ANTECEDENTS AND OUTCOMES OF POSITIVE DISCONFIRMATION AFTER SERVICE FAILURE AND RECOVERY

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ABSTRACT

The main purpose of this study was to identify the precursors of disconfirmation and examine the influence of disconfirmation on customer satisfaction in the airline industry of an emerging economy. The target population was airline travellers who had previously experienced service failure with a South African airline. Data was collected from a total of 300 respondents and analysed using structural equation modelling (SEM). The results revealed that positive disconfirmation is influenced by service recovery expectations and the perceived quality of recovery performance; that recovery expectation is positively related to the perceived quality of recovery performance; that service failure severity influences customer service recovery expectations; and that disconfirmation influences customer recovery satisfaction, which in turn affects customer loyalty. The study recommends that airlines establish in advance their customer expectations after service failure so that they can craft appropriate service recovery strategies.

Keywords: Service failure, Service recovery, Disconfirmation, Customer loyalty, Customer satisfaction

INTRODUCTION

The distinctive characteristics of service industries, such as customer involvement, heterogeneity, real-time performance and quality evaluation, increase the chances of perceived failure in a service industry such as an airline (Baker, 2013; Choi & Choi, 2014). Service failures are thus inevitable in such industries and if not well addressed can result in negative disconfirmation, which will eventually lead to dissatisfaction (Li-hua, 2012). Dissatisfaction often results in a customer exiting or spreading negative word of mouth (Lai & Chou, 2015). However, if appropriate service recovery strategies are implemented, positive disconfirmation can be achieved, turning dissatisfied customers into loyal ones (Lankton & McKnight, 2012). Disconfirmation refers to the discrepancy between two concepts, expectations or desires and actual performance (Spreng & Page, 2003). Service recovery describes the process of returning...
aggrieved customers to a state of satisfaction with the service provider after a service/product has failed to live up to expectations (Zemke & Bell, 1990). It is generally part of quality management, with the ultimate objective of maintaining a good relationship between the business and its customers.

Since the ultimate goal of any service recovery strategy is to improve customer satisfaction and customer loyalty (Al-Msallam, 2015), this study sought to examine factors which influence disconfirmation and the influence of disconfirmation on customer satisfaction with service recovery and on customer loyalty in the airline industry of an emerging economy, South Africa. The choice of an emerging economy was based on the need to get a glimpse of how service firms in such an economy perform in terms of service recovery and to provide suitable recommendations that could enhance such industries. In addition, the outcome of the model might be different as it is assumed that the expectations of customers after service failure in an emerging economy might be different from those in advanced economies due to exposure. Again, service failures are common in emerging markets. On top of this, the experience and qualification gap between emerging economy frontline employees and advanced economy employees who deal with customer complaints as well as handling might also influence the outcome of the model. Hence, it is assumed that these highlighted issues may affect the outcome of the model in an emerging economy. Thus, testing this model in an emerging economy will determine its applicability in these economies. This is in recognition of the fact that emerging economies press towards becoming advanced but have not yet reached the advanced stage. To achieve its aim, the study made use of the expectancy-disconfirmation theory as it is one of the dominant theories in service literature for explaining customer expectation and satisfaction (Lihua, 2012; Jha & Balaji, 2015). Specifically the objectives of this study are 1) examine the influence of service failure severity on recovery expectation, 2) to examine the influence of service recovery expectation on perceived quality of recovery performance and positive disconfirmation, 3) to establish the relationship between positive disconfirmation and customer satisfaction, and 4) to examine the relationship between customer satisfaction with service recovery and customer loyalty.

The next section of the paper presents a review of literature including the theory grounding the study, the theoretical model proposed for the study and the posited hypotheses. This is followed by the research methodology and research findings respectively. Thereafter the findings are discussed, their theoretical and managerial implications are outlined, and limitations and areas of further research are highlighted.

