

# Influence of emotions displayed by employees during service recovery

## Influencia de las emociones mostradas por el empleado durante la recuperación del servicio

### 员工在服务补救期间所表现 出的情绪的影响

María Sicilia, M. Carmen Caro-Jiménez and Estela Fernández-Sabiote  
*University of Murcia, Murcia, Spain*

#### Abstract

**Purpose** – While research evidences how customers' emotions can influence their consumer experience, understanding of how employees' displayed emotions affect the customer service experience is more limited. Drawing on affect transfer theory, the authors test for the mediating role of attitude towards the employee, which is proposed to mediate the effect of employees' displayed emotion on customers' satisfaction with recovery. As service recovery entails a critical service experience in which emotions can easily rise, this paper aims to highlight the pivotal role of employee-displayed emotions during service recovery.

**Methodology** – A scenario-based experiment in the context of an airline service failure recovery (3 × 2 between-subjects design) manipulates frontline employees' emotions (anger vs happiness vs no specific emotion) and the quality of the solution (bad vs good).

**Findings** – Employees' displayed emotions directly affect attitude towards the employee and indirectly affect service recovery satisfaction. Moreover, attitude towards the employee is affected more by the employee's displayed emotion when the solution offered is bad compared to good.



**Practical implications** – Employees' emotions displayed during service recovery can enhance or damage service recovery strategies. Employees should control for negative emotions in the case of service failure, especially when unable to provide a good solution.

**Originality** – Emotions displayed by employees can influence the customer's service recovery evaluations. There is an interesting interaction between the quality of the solution and employees' displayed emotions. Additionally, the mantra of "service with a smile" may not be valid in the case of service recovery: rather, employees should avoid displaying negative emotions.

**Keywords** Employee, Happiness, Anger, Emotions, Service recovery, Affect transfer, Satisfaction, Attitudes

**Paper type** Research paper

## Resumen

**Propósito** – A pesar de que la literatura ha demostrado la importancia que tienen las emociones en los consumidores, se sabe poco acerca de cómo influyen las emociones de los empleados. Basándonos en la teoría de la transferencia de afecto, testamos el papel mediador de la actitud hacia el empleado. Ésta se propone como mediadora del efecto que tiene la emoción mostrada por el empleado en la satisfacción del cliente. Este trabajo resalta el papel fundamental de las emociones mostradas por el empleado durante la recuperación del servicio.

**Metodología** – Experimento (3x2 entre sujetos) basado en el fallo de una aerolínea. Se manipulan las emociones del empleado (enfado vs alegría vs ninguna emoción específica) y la calidad de la solución (mala vs buena).

**Resultados** – Las emociones mostradas por los empleados afectan directamente a la actitud hacia el empleado e indirectamente a la satisfacción con la recuperación del servicio. La actitud se ve más afectada por la emoción mostrada por el empleado cuando la solución ofrecida es mala.

**Implicaciones prácticas** – Las emociones mostradas por los empleados pueden contribuir o dañar las estrategias de recuperación del servicio. Los empleados deben controlar las emociones negativas, especialmente cuando no pueden ofrecer una buena solución.

**Originalidad** – Las emociones mostradas por los empleados influyen en la recuperación del servicio. Existe interacción entre la calidad de la solución y la emoción del empleado. Además, la consigna de "atender al cliente con una sonrisa" puede no ser válida en este contexto, siendo más relevante que los empleados no muestren emociones negativas.

**Palabras clave** – Emociones, Satisfacción, Recuperación del servicio, Empleado, Enfado, Alegría, Transferencia de afecto, Actitudes

**Tipo de artículo** – Trabajo de investigación

## 摘要

**目的** – 虽然研究证明了顾客的情绪如何影响他们的消费体验,但对员工所表现出的情绪如何影响顾客服务体验的理解却比较有限。借鉴情感转移理论,我们测试了对员工态度的中介作用,提出了员工表现出的情绪对客户对服务补救满意度影响的中介作用。由于服务补救涉及情绪容易上升的关键服务体验,本文强调了员工表现出的情绪在服务补救过程中的关键作用。

**方法** – 在航空公司服务故障补救的背景下,一个基于场景的实验(3x2主体间设计)操纵了一线员工的情绪(愤怒vs快乐vs无特定情绪)和解决方案的质量(差vs好)。

**研究结果** – 员工表现出来的情绪直接影响顾客对员工的态度,间接影响对服务补救的满意度。此外,当所提供的解决方案质量是差的,而不是好的,顾客对员工的态度受员工所表现的情绪的影响更大。

**实际意义** – 员工在服务补救过程中表现出来的情绪可以增强或破坏服务补救策略。在服务失败的情况下,员工应该控制消极的情绪,特别是在无法提供一个好的解决方案时。

**原创性** – 员工表现出来的情绪会影响顾客的服务补救的评价。解决方案的质量和员工表现的情绪之间存在着有趣的互动。此外,“微笑服务”的口号在服务补救的情况下可能是无效的:相反,员工应该避免表现出负面情绪。

**关键词** – 情绪、满意度、服务补救、员工、愤怒、快乐、情感转移、态度。

**文章类型** – 研究型论文

## 1. Introduction

Despite the growing research literature, service recovery remains a challenge for many companies (Costers *et al.*, 2019). For customers, service failures can be frustrating and involve many emotions (Yom-Tov *et al.*, 2018). In fact, customers are increasing their expectations and becoming less tolerant of service failures (Bambauer-Sachse and Rabeson, 2015). In the past few years, many efforts have been made to understand what service recovery strategies are better or what the optimal solution could be (Bambauer-Sachse and Rabeson, 2015; Cheung and To, 2017). However, according to recent research (Ngan and Yu, 2018; Wei, 2021), efforts to understand the role of emotions during service recovery are more limited. To date, most of the studies that deal with emotions in service recovery have focussed on the customer (Valentini *et al.*, 2020), analysing how their emotions affect satisfaction with service recovery (Rio-Lanza *et al.*, 2013; Wen and Chi, 2013), how the emotions evolve throughout the interaction (Yom-Tov *et al.*, 2018) or how they are passed on to other customers (Du *et al.*, 2014). In addition, the few studies that deal with emotions displayed by the employee have focussed only on positive emotions (Du *et al.*, 2011; Ngan and Yu, 2018) or are not focussed on service recovery (Söderlund and Rosengren, 2010).

