# Who loves to forgive? The mediator mechanism of service recovery between brand love, brand trust and purchase intention in the context of food-delivery apps

The mediating role of service recovery

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#### Abstract

**Purpose** – This study investigates the mediating role of service recovery between brand love (BL), brand trust (BT) and purchase intention in the context of food-delivery apps.

Design/methodology/approach — This study follows a quantitative approach. The authors conducted an online survey and collected 275 responses from users of food-delivery apps in South America and Asia. The authors analyzed the conceptual model proposed using structural equation modeling (SEM) in Smart PLS 3.0. Findings — The results showed a direct and significant relationship between brand love, BT and purchase intention. Additionally, the authors identified the mediating role of service recovery between brand love, BT and purchase intention.

Research limitations/implications – First, this study focused on the service recovery construct in general. Future research can address different types of service recovery, for example, core, interpersonal and procedure failures (Kim and Jang, 2016). Second, the authors restricted the study to the relationship between brand love, BT and purchase intention. Future studies can include other constructs, such as e-word of mouth, loyalty and information risk, as intervening variables. A larger sample can also be considered to support the generalization of the findings.

Practical implications – This study recommends that companies enchant customers with immediate actions after a service failure has occurred. In doing so, companies must monitor those customers who have experienced a service failure, measuring the level of trust in the branded app and checking the frequency of purchases after a service recovery. Interacting with customers through messages is also an important action to manage their purchase intention following the problem's solution. Furthermore, companies must segment customers who have experienced a failure and direct them to specific benefits to reinforce their trust in the app. Then, after correcting the problem, they should pay them special attention by offering benefits, like discounts, coupons and free delivery, as a strategy to promote future purchases.

Originality/value – This is the first paper to investigate the impact of service recovery on brand love, BT and purchase intention in the context of food-delivery services. The authors extend the knowledge about consumers' responses in the case of a failure caused by consumers' loved brands and show how service recovery actions can establish BT and influence future purchases.

**Keywords** Triangular theory of love, Expectancy theory, Food-delivery apps, Branded apps, Brand love, Brand trust, Service recovery, Purchase intention

Paper type Research paper



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#### 1. Introduction

Almost certainly, you own a smartphone and use mobile apps for a variety of functions, such as ordering food. Most certainly, you have had trouble while using your preferred branded app, which, in our opinion, emphasizes the critical nature of service recovery actions in building brand trust (BT) and purchase intentions.

In research conducted in America, 70% of customers said that they had experienced a delivery issue that required customer service after a problem had occurred (BusinessofApps, 2021). In Brazil, the number of complaints about food-delivery apps reached almost 343% during the coronavirus pandemic (Exame Invest, 2020). Indeed, the use of smartphone apps has increased drastically in the last few years. The quantity of smartphones sold to end users from 2007 to 2021 is around 1.53 billion, and about 196 billion apps have been downloaded from the Google Play Store (Statista, 2021). In 2023, mobile apps are projected to generate more than US\$ 935 bn in revenues via paid downloads and in-app advertising (Statista, 2021). In our view, this is an important market phenomenon that deserves attention in the literature and in managerial practices.

Apart from serving as a channel for digital advertising (Mpinganjira and Maduku, 2019; Nyström and Mickelsson, 2019), branded apps have become a powerful sales channel for ordering food and have been a focus of recent literature. For instance, Tandon *et al.* (2021) investigated why people purchase from food-delivery apps, Zhao and Bacao (2020) studied the factors that determine customers' continuing use of food-delivery apps during the 2019 novel coronavirus pandemic period, Cho *et al.* (2019) focused on the differences in perceptions of food-delivery apps between single-person and multi-person households and Lee *et al.* (2017) examined the factors influencing the behavioral intention to use food-delivery apps.