LITERATURE REVIEW

Service Failure in the Airline Industry

Service failure is inevitable in many service industries, including the airline industry. A review of literature (Keiningham, Morgeson, Aksoy, & Williams, 2014; Chou, 2015; Sousa & Desai, 2015; Migacz, Zou, & Petrick, 2017) revealed a number of incidents of service failure in the airline industry, which included flight cancellations and delays, attitude of cabin and ground staff, reservation problems, and fights over booking delays or losses of luggage. These service failures, according to Keiningham et al. (2014) and Nikbin, Marimuthu, Hyun, and Ishak (2015), can increase a passenger’s frustration and disgruntlement, and they can be costly for the airline industry, especially for that in South Africa, which is faced with a number of challenges already.

A report on competition and regulatory issues in the South African civil aviation sector notes that the South African airline industry is experiencing financial distress and suffering from unbalanced government intervention (Mncube, 2014). The financial distress faced by South African Airways (SAA) is the result of both internal factors (inflated personnel, unprofitable routes, and a lack of good, effective management systems) and external factors (fuel price volatility and the global financial and economic crises that started in 2008) (International Air Transport Association, 2015). Airlines should therefore avoid losing customers
in order to remain profitable, and this among other things demands that they learn to respond properly to service failures.

**Theory Grounding the Study**

This study makes use of expectancy-disconfirmation theory to examine customer loyalty after service failure and recovery. Expectancy-disconfirmation theory states that individuals look forward to a specific quality of service when they are about to buy a particular service (Oliver, 1997). During and after the recovery process, individuals form valid perceptions of the service recovery performance (Tang, 2014). Positive or negative disconfirmation can develop when customers compare their pre-recovery and post-recovery expectations, and this in turn can influence overall satisfaction with service recovery (Awa, Ukoha, & Ugwo, 2016). Accordingly, the theory is made up of four constructs, namely customer expectations, performance, disconfirmation, and satisfaction.

The following subsections focus on how hypotheses for this study were developed using variables in disconfirmation theory. Two new variables, namely service failure severity and customer loyalty, were added to the disconfirmation model. The reason for adding service failure severity to the model is that research on service recovery has generally not considered severity of service failure, even though service failures can range from very minute failures to more serious cases (Weun, Beatty, & Jones, 2004), and severity has been identified as an important factor to consider in service research (Zeithmal, Berry, & Parasuraman, 1993). Customer loyalty was included since the ultimate aim of satisfying customers is to gain their loyalty (Chuang, Tsai, Wu, & Shiu, 2012).

**Proposed Theoretical Model**

Figure 1 depicts the proposed theoretical model for this study, illustrating the six constructs of the study and the hypothesised relationships between them.

**Figure 1. Proposed theoretical model**

**Service Failure Severity and Service Recovery Expectation**

Service failure severity has been described by Lai and Chou (2015) as how customers perceive the magnitude of a service failure. If the service failure is more intense, customers perceive a great loss (Chuang et al., 2012). Previous studies (Sundaram, Mitra, & Webster, 1998; Wang, Wu, Lin, & Wang, 2011; Keiningham et al., 2014; Chuang et al., 2012) are of the view that when research is being conducted on
service failure and recovery, the severity of service failure should be considered carefully to ensure that the results are accurate. After a service failure, customers often expect the service provider to consider measures to ensure service recovery (Weber & Sparks, 2010). Keiningham et al. (2014) discovered that service failure severity has a significant impact on recovery expectation in the airline industry. Hee (2016) also found a significant relationship between failure severity and service recovery. Based upon these findings, the following hypothesis can be formulated for the study:

H1: Service failure severity has a significant and positive impact on the service recovery expectations of airline customers.

Service Recovery Expectation, Perceived Quality of Recovery Performance, and Recovery Disconfirmation

The key determinant of whether customers experience a feeling of satisfaction or dissatisfaction after a service failure and recovery depends on the gap between what service providers do to rectify the problem and the recovery expectations of customers, also known as service recovery disconfirmation (Lihua, 2012). Positive disconfirmation develops when service recovery exceeds the customer’s initial expectation, and negative disconfirmation occurs when a service provider fails to meet the customer’s original expectations (Rashid, Ahman, & Othman, 2014; Wei, 2017). Lai and Chou (2015) found a significant relationship between customer recovery expectation and customer disconfirmation. Habel, Alavi, Schmitz, Schneider, and Wieseke (2016) established a significant relationship between perceived quality of recovery performance and recovery expectation. Chih, Wang, Hsu, and Cheng (2012) also established a significant positive relationship between quality of recovery performance and customer recovery expectation. Based upon these findings, the following hypotheses can be formulated for the study:

H2: Service recovery expectation is significantly and positively related to disconfirmation of airline customers.

