Service quality, customer satisfaction and customer value: holistic determinants of loyalty and word-of-mouth in services

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Abstract
Purpose – The objective of this paper is to understand the relationships between service quality, perceived value and satisfaction because several studies endeavored to model these linkages. It is important to test these relationships with loyalty and word-of-mouth (WOM). Thus, it is important to test these relationships in the insurance sector since the relationship between these variables and WOM has not been studied in insurance.

Design/methodology/approach – This investigation proposes a theoretical model tested using structural equation modeling (SEM). A questionnaire survey was developed to explore the relationships among service quality, perceived value, satisfaction, loyalty and WOM. For this study, 744 valid questionnaires were collected from a sample of Portuguese car insurance holders.

Findings – The results revealed that service quality has a direct relationship with perceived value and satisfaction. In turn, perceived value has a direct relationship with satisfaction. Perceived value and satisfaction influence loyalty and WOM. Finally, loyalty influences WOM.

Originality/value – This investigation examines the mediating role of perceived value and satisfaction in the relationship between service quality (facility and interactive) and loyalty and WOM in the insurance industry. It fills a gap in the literature by exploring the variables that lead to positive WOM in the insurance industry; the authors do not know any study that links these variables with WOM. Also, the relationship between loyalty and WOM has been poorly studied, although it is well known that in services, loyal customers speak well of the companies. Thus, the authors try to fill this gap in the academic literature by analyzing these relationships.

Keywords Determinants of loyalty and WOM, Insurance companies, Car insurance

Paper type Research paper

1. Introduction

It has been well known that customer-perceived service quality, customer value and satisfaction have been the most important success factors of business competition for both manufacturers and service providers (Parasuraman et al., 1988, 1991; Bolton and Drew, 1991; Zeithaml et al., 1996). Such factors are becoming the priority of managers in the increasingly intensified competition for customers in the customer-centered era of today and the future (Bolton and Drew, 1991; Raval and Grönroos, 1996; Woodruff, 1997; Oh, 1999; Lapierre, 2000; McDougall and Levesque, 2000). However, many different conclusions have been made regarding service quality, customer satisfaction and customer value.

Following Rust and Oliver’s (1994) call for research into the conceptual relationships between quality, value and satisfaction, some studies endeavored to model these linkages many years ago (Brady et al., 2001, 2005). More recently, in a wide variety of services, Leppäniemi et al. (2017), Pumin et al. (2017), Fu et al. (2018), Hallak et al. (2018), Haverila and
Haverila (2018), Konuk (2019), Hasan et al. (2020) and Lee (2020) studied the interrelationships between these variables. However, as our purpose is to study the financial sector, we will discuss essentially this sector. Therefore, in the banking sector, we can enhance studies of Rajendran and Suresh (2017) and Omorogbe et al. (2019). In the insurance industry, we can bring out the studies of Hellier et al. (2003), Durvasula et al. (2004), Yazdanpanah et al. (2013), Ansari and Riasi (2016), Jose and Saraswathiamma (2017) and Nguyen et al. (2018).

There has been a convergence of opinion that favorable service quality perceptions lead to improved satisfaction and value attributions and that, in turn, positive value directly influences satisfaction. The theoretical justification for these links can be attributed to Bagozzi’s (1992) appraisal, emotional response coping framework (Gotlieb et al., 1994). Bagozzi’s (1992) model suggests that the initial service evaluation (i.e. appraisal) leads to an emotional reaction that, in turn, drives behavior. Adapting the framework to a service context suggests that the more cognitively oriented service quality and value appraisals precede satisfaction (Cronin and Taylor, 1992; Anderson et al., 1994; Gotlieb et al., 1994; Alford and Sherrel, 1996; De Ruyter et al., 1997; Patterson and Spreng, 1997; Chenet et al., 1999; Ennew and Binks, 1999).

The investigation of the interplay between service quality, service value and satisfaction appears particularly relevant in light of the well-documented importance of the service sector to worldwide economies (Brady and Robertson, 1999, 2001). This study is meant to clarify the relationships that exist among and between service quality, perceived value and satisfaction. Finally, in our study, these variables were identified as antecedents of loyalty and word-of-mouth (WOM). This relationship between loyalty and WOM is a pioneer in insurance since the studies mentioned only examined the relationship between the variables quality of service, perceived value, satisfaction and the variable loyalty. As far as is known, there is no study in the insurance activity that has tested the links between these variables and the variable WOM. In turn, in our study, we also considered it important to analyze the relationship between loyalty and WOM. Thus, the current paper explores the complex interrelationships between these constructs in the insurance sector.

