

**Airline Service Failure and Recovery:  
A Conceptual and Empirical Analysis**

**Sen Choon Leow**

**Salford Business School  
University of Salford, Salford, UK**

**Submitted in Partial Fulfilment of the Requirements  
of the Degree of Doctor of Philosophy, April, 2015**

## Table of Contents

<b>Section</b>	<b>Title</b>	<b>Page</b>
	List of Abbreviations	xi
	Acknowledgements	xii
	Abstract	xiii
<b>Chapter 1</b>	<b>Title</b>	<b>Page</b>
	<b>Introduction and background to the study</b>	
1.1	Introduction	1
1.2	Justification for The Study	3
1.3	Aim/Research Objective and Hypotheses	5
1.4	A Summary of Research Methods	8
1.4.1	Research Contributions	9
1.4.2	Implications for Management Practice	11
1.4.3	Research Limitation	12
1.5	Thesis Structure	12
<b>Chapter 2</b>	<b>Literature Review</b>	
2.0	Introduction	14
2.1	Defining Quality	14
2.2.1	Measuring Service Quality	15
2.2.2	Strengths of SERVQUAL	17
2.2.3	Criticisms of SERVQUAL	18
2.3	The Service Encounter	20
2.3.1	The Importance Aspects of Service Encounters	22
2.3.2	Recruitment Constraints in the Service Sector	23
2.3.3	The Significance of Employee Selection	24
2.4	The Concept of Service	27
2.4.1	Service Performance	31
2.4.2	The Role of Organization Culture in Service Performance	32
2.4.3	Customer Satisfaction	34
2.4.4	Airline Service Quality	37
2.4.5	Customer Satisfaction with Airline Services	37
2.4.6	Service Quality in Full-Service Airlines	39
2.4.7	Service Quality in Low-Cost Carriers (LCC)	42

<b>Section</b>	<b>Table of Contents</b>	<b>Page</b>
2.4.8	Airline Alliances	45
2.5	The Concept of Service Failure	49
2.5.1	The Major Causes of Service Failure for Airlines	53
2.5.2	The Impacts of Service Failure on Repurchase Intentions, Word-of-Mouth Communication and Loyalty	53
2.5.3	Word-of-Mouth Communication	54
2.5.4	Loyalty	55
2.6	The Role of Service Criticality	57
2.6.1	The Concept of Service Failure Severity	58
2.7	The Concept of Justice in the Service Failure and Recovery	61
2.8	Service Recovery Actions/Strategies	67
2.9	The Role of Emotions in Service Failure	72
2.9.1	Conceptual Model for the Study	77
<b>Chapter 3</b>	<b>Methodology</b>	
3.1	Introduction	84
3.2	Research Framework	84
3.3	Type of Research Project	88
3.3.1	Explanatory Research	88
3.3.2	Exploratory Research	88
3.3.3	Descriptive Research	89
3.4	The Research Philosophy	93
3.4.1	Research Onion	94
3.4.2	Ontological, Epistemological and Methodological	95
3.4.3	Positivism	96
3.4.4	Post-Positivism	98
3.4.5	Critical Theory	100
3.4.6	Constructivism	100
3.4.7	Deductive and Inductive Approaches	102
3.5	The Research Methodology (Qualitative and Quantitative)	104

<b>Section</b>	<b>Table of Contents</b>	<b>Page</b>
3.5.1	Qualitative Research	104
3.5.2	Quantitative Research	105
3.5.3	Scenarios Methodology	107
3.5.4	The Chosen Methodology	107
3.5.5	Research Objectives and Questions	109
3.5.6	Hypothesis Testing	110
3.6	Survey Methods	113
3.6.1	Self-Completion Questionnaires	114
3.6.2	E-questionnaires	114
3.6.3	Street Surveys	115
3.6.4	Questionnaire Design	117
3.6.5	Sequence of Questions	118
3.6.6	Incentives	119
3.6.7	Pilot Testing and Protocol Analysis	120
3.6.9	Reliability and Validity of the Quantitative Research	122
3.7.10	Validity of the Quantitative Research	124
3.6.11	Content Validity	124
3.6.12	The Development and Testing of the Coding Scheme to Categorise Service Failure	126
3.6.13	Construct Validity	131
3.6.14	Methods of Analysis	132
3.7	Sampling	134
3.7.1	Sampling Procedures and Sample Type	137
3.7.2	Sample Size	139
3.8	Ethical Consideration	141
3.9	Chapter Summary	143

## **Chapter 4      Data Analysis and Discussion**

4.1	Introduction	144
4.1.1	Hypothesis 1 Severity of Service Failure Has A Negative Impact on Customer Satisfaction, Word-of-Mouth Communication (WOM) and Customer Loyalty.	144
4.1.2	Hypothesis 2 Failure Criticality Has A Negative Impact on Customer Satisfaction, Word-of-Mouth Communication (WOM) and Customer Loyalty.	145
4.1.3	Hypothesis 3 Different Types of Service Failure Have A Differential Negative Impact on Post-failure Satisfaction, Word-of-Mouth Communication and Intention to Repurchase.	146
4.1.4	Hypothesis 4 Passenger Type Moderates the Influence of Failure Type and Criticality of Failure on Post-Failure Satisfaction, Word-of-Mouth and Intention to Repurchase.	149
4.1.5	Hypothesis 5 Passenger Loyalty Moderates the Influence of Failure Type, Severity and Criticality on Post-Failure Satisfaction, Word-of-Mouth Communication and Intention to Repurchase.	152
4.1.6	Hypothesis 6 Airline Type Moderates the Influence of Failure Type, Severity and Criticality on Post-Failure Satisfaction, Word-of-Mouth Communication and Intention to Repurchase.	156
4.1.7	Hypothesis 7 Service Recovery Type Influences Post-Recovery Satisfaction.	161
4.1.8	Hypothesis 8 Gender Moderates the Perceived Effectiveness of Service Recovery Type.	167
4.1.9	Hypothesis 9 Post-Recovery Satisfaction Influences Word-of-Mouth Communication (WOM) and Intention to Repurchase.	170

4.20	Hypothesis 10 Emotion Mediates the Influence of Service Recovery on Post-Recovery Satisfaction, Word-of-Mouth Communication and Intention to Repurchase	171
4.21	Hypothesis 11 Perceived Distributive Justice and Procedural Justice Mediate the Influence of Service Recovery on Post- Recovery Satisfaction, Word-of-Mouth Communication and Intention to Repurchase	175
<b>Chapter 5</b>	<b>Conclusion and Recommendations</b>	
5.1	Introduction	180
5.2	Research Objectives and Questions	180
5.3	Limitations of the Research	191
5.3.1	Implications for Management Practice	192
5.4	Future Research	195
5.5	Chapter Summary	196
References	References	197
Appendix 1	Definitions of Justice and Measurement Constructs	256
Appendix 2	Application for Conducting Market Research at Manchester Airport	257
Appendix 3	Student Invitation Message	259
Appendix 4	Questionnaire Structure	260
Appendix 5	Ethical Approval Application	276

## **List of Tables**

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 2.1	Methods and Sample Size used on Airline Studies	42
Table 2.2	The Important Airline Service Quality Aspects	47
Table 2.3	Summarized the Most Effective Recovery Strategies	71
Table 2.4	Methods used in Emotion (Service Recovery)	75
Table 2.5	Gaps in the Service Recovery Literature	78
Table 3.1	Research Framework	84
Table 3.2	The Different Perspectives Underpinning the Concept of Research Paradigm	93
Table 3.3	Research Onion	94
Table 3.4	Basic Belief of Alternative Inquiry Research Paradigms	102
Table 3.4.1	The Major Differences between Deductive and Inductive Approaches to Research	103
Table 3.4.2	Fundamental Differences between Qualitative and Quantitative Research Strategies	106
Table 3.4.3	The Major Advantage and Disadvantage for Qualitative and Quantitative	106
Table 3.4.4	The Main Features for Qualitative and Quantitative	106
Table 3.5	Research Questions and Objectives	109
Table 3.5.1	Hypotheses and Key Literature Sources	111
Table 3.6	Advantages and Disadvantages for Different Survey Methods	116
Table 3.7	Pilot Testing and Protocol Analysis (Changes to Specific Question)	121
Table 3.8	A Summary of Reliability Definitions	122
Table 3.8.1	Analytical Methods	133
Table 3.8.2	The Definitions of Terms (Statistical)	132
Table 3.8.3	Probability and Non-Probability Sampling Designs	135
Table 3.8.4	Advantages and Disadvantages of Sampling Techniques	136

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 3.9	A Summary of Sample Size used in Airline Service Quality and Service Failure and Recovery Studies	140
Table 3.9.1	Demographic Profiles of the Respondents	141
Table 3.9.2	Service Recovery Actions and Key Literature Sources	268
Table 3.9.3	A Summary of Emotion Items Used in Service Failure and Recovery Studies	271
Table 4.2	Impact of Failure Severity on Post-Failure Satisfaction Word-of-Mouth and Intention to Repurchase	145
Table 4.3	Impact of Failure Criticality on Post-Failure Satisfaction Word-of-Mouth Communication (WOM) and Intention to Repurchase	146
Table 4.4	Impact of Failure Type on Post-Failure Satisfaction	147
Table 4.5	Impact of Failure Type on Word-of-Mouth Communication	148
Table 4.6	Impact of Failure Type on Intention to Repurchase	148
Table 4.7	The Moderating Influence of Passenger Type on Failure Type's Impact on Post-Failure Satisfaction	150
Table 4.8	The Moderating Influence of Passenger Type on Failure Type's Impact on Word-of-Mouth Communication	150
Table 4.9	The Moderating Influence of Passenger Type on Failure Type's Impact on Intention to Repurchase	151
Table 4.10	The Moderating Influence of Passenger Type on Criticality of Failure's Impact on Post-Failure Satisfaction	151
Table 4.11	The Moderating Influence of Passenger Type on Criticality of Failure's Influence on Word-of-Mouth Communication	151
Table 4.12	The Moderating Influence of Passenger Type on Criticality of Failure's Influence on Intention Repurchase	152



<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 4.13	The Moderating Influence of Passenger Loyalty on Failure Type's Impact on Post-Failure Satisfaction	153
Table 4.14	The Moderating Influence of Passenger Loyalty on Failure Type's Impact on Word-of-Mouth Communication	153
Table 4.15	The Moderating Influence of Passenger Loyalty on Failure Type's Impact on Intention to Repurchase	154
Table 4.16	The Moderating Influence of Passenger Loyalty on Failure Severity's Impact on Post-Failure Satisfaction	154
Table 4.17	The Moderating Influence of Passenger Loyalty on Failure Severity's Impact on Word-of-Mouth Communication	154
Table 4.18	The Moderating Influence of Passenger Loyalty on Failure Severity's Impact on Intention to Repurchase	155
Table 4.19	The Moderating Influence of Passenger Loyalty on Criticality of Failure's Impact on Post-Failure Satisfaction	155
Table 4.20	The Moderating Influence of Passenger Loyalty on Criticality of Failure's Impact on Word-of-Mouth Communication	155
Table 4.21	The Moderating Influence of Passenger Loyalty on Criticality of Failure's Impact on Intention to Repurchase	156
Table 4.22	The Moderating Influence of Airline Type on Failure Type's Impact on Post-Failure Satisfaction	158
Table 4.23	The Moderating Influence of Airline type on Failure Type's Impact on Word-of-Mouth Communication	158
Table 4.24	The Moderating Influence of Airline type on Failure Type's Impact on Intention to Repurchase	158
Table 4.25	The Moderating Influence of Airline Type on Failure Severity's Impact on Post-Failure Satisfaction	159
Table 4.26	The Moderating Influence of Airline Type on Failure Severity's Impact on Word-of-Mouth Communication	159
Table 4.27	The Moderating Influence of Airline Type on Failure Severity's Impact on Intention to Repurchase	159

<b>Table</b>	<b>Title</b>	<b>Page</b>
Table 4.28	The Moderating Influence of Airline Type on Criticality of Failure's Impact on Post-Failure Satisfaction	160
Table 4.29	The Moderating Influence of Airline Type on Criticality of Failure's Impact on Word-of-Mouth Communication	160
Table 4.30	The Moderating Influence of Airline Type on Criticality of Failure's Impact on Intention to Repurchase	160
Table 4.31	The T-Tests for Differences in Post-Recovery Satisfaction Based on the Recovery Action Received	162
Table 4.32	The Impact of the Significant Recovery Actions on Post-Recovery Satisfaction	164
Table 4.33	The T-Tests for Differences in Post-Recovery Satisfaction Based on The Recovery Action Received When Failure Severity is High (>4)	165
Table 4.34	The Impact of Significant Recovery Actions on Post-Recovery Satisfaction when Failure is High (>4)	167
Table 4.35	The Moderating Effect of Gender on the Effectiveness of Recovery Strategies for Post-Recovery Satisfaction	168
Table 4.36	The Impact of Post-Recovery Satisfaction on Word-of-Mouth Communication and Intention Repurchase	170
Table 4.37	Emotion Mediation Analysis for Post-Recovery Satisfaction	172
Table 4.38	Emotion Mediation Analysis for Word-of-Mouth Communication	173
Table 4.39	Emotion Mediation Analysis for Intention to Repurchase	174
Table 4.40	Justice Mediation Analysis for Post-Recovery Satisfaction	177
Table 4.41	Justice Mediation Analysis for Word-of-Mouth Communication	178
Table 4.42	Justice Mediation Analysis for Intention to Repurchase	179
Table 5.1	Research Question and Objective One	181
Table 5.2	Research Question and objective Two	182
Table 5.3	Research Question and Objective Three	183
Table 5.4	Research Question and Objective Four	184

Table 5.5	Research Question and Objective Five	185
Table 5.6	Research Question and Objective Six	186
Table 5.7	Research Question and Objective Seven	187
Table 5.8	Research Question and Objective Eight	188
Table 5.9	Research Question and Objective Nine	189
Table 5.10	Research Question and Objective Ten	190
Table 5.11	Implication of Research Findings	192

### **List of Figures**

<b>Figure</b>	<b>Title</b>	<b>Page</b>
Figure 2.1	Conceptual Framework for the Study	77
Figure 3.1	Research Onion	94
Figure 3.2	The Coefficient of Reliability	129
Figure 3.3	The Index of Reliability	130
Figure 4.1(a)	Emotion Mediation Analysis Model for Post-Recovery Satisfaction	172
Figure 4.1(b)	Emotion Mediation Analysis Model for Word-of-Mouth Communication	173
Figure 4.1(c)	Emotion Mediation Analysis Model for Intention to Repurchase	174
Figure 4.2(a)	Justice Mediation Analysis Model for Post-Recovery Satisfaction	177
Figure 4.2(b)	Justice Mediation Analysis Model for Word-of-Mouth Communication	178
Figure 4.2(c)	Justice Mediation Analysis Model for Intention to Repurchase	179

## **List of Abbreviations**

<b>Abbreviations</b>	<b>Full Text</b>
ASQ	American Society for Quality
ANOVA	Analysis of Variance
CR	Coefficient of Reliability
EU	European Union
EFQM	European Foundation for Quality Management
FC	Full-service
ISO	International Standard Organization
IR	Index of Reliability
JIS	Japanese Industrial Standards
KLIA	Kuala Lumpur International Airport
LCC	Low-cost carriers
OLS	Ordinary least-squares
USA	United States of America
SBS	Salford Business School
SERVQUAL	Service Quality Model (Zeithaml, Berry and Parasuraman, 1985)

## **Acknowledgements**

I would like to thank my supervisors: Dr James Mulkeen and Professor Peter Schofield (former supervisor) for their guidance and support in this research. Also, many thanks to Dr Jonathan Parke, Dr Wang Wei Yue and Dr Tahir Rashid for their guidance in my Interim Assessment and Internal Evaluation.

Additional thanks go to my family members. I would like to thank my father, for financial support during four years PhD programme at the University of Salford. A special thanks to my mother, for her encouragement, unconditional love and support throughout this PhD programme. I would also like to thank to my sister and brother for their love and encouragement.

## **Abstract**

One of the most problematic issues to face airlines in recent years has been service failure/breakdown. Consequently, the notion of effective recovery, in terms of retaining customer loyalty, has become increasingly important. The aim of this study is to examine incidents of airline service failure and identify optimal recovery strategies.

The study evaluates the service failure and recovery strategies in full-service airlines and low-cost carriers, the comparative effectiveness of alternative recovery actions/strategies (e.g. apology, compensation, correction, explanation) and their impact on post-recovery satisfaction and loyalty for a range of failure types. It also examines the mediating effect of emotion and justice on post-recovery behaviour.

A total of 387 useable questionnaires were obtained from three different sources: a street intercept survey in Manchester (n=50); an online survey at Salford University (n=52); a Marketest panel survey (n=285). A number of important findings have been obtained from the hypothesis tests. Firstly, the severity of service failure and failure criticality were found to have a significant impact on customer satisfaction, negative word-of-mouth communication (WOM) and customer loyalty. Secondly, the results revealed the following five service recovery actions are particularly effective for airline service recovery: acceptance of responsibility of service failure; correction; compensation; apology and follow-up in writing. Thirdly, the results show that three recovery actions (e.g. compensation; acceptance of responsibility and correction) have a significant impact on customer post-recovery satisfaction when severity is high (>4).

The implications of these results are that operations manager and staff can use these five recovery actions to deal with service failure (e.g. acceptance of responsibility of service failure; correction; compensation; apology and follow-up in writing). Frontline staff needs to be aware of customer emotions during service failure incident and good service recovery can therefore avoid negative customer emotion.

## **Chapter 1**

### **1. 1 Introduction**

This chapter aims to provide an introductory background to the research comprising of the following two parts: the first will explain the purpose of the study and the second will outline the justification for the importance of the study and its research objectives and hypotheses. Thereafter, the structure for the thesis is also presented.

#### **Aim**

The aim of this study is to examine incidents of airline service failure and identify optimal recovery strategies.

The most problematic issue to face airlines in recent years has been service failure/breakdown. Service failure and recovery has received considerable interest among service organizations and academics for a number of reasons. First, service failure is important to researchers because it can result in the loss of customers and profitability (Schlesinger and Heskett, 1991 and Edvardsson, 1992; Bejou and Palmer, 1998). Research by Berry and Parasuraman (1992) reported that service failure leads to a decline in customer confidence, negative word-of-mouth publicity and the direct cost of re-performing the service. Reflecting the significance of service quality in business operations, Petrick et al., (2006) examined the impact of service failure and customers repurchase intentions in the cruise service industry. The study found that service failure had a negative effect on customer repurchase intentions. In similar studies in banking services Jones and Farquhar (2007), and

Sousa and Voss (2009) concluded that service failure had a direct negative effect on the customer loyalty behaviours. This view was reflected in the work of Kalamas et al., (2008) who examined the impact of service of failure and customers repurchase intentions. They found service failure had a negative influence on customer repurchase intentions.

Previous studies reported that severity of failure and failure criticality had a significant impact on customer satisfaction, negative word-of-mouth communication and customer loyalty. For instance, research by Weun et al., (2004) examined the impact of service failure severity on customer satisfaction, trust, commitment, and negative word-of-mouth communication. They found service failure severity had a significant negative impact on customer satisfaction, trust, commitment, and negative word-of-mouth communication. Similarly research by Kim and Ulgado (2012) examined customer perceptions of service failure severity, recovery satisfaction and repurchase intention in hotel and restaurant services. They also found service failure severity had a significant negative impact on customer repurchase intentions.

In terms of cross cultural studies on service failure and satisfaction, Lin's (2010) conducted a study into service failure in the context of life insurance in Taiwan and Hong Kong, and found critical service failure had a significant influence on customer satisfaction. Similar conclusions were proposed by Watson (2012) who examined the effects of service criticality and service recovery on customer satisfaction in hairstyling and online gift purchase services. As such, the critical of failure is seen to affect satisfaction and loyalty.



Other, studies have demonstrated the important role of service recovery. For instance, Sparks and McColl-Kennedy (2001) noted that service recovery aims to return the customer to a state of satisfaction and other research studies reported that service recovery has been identified as one of the key ingredients for achieving customer loyalty. For example, McDougall and Levesque (1999) examined the effectiveness of recovery strategies in a hotel context and found assistance plus compensation had a significant effect on recovery satisfaction. Examining the impact of three recovery strategies: compensation, speed of recovery and apology on consumer satisfaction and loyalty in restaurant services, Wirtz and Mattila (2004) found compensation was most effective compared with an apology and the speed of recovery. In comparison Komunda and Osarenkhoe (2012) examined the impact of service failure and recovery on customer satisfaction in the Uganda banking sector and found communication skills of bank staff had a significant effect on customer recovery satisfaction. Investigating the relationship between service recovery, customer satisfaction and perceived value in online banking service. Yaya et al., (2013) found service recovery had a significant direct influence on satisfaction, perceived value and loyalty. Mostafa et al., (2014) support this view based on telecommunications service in Egypt. They found five service recovery actions: problem-solving, speed of response, effort, facilitation and apology had a significant impact on customer post-recovery satisfaction.

## **1.2 Justification for the study**

This section highlights a number of significant gaps in the existing literature on service failure and recovery which need to be addressed. Three gaps have been

identified through the review of the literature. First, the majority of studies to date have focused either on the financial sector, online retailers or restaurant service. For example, financial sector by Michel, (2001), Chebat and Slusarczyk (2005), Jones and Farquhar (2007), Sousa and Voss (2009), Varela-Neira et al., (2010a), Komunda and Osarenkhoe (2012), De Matos et al., (2013), Yaya et al., (2013), Wang et al., (2014); online retailers by Lee and Park (2010), Wang et al., (2011); and restaurant service by Mattila (1999), Mattila and Patterson (2004), Namkung and Jang (2010a), Susskind and Viccari (2011), Othman et al., (2014), Park et al., (2014) and Tsai et al., (2014). Thus, the research on service failure and recovery in airlines has been limited and relatively little is known about the impact of failure severity and the criticality of failure by type on key outcome variables in the airline sector.

Second, previous studies have highlighted a number of important steps which are required for effective service recovery which include: apology by Shapiro and Nieman-Gonder (2006), Kim, (2007), Wang and Mattila, (2011); assistance plus compensation by McDougall and Levesque (1999); acceptance of responsibility of the service failure by Blodgett et al., (1997) and Tax et al., (1998); attentiveness by Bhandari et al., (2007) and Casado et al., (2011); a prompt response by Varela-Neira., (2010b), Hua (2012); correction by Seawright et al., (2008); Chung-Herrera et al., (2010), explanation by Vaerenbergh et al., (2013), Zhou et al., (2013), Xu et al., (2014); effort by Chung-Herrera et al., (2004); Ozgen and Kurt (2012); empathy by Gruber and Frugone (2011); facilitation by Bhandari et al., (2007), Casado et al., (2011), compensation by Mattila and Cranage (2005), Kim (2007) and follow-up in writing by Andreassen (2000), Lewis and Spyropoulos (2001). Yet despite their

importance, little work has been done on the comparative effectiveness of alternative recovery strategies. As such, their relative effectiveness remains unclear and requires further research, particularly with regard to the airline sector.

Third, prior studies have begun to investigate how emotions and perceived justice influence customer post-recovery satisfaction, word-of-mouth communication and intention to repurchase. Previous research on emotion research include: Wen and Chi (2013), Kozub et al., (2014), Mattila et al., (2014); and perceived justice research by Lin et al., (2011), Robert et al., (2011) and Choi and Choi (2014). However, little work has been done to investigate the impact of emotion and perceived justice on service recovery strategies in the airline sector.

### **1.3 Aim**

The aim of this study is to examine incidents of airline service failure and identify optimal recovery strategies. It also examines the mediating effect of emotion and justice on post-recovery behaviour.

#### **1.3.1 Research objectives and hypotheses**

The specific research objectives of this study are:

1. Analyse the impact of failure severity on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
2. Analyse the impact of failure criticality on post failure satisfaction, word-of-mouth communication and intention to repurchase.
3. Identify the different types of service failure's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.

4. Analyse the mediating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
5. Analyse the mediating effect of passenger loyalty on the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
6. Analyse the moderating effect of airline type on failure type's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
7. Identify the impact of service recovery on post-recovery satisfaction.
8. Identify the differences of gender perception on recovery strategy influence on post-recovery satisfaction.
9. Identify the impact of post-recovery satisfaction on word-of-mouth communication and intention to repurchase.
10. Analyse the mediating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction and loyalty.

### **1.3.2 Research hypotheses**

The specific hypotheses of this study are:

1. Failure severity has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
2. Failure criticality has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.

3. Failure type influences post-failure satisfaction, word-of-mouth and intention to repurchase.
4. Passenger type moderates the influence of failure type and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
5. Passenger loyalty moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.
6. Airline type (low cost vs full service) moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and loyalty.
7. Service recovery type influences post-recovery satisfaction.
8. Gender moderates the perceived effectiveness of service recovery type.
9. Post-recovery satisfaction influences word-of-mouth communication and intention to repurchase.
10. Emotion mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.
11. Perceived justice mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.

## **1.4 A summary of the research methods**

This study employed a positivist design drawing on quantitative methods (i.e. questionnaires). The respondents were obtained from three different sources: a street intercept survey in Manchester (n=50); online survey at Salford University (n=52); a Marketest panel survey (n=285) and this resulted in 387 useable questionnaires.

### **1.4.1 Research contributions**

Research contributions are normally classified into two categories: (1) the contribution to the body knowledge, and (2) the contribution of the findings to difference parties: agencies, managers, and researchers (Singh et al., 2006).

### **1.4.2 The contribution to the body knowledge**

### **1.4.3 Literature**

This study has evaluated various types of service recovery actions/strategies (e.g. apology, compensation, etc) and their impact on post-recovery satisfaction and loyalty in relation to a range of service failure types. It has also examined the mediating effect of emotion and justice on post-recovery behaviour. As such, it makes an important contribution to the pertinent literature regarding the interrelationship between the variables in this context. The results have therefore addressed a gap in our knowledge about airline service failure and recovery. The findings will be disseminated at academic conferences and published in peer reviewed journals. Additionally, one of the major academic contributions to the

service failure and recovery literature is the study's classification of five different types of airline service failure: (1) delays, diversions or cancellations (2) delays diversions or cancellations due to weather (3) delays diversions or cancellations due to technical faults (4) lost/damaged luggage (5) airline passenger service. This classification can be used in other airline research in relation to the issue of service failure and recovery.

### **The contribution of the findings**

A number of important findings have been obtained from the hypothesis tests and this provides valuable information for airline management and frontline staff about service failure and recovery in regard to post-recovery satisfaction and loyalty. The hypothesis results are summarized in the following. First, severity of failure and criticality failure had a significant impact on customer satisfaction, negative word-of-mouth communication and intention to repurchase. This result provides important contribution for academic and stakeholder to a deeper understanding of the negative impact of airline service failure incident. The implication of this conclusion are that management should have a policy of identifying where a severe failure has taken place and airline management should deploy staff with good communication skills can therefore, avoid negative word-of-mouth communication.

Second, the results revealed that five recovery actions that are particularly effective for airline service recovery and they are: acceptances of responsibility of service failure, correction, compensation, apology, and follow-up in writing. This is another important contribution for both academic and airline management to understand the

relative effectiveness of recovery strategies in response to failure types. The results from the hypothesis test indicated that these five recovery actions should help frontline staff to deal effectively with unhappy airline customers. Future research should examine how the combination of service recovery actions influences post-recovery satisfaction, word-of-mouth communication and intention to repurchase.

Third, the study found that there were significant differences in recovery strategy impact on post-recovery satisfaction on the genders and these 13 recovery actions were found had a significant impact on gender perception and they are: acknowledgement of the service failure, acceptance of responsibility for the failure apology, explanation, staff empowered, correction, compensation, facilitation, a prompt response to the service failure, attentiveness, empathy, effort and an appropriate to explain/ handle my complaint. This results have made important contribute to a general understanding of the gender perception in airline service recovery context. These 13 service recovery actions should help airline manager to deal with recovery issues of male and female customer, as it can increase post-recovery satisfaction and repurchase intention. Fourth, the results show that three recovery actions had a significant impact on post-recovery satisfaction when severity is high ( $>4$ ). The three recovery actions that are particularly effective for airline service recovery are: (1) compensation, (2) acceptance of responsibility and (3) correction. Airline managers can use these 3 recovery actions to deal with seriousness of failure, as it can avoid customer negative word-of-mouth. This result provides another important contribution to the service failure literature, help us to understand the service recovery strategies better, particularly with regard to the airline sector.



A final important contribution for academic is that the following three concerns: post-recovery satisfaction (PRS); customer emotion and perceived justice in service recovery. The results show these three aspects had a significant influence customer satisfaction. Moreover, future research should examine other culture groups in relation to PRS, emotion and justice dimension, this can help us to understand better in service recovery research.

#### **1.4.3 A summary for management practice**

One of the main findings from the study indicated that five service recovery actions had a significant impact on customer post-recovery satisfaction and they are: (1) acceptance of responsibility of service failure, (2) apology, (3) correction, (4) compensation, and (5) follow-up in writing. The implication of this conclusion is that airline manager and staff should use these five recovery actions to deal with service failure. Other important findings is related to the customer perceptions of fairness with the service recovery and the results show that distributive justice and procedural justice have a significant effects on post-recovery satisfaction, word-of-mouth communication and intention to repurchase. The implications of these results are that airline manager and staff should understand the importance role of distributive and procedural justice. To achieve these justice dimensions, manager and staff need to understand the needs of customers and their expectations during service failure. Distributive justice refers compensation and discounts. Procedural justice refers to timeliness (e.g. speed of response).

## **A summary of the limitation to the study**

The study's cross sectional design and the major limitation to the use of a cross sectional design is that the data collection is at one point in time only rather than extended over a longer period. Future research should consider a longitudinal design using both qualitative and quantitative methods to strengthen the overall results of the research. Other limitations that include: sampling limitation, cost and geographical limitations. This study used a convenience sample in Manchester and Salford, the major benefits of this approach are: fast and inexpensive to get access to the potential respondents. Further studies should extend to other geographic areas, this can help to enhance external validity of the test results.

## **1.5 Thesis structure**

This thesis consists of five chapters. A brief explanation of each chapter is highlighted below:

Chapter 1 described the purpose of the study and identified the important gaps in existing research that need to be addressed. In particular, this chapter highlights three significant gaps in the existing literature. First, analyse the impact of failure severity and the criticality of failure by type on post-failure satisfaction, word-of-mouth and intention to repurchase. Second, identify the impact of service recovery on post-recovery satisfaction. Third, analyse the mediating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction and loyalty.

Chapter 2 This chapter presents a review of the relevant literature that includes the concepts of service quality, service encounters, customer satisfaction and the key empirical studies of airline service quality in full-service airlines and low-cost carriers. The literature related to the study topic is introduced, for instance, service failure and recovery theories, failure criticality, service failure severity, perceived justice of the recovery and the role of emotions in service failure.

Chapter 3 This chapter presents the methodology and methods used in the study. The chapter then introduces ten research questions, ten objectives and 11 hypotheses. Thereafter, it evaluate and justified the philosophical approach which was used for the study; discusses of the conceptual framework components; discusses and justified for the choice of method used in the data collection and analysis.

Chapter 4 This chapter presents the results for the 11 hypothesis tests and the discussion of the findings. In particular, this chapter presents hypothesis analysis results and results show that H1, H2, H7, H9, H10 and H11 were supported. H8 partially supported and hypotheses H3, H4, H5 and H6 were not supported.

Chapter 5 This chapter presents a discussion of the research objectives and questions and the methods used to address them. The chapter then highlights the limitations for the study, research contributions (i.e. literature and the implications for management practice) and makes recommendations for future research. Thereafter, the summary to the chapter is presented.

## **Chapter 2**

### **Literature Review**

#### **2.1 Introduction**

The previous chapter described the purpose of the study and identified the important gaps in existing research that need to be addressed. This chapter presents a review of the relevant literature for the study that includes the concepts of service quality, service encounters, customer satisfaction and a number of key empirical studies of airline service quality in full-service airlines and low-cost carriers. The literature related to the study topic is then presented in the separate sections including: service failure and recovery theories; failure criticality; service failure severity; perceived justice of the recovery and the role of emotions in service failure.

#### **2.2 Defining Quality**

A number of common quality standard bodies such as the International Standard Organization (ISO), American Society for Quality (ASQ), European Foundation for Quality Management (EFQM) and Japanese Industrial Standards (JIS) have provided the fundamental definitions of product and service quality. For example, the ISO 8420 series (2000, p.39) define quality as the ability of a product or service to satisfy the stated or implied needs of customers. Crosby (1979, cited in Beckford 2010, p.56) argued that a quality product or service is one that meets the requirements of the customer. It is acknowledged that quality control and assurance

has become important areas of service organisation today and a growing body of quality literature has emerged over the last decades. The most recognized authors in quality management include: Crosby (1979); Juran (1980); Gronroos (1984); Garvin (1987); Feigenbaum (1986); Deming (1990); Taguchi (1990).

### **2.2.1 Measuring service quality**

Early studies measuring customer perceptions of service quality include (Gronroos 1984; Czepiel et al., 1985; Parasuraman et al., 1998; Edwardsson et al., 1998). Gronroos (1984) examined customer perceptions of service quality in mobile communication services and proposed two quality dimensions: technical quality and functional quality. Functional quality refers to how the service is delivered i.e. the service employee manner. Technical quality relates to the attributes of a product i.e. quality of the service output (Gronroos, 1988; Sharma and Patterson, 1999). The technical and functional dimensions have been widely tested in previous empirical studies. For example, research by Kang (2006) examined customer satisfaction in the mobile communication services in Korea. Their study conducted a questionnaire with a sample of 464 and the service quality analysis was conducted using both technical and functional dimensions. The findings show that functional quality was found to have a significant effect on the overall customer satisfaction.

Understand the impact of culture factor affect on customer satisfaction, Edwardsson et al., (1998) offered a cross-cultural perspective in service encounter satisfaction and examined how different cultures impact on customer satisfaction. They also identified dimensions of service quality as being: integrative quality and outcome

quality. Integrative quality relates to how the different parts of the service delivery system work effectively. Outcome quality refers to how the actual service meets the promised service and the customer needs and expectations. These reflect the technical and functional aspects previously identified by Gronroos, (1984).

In examining customer perceptions of service encounter quality, Czepiel et al., (1985) proposed the following three service dimensions relating to the enhancement of service measurement: customer perceptions; provider characteristics; and production reality. The main results show that the characteristics of the service provider had a significant impact on customer satisfaction. While, provider characteristics refer to their expertise; and attitude; production reality is related to technology and location.

The most well-known service quality researchers Parasuraman et al., (1998) developed the gap model of service quality known as SERVQUAL. The major aim of the SERVQUAL framework was to measure the gap between customer perceptions and expectations. The original SERVQUAL scale comprised ten dimensions: tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communications and understanding. Later, Parasuraman et al (1991 ;1998) revised their service quality measurement tool to comprise the following five major dimensions: reliability, assurance, tangibles, responsiveness and empathy. The definitions for the service quality dimensions are as follows:

1. Tangible refers to the equipment or communication materials (e.g. in-flight atmosphere, food, drink and holiday brochure).

2. Reliability refers to the ability to perform the promised service to the customer.
3. Responsiveness refers to the willingness to help customers and provide good customer interaction.
4. Assurance refers to the knowledge and courtesy of service employees including service and product knowledge.
5. Empathy refers to the provision of caring and understand customer emotions.

