The following publication Hwang, Y., Gao, L., & Mattila, A. S. (2020). What recovery options to offer for loyalty reward program members: Dollars vs. Miles?. International Journal of Hospitality Management, 87, 102496. is available at https://dx.doi.org/https://doi.org/10.1016/j.ijhm.2020.102496

Title

What Recovery Options to Offer for Loyalty Reward Program Members: Dollars vs. Miles?

Abstract

Research shows that offering monetary compensation is effective in restoring customers' equity perceptions following a service failure. However, little is known about loyalty reward program members' responses to various types of recovery options. This study fills this important void by investigating two types of compensation: a discount coupon (in dollars) and bonus reward points (in miles) in the airline context. This study further investigates the boundary effect of controllability of a service failure. Our findings show that, when the flight delay is perceived as highly controllable by the airline company (i.e., scheduling error by flight crews), repatronage intention was higher in the 50-dollar discount (vs. 2,500 bonus miles) condition. Conversely, repatronage intention did not differ between the two compensation options when the flight delay was perceived as uncontrollable (i.e., inclement weather). Our findings help hospitality and tourism firms leverage service recovery initiatives for loyalty reward program members.

Keywords

Service recovery; service failure; recovery compensation; loyalty program; construal level

Introduction

Service failures occur when service delivery falls below customer expectations, and such incidents are frequently observed across various industry sectors, including hospitality and tourism (Basso & Pizzutti, 2016). Without a successful service recovery, service failures can have a detrimental effect on the company's market share and customer loyalty (Buttle & Burton, 2002; Norvell, Kumar, & Dass, 2018). For instance, United Airlines' shares plummeted shortly after the overbooking incident in 2017 (Shen, 2017). However, an effective service recovery can restore customer trust and fairness perceptions (Basso & Pizzutti, 2016; Zoghbi-Manrique-de-Lara, Suárez-Acosta, Aguiar-Quintana, & 2014), and the most commonly used recovery method is to offer financial compensation. Prior research has demonstrated the overall effectiveness of monetary compensation in encounter satisfaction (Gelbrich & Roschk, 2011; Grewal, Roggeveen, & Tsiros, 2008; Wirtz & Mattila, 2004) and long-term consequences such as sustained loyalty (Maxham & Netemeyer, 2002; Norvell et al., 2018).

Furthermore, recent research has offered a more nuanced understanding by examining various dimensions of monetary compensation such as tangibility and particularism (Roschk & Gelbrich, 2017), immediate vs. delayed compensation (Roschk & Gelbrich, 2014; Xu, Liu, & Gursoy, 2018), private vs. public compensation (van Gils & Horton, 2019), simple- vs. overcompensation (Gelbrich & Roschk, 2011), and group- vs. individual-level compensation (Albrecht et al., 2018). For instance, Roschk and Gelbrich (2017) show that personalized compensation (i.e., a handwritten note from a frontline employee) is related to particularism, and it increases justice perceptions and recovery satisfaction. In the airline context, Xu et al. (2018) demonstrate that immediate compensation lessens customers' negative emotions, no matter whether it is monetary or nonmonetary. Conversely, delayed compensation does not alleviate negative emotions induced by a failed service encounter.

However, little is known about preferences for monetary compensation options among loyalty reward program members. This knowledge gap is surprising, given the prevalence of loyalty reward programs in the hospitality and tourism industry (Hu, Huang & Chen, 2010; Hwang, Baloglu, & Tanford, 2019; Steinhoff & Palmatier, 2016) and the importance of loyalty reward programs in driving customer loyalty (Mattila, 2006; Tanford, 2013). Therefore, it is vital to fill this void and advance our understanding of loyalty reward program members' responses to different types of recovery compensation. This study showcases two monetary compensation options in the frequent flyer program context: 2,500 miles added to the account vs. a 50-dollar discount for the next trip. In fact, United Airlines offers these two options for frequent flyer members as compensation for a delayed flight (B. Stoller, personal communication, September 9, 2018).

In this paper, we shed light on the service recovery literature by examining the joint effect of the two compensation options and controllability of a service failure on loyalty reward program members' repatronage intention. Prior research has largely relied on the attribution theory, expectation disconfirmation theory and justice/equity theory to understand customer responses to recovery compensation following a service failure with varying levels of controllability (Choi & Mattila, 2008; Grewal et al., 2008; McCollough et al., 2000; Wirtz & Mattila, 2004; Zeithaml et al., 2017). For instance, Choi and Mattila (2008) posit that customers are more likely to blame a service provider if a failed service is perceived as highly controllable (vs. uncontrollable) by the provider. More recent studies adopt the commitment-trust theory

(Basso and Pizzutti, 2016), resource exchange theory (Roschk & Gelbrich, 2014, 2017), and cognitive appraisal theory (Xu et al., 2018).

