Research Paper

Relational outcomes of perceived justice in the insurance industry

Submitted in 19, January 2018
Accepted in 16, March 2018
Evaluated by a double blind review system

ANABELA MARCOS

Abstract

Purpose: The objective of this paper is to understand the role that perceived justice plays in the insurance industry, as well as its relational outcomes. Thus, the purpose is to help the insurance companies to understand the effects of service recovery rendered when service failure happens. This study seeks to propose and test a framework in the insurance sector for examining the role that perceived justice, with three dimensions: distributive, procedural and interactional, plays in car insurances.

Design/methodology/approach: This investigation proposes a theoretical model tested using structural equation modelling (SEM). A questionnaire survey was developed to explore the relationships between perceived justice, satisfaction, trust, commitment, loyalty and worth-of-mouth in the insurance industry. For this study, 744 valid questionnaires were collected from a sample of Portuguese car insurance holders.

Findings: The results show that all three justice dimensions affect satisfaction, with procedural justice showing the strongest relative influence. In turn, satisfaction influences directly loyalty and worth-of-mouth and indirectly through trust and commitment. Satisfaction influences trust. Trust has a direct influence on commitment and has an indirectly impact on loyalty and word-of-mouth, via commitment. Commitment influences loyalty and word-of-mouth. Finally, loyalty affects word-of-mouth.

Originality/Value: In order to address gaps in the literature, the present study developed an integrative model through which three dimensions of perceived justice operate in affecting loyalty and word-of-mouth, via satisfaction, trust and relational commitment. There is a lack of research on the direct and indirect effects of perceived justice on loyalty and word-of-mouth. Therefore, this investigation examines the importance of perceived justice in the car insurance industry, due to being a type of insurance where problems can occur after an accident. We investigate the influence of a good conflict resolution on satisfaction, trust, commitment, and loyalty and word-of-mouth.

Keywords: perceived justice; relational outcomes; insurance industry.

1. Introduction

Within the area of service recovery, perceived justice/fairness is increasingly identified as a key influence in the formation of consumers’ evaluative judgments of the recovery

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1 Instituto Superior de Contabilidade e Administração de Coimbra, Faculdade de Direito da Universidade de Coimbra. E-mail: amarcos@iscac.pt.
process (Tax, Brown & Chandrashekaran, 1998). Increasingly, studies that explore consumer responses to complaints have focused on the construct of perceived justice. This theoretical perspective suggests that the fairness of the complaint resolution procedures, the interpersonal communications and behaviours, and the outcome are the principal antecedents of customer evaluations. Collectively, these antecedents are referred to as perceived justice and individually they are described as: procedural justice, interactional justice, and distributive justice (Schoefer & Ennew, 2005).

Justice theory is adapted from social exchange and equity theories. Perceived justice can be considered as a three-dimensional construct that comprises distributive justice, procedural justice, and interactional justice (Blodgett, Hill & Tax, 1997). A number of studies have examined the justice dimensions in various service recovery settings. Recently, we might mention the studies of Assefa (2014), Nikbin et al. (2014), Lopes and Silva (2015), Nadiri (2016), Bahri-Ammari and Bilghihan (2017), Chan and Lai (2017), Hsu, Yu and Chang (2017), Jung and Seock (2017), and Tektas (2017).

Consumers generally evaluate justice related to service recovery in three dimensions - distributive justice, procedural justice, and interactional justice - all of which are based on the service recovery consumers receive from a company and how they receive it (Chebat & Slusarczyk, 2005; Collier & Bienstock, 2006). Distributive justice refers to the service recovery consumers receive from the company, and procedural justice relates to how they receive it - particularly the recovery process (McColl-Kennedy & Sparks, 2003; Kuo & Wu, 2012). Through the procedural components, consumers tend to evaluate the flexibility, efficiency, and transparency of the recovery process (Wirtz & Mattila, 2004). Interactional justice is defined as fairness during the process of interaction and communication between the consumer and the company in solving the problems resulting from the service failure (Chebat & Slusarczyk, 2005).

This paper aims to study the relationship between the three dimensions of perceived justice, satisfaction, trust, commitment, loyalty, and word-of-mouth in the insurance industry. According to the existing service-related literature, consumers’ perception of justice significantly influences their post-purchase behavior. We think, just like Jung and Seock (2017) that the three dimensions of justice represent important determinants for consumer post-purchase behavior.

2. Literature review and research hypotheses

Konovsky (2000) argues that the concept of perceived justice is critical for studying a person’s reactions in a conflict situation. Although some studies do not distinguish between the different dimensions of perceived justice (Pathak, Kucukarslan & Segal, 1994; Patterson, Johnson & Spreng, 1997), or do not analyze all three components (Oliver & Swan, 1989a, 1989b), other researchers (Smith et al., 1999; Varela-Neira, Vázquez-Caselles & Iglesias-Argüelles, 2008) recommend including all components of perceived justice (distributive, procedural and interactional) in research on service recovery.

