, only a limited number of studies examine how organizations can recover customer trust after a double deviation (i.e. an unsuccessful attempt to restore customer satisfaction after a service failure) (Bitner *et al.*, 1990). This situation is surprising because trust is a key factor to prevent clients from avoiding or retaliating against the company after a failure (Grégoire *et al.*, 2009) and to maintain relationships (Sirdeshmukh *et al.*, 2002). Moreover, the rebuilding of customer loyalty after a service failure and a recovery episode relies primarily on the recovery of customer trust rather than of customer affection (La and Choi, 2012).

Joireman *et al.* (2013) showed that offering compensation and an apology increases customers' desire for reconciliation. Basso and Pizzutti (2016) provided the most comprehensive analysis and showed that both an apology, that is, an acknowledgement of responsibility for a failure and the associated damages to the victim (Ohbuchi *et al.*, 1989), and a promise that the same failure will not recur in the future (Van Vaerenbergh *et al.*, 2012) result in significantly higher levels of trust after a double deviation. Other trust recovery tactics such as financial compensation and third-party endorsement appear less effective (Basso and Pizzutti, 2016).

Extending Basso and Pizzutti's (2016) research, the overall aim of this paper is to examine whether the generally accepted notion of recovering a service failure sooner rather than later (Hogreve *et al.*, 2017) also applies to trust recovery tactics after a double deviation – particularly for an apology and a promise. From this timing perspective, apology and promise are two tactics that may need to be applied at different times because of their different characteristics. However, the literature reports conflicting results on the best timing to apply them. For example, Tomlinson *et al.* (2004) showed that earlier (vs later) apologies are more effective in increasing the willingness to make amends in a professional relationship; other researchers suggest that later (vs earlier) apologies are more effective in increasing satisfaction with conflict resolution (Frantz and Bennigson, 2005). Similar conflicting views are found in the effectiveness of a promise. Therefore, the first aim of this study is to clarify the role of timing when conveying an apology and a promise following a double deviation.

Additionally, this study examines the processes underlying these effects. On the basis of attribution theory, an apology made sooner (vs later) after a failure plausibly enhances consumer attributions of company integrity because it acts as a cue that the company has solid principles and values. In turn, a promise made later (vs sooner) likely enhances consumer attributions of company competence because a later promise indicates that the company has had time to process, identify and plan how to solve the problem once and for all, thus enabling it to promise that similar failures will not happen again. And, as already known, both integrity and competence attributions enhance customer trust towards a company (Sirdeshmukh *et al.*, 2002).

This study contributes to the literature by providing evidence of the role of time in trust recovery after a double deviation. In line with Prasongsukarn and Patterson's (2012) call for understanding the role of time in the use of recovery options, this study examines how the timing of communicating an apology or a promise following a double deviation influences its effectiveness. It also provides additional empirical support for the notion that recovery should be considered a dynamic event (vs a static event) that unfolds over multiple moments in time (Goldstein *et al.*, 2002).

## Literature review and hypotheses development

### *Trust recovery after a double deviation*

Despite extensive literature on the benefits of service recovery and its effective management practices, service recovery is often poorly executed (Michel *et al.*, 2009;

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Van Vaerenbergh and Orsingher, 2016). A failed or unsatisfactory service recovery typically creates a strong breach of trust with the firm (Basso and Pizzutti, 2016). After the failure (a single deviation), a customer's positive expectations about the service recovery process are not met. Service recovery following a double deviation essentially becomes a trust recovery, which can be defined as the "activities directed at making a trustor's trusting beliefs and trusting intentions more positive after a violation is perceived to have occurred" (Kim *et al.*, 2004, p. 105). Studies on how to recover from a double deviation are scant. Table I presents a synthesis of these studies.

Researchers propose several tactics for recovering trust following a double deviation, including an apology (e.g. Johnston and Fern, 1999; Joireman *et al.*, 2013), a promise (e.g. Van Vaerenbergh *et al.*, 2012), financial compensation (e.g. Joireman *et al.*, 2013) or a third-party endorsement (e.g. Singh *et al.*, 2008). Basso and Pizzutti (2016) examined the relative effectiveness of these trust recovery options. While offering an apology and a promise was effective at restoring customer trust following a double deviation, offering financial compensation or a third-party endorsement had the same effect as doing nothing at all (Basso and Pizzutti, 2016). An apology and a promise appear as the most appropriate trust recovery tactics, as they offer "the psychological repair necessary to rebuild a relationship after a conflict is negatively solved from the consumer's perspective, as in double deviation" (Basso and Pizzutti, 2016, p. 210).

An apology is a communication in which the transgressor assumes responsibility for a failure and the damages to the victim (Ohbuchi *et al.*, 1989). Apologies increase customer trust both after a single deviation (De Ruyter and Wetzels, 2000) and double deviation (Basso and Pizzutti, 2016). A promise is "an assertive impression management approach designed to convey positive intentions about future acts" (Schweitzer *et al.*, 2006, p. 4). In a service recovery context, a promise typically refers to a service provider's communication about complaint-based process improvements to customers (Van Vaerenbergh *et al.*, 2012).

Whilst prior research focused on what could be done to recover customer trust following a double deviation, research has yet to examine when these tactics could be applied. This examination is particularly necessary because of the relatively limited understanding on the role of time in the effectiveness of recovery tactics, in general (Prasongsukarn and Patterson, 2012), and recovery tactics following a double deviation, in particular.

#### *The relationship between trust recovery tactics and customer trust*

Attribution theory (Calder and Burnkrant, 1977; Kelley and Michela, 1980) helps to explain the mechanisms by which these trust recovery tactics can restore customer trust. People typically seek to understand the causes of certain events through a cognitive process (Calder and Burnkrant, 1977; Kelley and Michela, 1980). Research shows that trust violations – like a double deviation – typically influence people's attributions of integrity and competence: actors violating another actor's trust are typically perceived as having lower integrity and being less competent (Kim *et al.*, 2004). As attributions of integrity and competence represent two of the most important building blocks of customer trust (Kim *et al.*, 2004; Schindler and Thomas, 1993), understanding trust recovery efforts requires an understanding of how they tap into these attribution dimensions.

Apologies positively affect customers' attributions of integrity to a company (Xie and Peng, 2009). Apologies are typically perceived as an acknowledgement of guilt (Kim *et al.*, 2004), which may indicate that the apologizing organization holds solid values and principles. Basso and Pizzutti (2016) showed that an apology increases customers' attributions of integrity to the company, which, in turn, increases customer trust (Basso and Pizzutti, 2016). Apologies reinforce customers' attributions of integrity, but not necessarily attributions of competence. After all, an apology is a low-effort tactic that does not need much time to be implemented.

**Table I.**  
Overview of prior research on service recovery following a double deviation

Reference	Objectives	Context	Method	Main findings	Focus on trust recovery?	Focus on the timing of recovery options?
Johnston and Fern (1999)	To identify service recovery strategies from a customer point of view	Banking	Interview	Customers prefer different recovery options for single and double deviations. In cases of double deviation, customers prefer a managerial apology and a written assurance that the failure will not happen again	No	No
Maxham and Netemeyer (2002)	To investigate within-subject evaluations of overall satisfaction with the firm, word-of-mouth recommendations, and repurchase intention following recovery efforts after multiple failures	Banking	Longitudinal survey	The service recovery paradox does not happen for multiple failures, only for single failures. Customers discount the effects of one unsatisfactory service recovery when the previous service was satisfactory; however, this does not occur after two unsatisfactory recoveries	No	No
Casado-Diaz and Nicolau-González (2009)	To explore the behaviours that customers are prone to demonstrate after a double deviation and the influence of firm recovery efforts on customers' choice of the behaviour they adopt after a double deviation	Banking	Survey	Both an apology and an explanation reduce the intention to complain and leave after a double deviation	No	No
Edvardsson <i>et al.</i> (2011)	To develop a new framework of factors that influence the resolution of unfavourable service experiences during service recovery processes	Restaurant	Interview	Communication, competence, time, and the service system for service recovery influence the customer's perception after a double deviation	No	No
Van Vaerenbergh <i>et al.</i> (2012)	To examine the effect of process recovery communication on customer outcomes for customers who experienced a failure with (un)satisfactory customer recovery	Bookstore, telecom operator and food retailer	Four experiments	Process recovery communication positively influences customer outcomes after an unsatisfactory customer recovery	No	No
Joireman <i>et al.</i> (2013)	To verify how customers respond to failed service recoveries (i.e., double deviations) and how companies can influence positive perceptions after this event	Airline and retail	Survey and two experiments	Compensation and apology positively influence customers' inferred motives (from negative to positive), desire for reconciliation, and intention to perform reparatory behaviours after a double deviation	No	No

(continued)

Reference	Objectives	Context	Method	Main findings	Focus on trust recovery? options?	Focus on the timing of recovery options?
Sembada <i>et al.</i> (2016)	To examine the effects of customers' power on behavioural responses after single and double deviation cases	Restaurant and hotel	Three experiments	Customers' power attenuates failure severity and intentions to take revenge against the firm in the single deviation context, but not in the double deviation context	No	No
Basso and Pizzutti (2016)	To verify the effect of apologies and promises that failures will not recur on the recovery of trust after a double deviation	Hotel and internet provider	Four experiments	Apology and promise positively influence trust recovery after a double deviation. An apology is more efficient for integrity violations, while a promise is more efficient for competence violations	Yes	No

Trust recovery tactics after double deviation

Table I.

