

The moderating role of perceived justice and satisfaction outcomes on the service recovery environment

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Summary

This study was conducted in the Brazilian airline industry in a context of service failure and recovery. Given the complexity, heterogeneity and inherent co-production of services (Zeithaml, Bitner & Gremler, 2006), some level of imperfection is expected. Nevertheless, firms are capable of changing an unpleasant situation by providing an adequate service recovery (Grönroos, 2000). That is crucial for increasing justice evaluations (Tax & Brown, 1998) and therefore customer satisfaction. Consequently, a satisfied customer may show different behavioral responses. The purpose of this study is thus to explore how perceived justice dimensions (distributive, procedural and interactional) minimize the negative impact of severity on satisfaction in a service failure context. Furthermore, we demonstrate the different effects of satisfaction on behavioral outputs, such as loyalty, positive word-of-mouth, trust and intention to complain. A survey with 639 airline passengers was conducted in the domestic boarding area of a large airport in Brazil. Data was entered and analyzed in the software SPSS. Results from regressions show that the three dimensions of justice have a positive direct effect on satisfaction. Yet, only perceived justice moderates this relationship, such that the more customers perceive to have been treated fairly, the weaker the impact of severity on satisfaction. Even when a failure is considered very severe (e.g. lost baggage or flight canceled) airlines may recover by increasing customer's justice perceptions. Also, customers in this context may be more concerned with having the failure promptly solved than getting compensation or a courteous treatment. Thus, airlines should focus in providing a flexible system and taking individual circumstances into account, acting quickly, and asking customer's opinions about the best way to solve the problem. Besides, in a failure setting, satisfied customers are more prone to be loyal to the airline. Yet, once Brazilian airline industry may be considered an oligopoly, loyalty seems to be less a function of satisfaction and more of the lack of choice. Additionally, whereas some authors consider trust as an antecedent of satisfaction, it has proven to significantly be impacted by it. Therefore, a more satisfied customer will trust more the service provider. Finally, Brazilian customers are little motivated to complain, even facing a failure situation. Rather, they prefer to engage in word-of-mouth communication, as typical in collective cultures. This study has important implications to the relationship marketing literature and to business operations in the airline sector.

THEORETICAL DEVELOPMENT

Customer satisfaction and service recovery

Customer satisfaction has been largely studied as a positive evaluation of a consumption experience usually contrasted with expectations (Blackwell, Engel & Miniard, 2008). Thus, it may be considered a mental process in a customer's mind after an experience with a product or service (Morgan, Crutchfield and Lacey, 2000).

According to Giese and Cote (2002) satisfaction has three general characteristics: (1) customer satisfaction is a response (cognitive or emotional); (2) the response has a focus (expectations, product, consumption experience, etc); and (3) the response occurs at a particular time (after consumption, after choice or based on accumulated experience). Therefore, satisfaction is determined at the time the evaluation occurs.

In order to better understand satisfaction, Oliver (1997) proposes the expectation disconfirmation model, based on the assumption that satisfaction is related to consumer's expectations before the purchase, compared to the perceived product or service performance. The disconfirmation is the discrepancy between the consumer's previous patterns and the company's delivered patterns. This view implies a goal, or something to be satisfied, that will be judged according to a standard. Thus, a satisfied consumer is the one who perceives the service as equal or superior to his or hers expectations.

Nevertheless, satisfaction is studied today not only as a comparison with expectations, but in a broader way, related to its antecedents and outcomes. There has been a variety of models attempting to explain what determines satisfaction and what its most likely outcomes are. Several scholars have shown a positive association of satisfaction with perceived quality and loyalty (eg. Blümelhuber & Meyer, 2000; Greenland, Coshall & Combe, 2006; Tam, 2004). Some others propose a positive impact on word-of-mouth (eg. East, Hammond & Lomax, 2008) and trust (e.g. Ha & Perks, 2005; Luk & Yip, 2008). Still, there are some that further extend this view and state it finally leads to a higher profitability (Helgesen, 2006).

In the service sector however, some peculiarities may mitigate satisfaction. Given the complexity, heterogeneity and inherent co-production of services (Zeithaml, Bitner & Gremler, 2006), some level of imperfection is expected. Thus, failures may occur at any time and for a variety of reasons.