This study adds to this stream of literature by drawing upon the construal level theory (e.g., Trope & Liberman, 2003) and the congruency effect (Jin & He, 2013; Roschk & Gelbrich, 2014). This study suggests that controllability of a service failure heightens customers' negative emotions, thereby inducing a concrete (vs. abstract) mindset. Previous research shows that discounts are construed as more concrete and tangible than credit entries (Roschk & Gelbrich, 2017). Previous research further demonstrates the notion of congruency between customers' mental states and external factors (i.e., compensation options) (e.g., Jin & He, 2013; Roschk & Gelbrich, 2014). For instance, Jin and He (2013) suggest that matching service guarantee benefits (concrete vs. abstract) with the customer's purchase time frame (short vs. long) enhances perceived usefulness of service guarantee. Extending this stream of literature, we suggest that congruency between the customer's construal level and recovery compensation in terms of concreteness increases loyalty reward members' repatronage intention.

Lastly, findings of this study offer insight to practitioners in the hospitality and tourism industry on how to present recovery compensation options to loyal customers. Specifically, when perceived controllability of a service failure is high, the firm may want to provide more concrete recovery options such as a discount coupon framed in dollar value (vs. bonus reward points). Such controllable failures include flight delays caused by scheduling problems and unavailability of menu items during non-peak hours. Conversely, when a service failure is out of the firm's control, the two compensation methods should be similarly effective. A delayed flight due to inclement weather and an unavailable menu item due to an outbreak of disease might be considered uncontrollable by a service provider. Understanding the nature of controllability of a service failure might help practitioners optimize their recovery options to increase customer loyalty.

Literature Review

The impact of recovery compensation on customer loyalty

Loyalty reward programs are important customer relationship management tools in the hospitality and tourism industry. They enable companies to enhance their bottom-line, including customer retention (Buttle & Burton, 2002; Mattila, 2006; Tanford, 2013). However, service failures can result in both challenges and opportunities in customer relationship management (Buttle & Burton, 2002). Loyal customers may have high expectations for service recovery (Bejou & Palmer, 1998; Buttle, & Burton, 2002; Kelley & Davis, 1994; Miller, Craighead, & Karwan, 2000). Such heightened expectations may induce disconfirmation, thereby reducing recovery satisfaction (Zeithaml et al., 2017). On the other hand, heightened expectations may provide the service provider with an opportunity to enhance the relationship with its customers (Miller et al., 2000). In other words, a successful service recovery can maintain or even increase loyalty (Mattila, 2001).

To understand customer responses to service recovery, previous research has adopted various theoretical accounts (see Table 1). For instance, according to the justice/equity theory, an interaction between the customer and the service provider involves an exchange of resources (Roschk & Gelbrich, 2017; Smith et al., 1999; Zeithaml et al., 2017). Customers pursue fairness during this exchange; that is, they expect services commensurate with the amount that they pay. According to the expectation disconfirmation theory, a service failure occurs when the service provided does not meet customer expectations, thereby violating the principle of fairness. The service provider strives to regain customer perceptions of fairness by providing recovery compensation. As such, prior research has mainly adopted the expectation disconfirmation

theory and justice/equity theory as underlying frameworks to understand customer responses to service failure and recovery (Koc, 2019).

The attribution theory has also been used to examine customer responses to recovery compensation following service failures with varying levels of controllability and stability (Choi & Mattila, 2008; Grewal et al., 2008; Lee & Cranage, 2018; Wirtz & Mattila, 2004). For instance, Choi and Mattila (2008) show that customers are more likely to blame a service provider if a failed service is construed as highly controllable (vs. uncontrollable) by the provider. Such findings are consistent with the cognitive appraisal theory (e.g., Xu et al., 2018). Customers may think that the service provider could have prevented the failed service, thereby exhibiting high levels of anger and annoyance.

[Insert Table 1 around here]

To reduce such negative emotions and to retain customer equity, various recovery strategies can be implemented, including monetary (e.g., travel certificates or coupons), temporal (e.g., expedited services), functional (e.g., priority check-in), experiential (e.g., free upgrade), emotional (e.g. recognition and guarantee), or social recovery (e.g., providing personal contact for the next visit) (Shoemaker & Lewis, 1999). Particularly, prior research has long recognized the effectiveness of monetary compensation in encounter satisfaction (Gelbrich & Roschk, 2011; Grewal et al., 2008; Wirtz & Mattila, 2004) and its long-term consequences such as sustained loyalty (Maxham & Netemeyer, 2002; Norvell et al., 2018). Specifically, Wirtz and Mattila (2004) show that a 20-percent discount on the restaurant bill (vs. no discount) increases customer satisfaction with the employee's handling of the service failure. In this research, we focus on two forms of financial compensation: miles vs. dollars.

Types of service recovery compensation by concreteness

Prior research documents that recovery compensation can be categorized based on particularism and concreteness (Foa & Foa, 2012; Roschk & Gelbrich, 2017). Particularism is defined as the degree to which compensation is delivered in a personal way (Roschk & Gelbrich, 2017). A handwritten note from an employee is an example of particularistic compensation. Concreteness is defined as the degree of tangibility of compensation, and tangible compensation can have a physical form to be touched (Tornblom & Kazemi, 2012). Foa and Foa (2012) suggest six resource categories with varying degrees of particularism and concreteness: money, status, love, goods, services, and information. They further suggest that money has a low level of particularism and a medium level of concreteness. In other words, the value of monetary compensation is not determined by how (im)personal the exchange between the customer and the service provider is (Roschk & Gelbrich, 2017). On the other hand, money is more concrete than status, yet less concrete than material goods, thereby being rated on a mid-point in terms of concreteness.