A company's ability to keep promises typically taps into customers' attributions of the company's competence (Xie and Peng, 2009). When customers complain about a service failure, they want to deal with competent employees who have sufficient knowledge to address their complaints appropriately (Gruber, 2011). Informing customers that a failure will not reoccur because the company has changed its procedures may be a signal of the company's willingness to analyze service failures in detail, discern the root cause of the failure, and take the necessary steps to make the possibility of subsequent failure remote (Van Vaerenbergh *et al.*, 2012). Customers receiving a promise may consider the service provider to possess the necessary skills and competence to effectively execute these actions. Basso and Pizzutti (2016) showed that a company's promise of non-recurrence of the failure positively affects customer's attribution of competence to the company, which is, in turn, related to customer trust.

Overall, prior research shows that an apology and a promise influence customer trust following a double deviation because of an attributional process, in which attributions of integrity and competence play an integral role. This paper extends prior work by examining the role of time in the effectiveness of trust recovery tactics.

#### *Effectiveness of trust recovery tactics according to timing*

Several studies show that time plays a significant role in consumer decision making. Festjens and Janiszewski (2015) showed that more time is associated with more and better use of time, that is, time increases marginal utility. People are willing to pay a higher amount of money to acquire a time unit (e.g. one day) when analyzing a longer (e.g. 180 days) rather than shorter (e.g. seven days) time gain or loss. This effect occurs because one can perform more and better activities after a longer vs shorter period.

Consumers' valuation of time carries implications for service providers. The longer a company takes to redress the customer, the bigger the time loss and the more customers value this time. In other words, the more time that elapses after the failed recovery, the more is expected from the service provider to make it right (Hogreve *et al.*, 2017). This observation is in line with equity and distributive justice theories (Adams, 1963; Smith *et al.*, 1999), which posit that exchange partners seek to maintain balance in a relationship. If one party perceives an imbalance (e.g. when a person has to wait for a company's response to a complaint), the more effort the other party should exert to restore the balance.

An apology can be easily provided. It also forms a sort of psychological compensation for the negative emotions (i.e. anger, rage) that typically occur shortly after a double deviation (Joireman *et al.*, 2013; Surachartkumtonkon *et al.*, 2015). Offering an apology after a longer period increases the probability of customers developing alternative explanations for the failure and judging the company negatively (Tomlinson *et al.*, 2004). Hence, this paper tests the following hypothesis:

- H1.* An apology offered shortly after the double deviation (e.g. immediately or after two days) is more effective in recovering trust than an apology offered at a later time after the double deviation (e.g. after 15 or 30 days).

In contrast, a promise that a failure will not happen again is a signal that the company has invested significant effort and especially time in making the possibility of subsequent failure remote (Van Vaerenbergh *et al.*, 2012). Additionally, Grégoire *et al.* (2009) found that after a double deviation, customers' desire for revenge decreases over time. In contrast, customers' avoidance behaviour increases over time. The negative feelings generated by a double deviation dissipate over time, causing customers to become more susceptible to listening to and assimilating the trust recovery tactics that convey a company's future intentions (e.g. a promise). On the other hand, a promise of non-recurrence of failures includes a statement about the company's future actions (Schweitzer *et al.*, 2006) based on

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new or modified procedures that take time to be executed. A promise must have a connection with the cause of the failures to make sense to the customer who experiences the service failure.

Van Vaerenbergh *et al.* (2012) suggested that after a successful service recovery, communication of service improvements to prevent future dissatisfaction is less effective in terms of customer outcomes when is made soon after experiencing the event than when it is applied later. Van Vaerenbergh *et al.* (2012) did not provide a formal assessment of this time lag effect, yet their findings signal that a promise might be less effective in restoring trust when communicated shortly after the double deviation than an apology. Corroborating this idea, Davidow (2003) argued that fast resolutions might imply that the firm has not devoted enough effort to resolve a customer's complaint. So, assuming that a promise will be more effective in restoring trust when it is communicated at a later time (vs a shorter time) after the double deviation is plausible. Therefore, the following hypothesis is formulated:

- H2.* A promise communicated at a later time after a double deviation (e.g. after 15 or 30 days) is more effective in recovering trust than a promise communicated shortly after a double deviation (e.g. immediately or after two days).

Attributions of integrity and competence explain the influence of time on the effectiveness of the trust recovery tactics. On the basis of attribution theory (Calder and Burnkrant, 1977), people form expectations about the meaning of an observed behaviour. To attribute a behaviour to a company, the customer must perceive that the behaviour is due to the company and not to an external condition, this behaviour is consistent over time and when the company faces similar situations, the same behaviour is demonstrated.

Customers' attribution of a company's integrity may be the underlying mechanism explaining the effect of time on apology effectiveness. Integrity is the adherence to a set of principles deemed acceptable by another party (Mayer *et al.*, 1995). One could infer that the sooner a company apologizes after a double deviation, the more the company's values and principles diverge from the double deviation. This could increase customers' attribution of the company's integrity. In contrast, taking too long to apologize after a double deviation could indicate that the double deviation was not very dissonant with the company's values and principles or that the company was not sufficiently sorry for the situation. As attributions of integrity are strongly related to trust (Kim *et al.*, 2004), the following hypothesis is formulated:

- H3.* An apology offered shortly after a double deviation (e.g. immediately or after two days) leads to a higher attribution of integrity than an apology offered at a later time after the double deviation (e.g. after 15 or 30 days), which, in turn, leads to more effectiveness in recovering trust.

Conversely, customers' attribution of a company's competence could be the underlying mechanism explaining the effect of time on promise effectiveness. Promising that a failure will not happen again implies that the company has corrected the cause of the failure. Implying that changes to procedures were made immediately after the double deviation could signal that the organization did not invest sufficient time and effort – typically associated with a promise (Van Vaerenbergh *et al.*, 2012) – to improve the processes that caused the failure to occur, and hence signal incompetence. Moreover, informing customers that the root cause of a failure could be improved after a very short time may lead customers to believe that prevention of the service failure could have been implemented much earlier, which might make customers doubt the company's competence to improve its processes and provide failure-free service. On the other hand, waiting a longer time to inform customers that procedures have changed may instigate appreciation of the company's time and effort



in solving the cause of the failure (Van Vaerenbergh *et al.*, 2012), enhancing customers' attribution of competence to the company. Thus, the following hypothesis is formulated:

- H4.* A promise communicated at a later time after a double deviation (e.g. after 15 or 30 days) leads to a higher attribution of competence than a promise communicated shortly after the double deviation (e.g. immediately or after two days), which, in turn, leads to more effectiveness in recovering trust.

### Overview of the studies

Two experimental studies were designed to test the hypotheses. The pilot study provides initial insights about whether people prefer to receive apologies after a shorter time and receive promises after a longer time following the double deviation. It adopts different service contexts, diverse types of failures (e.g. no internet signal, a reserved table unavailable and a camera delivered after the deadline) and double deviation situations (i.e. there was a consumer complaint and the company's representative did not adequately solve the problem) to check whether people's preferences are similar across these different scenarios. However, the pilot study does not address *H1* and *H2* directly, because it does not measure customer trust. Study 1 tests the effect of the recovery tactic according to timing on trust and on attributions of integrity and competence as the mechanism for this effect. Study 2 replicates the findings in a different double deviation situation whilst investigating apologies and promises made immediately after the double deviation, as well as the effects of using both recovery tactics together.