Thus, this paper aims to identify service quality (facility and interactive) as a direct antecedent of perceived value and satisfaction. Perceived value influences satisfaction. We also propose that perceived value and satisfaction are antecedents of loyalty and WOM. Finally, we expected that loyalty has a positive impact on WOM. We test a model of total mediation, where perceived value and satisfaction are the mediating variables between the independent factor (service quality) and the variables loyalty and WOM.

The remainder of this paper is structured as follows. First, a thorough literature review helps to clarify the link between research variables. Then, a conceptual model and research hypotheses are proposed. Posteriorly, we describe the adopted methodology and discuss the empirical results. Finally, we conclude by presenting the research’s theoretical and managerial implications, limitations and perspectives.

2. Literature review and research hypotheses

2.1 The effects of service quality on perceived value and satisfaction

Service quality is widely argued as one of the important variables that influence customers’ perceptions of value and as a prerequisite to customer loyalty (Allred and Adams, 2000). In the insurance sector, Hellier et al. (2003) define service quality as the customer’s overall assessment of the standard of the service delivery process.

Extant service quality literature generally supports the notion that service quality is a multidimensional construct that assesses various aspects of service quality (Grönroos, 1982; Parasuraman et al., 1985, 1988; Brady and Cronin, 2001; Chowdhary and Prakash, 2007; Ganguli and Roy, 2010). Parasuraman et al. (1985) defined service quality as the inconsistency
between customers’ expectations for the service and their perceptions of service presentation, and this definition is extensively accepted. In the service marketing literature, service quality is described as the consumer’s judgment about the entity’s total excellence or advantage (Zeithaml, 1988). Much of the literature recommended that customers perceive service quality as a multidimensional construct, which is consistent with the conception of service quality proposed by Parasuraman et al. (1988) in their well-known service-quality measuring instrument called SERVQUAL. This instrument, which measures service quality in terms of five dimensions (i.e. tangibles, reliability, responsiveness, assurance and empathy), is based on the impression that customers’ assessments of overall service quality. Cronin and Taylor (1992) discussed the framework of Parasuraman et al. (1985), concerning conceptualization and measurement of service quality, and developed a performance-only measurement of service quality called SERVPERF by illustrating that service quality is a form of consumer attitude and the performance-only measure of service quality is an enhanced means of measuring service quality. Based on SERVPERF, five dimensions were developed based on Cronin and Taylor (1992). They are tangibles, reliability, responsiveness, assurance and empathy.

Perceived service quality evaluations are cognitive responses at the attribute level. Consumers perceive at least two types: (1) facility service quality provided by the physical environment (such as modern equipment) and representing the tangible aspects of service, and (2) interactive service quality provided by employees (such as promptness and courtesy). The former represents the tangible aspects of service; although often considered the least important of service dimensions and frequently neglected, its role has recently been reevaluated (Chiou et al., 2002). The latter has been called the interactive factor, an essential component of perceived service quality according to the services marketing literature (e.g. Bitner, 1990; White and Schneider, 2000; Brady and Cronin, 2001). In this paper, we consider these two dimensions of service quality.

Although the significance of customer value is widely recognized, the growing body of research about customer value is quite fragmented, and the definition of customer value is divergent. Zeithaml (1988) considers value as the customer’s overall assessment of the utility of a product based on the perception of what is received and what is given. Dodds et al. (1991) argue that buyers’ perceptions of value represent a trade-off between the quality or benefits they receive in the product relative to the sacrifice they perceive in paying the price. Woodruff (1997) defines customer value as a customer perceived preference for and evaluation of those product attributes, attribute performances and consequences arising from use that facilitate achieving the customer’s goals and purposes in use situations. In this study, we concur with the majority of researchers who define customer value in terms of get (benefit) and give (sacrifice) components (Zeithaml, 1988; Day, 1994; Woodruff, 1997).

