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## Article

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*Suggested Citation:* Ali, Muhammad Asghar; Ding Hooi Ting; Ahmad-ur-Rehman, Muhammad; Abbasi, Amir Zaib; Hussain, Zahid (2021) : Perceived service recovery justice and customer re-patronage intentions: Sequential mediation, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 8, Iss. 1, pp. 1-21, <https://doi.org/10.1080/23311975.2021.1938352>

This Version is available at:

<https://hdl.handle.net/10419/245059>

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To cite this article: Muhammad Asghar Ali, Ding Hooi Ting, Muhammad Ahmad-ur-Rehman, Amir Zaib Abbasi & Zahid Hussain | (2021) Perceived service recovery justice and customer re-patronage intentions: Sequential mediation, Cogent Business & Management, 8:1, 1938352, DOI: [10.1080/23311975.2021.1938352](https://doi.org/10.1080/23311975.2021.1938352)

To link to this article: <https://doi.org/10.1080/23311975.2021.1938352>



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Received: 10 April 2021  
Accepted: 24 May 2021

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## MARKETING | RESEARCH ARTICLE

# Perceived service recovery justice and customer re-patronage intentions: Sequential mediation

Muhammad Asghar Ali<sup>1</sup>, Ding Hooi Ting<sup>1</sup>, Muhammad Ahmad-ur-Rehman<sup>2\*</sup>, Amir Zaib Abbasi<sup>3</sup> and Zahid Hussain<sup>2</sup>

**Abstract:** The aims of this time-lagged study are twofold, first to identify the effect of perceived justice (as a second-order construct) on recovery satisfaction and customer affection; secondly, to investigate the effect of customer affection and recovery satisfaction on customer's re-patronage intentions. Data from 300 respondents (car insurance in Punjab, Pakistan) were analyzed using Structural Equation Modelling (PLS-SEM). The findings indicate that perceived service recovery justice (PSRJ) significantly predicts recovery satisfaction, customer affection and re-patronage intentions, and customer re-patronage intentions can be engendered through customer justice perception, positive appraisal of recovery satisfaction and customer affection. Recovery satisfaction and customer affection also indirectly explain the effect of PSRJ on re-patronage intentions (sequential mediation). Such findings have implications to theory and practice as it proposes and tested a new link between recovery satisfaction and customer affection. This research contributes

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## PUBLIC INTEREST STATEMENT

It is not surprising that occasional service failure is inevitable despite tremendous effort for zero-defect service delivery. Specifically, if service failure not dealt properly can put customer company relationship at stake. When consumers suffer due to service failure they seek proper compensation for their loss. Even after recovery, the consumers make a comparison if provided recovery is fair in comparison to other consumers and form their attitude and behaviour accordingly. Therefore, it is important to understand how perceived service recovery justice influence patronage intentions. This study investigates the interrelationship between perceived service recovery justice and re-patronage intentions through mediating effect of recovery satisfaction and customer affection. The statistical evidence supported the indirect effect of perceived service recovery justice on re-patronage intentions with important practical implications. The managers should develop employee training strategies to keep them unbiased, there should be proper compensation with an apology, procedures of service recovery should be flawless and hassle-free.

to practice by providing strategies for effective service recovery and ultimately generates re-patronage intentions.

**Subjects:** Marketing; Services Marketing; Relationship Marketing

**Keywords:** Perceived service recovery justice; affection; recovery satisfaction; re-patronage intentions; Sequential mediation

## 1. Introduction

In many daily transactions, it is not surprising that occasional service failure is inevitable despite tremendous effort for zero-defect service delivery. The outcome of service failure can be disastrous for the company's short- and long-term existence. Service failure, if not appropriately handled, deteriorates customer relationship (affection) with the company and dissatisfaction could lead to defection. To overcome customer defection and to sustain a long-term relationship, many companies are using service recovery strategies to mend the damage caused by a service failure. Author argued that the service recovery strategies could be inappropriately handled, as many researchers and practitioners have yet to understand how service failure and service recovery interacts or interrelate. This could have added to a misconception and resource utilization, which ended up in customers' dissatisfaction and defection. To address this issue, this study provides a comprehensive framework that can overcome customer dissatisfaction and defection.

Service recovery refers to corrective measures taken by companies to respond to service failures perceived by the customer. Many previous studies have highlighted the importance of subsequent service recovery to establish a positive relationship with the customer (Chao & Cheng, 2019; Cheung & To, 2017; Gustafsson, 2009; Maxham & Netemeyer, 2002a; H. S. Chang & Hsiao, 2008) but no research has measured the orders of the service events in the forms of service recovery justice, recovery satisfaction and customer affection.

Recovery satisfaction is deemed critical, measuring the cognitive facets of consumer behavior. Various scholars have elaborated the link between- and their effect on customer loyalty (attitudinal or behavior intentions) (Chao & Cheng, 2019). Although customer recovery satisfaction has been confirmed prominent for future consumer patronage; however, recovery satisfaction is not the only sufficient factors to win customer re-patronage in-service failure. This study builds arguments based on evidence that sometimes consumers are satisfied with the products. Nonetheless, they still switch to another alternative if they found a better option; therefore, author argued that in the recovery context, customers re-patronage decisions might not be solely based on recovery satisfaction. To provide evidence to this notion, author proposed that emotional bonding or affection (affective aspect) might directly or indirectly (via enhanced service recovery evaluation) affect re-patronage intentions.

Scant studies have investigated the role of recovery satisfaction and customer affection in explaining consumer behavior (Choi & Choi, 2014; Nefat et al., 2012; Yani-de-Soriano et al., 2019). Affection has been considered a vital factor of intimacy in social psychology. Park et al. (1991) affirmed intimacy as an essence of a relationship with love and affection as its fundamental facets. Thomson et al. (2005) have identified three dimensions of attachment: passion, affection, and connection. They define "affection as warm feeling that a customer has towards a brand, while 'passion/love' is characterized as an impulse and "connection' as an effort to preserve/collect the brand". Contrary to these studies, Yim et al. (2008) described affection as a multidimensional construct that comprises passion/love, intimacy and commitment as sub-dimensions. Although understanding customer affection is slightly different between studies, customer affection's central role is to develop a robust customer-company relationship. In this study, the author followed the customer affection construct (a uni-dimensional construct) as defined by Thomson et al. (2005) as friendly, loved, peaceful emotions toward a company.