Distributive justice refers to the perceived fairness and equality that the firm adopts to allocate the resources to rectify and compensate for a service failure. It has generally focused on the tangible compensation given to the customers during the service recovery, including monetary rewards as refunds, discounts on future purchase, coupons, and exchanging the good or service (Blodgett, Hill & Tax, 1997; Tax, Brown & Chandrashekaran, 1998; Maxham & Netemeyer, 2002; Homberg & Fürst, 2005). Procedural justice refers to the perceived fairness of the specific policies, processes, and
methods adopted by the firm to handle the service problem and recover the failed service (Blodgett, Hill & Tax, 1997; Maxham & Netemeyer, 2002), including timeliness, accessibility, process control, and flexibility to adapt to the consumer’s recovery needs. Interactional justice refers to the manner in which consumers are treated during the complaint handling process, including elements such as interpersonal sensitivity, treating consumers with courtesy and respect, or providing appropriate explanations for the service failure (Blodgett, Granbois & Walters, 1993; Smith et al., 1999; Maxham & Netemeyer, 2002, 2003; McColl-Kennedy & Sparks, 2003).

In short, distributive justice refers to the assignment of tangible resources by the firm to rectify and compensate for a service failure (Río-Lanza, Vázquez-Casielles & Díaz-Martín, 2009). Procedural justice refers to the methods the firm uses to deal with the problems arising during service delivery in aspects such as accessibility, timing/speed, process control, delay and flexibility to adapt to the consumer’s recovery needs. Interactional justice includes customers’ perceptions about employees’ empathy, courtesy, sensitivity, treatment and the effort they expend to solve the problem. Distributive justice emphasizes fairness in outcome allocations including benefits, promotions, and office assignment (Karriker & Williams, 2009). Procedural justice emphasizes the impartiality of the process (policies, procedures and criteria) by which results are determined (Cohen-Charash & Spector, 2001); while interactional justice relates to “the human side of organizational practices” (Cohen-Charash & Spector, 2001).

2.1. The effects of the three justice dimensions on satisfaction

In this study, we adopt the broader definition of satisfaction whereby the overall measure is an aggregation of all previous transaction-specific satisfaction, and involves both cognitive and affective components. Compared to transactional-specific satisfaction, overall satisfaction reflects customers’ cumulative impression of a firm’s service performance. The overall satisfaction has been shown to be a better predictor of customer loyalty (Jones & Suh, 2000; Yang & Peterson, 2004).

A large number of empirical works study the component of distributive justice, and considerable evidence exists to indicate that distributive justice is positively related to satisfaction (Maxham & Netemeyer, 2002, 2003; Varela-Neira, Vázquez-Casielles & Iglesias-Argüelles, 2008; Chang & Chang, 2010; Matos & Reis, 2013; Wu, 2013; Mansori, Ismail & Tyng, 2014; Rashid, Ahmad & Othman, 2014; Lopes & Silva, 2015; Wu & Huang, 2015). Consequently:

**H1. Distributive justice has a direct positive effect on satisfaction.**

In turn, empirical studies show that fair interpersonal treatment contributes to satisfaction. So, interactional justice affects satisfaction (Maxham & Netemeyer, 2002, 2003; Varela-Neira, Vázquez-Casielles & Iglesias-Argüelles, 2008; Chang & Chang, 2010; Matos & Reis, 2013; Wu, 2013; Mansori, Ismail & Tyng, 2014; Rashid, Ahmad & Othman, 2014; Lopes & Silva, 2015; Wu & Huang, 2015). Consequently:

**H2. Interactional justice has a direct positive effect on satisfaction.**
Finally, several studies show that procedural justice has a positive effect on the consumer’s satisfaction (Maxham & Netemeyer, 2002, 2003; Varela-Neira, Vázquez-Casielles & Iglesias-Arguelles, 2008; Matos & Reis, 2013; Wu, 2013; Mansori, Ismail & Tyng, 2014; Rashid, Ahmad & Othman, 2014; Lopes & Silva, 2015; Wu & Huang, 2015). Consequently:

**H3. Procedural justice has a direct positive effect on satisfaction.**

2.2. **The effects of satisfaction on trust, loyalty and WOM**

In simple terms, trust can be defined as the belief by one party about another party that the other party will behave in a predictable manner (Luhmann, 1988). A frequently used definition of trust is “willingness to rely on an exchange partner in whom one has confidence” (Moorman, Deshpandé & Zaltman, 1993). Trust can be viewed as both a belief in the trustworthiness of a partner and a behavioral intention to rely on a partner in a situation of vulnerability. Credibility and benevolence are the underlying dimensions of trust (Ganesan, 1994; Doney & Cannon, 1997; Ganesan & Hess, 1997). Credibility focuses on the objective credibility of an exchange partner, an expectancy that the partner’s word or written statement can be relied on (Linkskold, 1978). Benevolence is based on the buyer’s belief in the positive intention of the seller (Ganesan, 1994) or the extent to which one partner is genuinely interested in the other partner’s welfare and motivated to seek joint gain (Doney & Cannon, 1997).