Service recovery is a very specific context in which there seems to be a consensus that employees should show positive emotions. However, service failure can sometimes lead to stressful situations in which displaying positive emotions may be especially difficult for the employee. In fact, negative exchanges may be very common in service recovery, but they are largely unexplored (Groth and Grandey, 2012). Employees may display different emotions during service recovery. They may show a positive emotion due to their commitment to deliver “service with a smile” (Barger and Grandey, 2006); they may not be particularly expressive at that moment, showing a more neutral emotion (Barger and Grandey, 2006); or they may show a negative emotion because of stress, anxiety or burnout (Söderlund and Rosengren, 2010). In this particular context, it may be interesting to analyse how the emotion displayed by the employee affects customers’ satisfaction with recovery. Instead of proposing a direct effect, and based on an affect transfer hypothesis (Mitchell and Olson, 2000), we propose that this effect is mediated by attitude towards the employee. Some interesting questions that may arise in this context are as follows:

- Q1. How may negative emotions displayed by employees affect service recovery?
- Q2. Could a good solution be affected by a negative emotional display by the employee during recovery? Finally,
- Q3. Could a positive emotional display ease a bad solution?

As the negative impact of service failure can be compensated for by service recovery (Khamitov *et al.*, 2019), gaining an understanding of how service recovery may affect customers is vital to companies. Following calls to further research the effect of emotions (Valentini *et al.*, 2020; Wei, 2021), especially in the case of the employee (Yom-Tov *et al.*, 2018) and of negative emotions (Dallimore *et al.*, 2007), we try to shed light on the role of the employee’s emotional display during service recovery. The current study seeks to extend the existing service literature by aiming at the following objectives:

- to understand how employees’ emotions displayed during service recovery affect the attitude towards employees;
- to examine whether employees’ emotions interact with the quality of the solution offered by the company; and

- to analyse whether those emotions displayed by the employee could also have a final impact on the customer's satisfaction with recovery.

The main contribution of this paper relies on the analysis of different employee emotions during service recovery, considering that the employee does not always have to or is not always able to display a positive emotion in this specific interaction episode. This paper specifically tests whether the mantra of “service with a smile” is valid for service recovery. It also contributes to the literature by studying how emotions displayed by the employee (both positive and negative) may interact with the quality of the solution offered by the company, which, to the best of our knowledge, has not been studied before. The remainder of the paper is structured as follows. We begin with a review of the literature around emotions in service recovery to support the hypotheses. Next, we explain the method used and report the results obtained. Finally, we discuss the results and propose managerial implications derived from our research. We describe limitations and future research lines at the end of the paper.

## 2. Literature review and hypotheses development

### 2.1 *Emotions in service recovery: the importance of employees' displayed emotions*

Emotions are episodic: they occur in response to a particular stimulus, such as a service failure (Dallimore *et al.*, 2007). Some examples of negative emotions are frustration, guilt or anger while some examples of positive emotions are happiness, love or pride. Emotions are felt by and affect both sides of the service recovery interaction episode, that is, customers and frontline employees. Customers' emotions are relevant because customer behaviour can be modelled using emotions as a predictor variable (Ustrov *et al.*, 2016; Yom-Tov *et al.*, 2018). After a service failure, customers can experience different negative emotions (Soscia, 2007), anger being the most prevalent (Du *et al.*, 2014). Therefore, responding appropriately to this negative emotion appears to be a challenge for most companies (Menon and Dubé, 2004).

Emotions displayed by employees are also important because they may impact customers' responses to service recovery (Pugh, 2001; Wang *et al.*, 2017). Among those emotions, happiness is the emotional state most ubiquitous in a marketing communication context (Söderlund and Sagfossen, 2017). Many companies have as a mantra “service with a smile”, forcing their employees to be less authentic during the interaction (Hennig-Thurau *et al.*, 2006), and this mantra has also been extended to service recovery. However, employees may experience customer rage episodes (McColl-Kennedy *et al.*, 2009) or burnout (Söderlund, 2017) that could impede them from displaying a positive emotion during recovery. In fact, a negative display is not uncommon in many service encounters (Söderlund and Rosengren, 2010), particularly in cases of recovery (Menon and Dubé, 2004). Negative emotions displayed by employees could affect how customers perceive service recovery intents (Hennig-Thurau *et al.*, 2006). Therefore, analysing the effect of a negative emotional display by employees during service recovery will give us a more complete and realistic picture of how employees' emotions affect service recovery.

As recent studies recommend focussing on specific emotions to analyse interaction episodes (Söderlund and Sagfossen, 2017; Yom-Tov *et al.*, 2018), we have selected two specific emotions, one positive and one negative, that may be displayed by employees during service recovery as follows: anger and happiness. We selected happiness because of the mantra of “service with a smile” common among employees (Otterbring, 2017). As for the negative emotion, we selected anger because it may be displayed by some employees subject to the stress of service recovery (Groth and Grandey, 2012). In addition, this emotion is more likely to appear during service recovery episodes where many customers are angry, which may also stimulate anger in employees, as anger is a very contagious emotion (Du *et al.*, 2014).

### 2.2 *Affect transfer theory*

Affect transfer theory (Mitchell and Olson, 2000) explains how people's pre-existing association with one object/person is transferred to a closely-related object/person, towards which people may not hold prior association (Nan and Heo, 2007). This theory has been traditionally applied to advertising, explaining the way in which consumers' perceptions of an advertisement might influence their attitudes towards the advertisement and the brand advertised (Mitchell and Olson, 2000).

Affect transfer has been observed in various marketing contexts (Nan and Heo, 2007). Scheinbaum and Lacey (2015) explain the transfer from event to sponsor, Wang and Zhang (2018) suggest an affect transfer from one channel to another, and Garcia (2016) uses it to suggest a transfer from corporate social responsibility to lobbying effectiveness. A similar logic may be applied to service recovery so that positive or negative feelings elicited by the employee during the recovery will be transferred to the customer's satisfaction with recovery. A customer's perceptions of an employee may first affect their attitude towards the employee during service recovery, which ultimately influences satisfaction with recovery.

### 2.3 *Hypotheses development*

When the emotion displayed by the employee is positive, such as happiness, a customer's perception of the employee may be affected (Söderlund and Berg, 2020). In this sense, Tsai and Huang (2002) observed that when an employee displayed positive emotions, the customer perceived that the employee was more friendly. Similarly, Söderlund and Sagfossen (2017) observed that an employee's display of happiness was positively associated with employee evaluations. Moreover, previous research has concluded that the way in which the customer is treated during service recovery affects attitudes towards the employee (Tax *et al.*, 1998). Since employees' emotions shown during the service interaction are part of the way the customer is treated (Hennig-Thurau *et al.*, 2006), these emotions can affect customers' attitudes towards the employee. Therefore, displaying happiness may provoke a more favourable attitude towards the employee compared to a situation in which the employee displays no specific emotion.