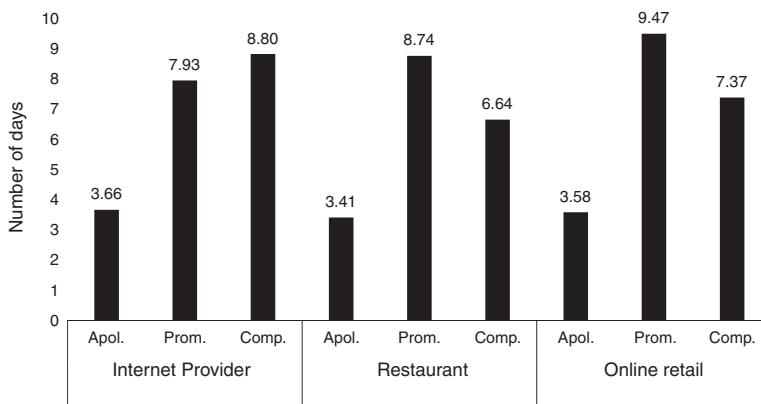
#### *Pilot study*

*Design and participants.* A total of 148 participants (58 per cent women,  $M_{\text{age}} = 33.24$ ,  $SD_{\text{age}} = 9.79$ ) were recruited through Facebook or by an e-mail sent to the authors' friends and acquaintances. Participants were randomly assigned to one of three double deviation scenarios in different service contexts: an internet service provider, a restaurant and an online retailer.

In the internet service provider setting, participants ( $n = 44$ ) were asked to imagine that they had no internet signal. After complaining to the service provider, the customer was informed that the internet signal would not be re-established until the next day. The customer asked the internet provider to solve the problem sooner, but the frontline employee was unsuccessful in doing so. In the restaurant setting, participants ( $n = 42$ ) were asked to imagine that a friend had made a reservation at a restaurant, but his table was unavailable even though he arrived on time. This friend complained to the manager, who was not able to arrange another table for him. In the online retail setting, participants ( $n = 62$ ) read a narrative about a man named Peter who had purchased a camera on a website. The camera was scheduled to be delivered before he left on vacation, yet the camera was delivered too late (service failure). He called customer service to request that they fix the situation. Despite customer service's attempt to send the camera on time, a delay occurred, and the camera was delivered after Peter's vacation trip. All scenarios are presented in Appendix 1.

*Measures.* After reading one of the three double deviation descriptions, the participants answered three questions about timing preferences on a sliding scale ranging from 1 to 90 days. Respondents rated the acceptable time for three trust recovery tactics: an apology, financial compensation (a discount on the next invoice or purchase) and a promise. The financial compensation tactic was introduced only as a distraction so that participants would not assume that the focus was the comparison between apology and promise.

*Results.* Figure 1 presents the findings of the pilot study. Three separate repeated measures ANOVA with a Greenhouse–Geisser correction were conducted, one for each setting.



Trust recovery tactics after double deviation

**Figure 1.** Acceptable time for each context

In the internet service provider context, the results showed that the acceptable time for an apology ( $M=3.66$  days), promise ( $M=7.93$  days), and financial compensation ( $M=8.80$  days) was significantly different ( $F(1.73, 74.16) = 9.385, p < 0.001$ ). *Post hoc* tests using the Bonferroni correction revealed that the acceptable time for an apology was significantly shorter than the acceptable time for a promise ( $p < 0.01$ ) and financial compensation ( $p < 0.001$ ). There was no significant difference between a promise and financial compensation ( $p > 0.10$ ).

Similarly, in the restaurant context, the mean scores for acceptable times for apologies, financial compensation, and promises were significantly different ( $F(1.61, 66.19) = 7.500, p < 0.01$ ). Participants indicated that the acceptable time for an apology ( $M=3.41$  days) was shorter than the acceptable time for a promise ( $M=8.74, p < 0.01$ ) and financial compensation ( $M=6.64, p = 0.05$ ). There was no significant difference between a promise and financial compensation ( $p > 0.10$ ).

In the online retail context, as with the other two contexts, the acceptable times for apologies, compensation and promises were significantly different ( $F(1.47, 89.45) = 10.548, p < 0.001$ ). Participants indicated that the acceptable time for an apology ( $M=3.58$  days) was shorter than the acceptable time for a promise ( $M=9.47, p < 0.01$ ) or financial compensation ( $M=7.37, p < 0.01$ ). There was no significant difference between a promise and financial compensation ( $p > 0.10$ ).

*Discussion.* The results of this pilot study indicate that people think service providers should apologize sooner than they should make a promise. This is initial evidence that service providers could and should take more time to make a promise than to apologize. Surprisingly, customers grant service provider little time to thoroughly investigate the root cause of the failure and formulate process improvements. The next study further investigated timing and tested the hypotheses on the effect of trust recovery tactics according to timing after a double deviation ( $H1$  and  $H2$ ), as well as the mediating role of integrity and competence attributions ( $H3$  and  $H4$ ).

### Study 1

*Design and participants.* A total of 139 participants (60 per cent women,  $M_{\text{age}} = 33.86, SD_{\text{age}} = 13.88$ ) took part in a 2 (trust recovery tactic: promise; apology)  $\times$  2 (length of time: 2 and 30 days) with a control group (no recovery tactic) between-subjects experimental design. Participants were recruited from students and employees of a financial institution and were randomly assigned to one of the four conditions. The length of time was verified by a

pre-test in which 132 subjects indicated what they considered a short time and a long time to receive a letter from the hotel about a failed recovery that occurred during a prior visit. The extreme answers (i.e. 2 and 30 days) were used in the experiment.

Participants were asked to read a scenario describing a failed recovery in a hotel context. There were two main reasons for selecting a hotel context. First, service failures are common in hotels (Smith and Bolton, 2002), increasing the realism of the scenarios. Second, customers need to provide personal information prior to the service, making it plausible that the company could contact them after the failed recovery. Moreover, the hotel context is different from the ones tested in the pilot study (restaurant, internet provider and online retail), which increases the external validity of the findings.

The scenario presented a situation in which a customer has planned an important business trip and arrives at the hotel after a five-hour flight. The customer goes to the reception desk one hour after the beginning of check-in time, only to hear that the room is not yet available. The customer is asked to come back two hours later, when the room will be available. After receiving this information, the customer complains to the hotel desk clerk and asks him to solve the failure. The hotel employee verifies some information in the computer and informs the customer that nothing can be done. The customer must wait for two hours before being able to enter the room. A pre-test involving 77 participants from Mechanical Turk was conducted to verify whether they perceived this scenario as a double deviation rather than a single deviation. The participants were asked whether they have complained to the company and the extent to which the frontline employee has resolved the problem following the complaint, both on a seven-point Likert scale. The respondents perceived the scenario as involving a complaint about a service failure ( $M = 6.35$ ) that was not recovered appropriately ( $M = 1.79$ ). Therefore, they perceived that they were evaluating double deviation situations[1].

It is important to note that the double deviation scenario does not indicate whether the violation was based on competence or integrity, since the type of violation could interfere with the effectiveness of the trust recovery tactic (Basso and Pizzutti, 2016). The purpose of omitting the type of violation was to isolate the effect of time and its interaction with trust recovery tactics. After reading the double deviation scenario, the participants were randomly assigned to one of the three trust recovery tactics. To manipulate the trust recovery tactic, participants were informed that the customer received a letter from the hotel. The letter not only thanked them for their stay, but also acknowledged that immediate occupancy of the room was not possible because of a failure by the hotel. In the apology condition, the hotel took full responsibility for the failure and expressed a sincere apology for the failure that the customer had experienced. In the promise condition, the hotel communicated that it had modified its operational procedures to improve their customer service. Thus, failures such as the one the customer experienced will not be repeated in the future. Finally, in the control condition, none of these actions were taken. The time between the occurrence of the double deviation and the insertion of the trust recovery tactic was manipulated by telling participants that the customer received the letter 2 (short time) or 30 (long time) days after the customer's stay at the hotel.