Nevertheless, firms are capable of changing an unpleasant situation. Grönroos (2000) argues that it is the firm's responsibility to identify and reverse problems. Therefore, an adequate service recovery is crucial for maintaining customer's satisfaction (eg. Boshoff, 2007; Chang, 2008), especially in the home country setting, where customers are more demanding regarding recovery strategies (Warden, Liu, Huang & Lee, 2003). Moreover, as shown by Spreng, Harrell & Mackoy (1995), service recovery results sometimes in a higher repurchase intent and word-of-mouth than when having customers initially satisfied.

Failure severity

In some cases, failures are considered extremely severe by the customers. For instance, in the airline industry, having a flight canceled or a lost bag may greatly alter a traveler's plans at the destination. On the other hand, a short delay may be considered less severe, especially for a traveler on vacation. Severity is thus related to the magnitude of a failure and varies depending on the seriousness of the problem.

Customers facing a problem with a service considered to be very important are more prone to get angry with providers than less important problems (Folkes, Koletsky & Graham, 1987). Furthermore, satisfaction is expected to decrease, as failure severity increases (Hess Jr,

2008). For instance, Liao (2007) found that failure severity minimizes the positive impact of service recovery on satisfaction. Weun, Beatty & Jones (2004) went one step further to show that severity minimizes the positive impact of perceived justice on customer satisfaction.

According to Vázquez-Casielles, Río-Lanza and Díaz-Mártin (2007), further investigation on the topic is needed in order to better understand how different types of failure affect customer satisfaction.

Therefore, we hypothesize that:

H1: An increase in the degree of failure severity will result in a decrease in customer satisfaction.

Perceived Justice

There are a number of ways of managing failures. Zeithaml, Bitner & Gremler (2006) highlight several strategies such as: assuming responsibility for the failure, apologizing, providing an explanation and acting quickly to solve the problem. As literature has shown, service recovery leads to higher perceived justice (eg. Chang & Hsiao, 2008). When studying the airline and banking industries in Brazil, for instance, Santos & Fernandes (2008) showed that customers that received fair treatment were more satisfied with the service recovery. As a result, they tend to be loyal and trust the service provider.

According to equity theory (J. Stacy Adams, 1963), perceived justice in service marketing could be considered the balance between the time and money spent by the consumer and the benefit provided by the firm. According to Tax & Brown (1998) customers base their justice evaluations on three aspects: results, processes and interactions. Each one is related to a type of justice, distributive, procedural and interactional, respectively.

Distributive justice refers to the outputs that consumers get from the service recovery. Each company has its way to compensate customers. Typical outputs are refunds, credits, repairs, replacements, either singly or in combination (Tax & Brown, 1998). Some authors even argue that distributive justice is the one that has the strongest impact on customers' satisfaction (eg. Weun, Beatty & Jones, 2004) and complaint behavior (Park, Lehto & Park, 2008).

Another dimension is procedural justice, which is related to the policies and rules in the service recovery process. It starts with the company assuming responsibility for the failure, providing an explanation and then quickly handling the complaint, preferably by the first person that is contacted (Tax & Brown, 1998). An effective way of providing this type of justice is to keep a good communication with the client, for instance, by asking for feedback and accepting suggestions (Campbell & Finch, 2004). This dimension is crucial even to employees' satisfaction recovery (Roberson, Moye & Locke, 1999).

Finally, interactional justice refers to the perceived fairness of interactions between the customer and firm. This involves demonstrating politeness, concern and honesty; being courteous to clients and making a genuine effort to resolve the problem (Tax & Brown, 1998). This dimension is focused on the interpersonal treatment during the service recovery process. In standardized services that entail low human contact, such as the airline industry, customers may have little tolerance for providers during problem situations (Matilla, 2001). Thus, front line employees' attitudes are particularly relevant to the customer experience. When handled appropriately, a positive impact on satisfaction will ensue (Liao, 2007).

Providing a fair service recovery will keep customers satisfied and build close and lasting relationships, even in the context of severe failures. Thus, we propose the following hypotheses:

H2: Perceived justice moderates the relationship between severity and satisfaction, such that the greater the perceived justice, the weaker the negative effect of severity on satisfaction.

H2a: Distributive justice moderates the relationship between severity and satisfaction, such that the greater the distributive justice, the weaker the negative effect of severity on satisfaction.