We use the term "branded apps" to refer to applications that utilize a company's name/brand and are accessible via a mobile device. For example, in 2020, Uber Eats and McDonald's had 82 million downloads, and Ifood, which dominates the food segment of the Brazilian market, had 22 million downloads (BusinessofApps, 2021). It is critical to emphasize that the use of apps (Kumar and Shah, 2021) increased significantly during the coronavirus pandemic due to the lockdown measures and social isolation designed to prevent the virus from spreading (The Economist, 2021). In this context, customers began purchasing products via apps in huge numbers to avoid having to visit a supermarket or other business (Annaraud and Berezina, 2020; Kumar and Shah, 2021; Taylor, 2020).

Even though apps have facilitated the purchase process (Ali *et al.*, 2021; Ho and Rezaei, 2018), and in general it is quite simple for customers to use them, there is a complex chain behind the operation linking dealers of products, deliverers and customers (Barata *et al.*, 2018). As a result, the information flow within a single purchasing process is complex and critical to the operation's performance (Barata *et al.*, 2018).

Indeed, services frequently fail (Fisk et al., 1993). In the context of food-delivery apps, for example, errors occurring while preparing food or packing it for delivery can negatively affect customers' trust and purchase intentions. A service failure is defined as a service that falls short of the customer's expectations (Sands et al., 2020). Service failures and recovery can occur in several phases and have been classified into core, interpersonal and process failures in the literature (Kim and Jang, 2016).

To advance the theory, we investigate this phenomenon through the lenses of brand love (BL) and service recovery and study its impact on BT and purchase intention. BL is conceptualized as customers' emotional attachment to a specific brand (Carroll and Ahuvia, 2006). BT consists of customers' emotional and rational commitment to a brand (Upmannyu and Rajput, 2017), and purchase intention is simply the intent to buy a product in future (Palazon *et al.*, 2019).

Previous studies have shown a positive impact of BL and BT on customers' purchase intention (Huang, 2017). However, there is a lack of understanding of the mediator mechanism of service recovery between these variables. Service recovery (SR) is defined as the actions

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and strategies taken by companies after a failure has happened (Vaerenbergh and Orsingher, 2016). Antecedent studies have supported the positive role of service recovery in customer behavior (Cummings and Yule, 2020; Jong and Ruyter, 2004; Sparks *et al.*, 2016). Individuals show favorable evaluations and intentions to speak about a company when they receive a recovery that reflects their preferred coping strategy (Cummings and Yule, 2020).

Supporting customers when a failure occurs can influence their trust in the company (Sparks *et al.*, 2016), loyalty and word of mouth (Jong and Ruyter, 2004). Positive outcomes during recovery may minimize the effects of the initial failure. More interestingly, SR processes may have a significant impact regardless of whether the recovery process has negative or positive results (Spreng *et al.*, 1995). In many studies, SR actions have been found to exert a positive impact on customers' behavior (Cheng *et al.*, 2019; Ok *et al.*, 2007). Nevertheless, a comprehension of SR's mediating role between BL, BT and purchase intention is demanded.

Thus, the main purpose of this paper is to investigate the mediating role of service recovery between BL, BT and purchase intention in the context of food-delivery apps and to fill this theoretical gap. The research context can also be considered relevant given the novelty of the topic of food-delivery apps; therefore, actions are recommended to companies that operate in this market. The paper presents a review of the literature on BL, BT and service recovery. Then, the methodology is discussed in detail, followed by the outcomes. Finally, the discussion and the theoretical and managerial implications are reported.

# 1.1 Theoretical background

This study is underpinned by the triangular theory of love (Sternberg, 1986) and the expectancy model (Oliver, 1977). The triangular theory emphasizes the role of feelings in a relationship and the way in which they influence individual behavior. In our study, we applied the triangular theory of love to explain that customers manifest affection for branded apps just as they do for brands of goods. In this case, intimacy and passion can be seen as a feeling of trust that consumers devote to a branded app. Commitment can be viewed as the actual and future purchases made through the mobile app.