### **2.2.2 Strengths of SERVQUAL**

The SERVQUAL model has been used regularly across different service sectors including: airlines by Sultan and Simpson (2000), Prayag 2007, Nadiri et al., (2008); Kim and Lee (2011); banking by Lassar et al., (2000), Newman, (2001); Caruana (2002), Herington and Weaven (2009), Kumar et al., (2010); mobile communication service by Bebeko 2000, Kang and James (2004); restaurant and fast food services by Brady et al., (2002), Luoh and Tsaur (2007); online retailing by Cai and Jun (2003), Long and McMellon (2004), Lee and Lin (2005). It has also been used in hotels by Wong et al., (1999), Alexandris et al., (2002), Akbaba (2006); Roshnee 2007); healthcare by Lam (1997), Bowers and Kiefe (2002), Kilbourne et al., (2004), Pakdil and Harwood (2005); university by Cook and Thompson (2000), Iwaarden et al., (2004), Abili et al., (2012); travel agency by Bigne et al., (2003), Hudson et al., (2004), Caro and Garcia (2008); and information systems by Kettinger and Lee (1997), Watson et al., (1998) and Landrum and Prybutok (2004).

### **2.2.3 Criticisms of SERVQUAL**

The major criticism of SERVQUAL is that the complexity score of SERVQUAL dimensions and this could lead to low reliability and validity (Fick and Ritchie, 1991; McDougall and Levesque 1992; Brown et al., 1993). Moreover, the SERVQUAL criticism has grown significantly in the empirical studies of service quality and service marketing literature (Van Dyke et al., 1997, Ekinici and Riley, 1998; Ladhari, 2008). In such, the criticisms of SERVQUAL have been divided into theoretical and operational factors highlighted by Buttle (1996, p.10):

#### **Theoretical:**

- Paradigmatic objections: SERVQUAL is based on a disconfirmation paradigm rather than an attitudinal paradigm; and SERVQUAL fails to draw on established economic, statistical and psychological theory.
- Gaps model: there is little evidence that customers assess service quality in terms of P – E gaps (e.g. P = perception and E = expectation).
- Process orientation: SERVQUAL focuses on the process of service delivery, not the outcomes of the service encounter.
- Dimensionality: SERVQUAL's five dimensions are not universals; the number of dimensions comprising SQ is contextualized; items do not always load on to the factors which one would a priori expect; and there is a high degree of intercorrelation between the five dimensions.



**Operational:**

- Expectations: the term expectation is polysemic; consumers use standards other than expectations to evaluate SQ; and SERVQUAL fails to measure absolute SQ expectations.
- Item composition: four or five items cannot capture the variability within each SQ dimension.
- Moments of truth (MOT): customers' assessments of SQ may vary from MOT to MOT.
- Polarity: the reversed polarity of items in the scale causes respondent error.
- Scale points: the seven-point Likert scale is flawed.
- Two administrations: two administrations of the instrument causes boredom and confusion.
- Variance extracted: the over SERVQUAL score accounts for a disappointing proportion of item variances.

Additionally, research by Vaughan and Woodruffe-Burton (2011) found that it is difficult to measure service quality in the context of intellectual disability and especially related to students with learning disabilities. Van Herk et al., (2005 cited in Ladhari, 2008, p.191) highlighted the following three methodological bias for the SERVQUAL model used in service quality research: (1) construct bias which can occur when the construct is being examined across different cultural contexts or countries; (2) method bias such as bias due to interviewer-interviewee interaction,

research method, or characteristics of the sample; and (3) item bias-distortions in several items in the measurement instrument).

### **2.3 The service encounter**

The classic definition of a service encounter was developed by Shostack (1985 cited in Baron and Harris, 1995, p.48). He defined it as the period of time during which a customer directly interacts with a service. The Shostack's service encounter framework comprises of the following three components.

- The remote encounter, where the customer interacts with a service by mail or perhaps via a machine (e.g. a vending machine).
- The direct personal encounter where customer are physically present and exposed to elements of the service system (e.g. come into face-to-face contact with employees).
- The indirect personal encounter where customers interact with the service by telephone.

Shostack's definition of service encounter was highlighted in the study of service marketing by Baron and Harris (1995, p.48) who state that the service encounter concept is a managerial tool to improve understanding of all components of the system that come into contact with customer. The above three components of service encounter: remote encounter, direct personal encounter and indirect personal encounter were investigated by several airline researchers in their empirical studies. For example, Cunningham et al., (2005) examined online airline reservation

services. The study examined how online transactions of remote service encounters impact on customer service perceptions of 263 students at the Metropolitan University in U.S.A. The study found that the internet risk had a significant influence on airline reservation services. Developing of indirect personal encounter, Meyer and Schwager (2007) suggested that such indirect service encounter as reflected in messages sent by a company such as advertising or customer word-of-mouth played a significant role in brand development for Malaysia Airlines (MA). They concluded that this significantly helped to improve customer perceptions of the brand (Zaid, 1994, p.15).

There is strong evidence that airline advertising has a direct relationship with airline image that influence on customer satisfaction (Andreessen and Lindestad, 1998; Chan, 2000; Jin et al., 2005). For example, research by Chan (2000) noted that airline advertising had a significant effect on customer perceptions of the airline image. Airline telephone services are a typical example for the indirect service encounter which allows traveller to check on flight availability such as arrival and departure times. Airline reservation service agents answer telephone inquiries that include flight schedules, fares, redeem loyalty points and purchase or cancel tickets (Ferguson, 2009, p.173).

Previous research has noted that employee performance is one of the most critical factors that impact customer repurchase intention. For example, Babbar and Koufteros (2008) examined customer perceptions of airline employee's empathy and responsiveness which include: employee helpfulness, courtesy, and promptness. Their study examined how direct personal encounters impacted on airline passenger

satisfaction as perceived by 437 students at the Southeastern University, Florida in USA. Structural equation modelling (SEM) was used to test the research model and relationship between constructs and the study found that individual attention, helpfulness, courtesy, and promptness had a significant effect on airline passenger satisfaction.

### **2.3.1 The importance aspects of service encounters**

The service encounter has become a crucial area of customer research and is based on the customers assessment of service quality (Lloyd, 2011). The important aspects of service encounters have been identified and investigated by many authors including: Chandon et al., (1997); Keillor et al., (2007); Lloyd and Luk (2011); Johnson and Grier (2011); Jani and Han (2011); Walter and Edvardsson (2012); and Ryu and Han (2011).

Research has tended to concentrate on employee integration, servicescape and interaction behaviour. For example, Chandon et al., (1997) using a questionnaire based 722 customer and employee perceptions of service quality, found that there were significant differences in the two stakeholder's perception in terms of responsiveness, listening, explanation and understanding. The significance of interaction behaviour on satisfaction was also highlighted by Lloyd and Luk (2011) in their study of 541 diners in a shopping mall in Hong Kong. Reflecting some of the themes of Chandon et al., (1997) and Lloyd and Luk (2011) suggests that politeness, sincerity and enthusiasm of customer contact staff have a positive impact on satisfaction.

Moreover, the influences of servicescape on customer satisfaction have become more important in recent years (Bitner, 1990; Keillor et al., 2007; Ordanini, and Parasuraman, 2011). For example, Keillor et al., (2007) used the servicescape concept developed by Booms and Bitner (1982) to support the significance between the physical environment where a service takes place and customer satisfaction. Based on 191 responses from fast food outlets in eight different countries, they conclude that not only the interaction behaviour but also the environment in which the service occurs affects overall customer satisfaction. These studies suggest that there are environmental as well as social aspects affecting overall customer satisfaction. These studies imply that whilst the environment is important, the attitude and behaviour of customer contact personnel is equally critical in affecting customer satisfaction. This has obvious implications for staff development but also has implications for the way in which staff are selected trained, motivated and managed.

### **2.3.2 Recruitment constraints in the service sector**

Previous studies have highlighted important recruitment issues in different service sectors including: airlines by Nickson (2007), Wirtz et al., (2008), Robinson (2009); tour operator by Woodruffe (1995); hospitality by Gilbert et al., (1998), Hinkin and Tracey (2000) and Ghiselli et al., (2001).

Recruitment issues have been identified that influence on cooperate performance, revenue and customer loyalty (Hinkin and Tracey, 2000; Ghiselli et al., 2001). For example, Woodruffe (1995, p.180) identified three recruitment issues that impact on

the service sector: (1) low rates of pay; (2) cutbacks; and (3) structured pay scales. Moreover, the recruitment issues for airlines include flight attendants must work rotating shifts such as holidays and weekends, age limits, breathing recycled air, irregular sleeping, safety and health concerns such as problem eating patterns, and dealing with stressful air passengers (Rhoades, 2006; Nickson, 2007; Wirtz et al., 2008; Robinson, 2009). Such factors reflect findings from the hospitality sector which have previously been identified, for example, seasonal demand against high fixed costs, casualisation of a workforce such as long and unsocial hours, low wages and high levels of labour turnover and sexual harassment (Croney, 1998, Gilbert et al., 1998; Hinkin and Tracey, 2000; and Ghiselli et al., 2001).

### **2.3.3 The significance of employee selection**

Research has demonstrated the importance of employee selection in human resource practices which have a direct negative impact on organization productivity (Robinson, 2009). Several studies reported that poor employee selection have a significant direct influence on customer perceptions of service quality provided by an organization (Shostack, 1985; Kandampully et al., 2001; Zeithaml et al., 2003; Robinson, 2009). Similarly, research on employee selection indicated that poor employee selection may result in high labour turnover, low morale, disciplinary problems and dismissals (Nickson, 2007). On the other hand, effective employee selection is a crucial aspect for achieving high standards of service delivery (Nickson, 2007; Robinson, 2009). Airline human resource literature has shown that a strong relationship between effective employee selection and organization

performance, is key to achieving organization performance (Wirtz et al., 2008; Heracleous et al., 2009; Robinson, 2009).

In addition, Nickson (2007, p.88) states that the importance of service quality has increased the pressure on all tourism and hospitality organisations to select the right kind of individual. Therefore, selecting the right employee has become a crucial strategy in the tourism and hospitality industries. In addition, several studies in airline research have found that a positive service attitude of employees is an important determinant of hiring decisions. For example, Bamber et al., (2006) highlighted that applicants with the right customer service attitude is the key employee selection criteria for JeStar airline. This findings supports research by Rhoades (2006) who also found the positive attitude of employees to be significantly important in the selection process of Southwest Airlines. Other studies on airline employee selection highlighted that employee quality is the primary source of airline success (Lirn 2003, p.556) and Heracleous et al., (2009, p.143) concluded that hiring the right people can help airlines to achieve service excellence and operational success.

Supporting the significant of recruitment of service quality Woodruffe (1995, p.180) identified the following selection criteria: qualification/technical knowledge; ability (specialist skills and attitudes); experience; personality and physical characteristics. These characteristics have been emphasised in other studies such as Bor and Hubbard (2006) who provide an overview of employee selection criteria in British Airways (BA), Nickson (2007) in his study of Easy Jet, and Heracleous et al., (2009) in their study of Singapore Airlines. Such studies emphasize the

significance of team working, interpersonal skills, problem solving and empathy in addition to the personal characteristics and education record of the applicant.

In addition, to recruitment policies, more general human resource practices have been the focus of many studies. For example, Wirtz et al., (2008) examined how employee selection impacts service effectiveness in Singapore Airlines. The study examined the following five key aspects of human resource practices (HRP) include: recruitment processes, training and retraining, service delivery teams, empowerment, and staff motivation through rewards and recognition. The results show that stringent employee selection had a significant effect on organizational performance. Their study also found that the five key aspects of HRP have a direct influence on customer perceptions of service quality.

Besides recruitment and HRP issues, airline culture is also play an important role in the service staff performance and service behaviour. For example, Kim and Lee (2009) examined how stereotyping and culture impact on airline employee service behaviour. Based on questionnaire responses from employees at South Korean Airlines, they concluded that the stereotyping and culture have a direct affect on employee service behaviour of South Korean Airlines. The stereotyping refers to the beliefs or perceptions about the characteristics of a group (Krueger, 1996). Examining the impact of job stress in China Airlines as perceived by 485 employees: pilots, engineers, flight attendants technicians and plane maintenance assistants, Tourigny et al., (2010) concluded that the practice of employee working long hours or long-term rotating shifts had a significant impact on employee job stress. Developing the theme of organisation support and employee behaviour Hur



et al., (2013) questioned 256 employees from domestic airlines in South Korea. The results show that the organizational support had a direct influence on service employee behaviour and also impacts on employee turnover intentions. The study found emotional exhaustion had a significant impact on employee motivation and resulted in lower levels of organizational commitment from employees. Emotional exhaustion refers to job turnover, absenteeism and low morale.

## **2.4 The concept of service**

The characteristics of services are generally described as intangibility, inseparability, heterogeneity and perishability (Zeithaml et al., 2006; Kossmann, 2006; Palmer, 2011; Pride and Ferrell, 2011). Intangibility refers to the fact that services cannot be touched (Zeithaml et al., 2006; Palmer, 2011). An airline offers an intangible element in the form of transportation and the service offered by an airline is mix of tangible and intangible elements (Kandampully et al., 2001; Mazanec, 1995). Prior studies on airline service quality have examined the intangible elements of airline services. For example, route network, corporate image and in-flight atmosphere were considered as the intangible elements of airlines (Kleymann and Seristo, 2004; Delfmann et al., 2005; Tangible elements of airlines are: food, seat, pillows and blankets (Kandampully et al., 2001).

Inseparability refers to the relationship between production and consumption of the service (Palmer, 2011). According to Kotler and Armstrong (2010) service inseparability means that services cannot be separated from the service provider. Kossmann (2006, p.14) noted that “production and consumption must take place at

the same time”, for example, a tourist must be present when the service is performed to consume it. In addition, airline seats and traveller are often described as being inseparable.

Heterogeneity refers to the service employee standards and service quality that customer receives (Bateson, 1995). A review of service literature indicated that there is complexity of service offering which is difficult to standardize. This is reflected on the following statement by Lashley (1988, p.25):

*“Service delivery is variable and difficult to standardize because of the personal nature of the contact between the customer and the service deliverer. Elements of human “chemistry” may affect performance, some individuals may be more personally committed to successful service encounters. Customers’ expectations of satisfactory service may well vary and be difficult to predict”.*

The previous statement suggests that the service delivery is variable and difficult to standardize, because service involves human elements. For instance, an air passenger may experience service from different employees during check-in or on-board service; this can result in a negative overall service standards and different quality impressions by customers. In the airline context, monitoring service performance has become a crucial task for airline managers and this has been noted by Looy et al., (2003, p.15):

*“Two cabin crews can go through the same motions, do the same tasks and yet the service given can be worlds apart. So much depends on how they do the things they do – what mood they’re in- and that we just can’t control, we can only try to influence”.*

Several studies noted that the airline employees work under stressful conditions in their daily tasks including handling ground service failures such as flight delays,

mishandled baggage, overbooking, and industrial strikes (Bamford and Xystouri, 2005; Waguespack et al., 2007; Rhoades and Waguespack, 2008). Therefore, employee job satisfaction plays a key role in the service performance. Rhoades (2006) examined the success factors of Southwest Airlines, concluded that employee job satisfaction has a direct influence on the service delivery standards. As with previous studies, they concluded that the seasonal demand and the high cost of employee turnover were found to have a significant impact on airline employee's service performance (Williams, 2002; Taneja, 2003; Raghavan and Rhoades, 2008).

The service standards of airline employees were found to have a direct relationship with human resources practices (Parast and Fini, 2010). The measurement of employee service standards has been an importance aspect of human resource management in service organisation (Parasuraman et al., 1985; Lashley, 1988; Gronroos, 2007). Prior empirical evidence shows that frontline employees' job satisfaction has a direct relationship with the employee service standards and its impact on customer evaluation of the service received. For example, Schneider and Bowen (1993, p.43) noted that employees need to feel that their own needs have been met within the organization before they can become enthusiastic about meeting the needs of their customers. Employee job satisfaction refers to the overall job satisfaction, wage, working hours, pension arrangements (Rhoades, 2006; Parast and Fini, 2010).

Perishability refers to the services offered by an airline cannot be stocked and airline seats cannot be held over long periods of time without paying any deposits or payment (Malaval and Benaroya, 2002; Pride and Ferrell, 2011). Additionally,

empty seats on an airline have a strong negative influence on the airline revenue. For example, Wyckham et al., (1975, p.62) argued that a product not sold today may be turned into cash tomorrow but a vacant airline seat today results in an irrecoverable loss. Research by Das and Reisel (1997, p.90) examined the effectiveness of airline marketing strategies and highlighted that the air-transportation sector is constrained by complete perishability of inventory and each time a flight departs with an empty seat there is a negatively effect on the airlines revenue. Clearly, perishability of airline services has a direct relationship with the operation of airline revenue. For example, Pride and Ferrell (2011, p.357) noted that the unfilled seat on an airline flight cannot be stored and sold to a passenger at a later date. This provides clear indication that the production and consumption of airline services must take place at the same time.

In addition, research in airlines revenue management has been increased significantly in recent years (Seristo, 1996; Elliott, 2003; Boyd, 2006; Kumar et al., 2009; Jain and Cox, 2011). Research by Boyd (2006) examined revenue of airlines management and his study highlighted that the important role of pricing strategies in airline revenue and the study suggested that airlines should hold the higher fare seats rather than lower fare seats, as this should help the airline to rebalance the profit margins from the unsold seats. It also maximizes the rate of higher business fare seats sold. The utilization of potential airline resources has significant effects on the unit of production costs and revenue performance of airline (Elliott, 2003). Therefore, controlling the perishability aspects of the product has an important part of airline operation.

### **2.4.1 Service performance**

Many of the earlier studies on services management highlighted the important role of managing service organization performance (Gronroos, 2000; 2007; Lovelock and Wirtz, 2010). The quality of service performance is identified as the major factor influencing customer satisfaction, loyalty, organization profitability and effectiveness (Parasuraman et al., 1993; Gronroos, 2000; Zeithaml et al., 2006; Kotler, 2010; Lovelock and Wirtz, 2010).

Service performance measurement is normally classified into the following three categories: expectation–performance; importance performance; and performance–only. (Kozak, and Nield, 1998, Fick and Ritchie, 1991, Yuksel and Rimmington, 1998). The expectation–performance approach is used to compare customer expectations and their perceptions of the service performance. The importance performance approach is used to determine which service quality aspect customers consider as important determinants of satisfaction (Kozak and Nield, 2001). The performance–only approach refers to service quality measures that are based only on consumers perception of the service performance (Brandy, 2002, p.17). Moreover, airlines service performance has been a popular area of research (Pakdil and Aydin, 2007; Tiernan et al., 2008; Kim and Lee, 2010; De Jager et al., 2012), with findings indicating that service performance has a major impact on passenger satisfaction and loyalty (Leong, 2008; Tiernan et al., 2008; Nejati et al., 2009).

#### **2.4.2 The role of organization culture in service performance**

This section presents the concept of organization culture and describes how organization culture is related to the service encounters. The studies include: British Airways (Bruce, 1987); Southwest Airlines (Laszlo, 1990; Bunz and Maes, 1998; Rhoades, 2006); Malaysia Airlines (Zaid, 1994); Singapore Airlines (Chan, 2000; Heracleous et al, 2009); El Al Israel Airlines (Herstein et al., 2008). The concept of Southwest's culture has been used regularly in airline management studies. For example, one of the definitions of Southwest's airlines culture was proposed by Bunz and Maes (1998, p.166) as being: "*Organizational culture of Southwest's is characterized by good employee-management relations*". The study highlights that Southwest's culture comprises the following three fundamental characteristics: the employee approach; organizational training; and strong leadership. The study found that the management of employee relations has a significant impact the quality of service delivery and that employee management relations had a significant effect on Southwest's culture which has resulted in long-term sales success.

In addition, previous studies in airlines management indicated that the organization culture is closely linked to corporate vision or mission statements. The empirical research has found that a strong vision in corporate aviation leads to profitability and that weak organization culture may negatively influence the standards of service delivered (Parasuraman, 1986; Gil et al., 2008). Moreover, increasingly many researchers have begun to investigate the role of organizational culture and its impact on service performance. For example, several studies found that airlines with a strong corporate vision have a significant impact on the efficiency of

employees in the service encounter (Zaid, 1994; Winsted, 1997; Chan, 2000; Rhoades, 2006). Also studies show that an effective organization culture was found to have the most significant impact on airlines employee performance and service behaviour (Zaid, 1994; Chan, 2000; Rhoades, 2006; 2006; Gil et al., 2008). Such studies support the conclusion of Parasuraman (1986), that a strong organization culture can reduce employee ambiguity. Similarly, Gil et al., (2008) highlighted that a strong service culture has a significant relationship with the employee performance and behaviour and may have influence on customer perceptions in service encounters.

Other studies have evaluated how the organizational culture impacts on airlines service performance. For example, Laszlo (1999) examined the service culture in Southwest Airlines. Using the Canada Awards for Excellence (CAE) framework to measure organizational quality and management principles, they concluded that the eleven principles in the mission statement of Southwest Airlines had a significant effect on the airlines service culture and performance. The Southwest Airlines principles are:

- southwest airlines is a service organization, employees are No. 1
- think small to grow big
- manage in good times for bad times
- have fun at work

Developing the theme of culture and performance, Zaid (1994) examined how an organisations vision affects service performance in Malaysia Airlines. The main

findings show that the organizational commitment has the most significant effect on organization service performance. The study also found that corporate culture, employee training, quality meals, information technology and airline advertisements had a significant positive impact on service performance. Similar results were obtained by Chan (2002) who examined the factors influencing service performance of Singapore Airlines. The main findings show that the strong and effective corporate culture had a significant direct influence on the service performance of Singapore Airlines. Rhoades (2006) also examined the critical success factors of Southwest Airlines and examined how the airline principles and employees satisfaction impact on service effectiveness and profitability of Southwest Airlines. The results highlight that the six key critical success factors that influence Southwest Airlines service performance include: mission statement, goals, service cultures, processes, policies and people.

### **2.4.3 Customer satisfaction**

The customer satisfaction concept has been defined by many authors such as: Oliver (1980); Kotler (1986); Gerson (1993); Gronroos (1994); Parasuraman et al., (1988); Hill et al., (2007). Oliver (1980) proposed the following two crucial elements to measure customer satisfaction: expectancy and disconfirmation. Expectation represents an anticipated level of performance (Lee et al., 2008. p.146). Disconfirmation is used to determine the relationship between customer expectations and perceived performance. For example, if perceived performance exceeds customer expectations, it would produce a positive disconfirmation and if perceived performance falls short of customer expectations, this can lead to



negative disconfirmation (Hamer, 2006, p.221). Churchill and Surprenant (1982, p.492) identified the following three elements of the disconfirmation model:

- Expectation: it is assumed that consumers anticipate the performance of a good or service in the pre-purchase situation.
- Performance: usually, in a post-purchase situation the consumer evaluates the performance of the good/service. The performance is conceptualized as standard against which the original expectation is compared.
- Disconfirmation: this is a crucial step in the comparison process between pre-purchase expectations and post-purchase performance perceptions. The consumer compares the initial expectation with the actual performance and may come up with one of three outcomes:
  1. Positive confirmation: The service/good performance as expected, which leads to medium satisfaction.
  2. Negative disconfirmation: The service/good does not perform as expected which leads to dissatisfaction.
  3. Positive disconfirmation: the service/good performs better than expected) a negative expectation is disconfirmed), which leads to satisfaction.

Kotler (1986 cited in Hill et al., 2007, p.31) argued that if the product matches expectations, then the consumer is satisfied; if it exceeds them, the consumer is highly satisfied; if it falls short, the consumer is dissatisfied. A different view was offered by Gerson (1993, p.11) who stated that if your customer is not satisfied, he or she will stop doing business with you. Gronroos (1994, p.15) defined customer

satisfaction as an evaluation made by the customer from their wide experience with a product or service.

In addition, the expectancy-disconfirmation measurement has been used regularly in customer satisfaction research. For example, Yoon and Kim (2000) examined the impact of expectation disconfirmation (e.g. positive and negative) on loyalty behaviour in automobile service in Korea. The results from 1,206 responses suggested that negative disconfirmation had a direct positive impact on customer satisfaction. The results show that negative disconfirmation has a stronger influence on repurchase decision than positive disconfirmation. This view was also supported by Lee et al., (2008) who examined the impact of expectation disconfirmation in retailer service in Midwestern state in the USA. Their results based on 328 useable questionnaires found that positive disconfirmation had a direct impact on customer satisfaction. Similar study reported by Ryu and Han (2011) further support the disconfirmation model based on 300 responses from restaurants in Seoul, Korea. The study found customers perceived disconfirmation had a significant impact on customer satisfaction and loyalty. The study proposed six factors for evaluating restaurant service quality, which included: facility aesthetics; lighting; ambience; layout; table settings; and service staff. The results show that the facility aesthetics were found to be most significantly influenced perceived disconfirmation. Facility aesthetics related to interior design or decoration in the restaurant. Their findings reflect those of Lopez-Mosquera and Sanchez (2014) examined the impact of expectation disconfirmation in visitor attractions in the Montede San Pedro Park and the Grajera Park, Spain using 404 questionnaires. The study found positive disconfirmation had a direct influence on visitor satisfaction. The results also

indicated that positive disconfirmation had a significant effect on customer willingness to pay and intention for repeat visits.

#### **2.4.4 Airline service quality**

In recent years, service quality issues have become a major challenge in the airline sector and airline service quality has been increasingly researched by academics over the past two decades (Kuo and Jou, 2014; Wittman, 2014; Suki, 2014; Waguespack and Rhoades, 2014).

Empirical research has demonstrated that airline service quality has a significant effect on traveller satisfaction, loyalty, positive word-of-mouth communication, firm profitability and competitive advantage (Parast and Fini, 2010; Dolnicar et al., 2011; Mikulic and Prebezac, 2011; Daft and Albers, 2012; Mayr and Zins, 2012; Nikbin et al., 2012). Prior empirical research has found that the quality of service provided by airlines has a direct relationship with traveller satisfaction (Kuo, 2011; De Jager et al., 2012; Steven et al., 2012; Singh and Sushil, 2013). Similarly, other research has noted that airline service quality is one of the most critical factors that influence travellers' selection of airlines (Ostrowski et al., 1993).

#### **2.4.5 Customer satisfaction with airline services**

Excellent passenger satisfaction is one of the greatest assets for airline businesses in today's competitive environment (Namukasa, 2013, p.521). The airline industry has become increasingly competitive, most operating airlines feel pressured and have to

respond quickly in order to survive in the industry (Wu and Liao, 2014, p.124). Therefore, with intense competition in the market, airlines need to improve their service quality in order to achieve competitive advantage and to remain competitive in the market (Singh and Sushil, 2013, p.251).

Moreover, there is strong evidence that customer satisfaction has a direct impact on profitability, market share, and return on investment (Barsky and Labagh, 1992; Fornell, 1992; Halstead and Page, 1992; Stevens et al., 1995). In addition, a range of airline services were found to have a significant impact on traveller satisfaction including: efficiency of service and friendliness of attendants (Tsaur et al., 2002); smoother baggage handling, and one stop check-in (Weber, 2005); frequent fly programs, in-flight entertainment and safety performance (Lu and Ling, 2008); responsiveness of the crew (Pakdil and Aydin, 2007; Nadiri et al., 2008; Nejati et al., 2009); in-flight entertainment, checking-in service, and convenience booking (Leong, 2008); flight cancellation and lost baggage (Kim and Lee, 2010); mishandled baggage (Sim et al., 2006; Rhoades and Waguespack, 2008); frequency of flights, on-time departures and arrivals, direct service to destinations and on-time luggage delivery on arrival, cabin cleanliness, quality of the food served, films and broadcasts during flights and the amount of food served during the flight (De Jager et al., 2012). The next two sections will review the literature relating to service quality in full-service airlines, low-cost carriers and airline alliances.

#### **2.4.6 Service quality in full-service airlines**

Full service airlines offer a range of services such as frequently scheduled flights, comprehensive in-flight entertainment, food and drink services and network linkages (Button, 2004; Kanafani and Kuroda, 2005; Pakdil and Aydin 2007; Nejati et al., 2009; Vervest et al., 2009; Wen and Chi, 2013).

Atalik (2007) examined frequent flyer customer perceptions of service quality in Turkish Airlines. The results highlighted the following five important factors of service quality factor for Turkish frequent flyers customers: (1) lack of free tickets and upgrades of the flight class; (2) behaviour of personnel; (3) card ownership issues (e.g. high miles needed to retain membership); (4) nature and level of priority services offered within the program and (5) lack of alliance with other airlines. The study concluded with the suggestion that the Turkish Airlines should add value to the frequent flyers programme and this will help to strengthen customer loyalty. Similarly, research by Pakdil and Aydin (2007) highlighted that service quality of Turkish Airlines has a significant relationship with the customer satisfaction. The study examined customer perceptions of service quality in Turkish Airlines. The results show that the responsiveness dimension was the most important to customers of Turkish Airlines and those of Nadiri et al., (2008) who found that the tangibles dimension had a significant effect on both customer satisfaction and repurchase intention in Turkish Airlines. Similar results were reported by Forgas et al., (2010) who concluded that customer satisfaction had a significant effect on customer loyalty. Responsiveness refers to the willingness to help customers or how the staff deals with customer requests and complaints (Zeithaml et al., 2006).

Tangibles relates to the appearance of employees or physical facilities (Parasuraman et al., 1988).

Investigating the airline service quality performance between the USA and EU, Tiernan et al. (2008) examined postgraduate students perception in universities in the USA and EU, (USA=104; EU=113), the study specifically addressed three main areas of airline service quality: on-time arrivals, flight cancellations and mishandled baggage. The key findings show: flights arriving on-time (US 71.63%; EU 77.58%); flights operating as scheduled (US 84.6%; EU 88.68%); bags delivered without problem (US 83.34%; EU 82.87%) were important to customer satisfaction. The results from the study confirm that the service quality of EU airlines on these key issues is generally higher than US airlines.

The traveller culture have been identified that influence customer service perceptions. For example, Lu and Ling's (2008) study offered a cross-cultural perspective on airline services between Taiwan and Mainland China. The study examined how different cultures impact on service perceptions. The results show that airline services such as frequent fly programs, in-flight entertainment and safety performance have a significant direct influence on the satisfaction of Taiwanese traveller's. By comparison, only in-flight entertainment was found to have a significant direct influence on satisfaction of mainland Chinese passengers. Other studies highlighted that airline service quality has a significant relationship with the customer satisfaction, for example, research by Nejati et al., (2009) examined customer perceptions of service quality in Iranian Airlines. The study proposed twenty two variables for evaluating service quality. The results highlight that the

most crucial factors of service quality that influence Iranian customers were: flight safety; good appearance of flight crew; and offering 24 hour customer service. Travel by air was found to be the most preferred transport by Iranian customers as compared to other modes of transport (e.g. bus, train or ship). The study also found that the overall service quality in Iranian Airlines had a significant negative aspects in comparison to foreign airlines and concluded that Iranian Airlines should improve within the areas of responsiveness of the crew and transfer services.

Investigating domestic airline service quality in both South Africa and Italy, De Jager et al., (2012) found timeliness and in-flight services are the most important service factors for both South African and Italian travellers. Timeliness consists of four key airline services: frequency of flights, on-time departures and arrivals, direct service to destinations and on-time luggage delivery on arrival. In-flight service elements comprised of five items: cabin cleanliness, quality of the food served, films and broadcasts during flights and quality of food served during the flight. The study concluded that both samples had similar views regarding the relative importance of airline service factors.

Examining the relationship between airline service failure attributions and customer satisfaction Nikbin et al., (2012) conducted study at Kuala Lumpur International Airport (KLIA) in Malaysia. The study found stability attribution to directly influence on customer satisfaction. The study also found severity of service failure plays a mediating role in the relationship between failure attributions and customer satisfaction. Stability attribution refers to several behavioural outcomes that negatively affect customer satisfaction (e.g. the causes of the service failure were

something: temporary/permanent; the causes of the service failure were something varies over time/stable over time, etc).

**Table 2.1: A summary of methods and sample size used in airline service quality studies**

Author/Year	Journal	Sample	Methods/methodology
Atalik (2007)	Management Research News	608	Online self-completed survey / quantitative design
Pakdil and Aydin (2007)	Journal of Air Transport Management	385	A questionnaire survey/ quantitative design
Tiernan et al. (2008)	Managing Service Quality	217	A questionnaire survey/ quantitative design
Nadiri et al., (2008)	Total Quality Management Journal	583	A questionnaire survey/ quantitative design
Lu and Ling's (2008)	Journal of Air Transport Management	404	A questionnaire survey/ quantitative design
Nejati et al., (2009)	International Journal of Quality and reliability Management	231	A questionnaire survey/ quantitative design
Forgas et al., (2010)	Journal of Air Transport Management	1700	A questionnaire survey/ quantitative design
De Jager et al., (2012)	Journal of Air Transport Management	335	A questionnaire survey/ quantitative design
Nikbin et al., (2012)	Journal of Air Transport Management	193	A questionnaire survey/ quantitative design

#### **2.4.7 Service quality in low-cost carriers (LCC)**

A LCC is an airline that offers low fares (Button, 2004; Vervest, 2009; Goeldner and Ritchie, 2009). LCCs have reshaped the competitive environment within liberalized markets and have made a significant impact in domestic markets (O'Connell and Williams, 2005). Competitive price advantage is the key factor behind the success of low-cost carriers (Goodrich, 2002).

Previous research has noted that airline service quality is one of the most critical factors that influence customer satisfaction. For example, Tsaur et al., (2002)



examined 211 customer perceptions of low-cost airline services in Taiwan. They used the analytic hierarchy process method (AHP) to calculate the criteria weights and comparative importance criteria and the results highlight the following five important criteria of services: courtesy of attendants (0.105), comfort and cleanness of seats (0.09), safety (0.09), responsiveness of the crew (0.084) and on-board entertainment (0.045). These results confirm that courtesy of attendants i.e. the efficiency of service and friendliness of attendants plays a significant role in customer satisfaction. Similarly, Leong (2008) highlighted that poor airline service quality performance has a significant influence on customer satisfaction. For example, they conclude that in-flight entertainment, checking-in service, and convenience booking were highlighted as significant factors that Singapore nationals value in determining customer satisfaction. As such, concentrating resources in these areas positively affects customer satisfaction.

There is significant growth of low-cost airlines in Asian countries and many researchers have identified and explored the important issues of service quality factors that had a significant influence of low-cost airlines service performance. For example, research by Kim and Lee (2011) examined customer satisfaction using low-cost airlines in South Korea. The study used the SERVQUAL scale to measure customer perceptions of service quality on the five service quality dimensions: reliability, assurance, tangibles, responsiveness and empathy. The study was based on 244 useable questionnaires from passengers who travel frequently on domestic flights from three major airports: Kimpo, Kimhae and Cheju. All the questionnaires were distributed in three main areas: boarding gates and both departure and arrival lounges. The results indicated that two dimensions (tangibles and responsiveness)

were the most important in determining Korean passenger satisfaction. Tangible refers to the physical facilities of aircraft, in-flight entertainment standard. Responsiveness is related to willingness of staff to help passengers to solve problems e.g. flight cancellation and baggage lost. Their findings support research by Pakdil and Aydin (2007) and Nejati et al., (2009) who also found responsiveness to be significantly important and Nadiri et al., (2008) results which also highlight the importance of the tangible dimension.