*Measures.* Trust was measured using a four-item seven-point semantic differential scale adopted from Sirdeshmukh *et al.* (2002;  $\alpha = 0.88$ ). Attributions of integrity ( $\alpha = 0.93$ ) and competence ( $\alpha = 0.89$ ) were measured using a six-item seven-point Likert scale (three items for each attribution) adopted from Kim *et al.* (2004). A nominal variable was used to verify the manipulation of the trust recovery tactic. The participants had to choose the content of the letter sent by the hotel (apology, promise or none). A seven-point bipolar single-item measure was used to assess the timing manipulation (the time between the end of the hotel stay and receipt of the letter was short/long). Finally, scenario realism was measured using a

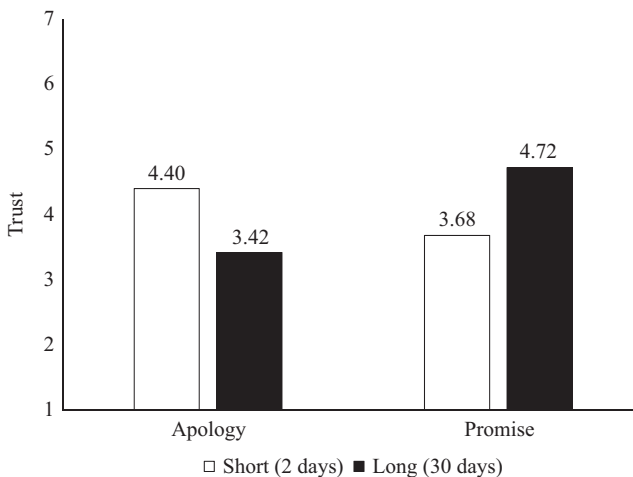
seven-point Likert scale at the end of the questionnaire (the situation described in the scenario is realistic). Several control variables were also measured; none of these variables influenced the results[2].

**Results.** Manipulation checks. The manipulations worked as intended. When assigned to no recovery tactic, 85.1 per cent of the participants stated that the hotel had not given an apology or a promise, while 83.0 per cent of the participants assigned to the apology stated that the hotel had given an apology, and 86.7 per cent of the individuals assigned to the promise reported that the hotel had promised that the failures would not occur again. The length of time was also manipulated successfully. The participants who were assigned to a 2-day distance ( $M=2.30$ ) perceived a shorter time than the participants who were assigned to a 30-day distance ( $M=5.90$ ,  $F(1, 137)=139.592$ ,  $p < 0.001$ ). Finally, the respondents rated the scenarios as realistic ( $M=5.00$ ). The mean realism scores did not differ across time conditions ( $F(1, 133)=1.149$ ,  $p=0.286$ ), among trust recovery tactic conditions ( $F(2, 133)=0.997$ ,  $p=0.372$ ) or among the interactions between time and the trust recovery tactic conditions ( $F(2, 133)=0.124$ ,  $p=0.883$ ).

**Hypotheses testing.** The trust recovery tactics had a significant effect on trust ( $F(2, 136)=6.434$ ,  $p < 0.01$ ). Participants assigned to the no recovery tactic condition ( $M=3.05$ ) presented a lower level of trust in the hotel than participants assigned to the promise ( $M=4.19$ ,  $p < 0.01$ ) or the apology ( $M=3.93$ ,  $p < 0.01$ ) conditions. The control condition was excluded from the analysis to test the effect of the tactics on trust according to timing. The analysis reveals nonsignificant main effects on trust for the trust recovery tactics ( $F(1, 88)=0.814$ ,  $p=0.36$ ), and a nonsignificant effect for the length of time manipulations ( $F(1, 88)=0.009$ ,  $p=0.92$ ). The interaction effect between variables is significant ( $F(1, 88)=9.856$ ,  $p < 0.01$ ). As shown in Figure 2, customers receiving a promise after a shorter time ( $M=3.68$ ) displayed lower levels of trust than customers receiving a promise after a longer time ( $M=4.72$ ,  $F(1, 88)=5.114$ ,  $p < 0.05$ ). Conversely, customers receiving an apology after a shorter time ( $M=4.40$ ) displayed higher levels of trust than customers receiving an apology after the longer time ( $M=3.42$ ,  $F(1, 88)=4.743$ ,  $p < 0.05$ ). These results support both *H1* and *H2*.

Regression-based moderated mediation analyses using 5,000 bootstraps (Hayes, 2013, process model 7) tested *H3* and *H4*. The analyses first examined whether the effect of receiving an apology shortly after a double deviation vs sometime after the double deviation

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deviation



**Figure 2.** Interaction between length of time after the double deviation and trust recovery tactics (study 1)

was mediated by the attribution of integrity. For this first analysis (which tests *H3*), only the subset of respondents who read a situation with apology was used. The path between the time (coded as 0 = short and 1 = long time) and the attribution of integrity was significant ( $a = -0.49, t = -2.17, p < 0.05$ ), as was the path between the attribution of integrity and trust ( $b = 0.73, t = 6.60, p < 0.001$ ). The indirect effect of time on trust through the attribution of integrity was significant ( $a \times b = -0.36$ ), since the confidence interval (95% through 5,000 resamples) did not include 0  $[-0.71 \text{ to } -0.03]$ . The direct effect of time on trust was not significant ( $c' = -0.12, t = -0.70, p = 0.482$ ), showing that there was a full mediation. These findings support *H3*.

To test whether receiving a promise after a longer time (vs a shorter time) following a double deviation led to higher perceptions of trust because it signalled more competence (*H4*), the same parameters used to test *H3* were used. For this analysis, only the subset of respondents who read a situation with promise was used. The significant paths between the time and attribution of competence ( $a = 0.60, t = 2.65, p < 0.05$ ) and between the attribution of competence and trust ( $b = 0.69, t = 6.89, p < 0.001$ ) suggest the plausibility of an indirect effect. The indirect effect of time on trust through the attribution of competence was significant ( $a \times b = 0.41$ ), since the 95% confidence interval did not include 0  $[0.10\text{--}0.85]$ . Moreover, the direct effect of time on trust became not significant ( $c' = -0.10, t = 0.63, p = 0.529$ ), suggesting full mediation. These findings support *H4*.

As a robustness check, the authors tested the extent to which an apology (a promise) influenced customers' attributions of competence (integrity). When the apology was the recovery tactic, the time did not influence the attribution of competence ( $a = -0.05, t = -0.33, p = 0.742$ ). Hence, the attribution of competence appears to be the mechanism that explains only the effect of promise on trust. Likewise, when the promise was the recovery tactic, time did not influence the attribution of integrity ( $a = 0.27, t = 1.06, p = 0.290$ ). Based on this, the attribution of integrity was the mechanism that explained only the effect of apology on trust.

*Discussion.* The findings support the idea that offering an apology is more effective in recovering trust after a shorter time, whereas a promise is more effective in recovering trust after a longer time. Moreover, the findings reveal that the effect of recovery tactics according to timing is mediated by customers' attribution of competence to the company for promises and by customers' attribution of integrity for apologies. These findings provide initial support for the hypotheses.

One of the limitations of this study is that trust was measured only after the adoption of the trust recovery tactic, making it impossible to assess the level of change in trust before and after the trust recovery tactic. Moreover, Study 1 does not examine the combined effects of an apology and a promise across different moments of communication. Study 2 investigates the effect of the recovery tactics according to timing by using a different design that has three different times for the recovery (immediate, shortly after the double deviation and long after the double deviation), combining the use of apology and promise together[3].

### Study 2

*Design and participants.* A total of 338 participants (53.8 per cent male,  $M_{\text{age}} = 35.00, SD_{\text{age}} = 10.34$ ) took part in a 3 (apology, promise, apology plus promise) by 3 (length of time: immediate, 2 days, 15 days) between-subjects experimental design. A control group with no trust recovery tactic was also used. The participants were recruited from Mechanical Turk and were randomly assigned to the conditions.

The participants were asked to read a scenario describing a failed recovery in a restaurant context. The double deviation scenario presented a situation in which a customer invites some friends to a restaurant and makes a reservation. Upon their arrival, the waiter

confirms the reservation but informs them that the table is occupied and that they have to wait for about 60 min. After the customer complains, the receptionist checks the computer and offers him/her a table outside. However, the customer perceives that no customer is sitting there because of the cold, which makes the area very unpleasant. Then, the customer and his/her friends decide to go to another restaurant. The idea here was to present a complaint handling situation, in which the company offered an alternative in an attempt to solve the problem. However, this solution is considered unsatisfactory by the customer, thus configuring a double deviation situation.