H3: Service recovery expectation is significantly and positively related to perceived quality of service recovery performance.

Perceived Quality of Service Recovery Performance and Disconfirmation

According to expectancy-disconfirmation theory, disconfirmation is affected by the service provider’s performance quality and expectation (Oliver, 1997). Following a service failure, disconfirmation is affected by the perceived quality of recovery performance. If the recovery process satisfies customers, positive disconfirmation will occur (Elkhani & Bakri, 2012). However, when the quality of recovery performance is worse than customers expected, negative disconfirmation will occur (Rejikumar, 2015). Jha and Balaji (2015) also found that perceived quality of recovery performance has an influence on disconfirmation and satisfaction with service recovery. Satisfaction and disconfirmation, as mentioned earlier, are two distinct constructs since disconfirmation is the discrepancy between two concepts, namely expectation or desire and actual performance (Spreng & Page, 2003), and it is a function of satisfaction. Thus, it is expected that perceived quality of recovery performance may influence both constructs. Accordingly, the following two hypotheses can be formulated for the study:

H4: Perceived quality of recovery performance is significantly and positively related to disconfirmation for airline passengers.

H5: Perceived quality of recovery performance is significantly and positively related to satisfaction with service recovery for airline passengers.
**Customer Disconfirmation and Satisfaction with Service Recovery**

“Customer satisfaction” is a common term used in marketing and is a measure of how customer expectations are being met by the products and services supplied by an organisation (Adesina & Chinonso, 2015; Tweneboah-Koduah & Farley, 2016). The importance of ensuring customer satisfaction lies in the belief that it can pave the way to loyalty and ultimately to customer retention (Mostert, Steyn & Mentz, 2017). Satisfaction after service recovery depends on how the service organisation meets the service recovery expectation of the customer. Rashid et al. (2014) indicated that disconfirmation influences recovery satisfaction; similarly, Chou (2015) concluded that customer disconfirmation influences recovery satisfaction. Baker (2013) studied service quality and customer satisfaction in the airline industry and also concluded that customer disconfirmation influences customer satisfaction with service recovery. Thus, the following hypothesis can be formulated for the study:

\[ H6: \text{Disconfirmation is significantly and positively related to airline customer satisfaction with service recovery.} \]

**Customer Satisfaction with Service Recovery and Customer Loyalty**

Customer loyalty is described as a deep commitment to repurchasing or re-patronising a preferred product consistently in the future or an obligation, based on emotion, to continue purchasing a specific brand (Rai & Srivastava, 2012; Rai & Medha, 2013). Of interest in this study is customer commitment to patronising certain airlines and recommending the same to other customers. Thus, elements of both attitudinal and behaviour loyalty are pertinent. Attitudinal loyalty, according to Andreassen and Lindestad (1998), includes positive word of mouth, while behavioural loyalty includes measures such as repeat purchase probability. A number of previous studies (Castañeda, 2011; Gures, Arslan, & Tun, 2014; AlMsallam, 2015; Tweneboah-Koduah & Farley, 2016; Zainol, Ahmad Rozali, Mahat, Akhir, & Nordin, 2016) have found a significant positive relationship between customer satisfaction and customer loyalty. Based upon these findings, the following hypothesis can be formulated for this study:

\[ H7: \text{Satisfaction with recovery is positively associated with customer loyalty.} \]

**METHODOLOGY**

The study used a quantitative research method following an exploratory research design. Exploratory research identifies main issues and key variables and seeks to establish the relationships (between key variables and main issues) and the nature of those relationships (Zikmund, 1984). Quantitative research is ideal where there is a need to collect data from a large number of respondents to be analysed using statistical methods (Malhotra, 2010). Data were collected using a cross-sectional approach through the use of a self-administered questionnaire which offered respondents greater anonymity (Bhattacherjee, 2012).