To conceptualize the construct of perceived value, two common methods based on structural equation modeling have arrived from empirical studies (Lin et al., 2005; Roig et al., 2006; Martín Ruiz et al., 2008). The first conceptualization strategy treats perceived value as unidimensional and globally measures overall customer value perceptions. The second strategy treats perceived value as multidimensional and measures perceived value using various get (benefits) and give (sacrifice) dimensions. This multidimensional approach considers functional and affective aspects to measure the overall perceived value. The functional aspects include valuations of the establishment, the contact personnel, the quality of the service and the price. The affective dimension is divided into an emotional dimension (relating to feelings or internal emotions) and a social dimension (relating to the social impact of the purchase made). The findings of Sheth et al. (1991) established the foundations for this multidimensional approach and set out the dimensions of value as functional value, that is the value associated with the benefits of owning a specific product or service; social value, that is the value derived from associated with specific social groups; emotional value, related with...
the capacity of a product or service to stimulate feelings or affective states toward the product or service to provide novelty or satisfy a desire for knowledge; and, finally, the conditional value that derives from the specific contexts of each situation. This paper proposes, for the insurance industry, a unidimensional approach of perceived value for car insurance and operationalizes the construct directly through multiple items.

Customer satisfaction has been regarded as the ultimate business goal. It is widely associated with customer loyalty which, in turn, is related to profitability. For years, companies have invested in measurable resources in measuring and improving customer satisfaction. Satisfaction does not necessarily lead to customer retention, however, as is evident by the extant findings that even satisfied customers buy from elsewhere. Instead, there is a general convergence of findings that delivering customer value is the fundamental basis of marketing activities and an effective source of competitive advantage. Intuitively, it seems plausible that the degree of value and quality consumers experience with services will have an impact on repeat business and favorable WOM.

Satisfaction is a well-researched subject in the services literature. It has been well accepted that satisfaction is customers’ cognitive or affective reaction to the overall service encountered. As Oliver (1980, p. 464) put it, satisfaction is “a cognitive and affective reaction to a service incident.” 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. Overall satisfaction evaluation was believed to be the “cumulative effect of a set of discrete service encounters or transactions with the service provider over a period of time” (Shankar et al., 2003, p. 156) and a function of all prior transaction-specific evaluations (Jones and Suh, 2000). As Oliver (1999) pointed out, satisfaction can be conceptualized at two levels: micro (as a response to a transaction-specific experience) and global (as a result of the customer’s cumulative experiences with a specific service). As a matter of fact, satisfaction tends to result from a global evaluation of all the aspects that make up the customer relationship rather than solely an outcome of a specific transaction with the provider (Thakur, 2016).

Overall satisfaction is a better predictor of customer loyalty (Jones and Suh, 2000; Yang and Peterson, 2004). Relationship satisfaction is accumulated across all the interactions in an ongoing relationship. In the insurer-policyholder relationship context, satisfaction is generated by insurers’ behaviors during interactions with policyholders (Tsoukatos and Rand, 2006; Siddiqui and Sharma, 2010). To sum up, in this research, we focus on the cumulative view of satisfaction since we examine the relationship between satisfaction and customer loyalty in the insurance industry, which engenders long-term customer-company relationships that cannot be delineated by a single purchase situation (Ruefenacht, 2018).

The relationship between the service quality variable and the value and satisfaction variables was studied in financial services. In the insurance sector, Durvasula et al. (2004), Gera (2011), Yazdanpanah et al. (2013), Ansari and Riasi (2016) and Nguyen et al. (2018) demonstrated that service quality influenced directly the perceived value and satisfaction. In the banking context, Rajendran and Suresh (2017) also showed this influence. However, it is worth remembering that, in other industries, the direct effects of service quality on perceived value and satisfaction have also been studied (Cho and Hyun, 2016; Laura, 2016; Ahmed et al., 2017; Hallak et al., 2018; Teeroovengadum et al., 2019; Chi et al., 2020; Choi et al., 2020; Molinillo et al., 2021).

When we analyze the influence of service quality on perceived value, several studies in financial services have studied this relationship. In banking services, Rajendran and Suresh (2017), Mahadin and Akroush (2019), Omoregie et al. (2019) and Özkan et al. (2020) demonstrated the influence of service quality on perceived value. In insurance services,
Hellier et al. (2003), Durvasula et al. (2004), Gera (2011), Yazdanpanah et al. (2013), Abdelfattah et al. (2015), Ansari and Riasi (2016) and Nguyen et al. (2018) identified that service quality has a strong impact on perceived value. Hence, the quality of service provided by the insurance agent influences perceptions of the value of the insurance product. Hence, we propose the following hypotheses:

\( H1 \). Facility service quality has a direct positive effect on perceived value.

\( H2 \). Interactive service quality has a direct positive effect on perceived value.