In a service recovery context, it may be difficult for the employee to show a positive emotion because these encounters are highly charged with negative emotions (Dallimore *et al.*, 2007). Typical stress emotions, such as anger, are then likely to occur. In fact, Menon and Dubé (2000) found that in 25% of cases, salespersons responded to customer anger by being rude and hostile. A negative emotion displayed by the employee, such as anger, may be transferred to customers (Hennig-Thurau *et al.*, 2006). As Groth and Grandey (2012) stated, a negative exchange may affect customers' subsequent reactions. Specifically, when an employee's displayed emotion is anger, it may negatively affect the customer's attitude towards the employee, compared to a situation in which no specific emotion is displayed. Therefore, we propose as follows:

- H1. The emotion displayed by the employee during the service recovery will affect the customer's evaluation of the employee.
- H1a. When the employee displays happiness, the attitude towards the employee will be more favourable than when the employee does not display any specific emotion.
- H1b. When the employee displays anger, the attitude towards the employee will be less favourable than when the employee does not display any specific emotion.

The quality of the solution offered by the company could moderate the previous effect. Previous research has demonstrated that being treated nicely by the employee can make it easier for people to accept or mitigate negative organisational outcomes such as a bad service recovery (Wirtz and Mattila, 2004). Therefore, the employee's display of happiness can mitigate the effects of a bad solution being offered, and the customer may evaluate the recovery more favourably compared to the display of negative emotion such as anger.

An alternative explanation comes from the expectations confirmation theory (Oliver, 1977). This theory suggests that customers expect a good solution and when this is not confirmed, the emotion shown by the employee can at least satisfy expectations related to how the customer should be treated. Displaying happiness will contribute to a more favourable attitude towards the employee than displaying anger. However, if the solution is good, the main expectations are met. This effect prevails over the employee's emotion. In this case, attitude towards the employee is not so affected by the emotion displayed by the employee during service recovery. In line with this reasoning, Söderlund (2017) noted that when service quality was good, customers were less affected by the emotions of the employee, as they were obtaining the expected performance. Extending this previous result to a service recovery context, we propose the following hypothesis:

- H2.* The effect of the emotion displayed by the employee during the service recovery on the attitude towards the employee depends on the quality of the solution offered by the company. This effect is stronger for a bad solution than for a good solution.

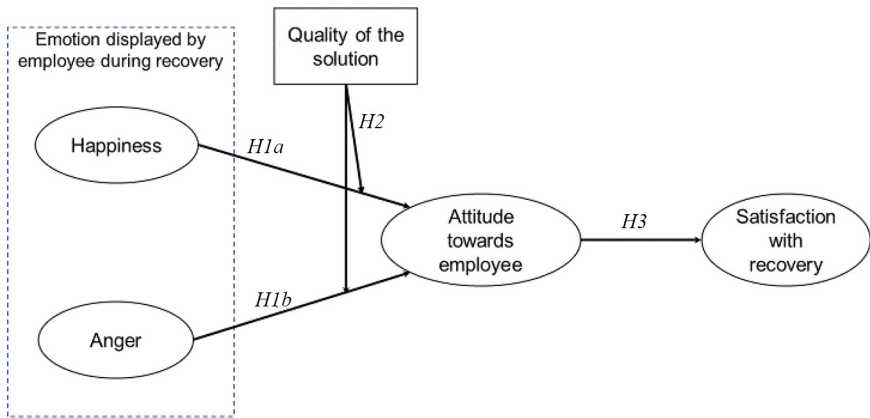
Even if the employees involved in the service recovery are not responsible for the service failure, they may have an important impact on how customers evaluate the results of recovery (Sparks and McColl-Kennedy, 2001). Therefore, employees' emotions transmitted during service recovery may indirectly affect customers' satisfaction with that service recovery through attitude towards the employee.

Previous research has widely supported the idea that customers' evaluation of the employee affects the evaluation of the service (Zhang *et al.*, 2020). Recently, Söderlund and Berg (2020) have observed that expressions of high levels of happiness produced a more positive attitude towards the employee while Kim and Qu (2020) have maintained that the causal relationship between attitude and behaviour is implicitly proved in social psychology literature. It is, therefore, reasonable to think that a customer's attitudes towards an employee may mediate the effect that employee-displayed emotions during recovery have on the customer's satisfaction with recovery.

Additionally, based on the affect transfer theory (Mitchell and Olson, 2000), affect transfer between customer's perceptions of the employee and the evaluation of the recovery outcome should occur. Customers will transfer affect from the employee to recovery (satisfaction with recovery) and will base their attitudes on the employees' displayed emotions. On a similar line of reasoning, Söderlund and Sagfossen (2017) found that customer's evaluations of the employees mediated the link between employees' displayed emotions (only happiness) and the evaluation of the company's offer. Therefore, we can argue that attitude towards the employee may act as a mediator in the relationship between the emotion displayed by the employee and the customer's satisfaction with recovery as follows:

- H3.* Attitude towards the employee mediates the effect of employee-displayed emotion on the customer's satisfaction with service recovery.

Figure 1 presents all the hypotheses.



**Figure 1.**  
Proposed model

### 3. Methodology

#### 3.1 Study design and sample

The research setting was a service recovery after a service failure in an airline service. Airline services generate many failures (Wen and Chi, 2013), which are likely to affect customer emotions (Otto and Ritchie, 1996). Therefore, it seems to be an adequate setting for testing our research hypotheses.

A  $3 \times 2$  between-subjects experimental design was created by manipulating the emotion displayed by the employee during recovery (anger, happiness or no specific emotion) and the quality of the solution offered by the company (good solution vs bad solution). An independent marketing research company was used for data collection. A total of 357 Spanish subjects between 18 and 65 years old with experience of being an airline customer participated in the study online.




#### 3.2 Stimuli and pre-test

As facial expressions transmit emotions (Winkielman and Schooler, 2011), a picture of an employee showing either anger, happiness or no specific emotion (control condition) was used to manipulate emotions displayed by the employee recovering the service. The pictures were taken by a professional photographer. Following Söderlund and Rosengren (2010), each picture was displayed along with text consistent with the picture indicating the emotion of the employee while they attended to the customer (Figure 2).

A pre-test was conducted with 36 women and 46 men, with ages ranging from 18 to 25 years old. Results indicated that the pictures along with the texts conveyed the intended emotions. Each participant was exposed to a pair of pictures along with their corresponding texts indicating the intended emotion. As intended, participants perceived that the employee was angrier in the anger condition ( $M = 4.29$ ) than in the control condition ( $M = 2.18$ ;  $p < 0.00$ ). Participants exposed to the happiness and control condition pair perceived that the employee was happier in the happiness condition ( $M = 4.56$ ) than in the control condition ( $M = 1.80$ ;  $p < 0.00$ ).

Regarding the manipulation of the quality of the solution, participants were told that the employee offered them either another flight one hour later (good solution) or a flight four days later with no change to the return date, halving the time of their trip (bad solution). This manipulation was shown to be successful.