The target population for the study was airline travellers (South Africans and non-South Africans) who had experienced a service failure with a South African airline. Only respondents who experienced the failure during the 12 months preceding the study and could recall it clearly were requested to complete the questionnaire. Considering that there was no available database on airline passengers for possible use as a sampling frame, a non-probability sampling method was used, specifically convenience sampling. According to Morse and Niehaus (2009), when the population size cannot be accurately defined, non-probability sampling techniques such as convenience sampling are appropriate. Data were collected over a period of a month from the two airports in the Gauteng province of South Africa, namely the OR Tambo and Lanseria international airports. OR Tambo is the largest international airport in South Africa. A total of 306 questionnaires were obtained, and after data screening 300 questionnaires were retained for analysis.
The first part of the questionnaire covered the demographic information of respondents, and the last part covered the constructs relevant to the study, namely customer satisfaction, service failure severity, service recovery expectation, perceived quality of service recovery, disconfirmation, and customer loyalty. These constructs were measured using a five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”. To measure the constructs, items were adopted from existing literature to ensure validity of the measures (see Appendix A). After the data were edited and cleaned, they were entered into SPSS 22.0. Frequencies and descriptive statistics were calculated to gain insight into the demographic profile of respondents, their age, level of income, gender, and level of education.

**RESULTS**

**Demographic Information**

Of those who completed the questionnaire, 66% were male and 34% female. As regards their age, 46.7% were 36–45 years, 30% were 26–35 years, 10% were 56–65 years, 8.3% were 18–25 years, and 5% were over 65 years. In respect of their education, 34% had a bachelor’s degree, 21% an honours degree, 27% a diploma, 10% a master’s degree, and 3% a doctoral degree, while 5% had no matric certificate. In terms of their earnings, 29.2% were earning between R16 000 and R20 000, 32.3% between R11 000 and R15 000, 15% between R21 000 and R22 000, 6.7% over R25 000, and 6.4% less than R5 000, while 3.1% had no income. Most of the respondents (65.7%) had experienced a service failure when using domestic flights, while the others (34.3%) had experienced a service failure when using international flights.

**Measurement Model**

The study employed a Structural Equation Modelling (SEM) approach using AMOS, and a model was developed to represent the causal relationships among the variables (Monecke & Leisch, 2012). Appendix A shows the items used to collect the data in the form of a questionnaire.

The model was empirically tested using confirmatory factor analysis (CFA). Composite reliability (CR), average variance extracted (AVE) and Cronbach’s alpha were used to assess the reliability and validity of the constructs. The results illustrated in Table 1 show that the alpha values of all the constructs are above 0.7, the cut-off point (Saunders, Lewis, & Thornhill, 2003). The CR values need to be greater than 0.7 for convergent validity to be demonstrated. It is evident from Table 1 that all the CR values of the different constructs exceed 0.7 and the AVE values exceed 0.5, indicating good convergent validity (Fornell & Larcker, 1981).

Table 1 also indicates the factor loadings, variances explained, means and standard deviations of the 24 items used to measure the six constructs in this study. The factor loading for each item is above 0.5. Therefore, no items were removed, since they all meet the requirement for further analysis. The variance explained for each item exceeds 0.3, ranging from 0.455 to 0.814. The means vary between 3.24 and 4.97, and the standard deviations vary between 1.431 and 1.821. This is indicative of regularity between the items measuring the constructs of the study.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor loading</th>
<th>Variance explained</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS</td>
<td>SFS₁</td>
<td>0.947</td>
<td>0.612</td>
<td>4.21</td>
<td>1.478</td>
<td>0.81</td>
<td>0.807</td>
<td>0.673</td>
</tr>
</tbody>
</table>
Discriminant validity was assessed using the criterion proposed by Fornell and Larcker (1981), who state that the correlation between constructs must be less than the square root of the AVE for each construct. Statistical results in Table 2 indicate that the inter-construct correlation values are less than the values of the square root of the AVE for each construct. The square root values are the diagonal italicised values in Table 2.