In financial services, a higher service quality leads to greater satisfaction. In the banking sector, Bakar et al. (2017), Hamzah et al. (2017), Narteh (2018), Parawansa (2018), Boonlertvanich (2019), Endara et al. (2019) and Asnawi et al. (2020) support the direct effect of service quality on satisfaction. In the insurance sector, Durvasula et al. (2004), Gera (2011), Srivastava and Rai (2013), Yazdanpanah et al. (2013), Ansari and Riasi (2016), Jose and Saraswathiamma (2017), Nguyen et al. (2018) and Yu and Tseng (2019) also demonstrated that service quality has a direct effect on satisfaction. Therefore, we predict the following hypotheses:

\( H3 \). Facility service quality has a direct positive effect on satisfaction.

\( H4 \). Interactive service quality has a direct positive effect on satisfaction.

2.2 The effect of perceived value on satisfaction

In general, research indicates that customer satisfaction and customer value are distinct but interrelated concepts. Perceived value is an overall cognitive response to a service experience, whereas satisfaction is an emotional response (Cronin et al., 2000), and according to cognition-affect causal ordering, cognitive responses precede emotional responses (Bagozzi, 1992).

Several studies in financial services demonstrated that perceived value is an antecedent of satisfaction. In the banking context, Seiler et al. (2013), Gillani and Awan (2014), Hoang (2019) and Omorogie et al. (2019) demonstrated that perceived value has an impact on satisfaction. In the insurance sector, the review of the literature showed that perceived value is a significant determinant of satisfaction. As a matter of fact, Hellier et al. (2003), Durvasula et al. (2004), Gera (2011), Yazdanpanah et al. (2013), Picón-Berjoy et al. (2016), Jose and Saraswathiamma (2017), Nguyen et al. (2018) and Steiner and Maas (2018) demonstrated that perceived value has a direct effect on satisfaction. Hence, we propose the following hypothesis:

\( H5 \). Perceived value has a direct positive effect on satisfaction.

2.3 The effects of perceived value and satisfaction on loyalty and WOM

The anticipation of future relational exchange is generally expressed in terms of two behavioral outcomes, namely, repeat purchase (re-patronage) and WOM recommendation (Bitner, 1990). Repeat purchase is viewed as an indicator of whether or not a customer will maintain the relationship with the company (Zeithaml et al., 1996). WOM recommendation 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 WOM as the intention to provide positive WOM.

In financial services, namely in banks, Santos and Basso (2012) demonstrated the impact of perceived value on loyalty and WOM. In the insurance sector, Gera (2011) demonstrated that perceived value influences loyalty and WOM. In other services, such as tourism (Dedeoğlu et al., 2016; Sharma et al., 2018; Caber et al., 2020), retail (Leppäniemi et al., 2017), transportation (Widianti et al., 2015) or even restaurants (Souki et al., 2020), these relationships were also proven. Therefore, we propose the following hypotheses:
Perceived value has a direct positive effect on loyalty.

Perceived value has a direct positive effect on WOM.

Loyalty is a factor of paramount importance in a mature services market sector. As was evidenced by Dash et al. (2018, p. 1), in the insurance context, “customer loyalty can be said to have occurred if people choose to use a particular shop or buy one particular product, rather than use other shops or buy products made by other companies,” Thus, managers of car insurer providers need to understand what the drivers of loyalty are. Relationship satisfaction certainly plays a role in developing loyalty and WOM. However, although the positive relationship between satisfaction and customer loyalty seems widely accepted, some authors raise concerns about generalizing a satisfaction-loyalty framework that has been tested in a specific context to other industries that were not part of the particular analysis (Fornell, 1992; Johnson et al., 2006; Olsen, 2007). For example, in a study of 30 industries in Sweden, Fornell (1992) concludes that the effect of satisfaction on loyalty varies across industries. Therefore, the validity of the relationship between these two variables must be empirically verified for the insurance industry rather than just inferred from works conducted in other services industries.

In the banking service industries, Cambra-Fierro et al. (2017), Sampaio et al. (2017), Al-Wugayan (2019) and Grott et al. (2019) demonstrated that satisfaction influences loyalty and WOM. Thereby, we advocate that satisfied policyholders often continue to buy the insurance and “spread the good news” and recommend products and services to others, because Durvasula et al. (2004), Gera (2011), Yu and Tung (2013) and Yu and Tseng (2016), in the insurance industry, supported a direct influence of satisfaction on loyalty and WOM. The impact of satisfaction on loyalty and WOM was found not only in financial services, but also in many other sectors, the examples of such studies being Sharma et al. (2018), Konuk (2019), Park et al. (2019), Issock et al. (2020), Menidjel et al. (2020) and Moharana and Pradhan (2020). Consequently, in an insurance context, we propose the following hypotheses:

H8. Satisfaction has a direct positive effect on loyalty.