### **1.1. Importance of customer affection**

Many researchers believe that affection is different from consumer emotions, as emotions are short term—they can temporarily transform a customer's mood. At the same time, customer affection is a state of mind (warm feelings of attachment) which can overlook minor mistake or service failure committed by the company. Affection can restore customer relationship with the company if appropriate subsequent service recovery is made. Young and Hausman (2006) posited that customer emotions could strengthen or weakened customer affection as customer affection is formed as a result of several positive experiences and interaction with the company. Some previous studies identified the role of consumer emotions and their effect on attitudinal and behavioral consequences. DeWitt et al. (2008) have used cognitive appraisal theory and has established that service recovery perceptions will have an effect on customer emotions (happiness, pleasure and disappointment) which in turn influence consumer loyalty. In a similar vein, Namkung and Jang (2010), following the Mehrabian-Russel Stimulus-Organism-Response model helped to understand the role of customer emotions and consumer behavioural response during service failure and recovery context. Emotions are subject to criticism because of their short-term or momentary effect on customer behaviour. Therefore, in our study, we focus on customer affection, which can be a strong predictor of consumer re-patronage. In other words, customer affection restores customer relationship if proper recovery is provided; however, we do not deny that if service recovery efforts also fail, it will have a disastrous impact on customer affection which ultimately will have negative consequences in the form of dissatisfaction and defection.

It is interesting to investigate the role of customer affection and customer service recovery satisfaction in explaining re-patronage intentions in the service failure and service-recovery context. Despite the importance of cognitive (recovery satisfaction) and affective (customer satisfaction) variables in explaining customer re-patronage intentions, no study has investigated the relative effect of recovery satisfaction and customer affection during service failure and recovery context (Chao & Cheng, 2019; Choi & Choi, 2014).

The main objectives of this study are twofold, first to identify the effect of perceived justice (as a second-order construct) on recovery satisfaction and customer affection. Secondly, the current study investigates the effect of customer affection and recovery satisfaction on customer's re-patronage intentions. Many research examines the role of recovery satisfaction on consumer behaviour and loyalty; scarce research is conducted to address the role of recovery satisfaction and customer affection as sequential mediating factors between justice perceptions and other outcome variables like patronage intentions (DeWitt et al., 2008; Harris et al., 2006; McColl-Kennedy et al., 2016; Namkung & Jang, 2010; Wirtz & Mattila, 2004).

The current study contributes to the existing literature in many ways. First perceived justice will be investigated as a second-order formative construct with three dimensions (procedural justice (PJ), distributive justice (DJ) and interactional justice (IJ)). This study investigates the effect of perceived justice on customer affection, recovery satisfaction and re-patronage intentions. There is no consensus on how recovery satisfaction and re-patronage intentions can be strengthened; we believe that the current service recovery strategies could have been handled wrongly. Therefore, it is important to know the order constructs of the service events to understand how behavior is manifested during the service failure and service recovery. Second, this study investigates the relative effect, recovery satisfaction and affection to understand re-patronage behavior. We investigate the sequential mediating effect of recovery satisfaction and customer affection which expands our understanding of the relationship between recovery satisfaction and customer affection on other variables. We believe that the sequential mediating effect will capture the missing connection between service failure, service recovery (justice) and re-patronage. It is crucial to make the connection, as there have been many uninformed decisions to establish the cause and effect of customer behaviour. With the sequential mediation effect, we can establish a more comprehensive understanding of customer behaviour events.

Third as per Choi and Choi (2014), customer affection is a new concept (overlooked in the past) in-service failure and recovery context that warrants further investigation. The continuous improvement in service strategies (with yet an inclusive understanding of behaviour) have gathered much debate as to why there is always customer defection, though many strategies have been proposed to reduce customer defect. Affection is the base of customer-supplier relationship, which are stronger (and can overlook minor mistake or service failure), and hence, this study will uncover how affection (car insurance sector, which is intended to be a long-term relationship) will be able to overcome service failure through a sequential mediating effect. The importance of this study is undeniable, as insurance is about forming a long-term relationship. Therefore, this study is hoped to uncover the affectionate aspect of a relationship, to understand how minor errors could be overlooked.

### **1.2. Research context- The insurance industry in Pakistan**

Insurance service in Pakistan is categorized into life insurance and non-life sector. Current trends in the market witnessed moderate growth in both sectors. Specifically, the Securities and Exchange Commission of Pakistan's annual report shows until December 2019, total assets of the insurance industry have increased to Rs 1784<sup>1</sup> billion as compared to Rs 150 Billion in 2018. This depicts a 16% growth in a single year. On the other hand, the gross written premium has reached Rs 343 billion (2019) as compared to Rs 326 billion in 2018, indicating a growth of around 5% in Gross Written Premium. On the revenue side, the non-life insurance sector demonstrates a surge from 100 billion in 2018 to 114 billion in 2019. All these factors are witnessing a remarkable growth of the insurance sector in Pakistan. Although all insurance companies are performing well; however, human involvement in service delivery is not error-free. Procedural delays and biased behavior of frontline employees or company policies can cause service failure and create customer dissatisfaction. Customer patronage has been deemed a critical factor because when consumer continuously uses a company's services, it contributes to the financial resources and long-term survival. Therefore, it is more useful to maintain an existing customer rather than acquiring a new one. That is why companies use service recovery strategies (i.e., providing compensation, apologizing and quick response) to overcome the damage caused by service failure and win their existing customers' patronage. Hence, this study focused on how customer perception of service recovery justice influences their patronage intentions through sequential mediation (in service failure and recovery context).