**Table 2. Correlation and average variance extraction**

<table>
<thead>
<tr>
<th></th>
<th>SFS</th>
<th>SRE</th>
<th>PQRP</th>
<th>PD</th>
<th>SR</th>
<th>CL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS</td>
<td></td>
<td>0.731*</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SRE</td>
<td>0.651</td>
<td></td>
<td>0.842*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQRP</td>
<td>0.583</td>
<td>0.112</td>
<td></td>
<td>0.715*</td>
<td></td>
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</tr>
</tbody>
</table>
The overall goodness of fit of the model was assessed using common model-fit measures, namely chi-square/(df), Tucker Lewis index (TLI), normed fit index (NFI), incremental fit index (IFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). To indicate an adequate model fit, the CFI should be greater than 0.95, the RMSEA should be less than 0.08, and the TLI, NFI and IFI should be greater than or equal to 0.90 (Hu & Bentler, 1999). The results obtained with the fit indices are displayed in Table 3. These results indicate that all the model-fit indices meet the common acceptance levels proposed by Schumacker and Lomax (2010), showing that overall the measurement model demonstrates a good fit with the collected data.

### Table 3. Measures for goodness of fit

<table>
<thead>
<tr>
<th>Fit index</th>
<th>Recommended value</th>
<th>Obtained value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square/(df)</td>
<td>≤ 3.00</td>
<td>2.91</td>
</tr>
<tr>
<td>NFI</td>
<td>≥ 0.90</td>
<td>0.90</td>
</tr>
<tr>
<td>IFI</td>
<td>≥ 0.90</td>
<td>0.92</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt; 0.95</td>
<td>0.96</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.90</td>
<td>0.93</td>
</tr>
<tr>
<td>RMSEA</td>
<td>&lt; 0.08</td>
<td>0.06</td>
</tr>
</tbody>
</table>

### Structural Model

The model was tested using structural equation modelling (SEM), through the application of partial least squares (PLS), since this can be used to examine complex relationships (Monecke & Leisch, 2012) and is also regarded as an appropriate statistical technique for testing theories (Babin & Svensson, 2012; Westland, 2010). The PLS results are indicated in Figure 2. The results show that statistically all paths are significant. According to the results, the model explains 30.6% of the variance in service recovery expectation, 31.8% of the variance in perceived quality of recovery performance, 48.1% of the variance in positive disconfirmation, 51.6% of the variance in satisfaction with service recovery, and 40.2% of the variance in customer loyalty. This illustrates that the model offers a good explanation of service recovery in the airline industry.

According to the results, service failure severity (β = 0.41, p < 0.001) significantly influences service recovery expectation (β = 0.11, p < 0.05), which significantly influences perceived quality of recovery performance. Moreover, service recovery expectation (β = 0.31, p < 0.001) significantly influences positive disconfirmation. Thus hypotheses 1, 2 and 3 are supported. Perceived quality of recovery performance (β = 0.13, p < 0.01) significantly influences positive disconfirmation. Hypothesis 4 is thus supported. Both perceived quality of recovery performance (β = 0.28, p < 0.01) and positive disconfirmation (β = 0.21, p < 0.01) significantly influence satisfaction with service recovery. Therefore, hypotheses 5 and 6 are also supported. Finally, the results also show that satisfaction with service recovery (β = 0.43, p < 0.001) significantly influences customer loyalty, supporting hypothesis 7.
**DISCUSSION**

**Summary of Research Findings**

This study’s main purpose was to determine the expectation of customers after a service failure and how it influences customer recovery satisfaction and ultimately customer loyalty, and also to determine the influence of service failure severity on recovery expectation. The results of this study reveal that customers’ recovery expectations are influenced by the severity of the service failure. This supports the argument of Abbas, Abdullateef, and Mokhtar (2015) that the gravity of the service failure probably influences customer expectations of service recovery. This is also in line with the findings of previous studies (Abbas et al., 2015; Keiningham et al., 2014; Wu & Chia, 2011) that established a significant relationship between service failure severity and service recovery expectation. If customers perceive the service failure to be severe, they expect the service provider to take action and compensate them, but for a minor service failure a simple apology is enough to secure customer satisfaction (Abbas et al., 2015; Haryono, Fauzi, & Suyadi, 2015).