H2b: Procedural justice moderates the relationship between severity and satisfaction, such that the greater the procedural justice, the weaker the negative effect of severity on satisfaction.

H2c: Interactional justice moderates the relationship between severity and satisfaction, such that the greater the interactional justice, the weaker the negative effect of severity on satisfaction.

Loyalty

The airline industry has had an historical role in developing the concept of loyalty in marketing studies. According to Johnson, Herrmann and Huber (2006), the construct became relevant especially after 1980, with the advent of frequent flyer programs. Gruen (2000) explains that these membership strategy aims to offer preferential services and to create an identity with the customer, generating a sense of belonging to the firm. Since then, frequent flyer programs have been growing and expanding to other sectors such as hotels, restaurants, pharmaceuticals and retail in general.

Yet, those authors agree that the efforts should not be restricted to tacit aspects of retention. Instead, loyalty programs should be focused on actual customer's needs and desires, seeking a trustful relationship.

Thus, loyalty is related to a long term attitude towards a firm which provides benefits beyond the value of a single transaction (Morgan, Crutchfield and Lacey, 2000). Rather than the mere repetition of a purchase solely due to economic benefits, a loyal customer is the one that also takes into account psychological and strategic aspects, which increase equity perceptions.

Despite the recognized importance of loyalty for a firm's longevity, there are still companies that drive their efforts to attracting new customers rather than maintaining current ones. Loyalty has been usually explained by the causal relationships: customer orientation > satisfaction > loyalty > economic success (Blümelhuber & Meyer, 2000). Although these associations may not be linear, a satisfied customer has a greater repurchase intention, what results in loyalty. Consequently, profitability will increase and costs of attracting new customers will be reduced. Learning costs will also drop and customers may become less price-sensitive (eg. Grönroos, 2000).

Therefore, we hypothesize that:

H3: An increase in the degree customer satisfaction will result in an increase in loyalty.

Trust

The relevance of trust has its origin in the social exchange theory, in which parties act on behalf of the best interests of the partnership, considering that firms are independent and rely on reciprocity (Donaldson & O'Toole, 2007). According to Morgan and Hunt (1994) a trusted partner reduces relational exchange risks, once trust is associated with a firm's

reliability, integrity, and competence. Thus, trustful partners provide safety and reduce sacrifices of both parties (Selnes, 1998).

Trust is particularly relevant in the service industry, in which exchanges are more complex and difficult to assess (Grönroos, 2000). Terawatanavong, Whitwell & Widing (2007) add that trust is elementary in the growth and maturity phase of relationships because that's when customers are more sensitive to failures and satisfaction is not a constant. Therefore, customers rely on trust to take a safe decision especially in situations that entail high risks and prices (Elliott & Yannopoulou, 2007).

Although great part of the literature on the field considers trust as an antecedent of satisfaction (eg. Armstrong & Yee, 2001; Bigne & Blesa, 2003; Geyskens, Steenkamp & Kumar, 1998), recent studies view trust as a satisfaction output (e.g. Ha & Perks, 2005; Luk & Yip, 2008). While there is no consensus about the role of trust, its position as a consequence of satisfaction has been gaining strength in studies on the service sector (e.g. Horppu *et al.*; Santos & Fernandes, 2008) and should be better explored by marketing scholars.

Caceres and Paparoidamis (2007) for instance show that a satisfied customer deposits greater trust on firms. This relationship is also corroborated by Costa *et al.* (2008), who finds empirical evidence in the Brazilian setting that trust is impacted by satisfaction and further leads to loyalty.

Thus, we hypothesize that:

H4: An increase in the degree customer satisfaction will result in an increase in trust.

Positive Word-of-Mouth

Word-of-mouth (WOM) is a type of communication concerning a brand, a product or service and is initiated by a non-commercial party (Arndt, 1967). WOM is especially relevant in a failure context (eg. Wang & Huff, 2007), in which a bad experience with a product or service may be told to others in an attempt to punish the firm, seek compensation and avoid similar situations in the future (eg. Cheung, Anitsal & Anitsal, 2007).