After reading the double deviation scenario, the participants were randomly assigned to one of the four trust recovery tactic conditions (no trust recovery, apology only, promise only, apology and promise). For the manipulation of the trust recovery tactic, the participants were informed that the customer was contacted by the manager before the customer left the restaurant or that he received an e-mail from the restaurant either after 2 days (short period) or 15 days (long period). The 15-day period was used based on the results of the pilot study for the restaurant scenario. It refers to the average acceptable time for a trust recovery tactic plus the average standard deviation for both tactics (i.e. apology and promise). On this basis, the manipulation of the trust recovery tactic was different from that in previous studies, as the possibility of considering the effects of apology and promise simultaneously is presented.

*Measures.* Customer trust was measured using the same scale used in previous studies. Trust was measured twice: after the double deviation event but before the trust recovery tactic ( $\text{trust}_{\text{before}}$ ,  $\alpha = 0.94$ ) and after the trust recovery tactic ( $\text{trust}_{\text{after}}$ ,  $\alpha = 0.94$ ). Trust variation ( $\Delta_{\text{trust}}$ ) was calculated based on these two trust measures (i.e.  $\text{trust}_{\text{after}}$  minus  $\text{trust}_{\text{before}}$ ). Scenario realism was measured using the same item as in Study 1.

*Results.* Manipulation check. The trust recovery tactic was correctly perceived by the participants (> 76 per cent of the participants correctly recognized the recovery tactic to which they were exposed)[4]. The participants assigned to the immediate time condition ( $M = 2.48$ ) perceived the time period as shorter than the participants assigned to 2 days ( $M = 3.78$ ) and 15 days ( $M = 5.93$ ,  $F(2, 294) = 97.150$ ;  $p < 0.001$ ) did. A *post hoc* test supports that all time conditions were perceived significantly different from one another ( $p < 0.001$ ).

The participants considered the scenarios realistic ( $M = 5.82$ ), and their perception did not differ among the time conditions ( $F(2, 288) = 0.274$ ,  $p = 0.760$ ) and trust recovery tactic conditions ( $F(2, 288) = 0.278$ ,  $p = 0.757$ ).

Hypotheses testing. A repeated measures ANOVA was used to test the effects of time and tactics on trust. A significant interaction effect of time and tactics on recovered trust ( $F(4, 288) = 16.009$ ,  $p < 0.01$ ) has been observed. A comparison between the variation of trust recovered by a promise along the time conditions reveals a difference in the amount of trust recovered ( $F(2, 97) = 12.498$ ,  $p < 0.001$ ). Specifically, post-hoc analyses reveal that a promise made 15 days after the double deviation ( $\Delta_{\text{trust}} = 1.50$ ) has more potential to recover trust than a promise made after two days ( $\Delta_{\text{trust}} = 0.67$ ;  $p < 0.001$ ) or immediately after the double deviation ( $\Delta_{\text{trust}} = 0.27$ ;  $p < 0.001$ ). No difference between a shorter time (2 days) and immediate time (15 days,  $p = 0.111$ ) has been observed[5].

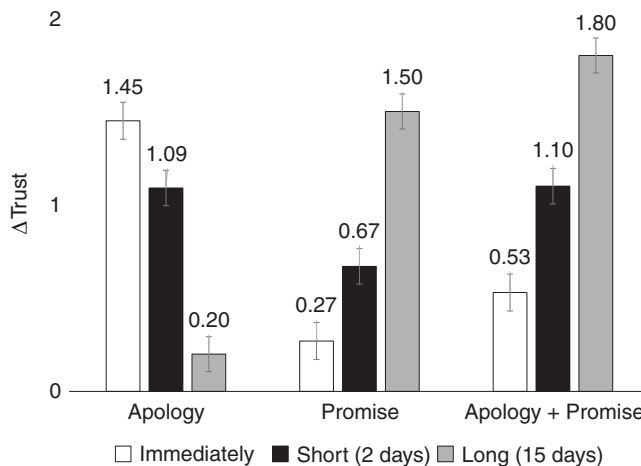
A comparison between the variation of trust recovered by an apology along the time conditions reveals a difference in the amount of trust recovered ( $F(2, 92) = 16.131$ ,  $p < 0.001$ ). Specifically, *post hoc* analyses revealed that an apology received immediately after the double deviation ( $\Delta_{\text{trust}} = 1.45$ ) or after 2 days ( $\Delta_{\text{trust}} = 1.09$ ) has more potential to recover trust than an apology received after 15 days ( $\Delta_{\text{trust}} = 0.02$ ;  $p < 0.001$ ). No difference between immediate apology and apology after two days ( $p = 0.153$ ) has been observed[6].

Although not hypothesized, the study design allows us to examine the effectiveness of an apology and a promise when they are offered simultaneously. A comparison between the

variation of trust recovered by an apology and a promise along the time conditions reveals a difference in the amount of trust recovered ( $F(2, 99) = 9.024, p < 0.001$ ). Specifically, post-hoc analyses revealed that an apology plus a promise made after 15 days ( $\Delta_{\text{trust}} = 1.80$ ) has more potential to recover trust than that made after 2 days ( $\Delta_{\text{trust}} = 1.10; p < 0.05$ ) or immediately after the double deviation ( $\Delta_{\text{trust}} = 0.53; p < 0.001$ ). No difference between two days and immediately after the double deviation ( $p = 0.064$ ) has been observed. These results are presented in Figure 3 and provide additional support to *H1* and *H2*.

The findings for each trust recovery tactic were also compared with the baseline: the trust measured in the control group without the presence of a trust recovery tactic. For an apology, a difference between time conditions and the control ( $F(3, 132) = 4.306, p < 0.01$ ) has been observed. Offering an apology immediately after the double deviation ( $p < 0.01$ ) or two days after it leads to higher levels of trust than the control condition. When offered 15 days after the double deviation, an apology no longer results in higher levels of trust than in the control condition ( $p = 0.398$ ). For promise, a difference also exists between time conditions and the control condition ( $F(3, 136) = 5.612, p < 0.001$ ). Specifically, offering a promise 15 days after the double deviation ( $p < 0.001$ ) or 2 days after it ( $p < 0.01$ ) leads to higher levels of trust than in the control condition. When offered immediately after the double deviation, a promise does not result in higher levels of trust than in the control condition ( $p = 0.685$ ). Finally, the results reveal a significant difference between trust after an apology plus promise and the control condition ( $F(3, 138) = 7.112, p < 0.001$ ). Specifically, offering both an apology and a promise immediately after the double deviation ( $p < 0.05$ ), two days after it ( $p < 0.05$ ) or 15 days after it ( $p < 0.001$ ) leads to higher levels of trust, compared with the control condition.

*Discussion.* The results from Study 2 support the notion that an apology sooner after the double deviation is better than an apology later after the double deviation. Interestingly, offering an apology immediately or after two days does not lead to significant differences in the amount of trust recovered. This finding can inform the design of trust recovery tactics. Similar to a single deviation situation (Hogreve *et al.*, 2017), customers seem to have a recovery time zone of tolerance for an apology following a double deviation. Similar to Study 1, offering a promise at a later time after the double deviation is more effective than offering a promise immediately or after two days. The same observation holds for the combined effects of apology and promise. The findings reveal that combining both tactics



**Figure 3.** Interaction between length of time after the double deviation and trust recovery tactics (study 2)

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results in a higher level of recovered trust in 15 days (vs 2 days or immediately). The nature of the promise might explain this finding. As proposed in this study, the company needs to identify the root cause of the problem and improve the process before a promise of non-recurrence can be made (Van Vaerenbergh *et al.*, 2012). This process requires time, so the combination of apology and promise is more effective at a later time.

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double  
deviation

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## General discussion

### *Theoretical implications*

A double deviation is a double failure to meet a customer's initial expectations of a service provider and increases the breach of trust caused by the initial failure. Despite a double deviation's prevalence in practice, few studies in marketing have explored the possibility of restoring customer trust (e.g. Xie and Peng, 2009; van Laer and de Ruyter, 2010). The results of one pilot study and two experimental studies contribute to a coherent picture, in which the effectiveness of a trust recovery tactic depends on the timing of its implementation.