H9. Satisfaction has a direct positive effect on WOM.

2.4 The effect of loyalty on WOM
In financial services, the findings of some studies support the effect of loyalty on WOM communication. WOM is especially important with intangible products that are difficult to evaluate before consumption, such as tourism or insurance (Chang and Lee, 2020).

In the banking context, Khan et al. (2015), Akbari et al. (2016), Mukerjee (2018), Al-Wugayan (2019) and Grott (2019), and in the insurance sector, Marcos (2018), Marcos and Coelho (2018) and Markovic et al. (2018) support this effect. Therefore, we predict the following hypothesis:

H10. Loyalty has a positive influence on WOM.

3. Research Methodology
The conceptual model proposed in the present study is depicted in Figure 1. This research model investigates service quality (facility and interactive) as an antecedent of perceived value and satisfaction in the insurance sector. For this purpose, we will test a model where facility service quality and interactive service quality are antecedents of perceived value and satisfaction. Perceived value is a determinant of satisfaction. In turn, perceived value and satisfaction influence loyalty and WOM. Finally, loyalty influences WOM. Therefore, it is a model of total mediation, where perceived value and satisfaction are the mediating variables.
between the independent factors, facility service quality and interactive service quality, and the variables loyalty and WOM. The relationships between the service quality, satisfaction and perceived value variables and the loyalty and WOM variables have not been studied in the financial sector, so these influences on both loyalty and WOM were considered fundamental. In our model, the influence of loyalty in WOM will also be tested, which has not been analyzed in previous studies in the financial sector, namely, in insurance. Consequently, it is a pioneering model in the insurance field, since WOM, being important in services, is equally crucial in insurance.

3.1 Sample selection and data collection
Extensive qualitative interviews were conducted on this topic before the collection of quantitative data. Personal interviews were conducted with insurance company directors and insurance intermediaries (agents and brokers) to understand how insurance companies work before we propose a conceptual model. This research study used a structured and self-administered questionnaire that addressed all the information needed. Thus, to obtain all the data needed, a sample of convenient elements was obtained by using a non-probabilistic convenience sample. Data were collected through personal interviews. Paper-based questionnaires were distributed to a total of 900 Portuguese car insurance holders who were invited to complete the survey. The response rate was 82.7% as 744 valid responses were obtained. The questionnaires were distributed to higher education institutions (students and teachers), friends, public services and companies. The demographic characteristics indicate that a diverse group of respondents was 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 Measurement scales
The measurement scales of the constructs were based on the literature and adapted to the relationship marketing in the insurance context. All variables, presented in Table 2, were measured on a seven-point Likert scale, ranging from 1–strongly disagree to 7–strongly agree.

The interactive service quality measures were adapted from Antón et al. (2007) and Parasuraman et al. (1988). The facility service quality measures were adapted from Antón et al. (2007) and Brady and Cronin (2001). The perceived value was adapted from Hellier et al. (2003). The satisfaction was measured using Gremler and Gwinner’s (2000) scale. The loyalty measures were adapted from Martín Ruíz et al. (2008). The WOM measures were adapted from Palmatier et al. (2007).
4. Analysis and results

4.1 Measurement model

An initial screening of each scale was conducted using item-total correlations, and exploratory factor analysis (EFA) using SPSS 26.0. 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 26.0. Maximum likelihood estimation procedures were used since these afford more security in samples that might not present multivariate normality.

First, we examined the most relevant fit indices of the measurement models recommended by Chin and Todd (1995) and Hu and Bentler (1999). In this perspective, we verified that the ratio between the chi-square value and the degrees of freedom ($\chi^2$/df) value is less than 3 and that the goodness-of-fit index (GFI) value is greater than 0.9. Besides, we established that a comparative fit index (CFI) value is greater than 0.95 and that a root mean square error of approximation (RMSEA) value is less than 0.06.

The measurement model fits the data well. To test a model’s fit, the chi-square ($X^2$) statistic concerning 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 711.751 with 237 degrees of freedom at $p<0.001$ ($X^2$/df=3.00). Because the chi-square is sensitive to sample size, 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=0.93, 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 RMSEA, which is 0.052.