Several authors (e.g. Bruyn & Lilien; Needham, 2008) claim that WOM helps spreading information about a new product and has a relevant effect on individual's attitudes and behaviors. According to Mazzarol, Sweeney & Soutar (2007) consumer's purchase decisions are highly impacted by WOM when the content is considered to be rich and the interlocutor has some sort of power or strength over the receiver. Additionally, Wangenheim (2005) highlights this type of communication is more intense when: the customer is highly involved with the product; there is a great perceived risk; there are numerous reasons to switch providers and the customer attempts to become a reference of knowledge.

However, not always WOM is employed in a negative sense. When a customer is satisfied with a product or service he or she may want to recommend it to others. According to East, Hammond & Lomax (2008) positive WOM has a greater impact on purchase likelihood than negative WOM, because customers are usually more influenced by positive recommendations before taking a decision. Even in cases of failures, having a proper service recovery increases customer satisfaction consequently leading to positive word-of-mouth (Gosling & Matos, 2007).

Some studies also show that WOM is associated with cultural and personality aspects. For instance, Matos & Leis (2008) compare Brazil and France and conclude that people in high collective countries are more likely to share their opinions about a product or service with others. Conversely, Cheung, Anitsal & Anitsal (2007), in a study with Chinese and

American consumers, show that the more individualistic the people, the more they tend to respect others' opinions but keep their own.

Therefore, we hypothesize that:

H5: An increase in the degree customer satisfaction will result in an increase in positive word-of-mouth.

Intention to Complain

When a failure occurs, consumers normally present some level of dissatisfaction. Still, not all of them start a formal complaint with the firm. According to Crie (2003), complaint behavior is a response to dissatisfaction that occurs during purchase, consumption or ownership of a product or service. Noticeably, most consumers are passive when it comes to dissatisfaction. According to Tax & Brown (1998), only 5 to 10% of them actually complain. The majority ends up switching providers or engaging in negative word-of-mouth. With that in mind, companies often face difficulties in identifying failures.

The literature lists various reasons for not complaining. For instance, Tax & Brown (1998) state that some consumers believe the firm will not resolve the problem whereas others lack knowledge on their rights or procedures to complain. In many cases, people avoid confrontations with the service provider and concern about possible costs of time and money. Zeithaml, Bitner & Gremler (2006) add that some consumers even feel guilty for the failure or fear receiving a worse service next time.

Alternatively, consumers who complain usually expect some positive output or benefit from this behavior. They believe every company should provide a fair treatment and a compensation for failures. Furthermore, some others consider complaining a social liability, as a way to punish the service provider and avoid similar situations in the future.

As some studies show (eg. Folkes, Koletsky & Graham, 1987), intention to complain is affected by attributions of causality and stability. Thus, the more frequent the failure and the more it is perceived to have been caused by the provider, the higher the customer's intention to engage in a formal complaint.

Complaints are important because they help firms identifying failures and recovering services. In fact, the higher the distributive and interactional justice of respondents that usually complain, the less likely they are to do negative WOM (Blodgett, Hill & Tax, 1997). Besides, Stauss (2002) shows that the firm's responses to consumer's complaints positively affect satisfaction, both with the outputs and with the process. Complaints even help improving a firm's operational area as well as its process and staff attitude, also leveraging financial results (Johnston, 2001).

With that post, we may infer that passive consumers are less likely to return representing a threat to firm's long term success. Therefore, complaints are extremely important for an effective recovery. Besides getting compensation or an apology, the customer who complains provides the firms with important inputs of how to improve the service.

Thus, we hypothesize that:

H6: An increase in the degree customer satisfaction will result in an increase in intention to complain.

METHODS

Study type

This study was comprised of two phases. The first was exploratory with three focus groups containing five participants in each (Malhotra, 2006). This phase provided a deep understanding of the concepts according to customers' points of view, which allowed us to make adaptations in the previously selected scales (Salant & Dillman, 1994).

The second phase was a descriptive study, encompassed by a survey with customers that have experienced service failures in the past year, such as flight cancellations and delays, baggage loss or damage, overbooking, problems on the website or with the call center service. The quantitative phase provided data to test hypotheses of association among variables (Bryman, 1992).