The influence of satisfaction on trust has been suggested in several studies (Hansen, 2014, Lombart & Louis, 2014; Mansori, Ismail & Tyng, 2014; Paulssen, Roulet & Wilke, 2014; Akamavi et al., 2015; Han & Hyun, 2015; Lee et al., 2015; Castaldo et al., 2016; Fang, Shao & Wen, 2016; Fernández-Sabiote & Román, 2016; Lee & Wong, 2016; Jalilvand et al., 2017; Menidjel, Benhabib & Bilgihan, 2017; Chu, Vasquez-Parraga, & Ma, 2018). Consequently:

**H4: Satisfaction has a direct positive effect on trust.**

Finally, we consider loyalty and word-of-mouth. Therefore, the anticipation of future relational exchange is generally expressed in terms of two behavioral outcomes, namely, repeat purchase (re-patronage) and word-of-mouth recommendation (Bitner, 1990). Repeat purchase is viewed as an indicator of whether or not a customer will maintain the relationship with the company (Zeithaml, Berry & Parasuraman, 1996). Word-of-mouth recommendation is the extent to which customers will inform their friends, relatives, and colleagues about the consumption experience (Söderlund, 1998).

Based on an in-depth review of relevant literature, we can say first that satisfaction in terms of previous interactions is considered a key antecedent of customer loyalty and positive WOM about an insurance company. Highly satisfied customers are likely to make future purchases and to recommend the source to other customers.


**H5**: Satisfaction has a direct positive effect on loyalty.


**H6**: Satisfaction has a direct positive effect on WOM.

2.3. **The effects of trust on commitment, loyalty and WOM**

We propose that relational commitment is central to relationship marketing. We define relational commitment as an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely (Morgan & Hunt, 1994). Our definition corresponds almost exactly with that developed by Moorman, Zaltman and Deshpandé (1992): “Commitment to the relationship is defined as an enduring desire to maintain a valued relationship”. Their “valued relationship” corresponds with our belief that relationship commitment exists only when the relationship is considered important. Similarly, their “enduring desire to maintain” corresponds with our view that a committed partner wants the relationship to endure indefinitely and is willing to work at maintaining it.

The relationships between trust, loyalty and commitment were based on the seminal paper by Morgan and Hunt (1994) on relationship marketing (Melewar et al., 2017). Understanding the relationship between corporations and their consumers that leads to brand commitment, loyalty, etc. requires an analysis of the consumer’s trust in the brand (Delgado-Ballester, Munuera-Alemán & Yagüe-Guilleñ, 2003; Kollat & Farache, 2017). Furthermore, customers who are loyal to the company are less likely to switch, and they make more purchases compared to non-loyal customers. In turn, loyal customers recommend the organisation.

Trust has a direct influence on relational commitment in numerous studies (Wang & Chang, 2013; Loureiro, Kaufmann & Rabino, 2014; Faryabi, Sadeghzadeh & Zakeri, 2015; Marinkovic & Obradovik, 2015; Curras-Perez & Sanchez-Garcia, 2016; Fang, Shao & Wen, 2016; Lee & Wong, 2016; Jalilvand et al., 2017; Poole, 2017; Barra, Pressgrove & Torres, 2018; Chu, Vasquez-Parraga & Ma, 2018). A relationship based on trust from both parties creates sufficient value to commit the parties to the relationship. If one party exploits the vulnerabilities of the other, the perceived risk relating to subsequent transactions, and thus their relationship, will increase. However, if two parties build trust, they can decrease the level of perceived risk related to their relationship, and mutually build a commitment to maintain it (Park, Choy & Yeu, 2016). Consequently:
**H7:** Trust has a direct positive effect on commitment.

Many authors advocate that trust has a direct effect on loyalty and WOM. For Rajaobelina et al. (2014), Athavale et al. (2015), Barreda, Bilgihan and Kageyama (2015), Khan, Ferguson and Pérez (2015), Agag and El-Masry (2016), Ding and Lii (2016), Nadiri (2016) and Su, Pan & Chen (2017), trust has a direct influence on loyalty and WOM. Various studies have shown the role of trust in explaining loyalty behavior; a higher level of trust has been associated with greater behavioral loyalty. Also, individuals with a higher level of trust in the employee or company exhibit a higher intention to promote verbally (Athavale et al., 2015; Su, Pan & Chen, 2017). Consequently:

**H8:** Trust has a direct positive effect on loyalty.

**H9:** Trust has a direct positive effect on WOM.

### 2.4. The effects of commitment on loyalty and WOM

Many works demonstrated a direct influence of relational commitment on loyalty and WOM (Kuenzel & Krolikowska, 2008; Alves, Terres & Santos, 2013; Loureiro, Kaufmann & Rabino, 2014; Curras-Perez & Sanchez-Garcia, 2016; Su et al., 2016; Wästerlund & Kronholm, 2017). Mukherjee and Nath (2007) suggest that commitment has a positive impact on WOM, purchase intention, and continued interaction. Thus, customer commitment is recognized as a determinant to long-term relationships. Previous studies have found a relationship between commitment and word-of-mouth. Bettencourt’s (1997) study found that committed customers are more likely to recommend the firm and say positive things. Liljander and Strandvik (1995) also noted that commitment can lead to behaviours such as positive word-of-mouth. In turn, De Ruyter and Wetzel (1999) found that commitment decreases the likelihood that the client will change. Relationship commitment has a strong positive effect on customer loyalty and the higher the customer commitment, the more willing the customer is to provide word-of-mouth recommendations for the business (Ou, Shih & Chen, 2015). Consequently:

**H10:** Commitment has a direct positive effect on loyalty.

**H11:** Commitment has a direct positive effect on WOM.

In several studies, there is also a direct and indirect association between trust and loyalty, through commitment (Aurier & Lanauze, 2012; Loureiro, Kaufmann & Rabino, 2014; Leaniz & Rodríguez, 2015; Fang, Shao & Wen, 2016; Park, Choy & Yeu, 2016).