Examining the relationship between airline image customer value and behavioural intentions, Yang et al., (2012) examined low-cost airline services in Taiwan. The study used convenience sampling method targeting business travellers, students and backpackers through an online self-complete survey and 458 useable questionnaires were obtained. Structure Equation-Modelling (SME) was used to measure the constructs of the study (e.g. service quality, airline image, behavioural intentions, etc). A total of five hypotheses were tested in the study. The results show the following hypotheses were accepted: service quality has a positive impact on customer value; service quality has a positive impact on airline image; customer value has a positive impact on behavioural intentions and service quality has a positive impact on behavioural intentions. The study found service quality had a significant influence on customer value, airline image and behavioural intentions. The study also found airline image have no direct effect on customer repeat intentions.

#### **2.4.8 Airline alliances**

Airline alliances research have increased significantly in recent years (Evan, 2001; Weber and Sparks, 2004; Duval, 2005; Weber, 2005; Tsantoulis and Palmer, 2008; Weber and Spark, 2009). Airline alliances can be described as a collaborative arrangements between two or more airlines that including agree fares pricing, air routes or arrange flight schedules together (Evans, 2001; Weber, 2005). The major benefit of airline alliance is that alliance agreement allows customer to purchase air ticket with the partner airlines (Weber and Sparks, 2004). Additionally, the service failure event in airline alliance settings has a strong negative influence on customer satisfaction. A study by Weber and Sparks (2009) found that service failure in airline alliance settings had a negative influence on customer evaluation of the airline services (e.g. individual or partner airline). Similarly, an earlier study in airline alliances found that service failure issues for airlines in an alliance were significantly affected by service failure of a partner airline and the study also found airline alliances post-recovery satisfaction have a significant effect on customer loyalty (Weber and Sparks, 2004).

Examining the impact of collaboration strategy in the international airline alliances Evans (2001) evaluated motivation factors, and the benefits of the international airline alliances. Strategic alliance literature was used as the main source of analysis that included: *Strategic Management Journal*, *Harvard Business Review*, *The journal of marketing*, *the Journal of Strategic Marketing*). The study highlighted the motivation factors for airline alliances and categorised internal and external factors that influence airline alliances. The internal factors are: risk sharing; economics

scales; scope and learning; access to assets; resources and competencies; and shape competition. External factors include: the information revolution; economic restructuring; and global competition. The key findings show that international airline alliances do not significantly benefit the consumers when purchasing a ticket in terms of geographic coverage.

Developing the concept of airline alliances Weber (2005) examined 819 passengers perception of airline alliances amongst at Hong Kong International Airport. The study proposed the following ten factors for examining customer perceptions of airline alliance benefits: ease of transfers between flights; smoother baggage handling, one-stop check-in; better assistance in case of problems; respectful treatment; consistently high service quality; ability to earn frequent flyer points; improved connections; expanded route network and access to partner lounge, the study found the three most important benefits of airline alliance that had a direct impact on customer satisfaction were: the ease of transfers between flights; smoother baggage handling; and one stop check-in. The results also indicated that access to partner lounges was the most important to the customers in lower household income and earn frequent flyer points was found to be the most important to the customers in high household income.

Similar results, were reported in the early study by Weber and Sparks (2004), they found service failure issues for airlines in an alliance were significantly affected by service failure of a partner airline. The study concluded with the suggestion that airline alliances are no longer only concerned about their own service standards and policies relating to service failure events but also need to be mindful of those of

their partner airlines. This conclusion was also supported by Duval (2005) who examined the public and stakeholder perceptions of airline alliances in Air New Zealand and Qantas Airways. The study also found that the government of New Zealand having majority of ownerships in Air New Zealand had a significant negative influence on New Zealand public. These studies further highlight the important of service quality in airline alliances.

Investigating the relationship between individual airline service quality and co-brand alliance, Tsantoulis and Palmer (2008) found that joining a co-brand alliance had no significant direct effect on individual airline service quality. Weber and Spark (2009) evaluated perception of 255 students from Eastern United States. The findings show that pre-consumption mood did not appear to impact consumer evaluations and behaviour. The study also found high interactional justice had a significant direct influence service recovery satisfaction. Consumer's pre-consumption mood (e.g. positive or negative) is related to the service employee behaviour (Liljander and Mattson, 2002). In summary, previous empirical studies in all areas relating to airlines service have highlighted important factors in determining positive customer perceptions of airline service quality. Table 2.1 summarizes some examples of service quality aspects of the 20 empirical studies discussed in above.

**Table 2.2: A summary of the most important airline service quality aspects**

Author	Year	Context	Main findings/ the important of airline service quality aspects
Evans	2001	Airline alliances service quality	The study highlighted the motivation factors for airline alliances and categorised internal and external factors that influence airline alliances. The internal factors are risk sharing, economics scales, scope and learning, access to assets, resources and competencies and shape

			competition. External factors include the information revolution, economic restructuring and global competition.
Tsaur et al	2002	Service quality in low-cost airlines	The study found the efficiency of service and friendliness of attendants plays a significant role in customer satisfaction.
Weber and Sparks	2004	Airline alliances service quality	The study suggested that airline alliances are no longer only concerned about their own service standards and policies relating to service failure events but also need to be mindful of those of their partner airlines.
Duval	2005	Airline alliances service quality	The study found that the government of New Zealand having majority of ownerships in Air New Zealand have a significant negative influence on New Zealand public.
Atalik	2007	Service quality in full service airlines	The results highlight five important factors of service quality that reduce Turkish frequent flyers customer: (1) lack of free tickets and upgrades of the flight class. (2) behaviour of personnel. (3) card ownership issues (e.g. high miles needed to retain membership). (4) nature and level of priority services offered within the program. (5) lack of alliance with other airlines.
Pakdil and Aydin	2007	Service quality in full service airlines	The results show that the responsiveness dimension was the most important to the customers of Turkish airlines.
Tiernan et al	2008	Service quality in full service airlines	The key findings show that the differences between US and EU airlines service quality: flights arriving on-time (US 71.63%; EU 77.58%); flights operating as scheduled (US 84.6%; EU 88.68%); bags delivered without problem (US 83.34%; EU 82.87%). The results from the study confirm that the service quality of EU airlines on these key issues is generally higher than US airlines.
Nadiri et al	2008	Service quality in full service airlines	The study found appearance of employees and onboard facilities had a significant impact on customer satisfaction and repurchase intention.
Lu and Ling.	2008	Service quality in full service airlines	The results show that airline services such as frequent fly programs, in-flight entertainment and safety performance have a significant direct influence on the satisfaction of Taiwanese traveller's. By comparison, only in-flight entertainment was found had a significant direct influence on satisfaction of mainland Chinese passengers.
Leong	2008	Service quality in low-cost airlines	The study found in-flight entertainment, checking-in service, and convenience booking were weaknesses. The study concluded with the suggestion that the management should allocate more resources to make improvements in these areas.
Tsantoulis and Palmer	2008	Airline alliances service quality	The results show that joining a co-brand alliance had no direct effect on individual airline service quality.
Weber and Spark	2009	Airline alliances service quality	The study found pre-consumption mood did not appear to impact consumer evaluations and behaviour. Consumer's pre-consumption mood (e.g. positive or negative) is related to the service employee behaviour.
Nejati et al	2009	Service quality in full service	The main results highlight that the most crucial factors of service quality that influence Iranian customers are: flight safety, good appearance of flight crew and offering 24

		airlines	hour customer service.
Forgas et al	2010	Service quality in full service airlines	The study found trust and overall customer satisfaction had a significant effect on customer loyalty.
Chang and Chang	2010	Service quality in full service airlines	The results show that interactional and procedural justice both had a significant effect on recovery satisfaction. The study concluded that recovery satisfaction plays a mediating role in the relationship between service recovery and overall satisfaction.
Kim and Lee	2011	Service quality in low-cost airlines	The results indicated that two dimensions (tangibles and responsiveness) were the most important in determining Korean passenger satisfaction.
De Jager et al	2012	Full service airlines	The study found timeliness and in-flight services are the most important service factors for both South African and Italian travellers.
Nikbin et al	2012	Service quality in full service airlines	The study found customer satisfaction had a significant effect on switching intention.
Yang et al	2012	Service quality in low-cost airlines	The study found service quality had a significant influence on customer value, airline image and behavioural intentions.
Wen and Chi	2013	Service quality in full service airlines	Procedural and the interactional justice were found had a significant direct influence customer's positive emotion.

## 2.5 The concept of service failure

Service failure can be defined as the specific events that lead to customer dissatisfaction (Bitner et al., 1990). A growing body of service failure and recovery literature has emerged in the past two decades. For example, Kelley et al., (1993) suggests that a service failure occurs when customer perceptions of service delivery do not meet customer expectations. Service failures represent a threat for firms, creating both customer dissatisfaction and incentives to switch service providers (Hirschman, 1970; Fornell and Wernerfelt, 1987; Keaveney, 1995). Similarly, other research has noted that service failure may lead to a breakdown in the relationship

between a customer and the service organization, generating negative word-of-mouth communication and negative future behaviours (Ha and Jang 2009, p.319). In this respect, all these types of failures bring about negative feelings and responses from customers and left unfixed, they can result in negative word-of-mouth and customers leaving and results in disloyalty (Zeithaml et al., 2006).

Service failure has been defined in a number of ways in the service literature. For example, Kelley et al., (1993, p.446) provide one of the simplest definitions for service failure: *“a service failure occurs when customer perceptions of service delivery do not meet customer expectations”*. A number of different perspectives underpinning the concept of service failure are shown below:

- A service failure can be defined as the specific events that lead to dissatisfying service encounters for the customer and including the unavailability of a service, slow service and errors in delivery (Bitner et al., 1990, p.72);
- A service failure is often described as the service performance that falls below a customer's expectations (Hoffman and Bateson, 1997, p.24);
- A service failure can be defined as the performance of service providers fails to meet customer expectations (Dasu and Rau, 1999, p.33);
- A service failure is defined as the service provider strives to meet customers' needs and expectations and they, in turn, depart largely satisfied (Mudie and Pirrie, 2006, p.122);



- Service failure occurs when outcomes of service delivery (reliability) are inadequate, or if processes associated with service delivery do not meet expectations such as tangible, responsiveness, assurance and empathy (Bhandari et al., 2007, p.175).

Service failure can have negative impact on customer satisfaction, negative word-of-mouth communication, intention to repurchase and loyalty. Jones and Farquhar (2007) examined customer perceptions of banking services in the UK. The study investigated the relationship between post-recovery satisfaction and loyalty. The study used a convenience sampling method targeting e-banking customers through an online self-complete survey. A five-point satisfaction scale was used to measure the questionnaire items and variables of the study. The study was based on 1,995 responses from bank customers and the results show that a weak service recovery had a significant influence on customer loyalty. The study also found minor service failure had a direct effect on the customer loyalty behaviours. These conclusions were supported by Sousa and Voss (2009) who used a five point scale to establish 5,942 customer perception of using e-banking services in Porto, Portugal.

Previous study in service failure and recovery indicated that customer recovery satisfaction, trust and loyalty are closely linked to repurchase intention. For example, Choi and La (2013) investigated the relationship between corporate social responsibility (CSR), recovery satisfaction, customer trust, and loyalty. The study based on 371 responses from students studying business at West Coast University, U.S.A. Used a variety of services as the context of analysis including: restaurants;

cable services; financial services; airline services; lodging services; and retailers. The results suggest that customer perceptions of an organisation CSR had a significant influence on customer trust and loyalty. The study also found customer trust plays a mediating role in post-recovery satisfaction. Corporate social responsibility (CSR) refers to responsiveness to service failure (e.g. service provider's poor responses to service failure). Similar results were obtained from De Matos et al., (2013) who investigated the relationship between post-recovery satisfaction, switching costs and loyalty in bank services in Sao Leopoldo, Brazil. The study was conducted via a telephone survey with 1,878 prospective participants who have experienced a service incident in the past twelve months. The study found post-recovery satisfaction had a direct influence on customer switching costs, positive word-of mouth and loyalty. Similarly, Cowart et al., (2014) highlighted that recovery satisfaction has a strong relationship with customer loyalty, for example their findings show that service failure which had a significant moderating effect on the relationship between brand equity and behavioural intention. Those of Schumann et al., (2014) who found similar results, a service failure by a company has an indirect negative effect on program loyalty. Clearly, the findings of these studies indicated that the important of service recovery satisfaction, therefore, service provider should respond quickly to all customer complaints and service staff with good manners, this may help to calm down an unhappy customer, also it can help to increase post-recovery satisfaction. Moreover, several studies found that post-recovery satisfaction have a significant impact on customer loyalty (Hess, 2008; Kalamas et al., 2008; De Matos et al., 2009).

### **2.5.1 The major causes of service failure for airlines**

Bamford and Xystouri (2005) identified that the majority of complaints for airlines were of three major types: first, flight delays (usually technical in nature); second, service interruptions (e.g. through frequent strikes); third, consumer complaints regarding the attitudes of ground staff. However, a study by Chen and Chang (2010, p.340) argued that “even the best airlines periodically suffer from some form of service failure, such as overbooking or delayed flights”. Research by Sim et al., (2006, p.293) noted that “lower service quality (e.g., flight delays, mishandled baggage, or passenger complaints) may negatively affect sales revenue”. Some of the most common causes of failure incidents for airlines are listed below:

- Industrial strikes (Bamford and Xystouri, 2005).
- Mishandled baggage (Sim et al., 2006; Rhoades and Waguespack, 2008).
- Overbooking (Chang, 2010).
- Technical problems caused flight cancellation or bad weather caused delays (Waguespack et al., 2007; Tiernan et al., 2008).

### **2.5.2 The impacts of service failure on repurchase intentions, word-of-mouth communication and loyalty**

Previous studies reported service failure has a significant impact on customer repurchase intentions (Petrick et al., 2006; Hess, 2008; Kalamas et al., 2008; De Matos et al., 2009).

Repurchase intentions (RI) refers to the customer belief that he or she would purchase from the same service firm at some future date (Schofer, 2002, p.138). RI can be described as the subjective probability that an individual will continue to

purchase products from the store in the future (Fang et al., 2011, p.484). This view is supported by Hess (2008) who investigated the effects of a firm's reputation for service quality on customer responses to service failures in airlines and restaurant services in Virginia, USA. The study was based on 322 responses from volunteer customers who frequently used air travel and restaurant services. The results indicated that service failures had a direct impact on customer repurchase intentions. This conclusion was also proposed by Oh (2003), Kalamas et al., (2008) and De Matos et al., (2009). However, Studies on post-recovery satisfaction have indicated that they a significant impact on customer repurchase intentions. For example, Lin et al., (2011) found that service recovery satisfaction had a significant direct influence on repurchase intentions. Vaerenbergh et al., (2013) research indicated that post-recovery satisfaction to be significantly correlated with customers repurchase intentions.

### **2.5.3 Word-of-mouth communication (WOM)**

Service failure research suggests that severity of failure and failure criticality leads to customer negative WOM communication. For example, Westbrook (1987, p.261) defined WOM as informal communication directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers (Westbrook, 1987, p.261). This compares to one definition proposed by Harrison-Walker (2001, p.63) who see WOM as informal, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, an organization or a service. The above definitions provide a broad perspective of WOM. Moreover, WOM can be divided into two

types: positive and negative. Positive WOM refers to strongly recommend to repurchase (Okazaki, 2012, p.328). Whereas, negative WOM communication can be described as unhappy customers who talk and tell others customers why they wouldn't buy the products and services (Tyson and Schell, 2012, p.232).

Research by Weun et al., (2004) found failure severity had a direct impact on customer WOM communication. This view is also supported by Chelminski and Coulter (2011) reported that failure severity has a direct influence on customer WOM communication. Similar results were found in the works of Nikbin et al., (2011), Balaji and Sarkar (2013) and Choi and Choi (2014). Such research is linked to work on how post-recovery satisfaction influences word-of-mouth communication as reflected in the work of Noone (2012) who reported that post-recovery satisfaction is significantly correlated with WOM communication, Balaji and Sarkar (2013) and Choi and Choi (2014) who found post-recovery satisfaction had a negative impact on WOM.

#### **2.5.4 Loyalty**

Service failure has been demonstrated to moderate the relationship between service failure and loyalty (Komunda and Osarenkhoe, 2012; Choi and La, 2013; Wen and Chi, 2013; Choi and Choi, 2014). Loyalty refers to the extent to which the customer intends to purchase again from the supplier who has created a certain level of satisfaction (Law et al., 2004, p.548). Craighead et al., (2004) examined the effects of severity of failure and customer loyalty. The data was collected from undergraduate business students at the University of Auburn and University of

South Carolina, U.S.A. Food service, auto repair and retail services were used as the context of analysis and the study found severity of failure had a significant impact on customer loyalty.

Previous research reported that there was a significant relationship between positive word-of-mouth communication and customer loyalty. For instance, research by Dolnicar et al., (2011, p.1024) examined the factors impact on customer loyalty. The loyalty factors included: frequent flyer membership; price; and word-of-mouth reputation. The results indicated that word-of-mouth reputation had a direct impact on customer loyalty. Loyalty aspect has been a common area of research, especially in the context of service failure and recovery. For example, Komunda and Osarenkhoe (2012) examined the impact of service failure on customer satisfaction and loyalty in banking service in Kampala, Uganda. The results indicated that had satisfaction service recovery had a significant impact on customer loyalty. Choi and La (2013) investigated the relationship between corporate social responsibility (CSR), recovery satisfaction, customer trust, and loyalty, and concluded that perceived CSR had a significant influence on customer trust and loyalty. CSR refers to the organisation responsibility of the service failure (e.g. how well the service provider handles the service failure).

A number of studies indicated that restaurant service failure has a direct influence on customer revisit intention (Mattila 2001; Kim et al., 2010; Kim and Hancer, 2010). For example, research by Othman et al., (2014) examined the factors influencing customer loyalty in restaurant service in Malaysia based on 481 useable questionnaires, the results show that service delivery system failure had a direct

impact on customer satisfaction. Service delivery system failure related to service factors such as food out of stock, unpleasant smell, long waiting time, unpleasant food presentation, unbearable noise level and inconsistent service. Post-recovery satisfaction was found to have a significant influence on behavioural intention. The study also found apology and explanation had a significant on post-recovery satisfaction. The importance of employee-initiated in improving post-recovery satisfaction was highlighted by Xu et al., (2014).

## **2.6 The role of service criticality**

The concept of service criticality is defined as service failure that has a critical impact on satisfaction. The high criticality situation refers to the service failure which results in significant inconvenience and highly dissatisfied (Wenster and Sundaram, 1998, pp.155). The low criticality condition represents a situation/event in which service failure would not cause significant inconvenience to the customer (Wenster and Sundaram, 1998). This view was also supported in the works of Levesque and McDougall (2000) and Weun et al., (2004) who concluded that service failure has a negative impact in dissatisfaction, loyalty and word-of-mouth communication. Service criticality has been found to effect consumer evaluations of service outcomes (e.g. Ostrom and Iacobucci, 1998; Hoffman and Kelly, 2000). Research by Watson (2012) showed that service failures that occur in high criticality situations elicit greater complaint behaviour than those occurring in low criticality situations.

Similarly, Berry and Parasuraman (1991) previously found that critical service errors have a strong negative influence on whether a customer continues his/her relationship with the service provider. Culture issue is always a major aspect in service quality research and airlines service failure literature (Zaid, 1994; Winsted, 1997; Chan, 2000; Rhoades, 2006; Lu and Ling's 2008). For example, Lin's (2010) study offered a cross-cultural perspective on service failure in the context of life insurance in Taiwan and Hong Kong. The findings show that criticality of failure had a significant effect on customer satisfaction.

#### **2.6.1 The concept of service failure severity**

The concept of service failure severity is defined as the serious or magnitude of loss experienced by customers from a service failure incident (Smith et al., 1999 and Weun et al., 2004). The increasing number of studies interest in examining service failure severity (e.g. Smith et al., 1999; Levesque and McDougall, 2000;; Zeithaml et al., 1993; McQuilken and Bednall, 2008). Moreover, the seriousness of the service failure event has a strong negative influence on customer intentions to switch to other service providers and results in disloyalty. Research by McQuilken and Bednall (2008) found that the severity of service failures had a significant negative influence on customer satisfaction and Weun et al., (2004) found that service failure severity is commonly associated with customer disloyalty and negative word-of-mouth communication. Similarly, research by Wang et al., (2011) found that service failure severity had a significant negative relationship with customer loyalty.



Investigating the impact of service failure severity on customer satisfaction, trust, commitment, and negative word-of-mouth communication, Weun et al., (2004) examined responses to scenarios from 1,070 students and church volunteers in South Korea. The findings show that service failure severity had a significant negative impact on customer satisfaction, trust, commitment, and negative word-of-mouth communication. Similar results, were reported that by Craighead et al., (2004) from their study into 861 students perception of experiences fast food, auto repair and retail services. Since 1999, the publication of service failure severity by Smith et al., many other researchers has explored this context to different service categories and different country settings. For example, Hess (2008) investigated the relationship between service failure severity, recovery satisfaction, firm reputation and repurchases intentions in restaurant service and a sample of 322 useable questionnaires were obtained from the passengers who waiting at boarding gates in Virginia airport, U.S.A. The results show that firm reputation had a significant direct moderated the relationship between failure severity and satisfaction. The study also indicated that the lowered attributions of controllability and stability have a significant effect on repurchase intentions. Similarly, another study in service failure severity had found that the seriousness of failures had a significant negative influence on customer satisfaction (McQuilken and Bednall, 2008).

The relationship between service failure severity, customer satisfaction and loyalty has been the focus of research. For example, Wang et al (2011) concluded that failure severity, interactional justice, procedural justice and perceived switching costs have a significant relationship with customer loyalty and that interactional justice had a negative relationship with both service failure severity and customer

loyalty. As such, perceived justice plays a mediating role in the relationship between customer satisfaction and loyalty. The two justice dimensions (e.g. interactional and procedural) were the most important in determining recovery satisfaction and the study suggests that management should improve resource within the areas of responsiveness of the service staff (interactional justice) and speed of response to the service failure incident (procedural justice) if customer satisfaction is to be improved. Swanson and Hsu (2011) developed the theme of severity by evaluating its impact on negative word of mouth communications (WOM) and repurchase intentions in the hospitality sector. Their findings reflect those of Wang et al (2011) who conclude that failure severity and perceived justice in service recovery have a strong negative influence on customer loyalty and that post-recovery satisfaction has a significant direct influence on WOM. It also reflects conclusions proposed by Betts et al (2011) who found that perceived company control of service failure had a direct impact on word of mouth communications. These studies further highlight the need for a proactive approach to managing the service recovery process.

Similar conclusion were made by Kim and Ulgado (2012) who examined customer perceptions of service failure severity, recovery satisfaction and repurchase intentions. Their results show that failure severity moderates the relationship between satisfaction and repurchase intention and failure severity moderates the effects of compensation timing on repatronage intentions. As such, on-the-spot compensation generates more repatronage intentions when service failure is perceived to be severe and delayed compensation leads to more repatronage intentions for non-severe failure.

## **2.7 The concept of justice in the service failure and recovery context**

The concept of justice is defined as a theoretical framework for customer assessment of service fairness (Palmer, 2011) and is derived from equity theory (Adams, 1965). Justice theory consists of three key dimensions: distributive justice, procedural justice and interactional justice. The dimensions of justice were developed by different authors such as distributive justice by Adams (1965), procedural justice by Thibaut (1975) and interactional justice by Bies (1986). For the definitions of justice dimensions and measurement constructs. The main features of the justice dimensions are highlighted in the following section.

- Distributive justice refers to the tangible compensation that includes coupons/ vouchers, discounts on future purchase, refunds, repairs, replacements and monetary rewards (Kelley et al., 1993; Blodgett et al., 1997; Tax et al., 1998; Maxham and Netemeyer, 2002; Homburg and Furst, 2005).
- Procedure justice relates to management process control, timeliness (e.g. speed of response), accessibility and flexibility in the procedure and company policies (Blodgett et al., 1997; Tax et al., 1998; Maxham and Netemeyer, 2002).
- Interactional justice relates to the service staff responsiveness and manner during the service recovery and complaint handling process. The key elements for interactional justice that include politeness, respect, explanation, and helpfulness and effort to resolve the customer problem (Smith et al., 1999; Maxham and Netemeyer, 2002; McColl-Kennedy and Sparks, 2003).

Perceived justice is identified as the key influence customer satisfaction that includes: aspect of customer satisfaction, word-of-mouth communication and repurchase intention in the research of service recovery (Chebat and Slusarczyk, 2005; Schoefer and Ennew, 2005; Del Rio-Lanza et al., 2009). Prior studies have found that achieving high levels of satisfaction with complaint handling depends on an organization achieving high levels of distributive, procedural and interactional justice (Tax et al., 1998). Similarly, perceived justice can affect customer emotions or satisfaction in certain service recovery situations (Chebat and Slusarczyk, 2005 and Rio-Lanza et al., 2009).

Justice dimensions (i.e. distributive, procedure and interactional) have been applied to a variety of sectors, for example, online retailer services by Lin et al., (2011), Wang et al., (2011); Lii and Lee, (2012); organizational studies by Klendauer and Deller, (2009), Nasurdin and Khuan, (2011); financial services Chen et al., (2012); Worthington and Devlin, (2013); telecommunications by Shapiro and Gonder, (2006); Nikbin et al., (2012); tourism by Schoefer and Ennew, (2005), Park et al., (2008), Wen and Chin, (2013); restaurant by Namkung et al., 2009) and hotels by Hwang and Wen, (2009), Noone, (2012).

Perceived justice have been identified that influences on customer post-recovery satisfaction, negative emotion, word-of-mouth communication and intention to repurchase (Schoefer and Ennew, 2005; Del Rio-Lanza et al., 2009; Nasurdin and Khuan, 2011; Noone, 2012; Wen and Chin, 2013). For example, research by McColl-Kennedy and Sparks (2003) investigated customer perception of perceived

justice on satisfaction and the role of customer emotions in the service failure and recovery in tourism and hospitality services. Based on 32 interviews in Australia, the study proposed the following four categories for evaluating service failure issues: service issues (e.g. didn't get business class seat overcooked/undercooked meal, cold meal, etc); service providers employee behaviour issues (i.e. jokes, rudeness, etc); outside the service provider's control issues (e.g. wet weather power cut delayed flight, etc) and customer related issues (e.g. sick/heart attack too short for theme park ride guest injures himself/herself, etc). The results showed that when service providers did not appear to put effort into correcting perceived errors, service recovery had a significant direct influence on customer negative emotions. These results have also been reflected in the work of Rio-Lanza et al., (2009). Examining the impact of perceived justice on customer's post-recovery perceptions in restaurant services, Mattila and Patterson (2004) used experimental methodology (scenarios) to examine 561 customer perceptions of restaurant service failure. The findings confirmed that perceived fairness in service recovery had a significant direct influence on post-recovery satisfaction.

A number of current studies have extended the gaps in existing literature by analyzing the different variables that may have a direct influence on customer recovery satisfaction and loyalty aspect (Kau and Loh 2006; Lin et al., 2011; Lee and Park, 2010). The variables that include in the following: WOM, revisit intention and negative emotion. For example, Kau and Loh (2006) investigated the relationship between customer perceived justice on recovery satisfaction, trust, word-of-mouth communication (WOM) and loyalty. The study was conducted in the cell-phone services context. The study used a convenience sampling method

targeting students and university staff through an online self-complete survey and 428 useable questionnaires were obtained from students at the National University of Singapore. The study found distributive justice has a significant impact on customer recovery satisfaction. The study also found recovery satisfaction had a significant direct influence on customers trust, WOM and loyalty. Similar results were found in the work of Kim et al., (2009) who concluded that interactional justice was found to have the most significant effect on recovery satisfaction, trust, word-of-mouth communication and revisit intentions. Lin et al., (2011) found similar results in the study based on online retailing in Taiwan.

Apart from the tests with the relationship between different variables, the researchers are also looking at the different country settings, one of the major reasons, is because may possible increase the reliability and validity of the results. For example, Lee and Park (2010) examined customer perceptions of perceived justice on recovery satisfaction in online retail service in U.S.A. The data were collected through the web-store reviews from five different websites: bizrate.com, buzzillions.com, dealtime.com, epinion.com and viewpoints.com. The online retail products were selected that include: apparel, accessories and footwear and a total of 743 useable data were selected for analyses. The findings show that distributive and procedural justice dimensions has a significant direct influence on customer satisfaction. The results also indicated that both distributive and procedural justices were found to have a significant impact on two separate service failure stages (i.e. the initial service failure and recovery failure stages). Service failure stages refer to the customers who experience service incidents in multiple service failures or either two separate service failure stages (Shostack, 1985; Smith et al., 1999).

Investigating the impact of service fairness on customer loyalty in hotel service in Guangzhou, China, Robert et al., (2011) examined 601 from hotel guests in 3 and 4-star hotels in Guangzhou. The results from their study show that distributive justice has a direct influence on customer trust and post-recovery satisfaction. The study also found procedural justice had a significant impact on customer loyalty. The results also indicated that distributive justice had a significant direct influence on the satisfaction of Chinese customers and interactional justice had a significant direct influence on loyalty of Western customer.

Moreover, the restaurant service failure and perceived justice in service recovery has been the focus of research in recent years. For example, investigating the relationship between complaint behaviour intentions and expectations of service recovery in fast-food restaurant service, Park et al., (2014) analysed 304 self-administered questionnaires which were distributed to American students in Korea (n=90) and USA (n=214). The results show that three justice dimensions (i.e. distributive, procedural and interpersonal justice) have significant impact on satisfaction and post-complaint behaviour intentions of American students. Interactional justice was found had a significant impact on satisfaction and post-complaint behaviour intentions of Korean students. This conclusion was also support by Chang and Chang (2010) examined the impact of the three following dimensions of perceived justice: interactional, procedural and distributive justice on service recovery satisfaction and overall satisfaction. Face-to-face interviews with passengers at Taoyuan International Airport in Taiwan and a sample of 257 useable questionnaires were obtained from passengers who had previously experienced

service failure and recovery. The results show that both interactional justice and procedural justice have a significant effect on recovery satisfaction.

Similar findings were found by Wen and Chi (2013) examined customer perceptions of domestic airline service in China, based on 581 responses from passengers who travel frequently on domestic flights in Baiyun International Airport in Guang Zhou, China. The results indicate that both interactional justice and procedural justice have a significant effect on recovery satisfaction. These results also support by Choi and Choi (2014) investigated the relationship between perceived justice, word-of-mouth and loyalty and 356 useable questionnaires were obtained from students at the West Coast University, USA. The service types were selected that include restaurants, cable services, financial services, airline services, lodging services and retailers. They concluded that procedural justice and interactional justice had a significant influence on customer satisfaction.

Based on above studies, it must be acknowledged that the negative impact of perceived justice on satisfaction has a direct influence on customer repurchase intention. Therefore, how the complaints are handled properly has become a significant role in post-recovery satisfaction and customer loyalty. Other studies have examined how service failure and perceived justice impact on customer emotion and satisfaction. For example, Tsai et al., (2014) investigated the relationship between service failure and perceived justice in restaurant service in Taiwan. The study used experimental methodology (scenarios) relating to restaurant service failure (i.e. service employee behaviours). The study was based on 572 responses from the undergraduate students who studying management course at



National Yunlin University of Science in Yunlin. The following conclusion were established: process failures lead to significantly greater negative reactions compared to outcome failures; process failures cause significantly stronger feelings of betrayal compared to outcome failures; physical recovery leads to a significantly stronger sense of perceived justice than psychological recovery does; physical recovery leads to a significantly stronger sense of distributive justice than psychological recovery does and perceived justice has a significantly positive effect on service-recovery satisfaction. The results show that psychological recovery had a significant impact on post-recovery satisfaction. Psychological recovery is related to apology. Physical recovery is related discounts or free coupons.

## **2.8 Service recovery actions/strategies**

The concept of service recovery is defined as the critical step for transforming dissatisfied customers into satisfied ones (Ha and Jang, 2008, pp.319). Research by Zemke and Bell (1990) highlighted a number of important steps required for effective service recovery includes: apology; re-instatement; empathy; symbolic atonement or compensation; and follow-up. Service recovery strategies have been identified and investigated by many authors including: Tax et al., (1998); Wirtz and Mattila, (2004); Bamford and Xystouri, (2005); Komunda and Osarenkhoe, (2012) and Mostafa et al., (2014). Some examples of service recovery strategies and the sources used to design this study questionnaire that includes the following:

- Accept responsibility of the service failure (Tax et al., 1998)
- Apology (Kim, 2007; Wang and Mattila, 2011)
- Attentiveness (Casado et al., (2011)

- A prompt response (Hua, 2012)
- Compensation (Mattila and Cranage, 2005)
- Correction (Seawright et al., 2008; Chung-Herrera et al., 2010)
- Empathy (Vaerenbergh et al., 2013)
- Explanation (Zhou et al., 2013 ; Xu et al., 2014)
- Effort (Ozgen and Kurt, 2012)
- Follow-up in writing (Lewis and Spyropoulos, 2001)
- Staff empowerment (Thwaites and Williams, 2006; Michel et al., 2009)
- Speed of recovery (Wirtz and Mattila, 2004)
- Opportunity to voice opinion (Priluck and Lala, 2009; Lacey, 2012)
- Facilitation (Casado et al., 2011)
- Rebooking a flight (Qantas airlines, 2011)
- Pocket expenses (Qantas airlines, 2011)
- Future discount (Qantas airlines, 2011)
- Free loyalty points (Qantas airlines, 2011)

Investigate the impact of service recovery on customer satisfaction WOM and intention to repurchases have been increasing attention by many service quality researchers, one of the major reasons is that a good service recovery can turn angry, frustrated customers into loyal ones (Hart et al 1990, p.148). However, a number of effective recovery strategies have been identified in the previous empirical research, this valuable evidence helps service providers to increase customer post-recovery satisfaction and loyalty. For example, Clark et al. (1992) examined how consumer complaints impact on a company's image and concluded that if a company is not responding to a written complaint, it will have a direct influence on the image of the company and a letter of apology was found to have a significant effect on recovery satisfaction. This level of satisfaction increase where the letter had a complementary gift. This view was supported by Wirtz and Mattila (2004).

The effectiveness of service recovery strategies in hotel sector have been the focus of research. For example, McDougall and Levesque (1999) examined the effectiveness of recovery strategies. The study was based on 592 responses from hotel guests and service managers in Ontario, Canada. The results show that assistance plus compensation have a significant effect on recovery satisfaction. Also, the findings indicated that recovery strategies (e.g. apology, assistance, compensation) have no direct effect on repeat intentions. Their findings support the conclusion of Lewis and McCann (2004), the study examined the impact of service failure and recovery strategies in hotel chain in North West England based on 149 useable questionnaires were obtained from hotel guests (e.g. business and leisure). The study highlighted that the most common service recovery strategies used for the hotel sector that include: apology, correction, explanation, immediate action and responsibility for the service failure. The results show that the most crucial factors of service quality that influence business and leisure customers are: room not ready, slow service, slow check-in/out, incorrect bill and missing reservation. Their findings also support by Davidow (2000) and Bamford and Xystouri (2005) who found apology to be significantly important.