Sampling and refinement

A survey was conducted with airline passengers in the domestic boarding area of the *Tancredo Neves International Airport*, in Belo Horizonte, Brazil, during ten days in October, 2009. Questionnaires were structured and self-administered (Babbie, 1999). Additionally, passengers of any of the five domestic airlines could participate in the survey. The only filter was having experienced a failure in the past year. A team of eight researchers worked in different shifts and gathered 799 questionnaires at the end of the period authorized by INFRAERO (Brazilian Airport Infra-Structure Company). After discarding invalid questionnaires (partially or incorrectly filled), a sample of 639 remained. Valid questionnaires were then entered into SPSS for further refinement and analysis.

The first procedure was to analyze missing value patterns. Missing data represents 1.5% of the total dataset and is randomly spread (*Little's MCAR test: Chi-Square = 5578,214, DF = 4797, Sig. = 0,000*). Thus, missing values are not a source of bias in this study and can be replaced (Hair *et al.*, 2005). Regression was the method used for replacement for taking into account the relationship among variables and not reducing variance. In addition, the data was examined in search of outliers, that is, extreme values or respondents that potentially distort the statistics. Univariate outliers were identified by standardized values that exceed $|Z| > 3,29$ and multivariate outliers were identified by testing the chi-square distribution in the Mahalanobis distance (Tabachnick and Fidell, 2001). Thus, the 49 multivariate outliers were deleted reducing the final sample to 589.

Measurement

In order to enhance the quality and credibility of the survey, validated scales were used, with a few adaptations to the context studied. All concepts were measured by multi-item scales as recommended in the literature (eg. Bryman, 1992; Churchill, 1979). This procedure is an attempt to capture all aspects associated with a concept and provides a broad understanding of a variable. Shared variances of indicators and reliability of the constructs were assessed. In some cases, data reduction was necessary to achieve good internal consistency (Tabachnick & Fidell, 2001).

Satisfaction was initially measured by a six-item scale from Oliver (1997) but two variables showed low communality and were deleted, confirming problems of using reversed items (eg. Wong, Rindfleisch & Burroughs, 2003). The final scale was composed of four items with Cronbach's alpha of 0.95.

Severity was measured by a four-item scale based on Liao (2007) and the exploratory study. No item exclusion was needed in this case. All items showed communalities above 0.50 (Hair, Anderson, Tatham & Black, 2005) and the construct had 0.80 Cronbach's alpha.

Perceived justice was studied in three dimensions: distributive justice, procedural justice and interactional justice. All scales were based on Tax & Brown (1998) and Mattila (2001). *Distributive justice* was measured by a four-item scale. After deleting one item that did not group with the others, the final scale showed 0.81 Cronbach's alpha. *Procedural justice* was measured by a four-item scale and the construct showed good reliability (0.86). *Interactional Justice* was measured by a four-item scale. After deleting one of the items due to a high factor loading in the undesirable factor, reliability was of 0.86.

Trust was measured by a seven-item scale adapted from Morgan and Hunt (1994). No data reduction was needed and the construct showed excellent reliability (0.95).

Loyalty was measured by a five-item scale adapted from Fullerton (2005) and Caceres and Papparoidamis (2007). Two items were deleted in order to improve internal consistency and final Cronbach's alpha was satisfactory (0.76).

Positive Word of Mouth was measured by a five-item scale based on Gosling and Matos (2007). Since two items showed correlation and inflation indexes above the accepted limits (correlation > 0.9 and VIF >10.0), they were combined to avoid multicollinearity (Hair et al., 2005). The final four-item scale showed 0.96 of reliability.

Finally, *Intent to Complain* was measured by a four-item scale based on Gosling and Matos (2007) but adapted to this study according to the several institutions that an airline passenger may deposit his/her complaint. No items were deleted and final Cronbach's alpha was 0.93.

Having proved good reliability of the measures, each construct's items were averaged (Churchill, 1979) in order to employ multiple regression techniques.

RESULTS

In order to test our hypothesis we conducted several regressions. Furthermore, we were able to test the moderating effect of a third variable, assuming that the relationship between two variables will depend on a third (Cohen, Cohen, West & Aiken, 2003). Baron & Kenny (1986) explain that for a full moderation to exist, the interaction must have a significant impact on the dependent variable without a direct effect from the moderating variable.