### 2.5. The effect of loyalty on WOM

The anticipation of future relational exchange is generally expressed in terms of two behavioral outcomes, namely, repeat purchase (re-patronage) and word-of-mouth recommendation (Bittner, 1990). Repeat purchase is viewed as an indicator of whether or not a customer will maintain the relationship with the company (Zeithaml, Berry & Parasuraman, 1996). Word-of-mouth recommendation (WOM) is the extent to which
customers will inform their friends, relatives and colleagues about the consumption experience (Söderlund, 1998). Therefore, customer loyalty is defined as the intention to repurchase and word-of-mouth as the intention to provide positive word-of-mouth.

The finding of several previous studies supports the effect of loyalty on word-of-mouth communication (Li, 2013; Choi & Choi, 2014; Roy, Lassar & Butaney, 2014; Ruiz, Esteban & Gutiérrez, 2014; Sirakaya-Turk, Ekinci & Martin, 2015; Watson et al., 2015; Akbari, Kazemi & Haddadi, 2016; Casydy & Wymer, 2016; Harris & Kathami, 2017; Rialti et al., 2017; Harun et al., 2018; Markovic et al., 2018). Thus, the following hypothesis is proposed:

**H12:** Loyalty has a direct positive effect on WOM.

### 3. Research Methodology

#### 3.1. Sample selection and data collection

The conceptual model proposed in the present study is depicted in Figure 1. This research model investigates the effects of the three justice dimensions on relational outcomes in the insurance sector. For this purpose, we will test a model where distributive justice, procedural justice and interactional justice are direct antecedents of satisfaction and indirect determinants of loyalty and WOM, via trust and commitment. In turn, we test the influence of commitment on loyalty and WOM. Finally, we test the influence of loyalty on WOM.

![Figure 1: Proposed Conceptual Model](source: Author)

Extensive qualitative interviews were conducted on this topic prior to the collection of quantitative data. Personal interviews were conducted with insurance company directors and contact personnel to understand how insurance companies work, before we propose...
a conceptual model. To achieve the purposes of the study, a total of 744 Portuguese car insurance holders were invited to complete the survey. The demographic characteristics indicate that a diverse group of respondents were recruited. Approximately 51.9% were female, while 48.1% were male. The majority of the respondents of this study were between 25 and 54 years old (86.5%). Moreover, 61.7% were married. Finally, 38.8% had completed high school and 38.0% held a university degree.

3.2. Measures

Established scales were used to measure the variables being studied, based on the review of the most relevant literature on relationship marketing. All the variables were measured on a seven-point Likert scale, ranging from 1- strongly disagree to 7- strongly agree and appear in the Table 2.

The scale used to measure perceived justice (distributive, procedural, and interactional) was adapted from the work of Varela-Neira, Vázquez-Casielles and Iglesias-Argüelles (2008). The scale items for distributive justice were: “Given the inconvenience caused by the problem and the time lost, the response I received by the insurance company has been correct” (DJU1), “The insurance company has been quite fair when solving the problem” (DJU2), and “Overall, the outcome I received from the insurance company in response to the problem in the service performance has been adequate” (DJU3). The scale items for procedural justice were: “The insurance company has given me the opportunity to explain my point of view of the problem” (PJU1), “The insurance company has fair policies and practices to handle the problem” (PJU2), and “The insurance company has shown adequate flexibility in dealing with the problem” (PJU3). The scale items for interactional justice were: “In response to the problem, the insurance company personnel have treated me with courtesy” (IJU1), “The employees’ communication and care when solving the problem has been appropriate” (IJU2), and “The insurance company employees have been honest and ethical when solving the problem” (IJU3) were used to measure interactional justice.

Satisfaction measured according to the scale used by Gremler and Gwinner (2000). The scale items were: “Based on all of my experience with this insurance company, I am very satisfied with the insurance services it provides” (SAT1), “My choice to use this insurance company was a wise one” (SAT2), “Overall, I am satisfied with the decision to use this insurance company” (SAT3), “I think I did the right think when I decided to use this insurance company for any insurance needs” (SAT4), and “My overall evaluation of the services provided by the insurance company is very good” (SAT5).

Trust measured according to the scale of Kaufman et al. (2006). The scale items were: “This insurance company keeps promises it makes to me” (TRU1), “We believe the information that this insurance company provides us” (TRU2), “When making decision, this insurance company considers our welfare as well as its own” (TRU3) and “The insurance company is trustworthy” (TRU4).

Commitment measured according to the scale of Kaufman et al. (2006). The scale items were: “My relationship with this insurance company is something I am very committed” (COM1), “My relationship with this insurance company is very importante to me” (COM2), “My relationship with this insurance company is something I really care about” (COM3), “My relationship with this insurance company deserve my maximum effort to maintain” (COM4).
The scale used to measure loyalty was adapted from the work of Martín Ruíz et al. (2008). The scale items were: “I intend to continue doing business with this insurance company in the future” (LOY1), “As long as the present service continues, I doubt that I would switch insurance companies” (LOY2), and “I will choose this insurance company the next time I need this service” (LOY3).