The expectancy model (Oliver, 1977) provides an understanding of the expectations that individuals have based on their previous experiences and their influence on their behavior regarding specific goals. The expectancy model clarifies the expectations that users have based on their previous interactions with a brand/branded app and shows how those expectations influence their behavior in relation to specific goals. If customers' previous interactions with a mobile application were pleasant, they will expect the same the next time. However, errors do occur, and customers' expectations may not be met. Thus, we add the service recovery theory as an explanation that mediates BL, BT and purchase intention in the face of a service failure in the context of mobile apps.

### 1.2 Brand love affects brand trust

BL consists of affection for/attachment to a specific brand (Bagozzi *et al.*, 2017; Batra *et al.*, 2012; Carroll and Ahuvia, 2006; Gumparthi and Patra, 2020), and BT is the emotional and rational commitment of customers to a particular brand (Upmannyu and Rajput, 2017). In this stream of research, previous studies have pointed out that consumers develop a relationship with brands similar to their ties to human beings (Albert and Merunka, 2013; Fournier and Yao, 1997; Huber *et al.*, 2015).

Recently, a study investigated consumer-brand relationships and brand loyalty in technology-mediated services. The findings showed that cognitive aspects of brand relationships are the major driver of behavioral intentions, followed by affective aspects, and the affective aspects of brand relationships have a stronger effect on price tolerance, while trust has no direct effect (Giovanis and Athanasopoulou, 2018).

Jain et al. (2018) studied consumer—brand relationships on social media platforms. The study revealed that trust partially mediated the relationship between involvement, commitment variables of customer—brand relationships, brand loyalty and word of mouth. The link between satisfaction with customer—brand relationships, brand loyalty and word of mouth via BT was found to be insignificant.

To understand this phenomenon better, marketing academics have investigated BL using different conceptual models and confirmed that it results in BT (Batra *et al.*, 2012; Huang, 2017; Palusuk *et al.*, 2019; Zhang *et al.*, 2020). A stream of research has supported the positive effect of BL on consumer behavior, for example increasing customers' positive evaluations of and emotional reactions to the brand (Batra *et al.*, 2012), the sales volume (Gwinner *et al.*, 1998) and customers' engagement (Bergkvist and Bech-Larsen, 2010) loyalty and word of mouth (Batra *et al.*, 2012); this positive effect, in our view, is a reflection of profound trust in the brand as a result of love for it (Huang, 2017). Thus, we propose the first hypothesis:

H1. BL has a positive impact on BT.

# 1.3 Brand love affects purchase intention

BL has been shown to be an antecedent of individuals' commitment, loyalty and word of mouth (Batra *et al.*, 2012; Fetscherin, 2014; Kudeshia *et al.*, 2016; Sarkar and Sreejesh, 2014). A wide body of studies has supported the direct and indirect linkages of BL and purchase intention (Batra *et al.*, 2012; Carroll and Ahuvia, 2006; Fetscherin *et al.*, 2014; Garg *et al.*, 2015). In addition, BL leads to positive consumer behavior in favor of some brands (Fetscherin, 2014), such as the intention to purchase products and baby food in retail stores (Garg *et al.*, 2015; Otero and Wilson, 2018; Palazon *et al.*, 2019; Vlachos and Vrechopoulos, 2012). Based on this body of studies, we established the second hypothesis for this study:

H2. BL has a positive impact on purchase intention.

#### 1.4 Mediating role of service recovery

Fundamentally, SR consists of the actions that a company takes after a failure in service has occurred (Vaerenbergh and Orsingher, 2016). The main objective of SR is to correct the failure and re-establish the customer's trust, relationship and interest in purchasing from the company in the future (Cheng *et al.*, 2019). The service recovery paradox (SRP) is an interesting view on this topic. The SRP (Ok *et al.*, 2007) posits that an excellent recovery can turn angry and frustrated customers into loyal ones and make the relationship more robust.