**Figure 2.** Manipulation of the emotion displayed by the employee during service recovery

Anger condition	Happiness condition	No specific emotion condition
		
<i>You are attended by an employee who displays anger.</i>	<i>You are attended by an employee who displays happiness.</i>	<i>You are attended by an employee who does not display any specific emotion.</i>

### 3.3 Procedure

The first question asked participants whether they had flown previously. Participants who answered negatively were excluded from the study, as they could have greater difficulty in understanding the scenario and stimuli (Schoefer and Ennew, 2005).

Participants were initially exposed to the following service failure scenario: “Imagine you’ve been planning a trip for three months. You have dedicated many hours to it and it represents a very important financial outlay for you. You are very excited, you will be able to do what you like the most (whether it is discovering new places, meeting people, resting or having fun). It is a unique opportunity to go to the destination you have always dreamed of and you are already at the airport with all your luggage. But suddenly, all your illusions are ruined because your flight is cancelled”.

After reading this scenario, participants were asked how angry they would be if that situation happened to them. Anger was measured with a scale based on Roseman (1991) and Soscia (2007), ranging from 0 (not at all) to 10 (very intensely). Initial anger has to be controlled because pre-recovery emotions can affect customers’ reactions to service recovery. Next, participants were randomly assigned to one of six experimental conditions depending on the emotion displayed by the employee and the quality of the solution offered. In all conditions, the individuals went to the flight counter and were attended to by an employee of the company. Exposure to the stimulus lasted for at least 30 s to ensure that all individuals had enough time to see the stimuli.

Participants then indicated their attitude towards the employee recovering the service. Items for measuring attitude towards the employee included “the employee treated me in a friendly manner” or “the employee was nice” (Tsai and Huang, 2002). Next, respondents indicated their general satisfaction with service recovery using an 11-point semantic differential scale, from very unsatisfied to very satisfied (Wen and Chi, 2013). In addition, two questions were included to check for manipulations. The first question asked about the employee’s displayed emotion during recovery (selection among four options, namely, anger, guilt, happiness and no specific emotion). Guilt was included to introduce a confounding check. A second question asked individuals to rate whether they considered the solution offered by the company adequate on a 11-point scale (Du et al., 2010). Interest in travelling (Yeh, 2013) was also controlled because it could affect some of the dependent variables of the study. Finally, the realism of the scenario was measured using a scale based on Mattila et al. (2014). The final sample consisted of 357 individuals. The average respondent was 39 years old, 47.1% of the respondents were male and 65.8% had completed university studies.



3.4 Manipulation and control checks

A one-way analysis of variance was performed to check the manipulation of the quality of service recovery solution. The results show that there is a significant difference [ $F(1,356) = 598.080; p < 0.000$ ] between the good solution ( $M_{\text{Good}} = 6.93$ ) and the bad solution ( $M_{\text{Bad}} = 1.36$ ) for the variable adequateness of the solution offered by the company. This result confirms that participants' perceptions are consistent with the intended manipulation of this factor.

In addition to the pre-test developed prior to the main study, recall scores were used to check the manipulation of the employee's displayed emotions. Subjects were instructed to recall the emotion displayed by the employee during service recovery. The results show a significant relationship between the emotion conveyed by the scenario and the emotion recalled by participants ( $\chi^2 = 601.621; p < 0.00$ ): 94.1% of subjects correctly recalled that the employee was angry, 94.0% that the employee was happy and 88.4% that the employee displayed no specific emotion (Table 1). Taken together, the results indicate that both experimental manipulations were successful.

Regarding the realism of the scenario, most participants rated the situation described as quite realistic, as individuals indicated that the situation described at the beginning of the study was very likely/realistic/believable (mean of the scale = 7.29 on an 11-point scale). Interestingly, realism did not vary along the three emotions displayed by the employee [ $F(2,356) = 0.717; p > 0.10$ ], which indicates that encountering an angry employee during service recovery is a realistic possibility that should be considered and analysed. The realism of the scenario did vary with the quality of the solution [ $F(1,356) = 19.014; p < 0.00$ ]. Perceived realism was higher when the solution offered by the company was good ( $M_{\text{Good}} = 7.79$ ) than when it was bad ( $M_{\text{Bad}} = 6.82$ ), confirming that current expectations of customers regarding service recovery are high. However, the perceived realism did not affect any of the dependent variables of the study. Interest in travelling was also controlled, but as it did not affect any of the dependent variables, it was not considered further in the analyses.

4. Results

Univariate analysis of covariance was used to test the first hypothesis. We introduced customers' initial anger (measured just after service failure) as a covariate in the analysis, as it showed a significant effect on attitude towards the employee ( $p = 0.011$ ). Attitude towards the employee does depend on the emotion displayed by the employee during service recovery ( $F = 34.673; p < 0.00$ ). As proposed in *H1a* and *H1b*, attitude towards the employee was more favourable when the employee displayed happiness ( $M_{\text{Happiness}} = 5.97$

**Table 1.** Manipulation check for the employee's displayed emotion during service recovery\*

Employee's displayed emotion	Recall of employee's displayed emotion				Correct attributions	
	Anger	Guilt	Happiness	No specific emotion	Total	(%)
Anger	<i>112</i>	3	3	1	119	94.1
Happiness	2	2	<i>110</i>	3	117	94.0
No specific emotion	6	7	1	<i>107</i>	121	88.4
Total	120	12	114	111	357	

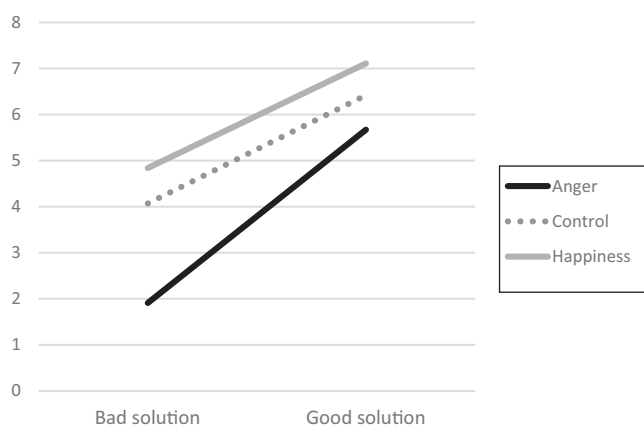
**Note:** \*Numbers in italic indicate correct attributions

vs  $M_{\text{control}} = 5.24$ ;  $p = 0.007$ ) and less favourable when the employee displayed anger compared to the control condition ( $M_{\text{Anger}} = 3.79$  vs  $M_{\text{control}} = 5.24$ ;  $p = 0.000$ ).