WOM measurement was drawn from the work of Palmatier et al. (2007). The scale items were: “I say positive things about this company insurance to other persons” (WOM1), “I would recommend this company insurance to someone seeking my advice” (WOM2), and “I encourage friends and relatives to do business with this insurance company” (WOM3).

3.3. Measurement Model

An initial screening of each scale was conducted using item-total correlations and exploratory factor analysis (EFA), using SPSS 25.0. Following Anderson and Gerbing’s (1988) two-step approach, a measurement model was estimated before testing the hypotheses using a structural model. The analysis of data was realized through confirmatory factor analysis (CFA) and structural equation modeling (SEM) using the statistical software AMOS (Analysis of Moment Structures) version 25.0. Maximum likelihood estimation procedures were used, since these afford more security in samples which might not present multivariate normality.

The measurement model fits the data well. In order to test a model's fit, the Chi-square ($X^2$) test statistic with respect to degrees of freedom (df) can be used. If the $X^2$/df value is less than 3, the model is considered a good fit. The chi-square($X^2$) was 899.539 with 322 degrees of freedom at $p<0.001$ ($X^2$/df=2.79). The chi-square is sensitive to sample size, so we also assessed additional fit indices (1) goodness of fit index (GFI), (2) normed fit index (NFI), (3) incremental fit index (IFI), (4) Tucker-Lewis coefficient (TLI) and (5) comparative fit index (CFI). All of these fit indices are higher than 0.9 ($GFI=0.92$, $NFI=0.97$, $IFI=0.98$, $TLI=0.98$ and $CFI=0.98$). Because fit indices can be improved by allowing more terms to be freely estimated, we also assessed the root mean square error of approximation (RMSEA), which is 0.048.

CFA enables the performance of tests regarding convergent validity, discriminant validity and reliability of study constructs. A commonly used method for estimating convergent validity examines the factor loadings of the measured variables (Anderson & Gerbing, 1988). Following the recommendations by Hair et al. (2005), factor loadings greater than 0.5 are considered very significant. In addition, we used the Average Variance Extracted (AVE) to contrast convergent validity. Fornell and Larcker (1981) suggested adequately convergent valid measures should contain less than 50% error variance (AVE should be 0.5 or above). Convergent validity was achieved in this study, because all the factor loadings exceeded 0.5 and all variance extracted estimates (AVE) were greater than 0.5.

Next, CFA was used to assess discriminant validity. If the AVE is larger than the squared correlation between any two constructs, the discriminant validity of the constructs is supported (Fornell & Larcker, 1981). Discriminant validity was also assessed for each pair of constructs by constraining the estimated correlation between them to 1.0 and a difference test was performed on the values obtained from the constrained and unconstrained models (Anderson & Gerbing, 1988). Discriminant validity of the scales was also supported as none of the confidence intervals of the phi estimates included 1.0 (Anderson & Gerbing, 1988). Finally, Gaski (1984) suggests the existence of discriminant
validity if the correlation between one composite scale and another is not as high as the coefficient alpha of each scale. These tests demonstrated that discriminant validity is present in this study.

To assess reliability, the composite reliability (CR) for each construct was generated from the CFA. The composite reliability (CR) of each scale must exceed the 0.7 threshold (Bagozzi, 1980). As Table 1 shows, the composite reliability coefficients of all the constructs are excellent, being larger than 0.9. Cronbach’s alpha indicator was also used to assess the initial reliability of the scales, considering a minimum value of 0.7 (Cronbach, 1970; Nunnaly, 1978). As shown in Table 1, coefficient alpha values are all over 0.9, exhibiting high reliability. Table 1 also shows the AVE for each construct and a correlation matrix of constructs.

### Table 1: Factor Correlation Matrix and Measurement Information

| Construct          | Nº Items | CR   | AVE  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|--------------------|---------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Distributive justice | 3       | 0.96 | 0.88 | 0.78  | 0.74  | 0.73  | 0.78  | 0.75  | 0.76  | 0.74  | 0.76  |
| 2. Interactional justice | 3       | 0.96 | 0.90 | 0.78  | 0.74  | 0.73  | 0.78  | 0.75  | 0.76  | 0.74  | 0.76  |
| 3. Procedural justice | 3       | 0.94 | 0.83 | 0.89  | 0.78  | 0.74  | 0.73  | 0.78  | 0.75  | 0.76  | 0.74  |
| 4. Satisfaction      | 5       | 0.97 | 0.86 | 0.62  | 0.59  | 0.64  | 0.78  | 0.75  | 0.76  | 0.74  | 0.76  |
| 5. Trust             | 4       | 0.94 | 0.81 | 0.61  | 0.60  | 0.68  | 0.88  | 0.75  | 0.76  | 0.74  | 0.76  |
| 6. Commitment        | 4       | 0.95 | 0.82 | 0.39  | 0.38  | 0.45  | 0.58  | 0.66  | 0.76  | 0.74  | 0.76  |
| 7. Loyalty           | 3       | 0.94 | 0.85 | 0.57  | 0.55  | 0.61  | 0.84  | 0.78  | 0.76  | 0.74  | 0.76  |
| 8. WOM               | 3       | 0.95 | 0.87 | 0.54  | 0.50  | 0.59  | 0.80  | 0.76  | 0.65  | 0.85  | (a=.95) |

Note: CR = Composite Reliability; AVE = Average variance extracted; α = Cronbach’s alpha. Source: Author.