## **2. Hypothesis development**

### **2.1 Perceived service recovery justice and customer recovery satisfaction and re-patronage intention**

Customer satisfaction is very significant to have sustainable customer-company relationships. "Customer satisfaction is defined as a consumer's response to a firm's fulfilling his expectation". Many past studies have explored the association between customer satisfaction and service recovery (Ibrahim et al., 2018; Jin et al., 2019). When a service failure occurs, service recovery has been suggested to influence customers' satisfaction from a justice perspective positively (H. S. Chang & Hsiao, 2008). Kim et al. (2009) posited that customers' satisfaction with recovery efforts in the form of favourable evaluation is the result of a fair recovery process practised by the organization to overcome service failure. Several empirical studies have supported assessing service recovery from the perspective of PSRJ and confirmed that PSRJ could affect satisfaction with the recovery (Cai & Qu, 2018; Jung & Seock, 2017; Shin et al., 2018). Jung and Seock (2017) confirmed that DJ, PJ, and IJ have a significant impact on customers' evaluations of service recoveries (satisfaction) and commitment positively increase (moderates) the effect of procedural and IJ on recovery satisfaction. Y. W. Chang and Chang (2010) showed that justice perception strongly influences recovery satisfaction. Customer orientation can enhance employee recovery performance (W. Kim et al., 2012), and effective service recovery measures can strengthen customer satisfaction regarding the quality of purchased products or services (Chou, 2015; Valenzuela, 2014; Wang et al., 2011).

On the other hand, justice theory is a widely recognized tool to explain the phenomena of recovery satisfaction and its outcomes after service failure (re-patronage intentions) (Chebat & Slusarczyk, 2005; Cheung & To, 2017; Ha & Jang, 2009; McColl-Kennedy et al., 2016; Smith et al., 1999). Service recovery satisfaction is considered a vital antecedent of loyalty. Jung and Seock (2017) confirmed recovery satisfaction precedes word of mouth. On the other hand, Bouranta et al. (2019) demonstrate that superior service recovery is positively associated with customer loyalty (re-patronage). A dissatisfied customer will spread negative word of mouth and switch to alternative options. Hence, recovery satisfaction seems a prerequisite to developing re-patronage intentions in response to perceived justice. Therefore, we hypothesized that:

H1: There is a positive relationship between perceived justice and recovery satisfaction.

H2: There is a positive relationship between recovery satisfaction and re-patronage intentions.

H3: There is a positive relationship between perceived justice and re-patronage intentions.

## **2.2.. Perceived service recovery justice and customer affection and re-patronage intentions**

“PSRJ is considered to be self-focused evaluations based on the trade-off between losses caused by service failures and gains from service recoveries. Perceived justice is a three-dimensional construct, namely, DJ, IJ, and PJ” (Carrillo et al., 2019; Ha & Jang, 2009; Homburg & Fürst, 2005). “DJ concerns the perceived fairness of specific outcomes of the firm’s recovery effort, such as discounts, refunds, store credits”, etc. “PJ is related to the perceived fairness of the procedures by which a service recovery is conducted”. The timing and speed of handling complaints are important aspects of PJ (Tax et al., 1998). “IJ refers to the manners by which customers are treated”, which includes elements such as courtesy, politeness, and efforts in dealing with customers by service personnel during a service recovery process.

Many previous studies confirmed that emotions are activated by PSRJ after receiving appropriate recovery (Chebat & Slusarczyk, 2005; DeWitt et al., 2008; Hashish, 2020; Lucas et al., 2018; Marmar et al., 1999; Namkung & Jang, 2010; Soenen et al., 2019; Varela-Neira et al., 2008). Marmar et al. (1999) depicted that happiness is the result of firms’ effective recovery effort, whereas procedural flaws in the service recovery process engender guilt and anger, disappointment etc. Another study termed emotions as a cause of relationship (mediator) between the relationship of PSRJ and customer loyalty in service failure and recovery contexts (Chebat & Slusarczyk, 2005; DeWitt et al., 2008). Moreover, Chebat and Slusarczyk (2005) posited that dimensions of perceived justice affect individuals emotions (happiness, guilt and anger, etc.) which, in turn, determine customer loyalty (or defection). Although the stream of research enhances our knowledge and understanding of the importance of customer emotions in service failure and recovery, nevertheless, this domain of research has gone through criticism from certain scholar due to its short-term and temporary effect on consumer behaviour (relationship quality). Therefore, for this study, we used customer affection instead of emotions and level of affection depend on positive experience or interaction with the firm and strength or weakness depending on how the service failure and recovery is handled. Customer affection is an affectionate bond or attachment (warm feelings) with the company, a failure caused by company might generate negative emotions but customer attachment or relational bonding with the company might overlook the service failure and restore customer relationship with the company. Contrary to this, if service failure is very severe, it may put customer affection at a test and break the affectionate customer tie (warm feelings) with the company that lead to defection. When customer–firm affection is created, it serves as a relationship-sustaining emotional bond between a customer and a firm (Young & Hausman, 2006).

Hence, extending previous research, this study investigates the link between customer affection and PSRJ, instead of PSRJ and emotions. Customer affection with a firm corresponds to

the way service failure is tackled by the service provider. For example, in a social relationship, a single incident can end or further strengthen the relationship; similarly, at the point of service failure, affection ties depend on the way employee interact with the customer (IJ), recovery is handled (PJ), and proper redress is provided (DJ). Strong affectionate ties developed based on PSRJ will generate re-patronage intentions. Park and Park (2016) posited that emotionally connected people overlook alternative competing brands. Customers intend to develop a complex range of relationship with people, object and intensity of the relationship vary from friendly to an addictive relationship (Yim et al., 2008). Customer love can influence or change customers perception by motivating customers to disregard the risk and cost attached to the consumption of a product or service (Fournier, 1998). Organizations that do not focus on the development of customer affection are often unsuccessful in winning customer patronage or loyalty (Bell et al., 2000). Hence, customer-company affectionate ties can be a good source of profitability which ensures customer future repurchase and patronage. A higher level of customer affection causes to increase and strengthen customer re-patronage intentions by following service failure and recovery. Thus, we hypothesized:

H4: There is a positive relationship between customer affection and re-patronage intentions.