The following table shows the descriptive statistics for the variables in this study:

Table 1 – Descriptive statistics and bivariate correlations

Variable	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9
1. Perceived Justice ⁽¹⁾	1,42	1,07									
2. Distributive Justice	0,91	1,23	0,82**								
3. Procedural Justice	1,00	1,23	0,89**	0,72**							
4. Interactional Justice	2,50	1,48	0,75**	0,36**	0,46**						
5. Severity	3,80	1,11	-0,38**	-0,28**	-0,36**	-0,30**					
6. Satisfaction	2,45	1,37	0,47**	0,30**	0,40**	0,44**	-0,38**				
7. Trust	2,43	1,23	0,51**	0,32**	0,41**	0,51**	-0,32**	0,73**			
8. WOM	1,89	1,37	0,48**	0,29**	0,42**	0,45**	-0,36**	0,75**	0,71**		
9. Complaint	2,90	1,58	-0,22**	-0,08*	-0,15**	-0,30**	0,29**	-0,26**	-0,24**	-0,26**	

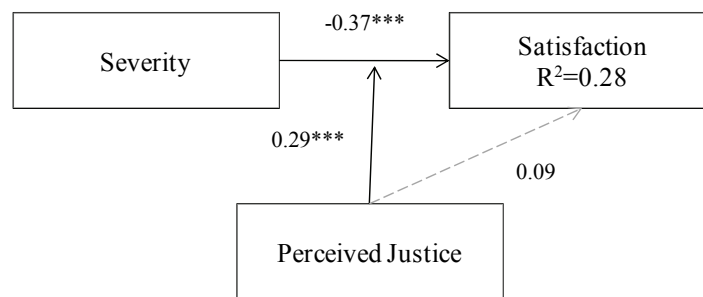
10. Loyalty	2,64	1,23	0,36**	0,21**	0,30**	0,37**	-0,29**	0,75**	0,64**	0,72**	-0,24**
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Source: Research data. OBS: **Beta is significant at 1% level; *Beta is significant at 5% level. ⁽¹⁾Represents the average of Distributive, Procedural and Interactional Justice.

The variable that achieved the highest mean was severity, indicating that in general, respondents agree that the failures they have suffered were severe (in a five-point Likert scale). On the other hand, the lowest mean was at distributive justice, showing that compensations were not usually offered by the airlines. Note that all bivariate correlations are significant.

Results from the first set of bivariate regressions support *H1* ($B=-0.38, p<0.001$), which states that the higher the failure severity, the higher the customer satisfaction.

The following figure shows the results for *H2*:



OBS: ***Beta is significant at 0.1% level. Perceived justice is the average of distributive, procedural and interactional justice

As we expected, severity negatively impacts customer satisfaction. Thus, our *H2* is supported at 0.1% level. Furthermore, perceived justice positively and fully moderates this relationship, minimizing the negative impact of severity on satisfaction. This equation is capable of explaining 28% of satisfaction's variance.

In order to compare effects of the three dimensions of justice, we tested separate models, which are shown in the next table:

Table 2 – Regression models of justice, severity and satisfaction

	Satisfaction							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Perceived Justice (Average)	0.38***	0.09						
Distributive Justice			0.22***	0.05				
Procedural Justice					0.30***	0.09		
Interactional Justice							0.36***	0.24†
Severity	-0.23***	-0.37***	-0.32***	-0.36***	-0.27***	-0.33***	-0.27***	-0.34***
Perceived Justice*Severity		0.29**						
Distributive Justice*Severity				0.17				
Procedural Justice*Severity						0.21*		
Interactional Justice*Severity								0.13
R ²	0.27	0.28	0.19	0.19	0.22	0.23	0.26	0.26
Adjusted R ²	0.26	0.27	0.18	0.18	0.22	0.22	0.26	0.26
F	106.16	74.36	66.80	45.41	83.43	57.38	104.29	69.86
Δ R ²		0.01		0.00		0.01		0.00

ΔF -31.79 -21.39 -26.04 -34.43

Source: Research data. OBS: *** significant at 0.1% level; ** significant at 1% level; * significant at 5% level; †Beta is significant at 10% level.

Note that when testing the justice dimensions separately, all of them have a positive and significant direct effect on satisfaction. Furthermore, severity negatively impacts satisfaction in all models. However, when we add the interaction the only significant moderating effect was at Model 6. Thus, only procedural justice moderates the relationship between failure severity and satisfaction. We may infer that in this context, the procedures that are really capable of recovering airline services are: (1) acting quickly to solve the problem, (2) providing a flexible system and taking individual circumstances into account and (3) asking customers' opinions about the best way to solve the problem. Therefore, by adopting these procedures, companies may diminish the negative impact of failure severity on satisfaction.