This paper contributes to the service recovery literature in two main ways. First, this paper outlines the role of time as an important boundary condition to a trust recovery tactic's effectiveness. Prior research suggests that offering an apology and offering a promise that the failure will not recur in the future are the most effective trust recovery tactics (Basso and Pizzutti, 2016). This paper, however, suggests that their effectiveness depends on the time at which they are communicated. In other words, effective trust recovery is not just a matter of what to do, such as apologizing and promising better future outcomes (Basso and Pizzutti, 2016), but it is also a matter of when to do it. The findings suggest that trust recovery tactics should be used as soon as possible in the case of apologizing, but more time should be taken promising that the failure will not happen again.

Taking a broader perspective, this research complements recent efforts to understand the role of time in service recovery. Zhou *et al.* (2014) argued that delaying service recovery might make sense in service contexts where the production and the consumption of the service are separate (e.g. Webcast English training programme). Hogreve *et al.* (2017) showed that customers have a recovery time zone of tolerance for organizational responses to a single deviation: Customers accept that organizations may not respond right away but start to increase compensation expectations if the recovery time is too long. Previous research focused on understanding the role of time following a single deviation (e.g. Zhou *et al.*, 2014; Hogreve *et al.*, 2017); this study focuses on understanding the role of time following a double deviation. The results also show that the role of time might depend on the type of response option. While some response options (e.g. an apology) require response after a short length of time, other response options are more effective after a longer length of time (e.g. a promise). These findings further the notion that service recovery researchers should carefully consider the role of time when researching service recovery (Goldstein *et al.*, 2002; Hogreve *et al.*, 2017; Prasongsukarn and Patterson, 2012; Zhou *et al.*, 2014).

Second, this research identifies attributions of competence and integrity as underlying processes for these effects. Customers' attributions of competence and integrity to a company correlate with increased customer trust (Mayer *et al.*, 1995; Schoorman *et al.*, 2007; Sirdeshmukh *et al.*, 2002). This paper shows that the effect of the trust recovery tactics on customers' attributions of integrity and competence also depends on the time at which these trust recovery tactics are communicated. A timely apology (promise) increases integrity (competence) attribution. These findings underscore the importance of understanding the role of time in customers' attribution formation in a trust recovery context. They also demonstrate the value of applying the attribution theory to service recovery contexts rather than the more typical service failure situations (Van Vaerenbergh *et al.*, 2014).



*Managerial implications*

From a managerial perspective, the main implication is that service organizations need to apologize first and make promises later to recover customer trust. However, the current results suggest caution in adopting both tactics at the same time due to the timing of each tactic as a boundary condition. Study 2 shows that when apologies and promises are offered together, the later they are offered (i.e. 15 days after the double deviation) the more that they recover trust, compared with when they are offered at a shorter (2 days) and an immediate time. This result reinforces the idea that promising a solution too soon may be worse than waiting for sometime to make such a promise.

In order to optimize the effect of an apology, frontline employees should be trained to apologize as soon as possible. However, apologies should not be automatic. The literature shows the importance of being sincere in service recovery and trust recovery situations (Gruber, 2011; Tomlinson *et al.*, 2004). To guarantee a sincere apology, empathy should be encouraged among frontline employees. Moreover, detecting if a double deviation has occurred in the real world may not always be possible. Managers should check daily (or at least twice a week) whether service failures have occurred and whether they were successfully recovered. This could be done through a simple form filled out by service employees to record the occurrence of service failures or allowing employees to ask explicitly whether the complaint was handled to the customer's satisfaction. In addition, it is recommended that managers carefully monitor social media to identify double deviations. Research shows that customers vent their dissatisfaction online when their complaints have not been addressed appropriately (Grégoire *et al.*, 2015). Another way to identify possible weak links in the service offer is through service blueprinting (Bitner *et al.*, 2008). As soon as managers identify a failed service recovery, they should apologize to the customer so that the service organization may be perceived as one of the strong moral principles.

Moreover, managers and frontline employees should be trained to investigate the cause of service failures to enable service providers to fix this cause before promising that it will not happen again. Service providers may adopt Six Sigma to discover the causes of failures and solve them (Antony, 2006). Service providers may also adopt the benchmarking method to investigate how similar causes of failures are being fixed by other service providers (Chen, 1998). A service provider can only promise that a failure will not happen again after identifying its cause and solving it. Ideally, the service organization should make this promise within a longer length of time to evoke the image of a competent organization. Therefore, managers should resist the temptation of making a quick (and probably empty) promise just because they think that this is what customers want to hear. In fact, complaining customers want to be treated in an authentic and competent manner (Gruber, 2011), which is only possible if promises are made after a reasonable time. However, it is important not to wait too long to make such a promise, because this would jeopardize the effectiveness of the tactic.

*Limitations and suggestions for future studies*

Despite the lengths of time used (immediately after the double deviation, 2, 15 and 30 days), it is important to highlight that the intention was not to point out the right timing of a trust recovery option, but rather to investigate when – in terms of in shorter or longer length of time after a double deviation – customers prefer to receive an apology or a promise of non-recurrence of a failure. This idea of sooner vs later is also reflected in the theoretical rationale of the paper. Future studies could investigate the specific timing required to maximize the efficacy of each trust recovery tactic, taking into account different variables such as the type of service, the type of violation, the severity of the failure, and the customers' individual characteristics.

Although perceived failure severity had no controlling effect on trust in Study 1 ( $M = 5.79$ ,  $F(1, 87) = 0.002$ ,  $p = 0.96$ ), the current research did not manipulate failure severity

to further examine whether a minor vs a severe service failure could impact the proposed relationships. For instance, a severe service failure may require a more immediate apology than a minor service failure. Moreover, a severe failure may be perceived as one that demands more time to be fixed; thus, severe failures may require a longer length of time to make a promise than minor failures.

In this study, only two trust recovery tactics were explored. Other tactics (e.g. financial compensation and denial) and the combined effect of these tactics to determine if the effect of these two trust recovery tactics perform better together or isolated may be addressed in the future. Finally, ways of handling time are related to a culture's basic value system and reveal fundamental differences among societies (Friedman, 1990). In individualistic cultures that exhibit a monochronic approach to time, people place stronger emphasis on promptness and punctuality than in collectivistic cultures (Hall and Hall, 1987). In addition, research shows that people may evaluate recovery tactics like an apology differently depending on their culture background (Sengupta *et al.*, 2018). Future research could explore these cultural differences by examining, for instance, if individualistic people – because of their greater concerns about time – place more value on the promptness of a company's actions after a double deviation than do collectivistic people.

## Notes

1. The authors thank reviewer 2 for suggesting the inclusion of more data on whether the described situation referred to a double deviation.
2. The number of times that each subject had stayed in hotels during the previous year ( $M=3.63$  times,  $F(1, 67)=2.182$ ,  $p=0.14$ ), the amount of money spent on hotel service in a year ( $M=\$365.00$ ,  $F(1, 65)=0.967$ ,  $p=0.32$ ), whether the participant had complained to hotels (has not 69.6 per cent,  $F(1, 84)=0.003$ ,  $p=0.95$ ), the participant's main reason for staying in hotels (75.9 per cent tourism,  $F(1, 83)=0.151$ ,  $p=0.69$ ) and the type of participant (student or non-student) ( $F(1, 87)=1.652$ ,  $p=0.20$ ) were also included as covariates. These variables presented no significant controlling effect on trust. Likewise, disposition to trust ( $\alpha=0.63$ ,  $M=5.09$ ,  $F(1, 87)=0.011$ ,  $p=0.91$ ), general satisfaction ( $\alpha=0.87$ ,  $M=4.84$ ,  $F(1, 87)=0.003$ ,  $p=0.95$ ) and the perceived severity of the failure ( $\alpha=0.75$ ,  $M=5.79$ ,  $F(1, 87)=0.002$ ,  $p=0.96$ ) also presented no controlling effect on trust.
3. The authors are grateful to reviewer 2 for his/her suggestion to test the effect of the trust recovery tactics immediately after the failed recovery, as well as to test the combined effect of apology and promise across different time lags.
4. The hypotheses were also tested by using only those respondents who correctly perceived the trust recovery tactic. The results also support the hypotheses.
5. Similar findings were obtained when a repeated measures ANOVA was used rather than difference scores.
6. Similar findings were obtained when a repeated measures ANOVA was used rather than difference scores.