However, past studies have presented a diversity of findings regarding this perspective (Rosenbaum and Russell-Bennett, 2021; Ok et al., 2007). For example, some studies have shown a positive impact of SR on customer behavior (Jung and Seock, 2017), while other findings have been negative (Kim et al., 2022). Thus, the impact of SR on customers' behavior is still not clear, and the need for alternative explanations has to be addressed (Van Vaerenbergh et al., 2019); thus, we focus on this gap.

A weak point of this BL stream was presented by Zhang *et al.* (2020) regarding the moderating role of BL in consumers' retaliation to brand failure. Studies have demonstrated that consumers facing brand failure suffer negative emotions and then generate an intention to retaliate. Additionally, prior studies have indicated that BL moderates relationship failure, negative emotion and retaliation intention (Zhang *et al.*, 2020). Indeed, a body of research (Borah *et al.*, 2020; Cummings and Yule, 2020; Sparks *et al.*, 2016) has proven the existence of positive outcomes of service recovery for customer behavior, but no previous study has tested the mediator mechanism of SR between BL, BT and purchase intention in the context of mobile apps. Thus, we address the following hypotheses:

H3. SR mediates the relationship between BL and BT.

H4. SR mediates the relationship between BL and purchase intention.

Based on the triangular theory of love (Sternberg, 1986) and expectancy theory (Oliver, 1977), the authors investigate the direct impact of BL on BT and purchase intention and the mediator mechanism of SR between these variables, which is the main contribution of this study. The conceptual model below presents the hypotheses (Figure 1).

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## 2. Methodology

#### 2.1 Measures

This study follows a quantitative approach. A questionnaire was developed from previous studies to investigate our conceptual model. After the items had been adapted to our study, each variable was measured using a seven-point Likert scale (1 = totally disagree to 7 = totally agree). The questionnaire was composed of BL (Carroll and Ahuvia, 2006): "This app is wonderful" (bl1), "This app makes me feel good" (bl2), "This app is awesome" (bl3), "I have neutral feelings about this app" (bl4), "This app makes me very happy" (bl5) and "I love this app" (bl6); BT (Sung, 2020): "This app can be relied on to keep its promises" (t1), "This app puts the customer's interests first" (t2), "This app usually keeps the promises that it makes to me" (t3) and "I trust this app" (t4); SR (Maxham and Netemeyer, 2002): "The way my app handles a problem influences my trust in the app's service" (sr1), "The way my complaint is resolved influences my trust in the app's service" (sr2), "The faster my app resolves a problem, the more I trust the app's service" (sr3) and "The proper effort my app puts into resolving my problem affects my trust in the app's service" (sr4) and purchase intention (Hendijani and Marvi, 2019): "I will continue to purchase food using this app" (pi1), "I consider this app to be a good option to purchase food" (pi2), "This app will be my first option to continue purchasing food" (pi3) and "I like this app to purchase food" (pi4).

#### 2.2 Data collection

We gathered data from users of food-delivery applications during February, March and April 2021 through an online link shared on a social platform. We used a screening question to filter the users of food-delivery apps who had experienced any sort of service failure. Following that, we asked them to share which app they use the most regularly and like the most when it comes to purchasing food. The food-delivery apps most mentioned were Ifood (93; 34%) in South America and Panda Food (97; 35%) and Uber Eats (85; 31%) in Asian countries.

Following that, we asked the respondents to express their opinion regarding BL, BT, SR and purchase decisions regarding the app that they use to purchase food. In total, 288

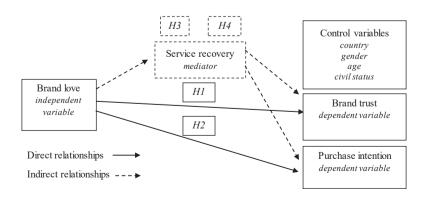


Figure 1. Conceptual framework

responses were collected, but 12 were discarded because of biased responses. Thus, the final sample consisted of 275 individuals. Following Armstrong and Overton's (1977) recommendations, the data were scrutinized for nonresponse bias. Early and late versions of the questionnaire were compared for systematic differences in demographic variables (i.e. gender, age and country), with no significant differences identified at p < 0.05.