The measurement information is shown in Table 2.
Table 2: Measurement information

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<tr>
<th>Construct</th>
<th>Item</th>
<th>Standardized Loading</th>
<th>t-value</th>
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<td>Distributive justice</td>
<td>DJU1</td>
<td>0.932</td>
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<tr>
<td></td>
<td>DJU2</td>
<td>0.946</td>
<td>34.419</td>
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<td></td>
<td>DJU3</td>
<td>0.944</td>
<td>34.334</td>
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<td>0.940</td>
<td>34.060</td>
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<tr>
<td></td>
<td>IJU2</td>
<td>0.962</td>
<td>35.521</td>
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<td></td>
<td>IJU3</td>
<td>0.941</td>
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<td>SAT5</td>
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<td>Loyalty</td>
<td>LOY1</td>
<td>0.916</td>
<td>32.428</td>
</tr>
<tr>
<td></td>
<td>LOY2</td>
<td>0.931</td>
<td>33.335</td>
</tr>
<tr>
<td></td>
<td>LOY3</td>
<td>0.920</td>
<td>32.680</td>
</tr>
<tr>
<td>WOM</td>
<td>WOM1</td>
<td>0.943</td>
<td>34.193</td>
</tr>
<tr>
<td></td>
<td>WOM2</td>
<td>0.956</td>
<td>35.036</td>
</tr>
<tr>
<td></td>
<td>WOM3</td>
<td>0.892</td>
<td>31.026</td>
</tr>
</tbody>
</table>

Source: Author.

4. Structural Model

Overall, the fit indices indicated an acceptable fit ($X^2=966.299$, $df=335$, $p<0.01$, NFI=.97, CFI=.98, RMSEA=.050). This model is depicted in Figure 2.
The results in Table 3 show the analyses of the causal paths hypothesized in the structural model. The models support ten hypotheses. Only two, hypotheses 8 and 9 are not supported.

Table 3: Estimation Results of the Structural Model

<table>
<thead>
<tr>
<th>Path</th>
<th>Standardized Coefficient</th>
<th>t-Value</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction ← Distributive justice</td>
<td>0.138</td>
<td>1.796***</td>
<td>H1 (+): S</td>
</tr>
<tr>
<td>Satisfaction ← Interactional justice</td>
<td>0.177</td>
<td>3.445*</td>
<td>H2 (+): S</td>
</tr>
<tr>
<td>Satisfaction ← Procedural justice</td>
<td>0.397</td>
<td>5.022*</td>
<td>H3 (+): S</td>
</tr>
<tr>
<td>Trust ← Satisfaction</td>
<td>0.882</td>
<td>30.539*</td>
<td>H4 (+): S</td>
</tr>
<tr>
<td>Loyalty ← Satisfaction</td>
<td>0.672</td>
<td>12.270*</td>
<td>H5 (+): S</td>
</tr>
<tr>
<td>WOM ← Satisfaction</td>
<td>0.249</td>
<td>4.308*</td>
<td>H6 (+): S</td>
</tr>
<tr>
<td>Commitment ← Trust</td>
<td>0.660</td>
<td>19.153*</td>
<td>H7 (+): S</td>
</tr>
<tr>
<td>Loyalty ← Trust</td>
<td>0.091</td>
<td>1.556</td>
<td>H8 (+): NS</td>
</tr>
<tr>
<td>WOM ← Commitment</td>
<td>0.009</td>
<td>0.161</td>
<td>H9 (+): NS</td>
</tr>
<tr>
<td>Loyalty ← Commitment</td>
<td>0.151</td>
<td>4.905*</td>
<td>H10 (+) S</td>
</tr>
<tr>
<td>WOM ← Commitment</td>
<td>0.174</td>
<td>5.973*</td>
<td>H11 (+) S</td>
</tr>
<tr>
<td>WOM ← Loyalty</td>
<td>0.531</td>
<td>12.038*</td>
<td>H12 (+) S</td>
</tr>
</tbody>
</table>

Note 1: * p<0.001; ** p<0.01; *** p<0.05 (one tail tests).
Note 2: S: Supported, NS: Not supported.

According to Bollen (1989), analyzing the effects of total effects (direct and indirect effects) becomes very important, since only examine the direct effects could be misleading. This, in table 4 we can observe the effects standardized direct, indirect, and totals. The analysis of indirect effects highlights the importance of mediating variables in explaining loyalty and word-of-mouth, as we can observe in Table 4.
We used the Bootstrapping technique with a sample of 2000 random observations generated from the original sample, and a confidence interval of 90% also used in the estimation of the proposed model. This is because the analysis of total and indirect effects is only possible with the use of this method of estimation.