CFA enables the performance of tests regarding the convergent validity, discriminant validity and reliability of the study constructs. A commonly used method for estimating convergent validity examines the factor loadings of the measured variables (Anderson and Gerbing, 1988). Following the recommendations by Hair et al. (2014), factor loadings greater than 0.5 are considered very significant. Also, we used the 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 AVEs 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 and 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 and Gerbing, 1988). Discriminant validity of the scales was also supported, as none of the confidence intervals of the phi estimates included 1.0 (Anderson and 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 CR of each scale must exceed the 0.7 thresholds (Bagozzi, 1981). As Table 1 shows, the composite reliability coefficients of all the constructs are excellent, being larger than 0.9, except for the variable lost benefits costs (0.87). 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 is also shown. In Table 2, we can also see the standardized loadings and t-value of all scale items.
<table>
<thead>
<tr>
<th>Construct</th>
<th>No Items</th>
<th>CR</th>
<th>AVE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility service quality</td>
<td>3</td>
<td>0.96</td>
<td>0.89</td>
<td>(α = 0.96)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Interactive service quality</td>
<td>4</td>
<td>0.95</td>
<td>0.84</td>
<td>0.69</td>
<td>(α = 0.96)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Perceived value</td>
<td>6</td>
<td>0.91</td>
<td>0.64</td>
<td>0.49</td>
<td>0.60</td>
<td>(α = 0.91)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>5</td>
<td>0.97</td>
<td>0.86</td>
<td>0.65</td>
<td>0.77</td>
<td>0.79</td>
<td>(α = 0.97)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>3</td>
<td>0.94</td>
<td>0.85</td>
<td>0.58</td>
<td>0.67</td>
<td>0.70</td>
<td>0.84</td>
<td>(α = 0.95)</td>
<td></td>
</tr>
<tr>
<td>WOM</td>
<td>3</td>
<td>0.95</td>
<td>0.87</td>
<td>0.58</td>
<td>0.66</td>
<td>0.68</td>
<td>0.80</td>
<td>0.85</td>
<td>(α = 0.95)</td>
</tr>
</tbody>
</table>

**Note(s):** α in diagonal entries (italic) are Cronbach’s alpha coefficients; AVE, average variance extracted; CR, composite reliability

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Table 1: Factor correlation matrix and measurement information for loyalty and word-of-mouth in services
4.2 Structural model

The structural model fits the data well ($X^2=725.056$ df $=241$, $p<0.01$ ($X^2$/df $=3.00$); GFI $=0.92$, NFI $=0.97$, IFI $=0.98$, TLI $=0.98$, CFI $=0.98$; RMSEA $=0.052$). This model is depicted in Figure 2.

The results in Table 3 involve the analyses of the causal paths hypothesized in the structural model. The models support all the hypotheses.

According to Bollen (1989), it is very important to analyze the effects of total effects (direct and indirect effects) because an examination of only the direct effects could be misleading. The analysis of indirect effects highlights the importance of mediating variables in explaining reputation. Thus, in Table 4, we can observe the standardized direct, indirect and totals effects.
We used the bootstrapping technique with a sample of 2,000 random observations generated from the original sample, and a confidence interval of 95% was 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.
5. Discussion and conclusions
In car insurance, facility service quality and interactive service quality are antecedents of perceived value and satisfaction. In turn, perceived value is an antecedent of satisfaction. Perceived value and satisfaction are antecedents of loyalty and WOM. Finally, loyalty is a determinant of WOM.

The strongest direct effect on perceived value comes from interactive service quality. Facility service quality also influences perceived value. Thus, the results in our research support hypotheses 1 and 2. In insurance services, Abdelfattah et al. (2015), Ansari and Riasi (2016) and Nguyen et al. (2018) identified that service quality has a strong impact on perceived value. Hence, the quality of service provided by the insurance agent influences perceptions of the value of the insurance product.

The strongest direct effect on satisfaction comes from perceived value, followed by interactive service quality. Facility service quality, although weaker, has also a significant effect on satisfaction. Therefore, the results support hypotheses 3, 4 and 5. These results are in line with studies in the insurance sector, since Jose and Saraswathiamma (2017), Nguyen et al. (2018) and Steiner and Maas (2018) demonstrated that perceived value has a direct effect on satisfaction. Also, in the insurance sector, Jose and Saraswathiamma (2017), Nguyen et al. (2018) and Yu and Tseng (2019) confirmed that service quality has a direct effect on satisfaction.

The strongest direct effect on loyalty comes from satisfaction. Perceived value also has a direct effect on loyalty, although the effect is weaker. Therefore, the results support hypotheses 6 and 8. The strongest direct effect on WOM comes from loyalty, followed by satisfaction. However, perceived value has a weak influence on WOM. Therefore, the results of our study support hypotheses 7, 9 and 10. In the insurance sector, Gera (2011) demonstrated that perceived value influences loyalty and WOM. Santos and Basso (2012) also confirm this effect in the banking context. For Gera (2011), Yu and Tung (2013) and Yu and Tseng (2016), satisfaction has a direct effect on loyalty and WOM in the insurance sector. Finally, Markovic et al. (2018), in services, which include insurance, confirmed that loyalty is an antecedent of WOM.