The results also confirm that perceived quality of recovery performance depends on the expectation of service recovery. It was also established that service recovery expectation influences positive disconfirmation. This finding further supports the argument presented by Li-hua (2012) that if the service provider is able to meet the customers’ recovery expectations, positive disconfirmation occurs, and that if the service provider fails to meet expectations and customers become more frustrated, this leads to negative disconfirmation. Lai and Chou (2015) and Habel et al. (2016) have also confirmed that positive disconfirmation is dependent on service recovery expectation and perceived quality of recovery performance. From the results it was deduced that service recovery expectation exerts more influence than perceived quality of recovery performance on positive disconfirmation. Thus, meeting their expectation is more important to customers.

The study further established that perceived quality of recovery performance and positive
disconfirmation both influence a customer’s satisfaction with service recovery. This result is in line with the research findings of Jha and Balaji (2015), who found that perceived quality of recovery performance influences satisfaction with service recovery. In addition, studies by Smith, Bolton, and Wagner (1999), Andreasen (2000) and Lai and Chou (2015) found that satisfaction with recovery is influenced by positive disconfirmation. When customers feel that the service recovery performance meets their expectation, positive disconfirmation occurs, and eventually those customers will be satisfied and in turn become loyal customers.

The results indicate that disconfirmation influences recovery satisfaction and that recovery satisfaction in turn influences customer loyalty. This finding supports the argument of Castañeda (2011) and Al-Msallam (2015) that customers who are highly satisfied tend to be more loyal than simply satisfied customers. This result confirms the findings of prior studies that customer satisfaction is positively related to customer loyalty (Gures et al., 2014; Abbas et al., 2015; Tweneboah-Koduah & Farley, 2016). It is therefore only those customers who are satisfied with service recovery who will become loyal to the service provider.

**Theoretical Contribution**

From a theoretical perspective, the results affirm that the measurement scales used to measure the positive disconfirmation construct, its antecedents and outcome are reliable and valid. The proposed model has been verified, confirming the relationship between positive disconfirmation and its antecedents and customer loyalty within the airline industry. The study establishes that positive disconfirmation in relation to the airline industry in an emerging market does lead to customer satisfaction. It can therefore be argued that the different constructs in expectancy-disconfirmation theory do have an influence on customer satisfaction with service recovery and on customer loyalty as hypothesised in this study. This finding is important as it shows what constitutes disconfirmation. The study also provides a clear indication that the customers’ expectation of service recovery depends on the severity of the service failure.

**MANAGERIAL RECOMMENDATIONS**

Airlines should focus more on how to satisfy dissatisfied customers and retain loyal customers through offering service recovery strategies which surpass the customers’ expectations. It is therefore imperative for airlines to concentrate on and put more effort into implementing service recovery which satisfies their customers, as satisfied customers become ambassadors of their organisation.

Secondly, airlines should strive to offer quality service delivery which will minimise failures. They must upgrade the status of the recovery function within the company. When a service failure has already occurred, airlines should provide quality recovery performance which sticks in the minds of the customers, thereby erasing their memories about the service failure. This can be achieved if service employees are trained in how to handle customer complaints. Service recovery quality should start from the way service employees respond to the complaints of customers and should extend to the final outcome of the service recovery process.

Airlines should strive to establish in advance what their customers normally expect so that they can use this information when crafting a service recovery strategy. This would assist them to perform to the expectation of their customers, thereby reducing the gap between customer expectation and actual recovery performance. This may be done in two ways: the airline could check the expectation trends of previous customers and come up with at least a general idea of customers’ expectations. Also, airlines could carry out a survey requesting customers to highlight what they expect in a case of service failure to get an idea of what customers want.
Airlines should make sure that the best service providers also become members of the recovery team to ensure quality of recovery performance. They would assist in providing the best recovery performance, which would satisfy customers so that they become loyal to the company. Customer satisfaction data should be captured and given to management, as this information could be used to improve the quality of service delivery in future. The data could also be given to organisational policy makers whose performance is partly dependent on this data. A customer satisfaction measurement system should be implemented, enabling managers to realise what customers are thinking and to make the necessary improvements.