### Table 4: Standardized Effects Direct, Indirect and Total

<table>
<thead>
<tr>
<th></th>
<th>Procedural Justice</th>
<th>Interational Justice</th>
<th>Distributive Justice</th>
<th>Satisfaction</th>
<th>Trust</th>
<th>Commitment</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>0.397*</td>
<td>0.177**</td>
<td>0.138***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.397*</td>
<td>0.177**</td>
<td>0.138***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trust</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>0.350*</td>
<td>0.156**</td>
<td>0.122***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.350*</td>
<td>0.156**</td>
<td>0.122***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Commitment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>0.231*</td>
<td>0.103**</td>
<td>0.080***</td>
<td>0.583*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.231*</td>
<td>0.103**</td>
<td>0.080***</td>
<td>0.583*</td>
<td>0.660*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Loyalty</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>0.334*</td>
<td>0.149**</td>
<td>0.116***</td>
<td>0.672*</td>
<td>0.091*</td>
<td>0.151*</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.334*</td>
<td>0.149**</td>
<td>0.116***</td>
<td>0.672*</td>
<td>0.091*</td>
<td>0.151*</td>
<td></td>
</tr>
<tr>
<td><strong>WOM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>0.319*</td>
<td>0.143**</td>
<td>0.111***</td>
<td>0.249*</td>
<td>0.090*</td>
<td>0.174*</td>
<td>0.531*</td>
</tr>
<tr>
<td>Total</td>
<td>0.319*</td>
<td>0.143**</td>
<td>0.111***</td>
<td>0.249*</td>
<td>0.090*</td>
<td>0.174*</td>
<td>0.531*</td>
</tr>
</tbody>
</table>

Note 1: *p≤0.001; ** p≤0.01; *p≤0.05 (one tail tests); ns=not supported.

Note 2: The influence of one variable on the other read vertically.

Source: Author.

5. Findings and Discussion

The role of perceived justice is crucial in the insurance context. This paper has proposed that the three justice dimensions of service recovery will influence customer satisfaction. A number of studies confirmed that all three dimensions (distributive, procedural and interactional justice) affect customer satisfaction. It is suggested that researchers and strategists aiming to nurture satisfied customer should pay close attention to the issues of these three justice dimensions of service recovery. Distributive justice, interactional justice and procedural justice increased perceptions of satisfaction for car insurers holders.

When we analyze the direct effects, procedural justice has an important direct effect on satisfaction. The procedural justice has the strongest effect. So, the methods the firm uses to deal with the problems arising during service delivery in aspects such as accessibility, timing/speed, process control, delay and flexibility to adapt to the consumer’s recovery needs are very important in the insurance industry. Thus, our result supports hypothesis H3. Interactional justice and distributive justice also have a direct impact on satisfaction. Thus, the results support hypotheses 2 and 1. Mansori, Ismail and Tyng, (2014), Rashid, Ahmad and Othman (2014), Lopes and Silva (2015) and Wu and Huang (2015) show that the tree justice dimensions have a direct influence on satisfaction.

Regarding the relative effect of each dimension of justice, no consensus has been reached (Levesque & McDougall, 2000). Some studies indicate that distributive justice is the most decisive predictor of satisfaction (Smith, Bolton & Wagner, 1999; Homburg & Fürst, 2005) while others suggest that interactional or procedural justice are the most significant factors in consumer satisfaction (Tax, Brown & Chandrashekaran, 1998; Maxham & Netemeyer, 2002; Voorhees & Brady, 2005). In the investigations of Wu (2013) and Lopes and Silva (2015), distributive justice has the strongest effect on satisfaction,
followed by interactional justice. However, the effect of procedural justice is the weakest. Mansori, Ismail and Tyng (2014) demonstrated that interactional justice has the strongest effect on satisfaction, followed by distributive justice. The effect of procedural justice is also the weakest.

Satisfaction has a direct influence on trust. This influence has been suggested in several studies (e.g. Jalilvand et al., 2017; Menidjel, Benhabib & Bilgihan, 2017; Chu, Vasquez-Parraga, & Ma, 2018). Therefore, the result supports hypothesis 4. Satisfaction also has a direct impact on loyalty and WOM. In the insurance sector, Sardar and Shahraki (2015), Abtin and Pouramiri (2016), Ansari and Riasi (2016), and Kim et al. (2016) demonstrated that satisfaction influences loyalty. In turn, Tournois (2015), Lee (2016) and Rambocas, Kirpalani and Simms (2018) demonstrated a direct influence of satisfaction on WOM. Thus, the results support hypotheses 5 and 6.

In turn, trust has a direct effect on relational commitment. This effect has been proved in numerous studies (Curra$\text{-}$Perez & Sanchez-Garcia, 2016; Fang, Shao & Wen, 2016; Jalilvand et al., 2017; Poole, 2017; Barra, Pressgrove & Torres, 2018). Therefore, the result supports hypothesis 7. Trust also is a determinant of loyalty and WOM in several studies (e.g. Kim, Kim & Kim, 2009; Yap et al., 2010; Castañeda, 2011; Ding & Lii, 2016; Su, Pan & Chen, 2017). However, the results do not support hypotheses 8 and 9, because trust indirectly impacts on loyalty and WOM, via commitment.