H5: There is a positive relationship between PSRJ and customer affection.

### **2.3. Customer affection and recovery satisfaction as Mediators**

Service recovery is the corrective measure taken by the companies in response to service failure (W. Kim et al., 2012; Lewis & Spyropoulos, 2001; Park & Park, 2016). Perceived justice/injustice with service recovery generates positive/negative emotions, which ultimately weaken or strengthen customer affection. Emotions being temporary and episodic do not have a long-lasting effect on customer behaviour. However, they can strengthen or weaken affectionate consumer ties with the company. Consequently, customer affection is included in the suggested model to get more rigorous results.

Previous studies have demonstrated a positive effect of customer affection in explaining customer satisfaction; for example, brand personality attracts consumer's internal affection and trust which consequently influence brand satisfaction. In another study by Veasna et al. (2013), they suggested destination attachment predicts destination satisfaction and revisit intentions. Affectionate ties have been reported as a primary component of life satisfaction in marital relationships, similarly, in service recovery context fair treatment by organization generate warm feelings (affectionate ties) with the company which forgoes minor mistake committed by the company and positively influence recovery satisfaction, however, in the context of this study, when consumer face service failure in response to their insurance claim, negative emotions may arise. Subsequent recovery might overcome negative emotions, and positive evaluation of recovery satisfaction will ultimately affect consumer affection (warm feelings, liking, etc.) with the company. Customer satisfaction work as an underpinning mechanism to strengthening and reinforcing the affectionate relationship between customer and firm (Daskin & Kasim, 2016; Yim et al., 2008). Thus, it can be inferred that customer affection will be re-established by recovery satisfaction. For instance, at the stage of service failure, recovery attempts in the form of apology, acknowledgement of customer's point of view and monetary compensations are likely to have a positive effect on recovery evaluation and assist in restoration in customer affection (Kelley & Waldron, 2005).

Some previous studies have also confirmed the indirect effect of PSRJ on re-patronage intentions through recovery satisfaction. A study by Kim et al. (2009) and Lee et al. (2018) confirmed a significant mediating role of recovery satisfaction between the relationship of PSRJ (PJ, IJ and DJ) and re-patronage intentions. Moreover, another study by (Nefat et al., 2012) also confirmed PSRJ indirectly

affect patronage intentions via recovery satisfaction. Still, only a few studies have investigated the mediating role of recovery satisfaction in explaining consumer intentions (Nefat et al., 2012).

Extant literature has supported this notion that recovery satisfaction is not a prerequisite indicator of re-patronage intentions (Chuang et al., 2012; Ting, 2014; Yi & La, 2004). There are possibilities that a customer is satisfied with the company's service recovery efforts but do not want to come back due to better alternative or grudges hold in their heart about the service failure. Hence, it is necessary to understand the role of customer recovery satisfaction in the insurance sector. Moreover, affectionate customer relation (warm feelings) with company derived from customer service recovery evaluation might be more influential in predicting re-patronage intentions, as an emotional attachment (affectionate ties) work as a resistance force and do not let customer switching to alternatives product or services easily. Similarly, Hashish (2020) confirmed that customer forgiveness mediates the relationship between perceived justice and customer satisfaction. Therefore, it can be hypothesized that

H6: There is a positive relationship between customer recovery satisfaction and customer affection.

H7: Customer recovery satisfaction mediates the relationship between PSRJ and re-patronage intentions.

H8: Customer affection mediates the relationship between PSRJ and re-patronage intentions.

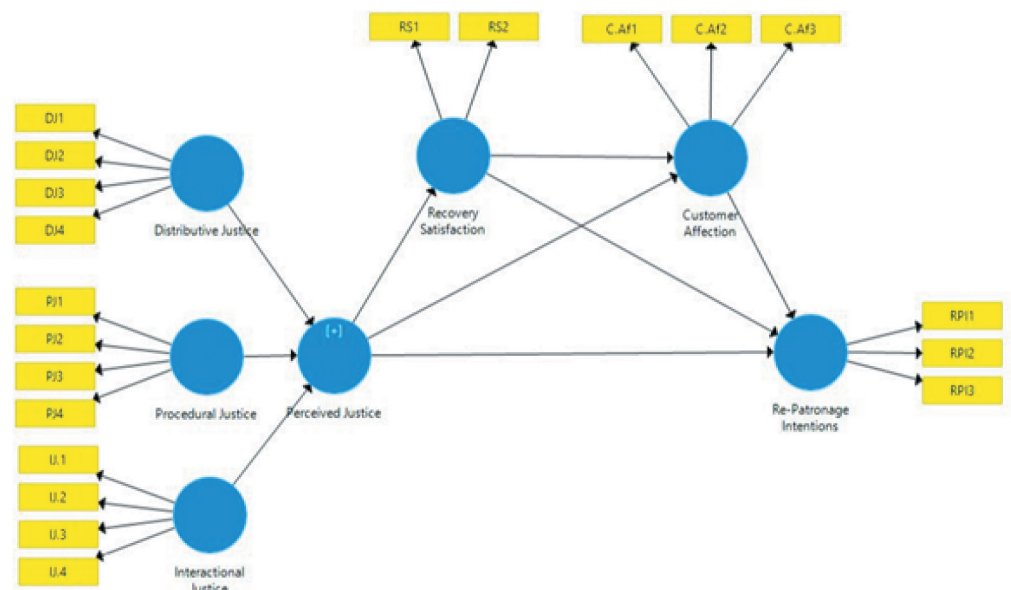
H9: Recovery satisfaction and customer affection sequentially mediate the relationship between PSRJ and re-patronage intentions.