Several studies have explored the impact of service recovery in banking services. For example, Yaya et al., (2013) investigated the relationship between service recovery, customer satisfaction and perceived value in online banking service in Spain. The sample data was used from a bank database and a total of 1,600 prospective participants were contacted by e-mail to participate in the online survey and 123 useable questionnaires were obtained. The study found service recovery had a significant direct influence on satisfaction, perceived value and loyalty. Their

findings reflect those of Wang et al., (2014) in that a good service recovery have a strong positive influence on customer loyalty of banking service and the results show that post-recovery satisfaction had a direct impact on customer purchase intentions. These conclusions were also reflected in the work of Vaerenbergh et al., (2014) and Zhao et al., (2014). Zoghbi-Manrique-de-Lara et al., (2014) also reflect these conclusions and suggest the important of customer loyalty.

Other studies have explored how the impact of service recovery system on business performance. For example, Santos-Vijande et al., (2013) examined the impact of service recovery system on business performance in Spanish companies that includes accounting consultancies, business management, legal, and service sector. Out of 1,236 prospective participants who were contacted by post, email and fax, 159 useable questionnaires were obtained. The results show that ISRS had a significant impact on business performance. Integrated service recovery system (ISRS) refers to the firms' ability to anticipate and prevent failures, react efficiently to recovery needs, maximizing the quality of the long-term client relationship, and enhance the firm's organizational learning processes (Santos-Vijande et al., 2013, p.935).

Examining the customer perceptions of self-service technology failure, Zhu et al. (2013) focused on customer experience in self-check-in machine failure and based on 250 responses from shopping centres in four different areas of United States: California, Texas, New York, and Illinois. The results show that the customer with high perceived control over the self-service technologies (SST) can increase the likelihood of staying with the service (e.g. I can usually figure out, without help

from others). The study concluded with the suggestion that firms should design appropriate strategies and technologies to minimize service failures. Technologies become more integral components of service experiences and in order to encourage customer on self-recovery (i.e. customer-recovery behaviours), therefore on-site assistance should be included in the SST services, this will effect on customer switching from the self-service technology.

The effective service recovery strategies are also explored in the context of online shopping and telecommunications services. For example, Bijmolt et al., (2014) investigated the relationship between complaint behaviours, satisfaction with the service recovery and intentions to repurchase in the online service. The data was collected from “European Opinion Research Group” and 2,978 useable questionnaires were obtained. The results indicate that consumers who vary in their complaint behaviours and satisfaction with the service recovery differ in their intentions to repurchase through the internet channel and consumers who vary in their (a) past online purchase behaviour, (b) country, (c) age group, and (d) gender differ in their intentions to repurchase through the internet channel. Undoubtedly, customer complaints in telecommunications service has increased in recent years, this is because the mobile users are growing in popularity. For example, Mostafa et al., (2014) examined the effectiveness of recovery strategies in telecommunications service in Egypt. A total of seven service recovery strategies were tested in the study: apology, compensation, courtesy, explanation, facilitation, problem-solving and promptness. A total of 437 useable questionnaires were obtained in the six months period. The findings show that five service recovery actions: problem-solving, speed of response, effort, facilitation and apology had a significant impact

on customer satisfaction. A summary of the most effective service recovery strategies considered in the literature review are presented in Table 2.2.

**Table 2.3: A summary of the most effective service recovery strategies**

<b>Author</b>	<b>Context</b>	<b>Main findings/ the effective service recovery strategies</b>
Clark et al (1992)	Customer complaints in foods and beverage service and personal care product	A letter of apology was found to have a significant effect on recovery satisfaction and a letter-with-free-gift was found have a significant effect on the image of the company.
McDougall and Levesque (1999)	Hotel	The study found assistance plus compensation had a significant effect on recovery satisfaction.
Wirtz and Mattila (2004)	Restaurant	The study found compensation was most effective compared with apology and speed of recovery.
Lewis and McCann (2004)	Hotel	The study highlighted that the most common service recovery strategies used for the hotel, which include: apology, correction, explanation, immediate action and responsibility for the service failure.
Bamford and Xystouri (2005)	Airlines	The study highlighted that the most common service recovery strategies for airlines were free business class tickets to any destination, printed letters of apology signed by the president of the airline, food vouchers, free hotel accommodations and re-booked flights free of charge.
Ashill et al (2005)	Hospital	The study found organizational commitment had a significant influence on frontline hospital staff satisfaction.
Komunda and Osarenkhoe (2012)	Bank	The study found communication skill of bank staff had a significant effect on customer satisfaction.
Othman et al (2014)	Restaurant	The study found apology and explanation had a significant influence on post-recovery satisfaction.
Mostafa et al (2014)	Telecommunication	The findings show that five service recovery actions: problem-solving, speed of response, effort, facilitation and apology had a significant impact on customer post-recovery satisfaction.
Zhao et al (2014)	Online travel agency	The study found face value and validity period of coupon had a significant impact on post-recovery satisfaction. Face value is related to the amount on the high value coupon.

## **2.9 The role of emotions in service failure**

The concept of emotion is defined as mental states of readiness that arise from cognitive appraisals of events or one's own thoughts (Bagozzi et al., 1999, pp.184).

Emotions generally consist of two dimensions: positive and negative. The positive

is related to happiness, love and pride, whereas negative emotion is related to anger, fear and sadness (Cacioppo and Gardner, 1993 and Watson et al., 1998). Clearly, emotions are relevant to the study of service failure and recovery (Bagozzi et al., 1999; Weiss et al., 1999; Schoefer and Ennew, 2005; Edvardsson, 2005 and Schoefer and Diamantopoulos, 2008). Previous studies show that positive emotions may lead to positive word-of-mouth behaviour and that negative emotions may result in complaining behaviour (Edvardsson, 2005).

Emotions have been found to have an important role in customer evaluation of service failures and recovery satisfaction (Bagozzi et al., 1999, Weiss et al., 1999; Schoefer and Diamantopolos, 2008). Prior research demonstrates that customer emotions has a direct relationship with the service recovery encounters and unsatisfied service recovery, may result in disloyalty (Smith and Bolton, 2002; Chebat and Slusarczyk, 2005; Schoefer and Ennew, 2005; Del Rio-Lanza et al., 2009). Schoefer and Ennew (2005) investigated the relationship between customer emotions and perceived justice. The study was based complaint-handling experiences at a tour operator's check-in counter (i.e. flight cancelation). Based on 384 responses from two different sources: university and an internet panel survey. The results show that low perceived justice (e.g. interactional, procedural and distributive) leads to an increase in negative emotions (e.g. anger, fury, and unhappiness) and a decrease in positive emotions (e.g. happiness, pleasure, and joy). Examining the service recovery factors influencing customer emotions, recovery satisfaction and behavioural intention, Du et al., (2010) examined 372 students' perceptions of service failure and emotions. The results show that customer recovery satisfaction had a significant direct influence on customer

emotions. The study also found that utilitarian and symbolic recovery both has a significant effect on recovery customer satisfaction and behavioural intentions. Utilitarian compensation refers money, goods and time. Symbolic compensation refers response, respect and sympathy. These conclusions were also reflected in the work of Varela-Neira et al., (2010a) who concluded that procedural justice (speed of response to the service failure incident) and interactional justice (responsiveness of the service staff) have a significant direct influence on customer satisfaction with complaint handling.

Previous studies have identified seven different service sectors that typically involve three key service encounter elements such as service failure, post-recovery satisfaction and loyalty. The service sectors examined in past studies that include: airlines, airports, automotive firms, restaurant service, retail stores, travel agencies and hospitals. These sectors involve a high level of interaction between customers and service providers. For example, Namkung and Jang (2010b) investigated the relationship between perceived service fairness, emotions and behavioural intentions. The study was conducted in a restaurant services in Phoenix, USA. The results show that restaurant services such as reasonable prices and employee manner had a significant direct influence on customer negative emotion. Similar results were obtained from Funches (2011) who examined the factors influencing customer anger and loyalty. A variety of service contexts were examined including: retail stores, restaurants, healthcare providers, airlines, cable TV companies and automotive firms. The results show that there were three major causes of consumer anger: broken promises, unfair treatment and expressed hostility and all these three factors had a significant direct influence on customer emotion and loyalty. Similar



results were reported that by Petzer et al., (2012) who examined the impact of service failure and recovery on customer emotions found post-recovery satisfaction had a significant direct influence on customer emotions and satisfaction.

Previous research has noted that service recovery satisfaction is one of the most critical factors that impact customer emotions, customer complaint behaviours and intention to repurchase. For example, Sviri and Olsen (2012) examined the relationship between customer emotions, service failure incidents and complaint behaviours. The study used a street intercept method of sampling in three areas of Norway: Norwegian airports, railway stations and bus stations. The results show that negative service incidents had a significant increase customer complaint behaviours and customer emotions. The study also found social media and blogs were most convenient ways to voice customer complaints. These results were also reflected in one work of Wen and Chi (2013) who also concluded that post-recovery satisfaction and customer emotions had a significant direct influence of complaint behaviours, customer trust and loyalty. Similar results were proposed by Kozub et al., (2014) who examined the relationship between customer emotions, future behavioural intentions (FIB) and post-recovery satisfaction in luxury hotel in U.S.A. The findings of this study indicate that the positive emotion (e.g. happiness) does not influence on post-recovery loyalty. FBI and customer negative emotions were found to have a direct impact on post-recovery satisfaction. Their findings support research by Mattila et al., (2014) who found customer negative emotions had a direct impact on future behavioural intentions. A summary methods and sample size used in these studies are presented in Table 2.4

**Table 2.4: A summary of methods used in customer emotions of service failure studies**

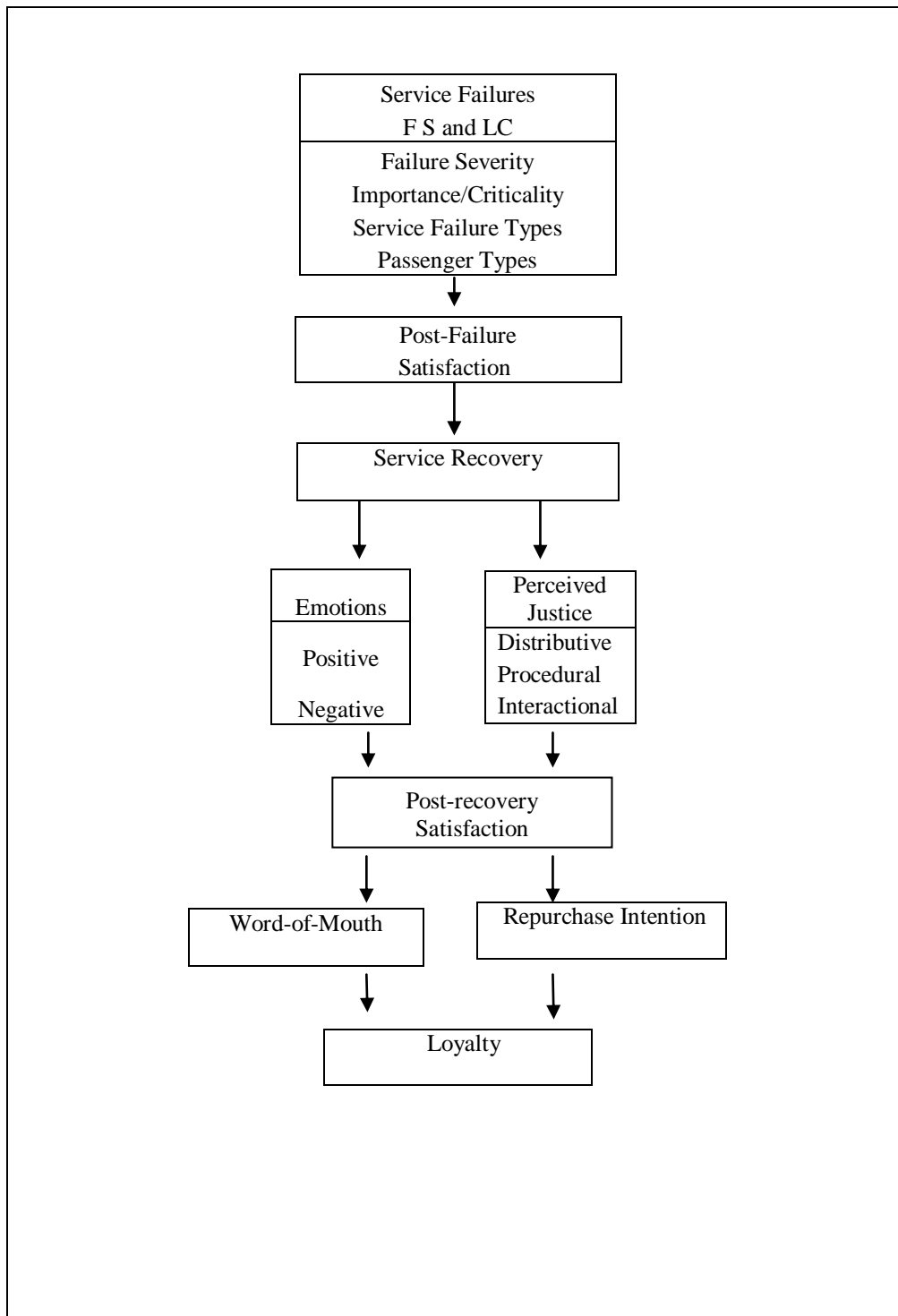
Author	Sample	Sector	Methods	Methodology
Schoefer and Ennew (2005)	384	Travel agency	Online market agency to collect data/ questionnaire surveys (QS)	Quantitative
Du et al (2010)	372	Restaurant	Used sample of students/ staffs / (QS)	Quantitative
Varela-Neira et al.(2010a)	344	Bank	Banking customer/ (QS)	Quantitative
Namkung and Jang (2010b)	326	Restaurant	University students and staffs/ (QS)	Quantitative
Funches (2011)	259	Bank	Used online market agency/banking customers	Quantitative
Petzer (2012)	582	Airport/hospital	Travellers/hospital users (QS)	Quantitative
Svari and Olsen (2012)	255	Hotel/ travel agency	Travellers and QS	Quantitative
Wen and Chi (2013)	581	Airlines	Travellers and QS	Quantitative
Kozub et al (2014)	1,142	Hotel	Travellers and QS	Quantitative

The review of the above literature has also facilitated the development of the conceptual framework for the study (Figure 2.1). The conceptual framework components that include: service failures in full-service airlines and low-cost carriers (De Jager et al., 2012, Wen and Chi, 2013); failure severity by (Weun and Jones, 2004, McQuilken and Bednall, 2008, Wang et al., 2011); criticality of failure by (Lin's, 2010, Namkung and Jang, 2010, Watson, 2012); service failure types by (Bramford and Xystouri 2005; Tiernan et al., 2008;;); passenger types (Dresner, 2006, Ringle et al., 2011, Garcia et al., 2011); post-failure satisfaction (Lii and Lee, 2012; Chang and Chen, 2013; Wen and Chi, 2013); service recovery and emotion (Schoefer and Diamantopoulos, 2008, Del Rio-Lanza et al., 2009, Du et al., 2010); perceived justice in service recovery/ post-recovery satisfaction (Schoefer and Ennew, 2005). Word-of-mouth communication/ repurchase intention (Nguyen et al., 2012). Thereafter, the following section is highlights the significant gaps on service recovery literature in Table 2.3

### 2.9.1 Conceptual Model

The review of the literature has also facilitated the development of the conceptual framework for the study (Figure 2.1).

**Figure 2.1: Conceptual Framework for the study**



Notes: FS= full-service carriers; LC= low-cost carriers

**Table 2.5: Gaps in the service recovery literature**

<b>Gap</b>	<b>Source</b>	<b>Implication</b>
1. Failure severity has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Webster and Sundaram, (1998); Weun et al., (2004); Wang et al., (2011); Kim and Ulgado (2012)	<p>Webster and Sundaram (1998) The study used three difference types of service for the context analysis: restaurant, repair services and dry cleaning services. The study concluded with the suggestion that future research should use other service sectors for analysis such as airline service.</p> <p>Weun et al., (2004) The study used hotel and mail-order as the context analysis. The study suggests that future research needs to examine the impact of failure severity in other service industries.</p> <p>Wang et al., (2011) The study conducted in Taiwan context. The study suggests that future research is needed to use other countries setting or other culture groups for analysis.</p> <p>Kim and Ulgado (2012) The services examined in the study that include restaurant and hotel. The study suggests that future research is needed to use other service sectors for analysis.</p>
2. Failure criticality has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase	Oh (2003); Lin's (2010); Namkung and Jang (2010a); Watson (2012)	<p>Oh (2003) examined the impact of failure criticality influencing customer satisfaction and future repurchase intentions in the context of hospitality service. The study suggests that future research is needed to examine the impact of different service failures interact with different types of recovery strategies in other service industries.</p> <p>Lin's (2010) examined failure criticality in life insurance service in Taiwan and Hong Kong. The study suggests that future research is needed to use other service sectors for analysis.</p> <p>Namkung and Jang (2010a) The study used experimental methodology (scenarios) relating to restaurant criticality failure incident. The study suggests that future research should consider use actual service failure for analysis, for example, empirical investigation.</p> <p>Watson (2012) The study used experimental methodology(scenarios) relating to hairstyling and online gift purchase service incidents. The study</p>

		concluded with the suggestion that future research should use other service for analysis such as airline or banking services.
3. Failure type influences post-failure satisfaction, word-of-mouth communication and intention to repurchase	Tiernan et al., (2008); Wen and Chi (2013); Namukasa (2013b)	<p>Tiernan et al., (2008) examined airline service quality performance between the USA and EU. Using a questionnaire survey of postgraduate students in universities in the USA and EU. The study suggests that future research should consider extends the demographic groups, because student sample does not reflect to the general population of travelling public.</p> <p>Wen and Chi (2013) examined customer perceptions of domestic airline service (e.g. flight delays) in China context. The study suggests that future research should include examine the effect of passenger type (e.g. business or leisure) on post-failure satisfaction and loyalty.</p> <p>Namukasa (2013b) examined airline service quality (e.g. flight delays, slow check-in, etc) and customer loyalty. The study conducted a questionnaire survey with a sample of 303 useable questionnaires from passengers who travel frequently on international flights at Entebbe International Airport in Uganda context. The study suggests that future research should consider domestic passengers' opinions for analysis.</p>
4. Passenger type moderates the influence of failure type and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Ringle et al (2011); Garcia et al., (2012)	<p>Ringle et al., (2011) examined business and leisure passenger satisfaction in full-service airlines in the context of Western Europe. The study conducted a questionnaire survey at airports. The study suggests that future research should use difference sample type in order to improve overall sampling reliability.</p> <p>Garcia et al., (2012) examined business and leisure travellers' satisfaction in low-cost carriers at Costa Brava Airport, in Spain context. The study suggests that future research should examine business and leisure traveller satisfaction in full-service airline.</p>
5. Passenger loyalty moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Kim and Ulgado (2012); Balaji and Sarkar (2013); Cowart et al., (2014)	Kim and Ulgado (2012) examined the impact of service failure severity on recovery satisfaction and loyalty in Seoul Korea context. The study used experimental methodology (scenarios) relating to restaurant and hotel service failure incident. The study suggests

		<p>that future research should consider other countries setting may help the reliability of the results.</p> <p>Balaji and Sarkar (2013) examined failure severity effects customer loyalty and using a single product category (e.g. product failure refrigerator). The study suggests that future research should use other product or other service categories.</p> <p>Cowart et al., (2014) examined customer perceptions of service failure in restaurant service in Michigan, U.S.A. The study suggests that future research is needed to extend other service failures types in other service sectors.</p>
6. Airline type (low cost vs full service) moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and loyalty	Bejou and Palmer (1998);Fourie and Lubbe (2006); Chiou and Chen (2010)	<p>Bejou and Palmer (1998) examined the service failure and recovery in airlines context and a sample of 214 usable questionnaires was obtained from passengers who travel frequently with American Eagle, USAir and Delta in Texas, in USA. The study suggests that future research is needed with a larger sample size in order to improve reliability.</p> <p>Fourie and Lubbe (2006) examined the airline service factors influencing business travellers in their selection of full-service airlines and low-cost carriers in South Africa context. A sample of 100 useable questionnaires was obtained. (e.g. full-service airlines n=50; low-cost carriers n=50). The study employed a small sample size for data collection. Therefore, the study suggests that future research is needed with a larger sample size in order to increase the reliability and validity of the results.</p> <p>Chiou and Chen (2010) examined customer perceptions of service quality in full service airlines and low-cost carriers in Taiwan context. The study suggests that future research is needed to use other countries setting for analysis.</p>
7. Service recovery type influences post-recovery satisfaction.	Wirtz and Mattila (2004); Kuo et al (2011); Choi	Wirtz and Mattila (2004) examined the impact of three recovery strategies: compensation, speed of recovery and apology on consumer satisfaction in

	<p>and Choi (2014) ; Wang et al., (2014)</p>	<p>Singapore. The study used experimental methodology (scenarios) relating to restaurant service failure incident. The study suggests that future research is needed to use actual service failure for analysis, in order to establish the external validity.</p> <p>Kuo et al., (2011) examined service failure and recovery in online shopping context in Taiwan. The study suggests that future research is needed to use other service sectors for analysis.</p> <p>Choi and Choi (2014) The study used wireless phone service, high speed internet, cable TV, restaurants as the context analysis. The study concluded with the suggestion that future research should use other types of service for analysis.</p> <p>Wang et al., (2014) examined the impact of service recovery satisfaction on purchase behaviour in banking service in Taiwan context. The study suggests that future research is needed to use other service sectors for analysis.</p>
<p>8. Gender moderates the perceived effectiveness of service recovery type.</p>	<p>Mattila (2010); Boo et al., (2013) ; Cambra-Fierro., et al., (2013)</p>	<p>Mattila (2010) examined the options of service recovery influencing gender perceptions and a sample of 195 useable questionnaires was obtained. The study employed a small sample size for data collection. Therefore, the study suggests that future studies are needed with a larger sample size in order to increase reliability.</p> <p>Boo et al., (2013) The study used experimental methodology (scenarios) relating to restaurant service failure incident in Malaysia context. The study suggests that future research is needed to use a cross cultural study and this will help better understanding the effectiveness of service recovery actions.</p> <p>Cambra-Fierro et al., (2013) investigate the moderating role of the gender variable in service recovery in mobile phone service in Spain context. The study suggests that future research is needed to use other product or service categories for analysis.</p>

<p>9. Post-recovery satisfaction influences word-of-mouth communication and intention to repurchase.</p>	<p>Weber and Sparks (2009); Kau and Loh (2006); Swanson and Hsu (2011)</p>	<p>Weber and Sparks (2009) examined the effects of service failure in an airline alliance setting. A sample of 255 useable questionnaires was obtained from undergraduate students in the eastern United States. The study suggests that future research should consider extends the demographic groups.</p> <p>Kau and Loh (2006) examined the effects of service recovery on customer satisfaction in mobile phone service in Singapore context. The study suggests that future research should attempt to broaden sample and this may help to achieve greater representation of the general population.</p> <p>Swanson and Hsu (2011) examined service failure and recovery in hospitality context in the Midwestern United States. The study suggests that future research is needed to use a cross cultural study context in order to gain a better understanding the impact of post-recovery satisfaction influence customer loyalty.</p>
<p>10. Emotion mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.</p>	<p>Schoefer and Ennew (2005); Du et al., (2010); Varela-Neira et al. (2010b)</p>	<p>Schoefer and Ennew (2005) investigated the relationship between customer emotions and perceived justice. The used experimental methodology (scenarios) relating to a complaint-handling experience at a tour operator's check-in counter (i.e. flight cancelation). In the experimental methodology the subject response to the scenarios is not actual service failure (Chebat and Slusarczyk, 2005, p.666). Therefore, the study suggests that future research is needed to consider an empirical investigation.</p> <p>Du et al., (2010) examined service failure and recovery encounters that influence customer emotions in restaurant service in Tianjin, in Northern China context. The study concluded with the suggestion that future research should consider other service categories for analysis.</p>



		<p>Varela-Neira et al., (2010b) investigated the relationship between post-recovery customer emotions, perceived justice in service recovery financial services in Spain context. The study only used one service context (e.g. financial services) analysis. Therefore, the study suggests that future research should use other type of service for analysis. This will help us better understand the role of emotion in service recovery in different service sectors.</p>
<p>11. Perceived justice mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.</p>	<p>Casado-Diaz et al., (2007) ; Kim et al., (2009) ; Lin et al., (2011)</p>	<p>Casado-Diaz et al., (2007) investigated the relationship between customer perceived justice and customer loyalty in banking service in Spain context. The research used a single service category for analysis. The study suggests that future research is needed to use other service categories for analysis. This will help us better understand the impact of perceived justice and loyalty in other sector.</p> <p>Kim et al., (2009) investigated the effects of perceived justice on recovery satisfaction and loyalty in hotel service in South Korea context. The research was conducted in one single country. Therefore, future research is needed to consider other segments of tourism industry for analysis.</p> <p>Lin et al., (2011) investigate consumer responses to online retailer service failure and recovery in Taiwan context. The research was targeted a specific consumer group in Taiwan, therefore, the study suggests that future research should consider other types of service for analysis.</p>

## **Chapter 3**

### **Methodology**

#### **3.1 Introduction**

This chapter outlines and justified the methodology and methods adopted in the study. It outlines the research framework and introduces the philosophical approach which was used for the study and this chapter aims: (1) to explain justify the research philosophy and which study is based, (2) to explain justify methods used collect and analysis data (3) to explain and justify the methods of sampling and sample selection.

#### **3.2 Research framework**

A research framework is a basic structure that guides researchers in how to conduct their research. There are several fundamental stages which should be considered when undertaking a research project, such as choosing the research methods, collecting data, analysing data and writing-up the report (Jennings, 2001; Bryman, 2008; Collin and Hussey, 2009). Saunders et al., (2009, p.11) provide a more comprehensive research framework that includes eight stages:

**Table 3.1: Research framework**

<b>Stage</b>	<b>Description</b>
1. Formulate and clarify the research topic	During this stage the researcher should consider the research topic and issues that have a clear link to theory (Saunders et al., 2009). For this study, a number of gaps

	have been identified through the review on service failure and recovery literature. (The details for the literature gaps are discussed in below stage 2).
2. Critically review the literature	This stage involves an extensive literature review on service failure and recovery theories, service criticality, service failure severity, justice theory and the role of emotions. Also, a review of a number of key empirical studies of airline service quality in full-service airlines, low-cost carriers and airline alliances was undertaken. In brief, three gaps have been identified through the review of the literature. First, research on airline service failure and recovery has been limited, this includes the aspects of severity and criticality of failure. Second, little work has been done on the comparative effectiveness of alternative recovery actions/strategies in full-service airlines and low-cost carriers (e.g. apology, compensation, explanation, speed of recovery). Third, little work has been done to investigate the impact of emotion and perceived justice on service recovery strategies in the airline sector. (See section 1.2 for details of study justification, pp.3). The review of the literature has facilitated the development conceptual framework, research objectives and hypotheses.
3. Understand the philosophy and approach	This stage involves understanding the concept of philosophical assumptions (e.g. ontological, epistemological and methodological). There are two different types of theoretical approaches: deductive and inductive approaches are important for consideration for research. For this study, the epistemological position was chosen, and the surveys were conducted using a in the quantitative method (e.g. street survey and e-questionnaire, etc). The developments of research objectives and hypotheses were based on deductive approaches (See section 3.5 and 3.5.1 for details of research objectives and hypotheses development).

Stage 4 formulate the research design	This stage involves classifying the research in relation to its purpose. Broadly research can be classified in different types, for example, exploratory, description or explanation. This study adopts an exploratory approach because there is limited information on the subject area. The exploratory approach will help researcher a better understanding of airline service failure incident and recovery.
Stage 5 address ethical issues	For this study, all participants gave informed consent during data collection period. Each prospective participant was provided with details of the research and their consent to take part in the survey was obtained. Each individual respondent who is qualified and consented to participate in the study were asked to participate in the survey (i.e. paper or online). The data collected from the surveys were based on anonymity and confidentiality for all the participants in this study. The questionnaire was submitted to the College of Arts Social Sciences (CASS) at University of Salford for ethical approval before the data collection stage was started. The study was approved by the CASS. For a summary of ethical approved statement (See Appendix 5, pp.276).
Stage 6 data collection	For this study, the respondents were recruited from three different sources: a street intercept survey in Manchester, an online survey at Salford University, and a Marketest panel survey. (See section 3.7.1, pp.137 for details of data collection procedure).
Stage 7 analysis of the data/ interpretation of the results	This study employed a quantitative approach underpinned by a positivist epistemology. The data was obtained using a questionnaire survey and it was analyzed using SPSS version 20.00. A variety of analytical methods were used (e.g. ordinary least squares (OLS) regression, independent samples t-tests, one-way between groups

	ANOVA and two-way between groups ANOVA). The details of the data analysis and the discussion of the findings are presented in section 4.1.
Stage 8 writing-up the report.	The writing stage begins when data collection and analysis are completed. The structure of this report is organized into five sections: (1) introduction to the study, (2) literature review, (3) methodology, (4) data analysis and discussion and (5) recommendation and conclusion. (See section 1.5, pp.12 for chapter descriptions). In addition, the above research framework provides a step-by-step procedure to be followed in conducting a research project. The aim of research framework is to provide a set of systematic guidelines to ensure reliability and validity of the project. It also this design was used in the development of the research framework for this study.

### **3.3 Type of research project**

Research can be classified into three types: exploratory, explanatory and descriptive (Jennings, 2001; Collis and Hussey, 2009; Saunders et al., 2009; Babbie, 2010; Myers, 2013; Gray, 2014). The following section provides an overview of the different types.

#### **3.3.1 Explanatory research**

Research by Saunders et al (2009, p.140) state that explanatory research focuses on studying a situation or a problem in order to explain the relationships between variables. This view is support by Cooper and Schindler (2011) and Vogt and Johnson (2011). Previous studies have noted that an explanatory approach aims is to test and explain to a particular issue or event and measure the effects between variables. For example, Myers (2014, p.252) highlighted that the major aims for explanatory research is to test, explain or compare. Normally, explanatory research may apply to either qualitative or quantitative methods (Jenning, 2001, p.18).

#### **3.3.2 Exploratory research**

Exploratory research normally is conducted when there are a small number of studies in the field or no data exists on the phenomenon (Jennings, 2001, p.17). Similar views were offered by Collis and Hussey (2009, p.10) who noted that exploratory research is conducted into a research problem or issue when there are very few or no studies to which one can refer for information about the issue or

problem. Sekaran and Bougie (2013, p.103) also highlighted that an exploratory study is undertaken when not much is known about the situation at hand. Saunders et al., (2009, p.140) identified three guiding principles to conduct exploratory research that include: a search of the literature, talking to experts in the field or conducting focus group interviews. Within this study a literature review was conducted to establish research gaps and experts were consulted using interviews..

Myers (2013, p.251) noted that the aims for an exploratory approach is to discover and explore the new phenomena. Babbie (2010, p.92) identified three purposes of conducting exploration research: firstly, to satisfy the researchers' curiosity and desire for better understanding; secondly, to test the feasibility of undertaking a more extensive study; and thirdly, to develop the methods to be employed in any subsequent study. In comparison, Collis and Hussey (2009, p.11) state that the objectives of exploratory research is to develop hypothesis of the study and test empirical evidence.

### **3.3.3 Descriptive research**

The goal of a descriptive study is to offer the researcher a profile or to describe relevant aspects of the phenomenon of interest from an individual organisation, industry, or other perspective (Sekaran and Bougie, 2009, p.106). Similarly, Saunders et al., (2009, p.590) state that the main purpose of the descriptive research is to produce an accurate representation of persons, events or situations. According to Collis and Hussey (2009, p.11) and for Wilson (2010) descriptive research is conducted to describe phenomena as they exist and it is used to identify and obtain

information on characteristics of a particular problem or issue. This view is supported by Gray (2014, p.36) who noted that descriptive studies seek to draw a picture of a situation, person or event or show how things are related to each other, the establishment links between variables related to customer satisfaction was the focus of this study.

An explanatory and exploratory approach were chosen for four major reasons. Firstly, the study is explanatory in that it explains current literature and the current position of the literature review in an explanatory manner. In addition part of the primary data collection explains factors identified in the literature review. Secondly, the study is also exploratory in that the literature review concludes with gaps in the current literature that will be investigated in the primary data section. As such, the emphasis here is on exploring stakeholder perceptions of these factors and the exploratory approach provides a better understanding of customer perception in airline service failure and recovery issues. It also provides a more accurate picture of service failure and recovery by asking the subject question on how individuals felt when they experienced a service failure and recovery. The questions also included measures of subject emotions and perceived justice. Overall outcome measures also included: overall satisfaction, intention to recommend and intention to repurchase.

Thirdly, these both explanatory and exploratory approaches provide valuable empirical data and a comprehensive way to understand travellers' perception of service failure and recovery. The major strength of an explanatory in this is that it enabled gaps within the literature to be identified. Exploring these gaps using a quantitative approach allowed for implications of the gaps as they relate to



consumers and providers to be identified. The use of this approach allowed descriptive (e.g. collecting and analysing data techniques) and inferential (e.g. hypothesis testing and determine the relationship between variables) approaches to be applied. This allowed for a new approach to investigations in this area. In addition, the quantitative research in exploratory research designs provides a straightforward method to explore research objectives and hypotheses, which offers a major advantage of exploratory studies as it allows for the what, why and how questions to be posed and answered. E-questionnaires are one of the common survey methods used in exploratory research, especially in service quality research (Schoefer and Ennew, 2005; Solnicar et al., 2009; Kim et al., 2014) The major weakness of this method is that the data sent as an attachment through email may contain virus, consequently, the antivirus software play a significant role in virus-detection and this can possibility overcome the limitation of e-questionnaire. Therefore, both explanatory and exploratory approaches as considered as appropriate for the study for this context of study.

Fourthly, both approaches have been regularly used in different service quality research. For example, explanatory approaches have been used in a variety of service quality research including: customer loyalty (Ball et al., 2004); customer satisfaction (Casado-Diaz et al., 2007); service quality and service recovery (Pantouvakis, 2010); and customer satisfaction and service failure (Varela-Neira et al 2010). The exploratory approach used in previous service quality research include: hotel service quality and service recovery (Alexandris et al., 2002, Mohsin, and Lockyer, 2010, Dortyol et al., 2014, Kozub et al., 2014); banking/financial service quality (Gounaris, et al., 2003, Joseph et al., 2005, Fraering and Minor,

2006); retail service and quality (Kim and Jin, 2004, Raven and Welsh, 2004, Lee-Ross, 2008); online shopping service quality (Sweeney and Lapp, 2004, Chen and Corkindale, 2008, Mummalaneni, and Meng, 2009). It has also been used in health care service quality studies (Isgrove and Patel, 1993, Zineldin, 2006, Camgoz-Akdag and Zineldin, 2010). These previous studies provide strong evidence that use of explanatory and exploratory approaches in this research context.

### 3.4 The research philosophy

A research paradigm is a philosophical framework that guides how research should be conducted (Collin and Hussey, 2009, p.55). A research paradigm can be viewed as the largest framework within which research takes place (Maykut and Morehouse, 1994).

The concept of research paradigm has been modified by various authors in different social science disciplines. For example, psychology (Hoshmand, 1994), tourism (Finn, 2000; Jennings, 2001; Hall, 2010; Smith, 2010; Liburd, 2012), hospitality (Prideaux et al., 2006), management (Rosile et al., 2013). There are a number of different perspectives underpinning the concept of research paradigm as shown in Table 3.1.