Although Foa and Foa (2012) document inter-category variations of concreteness, Roschk and Gelbrich (2017) posit that concreteness can also vary within each of the six resource categories. That is, within the category of money, concreteness can vary. Relying on their framework, this study suggests that the two types of recovery options – 2,500 miles and \$50 – are different in terms of concreteness. In practice, United Airlines offers these two options for frequent flyer members as compensation for a 4-5 hour delayed flight (B. Stoller, personal communication, September 9, 2018). We posit that 2,500 miles credited to the customer's account doesn't have a physical form that customers can touch, and it rather is presented with virtual numbers. On the other hand, discount coupons have a physical form that customers can touch. Thus, 2,500 bonus miles is not as concrete as a \$50 travel certificate. Roschk and Gelbrich (2017) manipulated concreteness in their scenario-based experiments by presenting either a banknote or a credit entry. Even though both options are shown on the computer screen, Roschk and Gelbrich (2017) demonstrate that individuals tend to construe a banknote as more concrete than a credit entry.

Note that these two types of compensation methods do not differ in terms of particularism. That is, how personal or impersonal the interaction between the focal customer and the service provider should be constant across the two compensation methods (miles and dollars). Prior research posits that concreteness of recovery compensation is effective in driving customer loyalty. Specifically, Roschk and Gelbrich (2017) show that concreteness of recovery compensation increases reciprocal behaviors such as tipping in the restaurant context (Study 1) and cross-buying in the hotel context (Study 2). In this paper, we posit that recovery compensation in a more concrete form should induce loyalty reward members' repatronage intention. That is, their repatronage intention should be higher for a discount of \$50 (vs. 2,500 miles credited to the account).

The moderating effect of controllability of a service failure: construal level theory

We further argue that perceived controllability of a service failure moderates the impact of concreteness of recovery compensation on repatronage intention. Controllability of a service failure refers to the degree to which the cause of the failure is under the service provider's volitional control (Hess, Ganesan, & Klein, 2003; Wirtz & Mattila, 2004). If a failed service is within the firm's control (e.g., inattentive service by a restaurant server during off-peak hours), customers perceive high levels of controllability. In the airline context, passengers may perceive high controllability of a delayed flight when the delay results from scheduling error by flight crews (Grewal et al., 2008; Xu et al., 2018). Conversely, when a failed service is completely out of the firm's control (e.g., a canceled/delayed flight due to inclement weather, a menu item temporarily unavailable due to weather/season), customers perceive low levels of controllability (Xu et al., 2018).

Customer perceptions of controllability can lead to negative emotions such as anger and lower repurchase intentions (Choi & Mattila, 2008; Folkes, Koletsky, & Graham, 1987; Wirtz & Mattila, 2004). Based on surveys from passengers having a delayed flight at the airport, Folkes et al. (1987) show that controllability of a delayed flight is positively related to passengers' anger toward the airline and their repatronage intention. When the service provider could have prevented the failure, customers may want to punish the service provider and exhibit high expectations for recovery compensation (Grewal et al., 2008). As such, recovery compensation becomes highly necessary to regain customer trust (Grewal et al., 2008; Smith et al., 1999). In this paper, we argue that such heightened anger and disappointment, in turn, influence an individual's construal level.

According to the construal level theory, individuals tend to have varying levels of mental construal (Trope & Liberman, 2010). A low construal level pertains to proximate objects in temporal, physical, and social dimensions, whereas a high construal level relates to distal objects with the same three dimensions (Trope & Liberman, 2010). With a high (vs. low) construal level, individuals assess objects in relation to goals. For instance, playing racquetball is construed as an activity of losing weight (high construal level) or an activity that involves a series of taking turns

with a partner to hit a ball to the wall (low construal level) (Trope & Liberman, 2010). With a low construal level, individuals tend to focus on concrete, specific, and idiosyncratic information about an object. With a high construal level, people tend to focus on abstract and broad aspects of an object (Trope & Liberman, 2010).

Previous research posits that positive and negative affect influences an individual's construal level (Labroo & Patrick, 2009; Pyone & Isen, 2011). For instance, Pyone and Isen (2011) show that positive affect results in a forward-looking and high-level thinking, thereby increasing the likelihood of preferring a larger, delayed reward (vs. a smaller, immediate reward). They rely on the premise that positive affect releases dopamine into frontal areas of a human brain, resulting in cognitive flexibility (Ashby, Isen, & Turken, 1999). Conversely, there is evidence to suggest that negative affect prompts an individual's low-level thinking and thus s/he is likely to construe objects in a more concrete way (Labroo & Patrick, 2009). Labroo and Patrick (2009) demonstrate that individuals in a negative mood consider concrete (vs. abstract) goals more important and prefer products highlighting short-term (vs. long-term) benefits. In sum, we argue that high (vs. low) controllability of a service failure results in greater levels of negative emotions, thereby inducing concrete construal. Consequently, recovery compensation in a more concrete form such as a \$50 travel certificate (vs. 2,500 miles) should have a positive impact on repatronage intention.