To define the sample size for our study, we considered ten times the maximum number of arrowheads pointing at a latent variable anywhere in the partial least squares (PLS) path model (Hair *et al.*, 2021). Having specified the maximum number of arrowheads, researchers can use the G\*Power (Faul *et al.*, 2007) software to calculate the minimum sample size necessary to detect the minimum  $R^2$  (0.10, 0.25, 0.50 and 0.75) in any of the endogenous constructs in the structural model at significance levels of 1, 5 and 10%, assuming the commonly used level of statistical power of 80% and a specific level of complexity of the PLS path model.

The results suggested that the minimum sample size required (to achieve a power of 0.95) for this study is 71 responses. Our study's sample exceeds this figure while also following Reinartz *et al.*'s (2009) advice that a sample size of 100 and power of 0.8 are sufficient to conduct PLS-structural equation modeling (SEM) (Hair *et al.*, 2021). Table 1 presents the respondents' demographics.

## 3. Data analysis and results

#### 3.1 Measurement model assessment

Smart PLS 3.0 was used as a statistical tool to conduct SEM based on PLS to test the study's framework and hypotheses. First, the measurement model for convergent validity was assessed through the following loading values: Cronbach's alpha (>0.50), rho\_A (>0.70), CR (>0.70) and average variance extracted (AVE) (>0.50) (Ramayah *et al.*, 2018; Henseler *et al.*, 2016). To establish the reliability and convergent validity, the load values should surpass the values presented above (Rasoolimanesh and Ali, 2018). Nonetheless, loadings between 0.50 and 0.70 remain acceptable if the composite reliability (CR) and AVE values reach the threshold above (Hair *et al.*, 2021). Table 1 provides an overview of these results to demonstrate that reliability and convergent validity were established for the model.

Second, the discriminant validity was examined. The Fornell–Larcker criterion and heterotrait–monotrait (HTMT) approaches were employed (Voorhees *et al.*, 2016) (Table 2). The extant research has suggested that acceptable HTMT values can be lower than either 0.85 or 0.90 (Kline, 2015; Sarstedt and Cheah, 2019) (Table 3).

We reported and confirmed in sequence the cross-validated redundancy ( $Q^2$ ): BT (0.328), purchase intention (0.302) and SR (0.053). According to Hair *et al.* (2021),  $Q^2$  values larger than 0 indicate that the exogenous constructs have predictive relevance to the endogenous constructs under consideration. As a relative measure of predictive relevance, values of 0.02, 0.15 and 0.35 indicate that an exogenous construct has small, medium or large predictive relevance for a certain endogenous construct (Hair *et al.*, 2021; Sarstedt and Cheah, 2019). Based on our findings, we can consider BT and purchase intention as having large effects and SR as having a small effect given the facts of being used and acting as a mediator variable in the model.

Respondents' gender	Civil status	Frequency of ordering meals per week	Number of respondents				
Male (126; 46%)	Married (35%) Single (65%)	From 1 to 3 times a week	(208; 76% consumers)				
Female (149; 54%)	Married (55%) Single (45%)	From 4 to 6 times a week	(41; 15% consumers)				
Total: 275	, , ,	More than 6 times a week	(26; 9% consumers)				
Note(s): *Average number of respondents aged 36 years (SD = 4.60)							