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

When we analyze the total effects (direct and indirect), interactive service quality and perceived value exert the strongest effect on satisfaction. Facility service quality is another variable that can be highlighted as important. Thus, the service quality of the contact personnel is very important to satisfy the car insurance holders. In turn, if the car insurance holders perceive value in the car insurance, they are satisfied. Facility service quality is another variable that car insurance holders seem to privilege.

In turn, the strongest total effects (direct and indirect) on loyalty come from satisfaction, followed by interactive service quality, perceived value and facility service quality. Therefore, if the car insurance holders are satisfied, they are loyal. In turn, if the service quality of the contact personnel is good, the car insurance holders are loyal. Perceived value is also important to foster loyalty. Thus, if the car insurance holders perceive value in the car insurance, they are loyal to the insurance company. Finally, if the facility service quality is adequate, the car insurance holders are loyal.

Finally, the strongest total effects (direct and indirect) on WOM come from satisfaction, loyalty, interactive service quality, perceived value and facility service quality. Once again, satisfaction is very important, because customers satisfied speak well about the insurance company. Loyal customers also speak well about the insurance company. The service quality of the contact personnel also influences the willingness of the customers to speak well. Finally, if the car insurance holders perceive value and if they perceive the office offers good service quality, they speak well about the insurance company.
5.1 Theoretical implications

Much of the value of the present work lies in our findings regarding the relationships between service quality, value and satisfaction in the insurance sector. These relationships were studied in this sector many years ago by Hellier et al. (2003), Durvasula et al. (2004), Gera (2011) and Yazdanpanah et al. (2013). More recently, Ansari and Riasi (2016), Jose and Saraswathiamma (2017) and Nguyen et al. (2018) also studied the relationships between these variables. Thus, we also found it important to study these interrelationships in car insurance in Portugal. The originality of this study lies in it being the first research examining the most varied direct and indirect antecedents of loyalty and WOM in the insurance industry, as well as service quality (facility and interactive), perceived value and satisfaction. None of the studies mentioned studied the relationship between loyalty and WOM, nor did most of them study the relationships between service quality, satisfaction, perceived value and WOM. In this way, our study has brought an important contribution to the study of the WOM determinants in insurance.

We think that the service quality of the contact personnel and perceived value are crucial for the insurance companies. The car insurance holders are satisfied if they perceive the contact personnel have quality and if they perceive value on the car insurance. Finally, in the insurance context, because insurance products are highly intangible, if car insurance holders are loyal, they will speak well about the insurance company.

This study makes a contribution to the insurance companies literature by testing a model of direct and indirect antecedents of loyalty and WOM in the insurance sector, in which the variables service quality, perceived value and satisfaction gain an evident prominence. Since there was a lack of such research in the insurance context, namely in Portugal, this research can provide a theoretical contribution for future research. Customer loyalty and WOM are one of the main business challenges, also for the insurance sector. Nevertheless, just a few papers are dealing with this problem in the insurance field and specifically considering the uniqueness of this business sector. Regarding the impact of the variables analyzed in WOM and the influence of loyalty in WOM, no studies are known in the insurance sector, hence the contribution of our study to the academic literature.

5.2 Managerial implications

The main goal of this research is to evaluate the principal antecedents of loyalty and WOM in the context of insurance companies. 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 factors that lead to satisfaction with insurance companies, 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 the antecedents of satisfaction with insurance companies are proper service quality (facility and interactive) and a good perceived value. Consequently, the car insurance holders, who perceive value in the car insurance and are satisfied, are loyal and speak well about the insurance company. Finally, loyal customers speak well of the insurer.

In this way, insurance companies should not neglect the satisfaction of their customers. They must also provide products and services with adequate perceived value. Therefore, it is crucial for the insurance companies that insurance holders have an appropriate satisfaction with their insurance companies in order to foster the car insurance holder loyalty and to promote favorable WOM. As was highlighted by Dash et al. (2018, p. 1), in the insurance industry, “customer loyalty is the result of consistently positive emotional experience, physical attribute-based satisfaction and perceived value of experience, which includes the product or services,”
Recent insurance work has highlighted other antecedents of loyalty and WOM, such as switching costs (Marcos, 2018). This work is the first to investigate the impact of positive switching costs on customer satisfaction, relational commitment, loyalty and WOM in the context of Portuguese insurance companies. The findings contribute to the discussion about the impacts of different types of positive switching costs on satisfaction, relational commitment, customer loyalty and WOM. Unlike most previous empirical studies, in the insurance sector, in which switching costs are assumed as an overall construct of some different dimensions for testing the relationship with other constructs (Hellier et al., 2003; Antón et al., 2007; Lai et al., 2011), that switching costs may be incurred from switching from current insurer to another, Marcos (2018) separated into two different positive switching cost (social and lost benefits).