The conceptual framework is illustrated in Figure 1.

### 3. Research methodology

To understand the phenomena of insurance claims and estimate the total population of policy-holders, we had reviewed reports of the Punjab Bureau of statistics which revealed that out of total

**Figure 1. Conceptual framework.**



**Table 1. Construct and source**

Construct	Source
Distributive Justice (4 Items)	(Maxham & Netemeyer, 2002a; Smith et al., 1999)
Procedural Justice (4 Items)	(Maxham & Netemeyer, 2002a; Smith et al., 1999)
Interactional Justice (4 Items)	(Maxham & Netemeyer, 2002a; Smith et al., 1999)
Customer Affection (3 Items)	(Thomson et al., 2005)
Recovery Satisfaction (2 Items)	(Choi & La, 2013; Swanson & Kelley, 2001),
Re-Patronage Intentions (3 Items)	(Bolton et al., 2000; del Rio-Lanza et al., 2009; La & Choi, 2012)

2 million registered vehicles, owners of 1.2 million vehicles have bought the insurance and claimed damages from the respective company.

Non-probability sampling technique has been used for data collection so that data can be analyzed and generalized to the actual population under investigation. We used the G\*power by Faul et al. (2007) to calculate the sample size. Using F test,  $f^2 = 0.15$ ,  $\alpha$  error prob = 0.05, power = 0.99 and number of predictors = 3, G\*power resulted that we required 119 respondents at a power of .99. However, we aimed to distribute 450 questionnaires to the potential respondents to increase the generalizability of our results.

Data collection from policyholders was a challenging task as the company's representatives were reluctant to share customers' data due to privacy concerns. To reach out to the respondents, we assured the company of preserving the privacy of the respondents and officials of insurance companies who shared the information of their customers. Later, we used the purposive sampling technique and the snowball effect to identify further respondents for data collection. Only respondents who fulfilled the inclusion criteria set by the researcher were contacted for this study. To qualify: 1) The respondent must be a car policyholder residing in Pakistan. 2) The respondent must have faced/experienced service failure during an insurance claim. 3) The respondent must have filed a complaint about compensation of service failure. 4) Respondent himself must have gone through the recovery process after a service failure. Self-administrative survey technique was used for data collection; the respondent was informed about the purpose of the study. This study comprises of two phases (time lag technique: using the time difference of three weeks between phase 1 and phase 2) (De Clercq et al., 2017). In the first phase, the data were collected from respondents (who meet the inclusion criteria) on the independent variable perceived justice. In the second phase, the same set of respondents were contacted to give their feedback on dependent variables (customer affection, recovery satisfaction and re-patronage intentions). We distributed 450 questionnaires to the respondents and successfully collected 350 responses with a response rate of 78%. We performed preliminary analyses using the treatment of missing values and discarding the biased data. Finally, 300 responses used for further data analysis. PLS (SEM) approach was used in this study instead of the covariance-based SEM (CB-SEM). This approach warrants multiple benefits over CB-SEM; firstly this approach helps in unanimous analysis of associations between several latent variables represented by complex factors (manifest variables) and theoretical model. Secondly, PLS-SEM is a nonparametric method; there are no pre-requisite conditions related to the distribution of factors (manifest variables) of latent variables, and it can run analysis (between theoretical construct) even in a small sample size. Finally, PLS-SEM is suitable when the objective of the analysis is more inclined toward prediction rather than explanation (Hair et al., 2013). Sources of measurement items used for the variables investigated in this study are given in Table 1.

### 3.1. Participants

To ensure the respondents' selection criteria, we asked them to answer a few screening/filtering questions before filling the questionnaire. The first question was, have you claimed for car insurance

**Table 2. Respondents' profile**

<b>Participants' information.</b>	
Respondents' profile	Percentage %
Gender	
Male	88.7
Female	11.3
Occupation	
Business	9.7
Job	88
Other	2.3
Age	
Between 20 to 30	35.7
Between 31 to 40	43.7
Between 41 to 50	16.3
Between 51 to 60	2.7
Between 61 and above	1.7
Education	
Bachelor	19.3
Masters	38
M Phil	8.7
PhD	34
Experience with a company	
Less than 1 year	23.7
Between 1-5 years	43.3
between 5 to 10 years	25.7
between 10 and above years	7.3
Monthly Income: RS	
between 10,000 to 200,000	14.7
between 21,000 to 400,000	22.3
between 41,000 to 60,000	16
between 61,000 to 100,000	7.3
Between 100,000 and above	39.7

policy and faced service failure? Secondly, have you gone through the service recovery process after service failure happened? The respondents who answered these questions as yes were further asked to respond to the questionnaire. Table 2 showed the demographic details of the respondents. Majority of the respondents were male (88.7 percent), and are working. Most of the respondents were within the age of 20 years to 40 years (Table 2), who had claimed their insurance and went through the recovery after a service failure.

#### 4. Results

The collected data were further analyzed using the Smart PLS (Partial Least Squares) software, psychometric properties (validity and reliability) of the measurement scale was analyzed through the confirmatory factor analysis (CFA) procedure. The path analysis model was used to check the effect of exogenous variables on endogenous variables as well as the specific indirect effect to confirm mediation.

Data analyses were done in two steps comprising measurement and structural model assessment using the Smart PLS 3.2.9 software. First, the measurement model was analyzed to establish psychometric properties and appropriateness of the reflective and formative measurement models. Later, the structural model was developed (using the two-step approach by Becker et al. (2012))—to develop the second-order formative construct, i.e. PSRJ—to test the proposed hypothesis between latent variables. Prior to running the analysis, factors (manifest variables) of latent variables were checked for outliers and results depicted there was no outlier because all the values were between the range of  $\pm 3$  standard deviation.

To avoid common method bias, data for theoretical variables were collected at different interval of time from the same set of respondents. All the items were listed under the labeled construct, and the introductory text was given to explain the theoretical construct properly (Podsakoff et al., 2003). To test for common method bias, Harman's one-factor test was also carried out, and results demonstrate, single factor explained 41.40 percent of variance including all factors variables which are less than 50% (Podsakoff et al., 2003), this depicted that CMB is not a problem in this study.