Given that distributive justice showed the lowest mean among the three dimensions, it is possible that providing compensation is not a common practice in Brazil's airline industry. Thus, respondents might have given poor scores to distributive justice because they do not usually get compensated for failures. For not expecting this type of justice, satisfaction is less impacted by it (note that it shows the lowest beta – 0.22). Additionally, distributive justice does not moderate the relationship between severity and satisfaction.

Regarding interactional justice, the results show a positive direct effect, the strongest from all dimensions (0.36). Thus, the more interested in solving the problem and the more polite and courteous is the staff, the more satisfied is the customer. However, providing fair interactions does not seem enough to reduce the negative impact of severe failures on satisfaction.

Once perceived justice and procedural justice in particular lightens the negative impact of severity on satisfaction, firms may adopt strategies to make customers happier. Thus, behavioral outcomes of satisfaction were also assessed and the results are shown in the following table:

Table 3 – Regression models of justice, severity and satisfaction

	Trust	Positive WOM	Loyalty	Intent to Complain
	Model 9	Model 10	Model 11	Model 12
Satisfaction	0,73***	0,75***	0,65***	-0,26***
R ²	0,54	0,56	0,42	0,07
Adjusted R ²	0,54	0,56	0,42	0,06
F	678,90	737,13	423,51	40,85

Source: Research data. OBS: ***Beta is significant at 0.1% level

As hypothesized, satisfaction positively affects trust, positive word-of-mouth and loyalty, accounting for at least 40% of these constructs variance. As opposed, it negatively impacts intent to complain. Though all relationships are significant, in this study satisfaction was found to have a stronger effect on positive WOM and trust than loyalty. Once Brazilian airline industry is concentrated in two large players and only five small airlines that have limited routes, it may be considered an oligopoly. Therefore, it is possible that loyalty to an airline is more a function of the lack of variety than a function of satisfaction. The results also show that satisfaction has a weaker impact on intent to complain than on the other outcomes

tested. The R^2 was extremely low (7.0%), revealing that satisfaction accounts for a small percentage of the construct's variance. We may infer that Brazilian customers are little motivated to complain, even facing a failure situation. Rather, they prefer to engage in word-of-mouth communication, as typical in collectivist cultures (Cheung, Anitsal & Anitsal, 2007; França, Matos & Leis, 2008).

CONCLUSION

This study corroborates the existing literature by confirming the negative association between failure severity and satisfaction. Yet, it advances the field by demonstrating that perceived justice moderates this relationship, such that the more customers perceive to have been treated fairly, the weaker the impact of severity on satisfaction. Thus, even when a failure is considered very severe (e.g. lost baggage or flight canceled) airlines may recover by increasing customer's justice perceptions. Although this effect is significant for overall perceived justice, results on the three dimensions separately show that in airline industry, only procedural justice is capable of changing satisfaction in a high severity context. Thus, airlines should focus in providing a flexible system and taking individual circumstances into account, acting quickly, and asking customer's opinions about the best way to solve the problem. Service providers should be aware of customer's justice perceptions and develop systems to increase fairness of service recovery strategies. By doing so, companies may increase levels of satisfaction and achieve higher levels of loyalty, positive word-of-mouth and trust, as well as lower levels of intention to complain. As the results show, those four behavioral responses are significant consequences of satisfaction. In a failure context, satisfaction has a greater impact on word-of-mouth communication than on the other constructs. That may be due to the collective profile of Brazilians, who may prefer to warn others about the failure than to directly confront the airline system by complaining. Despite the positive effect of satisfaction on loyalty, the impact is weaker than on trust and word-of-mouth, suggesting that in there may be other factors determining loyalty in the airline industry. Because it is an almost oligopolistic sector, loyalty to an airline may be related to the lack of alternatives, rather than to satisfaction. This study has some limitations such as the lack of data normality and the fact that it was done in only one country and one industry. We recommend that future research tests these relationships in other countries and settings and includes other predicting variables such as controllability and stability of the failure.

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