Table 1. Respondents' demographics

Constructs	Items	Out loadings	VIF collinearity	Cronbach's alpha	rho_A	Composite reliability	AVE	The mediating role of service
Brand love	bl1	0.806	2.152	0.902	0.902	0.924	0.670	recovery
	bl2	0.823	2.278					
	bl3	0.847	2.506					
	bl4	0.803	2.166					
	bl5	0.824	2.409					
	bl6	0.808	2.194					
Purchase	pi1	0.873	1.973	0.872	0.878	0.912	0.722	
intention	pi2	0.832	2,429					
	pi3	0.842	2.144					
	pi4	0.851	2.071					
Service	sr1	0.796	1.755	0.835	0.836	0.890	0.669	
recovery	sr2	0.844	2.062					
,	sr3	0.812	1.773					
	sr4	0.820	1.793					
Brand trust	bt1	0.832	1.941	0.857	0.860	0.903	0.701	
	bt2	0.787	1.681					Table 2.
	bt3	0.868	2.312					Measurement model
	bt4	0.860	2.2036					assessment

Constructs	Brand love	Purchase intention	Service recovery	Trust	
Brand love Purchase intention Service recovery Brand trust	0.819 0.322 0.297 0.652	0.850 0.643 0.386	0.818 0.420	0.837	<b>Table 3.</b> Discriminant validity – Fornell–Larcker criterion

# 3.2 Structural model assessment

The hypothetical relationships were also assessed using Smart PLS 3.0. Table 4 shows the direct effects. In terms of significance, BL has a direct impact on SC, BT and purchase intention ( $\beta = 0.297$ ; p < 0.01;  $\beta = 0.578$ ; p < 0.01;  $\beta = 0.144$ ; p < 0.01). In addition, SR has a direct impact on BT and purchase intention ( $\beta = 0.248$ ; p < 0.01;  $\beta = 0.601$ ; p < 0.01). These results support H1 and H2 proposed in this study.

# 3.3 Mediation analysis

Mediation analysis was performed to investigate the indirect effect of BL through SR. The results support the mediation effect of SR between BL, BT and purchase intention ( $\beta = 0.178$ ; p < 0.01;  $\beta = 0.074$ ; p < 0.01). The result of  $R^2$  explains 48.1% of BT and 43.2% of the variance

Constructs	Brand love	Purchase intention	Service recovery	Trust	
Brand love Purchase intention Service recovery Brand trust	0.356 0.340 0.742	0.745 0.439	0.496		<b>Table 4.</b> Discriminant validity – heterotrait–monotrait ratio (HTMT)

in purchase intention, supporting H3 and H4. We present Figure 2 to visualize better the structural model that we tested and its hypotheses.

In Table 5, we present the direct effects of BL on BT and purchase intention and SR. Table 6 shows the total effect of the model.

In sequence, we present the indirect effects of BL on BT and purchase intention through SR (Table 7).

Following the presentation of the data and the state of the hypotheses, the next section discusses the findings in light of the triangular theory of love and expectancy theory and refers to the previous findings to discuss the results of our study.

#### 4. Discussion

The primary purpose of this study was to investigate the mediating role of SR between BL, BT and purchase intention. The triangular theory of love (Sternberg, 1986), expectancy theory (Vrom, 1964) and SR (Vaerenbergh and Orsingher, 2016) were articulated to achieve this aim. The selection of the BL, BT, purchase intention and SR constructs for our study was made for two central reasons: first, the need to advance the literature relating to BL, BT, purchase intention and SR; second, the need to consider the significance of these constructs, including how managers operate in the circumstances of a failure. The literature on BL has supported the assertion that customers tend to trust and purchase the brands that they love; however, with the occurrence of a failure, customers can evaluate their "loved brand" negatively.

SR in this context is essential. We showed that, in the case of a failure, managers can reestablish customers' trust and purchase intention through SR. SR actions are so important that some companies give financial incentives to customers to report problems that they have experienced (Hart *et al.*, 1990).

According to the triangular theory of love, when engaged in a relationship with another person, people tend to present passion, intimacy and decision/commitment (Sternberg, 1986). In a consumption context, those feelings are manifested as love (passion) for a brand, trust (intimacy) and purchase intention (commitment) in the consumption context.