According to the latest investigations, switching costs are multidimensional. These investigations distinguish between positive costs and negative costs. The positive switching costs are all those that retain customers in the company, out of their own will (“wanting to stay”), showing a positive attitude toward the continuity of the relationship. On the contrary, negative switching costs include all those barriers that hold clients against their will (“having to stay”), reflecting a negative attitude toward the continuity of the relationship (Maicas Lopez et al., 2007).

The work of Marcos (2018) only considers positive switching costs: social and lost benefits. Social switching costs are the costs associated with the potential loss of personal relationships that customers have developed with a service. Lost benefits costs are the costs reflecting the potential loss of special discounts and unique benefits if the consumer switched from her or his current service provider to another (Jones et al., 2007). The positive switching costs (social and lost benefits switching costs) are derived largely from positive sources of constraint because they represent the positive benefits and value beyond the core service, which a customer would have to give up to switch. In this study, lost benefits costs had a positive influence on satisfaction, relational commitment, loyalty and WOM, contrary to social switching costs. Social switching costs only have a direct effect on relational commitment. Thus, in insurance companies, the priority to retain the car insurance holders is to focus on the lost benefits costs, because the social costs are not a priority for the car insurance holders. In the insurance markets, Duijmelinck et al. (2015) identified one of the switching costs, lost benefits costs, as the main reason for customers not switching insurers. Therefore, the insurance companies must not forget to provide discounts to loyal customers, because this is very important to them. They prefer to be distinguished because they are loyal to the insurer and not just because they did not have car accidents. Regarding the differential effects of switching costs on actual purchase behavior, results show that the two dimensions of financial and relational positive switching costs affect key marketing outcomes to a different extent. In the insurance industry, the financial switching costs are more significant. Particularly, lost benefits costs are the most important type of switching cost for securing relationships between car insurance holders and insurance companies.

There is yet another study in insurance that considered as loyalty and WOM antecedents, the variables communication, reputation, trust and relational commitment. In the study of Marcos and Coelho (2018), reputation, trust and relational commitment are mediators of the variables communication and the variables loyalty and WOM. Insurance companies have neglected the role of communication in maintaining a stable relationship with their insurance holders. It fills a gap by exploring the importance of communication in insurance companies. Therefore, the results of the current study have clear implications for insurance companies because they allow them to perceive the results of close communication, 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 communication contributes toward building a good reputation, trust, commitment and, consequently, greater
loyalty to the insurance company, which will lead to favorable WOM. For car insurance holders to rely on insurance companies, it is very important for insurance companies to demonstrate that they have nothing to hide from their car insurance holders. In this way, insurance companies should not neglect close communication with their policyholders, informing them of new types of car insurance, new services and additional coverage auto insurance. By taking these actions, policyholders will view insurance companies as being more credible, honest and committed, which will lead them to be more loyal and to spread positive WOM. Recently, Das et al. (2019), while not linking loyalty and WOM, considered satisfaction, trust, commitment and image to be essential factors in building loyalty to financial services, namely, insurance and banks.

In services, it is known that the positive WOM of customers is much more effective than advertising what that the insurer can do, so insurance companies should be aware that fostering the loyalty of their customers leads customers to speak well and recommend the insurer. Therefore, our study helps to bridge a gap in the academic literature about the role positive WOM plays in fostering effective customer acquisition, where service quality, perceived value and satisfaction are essential. Consequently, for customers to stay loyal and speak well of insurers, it becomes essential that insurance companies provide a good quality of service and that policyholders perceive that the insurer offers good value in their offerings. In this way, insurance companies get their customers to be satisfied, remaining loyal and promoting positive WOM.

5.3 Limitations and future research
The findings from the current research should be interpreted relative to certain limitations. Future studies could examine other variables that are related to service quality, perceived value and satisfaction. In the current study, the focus was on customers in the context of the insurance industry. 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.

We encourage researchers to explore some of these interesting research avenues in future research.

References


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