The main effect of the quality of the solution was also significant on attitude towards the employee ( $F = 165.336$ ;  $p < 0.00$ ), with a more positive attitude for the good solution than for the bad solution ( $M_{\text{good}} = 6.42$  vs  $M_{\text{bad}} = 3.58$ ).

Regarding the moderating role of the quality of the solution, the results show an interaction effect between the emotion displayed by the employee during service recovery and the quality of the solution on attitude towards the employee ( $F = 4.787$ ;  $p < 0.01$ ). As shown in Figure 3, attitude towards the employee was more affected by the emotion displayed by the employee when the solution was bad than when it was good. Pairwise comparisons showed that when the solution was good, attitude towards the employee was similar when the employee displayed happiness and when no specific emotion was displayed ( $M_{\text{Good*Happiness}} = 7.11$  vs  $M_{\text{Good*Control}} = 6.42$ ;  $p = 0.076$ ), but that attitude was slightly worse when the employee displayed anger compared to the control condition ( $M_{\text{Good*Anger}} = 5.67$  vs  $M_{\text{Good*Control}} = 6.42$ ;  $p = 0.052$ ). In contrast, when the solution was bad, attitude towards the employee was clearly worse when the employee displayed anger compared to the control condition ( $M_{\text{Bad*Anger}} = 1.91$  vs  $M_{\text{Bad*Control}} = 4.07$ ;  $p < 0.00$ ) while displaying happiness improved attitude towards the employee compared to the control condition ( $M_{\text{Bad*Happiness}} = 4.84$  vs  $M_{\text{Bad*Control}} = 4.07$ ;  $p = 0.042$ ). Results are in the expected direction, as attitude towards the employee seems to be more affected by the emotion displayed by the employee during service recovery when the solution offered is bad compared to good, giving support to  $H_2$ .

We tested the mediation hypothesis ( $H_3$ ) using Hayes' (2013) PROCESS macro for SPSS (version 3.5). The mediation analysis (Model 4 in PROCESS; Hayes, 2013) tested the mediating role of attitude towards the employee on the relationship between employee-displayed emotion and the customer's satisfaction with recovery. As employees' emotion is a multi-categorical variable, we coded this using indicator coding, also known as dummy coding (Hayes and Preacher, 2014). We created two dummy-coded variables ( $D_1$  and  $D_2$ ). The group in which the employee displayed no specific emotion was used as a reference group against those showing employee anger ( $D_1$ ) and employee happiness ( $D_2$ ). We entered the two dummy-coded variables to calculate the relative indirect and direct effects in the



Note: Estimated means

Figure 3. Customer's attitude towards the employee's

model. For the heteroscedasticity-consistent inference HC4 was selected, and the bootstrap inference for model coefficients was included in case of a possible violation of normality. Additionally, we included the customer's initial anger in the analysis as a covariate.

The employee's displayed emotions during service recovery do have a significant impact on attitude towards the employee ( $D_1$ :  $\beta = -0.55$ ;  $p < 0.001$ ;  $D_2$ :  $\beta = 0.27$ ;  $p < 0.05$ ). Compared to those exposed to the control condition (reference group), individuals exposed to an employee displaying anger showed a less favourable attitude towards the employee while individuals exposed to a happy employee showed a more favourable attitude. These results are consistent with those reported for *H1*. In addition, attitude towards the employee had a positive effect on service recovery satisfaction ( $\beta = 0.61$ ,  $p < 0.001$ ). To test *H3*, we also need to look at the bias-corrected confidence interval bootstrap (BCCI) to confirm the effect (Table 2). When the BCCI does not contain zero, the effect is statistically significant ( $p < 0.05$ ). BCCI reported for the relative indirect effects and the non-parametric bootstrap inferences for model coefficients showed that none of the intervals (for  $D_1$  and for  $D_2$ ) contain zero. That is, the indirect effect of employee's displayed emotions on customer's service recovery satisfaction is significant by the mediation of attitude towards the employee. Compared to those exposed to the control condition (reference group), individuals exposed to an employee displaying anger were less satisfied with the recovery while individuals exposed to a happy employee reported higher satisfaction with the recovery. These effects occur through the mediation of attitude towards the employee, which confirms *H3*.

To gain further insight into the moderating effect of the quality of the solution, we also tested a moderated mediation model using PROCESS (Hayes, 2013). According to Khamitov et al. (2019), moderated mediation along with experimental design may improve service recovery research by allowing a more finely grained analysis and more precision. The moderated mediation model was measured through Model 7, with 5,000 bootstrap resamples and 95% BCCI (Hayes, 2013). This model examines how the effect of the employee's displayed emotions (independent variable X) on service recovery satisfaction (dependent variable Y) through attitude towards the employee (mediation variable M) differs depending on the quality of the solution (moderator variable W). The moderated mediation model also includes initial anger as a covariate. The previous dummy-coded variables,  $D_1$  and  $D_2$ , were used in this additional analysis (Table 3).

Model 7 shows that there is a moderated mediation effect for  $D_1$  (index of moderated mediation, anger vs control: point estimate = 1.06, Standard Error (SE) = 0.39, 95%, Confidence Interval (CI): 0.26 to 1.81) but not for  $D_2$  (index of moderated mediation, happy vs control: point estimate = -0.08, SE = 0.42, 95%, CI: -0.92 to 0.76). Displaying anger (vs no specific emotion) is negatively associated with attitude towards the employee ( $\beta = -2.85$ ,  $p < 0.01$ ). This trend is moderated by the quality of the solution (bad vs good), as indicated by the significant interaction between both variables (Int\_1:  $D_1 \times W$ ,  $\beta = 0.69$ ,  $p < 0.01$ ). The bootstrapping procedure revealed that both the relative conditional indirect effect and

**Table 2.**  
Partially  
standardised relative  
indirect effects

Groups	Paths	Effect (SE)	95% BCCI	
			Lower	Upper
$D_1$ : Angry employee vs control (ref)	Employee's displayed emotion → Attitude towards the employee → Recovery satisfaction	-0.34 (0.081)	-0.496	-0.182
$D_2$ : Happy employee vs control (ref)	Employee's displayed emotion → Attitude towards the employee → Recovery satisfaction	0.17 (0.073)	0.024	0.310

**Note:** BCCI = Bias-corrected bootstrap 95% confidence interval

Path: Employee's displayed emotion → Attitude towards the employee

Predictor	Effect	(SE)	95% BCCI	
			Lower	Upper
Initial anger	-0.13*	0.05	-0.231	-0.031
D <sub>1</sub>	-2.85***	0.60	-4.027	-1.677
D <sub>2</sub>	0.86	0.599	-0.321	2.032
Quality level (W)	1.21***	0.189	0.833	1.576
Int_1 (D <sub>1</sub> × W)	0.69**	0.268	0.166	1.221
Int 2 (D <sub>2</sub> × W)	-0.05	0.269	-0.584	0.476