Conversely, we posit that, when perceived controllability of a failed service is low, concreteness of recovery compensation (miles vs. dollars) shouldn't influence customers' repatronage intention. When the service failure is out of the firm's control, customers are unlikely to blame the firm, and negative emotions are unlikely to be heightened (Choi & Mattila, 2008). Grewal et al. (2008) show that recovery compensation fails to influence repurchase intention when the company is not responsible for the service failure or when the failure occurs infrequently. That is, recovery compensation is not as necessary for customers to restore their equity perceptions and to enhance loyalty in the presence of service failures with low levels of controllability (Grewal et al., 2008; Smith et al., 1999). Relying on this stream of literature, we predict that loyalty reward program members' repatronage intention are not different across the 2,500 miles and \$50 conditions. The conceptual model is depicted in Figure 1. Taken together, we put forth the following hypothesis:

Hypothesis 1. There will be a two-way interaction between controllability of a service failure and recovery compensation type on loyalty reward program members' re-patronage intention. Specifically,

Hypothesis 1a. In the high controllability condition, loyalty reward members' repatronage intention will be higher with a \$50 (vs. 2,500 miles) compensation.

Hypothesis 1b. No such differences will be observed in the low controllability condition.

[Insert Figure 1 around here]

Methodology

Design

This study adopted a 2 (compensation: 2,500 miles vs. 50 dollars) by 2 (controllability of service failure: low vs. high), between-subjects, experimental design. Participants were randomly assigned to one of the four scenarios. This random assignment is to ensure probabilistic equivalence of participants across all experimental conditions with regard to potential factors influencing loyalty reward program members' re-patronage intention (Trochim & Donnelly, 2001). As such, this experimental design is suitable to control for such factors. Participants imagined that their flight was delayed due to either inclement weather (low controllability; see also Grewal et al., 2008) or scheduling error by airline crews (high controllability) (Adapted from Xu et al., 2018; see Appendix). After reading the scenario, participants were compensated with either 2,500 miles credited to their frequent flyer program account or a 50-dollar travel certificate for their next flight.

Sampling

Ninety-two participants from Amazon Mechanical Turk (see Buhrmester, Talaifar, & Gosling, 2018) and 105 participants from Qualtrics, an online consumer panel company, were recruited and paid for participation (USD 2.00) in December 2018. Participants were screened out based on (1) their age (18 years or older), (2) residency in the US, and (3) their current membership in any frequent flyer program. The purpose of the last screening criterion is to ensure that both compensation options are meaningful.

Measures

After reading the scenario, repatronage intention was measured with two items ("Because of what happened, I would not fly with ABC Airlines again", "If this situation had happened to me, I would not fly with ABC Airlines in the future"; r = .89, p < .01; Blodgett, Hill, & Tax, 1997), then reverse-coded. In terms of negative emotions, anger (irritated, annoyed; r = .87, p< .01; Mattila, 2001) and disappointment (disappointed, dissatisfied, unfulfilled; a = .91; Yi & Baumgartner, 2004) were measured. Controllability of a service failure was measured with a single-item ("I think there was only so much the airline could have done in order to prevent the inconvenience I experienced"; Choi & Mattila, 2008), then reverse-coded. Prior research shows that controllability and severity of a service failure may co-vary (e.g., Schindler, 1998). We thus measured severity of a service failure with one item ("How severe do you think the service failure in the scenario was?" 1=not at all, 7=very much) to include as a covariate in our ANCOVA model. Scenario realism was captured with two items ("The scenario was realistic," "It was easy to project myself in the scenario"; 1 = not at all, 7 = very much; r = .40, p < .01; Wu, Mattila, & Hanks, 2015).

Results

Demographics

On average, participants were 37 years old, and 48 percent were female. Twenty percent had a college degree, 33 percent had a household income ranging from \$40,000 to \$79,999. Seventy-four percent were Caucasian. Forty percent fly 1-2 times a year on average. Their demographic profile is shown in Table 2. On average, participants spent 6.22 minutes on the survey. They rated the scenario realism as high (M=5.77, SD=1.12), and this mean rating did not differ across the experimental conditions (ps > .1).

[Insert Table 2 around here]

Manipulation check

To check for controllability of a service failure, an independent samples *t*-test was run. Results showed that participants in the inclement weather condition (low controllability) rated controllability of the delayed flight lower than their counterparts in the scheduling error condition (high controllability) ($M_{weather} = 4.50$, $M_{scheduling} = 5.53$, t (195) = 4.38, p < .01, partial $\eta^2 = .09$).