LIMITATIONS AND FURTHER RESEARCH OPPORTUNITIES

One of the limitations of this study is that the population used consisted of only 300 travellers in a selected emerging economy in Africa, and a larger population size might be required to obtain a more realistic response concerning passengers’ perceptions of service recovery performance. A comparison study of South African Airways and other African airlines could be conducted to note any differences in expectations of service recovery performance between countries in Africa. However, the study provides useful insight into the influence of positive disconfirmation on satisfaction with service recovery and consequently on customer loyalty in the airline industry, and this could assist airlines globally to realise the importance of providing a satisfactory service recovery strategy.

CONCLUSION

The purpose of this study was to examine the influence of positive disconfirmation on satisfaction with service recovery and on customer loyalty. The study was also aimed at examining the antecedents of positive disconfirmation. The results reveal that both expectation of service recovery and perceived quality of service recovery performance have a significant influence on positive disconfirmation. Furthermore, it was also established that perceived quality of service recovery performance has a bearing on customer satisfaction with service recovery. The findings of this study support the importance of expectancy-disconfirmation theory in explaining the dynamics of service failure and service recovery. The results also confirm that service failure severity is an important factor that airlines should consider, as it influences the recovery expectation of customers.

REFERENCES


### Appendix A: Constructs and items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service failure severity</strong></td>
<td>Nikbin, Ismail, Marimuthu, and Salarzehi (2012); Wang et al. (2011)</td>
</tr>
<tr>
<td></td>
<td>I consider the service failure experience to be very severe.</td>
</tr>
<tr>
<td></td>
<td>The service failure experience was very bad.</td>
</tr>
<tr>
<td></td>
<td>The service failure experience was very unpleasant to me.</td>
</tr>
<tr>
<td></td>
<td>The service failure experience was enormous.</td>
</tr>
<tr>
<td><strong>Service recovery expectation</strong></td>
<td>Boulding, Staelin, Kalra, and Zeithaml (1992)</td>
</tr>
<tr>
<td></td>
<td>For my situation, I had high expectations that the airline would take action to deal with the problem.</td>
</tr>
<tr>
<td></td>
<td>I did expect the airline to act quickly if I encountered a problem.</td>
</tr>
<tr>
<td></td>
<td>I expected the airline to do everything in its power to solve the problem.</td>
</tr>
<tr>
<td></td>
<td>I expected the airline to make up for the problem I encountered.</td>
</tr>
<tr>
<td><strong>Perceived quality of recovery performance</strong></td>
<td>Park and Park (2016)</td>
</tr>
</tbody>
</table>
The airline responded promptly to my complaint.
The airline informed me immediately about the problem-solving status.
The airline informed me of the expected time it would take them to solve the problem.

<table>
<thead>
<tr>
<th>Positive disconfirmation</th>
<th>Oliver and Swan (1989)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was treated like royalty during the service recovery process.</td>
<td></td>
</tr>
<tr>
<td>The way the airline resolved my problem was much better than I expected.</td>
<td></td>
</tr>
<tr>
<td>The way the airline responded to my problem was more prompt than I expected.</td>
<td></td>
</tr>
<tr>
<td>The efforts provided by the airline to deal with my problem were better than what I expected.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer satisfaction</th>
<th>Li-hua (2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am satisfied with the way my problem was dealt with.</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the way my problem was resolved.</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the treatment from the airline’s employees involved in resolving the problem.</td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the procedure and resources used to resolve the problem.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer loyalty</th>
<th>Piha and Avlonitis (2015); Habel et al. (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the future I would use the airline again.</td>
<td></td>
</tr>
<tr>
<td>In the future I would travel with this airline more frequently.</td>
<td></td>
</tr>
<tr>
<td>I consider the airline to be my first choice for future trips.</td>
<td></td>
</tr>
<tr>
<td>I will encourage friends and others to use the airline.</td>
<td></td>
</tr>
</tbody>
</table>