Path: Attitude towards the employee → Satisfaction with recovery

Predictor	Effect	(SE)	95% BCCI	
			Lower	Upper
Initial anger	0.04	0.067	-0.086	0.175
D <sub>1</sub>	0.64	0.362	-0.069	1.356
D <sub>2</sub>	-0.50	0.356	-1.204	0.198
Attitude towards the employee (M)	0.76***	0.057	0.650	0.876

Relative conditional indirect effect of employee's displayed emotion (X) on satisfaction with recovery (Y)

Group	Quality level (W)	Effect (SE)	95% BCCI	
			Lower	Upper
D <sub>1</sub> : Angry employee vs control (ref)	Bad	-1.65 (0.30)	-2.243	-1.056
	Good	-0.59 (0.28)	-1.149	-0.075
D <sub>2</sub> : Happy employee vs control (ref)	Bad	0.61 (0.33)	-0.031	1.262
	Good	0.53 (0.28)	-0.012	1.086

Index of moderated mediation	Effect (SE)	95% BCCI	
		Lower	Upper
D <sub>1</sub>	1.06 (0.39)	0.267	1.809
D <sub>2</sub>	-0.08 (0.42)	-0.919	0.757

**Notes:** \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; 5,000 bootstrap samples, level of confidence 95%. 5,000 bootstrap samples for percentile bootstrap CIs

**Table 3.** Results of the moderated mediation analysis between the employee's displayed emotion and service recovery satisfaction via attitude towards the employee, moderated by service recovery quality

index of moderation mediation for D<sub>1</sub> were significant (95% BCCI analyses do not contain zero), supporting the moderated mediation effect for group D<sub>1</sub>. Consequently, the negative effect of displaying anger on service recovery satisfaction via attitude towards the employee is higher for bad solutions than for good solutions.

## 5. Discussion

This study contributes to the service marketing literature in three important ways. Firstly, unlike most of the previous studies, it focusses on the employee's displayed emotions during service recovery. Secondly, it considers not only an employee's positive emotion (happiness) as most papers do (Du *et al.*, 2011; Yom-Tov *et al.*, 2018) but also a negative one (anger). The inclusion of negative emotion is an aspect little explored to date, despite it being quite likely to occur in the context of service recovery, where employees may find it difficult to recover the service under the general mantra of "service with a smile". Finally, although the role of service recovery quality is undoubted, we further explore this main effect on customers by analysing the interaction between service recovery quality and the employee's displayed emotions.

### 5.1 Theoretical implications

The findings indicate that employees' emotions displayed during service recovery do determine the success of service recovery strategies. This extends previous research

showing that employees' emotions influence receivers' reactions (Söderlund and Sagfossen, 2017). Employees' displayed emotions directly affected customers' attitude towards the employee and indirectly affected customer satisfaction with service recovery. Consistent with the affect transfer hypothesis (Mitchell and Olson, 2000), attitude towards the employee was found to mediate the effect that employees' displayed emotions have on customers' satisfaction with recovery. Displaying happiness positively affects service recovery satisfaction, whereas displaying anger negatively affects service recovery satisfaction through the customer's attitude towards the employee.

Results from the moderating effect of the quality of the solution shed light on how this variable interacts with employees' emotions. When a bad solution is offered to the customer, the anger displayed by the employee (compared to the control condition) affects the employee evaluation more than when a good solution is offered to the customer. This means that it is critical for employees to control for the display of such a negative emotion when they are not able to offer a good solution to the customer. As an employee's negative emotional display can be easily perceived by customers (Du *et al.*, 2011), it is very important for the employee to control this negative emotion while recovering the service.

The existence of a moderated mediation effect is of special interest to determine if the mediation effect remains constant across different contexts and values of the independent variable (Preacher *et al.*, 2007), in our case good and bad solutions. Our results suggest that displaying happiness, compared to not displaying any specific emotion, does not affect customer's attitude towards the employee no matter the quality of the solution (good or bad). This result puts into question the traditional mantra of "service with a smile". It is also consistent with the recent line of thought expressed by Söderlund and Sagfossen (2017) regarding what may happen if customers do not expect or even desire employee happiness. The mantra of "service with a smile" wrongly assumes that happiness is always expected or even desired among customers. Our paper questions the validity of this traditional mantra in the case of service recovery. As displaying happiness does not add any advantage for service recovery compared to the control condition, companies should not force or encourage the employees to deliver "service with a smile" in cases where customers are complaining or are very angry because of a service failure.

Finally, a moderated mediation effect does exist for the display of anger compared to the control condition. In this case, the negative indirect effect of the employee's displayed anger on the customer's satisfaction with recovery is more negative for a bad solution than for a good solution. This means that anger is an emotion that employees need to control as much as possible during service recovery, especially when they are not able to provide a solution that fully compensates for the failure that has occurred.

### *5.2 Practical implications*

The findings reported in this paper identify emotions displayed by employees as an area of special concern for managers. On the one hand, there is a need for better training of employees' responses to customer emotions, particularly in the case of negative emotions such as anger. Sometimes, offering a good solution is not possible for a company, and in this particular case, it is especially important for employees to keep their negative emotions under control. Recently, Zhang *et al.* (2020, p. 8) have warned about the lack of a "unique organisational strategy for service recovery" that fits all frontline employees. In this particular case, it is essential to train frontline employees to be able to manage their own emotions while dealing with angry customers. We are not suggesting forcing employees to restrain their emotions or feign them, but rather training employees in communication and social skills so that they know how to avoid displaying anger, especially when a good

solution cannot be offered. Frontline employees' training in emotional intelligence should then be a priority for employees engaged in service recovery. In this line, service companies should hire experts to conduct emotional intelligence tests not only in every new hiring process to evaluate candidates' emotional intelligence but also for existing frontline employees. These experts would also be in charge of conducting targeted emotional intelligence training.

It is very interesting to note that employees do not need to recover the service displaying a positive emotion, such as happiness, as it does not improve the results obtained in terms of satisfaction with recovery and may put employees in the difficult position of trying to smile when they do not feel it genuinely. Relaxing this mantra for service recovery may also favour perceived service authenticity, which has been recently recognised (Kim, 2021) as a crucial factor in determining customers' emotions and their future behaviour.

The undoubted relevance of the quality of the solution for customer satisfaction should help managers realise the need to provide employees with the appropriate structure and tools to solve problems and recover the service. Gaining an understanding of what customers consider a good service recovery can help to reduce the gap between what customers and companies consider a good service recovery to be. Additionally, developing clear standards with a service recovery programme and providing employees with appropriate tools could contribute positively to the work environment. Empowering the employee to find the best way to do the right thing for the customer who has experienced a failure could prove beneficial. Companies leading in service recovery practices allow their employees to compensate customers with free shipping, gifts, extra points, upgrades, item replacements, product exchanges or free products. These tools are meant not only to solve the problem but also to make the customer feel important for the organisation, so the negative experience is transformed into a positive one.