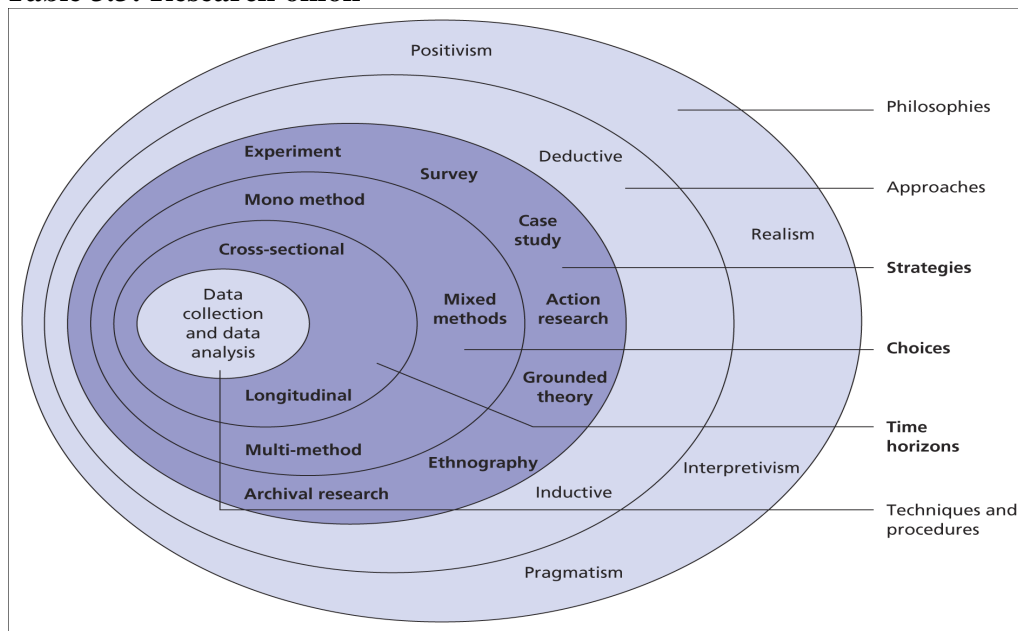
**Table 3.2: The different perspectives underpinning the concept of research paradigm**

Author	Year	Field	Definition for research paradigm
Rosile et al	2013	Management	A research paradigm is defined as the confluence of theory, method, and practice.
Hall	2010	Tourism	The research paradigms are more likely to provide a large context for a more specific theory that guides the researcher.
Smith	2010	Tourism	Researchers approach their work from a number of different perspectives, which they call a research paradigm.
Prideaux et al	2006	Hospitality	A research paradigm is the framework of concepts and assumptions that underpin the researchers thinking and importantly these are normally shared by most, if not all, people in a research community.
Jennings	2001	Tourism	A research paradigm can be viewed as the research guidelines for conducting the research project.
Finn	2000	Tourism	The methods and procedures are referred as a research paradigm.
Hoshmand	1994	Management	Research paradigms can be viewed as the conceptual and methodological frameworks for guiding systematic inquiry.

### 3.4.1 Research onion

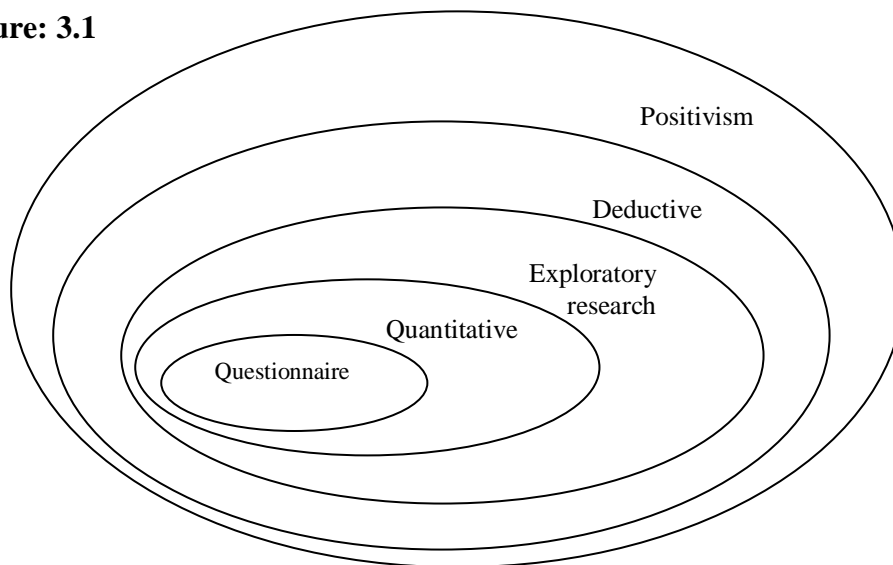
The research philosophy of this study has been structured around the onion proposed by (Saunders et al 2007). The research onion provides structure approach to do research by providing the following Table 3.3.

**Table 3.3: Research onion**



Apply research onion to this study, resulted the following diagram:

**Figure: 3.1**



### **3.4.2 Ontological, epistemological and methodological assumptions**

Research by Pernecky and Jamal (2010, p.1060) noted that research paradigms are useful to help researchers to recognise where they are situated with respect to the objects and things they study. Specifically three philosophical approaches have been identified: ontological, epistemological and methodological. The concepts of three philosophical assumptions are summarized in below.

- Ontological assumption can be described as the theory of being (Dezin and Lincoln, 1998; Guba and Lincoln, 1998; Wisker, 2008; Fink and Nyaga, 2009). One of the simple explanations of the ontological concept is to recognize whether the study requires a positivist or interpretive position. For example, a positivist ontology position views the reality as objective and singular, separate from the researcher (Collin and Hussey, 2009, p.58). By comparison an interpretive ontology position views reality as subjective and multiple, as seen by the participants (Collin and Hussey, 2009, p.58).
- Epistemology refers to theory of knowledge (Longino, 1990; Dalmiya and Alcoff, 1993; Walliman, 2011; Collin and Hussey, 2009). Epistemology enables the researcher's to understand what constitutes valid knowledge when conducting the research project (Collin and Hussey, 2009, p.58). The epistemology should be made clear at the outset of the research so that one that underpins the research can be understood by the readers and, in some instances, the subjects of the research (Walliman, 2011, p.340).

- Methodology refers to the philosophical assumptions underlying a particular study and methodology is the choice of methods based on a researcher's worldview (Wisker, 2008, p. 68). The research methodology used in social science research is categorized into qualitative or quantitative methods (Jennings, 2001; Clough and Nutbrown, 2002; Blaxter et al., 2006; Collin and Hussey, 2009).

In addition, the research paradigms can be classified or categorized as follow: positivism, post-positivism, critical theory and constructivism (Dezin and Lincoln, 1998; Guba and Lincoln, 2005; Creswell, 2009). These four types of theoretical paradigms will explain in the following section.

### **3.4.3 Positivism**

The aim of positivism is to collect and assemble data on the social world from which generalisation that explains human behaviour (May 2001, p.11). A simple example provided by Fox (2012, p.51) states that positivism is oriented to the testing, confirmation, and falsification of generalizable theories which correspond directly with objective reality. Positivism paradigm is underpinned by the belief that reality is independent on individuals and the goal is the discovery of theories based on empirical research (Collin and Hussey, 2009, p.56).

Research by Klungseth and Olsson (2013, p.293) argued that positivism is based on the belief that true knowledge is based purely on empirical observations and positive verification and develops laws and models that can be used to understand

and make predictions relating to a studied phenomena. Sobh and Perry (2006, p.1195) noted that the positivism concept is generally based on statistics and it is generalised to a population by statistical analysis of observations about an easily accessible reality.

Studies by Tribe (2009) and Rakic and Chambers (2011) present an alternative way to understand the concept of positivism paradigm and they suggest that the positivist researchers typically use quantitative methods. This view was supported by various authors in tourism, customer service and management field. For instance, these include: studies on tourism research methods by Finn (2000), Ritchie et al., (2005), Veal (2006) and Uysal (2012); research in tourism, leisure and recreation by Hall and Page (2005); research in sport tourism by Weed (2007); and research in events tourism by Getz (2012).

Henderson (1990) explores different research paradigms in the leisure sector. The study highlights the main features of a positivism paradigm in the tourism research. This was cited by Finn et al., (2000, p.6) as listed below:

- It assumes an external world determining behavior
- It strives for explanation prediction and control by dividing into parts and isolating them
- It use mechanistic processes for explaining social behavior
- The researcher is objective and value-free
- The truth has to be confirmed with empirical evidence

In addition, within the tourism context, Finn et al., (2000, p.10) state that a positivist paradigm seeks to explain human behaviour by predicting and explaining tourism behaviour, events or phenomenon (Jennings, 2001, p.36). Moreover, Jennings (2001, p.36) noted that a tourism researcher working within a positivist paradigm is deductive and would commence their study from a theory perspective and using a quantitative methodology and to test their hypothesis.

#### **3.4.4 Post-positivism**

Post-positivism takes the positivist paradigm as its starting point and the post-positivists collect qualitative data through interviews, observations, and a review of documents (Morris 2006, p.71). According to Creswell (2009, p.7) knowledge that develops through a post-positivist lens is based on careful observation and measurement of objective reality that exists in the world. Moreover, Phillips and Burbules (2000) provide key assumption of post-positivism (as cited by Creswell, 2009, p.7):

- Knowledge is conjectural (and antifoundational)-absolute truth can never be found. Thus, evidence established in research is always imperfect and fallible. It is for this reason that researchers state that they do not prove a hypothesis; they indicate a failure to reject the hypothesis.
- Research is the process of making claims and then refining or abandoning some of them for other claims more strongly warranted. Most quantitative research, for example, start with the test of a theory.



- Data, evidence and rational considerations shape knowledge. In practice, the researcher collects information on instruments based on measures completed by the participants or by observations recorded by the researcher.
- Research seeks to develop relevant, true statements, that can serve to explain the situation of concern or that describe the causal relationships of interest. In quantitative studies, researchers advance the relationship among variables and pose this in terms of questions or hypothesis.
- Being objective is an essential aspect of competent inquiry; researchers must examine methods and conclusions for bias. For example, standard of validity and reliability are important in quantitative research.

In addition, a post-positivist researcher ontological position focuses on a critical realism approach and a post-positivist epistemological position focuses on an objectivity approach. For example, Rakic (2011, p.19) suggests that a post-positivist researcher's ontological position tends to subscribe to critical realism, rather than naive realism and epistemological position of post-positivist researcher tends to believe that objectivity in research. Rakic (2011, p.20) adds that in attempting to achieve an objective and as realistic research findings the deductive style of post-positivist methodology is therefore usually marked by a combination of qualitative and quantitative methods. This view is support by authors in tourism, consumer research and hospitality sector (Reid, 2002; Harrison and Reilly, 2011; Pechlaner and Volgger, 2012; Valente et al., 2014).

### **3.4.5 Critical theory**

Critical theory is often describes as ideologically oriented inquiry (Habermas's, 1978; Guba, 1990). The ideology can be explained as the natural way of thinking of a society and accepted or common-sense view in the world (Tribe, 2001). Research by Smith (2010, p.25) concludes that the concept of critical theory is not only about theory, but a view of the world that sees society in terms of conflict, inequity and power struggles.

Research by Habermas (1978, p.370) identified three ideological interests that motivate human inquiry: technical; practical; and emancipatory. Technical interest attempts to find controllable factors to manage the environment and that dominate thinking in a modern technological world. This is often described as scientific positivism paradigm. Practical interest attempt to find an understanding of the world and environment and this is commonly described is interpretive methods. Emancipatory interest attempt to find emancipation and freedom from falsehood and dogma and this normally is described as critical theory approaches. Critical theory approach is commonly used to explore culture and historical issues (Guba, 1990; Guba and Lincoln, 2005). In addition, a critical theory approach is typically labelled as qualitative methods (Guba and Lincoln, 2005, Chambers, 2007).

### **3.4.6 Constructivism**

The constructivist is likely to believe that social reality is plural. The constructivist paradigm is often described as multiple meanings of knowledge and provides

significant different ways of thinking. Constructivist research aims to capture human perception and experience in a comprehensible way (Rakic and Chambers, 2011, p.21). The constructivist paradigm is also known as interpretive approach (Jennings, 2001, p.38). In addition, social constructivists hold assumptions that individuals seek understanding of the world in which they live and work (Creswell, 2009, p.8). Under the constructivism concept, constructivists normally obtain subjective views and then shape their social interactions with other participants based on their personal experience (Cresswell and Clark, 2007, p.15). The major features for the constructivist approach are to explore the perception of participants and their experience with descriptions of beliefs (Koro-Ljungberg et al., 2012). A summary for the features of constructivist paradigm provided by Jennings (2001, p.38):

- There are multiple explanations or realities to explain a phenomenon rather than one causal relationship or one ‘theory’;
- The research process should be subjective rather than objective;
- The use of a qualitative methodology instead of a quantitative methodology;
- Data are collected from an insider’s perspective rather than from an outside’s perspective;
- Data are collected in their real world or natural setting as opposed to being collected under ‘experimental’ condition.

Moreover, the constructivist approach is commonly labelled as qualitative methods (Guba, 1990; Charmaz, 2000; Denzin and Lincoln, 2000; Maxwell, 2004; Guba and Lincoln, 2005; Zwaal and Otting, 2007; Prince et al., 2009; Koro-Ljungberg et al.,

2012). According to Lincoln and Guba (2000) the main features for the four paradigms are shown in Table 3.4.

<b>Table 3.4: Basic Belief of Alternative Inquiry Research Paradigms</b>				
	<div> <div>Extreme view</div> <div> <div></div> <div></div> </div> <div>Extreme view</div> </div>			
<b>Paradigm characteristic</b>	<b>Positivism</b>	<b>Post-positivism</b>	<b>Critical Theory</b>	<b>Relativism or Constructivism</b>
<b>Ontology</b>	Naive realism - 'real' reality but apprehendable	Critical realism - 'real' reality but only imperfectly and probabilistically apprehendable	Historical realism - virtual reality shaped by social, political, cultural and economic	Relativism - local and specific constructed realities
<b>Epistemology</b>	Dualist and objectivist findings true	Modified dualist and objectivist; critical tradition and community; findings probably true	Transactional and subjectivist; value-mediated findings	Transactional and subjectivist, created findings
<b>Methodology</b>	Experimental and manipulative; verification of hypotheses; chiefly quantitative methods	Modified experimental and manipulative; critical multiplism; falsification of hypothesis; may include qualitative methods	Dialogical and dialectical	Hermeneutical and dialectical
Source: Lincoln and Guba (2000:165)				

### 3.4.7 Deductive and inductive approaches

Research methods are often associated with two theoretical approaches namely: deductive and inductive approaches (Wilson, 2010, p.7). A deductive approach is basically begins with the theory, then test hypotheses and is followed by data collection and the last stage is to provide findings of the study (Wilson, 2010, p.7).

Moreover, a deductive approach can be described as the process of drawing conclusions from rational and logical principles (Lee and Lings, 2008, p.8).

Bryman (2008, p.10) noted that the deductive method involved six steps: (1) theory (2) hypothesis (3) data collection (4) findings (5) hypotheses confirmed or rejected (6) revision of the theory. The inductive approach seeks to make observations about the research then perhaps contribute to a new theory (Wilson, 2010, p.7). The inductive method normally works in the opposite direction of deductive approach.

This study is based on the deductive approach design and this approach provides theoretical foundation that includes the main components of the topic: service failure and recovery, customer emotion and perceived justice in service recovery. It also guides the development of research objectives and hypothesis. The difference between deductive and inductive approaches to research is presented in Table 3.4.1.

**Table 3.4.1: The differences between deductive and inductive approaches**

<b>Deductive emphasizes</b>	<b>Induction emphasizes</b>
Scientific principles	A close understanding of the research context
The collection of quantitative data	The collection data of qualitative data
A highly structured approach	A more flexible structure to permit changes of research emphasis as the research progresses
Researcher independence of what is being researched	Less concern with the need to generalize

(Saunders et al 2009, p. 15)

In this study, a positivist epistemological stance was chosen because this study investigates the truth about service failure and recovery experience. The main epistemological philosophical principle is to explore perceptions of participants in order to establish empirical evidence and also seeks to explain consumer behaviour

(Henderson, 1990; Lincoln and Cuba, 2000; Finn et al., 2000; Jankowicz, 2005). Moreover, a positivist research design is based on the empiricist perspective have regularly been used by various authors in the areas of service quality and service failure and recovery. For example, service quality (Saha and Theingi, 2009; Pakdil and Aydin, 2007) and service failure and recovery studies (Mattila, 2010; Ozgen and Kurt, 2012; Choi and La, 2013; Zhu et al., 2013; Bijmolt et al., 2014; Mattila et al., 2014). These studies have developed strong evidence for the greater use of a positivism paradigm in the areas of service quality and service failure and recovery.

### **3.5 The research methodology (qualitative and quantitative)**

This section, presents an overview of research methodology and discusses the choice of methods that were used in the study. The two methodologies were known as qualitative and quantitative. The research methodologies are common labelled as important elements in research designs and each of these methodology concepts will be explained. A summary of the features of qualitative and quantitative research are presented in Table 3.4.4.

#### **3.5.1 Qualitative research**

Qualitative research is designed to help researchers to understand people in the social and cultural contexts within which they live (Myers, 2013, p.5). Qualitative research also describes, explores the meaning that individuals or groups ascribe to a social or human problem (Creswell, 2009, p.4). The common data collection for qualitative methods include: interview, participant observation, focus groups, case

studies, action research and documentary methods (Jennings, 2001; Yin, 2003; Creswell, 2009; Myers, 2013).

### **3.5.2 Quantitative research**

Quantitative research is broadly described as an empirical investigation of the study that tests hypothesis by examining the significant relationships between variables (Creswell, 2009, p.4). Moreover, the quantitative approach normally tests hypothesis and statistical analysis (Veal, 1992, p.25). Traditional data analysis for quantitative methods include: chart reviews, econometrics, survey methods, laboratory experiments (e.g. hypothesis testing), numerical methods (e.g. mathematical modelling) and quantitative forecasting including trend analysis, product testing and historical sales data analysis (Jennings, 2001; Creswell, 2009; Myers, 2013).

In addition, Jennings (2001, p.271) identified four types of quantitative data analysis used in the social sciences research including: (1) it involves the use of number and statistical formula; (2) it tests hypotheses; (3) it involves inferences grounded in empirical numerical data and (4) involves comparison between variables. Moreover, the fundamental differences between qualitative and quantitative research strategies are highlights in Table 3.4.2. In addition, the advantage and disadvantage for qualitative and quantitative methods is presented in Table 3.4.3.

**Table 3.4.2: Fundamental differences between qualitative and quantitative research strategies**

Approaches	Qualitative	Quantitative
Principal orientation to the role of theory in relation to research	Inductive; generation of theory	Deductive, testing of theory
Epistemological orientation	Interpretivism	Natural science model, in particular positivism
Ontological orientation	Constructionism	Objectivism

Source: (Bryman 2008, p. 22)

**Table 3.4.3: The major advantage and disadvantage for qualitative and quantitative**

	Qualitative	Quantitative
<b>Advantage</b>	Study a particular subject in depth investigation (i.e. deeper understanding) and less concern for representativeness.	More useful for testing a large sample and provides rich information on many characteristics and variables.
<b>Disadvantage</b>	It is difficult to generalize to a larger population.	Higher concern for representativeness.

Source: Maylor and Blackmon (2005, p.261); Hair et al (2007, p.152); Myers (2013, p.8)

**Table 3.4.4: The main features for qualitative and quantitative research**

	Qualitative	Quantitative
Type of questions	Probing	Limited probing
Design characteristics	Emergent design	Pre-ordinate design
Sample size	Meaning, using words	Measurement, using number
Information per respondent	Much	Varies
Administration	Requires interviewer with special skills	Fewer special skills required
Setting	Natural, interactive, personal	Impersonal, controlled, manipulative
Type of analysis	Subjective, interpretive	Statistical, summarisation
Hardware	Tape recorders, projection devices, video, pictured	Questionnaires, computers, printouts
Relationship with theory and approach of research	Developing theory, inductive approach	Confirming theory, deductive approach
Training of the researcher	Psychology, sociology, social psychology, consumer behaviour, marketing	Statistics, decision models, decision support systems, computer programming
Example	Ethnographer's observation	Questionnaire survey

Source: Henderson (1990); McDaniel and Gates (1993)



### **3.5.3 Scenarios methodology**

Scenario methodology have frequently used in service failure and recovery research (McColl-Kennedy and Spark, 2003; Wirtz and Mattila, 2004; Harris et al., 2006b). Research by Chebat and Slusarczyk (2005, p.666) highlights two major limitations for scenarios methodology used in service failure and recovery studies. First, the subject response to the scenarios is not actual service failure. Secondly, the case of scenarios is not present the actual behaviour of customer. Moreover, the major studies used scenarios methodology on service failure and recovery studies that include: Bitner, (1990), Blodgett et al., (1997), Smith et al., (1999), McCollough et al., (2000), Maxham, (2001), Mattila, (2001), McColl-Kennedy and Spark, (2003), Wirtz and Mattila, (2004) and Harris et al., (2006b). The scenarios methodology have been used with the different service contexts such as: athletic shoes scenarios Blodgett et al., (1997); restaurants service failure Smith et al., (1999), Mattila and Patterson, (2004); airlines service failure McCollough et al., (2000); hotel/resort service failure scenarios (Patterson et al., 2006) and hospital service failure scenarios (Choi and Mattila, 2008).

### **3.5.4 The chosen methodology**

A quantitative design was employed for the study as traditionally quantitative research design has frequently been used in airline service quality research and service failure and recovery studies. For instance, airline service quality studies include: Sultan and Simpson, (2000), Nadiri et al., (2008), Chau and Kao, (2009), Saha and Theingi, (2009), Chang and Chang, (2010), Parast and Fini, (2010), De Jager et al., (2012), Nikbin et al., (2012), Namukasa, (2013), Wen and Chi, (2013);

the severity of failure research: Craighead et al., (2004), Weun et al., (2004), Hess, (2008), Kim and Ulgado, (2012), Noone, (2012); criticality of failure studies that include: Mattila, (1999), Michel, (2001), Oh, (2003), Lin's, (2010), Namkung and Jang, (2010), Watson, (2012).

It has also been used in service recovery studies that include: McDougall and Levesque, (1999), Wirtz and Mattila, (2004), Zhu et al.,(2013), Othman et al., (2014), Mostafa et al., (2014), Wang et al., (2014), Vaerenbergh et al., (2014), Xu et al., (2014) and Zhao et al., (2014); perceived justice on recovery satisfaction research: McCollough, (2000), Mattila and Patterson, (2004), Kau and Loh, (2006), Kim et al., (2009), Río-Lanza et al., (2009), Wang et al., (2011) and Lin et al., (2011); and post-recovery emotion studies include: Schoefer and Ennew, (2005), Chebat and Slusarczyk, (2005), Du et al., (2010), Varela-Neira et al., (2010a), Ozgen and Kurt, (2012), Petzer et al., (2012) and Kozub et al., (2014).

The above studies provide strong evidence for the greater use of quantitative methodology in the service quality research. Therefore, employed quantitative designs as considered as appropriate to examine airline service failure and service recovery. Additionally, a variety of methods have been used in the existing literature such as experiments/scenarios, case studies, interviews and questionnaire surveys (e.g. Blodgett et al., (1997), Wirt and Mattila, (2004), Sparks and McColl-Kennedy, (2001) and Huang and Lin, (2011). Among these methods of data collection, a questionnaire survey is the most common. Moreover, the specific objectives and hypotheses are highlighted in the section below.

### 3.5.5 Research objectives and questions

A research question is a specific question the research is designed to investigate and attempt to answer (Collis and Hussey (2009, p.117). The research objectives are the goals of the research study (Kumar, p. 1999, p.40).

For this study, ten individual research questions and objectives were developed through a review of the relevant body of literature. The research questions and the research questions and associated objectives are presented in Table 3.5.

**Table 3.5: Research questions and objectives**

<b>Research Questions</b>	<b>Linked Research Objectives</b>	<b>Literature Sources</b>
1) Does failure severity have an impact on post-failure satisfaction, world-of-mouth communication and intention to repurchase?	1) Analyse the impact of failure severity on post- failure satisfaction, world-of-mouth communication and intention to repurchase.	Weun and Jones (2004); McQuilken and Bednall (2008); Wang et al., (2011)
2) Does failure criticality have an impact on post-failure satisfaction, world-of-mouth communication and intention to repurchase?	2) Analyse the impact of failure criticality on post failure satisfaction, world-of-mouth communication and intention to repurchase.	Weun et al., (2004); Lin's, (2010); Namkung and Jang (2010); Watson (2012).
3) Do different types of service failure have a differential impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	3) Identify the different types of service failure's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Dresner (2006); Ringle et al., (2011); Garcia et al., (2011)
4) Does passenger type moderate the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	4) Analyse the mediating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Bejou and Palmer, (1998); Bamford and Xystouri, (2005); Chang and Chang (2010)

5) Does passenger loyalty moderate the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	5) Analyse the mediating effect of passenger loyalty on the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Bamford and Xystouri (2005); Chang and Chang, (2010) Susskind and Viccari (2011)
6) Does airline type moderate the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	6) Analyse the moderating effect of airline type on failure type's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Chang and Chang, (2010); Yang et al., (2012); Wen and Chi (2013)
7) Do differences in service recovery type influence post-recovery satisfaction?	7) Identify the impact of service recovery on post-recovery satisfaction.	Wirtz and Mattila, (2004); Tiernan et al., (2008); Wen and Chi (2013).
8) Does gender moderate the influence of service recovery type on post-recovery satisfaction?	8) Identify the differences of gender perception on recovery strategy influence on post-recovery satisfaction.	Mattila (2010); Boo et al., (2013); Cambra-Fierro et al., (2013)
9) Does post-recovery satisfaction influence word-of-mouth communication and intention to repurchase?	9) Identify the impact of post-recovery satisfaction on word-of-mouth communication and intention to repurchase.	Chebat and Slusarczyk (2005); Schoefer and Ennew (2005); Del Rio-Lanza et al., (2009)
10) Do emotion and perceived justice mediate the impact of recovery actions/strategies on post-recovery satisfaction and loyalty?	10) Analyse the mediating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction and loyalty.	Schoefer and Diamantopolos, (2008); Lanza et al., (2009); Varela-Neira et al.,(2010a); Wang et al., (2011)

### 3.5.6 Hypothesis testing

Kumar (1999, p. 66) provides four main functions of a hypothesis tests: (1) the formulation of a hypothesis provides a study with focus, it tell researches what specific aspects of a research problem to investigate; (2) a research hypothesis tells

the researcher what data to collect and what not to collect thereby providing focus to the study; (3) as it provides a focus, the construction of a hypothesis enhances objectivity in a study; and (4) a hypothesis may enable researcher to add to the formulation of theory and help researcher to bridge the gaps in the body of knowledge.

In addition, hypothesis tests in social sciences research can be used for a wide range of purposes. Singh and Nath (2005, p.30) highlight the following three main purposes for the hypotheses tests: (1) the development of theory; (2) hypothesis is a formal affirmative statement predicting a single research outcome; and (3) a tentative explanation of the relationship between two or more variables. For this study, the review of the literature has facilitated the development of research hypothesis. The hypotheses and key literature sources associated with each one are presented in Table 3.5.1.

**Table 3.5.1: Hypotheses and key literature sources**

<b>Hypothesis</b>	<b>Relevant Literature</b>
H1. Failure severity has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	The severity of service failure has a negative impact on customer satisfaction, negative word-of-mouth communication and customer disloyalty (Levesque and McDougall, 2000; Weun et al., 2004; Wang et al., 2011; Kim and Ulgado, 2012).
H2. Failure criticality has a negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	The failure criticality has a negative impact on customer satisfaction, word-of-mouth communication and customer disloyalty (Berry and Parasuraman, 1992; Webster and Sundaram, 1998; Levesque and McDougall, 2000; Weun et al., 2004; Lin's, 2010; Namkung and Jang, 2010; Watson, 2012).

H3.Failure type influences post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Different type of service failure has a negative impact on post-failure satisfaction, word-of-mouth and intention to repurchase (Wenster and Sundaram, 1998; Levesque and McDougall, 2000; Weun et al., 2004; Watson, 2012).
H4.Passenger type moderates the influence of failure type and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	Empirical evidence indicates that there are significant differences between business and leisure passengers regarding their perception of service failure type and criticality service failure its impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase (Bejou and Palmer, 1998; Bamford and Xystouri, 2005; Chang and Chang, 2010)
H5. Passenger loyalty moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.	The failure type, severity and criticality have been found to be moderated by passenger loyalty (Bejou and Palmer, 1998; Bamford and Xystouri, 2005; Chang and Chang, 2010 Susskind and Viccari, 2011).
H6. Airline type (low cost vs full service) moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth and loyalty.	The service failure type, severity and criticality of both full service and low-cost airline have been found to impact on customer post-failure satisfaction, word-of-mouth and loyalty (Bejou and Palmer, 1998; Bamford and Xystouri, 2005; Chang and Chang, 2010; Yang et al., 2012; Wen and Chi, 2013).
H7. Service recovery type influences post-recovery satisfaction.	The previous literature shows that difference types of service recovery strategies to have a significant impact on customer post-recovery satisfaction (Kelly et al., 1993; Tax et al., 1998; Davidow, 2000; Wirtz and Mattila, 2004; Tiernan et al., 2008; Wen and Chi, 2013).
H8. Gender moderates the perceived effectiveness of service recovery type.	Empirical evidence indicates that the difference types of service recovery strategies has a direct influence on gender perceptions(McColl-Kennedy et al., 2003; Mattila, 2010; Boo et al, 2013; Cambra-Fierro et al., 2013).

H9. Post-recovery satisfaction influences word-of-mouth communication and intention to repurchase.	Empirical evidence indicates that post-recovery satisfaction has direct influences on word-of-mouth communication and intention to repurchase (McDougall and Levesque, 1999; Davidow, 2000; Chebat and Slusarczyk, 2005; Schoefer and Ennew, 2005; Del Rio-Lanza et al., 2009).
H10. Emotion mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.	Emotions have been found to have an important role in customer evaluation of various service recoveries and its impact on post-recovery satisfaction, word-of-mouth communication and intention to repurchase (Bagozzi et al., 1999, Weiss et al., 1999; Schoefer and Diamantopolos, 2008; Sviri and Olsen, 2012; Wen and Chi, 2013).
H11. Perceived justice mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.	The previous literature shows that perceived justice of service recovery can affect customer post-recovery satisfaction, word-of-mouth communication and intention to repurchase (Chebat and Slusarczyk, 2005 and Rio-Lanza et al., 2009; Varela-Neira et al., 2010a; Wang et al., 2011).

### 3.6 Survey methods

The previous section presents an overview of research methodology (e.g. qualitative and quantitative). This section will provide an overview of the different data collection methods used in the study that includes self-completed questionnaires, e-questionnaires and street surveys. Among these methods of data collection, e-questionnaires and street surveys were used as the main methods of data collection for this study. The details for data collection procedures are presents in the section 3.8.2. An overview of survey methods and each of their main features will highlights in the following section.

### **3.6.1 Self-completion questionnaires**

The self-completion questionnaire concept is a normally distributed to possible respondents or left in a prominent position for completion (Jennings, 2001, p.234). The self-completion questionnaires technique has one major disadvantage in that there is no one present to explain things to the respondent and clarify responses to open-ended questions (Aaker et al., 2011, p.217).

Self-completed questionnaires are commonly conducted by service firms including restaurants, retail stores, hotels or financial institutions and the questionnaires are left in convenient places for the potential respondent to pick up, fill in and return using a prepaid–postage return envelope (Proctor, 2003, p.138). The self-completed questionnaire is also less commonly used in service failure and recovery research but used by other studies such as management research by Hartley (2001) education management by Douglas et al., (2009), human resource management by Lusty (2009) and operation and facilities research by Hebert and Chaney (2012).

### **3.6.2 E-questionnaires**

E-questionnaires provide a quicker from of data collection and this is one of the more popular modes of the survey methods (Jennings 2001, Denscome, 2007). According to Denscome (2007, p.14) the following represent three ways to conduct an e-questionnaire: (1) an e-mail questionnaire, the questions are sent as part of the email itself (2) the questionnaire is sent with an email as an attachment (3) web-based questionnaire, the questionnaire can be designed as a web page and located



on a host site, waiting for people who visit the site to complete it. Jennings (2001, p.240) states that the use of electronic communication increases, therefore, e-questionnaire popularity as a means of collecting data. In addition, the main advantage for web-based surveys is that it is fast and convenient for data collection (Denscome, 2007; Neuman, 2011).

E-questionnaires are commonly used in different fields of research, for example, service failure and recovery research by Schoefer and Ennew (2005), Funches (2011), Robinson et al., (2011); tourism management and service quality research by Law et al., (2004), Vrana and Zafiroopoulos (2006), Unbehaun et al., (2008), Dolnicar et al., (2009), Seppala-Esser et al., (2009), Bristow et al., (2011), Mwaura et al., (2013), Filieri, and McLeay (2013) and Kim et al., (2014). It has also been used in business management by Quinton and Harridge-March (2008); service management by Jiang et al., (2013); banking and finance by Rajaobelina et al., (2013); online retail service by Lee et al., (2013) and hospitality studies by Lu and Chiang (2003); Law and Hsu (2005), Brey et al.,(2008), Janta (2011), Kwok (2012), Vij (2012), Rothfelder et al., (2012) and Xie and Chen (2014).

### **3.6.3 Street surveys**

Street surveys are also known as intercept surveys and this also can be described as a variation of the in-person survey whereby information can be obtained from respondents as they pass by a populated public area: a transit station, a retail mall or a workplace (Rea and Barker, 2005, p.21). Street surveys represent one of the most popular modes of survey methods used in the service research and tourism studies,

for example, Tyrrell and Spaulding (1984), Clarke (2000), Nawijn and Mitas (2012), Ozgen and Kurt (2012). In addition, the advantages and disadvantages for different survey methods such as self-complete questionnaires, e-questionnaires, and street surveys are presented in Table 3.6.

**Table 3.6: Advantages and disadvantages for different survey methods**

Type of survey method	Advantages	Disadvantages	Overcome the Disadvantages
Self-completed questionnaires (Jennings, 2001, p.235)	<p>The participant can complete the questionnaire at their own pace</p> <p>The researcher can never be sure that the targeted person has responded to the questionnaire, unless the researcher has personally handed the questionnaire to the respondent and waited for its completion</p>	<p>If left with the respondent, the questionnaire can be completed at a time convenient to the respondent</p> <p>The respondent is unable to seek clarification unless the researcher is present</p>	A short personal interview can overcome this limitation. A quick interview was used when conducted questionnaires in the Salford University Campus: Clifford Whitworth Library; Mary Seacole Building; Maxwell Building; Media City UK campus
E-questionnaires (Jennings, 2001, p.241)	<p>The speed of data collection is faster than mail, telephone, or intercept surveys</p> <p>The ease of conduct of an e-questionnaire can be linked to data analysis programs</p>	<p>The possibility of data corruption via virus transmission</p> <p>The possibility of bogus replies as a result of computer hacking activities</p>	Antivirus software can overcome this problem. Antivirus software helps prevent viruses, spyware and other online threats
Street surveys (Veal, 1992, p.106) (Rea and parker, 2005, p.21)	<p>Data collection time for street surveys are shorter than other traditional mode of surveys (Veal, 1992, p. 106)</p> <p>Provides access widely sample groups and target in most population (Veal, 1992, p.106)</p>	<p>Time consuming to complete by respondent - street surveys are unable to conduct more than 20 minutes because respondent may in a hurry (Veal, 1992, p.106)</p> <p>Limited information obtain from respondents due to the time consuming by respondents (Rea and parker, 2005, p.21)</p>	A short interview and quick online surveys were used to overcome these limitations.