#### **4.1. Step 1: Measurement model**

The conceptual model, as shown in Figure 1, depicts reflective formative combinations of constructs. PSRJ is a second-order formative construct with underlying three dimensions (PJ, DJ, and IJ) that are reflectively measured. Whereby customer affection, recovery satisfaction, PJ, DJ, IJ and re-patronage intentions are modelled as first-order reflective constructs. To assess the reliability and validity of the measurement model, we first assessed the first-order reflective construct followed by the second-order formative construct, i.e. perceived justice.

#### **4.2. Assessment of reflective (first-order) measurement model**

Hair et al. (2019) recommended the following quality checks for being reliable and sound reflective constructs. For instance, the outer loadings should exceed the minimum value of 0.40, reliability measures must be greater than the value of 0.70, and convergent validity (AVE) must be 0.50 or greater. Discriminant validity is another criterion for reflective constructs that need to be assessed. We used the most recent approach by Henseler et al. (2015) for assessing discriminant validity. They have suggested that the HTMT value should be lower than the value of 0.85 or a minimum of 0.90 (Voorhees et al., 2016). Our results reported in Table 3 showed that there is no discriminant issue, as all values were lower than the critical value (Table 3).

#### **4.3. Evaluation of the measurement model**

The discriminant validity of the measurement model was assessed by using the Fornell–Larcker criterion and Heterotrait-Monotrait Ratio (HTMT). Table 4a shows The total square roots of the indicators' AVE for all constructs are greater than the correlation of these constructs with other constructs in the model, thus meeting the Fornell–Larcker criterion (Fornell and Larcker, 1981). Table 4b confirmed HTMT values of all variables are less than the threshold value of 0.85 and there is no issue of discriminant validity.

#### **4.4. Assessment of formative (second-order) measurement model**

SmartPLS 3.2.9 was utilized to develop the second-order formative construct, i.e., PSRJ. We followed the two-stage approach by Becker et al. (2012) to calculate the latent variables scores and assign those scores to construct the second-order formative construct. We assessed the VIF that must be lower than 5 or even lower than 3.3, which is the most strict criterion (Kock & Lynn, 2012). Additionally, we checked the indicator weights and significance. The study findings showed in Table 5 reported that VIF is even lower than the threshold 3.3 and indicator weights of PSRJ (DJ, IJ and PJ) are statistically significant which depicts that the second-order formative construct (PSRJ) is valid.

**Table 3. Reflective measurement model analysis**

Construct	Code	Outer loadings – original Sample O	VIF	t Value	p Value	Cronbach's $\alpha$	CR	AVE
<u>Distributive Justice</u>								
	DJ1	0.719	2.047	39.86	0.00	0.86	0.86	0.605
	DJ2	0.859	2.617	85.72	0.00			
	DJ3	0.683	2.021	39.23	0.00			
	DJ4	0.837	1.811	42.79	0.00			
<u>Procedural Justice</u>								
	PJ1	0.879	2.124	48.32	0.00			
	PJ2	0.589	2.160	36.37	0.00	0.85	0.85	0.58
	PJ3	0.856	2.357	66.70	0.00			
	PJ4	0.691	1.843	28.66	0.00			
<u>Interactional Justice</u>								
	IJ.1	0.582	1.714	28.06	0.00	0.83	0.83	0.56
	IJ.2	0.817	2.340	71.86	0.00			
	IJ.3	0.874	2.409	73.51	0.00			
	IJ.4	0.684	1.660	21.57	0.00			
<u>Customer Affection</u>								
	C.Af1	0.84	3.082	124.02	0.00	0.91	0.91	0.78
	C.Af2	0.90	3.395	130.79	0.00			
	C.Af3	0.90	3.095	113.76	0.00			
<u>Recovery Satisfaction</u>								
	RS1	0.93	4.709	234.73	0.00	0.94	0.94	0.89
	RS2	0.95	4.709	288.40	0.00			
<u>Re-Patronage Intentions</u>								
	RPI1	0.85	2.252	61.42	0.00	0.86	0.86	0.68
	RPI2	0.86	2.540	96.40	0.00			
	RPI3	0.76	1.980	61.97	0.00			

#### 4.5. Step 2: Structural model analysis

For structural model assessment, we evaluated the beta value, t-values, coefficient of determination ( $R^2$ ), effect size and predictive relevance (Hair et al., 2019). The statistical significance of the structural models' parameters was established using the bootstrapping technique, running 5,000 sub-samples. Table 6 shows the results of the structural model analysis. Results of path analysis confirmed and supported all hypothesis (H1-H2, H3, H4, H5 & H6).

PSRJ (H1:  $\beta = 0.371$ ; [0.642, 0.748],  $p = 0.000$ ) has a statistically significant positive effect on customer recovery satisfaction, and PSRJ alone explained 13.8 ( $R^2 = 0.138$ ) percent of the variance in the independent variable (recovery satisfaction), and predictive relevancy was also more than zero ( $Q^2 = 0.130$ ).