## References

- Adams, J.S. (1963), "Toward an understanding of inequity", *Journal of Abnormal Psychology*, Vol. 67 No. 5, pp. 422-436.
- Antony, J. (2006), "Six sigma for service processes", *Business Process Management Journal*, Vol. 12 No. 2, pp. 234-248.
- Basso, K. and Pizzutti, C. (2016), "Trust recovery following a double deviation", *Journal of Service Research*, Vol. 19 No. 2, pp. 209-223.

- Bitner, M.J., Booms, B.H. and Tetreault, M.S. (1990), "The service encounter: diagnosing favorable and unfavorable incidents", *Journal of Marketing*, Vol. 54 No. 1, pp. 71-84.
- Bitner, M.J., Ostrom, A.L. and Morgan, F.N. (2008), "Service blueprinting: a practical technique for service innovation", *California Management Review*, Vol. 50 No. 3, pp. 66-94.
- Calder, B.J. and Burnkrant, R.E. (1977), "Interpersonal influence on consumer behavior: an attribution theory approach", *Journal of Consumer Research*, Vol. 4 No. 1, pp. 29-38.
- Casado-Díaz, A.B. and Nicolau-Gonzálbez, J.L. (2009), "Explaining consumer complaining behaviour in double deviation scenarios: the banking services", *The Service Industries Journal*, Vol. 29 No. 12, pp. 1659-1668.
- Chen, W.H. (1998), "Benchmarking quality goals in service systems", *Journal of Services Marketing*, Vol. 12 No. 2, pp. 113-128.
- Customer Care Measurement and Consulting (2017), "2017 National customer rage survey", Customer Care Management and Consulting, Alexandria, VA, available at: [www.customercaresmc.com/insights/2017-us-customer-rage-study/](http://www.customercaresmc.com/insights/2017-us-customer-rage-study/) (accessed December 21, 2017).
- Davidow, M. (2003), "Organizational responses to customer complaints: what works and what doesn't", *Journal of Service Research*, Vol. 5 No. 3, pp. 225-250.
- De Ruyter, K. and Wetzels, M.G. (2000), "The impact of perceived listening behavior in voice-to-voice service encounters", *Journal of Service Research*, Vol. 2 No. 3, pp. 276-284.
- Edvardsson, B., Tronvoll, B. and Höykinpuro, R. (2011), "Complex service recovery processes: how to avoid triple deviation", *Managing Service Quality: An International Journal*, Vol. 21 No. 4, pp. 331-349.
- Festjens, A. and Janiszewski, C. (2015), "The value of time", *Journal of Consumer Research*, Vol. 42 No. 2, pp. 178-195.
- Frantz, C.M. and Bennisson, C. (2005), "Better late than early: the influence of timing on apology effectiveness", *Journal of Experimental Social Psychology*, Vol. 41 No. 2, pp. 201-207.
- Friedman, W. (1990), *About Time: Inventing the Fourth Dimension*, The MIT Press, Cambridge.
- Gelbrich, K. and Roschk, H. (2011), "A meta-analysis of organizational complaint handling and customer responses", *Journal of Service Research*, Vol. 14 No. 1, pp. 24-43.
- Goldstein, S.M., Johnston, R., Duffy, J. and Rao, J. (2002), "The service concept: the missing link in service design research?", *Journal of Operations Management*, Vol. 20 No. 1, pp. 121-134.
- Grégoire, Y., Laufer, D. and Tripp, T.M. (2010), "A comprehensive model of customer direct and indirect revenge: understanding the effects of perceived greed and customer power", *Journal of the Academy of Marketing Science*, Vol. 38 No. 6, pp. 738-758.
- Grégoire, Y., Salle, A. and Tripp, T.M. (2015), "Managing social media crises with your customers: the good, the bad, and the ugly", *Business Horizons*, Vol. 58 No. 2, pp. 173-182.
- Grégoire, Y., Tripp, T.M. and Legoux, R. (2009), "When customer love turns into lasting hate: the effects of relationship strength and time on customer revenge and avoidance", *Journal of Marketing*, Vol. 73 No. 6, pp. 18-32.
- Gruber, T. (2011), "I want to believe they really care: how complaining customers want to be treated by frontline employee", *Journal of Service Management*, Vol. 22 No. 1, pp. 85-110.
- Hall, E.T. and Hall, M.R. (1987), *Hidden Differences: Doing Business with the Japanese*, Anchor Press-Doubleday, Garden City, NY.
- Hayes, A.F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression Based Approach*, Guilford Press, New York, NY.
- Hazée, S., Van Vaerenbergh, Y. and Armiroto, V. (2017), "Co-creating service recovery after service failure: the role of brand equity", *Journal of Business Research*, Vol. 74 No. 1, pp. 101-109.
- Hogreve, J., Bilstein, N. and Mandl, L. (2017), "Unveiling the recovery time zone of tolerance: when time matters in service recovery", *Journal of the Academy of Marketing Science*, Vol. 45 No. 6, pp. 866-883.
- Johnston, R. and Fern, A. (1999), "Service recovery strategies for single and double deviation scenarios", *Service Industries Journal*, Vol. 19 No. 2, pp. 69-82.

- Joireman, J., Grégoire, Y., Devezer, B. and Tripp, T.M. (2013), "When do customers offer firms a 'second chance' following a double deviation? The impact of inferred firm motives on customer revenge and reconciliation", *Journal of Retailing*, Vol. 89 No. 3, pp. 315-337.
- Keaveney, S.M. (1995), "Customer switching behavior in service industries: an exploratory study", *Journal of Marketing*, Vol. 59 No. 2, pp. 71-82.
- Kelley, H.H. and Michela, J.L. (1980), "Attribution theory and research", *Annual Review of Psychology*, Vol. 31 No. 1, pp. 457-501.
- Kim, P.H., Ferrin, D.L., Copper, C.D. and Dirks, K.D. (2004), "Removing the shadow of suspicion: the effects of apology versus denial for repairing competence-versus integrity-based trust violations", *Journal of Applied Psychology*, Vol. 89 No. 1, pp. 104-118.
- La, S. and Choi, B. (2012), "The role of customer affection and trust in loyalty rebuilding after service failure and recovery", *Service Industries Journal*, Vol. 32 No. 1, pp. 105-125.
- Maxham III, J.G. and Netemeyer, R.G. (2002), "A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts", *Journal of Marketing*, Vol. 66 No. 4, pp. 57-71.
- Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995), "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20 No. 3, pp. 709-734.
- Michel, S., Bowen, D. and Johnston, R. (2009), "Why service recovery fails: tensions among customer, employee, and process perspectives", *Journal of Service Management*, Vol. 20 No. 2, pp. 253-273.
- Ohbuchi, K.I., Kameda, M. and Agarie, N. (1989), "Apology as aggression control: its role in mediating appraisal of and response to harm", *Journal of Personality and Social Psychology*, Vol. 56 No. 2, pp. 219-227.
- Prasongsukarn, K. and Patterson, P.G. (2012), "An extended service recovery model: the moderating impact of temporal sequence of events", *Journal of Services Marketing*, Vol. 26 No. 7, pp. 510-520.
- Schindler, P.L. and Thomas, C.C. (1993), "The structure of interpersonal trust in the workplace", *Psychological Reports*, Vol. 73 No. 2, pp. 563-573.
- Schoorman, F.D., Mayer, R.C. and Davis, J.H. (2007), "An integrative model of organizational trust: past, present, and future", *Academy of Management Review*, Vol. 32 No. 2, pp. 344-354.
- Schweitzer, M.E., Hershey, J.C. and Bradlow, E.T. (2006), "Promises and lies: restoring violated trust", *Organizational Behavior and Human Decision Processes*, Vol. 101 No. 1, pp. 1-19.
- Sembada, A., Tsarenko, Y. and Tojib, D. (2016), "The positive effects of customers' power on their behavioral responses after service failure", *Journal of Service Research*, Vol. 19 No. 3, pp. 337-351.
- Sengupta, S., Ray, D., Trendel, O. and Van Vaerenbergh, Y. (2018), "The effects of apologies for service failures in the global online retail", *International Journal of Electronic Commerce*, Vol. 22 No. 3, pp. 419-445.
- Singh, A., Taneja, A. and Mangalaraj, G. (2008), "Winning back trust in e-business", *39th Annual Meeting of the Decision Sciences Institute, Proceedings of a Meeting Held, Michigan State University, Baltimore, MD, 22-25 November*, pp. 1532-1537.
- Sirdeshmukh, D., Singh, J. and Sabol, B. (2002), "Consumer trust, value, and loyalty in relational exchanges", *Journal of Marketing*, Vol. 66 No. 1, pp. 15-37.
- Smith, A.K. and Bolton, R.N. (2002), "The effect of customers' emotional responses to service failures on their recovery effort evaluations and satisfaction judgments", *Journal of the Academy of Marketing Science*, Vol. 30 No. 1, pp. 5-23.
- Smith, A.K., Bolton, R.N. and Wagner, J. (1999), "A model of customer satisfaction with service encounter involving failure and recovery", *Journal of Marketing Research*, Vol. 36 No. 3, pp. 356-372.
- Surachartkumtonkon, J., McColl-Kennedy, J.R. and Patterson, P.G. (2015), "Unpacking customer rage elicitation: a dynamic model", *Journal of Service Research*, Vol. 18 No. 2, pp. 177-192.
- Tomlinson, E.C., Dineen, B.R. and Lewicki, R.J. (2004), "The road to reconciliation: antecedents of victim willingness to reconcile following a broken promise", *Journal of Management*, Vol. 30 No. 2, pp. 165-187.