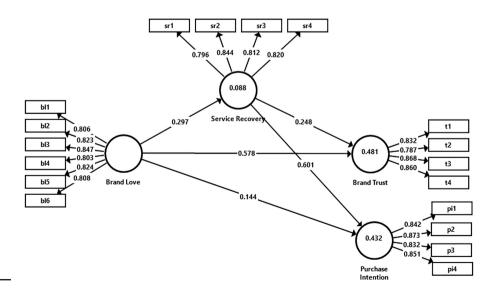


Figure 2. Structural model

From the viewpoint of expectancy theory (Vrom, 1964), individuals will have specific expectations in social settings according to their previous experiences and will behave accordingly to achieve certain goals. In the context of this research, it means that consumers expect a good performance of their branded apps because they love and trust such brands.

Even though there is a brilliant body of studies supporting BL's impact on consumers' behavior (Batra *et al.*, 2012; Carroll and Ahuvia, 2006; Palusuk *et al.*, 2019), to the best of our knowledge, this study is the first one to investigate the mediator mechanism of SR in relation to BL, BT and purchase intention in the context of branded apps.

Supported by the triangular theory of love the relationship between BL and BT was confirmed by H1 (0.652). This means that, when a person becomes engaged in a relationship, the love component influences trust – thus, I love the brand, I trust in the brand. Some previous studies have also provided evidence of this relationship (Madeline and Sihombing, 2019). Additionally, BL showed a relationship with purchase intention, confirming H2 (0.322). From the triangular theory of love perspective, this is a kind of commitment that consumers tend to develop with a brand manifested through purchase intention (Yasin and Shamim, 2013).

Besides the positive effect of BL on BT and purchase intention, all companies are susceptible to failure. To investigate consumers' trust and purchase intention after a failure has occurred, we articulated the SRP, based on the triangular theory of love and expectancy theory (Vrom, 1964). The SRP supports the idea that a failure, once satisfactorily recovered, can strengthen the relationship between a customer and a company (Kim *et al.*, 2022). The

12 Paths β T-statistics p-values Hypothesis status 0.588 12.224 Brand love → Brand trust 0.578 0.000 H1 supported Brand love → Purchase intention 0.144 0.033 3.113 0.002 H2 supported 0.297 4.797 \*Effect present Brand love → Service recovery 0.096 0.000 Service recovery → Brand trust 0.248 0.108 4.416 0.000 \*Effect present Service recovery → Purchase intention 0.601 0.579 11.911 0.000 \*Effect present

Note(s): \*These paths were investigated to support the mediation effect present in the model (Baron and Kenny, 1986)

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Table 5.
Structural model results (direct effects)

Paths	β	Sample mean	T-statistics	<i>p</i> -values
Brand love → Brand trust	0.652	0.654	16.113	0.000
Brand love → Purchase intention	0.322	0.324	5.574	0.000
Brand love → Service recovery	0.297	0.301	4.846	0.000
Service recovery → Brand trust	0.248	0.250	4.793	0.000
Service recovery → Purchase intention	0.601	0.603	11.830	0.000

Constructs	β	Sample mean	T statistics	p values	Hypothesis status
Brand love → Service recovery → Purchase intention	0.178	0.181	4.131	0.000	H3 supported
Brand love → Service recovery → Brand trust	0.074	0.076	2.930	0.004	H4 supported

**Table 7.** Specific indirect effects

previous literature on SR has presented mixed results regarding this construct and customer behavior (Kim *et al.*, 2022). Scholars have found that customers who had experienced a satisfactory SR after a service failure presented higher satisfaction levels than customers who had experienced no loss (McCollough and Bharadwaj, 1992). On the other hand, Zeithaml *et al.* (1996) argued that a service failure can generate negative emotions.