Moreover, recovery satisfaction, PSRJ and customer affection all have a statistically significant positive effect on re-patronage intentions (H2, H3, H4), and together these exogenous variables

**Table 4a. Fornell-larcker criterion**

	Customer Affection	Distributive Justice	Interactional Justice	Re-patronage Intentions	Procedural Justice	Recovery Satisfaction
Customer Affection	0.883					
Distributive Justice	0.593	0.778				
Interactional Justice	0.695	0.580	0.748			
Re-Patronage Intentions	0.659	0.603	0.608	0.823		
Procedural Justice	0.459	0.336	0.289	0.353	0.763	
Recovery Satisfaction	0.463	0.337	0.340	0.597	0.259	0.942

**Table 4b. Heterotrait-Monotrait Ratio (HTMT)**

	Customer Affection	Distributive Justice	Interactional Justice	Patronage Intentions	Procedural Justice	Recovery Satisfaction
Customer Affection						
Distributive Justice	0.589					
Interactional Justice	0.692	0.577				
Re-Patronage Intentions	0.458	0.326	0.275	0.796		
Procedural Justice	0.663	0.595	0.608	0.688	0.341	
Recovery Satisfaction	0.464	0.334	0.342	0.413	0.250	0.598

**Table 5. Formative measurement model**

Constructs	Item	Scale Type	Weight	t statistics	P value	VIF
Perceived Service Recovery Justice	Distributive Justice	Formative	0.430	6.140	<0.001	1.378
	Interactional	Formative	0.576	9.473	<0.001	1.344
	Procedural Justice	Formative	0.291	4.866	<0.001	1.108

explain 50.50 percent variance in the endogenous variable (re-patronage intentions) with predictive relevancy importantly higher than zero ( $Q^2 = 0.489$ ). Recovery satisfaction has significant impact on re-patronage intentions (H2:  $\beta = 0.321$ ; [0.086, 0.332],  $p = 0.000$ . While PSRJ and customer affection also have significant positive impact on re-patronage intentions with (H3:  $\beta = 0.341$ ; [0.218, 0.471],  $p = 0.000$  and (H4:  $\beta = 0.212$ ; [0.224, 0.413],  $p = 0.000$ ), respectively.

PSRJ has significant impact on customer affection (H5: t-value = 18.145, p-value = <0.001):  $\beta = 0.621$ , [0.181, 0.473] and recovery satisfaction also positively explain customer affection (H6: t-value = 4.838, p-value = <0.001):  $\beta = 0.200$ , [0.181, 0.473]. PSRJ and recovery satisfaction together explain 51.7 percent ( $R^2 = 0.517$ ) variance in customer affection with  $Q^2$  (0.496).

Considering that effect size explains “the extent to which exogenous latent variable contributes to an endogenous latent variable’s  $R^2$  value” and measures the strength of the relationship between variables. f square value 0.35, 0.15 and 0.02 indicate higher, medium and smaller magnitudes, respectively.

We can identify from Table 6 that PSRJ had the highest effect in explaining variance in customer affection ( $f^2 = 0.688$ ,  $p < 0.001$ ). In contrast effect size from affection to re-patronage intentions ( $f^2 = 0.044$ ,  $p < 0.001$ ) was smaller as compared to recovery satisfaction to affection ( $f^2 = 0.071$ ,  $p < 0.001$ ) which was marginally closer to medium effect, respectively. PSRJ and recovery satisfaction demonstrated medium effect sizes in predicting re-patronage intentions with  $f^2 = 0.120$ ,  $p < 0.001$  and  $f^2 = 0.167$ ,  $p < 0.001$ . While effect size ( $f^2 = 0.160$ ,  $p < 0.001$ ) of PSRJ on recovery satisfaction was also medium and statistically significant (Table 6).

#### 4.6. Mediation analysis

To examine the mediation (indirect) effects, a bootstrapping (with 5000 re-samples) procedure, bias-corrected with 95% confidence interval was employed; Results of the study supported H7 which showed customer recovery satisfaction as a mediator with medium effect size (0.119). While H8 also tested the mediating role of customer affection and results supported the hypothesis with maximum effect size (0.132). Moreover, H9 was supported, which confirmed that recovery satisfaction and customer affection are sequential mediators between the relationship of PSRJ and re-patronage intentions with a statistically significant effect size (0.016) (Table 7)

### 5. Discussion, conclusion, and future research

#### 5.1. Discussion and implication

Based on the justice theory, this study contributes to the existing literature by proposing and empirically investigating the effect of PSRJ (second-order construct) on recovery satisfaction and customer affection and subsequently relative and sequential mediation mechanism of customer service recovery satisfaction and customer affection between the relationship of PSRJ and re-patronage intentions which were yet to be considered.

**Table 6. Structural model assessment**

Hypothesis	STD coefficient ( $\beta$ )	SE	$f^2$ Effect Size	t-values	P Value	$R^2$	$Q^2$	Results
H1: PSRJ→RS	0.371	0.050	0.160	7.366	<0.001	0.138	0.130	Accepted
H2: RS→RPI	0.321	0.049	0.167	6.593	<0.001	0.505	0.489	Accepted
H3: PSRJ→RPI	0.341	0.063	0.120	5.444	<0.001			Accepted
H4: Aff→RPI	0.212	0.061	0.044	3.466	<0.001			Accepted
H5: PSRJ→Aff	0.621	0.034	0.688	18.145	<0.001	0.517	0.496	Accepted
H6: RS→Aff	0.200	0.046	0.071	4.838	<0.001			Accepted

**Table 7. Mediation**

Specific Direct Effect		Hypothesis #	$\beta$	Standard Deviation (STDEV)	Confidence Interval	T Statistics ( O/STDEV )	P Values
<b>Result</b>							
PSRJ -> RS -> RPI	H7	0.119	0.023	[0.077, 0.167]	5.116	0.001	Accepted
PSRJ -> Aff-> RPI	H8	0.132	0.040	[0.020, 0.081]	3.303	0.001	Accepted
PSRJ -> RS-> Aff -> RPI	H9	0.016	0.006	[0.007,0.031]	2.60	0.000	Accepted

The relationships between PSRJ and customer affection, PSRJ and recovery satisfaction were supported. These findings contribute to the existing body of knowledge that suggests, although recovery satisfaction is important, however, customer affection is more vital than recovery satisfaction in service failure and recovery context. Similarly, PSRJ also directly predict re-patronage intentions; however, the effect on customer affection is higher than re-patronage intentions. Because consumers are having relational bond (affection), sacrifice or forgiving the company's mistakes in service delivery can happen, they give more importance to recovery efforts exerted by company employees, and the perception of fair treatment (perceived justice) will generate positive emotions which strengthen their affection (warm feeling, liking or love) with the company. Thus, it is pivotal to build a positive rapport with the customers in post-service failure and recover the situation.