- van Laer, T. and de Ruyter, K. (2010), "In stories we trust: how narrative apologies provide cover for competitive vulnerability after integrity-violating blog posts", *International Journal of Research in Marketing*, Vol. 27 No. 2, pp. 164-174.
- Van Vaerenbergh, Y. and Orsingher, C. (2016), "Service recovery: an integrative framework and research agenda", *Academy of Management Perspectives*, Vol. 30 No. 3, pp. 328-346.
- Van Vaerenbergh, Y., Larivière, B. and Vermeir, I. (2012), "The impact of process recovery communication on customer satisfaction, repurchase intentions, and word-of-mouth intentions", *Journal of Service Research*, Vol. 15 No. 3, pp. 262-279.
- Van Vaerenbergh, Y., Orsingher, C., Vermeir, I. and Larivière, B. (2014), "A meta-analysis of relationships linking service failure attributions to customer outcomes", *Journal of Service Research*, Vol. 17 No. 4, pp. 381-398.
- Wirtz, J. and Mattila, A.S. (2004), "Consumer responses to compensation, speed of recovery and apology after a service failure", *International Journal of Service Industry Management*, Vol. 15 No. 2, pp. 150-166.
- Xie, Y. and Peng, S. (2009), "How to repair customer trust after negative publicity: the roles of competence, integrity, benevolence, and forgiveness", *Psychology & Marketing*, Vol. 26 No. 7, pp. 572-589.
- Zhou, Y., Tsang, A.S.L., Huang, M. and Zhou, N. (2014), "Does delaying service-failure resolution ever make sense?", *Journal of Business Research*, Vol. 67 No. 2, pp. 159-166.

## Appendix 1

### Double deviation – internet provider (pilot study)

Imagine that you need access to the internet to finish some important work. You turn on the computer to start to work and realize that the internet is not working (there is no connection signal). You call your internet service provider and explain the situation. The customer service representative informs you that the signal will be re-established the next day at 11 a.m., but you must finish your work before then. You ask to speak to the manager and complain about the problem, asking him to find a way to re-establish the connection sooner than the scheduled time. The manager tells you that he will try to comply with your request, asking you to hold while he verifies some information in his system. After a few minutes, the manager tells you that they cannot do anything and that you must wait until the next day to have an internet signal. Since you cannot use your broadband internet, you take your cellphone and try to work using your mobile internet.

### Double deviation – restaurant (pilot study)

Imagine that a friend made a reservation at a restaurant to celebrate a special occasion. The reservation was for 8 p.m., and your friend arrived at the restaurant at 8 p.m. sharp. The receptionist verifies your friend's reservation but informs him that all the tables are occupied. The receptionist tells him that the waiting time for a table should be approximately 40min. Your friend asks to talk to the manager. He complains to the manager and asks him to do something about the situation. The manager says he will check whether there is something he can do. The manager walks through the restaurant and returns saying that there is no table available and that your friend must wait approximately 40min for a table. Your friend decides to go to another restaurant.

### Double deviation – online retail (pilot study)

Peter bought a camera through a webstore. Since the delivery time was seven working days, the camera should be delivered on time for Peter's vacation. Peter checked the status of his purchase daily. On the fourth working day, Peter noticed that the camera has not shipped yet. Peter calls the store, complains that the camera has not yet left the warehouse and asks the customer service representative to take measures to deliver the camera as soon as possible. The representative says he has requested the warehouse to send the camera to its destination immediately. The camera takes a few more days to leave the warehouse and is not delivered on time for Peter's trip.

Appendix 2

Trust recovery  
tactics after  
double  
deviation

Variable	Study 1	Study 2	Study 2
	Mean (SD)	– before	– After
<i>Trust</i> (Sirdeshmukh <i>et al.</i> , 2002)	3.71 (1.65)	2.17 (1.39)	3.12 (1.58)
You believe that the hotel/restaurant is...			
Very undependable/Very dependable	3.74 (1.83)	2.02 (1.49)	2.82 (1.66)
Very incompetent/Very competent	3.57 (1.89)	2.14 (1.46)	2.94 (1.68)
Of very low integrity/Of very high integrity	3.92 (1.87)	2.31 (1.56)	3.28 (1.71)
Very unresponsive to customers/Very responsive to customers	3.64 (2.02)	2.27 (1.54)	3.53 (1.79)
<i>Attribution of competence</i> (Kim <i>et al.</i> , 2004) (completely disagree/completely agree)	3.23 (1.50)	–	–
The restaurant employees are very capable of performing their job	3.17 (1.61)	–	–
The restaurant employees have much knowledge about the work that needs to be done	3.45 (1.73)	–	–
I feel very confident about the restaurant employees' skills	3.09 (1.65)	–	–
<i>Attribution of integrity</i> (Kim <i>et al.</i> , 2004) (completely disagree/completely agree)	3.42 (1.75)	–	–
I like the restaurant's values	3.38 (1.90)	–	–
Sound principles seem to guide the restaurant's behaviour	3.35 (1.80)	–	–
The restaurant has a great deal of integrity	3.53 (1.88)	–	–

Table A1.  
Measures

About the authors

Natalia Araujo Pacheco is Assistant Professor of Marketing at the IMED Business School, Faculdade Meridional – IMED, Brazil. Her research interests include service failures, causal attributions, co-production and consumer perceived control. Her research has been published in the *Journal of Retailing and Consumer Services*, *Australasian Marketing Journal*, *Brazilian Administration Review*, among others. Natalia Araujo Pacheco is the corresponding author and can be contacted at: natalia.a.pacheco@gmail.com

Cristiane Pizzutti is Professor of Marketing at the Federal University of Rio Grande do Sul, Brazil. Her research interests include consumer trust, persuasion and service recovery. She has published in journals such as the *Journal of Service Research*, *Journal of Services Marketing*, *International Journal of Electronic Commerce*, *European Journal of Marketing*, among others.

Kenny Basso is Professor of Marketing at the IMED Business School, Faculdade Meridional – IMED, Brazil. His research interests include services marketing, trust and consumer behaviour. He has papers published in the *Journal of Service Research*, *Journal of Services Marketing*, *Journal of Retailing and Consumer Services*, *International Journal of Bank Marketing*, *Australasian Marketing Journal* and *Journal of Product & Brand Management*.

Yves Van Vaerenbergh is Associate Professor of Marketing at the KU Leuven, Belgium. He received the PhD degree in Applied Economics from the Center for Service Intelligence at Ghent University. His research interests include service issues such as service failures, service recovery, pricing innovations and meta-analysis. His publications have appeared in *Academy of Management Perspectives*, *Journal of Service Research*, *International Journal of Electronic Commerce*, among others. He received several best-paper awards and best-reviewer awards from service journals, and serves on the editorial boards of the *Journal of Service Research*, *Journal of Business Research*, *Journal of Service Management* and *Journal of Service Theory and Practice*.

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