In this study, commitment is a determinant of loyalty and WOM. So, the results support hypotheses H10 and H11. Several studies (e.g. Ou, Shih & Chen, 2015; Curra$\text{-}$Perez & Sanchez-Garcia, 2016; Su et al., 2016; Wästerlund & Kronholm, 2017) identified commitment as determinant of loyalty and WOM.

Finally, loyalty has a direct impact on WOM. So, in the insurance industry, loyal car insurer holders speak well about the insurance company. The finding of several previous studies supports the effect of loyalty on word of mouth communication (e.g. Casidy & Wymer, 2016; Harris & Kathami, 2017; Rialti et al., 2017; Harun et al., 2018; Markovic et al., 2018). Thus, the result supports hypothesis 12.

However, we must look at both direct and indirect effects, because the consideration of the total effects will give us a more rigorous assessment about the relationships between the variables under analysis.

The strongest total effects (direct and indirect) on trust come from satisfaction, followed by procedural justice, interactional justice and, finally, distributive justice. However, satisfaction only has a direct effect. Thus, procedural justice plays an important indirect role in the building of trust.

The strongest total effects (direct and indirect) on commitment come from trust, followed by satisfaction and procedural justice. Satisfaction plays an important indirect influence on commitment, via trust, followed by procedural justice.

The strongest total effects (direct and indirect) on loyalty come from satisfaction, followed by procedural justice and trust. However, the strongest indirect impact on loyalty comes from procedural justice. Trust, interactional justice and distributive justice also have an indirect impact on loyalty. Finally, the strongest total effects (direct and indirect) on WOM come from satisfaction, followed by loyalty. However, the strongest indirect impact on WOM comes from satisfaction, followed by procedural justice.

In conclusion, in the insurance industry, procedural justice has a very significant indirect effect on achieving trust, commitment, loyalty and WOM. Therefore, the insurance
companies must not forget to ensure effective justice on the conflict resolution, because the car insurance holders privilege the methods the insurance companies use to deal with the problems arising during service delivery in aspects such as accessibility, timing/speed, process control, delay and flexibility to adapt to the consumer’s recovery needs.

6. Implications and Limitations

The results of the study have a number of important implications for both theory and practice, because there was a lack of such research in Portuguese insurance context.

6.1. Theoretical Implications

Much of the value of the present work lies in our findings regarding the relational outcomes of perceived justice in the insurance sector. The process of justice means the handling of complaints, and includes the series of events related to the procedure for recovering any failures that have occurred.

The purpose of this study is to help the insurance companies to understand the effects of service recovery rendered when service failure happens. Insurance companies have to be more proactive to win back the upset customers and make them loyal for life. A study on service recovery paradox has suggested that the satisfaction, word-of-mouth intentions, and repurchase rates of recovered customers exceed those of customers who have not encountered any problems with the initial service (McCollough & Bharadwaj, 1992). This is somehow true if the company proactively take action towards the problem faced by the customers. They will remember the effort taken by the company and will spread positive word-of-mouth to other customers. Although companies put their very best effort to avoid service failure from happening, however even the best company in the world experienced service failure. It is unavoidable and employees have to equip themselves with required skills and knowledge in recovering from the problem (Rashid, Ahmad & Othman, 2014).

Therefore, this study is original in that it is the first to examine the mediating role of satisfaction, trust, and commitment in the relationship between the three justice dimensions and loyalty and WOM. This study supports the view that perceived justice does not influence loyalty and WOM directly, but indirectly via satisfaction, trust, and commitment.

6.2. Managerial Implications

The main goal of this research is to evaluate the principal outcomes of perceived justice between insurance companies and car insurance holders. This study is one of the first to be conducted in the context of insurance in Portugal. Therefore, the results of the current study have clear implications for insurance companies because they allow them to perceive the results of effective conflict resolution, which can help managers to anticipate a customer’s decision to switch to another insurance company.

It becomes essential for insurance companies to understand that effective perceived justice contributes toward building a good satisfaction, trust, commitment, and, consequently, greater loyalty to the insurance company, which will lead to favorable word-of-mouth. For car insurance holders to be satisfied with the insurance company, to rely on insurance companies, and to be committed to the insurance companies, it is very important that exists effective conflict resolution.
It is expected that managers will consider the distributive, procedural and interactional justice in recovering from service breakdown. Thus, several important managerial implications emerge from this study. First, the importance of justice oriented service recovery cannot be disregarded. In the case of the provision of insurance services, it is noted that in the case of service recovery, customers are more particular of the procedural although they also care for interaction and distributive justice.

In this way, insurance companies should not neglect a proper service recovery. It is expected that managers will consider the distributive, procedural and interactional justice in recovering from service breakdown. By doing this, car insurance holders will view insurance companies as being more credible, honest, committed with them, which will lead them to be more satisfied, loyal and spread positive word-of-mouth.

6.3. Limitations and Future Research

The findings from the current research should be interpreted with certain limitations. Future studies could examine other outcomes of perceived justice. In the current study, the focus was on customers in the context of the insurance industry, more precisely car insurance. Although this method enhances the generalizability of the findings, future research aimed at replication should examine the model when used with different types of service firms (e.g. banks) or in different insurance contexts (e.g. life insurance).

Given that the current study used cross-sectional data, it would also be useful for future research to investigate a set of customers longitudinally. This longitudinal research could investigate the nature of the communication over time.

References