### 3.6.4 Questionnaire design

The concept of a questionnaire has described as the research tools through which people are asked to respond to the set of questions (Gray, 2014, p.352). The questionnaire is also referred to as a self-completion survey by participants (Brace, 2008, p.2). The research questionnaire can have multiple purposes. For example, Frankfort-Nachmias and Nachmias (2008, p.230) state that the questionnaire questions can be translated into specific questions, with answers to the such questions providing the data for hypothesis testing. In addition, the format of the questions used in a questionnaire is normally divided into three different types: (1) closed-end questions, (2) open-ended questions and (3) contingency questions (Brace, 2008; Frankfort-Nachmias and Nachmias, 2008; David and Sutton, 2011; Gray, 2014). A summary for the definition on these three different types of questions are provided by (Frankfort-Nachmias and Nachmias, 2008, p.236).

- *Closed-ended questions*: Respondents are given a set of responses and asked to choose the one that most closely describes their attribute or attitude.
- *Open-ended questions*: Respondents are not given a specific set of response. They are asked to describe their attributes or attitudes in their own words, and their answer are recorded in full either by the respondent or by an interviewer.
- *Contingency questions*: A type of closed- ended question applicable to a subgroup of respondents. The subgroup may be identified by a filter question, which directs them to answer other relevant questions, or instructions may be provided that direct members of the subgroup to answer a question or set of questions and non-subgroup members to skip to another question.

The next separate sections will present the sequence of questions, questionnaire content and structure that used for the study.

### **3.6.5 Sequence of questions**

The sequence of questions is one of the crucial aspects in the design of questionnaire (Sumathi and Saravanavel, 2003; Kothari, 2004; Reddy and Acharyulu, 2008). For example, Sumathi and Saravanavel (2003, p.189) state that a proper sequence of questions can help the study by clear and providing a clear and understandable process for respondents. In addition, Kothari (2004, p.102) noted that a proper sequence of questions reduces considerably the chances of individual questions being misunderstood and it also makes the questionnaire more effective

For this study, the questionnaire consisted of three sections. In the first section, the measurement covered the following five aspects of airline service quality: (1) respondents were asked to describe in detail a recent or past experience with a service failure incident in an open-ended question, (2) failure severity variable, (3) criticality of failure variable, (4) post-failure satisfaction variable and (5) customer complaint behaviour variable. Responses to questions 2-6 were measured using a five point-Likert scale. This sequence of questions were presented in the first section of the questionnaire and this layout has been used regularly in previous research on service failure and recovery, for example, Miller et al (2000); Karatepe and Ekiz, (2004); Jones and Farquhar,(2007); Michel and Meuter, (2008); De Matos et al., (2009); Smith et al., (2010); Lee et al., (2011); Ozgen and Kurt, (2012).

The second section of the questionnaire was designed to measure: customer perceptions of service recovery (SR); their emotions in service recovery; their perception of justice; and their overall satisfaction, their intention to recommend and their intention to repurchase. This sequence of questions had also been used in the previous studies on service failure and recovery (Michel and Meuter, 2008; Lee et al., 2011; Ozgen and Kurt, 2012). The third section of the questionnaire was designed to collect subjects' socio-demographic characteristics. This sequence of questions has commonly been presented at end of the questionnaire (Do Valle et al., 2008; De Matos et al., 2009; Lee et al., 2011; Ozgen and Kurt, 2012). The justification for the questionnaire structure is presented in (Appendix 4, pp.261).

### **3.6.6 Incentives**

A number of studies have reported that offering incentives to respondents may increase participation rate (Webb, 2001; Parasuraman et al., 2006; Saunders et al., 2009; Pride and Ferrell, 2011; Zikmund and Babin, 2009; Zikmund et al., 2012). For this study, the online survey at Salford University offered incentives to respondents that decided and consented to take a part in the study. The incentives included a return flight to London (from Manchester) plus £100 in shopping vouchers in an optional prize draw. Unfortunately, offering incentives did not have a significant effect on the response rate for this study. Moreover, offering incentives to respondents to participate in the research are regularly employ in the service failure and recovery studies (Kanousi 2005; Harris et al., 2006a; Cassab and MacLachlan, 2009; Namkung et al., 2009; Kim et al., 2012; Nguyen et al., 2012; Kozub et al., 2014; Mattila et al., 2014).

### **3.6.7 Pilot testing and protocol analysis**

### **3.6.8 Pilot testing**

The main purpose for the pilot test is to refine the questionnaire so that respondents will have no problems in answering the questions (Saunders et al., 2009, p.394). A similar view was offered by McDaniel and Gates (2006, p.281) who noted that the aim of a pre-test is to make certain that the questionnaire gives the respondent clear, understandable questions that will evoke clear and understandable responses. However, the pilot testing also enables the researcher to determine that the categories provided for questions are valid and reliable measures, the terms are understandable, and the questions order flows and also measures how long the tool takes to complete (Jennings, 2001, p. 253).

The objective of the pilot study is to assess the validity and reliability of the survey instrument. This study used 16 students at Salford Business School for testing the questionnaire (i.e. six PhD students and ten Master's students). Pilot tests using 16 to 20 subjects have often been used in tourism and hospitality studies (Kang et al., 2003; Law and Cheung, 2003; Nnaji et al., 2011; Mathenge, 2013). In addition, all 16 volunteer participants were asked whether the variables in the three different sections of questions were clear and understandable. All 16 respondents in pilot-tests were highlighted that the option of '*nothing*' should be included in the list of service recovery actions. Therefore, the change was made to the question QB2. As a result, the term '*nothing*' was added in both paper and online survey. In addition, the time taken to complete the questionnaire was around 15 minutes for both paper and online survey.

Protocol analysis (PA) can be described as a data collection method used to test questionnaires and identify questions associated with information problems (Collin and Hussey, 2009, p. 149). Day (1986) identified three advantages for use of protocol analysis: (1) it helps to reduce the problem of researcher bias (2) the possibility of omitting potentially important areas or aspects is reduced and (3) the technique is open-ended and provides considerable flexibility. In addition, PA offers a useful tool for the researcher to evaluate pre-test questionnaires effectively and also provide rich detailed feedback on each question (Tull and Hawkins, 1990).

In this study, verbal protocol analysis was used to test the questionnaire reliability. The questionnaire was piloted with 4 students at Salford Business School, two undergraduates and two postgraduates. All 4 respondents in verbal protocol test were highlighted that “service failure type” such as slow check-in, flight delays or mishandled baggage should be included in the Question A1. The changes to question A1 are presented in Table 3.7.

**Table 3.7: Changes to specific question QA1**

Question	Original question	Edited question
<b>QA1</b>	Please recall ONE RECENT INCIDENT when you experienced a service failure/problem with an airline and briefly summarise the problem in the box below.	Please recall ONE RECENT INCIDENT when you experienced a service failure/problem with an airline and briefly summarise the problem in the box below. (e.g. Slow check-in, flight delays, mishandled baggage, etc).

### 3.6.9 Reliability and Validity of the quantitative research

Reliability is often described as the consistency of a measurement (Bryman and Bell, 2007; Saunders et al., 2009; Gray, 2014). A number of well-known social scientists have provided different views for the reliability concept (Babbie, 1990; Baker, 1999; Bryman and Teevan 2005; Frankfort-Nachmias and Nachmias, 2008; Creswell, 2009; Saunders et al., 2009; David and Sutton, 2011). For instance, Baker (1999, p.114) argued that put simply, reliability is defined as the degree to which a procedure for measuring produces similar outcomes when it is repeated, if similar results it is repeated then state the measuring instrument is reliable. Bryman and Teevan (2005, p.25) noted that reliability is concerned with whether the results of a study would be the same. A summary of different definitions in reliability are shown in Table 3.8.

**Table 3.8: A summary of reliability definitions**

Author	Year	Field	Definition for reliability
Babbie	1990	Social science research methods	Reliability is a matter of whether a particular technique, applied repeatedly to the same object would yield the same result each time.
Jennings	2001	Tourism	Reliability refers to the consistency and stability of the measuring instrument.
Malhotra	2007	Marketing research	Reliability refers to the extent to which a scale produces consistent results.
Saunders et al	2009	Management	Reliability refers to the extent to which data collection technique or techniques will yield consistent findings.
Collis and Hesse	2009	Business research methods	Reliability refers to the extent to which research results are consistent with previous studies.
Aaker et al	2011	Marketing research	Reliability is the random error component of a measurement instrument.
Olsen	2011	Social science research methods	Reliability refers to the extent to which research findings are consistent with previous studies



For this study, respondents were recruited from three different sources: (1) a street intercept survey in Manchester, (2) an online survey at Salford University and (3) a Marketest panel survey. These three different sources of data collection may have helped to increase the data reliability. Moreover, Olsen (2011) highlights that the reliability of the findings is crucial for the research project and the research findings need to be consistent with previous studies. One of the main findings from the study indicated that the severity of service failure has a negative impact on customer satisfaction, negative word-of-mouth communication and customer loyalty. This finding is consistent with previous service failure and recovery research (Berry and Parasuraman, 1992; Webster and Sundaram, 1998; Hoffman and Kelly, 2000; Michel, 2001; Weun et al., 2004; Hess, 2008; McQuilken and Bednall, 2008; Wang et al., 2011; Watson, 2012; Kim and Ulgado, 2012).

Within this study reliability is reflected in the results, for example the results showed that men and women view service recovery differently in terms of service recovery actions variables. This result is consistent with previous research (McColl-Kennedy et al., 2003; Mattila, 2010; Boo et al., 2013; Cambra-Fierro et al., 2013). The study also found that post-recovery satisfaction has a significant impact on customer word-of-mouth and intention to repurchase which is consistent with previous service failure and recovery research (Oh, 2003; Weber and Sparks, 2004; Kau and Loh, 2006; Swanson and Hsu, 2011). Additionally, reliability tests were conducted using Cronbach's alpha coefficients to measure of internal consistency. The Cronbach's alphas values (ranging from 0.65 to 0.98) are consider a good indication of reliability (Weed, 2007). The reliability scores for each of the scales are presented in the following section.

The Cronbach's alpha for the scales used in this research are reliable:

1. Service failure types ( $\alpha=.98$ )
2. Severity and criticality failure on service quality attributes ( $\alpha=.73$ )
3. Service recovery actions employed ( $\alpha=.94$ )
4. Emotion variables ( $\alpha=.81$ )
5. Customer complaints and perceived justice variables ( $\alpha=.88$ )
6. Post-failure satisfaction, post-recovery satisfaction and loyalty variables ( $\alpha=.80$ )

### **3.6.10 Validity of the quantitative research**

The concept of validity in research has been defined by many researchers (Creswell, 2009; Collin and Hussey, 2009; Saunders et al., 2009; Gray, 2014). Validity has been defined as the degree to which data in a research study are accurate and credible (Gray, 2014, p.692). It has also been defined as the extent to which the research findings accurately reflect phenomena under study (Collin and Hussey 2009, p.64). Validity in quantitative research also refers to whether one can draw meaningful and useful inferences from scores on particular instruments (Creswell, 2009, p.235). Validity has also been described as the extent to which data collection method or methods accurately measure what they were intended to measure (Saunders et al., 2009, p.603). There are a number of different types of validity such as content validity and construct validity.

### **3.6.11 Content validity**

Content validity has been described as the inclusiveness in the measure of all relevant aspects of the construct (Lehmann et al., 1998, p.255). It has also been

defined as a subjective but systematic evaluation of how well the content of a scale represents the measurement task at hand (Malhotra 2010, p.320).

Content validity is the representativeness or sampling adequacy of the content of the measurement instrument (McDaniel and Gates, 2006, p.225). Content validity is sometimes known as 'face validity' because it is assessed by looking at the measure to ascertain the domain being sampled. If the actual items look different from the possible domain, the measure is said to lack context validity (Lacobucci and Churchill, 2010, p.257). Moreover, one of the common methods to access content validity is to employ the content analysis technique. The content analysis concept is a relatively deductive method of analysis where codes or constructs are almost all predetermined and where they are systematically searched for within the data collected (Easterby-Smith et al, 2008, p.327). In the content analysis, the written materials of analysis may be words, character, themes, space and time measures, or topics and the analytical categories for classifying the units are developed (Aaker et al., 2011, p.186).

For this study, the content analysis was used to test coding to categories of service failure and the details for the procedure of classification of service failure are presented in the following section. Additionally, the data collection for this study was collected from the broader sample of participants, in order to improve content validity. The sample includes people employed as: senior executive, small business owners, junior administrative, casual workers and students. The data from multiple sources, can help to increase the strength of the results and content validity (Easterby-Smith et al, 2008; Lacobucci and Churchill, 2010; Aaker et al., 2011).

### **3.6.12 The development and testing of the coding scheme to categorise service failure**

Before the analysis of the primary data collected from the questionnaire survey, the examples of airline service failure elicited from the respondents had to be classified into different types. However, limited classification schemes in the literature, therefore, the service failure types were established using a content analysis of subjects' descriptions of the critical incidents. According to Janis's (1965) classification methods, the approach to context analysis adopted in this study may be defined broadly as 'semantical content analysis', and specifically as 'designations analysis'. The analysis was based on the content of the text, for example, 'what' was elicited rather than looking to 'why' the words. Additionally, in order to determine the relative emphasis on the important of different elements within the subject matter. The content analysis was used by defining service failure categories in order to permit a classification of the data. Five categories of service failure were carefully identified through a preliminary examination of the data set. In order to satisfy the requirements of coding scheme reliable. The seven key procedural steps are presented as follow (Weber, 1990, p.21):

1. Define the recoding units;
2. Define the categories;
3. Test the coding on a sample of text;
4. Assess reliability;
5. Revise the coding rules;
6. Retest the coding;
7. Assess reliability and validity.

The 'recording unit', can be explained as the basic unit of text to be classified and In this case the recording unit was freely elicited actual critical incidents of service failure. Five categories were considered to represent the different broad types of airline service failure identified from an initial examination of the data set to the most suitable given the subject matter, the objectives of the analysis and the requirement for unambiguous items and exhaustive categories definitions (Holsti, 1969). The five categories were:

1. Delays, diversions or cancellations.
2. Delays diversions or cancellations due to weather.
3. Delays diversions or cancellations due to technical faults.
4. Lost/damaged luggage.
5. Airline passenger service.

At stage three, the categories were tested on a sample of the data on the 20/08/2013. The categories appeared to perform successfully in terms of differentiating between service failure types. At stage four, the airline categories were subjected to an 'internal' consistency test of 'intra-coder reliability' or called as 'stability' which shows test-retest reliability. All of service failure critical incidents were initially coded as one of the five categories. The researcher then used the same categories to code the data one week later (27/08/2013) and found them to be 'stable', with an intra-coder coefficient of reliability of 0.95. As a result, the coding rules were, therefore, considered to be sufficiently reliable. The data was subjected to an 'inter-coder reliability' test in which the researcher's supervisor in Salford Business School (SBS) at the University of Salford independently coded the service failure critical incidents using the prescribed categories.

The test coder was provided with descriptions to code the critical incidents. He was then asked to code each critical incident into one of the categories with the exception of seven ambiguous description of service failure which were coded into different categories by the test coder. The content classification produced the same results. The seven ambiguous descriptions of service failure are shown below:

1. "When I went on Honeymoon my plane was delayed by five hours due to an incident upon landing"
2. "Plane delayed for 3h due pilot drowsiness"
3. "Inbound aircraft diversion due to medical emergency"
4. "Flight delay turbulence"
5. "Long delay at baggage hall at airport and long wait at check in"
6. "Flight cancelled/rescheduled 2 months before departure"
7. "Last Christmas when I was flying home from Manchester to Belfast my Easyjet flight got delayed for two day because of a crew shortage"

As a result of the external test results the coding rules were changed at stage five to the following:

1. Flight delays, diversions or cancellations (unable to classify as either 2 or 3).
2. Flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano).
3. Flight delays, diversions or cancellations due to technical or airline faults.
4. Lost/damaged luggage.
5. Airline passenger service.

The ‘coefficient of reliability’ (the ratio of coding agreements to the total number of coding decision), is often used measure of reliability was 0.98. (Figure 3.2). Because this formula does not take into consideration, however, the extent of inter-coder agreement which may result from chance, an ‘index of reliability’ (the most widely accepted formula used in social science research) was also calculated, this was also found to be 0.98. (Figure 3.3). Analysis showed a high level of ‘intra-coder consistency’ and ‘intersubjective agreement’ among coders, therefore established the ‘semantical’ validity of the scheme and assess overall reliability and viability.

### **Figure 3.2 The Coefficient of Reliability (C.R.)**

$$C.R = \frac{M}{N1}$$

Where M = Number of coding decision on  
which the test coder is in agreement;

N1 = Number of coding decisions  
made by test coder

$$C.R. = \frac{395}{402}$$

$$C.R. = 0.98$$

The coefficient of reliability (CR) ranged from 0.60 to 0.80 are consider a good indication of reliability. A summary of the CR is provided by Landis and Koch (1977).

- Below 0 : Poor agreement
- 0-0.2 : Slight agreement
- 0.21-0.40 : Fair agreement
- 0.41-0.60 : Moderate agreement
- 0.61-0.80 : Substantial agreement
- 0.81-0.99 : Almost perfect agreement
- 1.0 : Perfect agreement

A further test of inter-coder reliability produced 100% agreement on the categories of the critical incidents into five types.

### **Figure 3.3 The Index of Reliability (pi)**

$$Pi = \frac{\% \text{ observed agreement} - \% \text{ expected agreement}}{1 - \% \text{ expected agreement}}$$

Expected Agreement (By Chance):

Category	Frequency	Proportion of All Themes
Flight delays, diversions or cancellations (unable to classify as either 2 or 3)	156	0.403
Flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano)	34	0.088
Flight delays, diversions or cancellations due to technical or airline faults	59	0.152
Lost/damaged luggage	62	0.160
Airline passenger service	76	0.196

$$\begin{aligned} \text{The expected agreement is} \\ &= (0.403)^2 + (0.088)^2 + (0.152)^2 + (0.160)^2 + (0.196)^2 \\ &= 0.257 \end{aligned}$$

$$Pi = \frac{0.983 - 0.257}{1 - 0.257}$$

$$\begin{aligned} Pi &= 0.977 \\ &= 0.98 \end{aligned}$$

Source: Angell et al (1964)



### **3.6.13 Construct validity**

Construct validity has been described as the degree to which a measurement instrument represents and logically connects, via the underlying theory and the observed phenomenon to construct (McDaniel and Gates, 2006, p.227). Construct validity refers to the degree to which a measure relates to other variables as expected within a system of theoretical relationship (Babbie, 2010, p.154). Construct validity is a form of validity testing in which hypotheses generated from a concept are tested and the results of these tests are correlated (Baker, 1999, p.496). Aaket et al., (2011, p.269) states that one way to assess construct validity is to test whether or not the measure confirms hypotheses generated from theory. Moreover, the construct validity objective is to test whether the results of the study are consistent with previous studies.

Construct validity is normally classified into three categories such as convergent, divergent and nomological validity. Convergent validity is present if the degree that scores on a measure of a construct are strongly correlated with an independent variable (Vogt and Johnson, 2011, p.76). Divergent validity is used to measure the extents to which two or more variables are co-related to one another (Vogt and Johnson, 2011, p.77). Nomological validity aim is to test whether the findings of the study are consistent with relevant theory or empirical results (Hamann et al., 2013). For this study, three different analytical methods were used (e.g.convergent, divergent and nomological) to determine the construct validity of the study and the three key analytical methods were used to assess construct validity that include the following tests: (1) ANOVA; (2) t-test; and (3) least squares regression (OLS).

### 3.6.14 Methods of analysis

The data analysis may recognize a basic distinction between the qualitative (i.e. words) and quantitative (i.e. number) (Blaxter et al., 2006, p.1999). For this study, the data gathered in the survey was loaded into SPSS version 20.00. A variety of analytical methods were used (e.g. least squares regression (OLS), t-tests, one-way between groups ANOVA and two-way between groups ANOVA). Previous studies on service quality and service failure research have often used these analytical tests, for example, OLS (Huppertz, 2007; Utley and May, 2009; Wang and Beise-Zee, 2013), t-test (Hurst et al., 2009; Durvasula and Lysonski, 2011, one-way between groups ANOVA (Ku et al., 2013; Vaerenbergh et al., 2014) and two-way between groups ANOVA (Mattila and Patterson, 2004; Dallimore et al., 2007). A summary of methods for the analysis is presented in Table 3.8.1 and the definition of terms for (e.g. ANOVA, OLS and T-tests) is presented in Table 3.8.2.

**Table 3.8.1: Analytical methods**

Test	Reason for application and description
One-way between groups ANOVA	One-way analysis of variance (ANOVA) is a statistical procedural for testing the significant of the differences among several independent group means (Corston and Colman, 2000, p. 74). One-way ANOVA could tell us if there are significant differences within any of the comparison of the groups in our sample (George and Mallery, 2008, p. 156).
Two-way between groups ANOVA	Two-way ANOVA allows researchers to simultaneously test for the effect of each of the independent variables on the dependent variable and also identifies any interaction effect (Pallant, 2007, p. 258).
Least squares regression (OLS)	Methods used to describe the relationship between dependent and independent variable. To determine whether dependent variable has statistical significance (Vogt and Johnson, 2011).
T-tests	The measurements of subjects in the group and compare between sets of their scores (Vogt and Johnson, 2011, p. 77)

**Table 3.8.2: The definitions of terms (ANOVA, OLS and T-tests)**

Term	Definition/ Description
Adjusted R squared	Adjusted R squared gives a truer (population) estimate of amount of variance in a dependent variable (Vogt and Johnson, 2011, p.5).
$\beta$ (unstandardized regression coefficient)	A number indicating the values of a dependent variable associated with the values of an independent variable (Vogt and Johnson, 2011, p. 331).
Beta (standardized regression coefficients)	Beta coefficient indicates the difference in a dependent variable with an increase or decrease statistical show in the regression analysis (Vogt and Johnson, 2011, p. 27).
Durbin watson	The Durbin-Watson statistic determines whether or not the correlation between adjacent error; this broadly used in OLS regression analysis.
df (degrees of freedom)	DF to represent the number of individual scores in a sample and estimate the sample means error in a data set.
Frequency	Number of individuals in a given category.
F-statistic	(a) Measure of the stability the variance within the groups or error of variance. (b) The term usually means statistical significance used in correlation and regression coefficients (Vogt and Johnson, 2011, p. 147).
Levene's Test of Equality of Error Variances	It is a measure of sample stability and equally of variances; broadly used in the ANOVA or t-test analysis.
Mean	Average score for each group.
Mean Square	A statistic indicating how much the mean score of a group scores differs (deviates from an individual scores (Vogt and Johnson, 2011, p. 105).
N	Number of individuals in a given category.
P-value (Probability value)	(a)To determine whether the results has statistical significance in two-way ANOVA analysis. (b) The probability that a statistic would occur by sampling error and sampling error is an estimate of how a sample statistic is expected to differ from a population parameter (Vogt and Johnson, 2011, p.306).
Post Hoc Comparison	A test of the statistical significance of differences between group means and overall difference among group (Vogt and Johnson, 2011, p. 296).
R Squared	R-square indicates that the tendency of each score and estimate errors in a group of scores.
SE.B (standard error of B)	Measure the statistical stability and sampling error in a regression analysis.
Standard deviation	A statistic that shows the variable scores in a group (Vogt, 2011, p. 374).
Standard error	It is a measure of stability and sampling error, it refers to error in our estimates due to random fluctuations in the sample (Vogt, 2011, p. 375).
Sig	A value indicating statistical significance.
t-statistic	The t-statistic is the hypothesized parameters. When the unit of measurement (i.e. independent

	variable) have a direct impact on the dependent variable and the t- statistic value can be either positive or negative (Dewberry, 2004, p.138).
Type III Sum of Squares	A statistic indicates the main effect and interaction effect of the independent variables.
Tolerance	Measure proportion of variability (e.g. scores in the group) and shows how much of the variance scores of each independent variable.
VIF (variance inflation factor )	VIF is calculated for each variable in the model and the extent to which independent (or predictor) variables in a regression analysis are correlated with one another (Vogt and Johnson 2011, p. 61).

### 3.7 Sampling

A sample can be described as a set of elements selected in some way from a population and the aim of sampling is to save time and effort (Sapsford and Jupp, 1998, p.25). Sampling designs normally can be classified as random/probability sampling designs or non-random/probability sampling designs (Kumar, 1999; Sapsford and Jupp, 1998; Aaket et al., 2011). Probability sampling is simple random sampling and random sampling means that every element in the population of interest has an equal and independent chance of being chosen (Sapsford and Jupp, 1998, p.30). A different view is offered by Aaket et al., (2011, p.342) states that probability sampling designs are involve three important considerations. First, the target population must be specified. Second, the method for selecting the sample needs to be developed. Third, the sample size must be determined. Aaket et al., (2011, p.349) adds that non-probability sampling designs typically is used in five common situations, including (1) the exploratory stage of a research project; (2) pretesting a questionnaire; (3) dealing with a homogeneous population; (4) when a researcher lacks statistical knowledge; and (5) when operational ease is required. Additionally, some of the key advantages and disadvantages of various sampling techniques are highlighted Table 3.8.4.

For this study, convenience sampling technique was adopted for the study and the respondents were obtained from three different sources: a street intercept survey in Manchester, an online survey at Salford University and Marketest panel survey (see sample type section for description of sampling procedures). Additionally, non-probability method is used in this study, because it was difficult to determine how many people have experienced airline service failure, therefore, the non-probability method as considered as appropriate for the study. Moreover, the main features for probability and non-probability sampling designs are presented in Table 3.8.3.

The critical incident technique (CIT) within a questionnaire survey design was used in this research rather than a simulated scenario-based procedure because the study focuses on evaluating the effectiveness of service recovery actions in response to real world airline service failure. Moreover, the superiority of CIT has been established in previous research (Dutta, et al 2007; Lewis and McCann 2004; Seawright et al., 2008). Service failures are not commonplace; as such, a random sample of the general population would be unlikely to produce sufficient numbers of respondents with relevant experiences. Under these circumstances, a convenience sampling procedure was followed (Menon and Dube, 2004).

**Table 3.8.3: Probability and non-probability sampling designs**

<b>Probability sampling designs</b>	<b>Definition/ Description</b>
Stratified random sampling	Stratified sampling is used when the case in a population fall into distinctly different categories (strata) of a known proportion of that population (Wallimam, 2011, p.186).
Cluster sampling	The aim of cluster sampling method is often divided the sampling population into groups that called clusters sampling (Kumar, 1996, p.160). Cluster sampling is used when the population is large and spread over a large area rather than enumerating the whole population, it is divided into segments (Wallimam, 2011, p.186).
Systematic sampling	Systematic sampling is used when the population is very large and of no known characteristics, e.g. the population of a town (Wallimam, 2011, p.186).

<b>Non-probability sampling designs</b>	<b>Definition/ Description</b>
Convenience sampling	The aim of convenience sampling to contact sampling unit that are convenient such as university students, a church activity group, Subjects at a shopping centre (Aaker et al., 2011, p. 350).
Snowball sampling	Snowball sampling is the process of selecting a sample using network, for instance, a few individual in a group or organisation are selected and the required information is collected from them, they are then asked to identify other people in the group or organisation, and the people selected by them become a part of the sample (Kumar, 1999, p. 162).
Quota sampling	Quota sampling may be viewed as two-stage restricted judgmental sampling, the first stage consists of developing control categories, or quotas of population elements, for instance, control characteristics which may include sex, age and race. In the second stage sample elements are selected based on convenience or judgment (Malhotra, 2010, p. 380).

**Table 3.8.4: Advantages and disadvantages of basic sampling techniques**

<b>Probability sampling</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Overcome the Limitations</b>
Stratified sampling	Includes all important subpopulations precision	Expensive to recruit subjects	To overcome this limitation, use some of secondary sources may help to reduce cost of investigation.
Cluster sampling	Easy to implement and cost-effective	Imprecise, difficult to compute and interpret results	Categorize the important variables into different groups may help to resolve this problem.
Systematic sampling	Can increase representativeness, easier to implement than simple random sampling, sampling frame not necessary	Can decrease representativeness if there are cyclical patters	A short and quick interview with the representative may help to overcome this problem.
<b>Non-probability</b>	<b>Strengths</b>	<b>Weaknesses</b>	<b>Overcome Limitations</b>
Convenience sampling	Least expensive, least time-consuming, most convenient	Selection bias, sample not representative, not recommended for causal research	Conduct a short and quick interview with the representative may help to overcome this issue.
Experiential sampling	This is a useful method for capturing people attitudes, and feelings	It may be difficult to recruit a large number of people	Attractive incentives (e.g iPhone; MacBook or airline ticket) may help to overcome this problem.
Snowball sampling	Can estimate rare characteristics	Time-consuming	A short online survey may help to overcome this limitation.
Quota sampling	Sample can be controlled for certain characteristics	Selection bias, no assurance of representativeness	A short personal interview with the representative may help to overcome this problem.

Source: Malhotra, 2010, p.388

### **3.7.1 Sampling procedures and sample type**

The researcher's application to Manchester Airport Authority (see Appendix 3, pp.269) to conduct the primary data collection using a face-to-face intercept questionnaire survey was denied. Instead, the respondents were obtained from three different sources: a street intercept survey in Manchester (n=50); an online survey at Salford University (n=52); a Marketest panel survey (n=285), this resulted in 387 useable questionnaires.

The first survey used a street intercept method of sampling in seven areas of Manchester: Corporation Street, Piccadilly Gardens, and University of Salford Campus: Clifford Whitworth Library; Lady Hale Building; Mary Seacole Building; Maxwell Building; Media City UK campus from 28/03/13 to 03/5/13. Out of 120 prospective participants who were approached, 40 did not have experience of airline service failure; 30 refused to participate for a different of reasons that include: being busy and they did not have the time; only 50 useable questionnaires were obtained.

The second survey also used a convenience sampling method to target students and University staff through an online self-completion survey which was placed on the website at the University of Salford. Previous studies in service quality, service failure and recovery have often used student samples, for example, airline service quality studies Tiernan et al., (2008), Weber and Spark, (2009); and service failure and recovery studies Namkung and Jang, (2010), Betts et al., (2011), Komunda and Osarenkhoe, (2012), Swanson and Hsu, (2011) and Choi and La, (2013). The invitation message included a hyperlink to the survey page <https://www.surveymonkey.com/s/9YLBCKGK>, which was live between 17/05/13 and

31/05/13. The response rate was low; only 62 completed questionnaires were obtained, 52 questionnaires were useable. The researcher, therefore decide to use a third approach to increase the sample size. For a summary of student invitation message (See Appendix 3, pp.259).

The third survey employed the services of Marketest, an online market research service. A total of 300 questionnaires were obtained, 15 questionnaires were invalid, resulting in a total of 285 useable questionnaires. Marketest used an internet panel of participants who had experience of airline service failure and the online self-complete survey was placed on the website at Marketest. The website link was at [http://www.marketest.co.uk/market-research-questinnaire/179/airline service and failure](http://www.marketest.co.uk/market-research-questinnaire/179/airline%20service%20and%20failure), which was live between 04/07/13 and 17/07/13. Marketest employ quality control guidelines to monitor the quality of panel members. These include: IP address control to avoid double registration, profile information to remove similar questionnaires, time taken to complete a survey, the quality of open question answers and the coherence of answers.

Service failure and recovery studies have typically used professional online market research services to recruit participants. For example, a study by Schoefer and Ennew (2005) investigated the relationship between customer emotions and perceived justice used in online market research service to collect data and a total of 216 useable questionnaires were obtained. Robinson et al., (2011) also used a professional online market research sample to examine the relationship between service failure recovery and customer relationship management.



### 3.7.2 Sample size

The number of people in the UK population who have experienced airline service failure is an unknown quantity. As a result, the sample size must be calculated according to the following parameters (Tull and Hawkins, 1993): allowed error ( $e^2$ ), level of confidence to be obtained ( $Z^2$ ) and an estimated variance for the population ( $\sigma^2$ ). Hence, the formula employed in this research was:

$$n = \frac{Z^2 \sigma^2}{e^2}$$

According to Field (2009) the coefficient Z, for a 95% level of confidence, is 1.96 and, according to Tull & Hawkins (1993), the variance  $\sigma^2$ , for a 5 point Likert scale, is 1.8. This airline service failure and recovery research is based on scales measured with a five point interval in Likert scales, as explained below section and consequently, a 5% (100% - 95% confidence) allowable error  $e$  is 5% of 5 i.e. 0.25. Therefore, the calculation of the sample for this research is as follows:

$$n = \frac{1.96^2 1.8}{0.25^2} = 115$$

A sample size of 387 was obtained and the minimum sample sizes used in previous research typically range from 214 to 371, as outlined in the following table 3.9.