To check for recovery compensation, we asked participants whether the airline offered them compensation in dollars or miles. Eighty-five percent of the participants in the miles condition correctly indicated their compensation received. Eighty-seven percent of the participants in the dollars condition correctly indicated their compensation received. Taken together, our manipulations were successful. Results from independent samples t-test show that anger was heightened in the high (vs.

low) controllability condition ($M_{scheduling} = 5.53$, $M_{weather} = 4.47$, t (195) = 4.20, p < .01). Similarly, disappointment was greater in the high (vs. low) controllability condition ($M_{scheduling} = 5.26$, $M_{weather} = 4.15$, t (195) = 4.72, p < .01). As negative emotions lead to concrete (vs. abstract) construal levels (Labroo & Patrick, 2009; Pyone & Isen, 2011), this supports our theorizing that high controllability of a service failures induces concrete (vs. abstract) construal levels.

Hypothesis testing

To test our hypothesis, a two-way ANCOVA was run. Participants' gender (0 = male, 1 = female, 2 = other) and panel source (0 = Qualtrics, 1 = MTurk) were used as control variables. As a result, both gender (F(1, 191) = 11.07, p < .01; partial $\eta^2 = .06$; see Table 3) and panel source (F(1, 191) = 19.42, p < .01; partial $\eta^2 = .09$) were significant. More importantly, the two-way interaction between controllability of a service failure and compensation type was significant (F(1, 191) = 9.92, p < .01; partial $\eta^2 = .05$), while neither of the main effects was (ps > .05). To decompose this interaction, simple effects were run (see Figure 2). As a result, when the delayed flight was attributed to scheduling error, repatronage intention was higher in the dollars (M = 4.50) than in the miles condition (M = 3.46; F(1, 191) = 5.54, p < .05). Conversely, when the delayed flight was attributed to inclement weather, there was no difference in repatronage intention across the miles (M = 4.78) and the dollars condition (M = 4.13; F(1, 191) = 2.76, p > .05).

[Insert Table 3 here]

Note that we measured severity of a service failure with one item and its correlation with controllability was positive (r = .23, p < .01). We thus ran another ANCOVA with severity of a service failure as an additional covariate. As a result, severity of a service failure was significant (F(1, 190) = 3.86, p = .05; partial $\eta^2 = .02$), and more importantly, the two-way interaction remained significant (F(1, 190) = 9.30, p < .01; partial $\eta^2 = .05$). In sum, our hypothesis is fully supported.

[Insert Figure 2 here]

Post-test

We conducted a post-test in February 2020 to demonstrate that dollars are more tangible and concrete than miles. We recruited participants (n = 60) from Amazon Mechanical Turk. Participants are US consumers who have at least one frequent flyer membership. On average, they are 37 years old (SD = 9.46). Fifty-eight percent of them are male, half of them have a college degree, and 41 percent of them have an annual household income of \$40,000 to \$59,999. Forty-eight percent of them fly 3-5 times a year. We asked participants concreteness perceptions of miles and dollars (concrete, tangible, touchable, and possible to take in hand; 1 = not at all, 7 = very much; Roschk & Gelbrich, 2017; $\alpha_{Miles} = 0.94$, $\alpha_{Dollars} = 0.97$). Our results show that participants construe dollars (vs. miles) as more concrete (M_{Dollars} = 5.69, M_{Miles} = 3.31, *t* (59) = 8.33, *p* < .01). In conclusion, the above findings are congruent with our theorizing in relation to construal level theory.

General Discussion

Service failures are inevitable in the hospitality and tourism industry due to the heterogeneity of services (Koc, 2019). An ineffective service recovery effort (i.e., a double deviation) can further deteriorate the company's image and its relationship with customers (Bitner, Booms, & Tetreault, 1990; Zeithaml et al., 2017). However, effective service recovery can regain customer trust and increase their loyalty. According to the service recovery paradox, customers may feel more satisfied when they are given recovery compensation than when things are right in the first place (McCollough et al., 2000; Zeithaml et al., 2017). The purpose of this research is to investigate the differential effectiveness of two monetary recovery compensation options among loyalty reward program members in the airline context. The study findings help practitioners customize their compensation options based on the degree of controllability of a service failure.

Theoretical implications

Previous research on service recovery mainly relies on the attribution theory, fairness/justice theories, and disconfirmation theory (Choi & Mattila, 2008; Folkes et al., 1987; Lee & Cranage, 2018; McCollough et al., 2000; McCollough, 2009; Migacz et al., 2018; Smith et al., 1999; Swanson & Hsu, 2011; Wirtz & Mattila, 2004; Zeithaml et al., 2017). This research offers a unique perspective by drawing upon the construal level theory (e.g., Trope & Liberman, 2003, 2010) to understand the impact of two recovery compensation options (miles vs. dollars) on customer loyalty. Specifically, we argue that a 50-dollar discount is construed as more concrete and tangible than 2,500 miles credited to the customer's account. Our findings rely on the premise that high controllability of a service failure heightens the customer's negative affect, thereby resulting in a concrete mindset. Consequently, we show that, in the high controllability condition, loyalty reward program members' repatronage intention is higher with a more concrete compensation option, dollars (vs. miles). Conversely, in the low controllability condition, customers' construal levels are not as concrete, and thus repatronage intention is not influenced by the concreteness of recovery options.