Results regarding the indirect effects of PSRJ on re-patronage intentions through customer recovery satisfaction and customer affection were interesting. Mediation of customer recovery satisfaction between PSRJ and re-patronage intentions was significant, while mediation of customer affection between perceived justice and re-patronage intentions was also significant. Although both mediators explained the effect of justice on re-patronage intentions; however, the role of customer affection (as mediator) was more prominent in generating re-patronage intentions to retaining the customer. Apart from each mediator's role (recovery satisfaction affection), the double indirect effect of PSRJ on re-patronage intentions through affection and recovery satisfaction was significant. These were novel findings of this study and important contributions to the existing body of knowledge. This demonstrates that PSRJ (PJ, DJ, and IJ) affect customers' evaluation criteria (recovery satisfaction) which generate positive emotions to strengthen the relational bond (affection) with the company, which ultimately influences re-patronage intentions. Hence, these significant results are very important for theory building and for further validation of future studies that will be conducted to address these variables. Affection (relational bond) will help to develop sustainable customer and company relationship, as affectionate ties (connection) persuade the customer to overlook minor mistake or service failure committed by the company. With appropriate subsequent service recovery, the company can retain customer's patronage in the long run.

## 5.2. Managerial implications

This empirical study has several managerial implications. Firstly, understanding PSRJ and its effects on customer affection would help managers to understand and identify prevailing loopholes in a customer-company relationship and devise measures to maintain a long-term relationship with the customers. Identification of these procedural, distributive or interactional flaws would help them to develop a cost-effective mechanism to win an annoyed customer with effective service recovery. In the insurance sector, managers need to develop a comprehensive customer relationship management system; the responsibility of this system is not only to maintain customer record of transaction but also to comprise of online/digital complaint handling department. Complaint handling department can ensure accountability and contribute to service employee's performance and also increase customer trust in the company credibility. Generally, due to human involvement, service failure is inevitable; hence, once failure happened, and customers lodge their complaint about their dissatisfaction, effective steps by the complaint handling department is encouraged to change negative feelings to positive and strengthen

customer affection (emotional bond) with the company which ultimately contribute to recovery satisfaction and re-patronage intentions.

Secondly, frontline employees of insurance companies that deal with policyholders' claims, therefore, to generate affectionate ties, recovery satisfaction, and re-patronage intentions, employees should be trained to take care of policyholder's interest during the execution of their claim. Generally, in (small or large) insurance companies, surveyors (company representative) try to minimize the amount of claim admissible to policyholders because of their self-interest in the company which annoy customers. Surveyors' should be encouraged to be unbiased while estimating damage incurred to policyholders. Ethical education should be imparted so that they can keep a balance between company priorities and customer benefits. Moreover, surveyors should be properly trained by explaining different failure scenario and providing a solution to each problem; Scenarios can be related to offerings, employee, process, and physical evidence, as these are the main sources of service failure. Management should get the benefit of recent technological development and make videos of the different scenario for easy understanding of the employees.

Further, managers can also use advanced communication strategies to properly educate their customers regarding the execution of their insurance claims and documentation requirements. For instance, for insurance claim procedure, all steps (standard operating procedure) should be highlighted for flawless execution (like within three hours surveyor will reach the incident of an accident. After the visit, a surveyor will report to the company within the same day along with customer documents, claim amount will be set, and the customer will be informed the very next day of the incident, car/vehicle will be delivered to a workshop on the next day of accident and customer will receive the repaired car within an appropriate duration etc.). Social media can be used to disseminate procedure-related information so that the customer does not face any handicap while filing their claims.

Lastly, customer complaints, if handled properly, can be a vital source to develop a long-lasting affectionate relationship with the company. Therefore, customer's complaints should be tackled patiently with an apology and their point of view and concerns should be addressed properly (with monetary compensation if necessary). To make the recovery process, efficient employees should be empowered to make a critical decision; this will save the customer time and help to overcome negative emotions generated as a result of service failure. Resultantly customer will feel self-worth, and enhanced emotional or warm feeling with the company will increase re-patronage intentions.

### **5.3. Limitations and future research directions**

Other than the implications mentioned above, the current study also has some limitations. Firstly, recall bias might present in survey records, because data were collected from respondents of car/auto insurance company in Pakistan, who has claimed their insurance in case of an accident or damage to their car. Their responses comprised of the real experience of service failure and the firm's recovery actions. Hence, there is a probability that recall-bias might have affected the results (Tax et al., 1998). In most circumstances, many researchers face this general problem when they use the survey questionnaire for data collection for their research works. Experimental studies can be an alternative way for future research work. Although it has its own merits, this method does have some weakness because manipulations may be unsuccessful to cope with the real-world situation properly (Chebat & Slusarczyk, 2005). As this is a time-lagged study, although it has an advantage over single-time data collection, however, causality cannot be determined by a single study. Therefore, for better results, a longitudinal study seems to be a better choice that can help to establish causality. Moreover, with reference to previous research, it has been confirmed that the severity of service failures might act as a moderator on the relationship of perceived justice and customer affection. This moderation can have a specific effect on the dependent variable under investigation (Choi & Choi, 2014; Weun et al., 2004). Therefore, the severity of service failure can be the potential to moderate the relationship and this might enhance the understanding of these customers. A broad range of customers (who experienced failures and

recoveries) from different unrelated organizations can also deepen our understanding of the model or construct under study.

#### Funding

The authors received no direct funding for this research.

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#### Citation information

Cite this article as: Perceived service recovery justice and customer re-patronage intentions: Sequential mediation, Muhammad Asghar Ali, Ding Hooi Ting, Muhammad Ahmad-ur-Rehman, Amir Zaib Abbasi & Zahid Hussain, *Cogent Business & Management* (2021), 8: 1938352.

#### Notes

1. As of 2 February 2021, Rs1 = USD0.0062

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