**Table 3.9: A summary of sample size used in airline service quality and service failure and recovery studies**

Author	Year	Journal	Investigated aspects	Sample size
Bejou and Palmer	1998	Journal of Service Marketing	Airline service failure and loyalty	214
Prayag	2007	International Journal of Quality and Reliability Management	Airline service quality	263
Komunda and Osarenkhoe	2012	Business Process Management Journal	Service failure and recovery, customer satisfaction	120
Chang and Chen	2013	Journal of Service Marketing	Service failure and recovery	340
Choi and La	2013	Journal of Service Marketing	Service failure and recovery, customer loyalty	371
Namukasa	2013a	The TQM Journal	Airline service quality and customer loyalty	303
Jiang	2013	Journal of Transport Management	Airline service quality	200
Suki	2014	Research in Transportation Business and Management	Airline service quality and customer satisfaction	300
Wang et al.,	2014	Managing Service Quality	Service failure and recovery, customer satisfaction, purchase behaviour	357

A summary of the sample characteristics are presented in Table 3.9.1. The sample contains (51.9%) females (48.1%) males and the age group breakdown is as follow: 55-64 (9.3%), 45-54, (14.2%), 35-44(19.9%), 25-34(32%) and 18-24 (24.5%). Respondents who travelled with low-cost carriers (55.6%) were slightly higher than full-service (44.4%) respondents. The results also indicated that (84%) of the respondents were UK residents, this represent a higher response rate than the other nationalities. The results also indicated that more travellers were in economy class (94.1%) compared to business class (5.2%), and first class (8%), all of these results are shown in Table 3.9.1

**Table 3.9.1: Demographic profiles of the respondents**

<b>Gender</b>	<b>Frequency</b>	<b>%</b>	<b>Airline type</b>	<b>Frequency</b>	<b>%</b>
Female	201	51.9	Full-service airline	172	44.4
Male	186	48	Low-cost carrier	215	55.6
Total	387	100	Total	387	100
<b>Age</b>	<b>Frequency</b>	<b>%</b>	<b>Nationality</b>	<b>Frequency</b>	<b>%</b>
18-24	95	24.5	UK	325	84.0
25-34	124	32.0	Rest of Europe	32	8.3
35-44	77	19.9	Asian	20	5.3
45-54	55	14.2	African	2	0.5
55-64	36	9.3	Middle East	5	1.3
Total	387	100	American	3	0.8
			Total	387	100
<b>Passenger type</b>	<b>Frequency</b>	<b>%</b>	<b>Travel class</b>	<b>Frequency</b>	<b>%</b>
Business	28	7.2	First class	3	8
Leisure	341	88.1	Business class	20	5.2
Other e.g. education	18	4.7	Economy class	364	94.1
Total	387	100	Total	387	100
<b>Social class</b>	<b>Frequency</b>	<b>%</b>	<b>Air route</b>	<b>Frequency</b>	<b>%</b>
A	20	5.2	Domestic within the USA	13	3.4
B	63	16.3	Domestic within the UK	6	1.6
C1	91	23.5	International outside Europe	123	31.8
C2	26	6.7	Domestic within the Europe	245	63.3
D	13	3.4	Total	387	100
E	174	45.0			
Total	387	100			

**Notes:** Social class classification: (A) indicate higher managerial, administrative or professional, (B) indicate intermediate managerial, administrative or professional, (C1) indicate supervisory or clerical and junior managerial, administrative or professional, (C2) indicate skilled manual workers, (D) indicate semi and unskilled manual workers, (E) indicate casual or lowest grade worker

### 3.8 Ethical consideration

Ethical consideration is not only important in natural sciences but also important in social sciences research (Collis and Hussey 2009). In social research, or other forms of research which study people and their relationships with each other, there is a need to be particularly sensitive about issues of ethical behaviour and researchers must be aware of necessary ethical standards (Walliman, 2011, p.340). Ethical concerns will affect the plan of the research, access to individuals or organisations, and how data is collected and analysed (Saunders et al., 2009, p.183). Bryman and

Bell (2007, p.248) identified 10 principles of ethical practice and which include: (1) ensuring that no harm comes to participants; (2) respecting the dignity of research participants; (3) ensuring a fully informed consent of research participants; (4) protecting the privacy of research subjects; (5) ensuring the confidentiality of research data; (6) protecting the anonymity of individual or organisations; (7) avoiding deception about the nature or aims of the research; (8) declaration of affiliations, funding sources and conflicts of interest; (9) honesty and transparency in communicating about the research; and (10) avoidance of any misleading or false reporting of research findings. These ten guidelines provide useful information about ethical principles for conducting a research project.

Informed consent is one of the important aspects for ethical consideration. Kumar (1999, p.192) noted that informed consent implies that respondent/participant are made adequately aware of the type of information you want from them, why the information is being sought, what purpose it will be put to and how they are expected to participate in the study. A similar view is offered by Walliman (2011, p.252) who states that informed or written consent questionnaire data should always provide the necessary written information as an introduction, what are its aims and objectives, what steps are being taken to ensure confidentiality and anonymity.

For this study, written consent was given by all participants after receiving details of the research in both paper and online surveys, confirming that they understood what the survey was about, and that their anonymity was guaranteed. In addition, the anonymous quantitative data from the questionnaire survey were loaded into a password secure SPSS version 20.00 matrix and stored in a secure location in the

University of Salford. All statistical analyses were performed on aggregated data. The study was approved by the College of Arts Social Sciences (CASS). For a summary of ethical approved statement (See Appendix 5, pp.276).

### **3.9 Chapter summary**

This chapter has outlined the methodological approach adopted for the study and has discussed the research method and associated instrument which were used to collect the primary data. It has also presented the study's conceptual framework, its objectives and hypotheses. Issues relating to reliability, validity, ethics and data preparation and analysis were also discussed. The following chapter presents the research findings and their interpretation.

## Chapter 4

### Data Analysis and Discussion of the Findings

#### 4.1 Introduction

The previous chapter outlined the methodological approach adopted for the study and discussed the different survey methods used to collect the primary data. This chapter presents the results for the hypothesis tests and the discussion of the findings. A total of 11 hypothesis tests are shown below.

##### 4.1.1 Hypothesis 1

**(H1) Severity of service failure has a negative impact on customer satisfaction, word-of-mouth communication (WOM) and customer loyalty.**

The test results are presented in Table 4.2 show that failure severity does indeed have a significant albeit weak influence on all three dependent variables (e.g. post-failure satisfaction, word-of-mouth communication and intention to repurchase). As such, H1, is supported and this finding is consistent with previous service failure and recovery studies which also found failure severity to have a significant negative impact on these outcome variables (Weun et al., 2004; Hess, 2008; McQuilken and Bednall, 2008; Wang et al., 2011; Kim and Ulgado, 2012). The implication of this result is that senior management should employ responsive staff with good communication skills to handle severity of service failure and this should help to increase customer satisfaction. Regular staff training and service skills development

for front-line staff are needed, as can help to improve service performance and customer satisfaction.

**Table 4.2: Impact of failure severity on post-failure satisfaction, word-of-mouth communication and intention to repurchase**

Dependent variables \	$\beta$	SE.B	Beta	t
H1(a) Post-failure satisfaction Adjusted R <sup>2</sup> =0.02; F=9.99; p<0.01				
Failure severity	-0.15	-0.05	-0.16**	-3.16
H1(b) Word-of-Mouth (WOM) Adjusted R <sup>2</sup> =0.03; F=10.83; p<0.001				
Failure severity	-0.18	- 0.06	-0.17**	-3.29
H1(c) Intention to repurchase Adjusted R <sup>2</sup> =0.02; F=9.11; p<0.01				
Failure Severity	-0.17	-0.06	-0.16**	-3.02

Notes: Figures obtained from OLS regression

\*Significant at the p < 0.05 level; \*\* significant at the p < 0.01level; \*\*\* significant at the p<0.001 level.

Standardised beta coefficients were used: Durbin Watson: 1.86(a); 1.90(b); 2.07(c);

Tolerance: 1.00 (a),(b), (c); VIF: 1.00 (a),(b), (c)

Summary of the analysis results: OLS is used to determine the relationship between dependent and independent variable. It also to determine whether dependent variable has statistical significance. The test results showed that failure severity had a significant influence on all three outcome variables: customer post-recovery satisfaction, (t = -3.16, p<0.01); word-of-mouth communication (t= -3.29, p<0.001) and intention to repurchase (t= -3.02, p<0.01).

#### 4.1.2 Hypothesis 2

**(H2) Failure criticality has a negative impact on customer satisfaction, word-of-mouth communication (WOM) and customer loyalty.**

The results from an OLS regression analysis are shown in Table 4.3. Failure criticality has a highly significant impact on customer satisfaction, word-of-mouth communication and customer loyalty. H2 is therefore supported although, as in H1, the negative impact is relatively weak for all dependent variables; the influence is, however, stronger than for failure severity. The significance of failure criticality is consistent with previous service failure and recovery research (Berry and Parasuraman, 1992; Webster and Sundaram, 1998; Hoffman and Kelly, 2000; Michel, 2001; Watson, 2012). The implication of this result is that airline

management should employ frontline staff skills in problem-solving to handle seriousness of the service failure and that by doing this can help to avoid loss of customers.

**Table 4.3: Impact of failure criticality on post-failure satisfaction, word-of-mouth communication (WOM) and intention to repurchase**

Dependent variables \	$\beta$	SE.B	Beta	t
H2 (a) Post-failure satisfaction Adjusted R <sup>2</sup> =0.09; F=41.69; p<0.0001				
Failure criticality	-0.28	-0.04	-0.31***	-6.48
H2 (b) Word-of-Mouth (WOM) Adjusted R <sup>2</sup> =0.08; F=33.96; p<0.0001				
Failure criticality	-0.31	-0.54	-0.29***	-5.83
H2(c) Intention to repurchase Adjusted R <sup>2</sup> =0.08; F=33.02; p<0.0001				
Failure criticality	-0.31	-0.05	-0.28***	-5.75

Notes: Figures obtained from OLS regression

\*Significant at the  $p < 0.05$  level; \*\* significant at the  $p < 0.01$  level; \*\*\* significant at the  $p < 0.001$  level.

Standardised beta coefficients were used: Durbin Watson: 1.94(a); 1.86(b); 2.03(c);

Tolerance: 1.00(a),(b), (c); VIF: 1.00(a), (b), (c)

Summary of the analysis results: OLS is used to determine the relationship between dependent and independent variable and also to determine whether dependent variable has statistical significance. The test results showed that failure criticality had a significant influence on all three outcome variables: customer post-recovery satisfaction, ( $t = -6.48$ ,  $p < 0.001$ ); word-of-mouth communication ( $t = -5.83$ ,  $p < 0.001$ ) and intention to repurchase ( $t = -5.75$ ,  $p < 0.001$ ).

### 4.1.3 Hypothesis 3

**(H3) Different types of service failure have a differential negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The results using a one-way ANOVA test are presented in Tables 4.4, 4.5 and 4.6.

They show that the impact of service failure type is not significant for any of the three outcome variables. Therefore, H3 is not supported. This is interesting because it would be expected that failures that are perceived as being the fault of the airline such as flight delays, diversions or cancellations would have a significantly greater



negative impact on post-failure satisfaction, word-of-mouth communication, and intention to repurchase than the failure such as lost/damaged luggage. This results may be based on the relatively low number of responses (n=34). Alternatively, the result may be accounted by the proposition that customers may see safety grounds as being valid as one based natural disasters. Previous research has found that airline service failure (e.g. flight delays, flight cancellation) has a negative impact on customer satisfaction (Tiernan et al., 2008; Wen and Chi, 2013; Namukasa, 2013). Unfortunately, these studies did not look at the impact of different types of airline service failure so no direct comparison can be undertaken. Further research is therefore needed to establish the external validity of the findings from this hypothesis test. The implication of this results is that airline management should provide helpful customer support (i.e. accurate information for flight delays) to help to reduce anger and frustration customer.

**Table 4.4: Impact of failure type on post-failure satisfaction (H3a)**

Failure type \	Frequency	Post-failure satisfaction mean	Std. Deviation	Std. Error
1)Flight delays, diversions or cancellations (unable to classify as either 2 or 3)	156	2.18	0.93	0.07
2)Flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano)	34	2.53	1.26	0.22
3)Flight delays, diversions or cancellations due to technical or airline faults	59	2.07	0.93	0.12
4)Lost/damaged luggage	62	2.13	0.99	0.13
5)Airline passenger service	76	2.13	0.94	0.11

Notes: One-way between groups ANOVA: (F=1.37; df=4,381; p=0.25)

Summary of the analysis results: The test results showed that flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano) had a stronger effect on customer post-recovery satisfaction (Mean=2.53).

**Table 4.5: Impact of failure type on word-of-mouth communication (H3b)**

Failure type \	Frequency	Word-of-mouth mean	Std. Deviation	Std. Error
1)Flight delays, diversions or cancellations (unable to classify as either 2 or 3)	156	2.87	1.13	0.09
2)Flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano)	34	2.69	1.31	0.23
3)Flight delays, diversions or cancellations due to technical or airline faults	59	2.78	1.22	0.16
4)Lost/damaged luggage	62	3.02	2.15	0.15
5)Airline passenger service	76	2.73	1.24	0.14

Notes: One-way between groups ANOVA: (F=0.09; df=4,372; p=0.60)

Summary of the analysis results: The test results showed that lost/damaged luggage had a stronger effect on customer post-recovery satisfaction (Mean=3.02).

**Table 4.6: Impact of failure type on intention to repurchase (H3c)**

Failure type \	Frequency	Intention to repurchase mean	Std. Deviation	Std. Error
1)Flight delays, diversions or cancellations (unable to classify as either 2 or 3)	156	3.35	1.13	0.93
2)Flight delays, diversions or cancellations due to natural causes (e.g. weather, volcano)	34	3.17	1.31	0.24
3)Flight delays, diversions or cancellations due to technical or airline faults	59	3.13	1.21	0.16
4)Lost/damaged luggage	62	3.35	2.10	0.15
5)Airline passenger service	76	3.19	1.28	0.15

Notes: One-way between groups ANOVA: (F=0.79; df=4,364; p=0.70)

Summary of the analysis results: The test results showed that flight delays, and lost/ damaged luggage had a stronger effect on customer post-recovery satisfaction (Mean=3.35).

#### 4.1.4 Hypothesis 4

**(H4) Passenger type moderates the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth and intention to repurchase.**

The results from a two-way ANOVA are presented in Tables 4.7, 4.8, 4.9, 4.10, 4.11 and 4.12. The findings show that the moderating effect of passenger type on failure type and criticality in relation to the outcome variables was not significant with the exception of the moderating effect of passenger type on failure criticality with respect to word-of-mouth promotion (Table 4.11). Passenger type did not moderate the effect of failure type on any of the three outcome variables. There are significant main effects for passenger type on intention to repurchase (Table 4.9). This result indicated that there is a significant difference between business and leisure passengers regarding their perception of service failure type its impact on intention to repurchase.

There is also a significant interaction effect between passenger type and criticality of failure with respect to passenger intention to recommend a service provider (Table 4.11). This result shows that there is a significant difference between business and leisure passengers regarding their perception of criticality service failure its impact on word-of-mouth communication. However, passenger type did not generally moderate the influence of failure type or failure criticality on post-failure satisfaction, intention to recommend or intention to repurchase. As such, H4 is not supported. There are limited published findings to date relating to the influence of passenger type on either the impact of failure type or the influence of failure criticality on satisfaction and loyalty. Previous research has found that business and leisure traveller satisfaction levels are quite similar in relation to

certain service quality aspects e.g. parking facilities, efficiency of check-in, boarding procedures (Dresner, 2006; Ringle et al., 2011; Garcia et al., 2012). Future research is needed with a larger sample size in order to establish the external validity of the findings from this hypothesis test. The implication of this results is that airline management should check and maintenance all daily operation tasks and facilities (i.e. ground and on-board), this can avoid any technical fault or flight delays. Where such delays are unavoidable they need to have communication strategies to minimise the impact on the operation.

**Table 4.7: The moderating influence of passenger type on failure type's impact on post-failure satisfaction (H4a1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	1.94	2	0.97	1.01	0.37
Failure type	3.402	4	0.850	0.883	0.47
Passenger type * Failure type	3.634	8	0.454	0.472	0.88

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.90; p=.025

R Square=.029; Adjusted R Square = -.007

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for passenger type on post-failure satisfaction (Sig :0.37) and there is no interaction effect between passenger type and failure type (sig: 0.88).

**Table 4.8: The moderating influence of passenger type on failure type's impact on word-of-mouth communication (H4a2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	5.712	2	2.86	2.05	0.13
Failure type	4.33	4	1.082	0.78	0.54
Passenger type* Failure type	8.361	8	1.045	0.75	0.65

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.275; p=.221

R Square=.040; Adjusted R Square = .003

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for passenger type on word-of-mouth communication (Sig :0.13) and there is no interaction effect between passenger type and failure type (sig: 0.65).

**Table 4.9: The moderating influence of passenger type on failure type's impact on intention to repurchase (H4a3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	9.622	2	4.811	3.40	0.05
Failure type	1.303	4	0.326	0.230	0.92
Passenger type* Failure type	13.66	8	1.71	1.205	0.29

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F =.811; p =.66

R Square=.052; Adjusted R Square = .014

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there are significant main effects for passenger type on intention to repurchase (Sig :0.05) and there is no significant interaction effect between passenger type and failure type (sig: 0.29).

**Table 4.10: The moderating influence of passenger type on criticality of failure's impact on post-failure satisfaction (H4b1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	3.16	2	1.59	1.82	0.16
Criticality	9.402	4	2.350	2.705	0.13
Passenger type* Criticality failure	4.780	8	0.60	0.69	0.70

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.72; p=.050

R Square=.124; Adjusted R Square = .092

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there is no significant main effects for passenger type on post-failure satisfaction (Sig :0.16) and there is no significant interaction effect between passenger type and criticality failure (sig: 0.70).

**Table 4.11: The moderating influence of passenger type on criticality of failure's influence on word-of-mouth communication (H4b2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	2.605	2	1.303	2.120	0.05
Criticality	10.49	4	2.622	2.121	0.18
Passenger type* Criticality failure	21.295	8	2.662	2.153	0.03

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.29; p=.212

R Square=.140; Adjusted R Square =.108

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effects for passenger type on word-of-mouth communication (Sig :0.05) and there is a significant interaction effect between passenger type and criticality of failure (sig: 0.03).

**Table 4.12: The moderating influence of passenger type on criticality of failure's influence on intention to repurchase (H4b3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger type	5.702	2	2.851	2.190	0.11
Criticality	8.85	4	2.212	1.70	0.15
Passenger type* Criticality failure	13.51	8	1.69	1.30	0.24

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=2.771; p=.001

R Squared=.128; Adjusted R Squared =.0.94

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. In the test results showed that there were no significant main effects for passenger type on intention to repurchase (Sig :0.11) and there is no interaction effect between passenger type and criticality failure (sig: 0.24).

#### 4.1.5 Hypothesis 5

**(H5) Passenger loyalty moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The results from two-way ANOVA tests are presented in Tables 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, and 4.21. The findings show that there are significant main effects for passenger loyalty on word-of-mouth communication and intention to repurchase (Table 4.14 and 4.15) but no significant interaction effects between passenger loyalty and failure type in relation to any of the outcome variables ( Table 4.13 to 4.18). There are also significant effects for both failure severity and failure criticality variables but no significant interaction effects (Table 4.16 and 4.18). There is a significant interaction effect between passenger loyalty and criticality of failure with respect to post-failure satisfaction (Table 4.19). The results show that there are significant main effects for passenger loyalty on word-of-mouth communication and intention to repurchase (Table 4.20 and 4.21). As passenger loyalty did not generally moderate the effect of failure type, failure severity or

criticality of failure on the outcome variables, H5 is not supported. Future research is needed to use other countries setting and with large sample sizes in order enhances the external validity of the findings from this hypothesis test. The implication of these results are that airline operation department should monitor and evaluate every aspect of the daily operation tasks, this can avoid any unexpected failure or system downtime where delays are unavoidable, they should have emergency plans in place which include effective communication strategies with stakeholder to minimise negative impact.

**Table 4.13: The moderating influence of passenger loyalty on failure type's impact on post-failure satisfaction (H5a1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	8.78	5	1.76	1.86	0.10
Failure type	8.010	4	2.003	2.12	0.68
Passenger loyalty* Failure type	20.512	20	1.03	1.084	0.36

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.010; p=.455

R Square=.085; Adjusted R Square =.011

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for passenger loyalty on post –failure satisfaction (Sig :0.10) and there is no interaction effect between passenger loyalty and failure type (sig: 0.36).

**Table 4.14: The moderating influence of passenger loyalty on failure type's impact on word-of-mouth communication (H5a2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	20.100	5	4.020	2.940	<.001
Failure type	2.60	4	0.650	0.475	0.75
Passenger loyalty* Failure type	34.80	20	1.740	1.272	0.19

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.372; p=.100

R Square=.098; Adjusted R Square =.022

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effects for passenger loyalty on word-of-mouth communication (Sig :<.001) and there is no interaction effect between passenger loyalty and failure criticality (sig: 0.19).

**Table 4.15: The moderating influence of passenger loyalty on failure type's impact on intention to repurchase (H5a3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	28.904	5	5.781	4.142	<.001
Failure type	2.565	4	0.641	0.46	0.77
Passenger loyalty* Failure type	25.772	20	1.29	0.923	0.59

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.21; p=.22

R Square=.105; Adjusted R Square =.03

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effects for passenger loyalty on intention to repurchase (Sig :<.001) and there is no significant interaction effect between passenger loyalty and failure criticality (sig: 0.59).

**Table 4.16: The moderating influence of passenger loyalty on failure severity's impact on post-failure satisfaction (H5b1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	3.922	5	0.784	0.845	0.52
Failure severity	18.895	4	4.724	5.09	<.001
Passenger loyalty* Failure severity	12.333	20	0.62	0.644	0.86

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=.96; p=.53

R Squared=.092; Adjusted R Squared =.02

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for passenger loyalty on failure severity (Sig :<.001) and there is no interaction effect between passenger loyalty and failure severity (sig: 0.86).

**Table 4.17: The moderating influence of passenger loyalty on failure severity's impact on word-of-mouth communication (H5b2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	3.400	5	0.680	0.501	0.78
Failure severity	21.59	4	5.40	3.980	0.024
Passenger loyalty* Failure severity	14.905	20	0.745	0.550	0.99

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.09; p=.35

R Square=.094; Adjusted R Square =.02

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e. passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for passenger loyalty on word-of-mouth communication (Sig :0.78) and there is no interaction effect between passenger loyalty and failure type (sig: 0.99).



**Table 4.18: The moderating influence of passenger loyalty on failure severity's impact on intention to repurchase (H5b3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	14.031	5	2.81	2.06	0.27
Failure severity	19.67	4	4.92	3.61	<.001
Passenger loyalty* Failure severity	14.164	20	0.71	.520	0.96

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.76; p=.011

R Square=.126; Adjusted R Square =.052

Summary of the analysis results: A two-way ANOVA is used determines the effects of two independent variables (i.e passenger loyalty and failure criticality).If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for passenger loyalty on failure severity (sig :<.001) and there is no interaction effect between passenger loyalty and failure severity (sig: 0.96).

**Table 4.19: The moderating influence of passenger loyalty on criticality of failure's impact on post-failure satisfaction (H5c1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	7.78	5	1.555	1.872	0.16
Failure criticality	27.622	4	6.91	8.314	<.001
Passenger loyalty* Failure criticality	30.47	20	1.523	1.834	<.001

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=2.015; p=.002

R Square=.195; Adjusted R Square =.132

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for passenger loyalty on failure criticality (sig :<.001) and there is a significant interaction effect between passenger loyalty and failure criticality (sig: <.001).

**Table 4.20: The moderating influence of passenger loyalty on criticality of failure's impact on word-of-mouth communication (H5c2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	10.262	5	2.052	1.65	0.05
Failure criticality	28.27	4	7.07	5.675	0.41
Passenger loyalty* Failure criticality	31.713	20	1.59	1.273	0.19

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.350; p=.111

R Square=.169; Adjusted R Square =.101

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effect for passenger loyalty on word-of mouth communication (sig: 0.05) and there is no interaction effect between passenger loyalty and failure criticality (sig: 0.19).

**Table 4.21: The moderating influence of passenger loyalty on criticality of failure's impact on intention to repurchase (H5c3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Passenger loyalty	16.734	5	3.35	2.673	0.05
Failure criticality	25.545	4	6.39	5.101	0.51
Passenger loyalty* Failure criticality	32.354	20	1.62	1.292	0.18

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.90; p=.004

R Square=.195; Adjusted R Square =.13

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e. passenger loyalty and failure criticality). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effects for passenger loyalty on intention to repurchase (sig :0.05) and there is no interaction effect between passenger loyalty and failure criticality (sig: 0.18).

There has been a limited published data to date relating to the moderating effect of passenger loyalty on failure type with respect to post-failure satisfaction, word-of-mouth communication and intention to repurchase. However, previous research has found that severity and criticality of failure affects post-failure satisfaction, word-of-mouth communication and intention to repurchase (Oh, 2003; Sparks and Fredline, 2007; Namkung and Jang, 2010; Kim and Ulgado, 2012; Balaji and Sarkar, 2013). Future research is needed to use other service settings or different culture groups in order to enhance the external validity of the findings from this hypothesis test. The implication of these results is to encourage customers to complaint in order that the organisation has the opportunity to correct any mistakes. Correcting failure may reduce negative impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase.

#### **4.1.6 Hypothesis 6**

**(H6) Airline type moderates the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The results from two-way ANOVA tests are presented in Table 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.28, 4.29 and 4.30. The findings show that the moderating effect

of airline type on failure types influence on the outcome variables was not significant; there are no significant main or interaction effects. There are significant effects for failure severity on the outcome variables (Table 4.25 to 4.27), but no interaction effect between airline type and severity of failure i.e. airline type does not moderate the influence of failure severity in regard to the outcome variables. By comparison, airline type does moderate the influence of failure criticality on post-failure satisfaction (Table 4.28), but has no significant influence regarding word-of-mouth promotion or intention to repurchase. As such, H6 is not supported. There are limited published findings to date examining the moderating influence of airline type on the impact of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to purchase. Future research should continue to examine the moderating effect of airline type on failure type's influence on all three outcome variables. In addition, previous research has found that there are differences in passengers' perceptions of service quality between full-service and low-cost-carriers in relation to flight meals and drinks, frequent flyer programmes, the schedule and frequency of flights and airport lounge facilities (O'Connell and Williams, 2005; Fourie and Lubbe, 2006; Chiou and Chen, 2010).

Future research is needed with a larger sample size in order to enhance the external validity of the findings from this hypothesis test. The implication of these results are that airline operation department should use customer comment cards which encourage customer feedback about unhappy travel experience, as this can stop negative word-of-mouth communication to spread other customer.

**Table 4.22: The moderating influence of airline type on failure type's impact on post-failure satisfaction (H6a1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.29	1	0.29	0.30	0.58
Failure type	4.6	4	1.15	1.202	0.31
Airline type* Failure type	3.613	4	0.903	0.95	0.44

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=2.193; p=.111; R Square=.025; Adjusted R Square =.002

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for airline type on post-failure satisfaction (sig :0.58) and there is no interaction effect between airline type and failure type (sig: 0.44).

**Table 4.23: The moderating influence of airline type on failure type's impact on word-of-mouth communication (H6a2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	3.821	1	3.821	2.724	0.75
Failure type	3.52	4	0.8	0.63	0.64
Airline type* Failure type	4.25	4	1.05	0.760	0.55

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.353; p=.21; R Square=.021; Adjusted R Square =.003

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, .05, this suggests significant. The test results showed that there were no significant main effects for airline type on word-of-mouth communication (sig :0.75) and there is no interaction effect between airline type and failure type (sig: 0.55).

**Table 4.24: The moderating influence of airline type on failure type's impact on intention to repurchase (H6a3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.055	1	0.055	0.04	0.85
Failure type	2.143	4	5.36	0.373	0.83
Airline type* Failure type	9.614	4	2.403	1.672	0.16

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=.650; p=.754; R Square=.024; Adjusted R Square =.000

Summary of the analysis results: A two-way ANOVA is used to determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for airline type on intention to repurchase (sig :0.85) and there is no interaction effect between airline type and failure type (sig: 0.16).

**Table 4.25: The moderating influence of airline type on failure severity's impact on post-failure satisfaction (H6b1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.44	1	0.44	0.480	0.49
Failure severity	17.10	4	4.50	4.935	<0.01
Airline type* Failure severity	5.863	4	1.45	1.61	0.17

Notes: Two- way between groups ANOVA;

Levene's Test of Equality of Error Variances: F=1.492; p=.149; R Square=.059; Adjusted R Square =.04;

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for airline type on failure severity (sig <:0.01) and there is no interaction effect between airline type and failure type (sig: 0.17).

**Table 4.26: The moderating influence of airline type on failure severity's impact on word-of-mouth communication (H6b2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.11	1	0.11	0.081	0.78
Failure severity	20.794	4	5.20	3.915	0.05
Airline type* Failure severity	7.83	4	1.96	1.474	0.21

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=.56; p=.832; R Square=.062; Adjusted R Square =.04

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for airline type on failure severity (sig :0.05) and there is no interaction effect between airline type and failure type (sig: 0.21).

**Table 4.27: The moderating influence of airline type on failure severity's impact on intention to repurchase (H6b3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	1.600	1	1.600	1.15	0.28
Failure severity	23.08	4	5.770	4.115	0.03
Airline type* Failure severity	5.45	4	1.36	9.842	0.42

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=.763; p=.651; R Square=.055; Adjusted R Square =.032

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant effects for airline type on failure severity (sig :0.03) and there is no interaction effect between airline type and failure type(sig: 0.42).

**Table 4.28: The moderating influence of airline type on criticality of failure's impact on post-failure satisfaction (H6c1)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.01	1	0.01	0.11	<.001
Criticality of failure	36.43	4	9.11	10.405	0.11
Airline type* Criticality of failure	0.053	4	0.013	0.015	0.10

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.56; p=.126; R Square=.106; Adjusted R Square =.085;

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were significant main effects for airline type on post failure satisfaction (sig :0.01) and there is no interaction effect between airline type and failure type (sig: 0.10).

**Table 4.29: The moderating influence of airline type on criticality of failure's impact on word-of-mouth communication (H6c2)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.833	1	0.833	0.653	0.49
Criticality of failure	39.200	4	9.800	7.68	0.53
Airline type* Criticality of failure	4.263	4	1.07	0.835	0.50

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.25; p=.264 ; R Square=.100; Adjusted R Square =.08

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there were no significant main effects for airline type on word-of-mouth communication (sig :0.49) and there is no interaction effect between airline type and failure type (sig: 0.50).

**Table 4.30: The moderating influence of airline type on criticality of failure's impact on intention to repurchase (H6c3)**

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Airline type	0.44	1	0.44	0.480	0.49
Criticality of failure	17.10	4	4.50	4.935	0.11
Airline type* Criticality of failure	5.863	4	1.47	1.61	0.17

Notes: Two- way between groups ANOVA

Levene's Test of Equality of Error Variances: F=1.492; p=.149; R Square=.059; Adjusted R Square =.04

Summary of the analysis results: A two-way ANOVA is used determine the effects of two independent variables (i.e airline type and failure type). If the value is less than or equal to .05, .03, .01, .001, this suggests significant. The test results showed that there is no significant main effects for airline type on intention to repurchase (sig :0.49) and there is no interaction effect between airline type and failure type (sig: 0.17).

#### **4.1.7 Hypothesis 7**

##### **(H7) Service recovery type influences post-recovery satisfaction.**

The results from independent samples t-tests and OLS regression are presented in Tables 4.31, 4.32, 4.33, and 4.34. The overall findings in this section show that there are significant differences between recovery actions, this indicated that difference types of service recovery strategies to have a significant impact on customer post-recovery satisfaction. As such, H7 is supported. The data was analysed in two parts. Part one analysed the differences in ratings between passengers who received/did not receive a recovery action, using t-tests (H7a1) and then tested whether a particular recovery action had a significant influence on post-recovery satisfaction using regression analysis (H7a2). Part two analysed the influence of high failure severity on service recovery action impact on satisfaction using t-tests (H7b1) and then examined whether a particular recovery actions had a significant influence at high severity on post-recovery satisfaction using regression analysis (H7b2).

Table 4.31 (H7a1) shows that 12 of the 20 recovery actions examined have a direct impact on passenger post-recovery satisfaction: acknowledgement of service failure; acceptance of responsibility of service failure apology; explanation, correction; compensation; facilitation; a prompt response from the airline in dealing with service failure; attentiveness/helpfulness; empathy; effort; and an appropriate place to explain my complaint. This is suggests that airline managers can use these 12 recovery actions to deal with service failure.

**Table 4.31: Results from the t-tests for differences in post-recovery satisfaction based on the recovery action received (H7a1)**

Service Recovery Actions	N	Mean*		SD	t	df	p
		Yes	No				
<b>Acknowledgement of the service failure</b>	<b>190</b>	<b>3.35</b>	<b>2.88</b>	<b>1.13</b>	<b>4.01</b>	<b>385</b>	<b>&lt;.0001</b>
<b>Acceptance of responsibility of the service failure</b>	<b>105</b>	<b>3.70</b>	<b>2.89</b>	<b>1.03</b>	<b>6.45</b>	<b>385</b>	<b>&lt;.0001</b>
<b>An apology for the service failure</b>	<b>224</b>	<b>3.36</b>	<b>2.77</b>	<b>1.08</b>	<b>5.14</b>	<b>385</b>	<b>&lt;.0001</b>
<b>An explanation of the service failure</b>	<b>147</b>	<b>3.31</b>	<b>2.99</b>	<b>1.16</b>	<b>2.70</b>	<b>385</b>	<b>.007</b>
An opportunity to voice my view/feelings	29	3.45	3.08	1.30	1.63	385	.104
Staff empowered to solve my problem	23	3.78	3.07	1.24	2.89	385	.103
<b>Correction of the problem</b>	<b>81</b>	<b>3.55</b>	<b>2.99</b>	<b>1.28</b>	<b>3.95</b>	<b>385</b>	<b>&lt;.0001</b>
<b>Compensation for the service failure</b>	<b>61</b>	<b>3.51</b>	<b>3.04</b>	<b>1.03</b>	<b>2.94</b>	<b>385</b>	<b>.002</b>
<b>Facilitation (the airline made it easy to complain/had easy to follow procedures)</b>	<b>18</b>	<b>3.94</b>	<b>3.07</b>	<b>1.30</b>	<b>3.15</b>	<b>385</b>	<b>.012</b>
<b>A prompt response from the airline in dealing with the service failure</b>	<b>53</b>	<b>3.85</b>	<b>2.99</b>	<b>1.05</b>	<b>5.14</b>	<b>385</b>	<b>&lt;.0001</b>
<b>Attentiveness/Helpfulness of staff</b>	<b>50</b>	<b>3.82</b>	<b>3.00</b>	<b>1.10</b>	<b>4.75</b>	<b>385</b>	<b>&lt;.0001</b>
<b>Empathy/Understanding from staff</b>	<b>56</b>	<b>3.57</b>	<b>3.03</b>	<b>1.14</b>	<b>3.25</b>	<b>385</b>	<b>.002</b>
<b>Effort from the staff in resolving my complaint</b>	<b>29</b>	<b>3.59</b>	<b>3.07</b>	<b>1.15</b>	<b>2.30</b>	<b>385</b>	<b>.022</b>
<b>An appropriate place to explain/handle my complaint</b>	<b>20</b>	<b>3.75</b>	<b>3.08</b>	<b>1.21</b>	<b>2.54</b>	<b>385</b>	<b>.011</b>
Follow-up from the airline management/staff	11	3.45	3.10	1.69	.995	385	.320
Follow-Up in writing from the airline management/empowered staff member	15	2.87	3.12	1.46	-.831	385	.406
Transfer to another airline with a code sharing agreement	14	2.93	3.12	.997	-.599	385	.550
Pocket expenses including accommodation, transfer services voucher (e.g. bus, car hire, taxi, train) where the airline has a partnership agreement	31	3.22	3.10	1.26	.573	385	.567
Future discount re-route travel with discount including holiday package and travel insurance voucher where the airline has a partnership agreement	7	3.71	3.10	.456	1.39	385	.166
Free loyalty points	2	4.00	3.11	1.41	1.09	385	.278

Independent samples t-test results for differences in ratings between passengers who received/did not receive recovery action. Recovery actions was measured with 5- point scale (1= extremely unimportant, 2=fairly unimportant, 3= neither unimportant nor important, 4=fairly important, 5=extremely important) \*Mean = Post-recovery satisfaction ratings for passengers who received/did not receive recovery action



These findings are consistent with previous service failure and recovery studies which also found differences in post-recovery satisfaction and loyalty relating to different service recovery actions. Previous research over the past 10 years has examined 16 types of recovery actions: acknowledgement of the service failure; acceptance of responsibility of the service failure; apology; explanation; opportunity to voice my view/feelings; staff empowered to solve my problem; correction; compensation; facilitation; a prompt response; attentiveness; empathy; effort; appropriate place to explain customer complaint; follow-up from the management staff and follow-up in writing to have a direct influence on customer post-recovery satisfaction, studies include: Cranage (2004); Karatepe and Ekiz (2004); Wirtz and Mattila (2004); Forbes et al., (2005); Mattila and Cranage (2005); Patterson et al., 2006; Liao (2007); Park et al., (2008); Iyer and Muncy (2008); Gruber et al., (2009); Wang and Mattila (2011); Ozgen and Kurt (2012). All 16 have been found to have a significant positive impact on customer post-recovery satisfaction in previous research, but with differing degrees of relative success.