Based on the construal level theory, this research documents a congruency effect between failure controllability and compensation type. Previous research shows the importance of congruency between external stimuli and customers' mental states (Jin & He, 2013). For example, Jin and He (2013) argue that the effectiveness of service guarantees results from a construal congruency between benefits of service guarantees and the time frame of customers' purchase decisions. Through four experiments, they show that individuals perceive service guarantees with attribute-specific benefits as highly persuasive for temporarily close (vs. distant) purchase decisions. Extending their study to the frequent flyer program context, we suggest a construal congruency between failure controllability and compensation options. We show that a concrete compensation (i.e., \$50) leads to more positive responses than a less concrete compensation (i.e., 2,500 miles) when a service failure is highly controllable by the service provider.

Furthermore, prior research posits that the effectiveness of recovery compensation varies across situations (Mattila & Patterson, 2004b; Lewis & McCann, 2004; Smith et al., 1999). For instance, Mattila and Patterson (2004b) demonstrate that offering compensation (e.g., discount) is particularly important in driving equity perceptions among customers in individualistic (vs. collectivistic) cultures. Grewal et al. (2008) show that monetary compensation is effective in increasing recovery satisfaction, particularly when service providers are responsible for a reoccurring service failure. Relying on the resource exchange theory (e.g., Foa & Foa, 1976), Roschk and Gelbrich (2014) find a matching effect between service failure type (outcome failure vs. procedural failure) and recovery compensation type (monetary vs. nonmonetary and irreversible vs. reversible compensation). Specifically, monetary failures, such as inaccurate billing, are more effectively recovered when given the option of monetary (vs. psychological) compensation. This study extends the notion of congruency effect in the frequent flyer program context and documents a match between monetary compensation type and controllability of a service failure in driving customers' repatronage intention.

Lastly, this study advances our understanding of concrete compensation as an effective service recovery method (Foa & Foa, 2012; Roschk & Gelbrich, 2017). Roschk and Gelbrich (2017) posit that a discount is perceived as more concrete than a credit entry, thus having a positive effect on recovery satisfaction. They further argue that the strength of the relationship between the customer and the service provider moderates the effectiveness of a concrete compensation. However, they failed to empirically support such a moderating effect in their studies. This study demonstrates another boundary condition, controllability of a service failure, thereby contributing to the literature documenting differential effectiveness of a concrete compensation.

Practical implications

The effectiveness of recovery compensation is an important issue for hospitality and tourism companies. The findings of this study help companies identify situational factors (i.e., controllability) that may affect the effectiveness of service recovery initiatives among loyalty reward program members. First, it is always a priority to "do things right in the first place," since providing service recovery is costly to the firm, and it puts customer perceptions of reliability of service quality at risk (Zeithaml et al., 2017). However, occasional service failures are inevitable. The findings of this study suggest that, when a service failure occurs, service providers should be transparent and let customers know the cause of the failure.

Second, hospitality and tourism companies should be strategic in using different service recovery strategies based on the controllability of a failure. When the failure is out of a company's control (e.g., weather, natural disasters), the choice of recovery compensation may not influence customers' repatronage intention. However, when the service failure is within the company's control, it is critical to provide a more concrete compensation to enhance customer loyalty. Understanding conditions under which different recovery methods influence customer loyalty is important for firms to make strategic decisions on what recovery options to offer to their loyalty reward program members.

In sum, providing a more concrete compensation may be preferred (discounts in dollars) with highly controllable failures. Offering a more concrete option can be a win-win situation for both companies and loyal customers. Companies can use this method to cultivate relationships with customers and customers may feel valued by the company, thereby doing more business in the future.

Limitations and future research

The current research has several limitations that can be addressed in future research. First, this research adopted a scenario-based experimental design, and as such future research may validate our findings in a field setting. Second, it could be illuminating to extend our findings to other industries or countries with different cultures (e.g., individualism-collectivism). Third, while Roschk and Gelbrich (2017) used a procedural failure in the hotel and restaurant contexts, this research used an outcome failure in the airline context. It may be interesting to examine the interactive effect of service failure type and concreteness of recovery compensation in different service contexts. Fourth, in this research, both a \$50 travel certificate and a credit entry of 2,500 miles involved a delay. Further research is needed to understand the intertemporal nature of recovery compensation options. That is, the interactive effect of the intertemporal nature and concreteness of recovery compensation on recovery satisfaction and loyalty may be worth investigating.

Underlying processes of the effects of different compensation types on loyal customers' perceptions (e.g., perceived value, fairness, or usefulness of the compensation) and other downstream consequences of service recovery (e.g., satisfaction, electronic word-of-mouth) should be examined in the future research. Lastly, it may be illuminating to investigate customer characteristics (e.g., redemption experience) influencing their preferences for recovery compensation type. Customers who have previously redeemed their miles may construe recovery compensation stated in miles as concrete as one stated in dollars (or even more concrete). Examining the interactive effect of previous redemption experiences and recovery compensation type on repatronage intention may help practitioners optimize recovery initiatives, thereby maintaining loyal customers.

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APPENDIX. Scenario

Imagine that you are a frequent flyer member of ABC airlines.