### 5.3 *Limitations and future research*

This research has limitations that future research should address. Because the study uses an experiment to test its hypotheses, it shares limitations associated with experiments. In addition, the employee–customer interaction was not face to face, which may have affected the results obtained. Along this line, future research could include other types of interactions (e.g. videos and face-to-face interactions) as well as manipulate variables that could be key in the recovery process, such as the length or intensity of the interaction.

We have assumed that employees' display of anger is the most typical negative emotion to be displayed after a service failure. Nevertheless, employees are likely to experience other emotions that have not been included in this research. Emotions less studied – including frustration, embarrassment, guilt or an extreme of anger such as rage – could also take place in this context. Future research should analyse how these specific employees' emotions affect customers' attitudes and behaviours.

In our experimental design, we have also assumed that employees' emotions do not change during the interaction. As future research, we recommend analysing how employees' emotions evolve during the service recovery interaction. Employees' emotions are also susceptible to emotional contagion from customers (Dallimore *et al.*, 2007) or employees could use an emotion regulation strategy (Côté, 2005) that affects the interaction. Therefore, it could be interesting to analyse the dynamics of the emotions of the two parts involved in the interaction. The study of Yom-Tov *et al.* (2018) may represent a good first step for studying the dynamics of emotions during service recovery.

**References**

- Bambauer-Sachse, S. and Rabeson, L. (2015), "Determining adequate tangible compensation in service recovery processes for developed and developing countries: the role of severity and responsibility", *Journal of Retailing and Consumer Services*, Vol. 22, pp. 117-127.
- Barger, P.B. and Grandey, A.A. (2006), "Service with a smile and encounter satisfaction: emotional contagion and appraisal mechanisms", *Academy of Management Journal*, Vol. 49 No. 6, pp. 1229-1238.
- Cheung, M.F.Y. and To, W.M. (2017), "The effect of organizational responses to service failures on customer satisfaction perception", *Service Business*, Vol. 11 No. 4, pp. 767-784.
- Costers, A., Van Vaerenbergh, Y. and Van den Broeck, A. (2019), "How to boost frontline employee service recovery performance: the role of cultural intelligence", *Service Business*, Vol. 13 No. 3, pp. 581-602.
- Côté, S. (2005), "A social interaction model of the effects of emotion regulation on work strain", *Academy of Management Review*, Vol. 30 No. 3, pp. 509-530.
- Dallimore, K.S., Sparks, B.A. and Butcher, K. (2007), "The influence of angry customer outbursts on service providers' facial displays and affective states", *Journal of Service Research*, Vol. 10 No. 1, pp. 78-92.
- Du, J., Fan, X. and Feng, T. (2010), "An experimental investigation of the role of face in service failure and recovery encounters", *Journal of Consumer Marketing*, Vol. 27 No. 7, pp. 584-593.
- Du, J., Fan, X. and Feng, T. (2011), "Multiple emotional contagions in service encounters", *Journal of the Academy of Marketing Science*, Vol. 39 No. 3, pp. 449-466.
- Du, J., Fan, X. and Feng, T. (2014), "Group emotional contagion and complaint intentions in group service failure: the role of group size and group familiarity", *Journal of Service Research*, Vol. 17 No. 3, pp. 326-338.
- Garcia, J. (2016), "The influence of corporate social responsibility on lobbying effectiveness: evidence from effective tax rates", Doctoral thesis, Virginia Polytechnic Institute and State University.
- Groth, M. and Grandey, A. (2012), "From bad to worse: negative exchange spirals in employee-customer service interactions", *Organizational Psychology Review*, Vol. 2 No. 3, pp. 208-233.
- Hayes, A.F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, Guilford, New York, NY.
- Hayes, A.F. and Preacher, K.J. (2014), "Statistical mediation analysis with a multicategorical independent variable", *British Journal of Mathematical and Statistical Psychology*, Vol. 67 No. 3, pp. 451-470.
- Hennig-Thurau, T., Groth, M., Paul, M. and Gremler, D.D. (2006), "Not all smiles are created equal: how employee-customer emotional contagion impacts service relationships", in Spotts, H.E. (Ed.), *Marketing, Technology and Customer Commitment in the New Economy*, Springer International Publishing, Cham, pp. 254-254.
- Khamitov, M., Wang, X. and Thomson, M. (2019), "How well do consumer-brand relationships drive customer brand loyalty? Generalizations from a meta-analysis of brand relationship elasticities", *Journal of Consumer Research*, Vol. 46 No. 3, pp. 435-459.
- Kim, J.-H. (2021), "Service authenticity and its effect on positive emotions", *Journal of Services Marketing*, Vol. 35 No. 5, doi: [10.1108/JSM-07-2020-0261](https://doi.org/10.1108/JSM-07-2020-0261).
- Kim, H. and Qu, H. (2020), "Effects of employees' social exchange and the mediating role of customer orientation in the restaurant industry", *International Journal of Hospitality Management*, Vol. 89, doi: [10.1016/j.ijhm.2020.102577](https://doi.org/10.1016/j.ijhm.2020.102577).
- McCull-Kennedy, J.R., Patterson, P.G., Smith, A.K. and Brady, M.K. (2009), "Customer rage episodes: emotions, expressions and behaviors", *Journal of Retailing*, Vol. 85 No. 2, pp. 222-237.
- Mattila, A., Hanks, L. and Wang, C. (2014), "Others service experiences: emotions, perceived justice, and behavior", *European Journal of Marketing*, Vol. 48 Nos 3/4, pp. 552-571.