From a brand relationship perspective, consumers engage in cognitive and affective behavior with brands. Recently, a study investigated consumer—brand relationships and brand loyalty in technology-mediated services. The findings showed that the cognitive aspects of brand relationships are the major drivers of behavioral intentions, followed by affective ones, and the affective aspects of brand relationships have a stronger effect on price tolerance, while trust has no direct effect (Giovanis and Athanasopoulou, 2018). Different from this study, our findings show that BL indirectly influences BT and purchase intention through the SR mechanism (0.601).

Jain et al. (2018) studied consumer—brand relationships on social media platforms. The study revealed that trust partially mediates between involvement, customer—brand relationships, brand loyalty and word of mouth. The link between the satisfaction of customer—brand relationships, brand loyalty and word of mouth via BT was found to be insignificant. Differently, our study shows that BL has a significant impact on BT as well as on purchase intention. Additionally, our results support the mediating impact of SR on the relationship between BL, BT and purchase intention, supporting H3 and H4. Thus, different from previous studies, our findings extend the knowledge of BL, BT and purchase intention, adding the SR recovery theory involving service failures in the context of food-delivery apps' operations.

# 4.1 Theoretical and managerial implications

Theoretically, this paper explains SR's mediating role between BL, BT and purchase intention. The study shows that, on the occurrence of a failure caused by a loved brand, the action taken by a company to recover the service strengthens the customers' trust in the brand as well as their purchase intention. In other words, SR re-establishes the feeling of love and BT as well as consumers' behavioral intentions.

To our knowledge, this is the first study to demonstrate the impact of the SR phenomenon by combining the theories of triangular love, expectation theory and BL. In doing so, we extend the knowledge about consumers' responses in the case of a failure caused by their loved branded apps and an SR's ability to establish trust (feelings) and promote future purchases (behaviors).

From a managerial perspective, this study proposes several actions that can be taken by food-delivery app companies. First, the way in which branded apps handle a problem influences customers' trust, so high-quality customer service is essential for supporting customers when they face specific issues. Second, this study recommends that companies enchant customers immediately after a failure has occurred. Accordingly, companies must monitor those customers who have experienced a service problem, measuring their level of trust in the branded app and checking the frequency of their purchases after a SR has been applied.

Keeping in touch with customers through messages is also a substantial action to interact with them and manage their expectations regarding the problem's solution. Furthermore, companies must segment customers who have experienced a failure. After correcting it, delivering a special service and offering benefits, like discounts and free delivery as a strategy to keep up future purchases, can be a good strategy. The way in which a consumer's complaint is resolved influences the trust in the app's service; in other words, food-service apps have to innovate in the way in which they offer solutions to customers or even allow them to choose whether they want another product or their money back. Fourth, the faster the

app operator resolves a problem, the more customers tend to trust the app's service. Branded app companies should also offer different channels for their contact and offer 24-h customer service to support clients in their needs. Finally, the proper effort that an app company puts into resolving customers' problems has an impact on their trust in the app's service. Along this line, app companies must keep in touch with customers or give them the ability to track the actions that have been taken to resolve the problem. In sum, customers do not want to feel abandoned when facing such problems but desire immediate SR actions.

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## 4.2 Limitations and recommendations for future studies

This research has some limitations, which also offer opportunities for future studies. First, using a larger sample can be considered to increase the generalizability of our findings. Second, this study focused on the SR construct in general. Future research can address different types of failures, for example, core, interpersonal and procedure failures (Kim and Jang, 2016). Third, our study was limited to the relationship between BL, BT and purchase intention. Future studies can investigate the dimensions of the BL construct using a second-order approach. Additionally, future studies can add other constructs to our model, for example individuals' involvement level with the branded app, brand loyalty, e-word of mouth and information risk. In partnership with some branded app companies, future studies can examine the social and economic benefits of SR following a longitudinal study approach and investigate through secondary data how much expenses/resources food delivery service providers can save by providing the right service at the first time and cost per SR. Also, a cross-cultural study on the use of food-app-delivery could be addressed.

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