A couple of months ago, you booked a flight through ABC airlines' website for a leisure trip. Now, you are at the gate, waiting for your flight. Soon after, a gate agent announces that your flight is delayed for now due to an incorrect scheduling by an employee (vs. inclement weather in the departure city). Four hours later, the gate agent informs that boarding for your flight will start in 30 minutes.

Later that day, you receive the following email from ABC Airlines about your delayed flight:

We can understand your disappointment when your flight was delayed due to an incorrect scheduling by our employee (vs. inclement weather in the departure city). We know you had commitments to keep and rescheduling your flight so much later was not what you expected.

Your satisfaction is important to us and we want to regain your trust. Please accept our offer, \$50 travel certificate (vs. 2,500 miles) toward ABC Airlines, as our way to apologize for your inconvenience.

Thank you for choosing ABC Airlines for your travel. We welcome the opportunity to provide better service for you the next time you fly with us.

Sincerely,

Chris Anderson Customer Service Solutions Supervisor, ProTeam ABC Airlines

TABLES

Table 1.

Summary of Key Literature on Service Recovery

Reference	Main Focus	Theoretical Framework		
Albrecht et al. (2018)	Comparing a group service recovery with an individual service recovery in terms of recovery satisfaction	Equity theory		
Basso and Pizzutti (2016)	Comparing the effectiveness of monetary compensation following a single deviation vs. a double deviation in terms of customer trust	Commitment-trust theory		
Choi and Mattila (2008)	Examining the interactive effect of controllability of service failure and customer expectations on encounter satisfaction	Attribution theory Expectation disconfirmation theory		
Gelbrich and Roschk (2011)	Comparing simple vs. over-compensation in terms of recovery satisfaction	Justice theory Expectation disconfirmation theory		
Grewal et al. (2008)	Examining the effectiveness of recovery compensation depending on the cause and stability of service failure on repurchase intention	Equity theory Attribution theory		
Lee and Cranage (2018)	Testing the interaction between service failure type (self- service technology, employee, or company policy) and failure severity on causal attributions	Attribution theory		
Mattila and Patterson (2004b)	responses to compensation and explanation of service failure			

Migacz et al. (2018)	Comparing service failure type (procedural, interactional, and distributive injustice) in terms of customer loyalty	Justice theory	
Norvell et al. (2018)	Comparing long-term effects of service recovery among no- failure, no-complaint, single-deviation, and double-deviation groups		
Roschk and Gelbrich (2014)	Testing the matching hypothesis (match of the exchanged resources in-kind) and intertemporal choice hypothesis (immediate vs. delayed compensation)	Resource exchange theory	
Roschk and Gelbrich (2017)	Examining particularism and concreteness of service recovery across varying levels of relationship strength	Social resource theory Justice theory	
Swanson and Hsu (2011)	Examining the impact of recovery locus attributions and service failure severity on word-of-mouth and repurchase behaviors	Attribution theory	
van Gils and Horton (2019)	Examining the joint effect of moral identity (internalization vs. symbolization) and recovery type (private vs. public) on post-failure satisfaction	Attribution theory	
Wen and Chi (2013)	Testing the relationships between three dimensions of justice, customer emotions, trust, word-of-mouth, and repurchase intention	Justice theory	
Wirtz and Mattila (2004)	Investigating the interactive effect of compensation, speed of recovery, and apology on post-failure satisfaction	Justice theory Attribution theory	
Xu et al. (2018)	Investigating (1) the cause and severity of service failure, (2) compensation type (monetary vs. non-monetary, immediate vs. delayed), and (3) airline/class type on customers' positive and negative emotions	Justice theory Cognitive appraisal theory	

Table 2.