- Menon, K. and Dubé, L. (2000), "Ensuring greater satisfaction by engineering salesperson response to customer emotions", *Journal of Retailing*, Vol. 76 No. 3, pp. 285-307.
- Menon, K. and Dubé, L. (2004), "Service provider responses to anxious and angry customers: different challenges, different payoffs", *Journal of Retailing*, Vol. 80 No. 3, pp. 229-237.
- Mitchell, A.A. and Olson, J.C. (2000), "Are product attribute beliefs the only mediator of advertising effects on Brand attitude?", *Advertising and Society Review*, Vol. 1 No. 1, doi: [10.1353/asr.2000.0010](https://doi.org/10.1353/asr.2000.0010).
- Nan, X. and Heo, K. (2007), "Consumer responses to corporate social responsibility (CSR) initiatives: examining the role of brand-cause fit in cause-related marketing", *Journal of Advertising*, Vol. 36 No. 2, pp. 63-74.
- Ngan, H.F.B. and Yu, C.-E. (2018), "To smile or not to smile – an eye-tracking study on service recovery", *Current Issues in Tourism*, Vol. 22 No. 19, pp. 2327-2332.
- Oliver, R.L. (1977), "Effect of expectation and disconfirmation on postexposure product evaluations: an alternative interpretation", *Journal of Applied Psychology*, Vol. 62 No. 4, pp. 480-486.
- Otterbring, T. (2017), "Smile for a while: the effect of employee-displayed smiling on customer affect and satisfaction", *Journal of Service Management*, Vol. 28 No. 2, pp. 284-304.
- Otto, J.E. and Ritchie, J.R.B. (1996), "The service experience in tourism", *Tourism Management*, Vol. 17 No. 3, pp. 165-174.
- Preacher, K.J., Rucker, D.D. and Hayes, A.F. (2007), "Addressing moderated mediation hypotheses: theory, methods, and prescriptions", *Multivariate Behavioral Research*, Vol. 42 No. 1, pp. 185-227.
- Pugh, S.D. (2001), "Service with a smile: emotional contagion in the service encounter", *Academy of Management Journal*, Vol. 44 No. 12, pp. 1018-1027.
- Río-Lanza, A.B., del Vázquez-Casielles, R. and Díaz-Martín, A.M. (2013), "Satisfaction with service recovery: perceived justice and emotional responses", *Journal of Business Research*, Vol. 63, pp. 775-781.
- Roseman, I.J. (1991), "Appraisal determinants of discrete emotions", *Cognition and Emotion*, Vol. 5 No. 3, pp. 161-200.
- Scheinbaum, A.C. and Lacey, R. (2015), "Event social responsibility: a note to improve outcomes for sponsors and events", *Journal of Business Research*, Vol. 68 No. 9, pp. 1982-1986.
- Schoefer, K. and Ennew, C. (2005), "The impact of perceived justice on consumers' emotional responses to service complaint experiences", *Journal of Services Marketing*, Vol. 19 No. 5, pp. 261-270.
- Söderlund, M. (2017), "Employee display of burnout in the service encounter and its impact on customer satisfaction", *Journal of Retailing and Consumer Services*, Vol. 37, pp. 168-176.
- Söderlund, M. and Berg, H. (2020), "Employee emotional displays in the extended service encounter: a happiness-based examination of the impact of employees depicted in service advertising", *Journal of Service Management*, Vol. 31 No. 1, pp. 115-136.
- Söderlund, M. and Rosengren, S. (2010), "The happy versus unhappy service worker in the service encounter: assessing the impact on customer satisfaction", *Journal of Retailing and Consumer Services*, Vol. 17 No. 2, pp. 161-169.
- Söderlund, M. and Sagfossen, S. (2017), "The depicted service employee in marketing communications: an empirical assessment of the impact of facial happiness", *Journal of Retailing and Consumer Services*, Vol. 38, pp. 186-193.
- Soscia, I. (2007), "Gratitude, delight, or guilt: the role of consumers' emotions in predicting postconsumption behaviors", *Psychology and Marketing*, Vol. 24 No. 10, pp. 871-894.
- Sparks, B.A. and McColl-Kennedy, J.R. (2001), "Justice strategy options for increased customer satisfaction in a services recovery setting", *Journal of Business Research*, Vol. 54 No. 3, pp. 209-218.
- Tax, S.S., Brown, S.W. and Chandrashekar, M. (1998), "Customer evaluations of service complaint experiences: implications for relationship marketing", *Journal of Marketing*, Vol. 62 No. 2, pp. 60-76.



- Tsai, W.-C. and Huang, Y.-M. (2002), "Mechanisms linking employee affective delivery and customer behavioral intentions", *Journal of Applied Psychology*, Vol. 87 No. 5, pp. 1001-1008.
- Ustrov, Y., Valverde, M. and Ryan, G. (2016), "Insights into emotional contagion and its effects at the hotel front desk", *International Journal of Contemporary Hospitality Management*, Vol. 28 No. 10, pp. 2285-2309.
- Valentini, S., Orsingher, C. and Polyakova, A. (2020), "Customers' emotions in service failure and recovery: a meta-analysis", *Marketing Letters*, Vol. 31 Nos 2/3, pp. 199-216.
- Wang, Z., Mao, H., Li, Y.J. and Liu, F. (2017), "Smile big or not? Effects of smile intensity on perceptions of warmth and competence", *Journal of Consumer Research*, Vol. 43, pp. 787-805.
- Wang, X. and Zhang, Q. (2018), "Does online service failure matter to offline customer loyalty in the integrated multi-channel context? The moderating effect of Brand strength", *Journal of Service Theory and Practice*, Vol. 28 No. 6, pp. 774-806.
- Wei, J. (2021), "The impacts of perceived risk and negative emotions on the service recovery effect for online travel agencies: the moderating role of corporate reputation", *Frontiers in Psychology*, Vol. 12, doi: [10.3389/fpsyg.2021.685351](https://doi.org/10.3389/fpsyg.2021.685351).
- Wen, B. and Chi, C. (2013), "Examine the cognitive and affective antecedents to service recovery satisfaction: a field study of delayed airline passengers", *International Journal of Contemporary Hospitality Management*, Vol. 25 No. 3, pp. 306-327.
- Winkielman, P. and Schooler, J.W. (2011), "Splitting consciousness: unconscious, conscious, and metaconscious processes in social cognition", *European Review of Social Psychology*, Vol. 22 No. 1, pp. 1-35, doi: [10.1080/10463283.2011.576580](https://doi.org/10.1080/10463283.2011.576580).
- 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.
- Yeh, C.M. (2013), "Tourism involvement, work engagement and job satisfaction among frontline hotel employees", *Annals of Tourism Research*, Vol. 42, pp. 214-239.
- Yom-Tov, G.B., Ashtar, S., Altman, D., Natapov, M., Barkay, N., Westphal, M. and Rafaeli, A. "Customer sentiment in web-based service interactions: automated analyses and new insights", *WWW 2018 Companion Proceedings of the Web Conference 2018, April 23-27, Lyon, France*, ACM, New York, NY, pp. 1689-1697.
- Zhang, M., Geng, R., Hong, Z., Song, W. and Wang, W. (2020), "The double-edged sword effect of service recovery awareness of frontline employees: from a job demands-resources perspective", *International Journal of Hospitality Management*, Vol. 88, doi: [10.1016/j.ijhm.2020.102536](https://doi.org/10.1016/j.ijhm.2020.102536).

#### Corresponding author

Estela Fernández-Sabiote can be contacted at: [estelafs@um.es](mailto:estelafs@um.es)