Demographic	Profile o	f Participants

Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAmerican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)		Categories	n (%)	
Other 2 (1.0) Less than \$20,000 24 (12.2) \$20,000-\$39,999 48 (24.4) \$40,000-\$59,999 29 (14.7) \$60,000-\$79,999 36 (18.3) \$80,000-\$99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)		Male	101 (51.3)	
Less than \$20,000 24 (12.2) \$20,000-\$39,999 48 (24.4) \$40,000-\$59,999 29 (14.7) \$60,000-\$79,999 36 (18.3) \$80,000-\$99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)	Gender	Female	94 (47.7)	
S20,000-S39,999 48 (24.4) \$40,000-S59,999 29 (14.7) \$60,000-S79,999 36 (18.3) \$80,000-S99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)		Other	2 (1.0)	
Income $$40,000-$59,999$ $29 (14.7)$ $$60,000-$79,999$ $36 (18.3)$ $$80,000-$99,999$ $23 (11.7)$ $$100,000-$119,999$ $16 (8.1)$ $$120,000-$149,999$ $10 (5.1)$ $$150,000 or above$ $11 (5.6)$ High school or equivalent $27 (13.7)$ Some college education $39 (19.8)$ EducationCollege degreeCollege degree $91 (46.2)$ Graduate school/ professional degree $36 (18.3)$ Other $4 (2.0)$ Hispanic/Latino $7 (3.6)$ Caucasian $146 (74.1)$ Asian American $13 (6.6)$ EthnicityAfrican AmericanAfrican Indian $5 (2.5)$ Alaskan, Hawaiian, or Pacific Islander $1 (0.5)$ Other $3 (1.5)$ Frequency ofRarelyRarely $18 (9.1)$		Less than \$20,000	24 (12.2)	
Income \$60,000-\$79,999 36 (18.3) \$80,000-\$99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)		\$20,000-\$39,999	48 (24.4)	
Income \$80,000-\$99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)		\$40,000-\$59,999	29 (14.7)	
\$80,000-\$99,999 23 (11.7) \$100,000-\$119,999 16 (8.1) \$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)	Income	\$60,000-\$79,999	36 (18.3)	
\$120,000-\$149,999 10 (5.1) \$150,000 or above 11 (5.6) High school or equivalent 27 (13.7) Some college education 39 (19.8) Education College degree 91 (46.2) Graduate school/ professional degree 36 (18.3) Other 4 (2.0) Hispanic/Latino 7 (3.6) Caucasian 146 (74.1) Asian American 13 (6.6) Ethnicity African American 22 (11.2) American Indian 5 (2.5) Alaskan, Hawaiian, or Pacific Islander 1 (0.5) Other 3 (1.5)	Income	\$80,000-\$99,999	23 (11.7)	
\$150,000 or above11 (5.6)High school or equivalent27 (13.7)Some college education39 (19.8)EducationCollege degree91 (46.2)Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican American22 (11.2)American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)		\$100,000-\$119,999	16 (8.1)	
High school or equivalent27 (13.7)Some college education39 (19.8)EducationCollege degree91 (46.2)Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican American22 (11.2)American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)		\$120,000-\$149,999	10 (5.1)	
EducationSome college education39 (19.8)EducationCollege degree91 (46.2)Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAmerican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)		\$150,000 or above	11 (5.6)	
EducationCollege degree91 (46.2)Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican American22 (11.2)American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)		High school or equivalent	27 (13.7)	
Graduate school/ professional degree36 (18.3)Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAmerican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarelyRarely18 (9.1)		Some college education	39 (19.8)	
Other4 (2.0)Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAfrican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)	Education	College degree	91 (46.2)	
Hispanic/Latino7 (3.6)Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAmerican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)		Graduate school/ professional degree	36 (18.3)	
Caucasian146 (74.1)Asian American13 (6.6)EthnicityAfrican AmericanAmerican Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarelyRarely18 (9.1)		Other	4 (2.0)	
Asian American13 (6.6)EthnicityAfrican American22 (11.2)American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)		Hispanic/Latino	7 (3.6)	
EthnicityAfrican American22 (11.2)American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarelyRarely18 (9.1)	Ethnicity	Caucasian	146 (74.1)	
American Indian5 (2.5)Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarelyRarely18 (9.1)		Asian American	13 (6.6)	
Alaskan, Hawaiian, or Pacific Islander1 (0.5)Other3 (1.5)Frequency ofRarely18 (9.1)		African American	22 (11.2)	
Other 3 (1.5) Frequency of Rarely 18 (9.1)		American Indian	5 (2.5)	
Frequency of Rarely 18 (9.1)		Alaskan, Hawaiian, or Pacific Islander	1 (0.5)	
		Other	3 (1.5)	
	Frequency of	Rarely	18 (9.1)	
		1-2	79 (40.1)	

3-5	66 (33.5)
6-9	22 (11.2)
10 or more	12 (6.1)
Total	197 (100.0)

Table 3.

ANCOVA Results

Source	Type III SS	df	MSE	F	р	Partial η^2
Corrected Model	176.06	5	35.21	9.96	<.01	.21
Intercept	423.65	1	423.65	119.86	<.01	.39
Panel Source	68.62	1	68.62	19.42	<.01	.09
Gender	39.14	1	39.14	11.07	<.01	.06
Controllability	11.32	1	11.32	3.20	.08	.02
Compensation	1.87	1	1.87	.53	.47	.00
Interaction	35.07	1	35.07	9.92	<.01	.05
Error	675.11	191	3.54			
Total	4365.00	197				
Corrected Total	851.17	196				

FIGURES

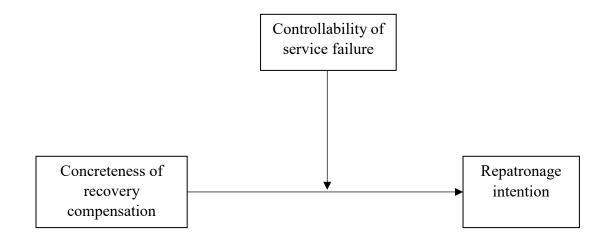


Figure 1. Conceptual model

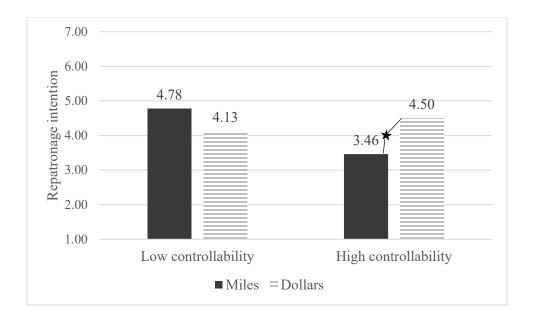


Figure 2. Interaction plot