Table 4.32 (H7a2) shows that only five of the 12 significant recovery actions have a direct influence on post-recovery satisfaction when this outcome variable was regressed against them: acceptance of responsibility of service failure, correction, compensation, apology and follow-up in writing. The test results indicate that acceptance of responsibility for service failure, correction and compensation have the highest impact on post-recovery satisfaction. By comparison, apology and follow-up in writing have relatively low impact on customers post-recovery satisfaction. This suggests that frontline staff can use these five recovery actions to deal quickly and effectively to unhappy airline customers. As such, they should

improve staff training in the skills of communication and problem solving, this can help improve current service performance and customer satisfaction.

**Table 4.32: The impact of the significant recovery actions on post-recovery satisfaction (H7a2)**

Dependent variables \	$\beta$	SE.B	Beta	t
(a)Acceptance of responsibility of service failure	-.640	.131	-2.42**	-4.898
(b)Correction	-.525	.135	-1.82**	-3.879
(c)Compensation	-.570	.153	-1.79**	-3.734
(d) Apology	-.328	.116	-1.40**	-2.839
(e) Follow-up in writing	-.708	.289	-1.16**	2.447

Notes: Figures obtained from OLS regression

\*Significant at the  $p < 0.05$  level; \*\* significant at the  $p < 0.01$  level; \*\*\* significant at the  $p < 0.001$  level.

Standardised beta coefficients were used.; Durbin Watson: 2.090(a),(b),(c),(d),(e)

Tolerance: .869(a);.874(b);.963(c);.930(d).952(e); VIF: 1.151(a);1.144(b);1.039(c);1.075(d);1.050(e); R Squared=.208

Adjusted R Square=.195

Summary of the analysis results: OLS is used to determine the relationship between dependent and independent variable It also used to determine whether dependent variable has statistical significance.The test results showed that acceptance of responsibility of service failure had a stronger effect on customer post-recovery satisfaction (beta = -2.42\*\*).

The significance of these five recovery actions for post-recovery satisfaction supports the findings from previous studies on service failure and recovery that include: Cranage (2004); Swanson and Kelley (2001); Wirtz and Mattila (2004); Forbes et al., (2005); Mattila and Cranage (2005); Patterson et al., (2006); Park et al., (2008); DeWitt and Martin (2009); Wang and Mattila, (2011).

Table 4.33 (H7b1) shows that seven of the 20 recovery actions are significant when failure severity is high ( $>4$ ) compared with 12 previously (Table 4.31). The significant recovery actions are: acceptance of responsibility; apology; correction; compensation; prompt response from the airline in dealing with service failure; attentiveness/helpfulness and empathy. This finding is consistent with previous

research over the past 10 years which found these recovery actions have a significant influence on customer satisfaction when service failure is severe failure, studies that include: Craighead et al., (2004); Dunning et al., (2004); Forbes et al., (2005); Hess et al., (2006); Sparks and Fredline (2007); Huang (2008); Matos et al., (2009); McQuilken (2010); Gruber (2011); Swanson and Hsu (2011); Bradley and Sparks (2012); Kim and Ulgado (2012); Boo et al (2013); Choi and Choi, (2013).

**Table 4.33: Results from the t-tests for differences in post-recovery satisfaction based on the recovery action received when failure severity is high (>4) (H7b1)**

Service Recovery Actions	N	Mean*		SD	t	df	p
		Yes	No				
Acknowledgement of the service failure	63	2.90	2.83	1.90	35	132	.729
<b>Acceptance of responsibility of the service failure</b>	<b>36</b>	<b>3.50</b>	<b>2.63</b>	<b>1.93</b>	<b>3.81</b>	<b>132</b>	<b>&lt;.0001</b>
<b>An apology for the service failure</b>	<b>70</b>	<b>3.10</b>	<b>2.61</b>	<b>1.18</b>	<b>2.35</b>	<b>132</b>	<b>.020</b>
An explanation of the service failure	44	2.97	2.81	1.22	.74	132	.463
An opportunity to voice my view/feelings	11	2.63	2.88	1.30	-.65	132	.519
Staff empowered to solve my problem	7	3.00	2.85	1.63	2.97	132	.767
<b>Correction of the problem</b>	<b>33</b>	<b>3.39</b>	<b>2.69</b>	<b>1.11</b>	<b>2.93</b>	<b>132</b>	<b>.003</b>
<b>Compensation for the service failure</b>	<b>34</b>	<b>3.55</b>	<b>2.63</b>	<b>1.05</b>	<b>4.3</b>	<b>132</b>	<b>&lt;.0001</b>
Facilitation (the airline made it easy to complain/had easy to follow procedures)	5	3.20	2.85	2.04	.621	132	.536
<b>A prompt response from the airline in dealing with the service failure</b>	<b>20</b>	<b>3.45</b>	<b>2.76</b>	<b>1.50</b>	<b>2.35</b>	<b>132</b>	<b>.020</b>
<b>Attentiveness/Helpfulness of staff</b>	<b>19</b>	<b>3.63</b>	<b>2.73</b>	<b>1.16</b>	<b>3.08</b>	<b>132</b>	<b>.005</b>
<b>Empathy/Understanding from staff</b>	<b>20</b>	<b>3.60</b>	<b>2.74</b>	<b>1.04</b>	<b>3.32</b>	<b>132</b>	<b>.002</b>
Effort from the staff in resolving my complaint	15	3.20	2.82	1.37	1.12	132	.264
An appropriate place to explain/handle my complaint	5	3.20	2.85	1.78	.621	132	.536
Follow-up from the airline management/staff	6	3.16	2.85	1.83	.614	132	.540

Follow-Up in writing from the airline management/empowered staff member	5	1.40	1.95	0.55	-1.14	135	.26
Transfer to another airline with a code sharing agreement	10	3.00	2.85	1.05	359	135	.720
Pocket expenses including accommodation, transfer services voucher (e.g. bus, car hire, taxi, train) where the airline has a partnership agreement	19	3.21	2.80	1.35	133	135	.186
Future discount re-route travel with discount including holiday package and travel insurance voucher where the airline has a partnership agreement	2	2.00	1.93	1.41	.09	135	-.93
Free loyalty points	1	5.00	2.84	1.21	1.76	135	.080

---

Independent samples t-test results for differences in ratings between passengers who received/did not received recovery action when failure severity is high (>4). The high (>4) indicate the level at 'severe failure'. Severity levels was measured with 5- point scale (1=very slight failure, 2=slight failure, 3=moderate failure, 4=severe failure, 5= very severe failure).

\*Mean = Post-recovery satisfaction ratings for passengers who received/did not received recovery action.

Table 4.34 (H7b2) shows the results from the OLS regression of post-recovery satisfaction on the seven recovery actions when service failure is high (>4). The results show that three recovery actions have a significant impact on post-recovery satisfaction. They are: compensation, acceptance of responsibility and correction. The results indicate that compensation and acceptance of responsibility for service failure have a stronger effect on customer post-recovery satisfaction compared with correction. Therefore, overall the findings show that there are significant differences between recovery actions in terms of their impact on post- recovery satisfaction. As such, Hypothesis 7 is supported. This suggests that airline management can use these three recovery actions to deal with severity of failure and airline managers should put additional efforts to the condition of high severity failure incident, as it can avoid loss of customers.

**Table 4.34: The impact of significant recovery actions on post recovery satisfaction when failure is high (>4)(H7b2)**

Dependent variables \	$\beta$	SE.B	Beta	t
(a) Compensation	-.909	.215	-3.22**	-4.218
(b)Acceptance of responsibility of service failure	-.760	.213	-2.74**	-3.567
(b)Correction	-.612	.219	-2.14**	-2.792

Notes: Figures obtained from OLS regression

\*Significant at the  $p < 0.05$  level; \*\* significant at the  $p < 0.01$  level; \*\*\* significant at the  $p < 0.001$  level.

Standardised beta coefficients were used; Durbin Watson: 2.100(a),(b),(c);Tolerance: .982(a);.983(b);.998(c);VIF: 1.019(a), 1.017(b), 1.002(c);R Squared=.246; Adjusted R Square=.229

Summary of the analysis results: OLS is used to determine the relationship between dependent and independent variable It also used to determine whether dependent variable has statistical significance. The test results showed that compensation had a stronger effect on customer post-recovery satisfaction (beta = -3.22\*\*).

#### 4.1.8 Hypothesis 8

##### **(H8) Gender moderates the perceived effectiveness of service recovery type.**

The results from independent sample t-test and two-way ANOVA are presented in Table 4.35. Gender is significant for 13 of the 20 recovery strategies. Therefore, H8 is supported. This finding is consistent with previous studies indicating that men and women view service recovery differently on the variables which were found to be significant here. For example, McColl-Kennedy et al., (2003) examined the role of gender in reactions to service failure and recovery. The study found significant gender differences in the relationship between recovery satisfaction and repeat intentions. Also, Mattila (2010) examined the options of service recovery influencing gender perceptions and concluded that women were more satisfied than men when provided with compensation options. Cambra-Fierro et al., (2013) also analysed the moderating role of gender for satisfaction and repurchase after service recovery in the mobile phone sector in Spain and concluded that women are more susceptible than men to perceived justice and its impact on post-recovery customer

satisfaction levels. The implication of this result is that airline managers can use these 13 recovery actions to deal with recovery issues of male and female customer, as it can increase customer satisfaction.

**Table 4.35: The moderating effect of gender on the effectiveness of recovery strategies for post-recovery satisfaction (H8)**

	Type III	df	Mean square	F	Sig.	R Squared	Adjusted R Square	Mean* (PRS) (Male Female)	
<b>Acknowledgement of the service failure</b>	<b>23.39</b>	<b>3</b>	<b>7.80</b>	<b>6.01</b>	<b>&lt;.001</b>	<b>.045</b>	<b>.037</b>	<b>3.22</b>	<b>3.44</b>
<b>Acceptance of responsibility of the service failure</b>	<b>53.11</b>	<b>3</b>	<b>17.70</b>	<b>14.52</b>	<b>&lt;.001</b>	<b>.102</b>	<b>.095</b>	<b>3.63</b>	<b>3.75</b>
<b>An apology for the service failure</b>	<b>49.99</b>	<b>3</b>	<b>16.66</b>	<b>13.57</b>	<b>&lt;.001</b>	<b>.096</b>	<b>.089</b>	<b>3.10</b>	<b>2.89</b>
<b>An explanation of the service failure</b>	<b>13.83</b>	<b>3</b>	<b>4.61</b>	<b>3.49</b>	<b>.016</b>	<b>.027</b>	<b>.019</b>	<b>3.14</b>	<b>3.46</b>
An opportunity to voice my view/feelings	6.71	3	2.23	1.67	.17	.013	.005	3.30	3.56
<b>Staff empowered to solve my problem</b>	<b>14.69</b>	<b>3</b>	<b>4.89</b>	<b>3.71</b>	<b>.012</b>	<b>.028</b>	<b>.021</b>	<b>3.54</b>	<b>4.00</b>
<b>Correction of the problem</b>	<b>23.64</b>	<b>3</b>	<b>7.88</b>	<b>6.08</b>	<b>&lt;.001</b>	<b>.045</b>	<b>.038</b>	<b>3.58</b>	<b>3.53</b>
<b>Compensation for the service failure</b>	<b>17.07</b>	<b>3</b>	<b>5.69</b>	<b>4.33</b>	<b>.005</b>	<b>.003</b>	<b>.025</b>	<b>3.27</b>	<b>3.78</b>
<b>Facilitation (the airline made it easy to complain/had easy to follow procedures)</b>	<b>17.72</b>	<b>3</b>	<b>5.90</b>	<b>4.50</b>	<b>.004</b>	<b>.034</b>	<b>.027</b>	<b>4.11</b>	<b>3.77</b>
<b>A prompt response from the airline in dealing with the service failure</b>	<b>36.63</b>	<b>3</b>	<b>12.2</b>	<b>9.67</b>	<b>&lt;.001</b>	<b>.070</b>	<b>.063</b>	<b>3.80</b>	<b>3.89</b>
<b>Attentiveness/ Helpfulness of staff</b>	<b>32.24</b>	<b>3</b>	<b>10.74</b>	<b>8.43</b>	<b>&lt;.001</b>	<b>.062</b>	<b>.055</b>	<b>3.55</b>	<b>4.00</b>
<b>Empathy/ Understanding from staff</b>	<b>19.10</b>	<b>3</b>	<b>6.36</b>	<b>4.86</b>	<b>.002</b>	<b>.037</b>	<b>.029</b>	<b>3.29</b>	<b>3.82</b>

<b>Effort from the staff in resolving my complaint</b>	<b>10.54</b>	<b>3</b>	<b>3.51</b>	<b>2.64</b>	<b>.049</b>	<b>.020</b>	<b>.013</b>	<b>3.61</b>	<b>3.56</b>
<b>An appropriate place to explain/handle my complaint</b>	<b>16.09</b>	<b>3</b>	<b>5.364</b>	<b>4.07</b>	<b>.007</b>	<b>.031</b>	<b>.023</b>	<b>3.38</b>	<b>4.42</b>
Follow-up from the airline management/staff	7.43	3	2.18	1.85	.14	.014	.007	2.80	4.00
Follow-Up in writing from the airline management/empowered staff member	7.36	3	2.45	1.85	.14	.04	.006	2.28	3.37
Transfer to another airline with a code sharing agreement	4.13	3	1.37	1.02	.38	.008	.000	3.00	2.88
Pocket expenses including accommodation, transfer services voucher (e.g. bus, car hire, taxi, train) where the airline has a partnership agreement	3.88	3	1.29	.961	.41	.007	.000	3.23	3.22
Future discount re-route travel with discount including holiday package and travel insurance voucher where the airline has a partnership agreement	6.15	3	2.05	1.52	.21	.012	0.04	3.33	4.00
Free loyalty points	6.49	3	2.16	1.61	.19	.012	.005	3.00	5.00

Notes: Independent sample T-Test and two-way ANOVA results

\*Mean = Post-recovery satisfaction ratings for passengers who received/did not received recovery action; Levene's Test of Equality of Error Variances=.92(1); 0.34(2); 0.28 (3); 0.67(4); 0.23 (5); 0.11(6); 0.53 (7); 0.22 (8); 0.55(9); 0.50(10); 0.34(11); 0.17(12); 0.69(13); 0.42(14); 0.25 (15); 0.38 (16); 0.20(17); 0.34(18); 0.17(19); 0.14(20)

Summary of the analysis results: The test results showed that 13 service recovery strategies had a stronger impact on post-recovery satisfaction on the gender perception with the following 13 service recovery actions being found to have a significant impact on gender perception: (1) acknowledgement of the service failure; (2) acceptance of responsibility for the failure; (3) apology; (4) explanation; (5) staff empowered; (6) correction; (7) compensation; (8) facilitation; (9) a prompt response to the service failure; (10) attentiveness; (11) empathy; (12) effort; and (13) an appropriate to explain/ handle my complaint.

#### 4.19 Hypothesis 9

##### **(H9) Post-recovery satisfaction influences word-of-mouth communication (WOM) and intention to repurchase.**

The results from an OLS regression test are presented in Table 4.36 and show that H9 is supported. This finding is consistent with prior service failure and recovery studies which also found post-recovery satisfaction has a direct influence on customers WOM and intention to repurchase Oh (2003); Weber and Sparks (2004); Kau and Loh (2006); Swanson and Hsu (2011). For example, Oh (2003) examined service recovery in the hospitality sector. The results show that satisfaction with recovery had a significant effect on overall customer satisfaction and repeat intentions. Similar results were produced by Weber and Sparks (2004) who examined customer perceptions of service quality in airline alliance settings. The study found airline alliance passenger's post-recovery satisfaction has a significant effect on customer loyalty. The implication of this result is that airline managers should understand the important of post-recovery satisfaction, as it can avoid negative WOM and loyalty.

**Table 4.36: The impact of post-recovery satisfaction on word-of mouth communication (WOM) and intention repurchase (H9)**

Dependent variables \	$\beta$	SE.B	Beta	t
H1(a) Word-of-mouth (WOM) Adjusted R <sup>2</sup> =.513; F=3.99; p<0.01				
Post-recovery satisfaction	0.729	0.036	0.72**	-19.99
H1(b) Intention to repurchase Adjusted R <sup>2</sup> =.395; F=2.44; p<0.01				
Post-recovery satisfaction	0.651	0.42	0.630**	15.65

Notes: Figures obtained from OLS regression

\*Significant at the  $p < 0.05$  level; \*\* significant at the  $p < 0.01$  level; \*\*\* significant at the  $p < 0.001$  level.

Standardised beta coefficients were used; Durbin Watson: 1.854 (a); 2.061 (b); Tolerance: 1.00 (a),(b); VIF: 1.00 (a),(b)

Summary of the analysis results: OLS is used to determine the relationship between dependent and independent variable It also used to determine whether dependent variable has statistical significance. The test results showed that post-recovery satisfaction had a stronger effect word-of-mouth communication (t = -19.99, p<0.01)



#### **4.20 Hypothesis 10**

**(H10) Emotion mediates the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase.**

The results from an OLS regression analysis are shown in Tables 4.37, 4.38 and 4.39. The mediation analysis technique was used to measure the mediating effect of emotion on service recovery influence on the outcome variables (Baron and Kenny, 1986). The procedure of mediation analysis is based on the fulfilment of three requirements: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.

The test results are presented in Tables 4.37, 4.38 and 4.39 and Figures 4.1 a, b, and c respectively displays the results diagrammatically. Clearly emotion has a direct mediating effect on post-recovery satisfaction, word-of-mouth communication and intention to repurchase. H10 is therefore supported and this finding is consistent with the previous service failure and recovery studies which also found that emotions have an important impact on customer post-recovery satisfaction, word-of-mouth communication and intention to repurchase, Davidow (2003) found negative emotions have a significant impact on customer repurchase intentions and customer attitudes toward the company. Similarly, more recent research by Roos et al., (2009) investigated customer emotions and customer stability in the context of telecom services and found that negative emotions had a direct impact on customer intention to repurchase. Wen and Chi (2013) investigated the relationship between customer perception of customer consumption emotions and satisfaction, post-

consumption behaviours and loyalty. The study found customer perception of post-recovery satisfaction had a significant direct influence on customer emotions. The implication of this result is that airline managers should understand the important of customer emotions in service recovery, effective communication to customer, can help to reduce customer dissatisfaction and avoid negative emotions.

**Table 4.37: Emotion Mediation Analysis for Post-Recovery Satisfaction (H10a1)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting negative emotion Service Recovery	-0.63	0.06	-0.50	-11.40***
1.(b)Predicting positive emotion Service Recovery	0.42	0.05	0.40	8.57***
2. Predicting post-recovery satisfaction Service Recovery	0.62	0.04	0.61	14.82***
3. Predicting post-recovery satisfaction Service Recovery	0.46	0.05	0.45	9.06***
Negative emotion	-0.18	0.04	-0.22	-4.71***
Positive emotion	0.11	0.04	0.12	2.67***

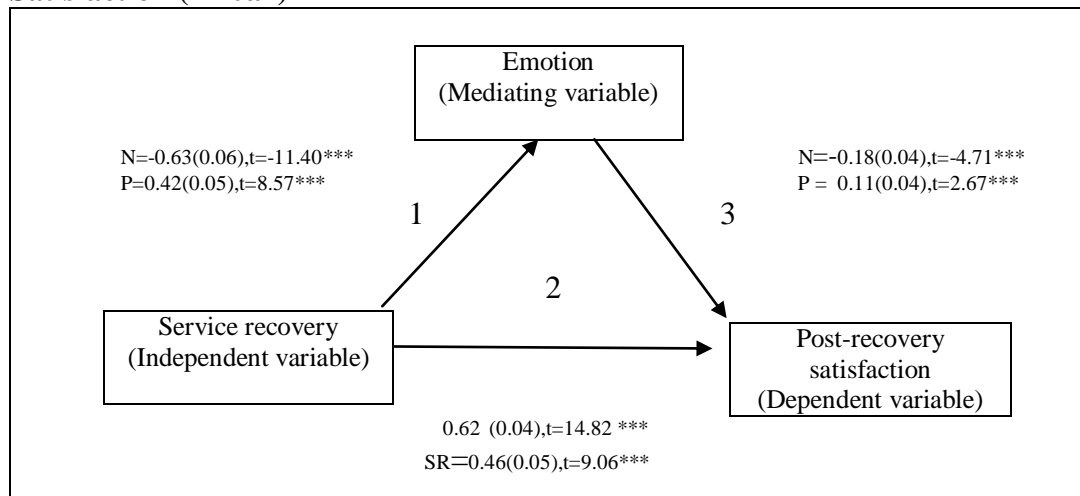
Notes: Figures obtained from OLS regression

\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used; Durbin Watson: 1.684 (a); 1.965(b); 1.949 (c); Tolerance: 1.000(a); 1.000 (b); .633(c) ; VIF: 1.000 (a); 1.000(b); 1.580(c)

Summary of the analysis results: Table 4.37 showed that the influence of emotion on service recovery was significant ( $t = \text{negative emotion} = -11.40, p < .001$ ,  $\text{positive emotion} = 8.57, p < .001$ ). The influence of service recovery on post-recovery satisfaction was significant ( $14.82, p < .001$ ).

**Figure 4.1(a): Emotion Mediation Analysis Model for Post-Recovery Satisfaction (H10a1)**



Notes: N= negative emotion; P=positive emotion; SR= service recovery

Summary of the analysis results: Figure 4.1 (a) showed the mediation effect of emotion on post-recovery satisfaction. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.

**Table 4.38: Emotion Mediation Analysis for Word-of-Mouth Communication (H10b1)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting negative emotion Service Recovery	-0.63	0.06	-0.50	-11.40***
1.(b)Predicting positive emotion Service Recovery	0.42	0.05	0.40	8.57***
2. Predicting word-of-mouth Service Recovery	0.58	0.04	0.56	13.07***
3. Predicting word-of-mouth Service Recovery	0.36	0.05	0.35	6.87***
Negative emotion	-0.19	0.04	-0.23	-4.95***
Positive emotion	0.23	0.04	0.23	5.26***

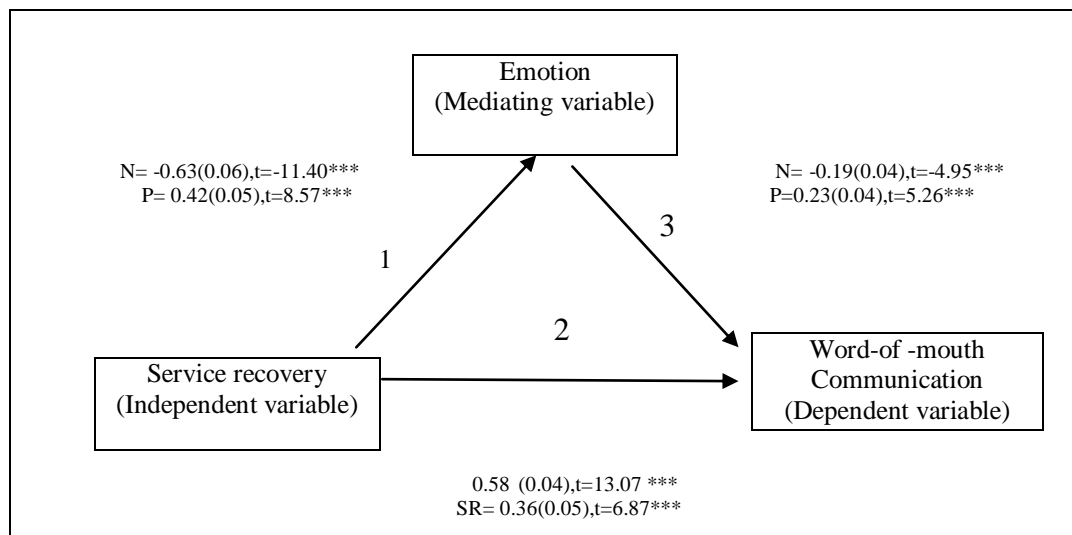
Notes: Figures obtained from OLS regression

\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used; Durbin Watson: 1.684(a); 1.965(b); 1.950(c); Tolerance: 1.000(a); 1.000(b); .633(c); VIF: 1.000(a); 1.000 (b); 1.580(c)

Summary of the analysis results: Table 4.38 showed that the influence of emotion on service recovery was significant ( $t = \text{negative emotion} = -11.40$ ,  $p < .001$ ,  $\text{positive emotion} = 8.57$ ,  $p < .001$ ). The influence of service recovery on word-of-mouth communication was significant ( $13.07$ ,  $p < .001$ ).

**Figure 4.1(b): Emotion Mediation Analysis Model for Word-of-Mouth Communication (H10b1)**



Notes: N= negative emotion; P=positive emotion; SR= service recovery

Summary of the analysis results: Figure 4.1 (b) showed the mediation effect of emotion on word-of-mouth communication. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.

**Table 4.39 (c): Emotion Mediation Analysis for Intention to Repurchase (H10c1)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting negative emotion Service Recovery	-0.63	0.06	-0.50	-11.40***
1.(b)Predicting positive emotion Service Recovery	0.42	0.05	0.40	8.57***
2. Predicting intention to repurchase Service Recovery	0.51	0.05	0.49	10.67***
3. Predicting intention to repurchase Service Recovery	0.29	0.06	0.27	5.02***
Negative emotion	-0.23	0.04	-0.27	-5.26***
Positive emotion	0.20	0.05	0.19	4.07***

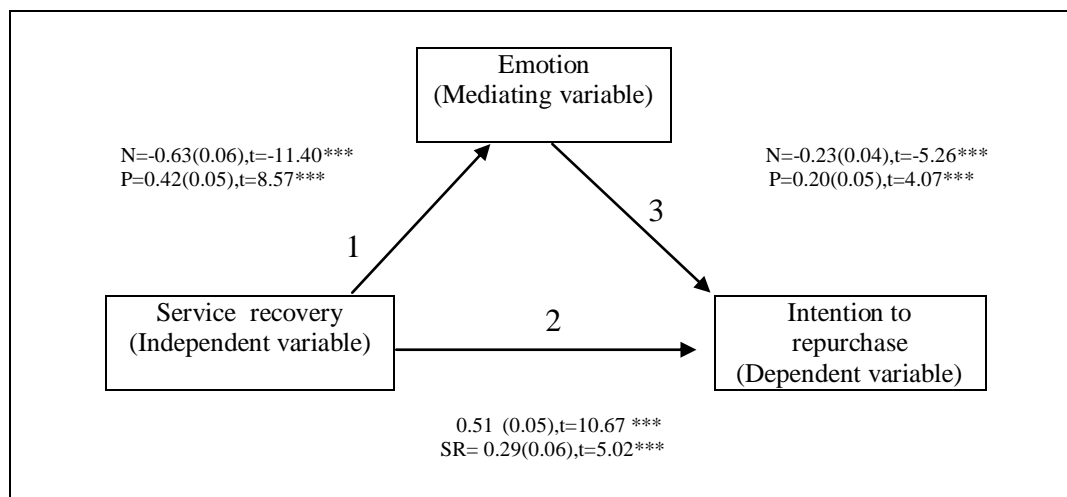
Notes: Figures obtained from OLS regression

\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used; Durbin Watson: 1.684(a); 2.005(b); 1.994(c); Tolerance: 1.000(a); 1.000(b); .633(c)  
VIF: 1.000(a); 1.000(b); 1.580(c)

Summary of the analysis results: Table 4.39 showed that the influence of emotion on service recovery was significant ( $t =$  negative emotion=-11.40,  $p < .001$ , positive emotion =8.57,  $p < .001$ ). The influence of service recovery on intention to repurchase was significant (10.67,  $p < .001$ ).

**Figure 4.1(c): Emotion Mediation Analysis Model for Intention to Repurchase (H10c1)**



Notes: N= negative emotion; P=positive emotion; SR= service recovery

Summary of the analysis results: Figure 4.1 (c) showed the mediation effect of emotion on intention to repurchase. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.

#### 4.2.1 Hypothesis 11

**(H11) Perceived distributive justice and procedural justice mediate the influence of service recovery on post-recovery satisfaction, word-of-mouth communication and intention to repurchase**

The results from an OLS regression analysis are shown in Tables 4.40, 4.41 and 4.42 and Figures 4.2a, b, and c respectively display the results diagrammatically. There were significant effects from distributive and procedural justice on all three outcome variables, but no significant effect from interactional justice on post-recovery satisfaction, word-of-mouth communication or intention to repurchase. Distributive and procedural justice therefore positively mediates the influence of service recovery on intention to repurchase whereas interactional justice does not. H11 is therefore supported. This suggests that airline manager can use these two recovery techniques: compensation (distributive) and speed of response (procedural) to deal effectively to unhappy customers in the process of complaint.

The test results indicate that negative emotions have a higher influence than positive emotions on post-recovery satisfaction (Figure 4.1a). The emotion mediation analysis results for word-of-mouth communication results indicate that positive emotion has a stronger influence than a negative emotion on word-of-mouth (Figure 4.1b). The emotion mediation analysis results for intention to repurchase show a more equally balanced influence than with word-of-mouth communication and post-recovery satisfaction (Figure 4.1 c). This finding supports research by Kau and Loh (2006). They found that interactional justice has less impact on customer post-recovery satisfaction than distributive or procedural justice. Prasongsukarn and Patterson (2012) found interactional justice to have minimal impact on post-recovery satisfaction. Research by Hua (2012) also found no significant effects of

interactional justice on customer post-recovery satisfaction. Huang (2011) also found that interactional justice has no direct effect on post-recovery satisfaction. Lin et al (2011) found that interaction justice has no significant effect on customer repurchase intentions. Furthermore, Prasongsukarn and Patterson (2012) found interactional justice to have minimal impact on post-recovery satisfaction. Research by Hua (2012) also found no significant effects of interactional justice on customer post-recovery satisfaction.

Conversely, previous studies found that perceived distributive and procedural justices have a direct impact on all three outcome variables (i.e. post-recovery satisfaction, word-of-mouth communication and repurchase intentions). This finding is consistent with previous studies. Cranage (2005) found that distributive and procedural justices have a significant direct influence on customer post-recovery satisfaction. Moreover, Casado-Diaz et al (2007) found distributive justice had a direct effect on customer post-recovery satisfaction. Kim et al., (2009) found distributive and procedural justice had a significant direct influence on customer word-of-mouth communication and repurchase intentions. Wang et al., (2011) found procedural justice has a significant direct influence on customer word-of-mouth communication and repurchase intentions. Such studies support the conclusion of Lin et al (2011) found distributive and procedural justice have a direct effect on customer post-recovery satisfaction, word-of-mouth communication and repurchase intentions. The implication of this result is that airline managers can use these two recovery techniques: compensation (distributive justice) and speed of response (procedural justice) to deal unhappy customer, as this can help to reduce anger customer and avoid disloyalty.

**Table 4.40: Justice Mediation Analysis for Post-Recovery Satisfaction (H11a)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting distributive justice Service Recovery	-0.71	0.04	-0.71	-19.46***
1.(b)Predicting interactional justice Service Recovery	0.54	0.04	0.58	13.64***
1.(c)Predicting procedural justice Service Recovery	0.62	0.04	0.61	14.82***
2. Predicting post-recovery satisfaction Service Recovery	0.19	0.05	0.18	3.62***
3. Predicting post-recovery satisfaction Service Recovery	0.19	0.05	0.18	3.62***
Distributive justice	0.30	0.07	0.10	4.55***
Interactional justice	0.11	0.07	0.10	1.59 <sup>ns</sup>
Procedural justice	0.30	0.07	0.27	4.32***

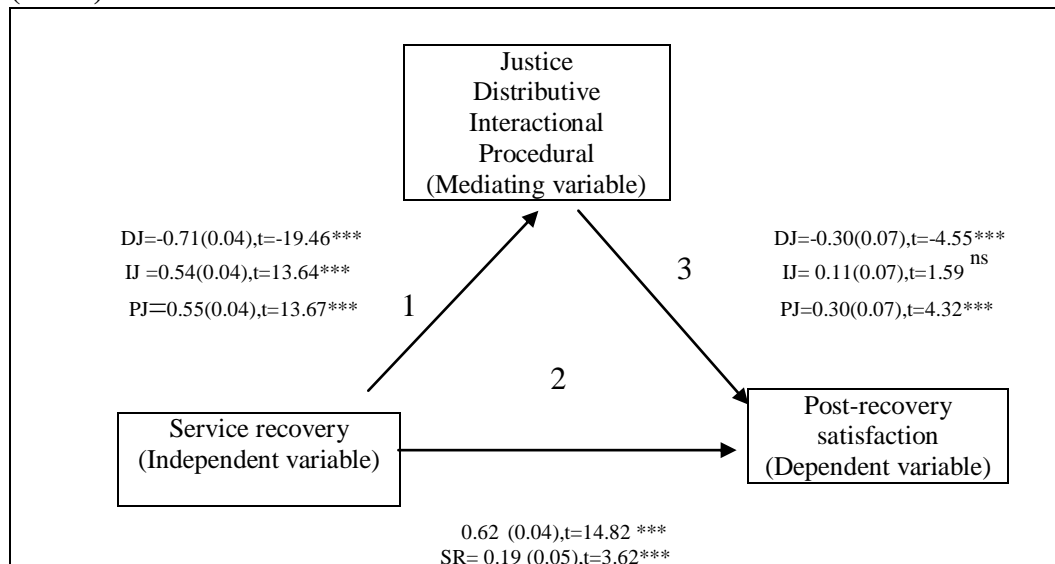
Notes: Figures obtained from OLS regression

\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used;

Durbin Watson: 1.908 (a); 2.063(b); 1.959(c); Tolerance: 1.000(a),(b),(c); VIF: 1.000(a),(b),(c); NS = non-significant

Summary of the analysis results: Table 4.40 showed that the influence of justice on service recovery was significant (distributive justice = -19.46,  $p < .001$ , interactional justice = 13.64,  $p < .001$ , procedural justice = 14.82,  $p < .01$ ). The influence of service recovery on post-recovery satisfaction was significant (3.62,  $p < .001$ ). Additionally, there is no significant effect of interactional justice on post-recovery satisfaction ( $t = 1.59^{ns}$ )

**Figure 4.2(a): Justice Mediation Analysis Model for Post-Recovery Satisfaction (H11a)**

Notes: DJ =distributive justice; IJ= interactional justice; PJ= procedural justice; SR= service recovery

Figure 4.2 (a) showed the mediation effect of justice on post-recovery satisfaction. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.

**Table 4.41: Justice Mediation Analysis for Word-of-Mouth Communication (H11b)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting distributive justice Service Recovery	-0.71	0.04	-0.71	-19.46***
1.(b)Predicting interactional justice Service Recovery	0.54	0.04	0.58	13.64***
1.(c)Predicting procedural justice Service Recovery	0.55	0.04	0.60	13.67***
2. Predicting word-of-mouth Service Recovery	0.58	0.04	0.56	13.07***
3. Predicting word-of-mouth Service Recovery	0.23	0.06	0.22	3.89***
Distributive justice	0.27	0.08	0.26	3.56***
Interactional justice	-0.02	0.08	-0.02	-0.28 <sup>ns</sup>
Procedural justice	0.31	0.08	0.27	3.85***

Notes: Figures obtained from OLS regression

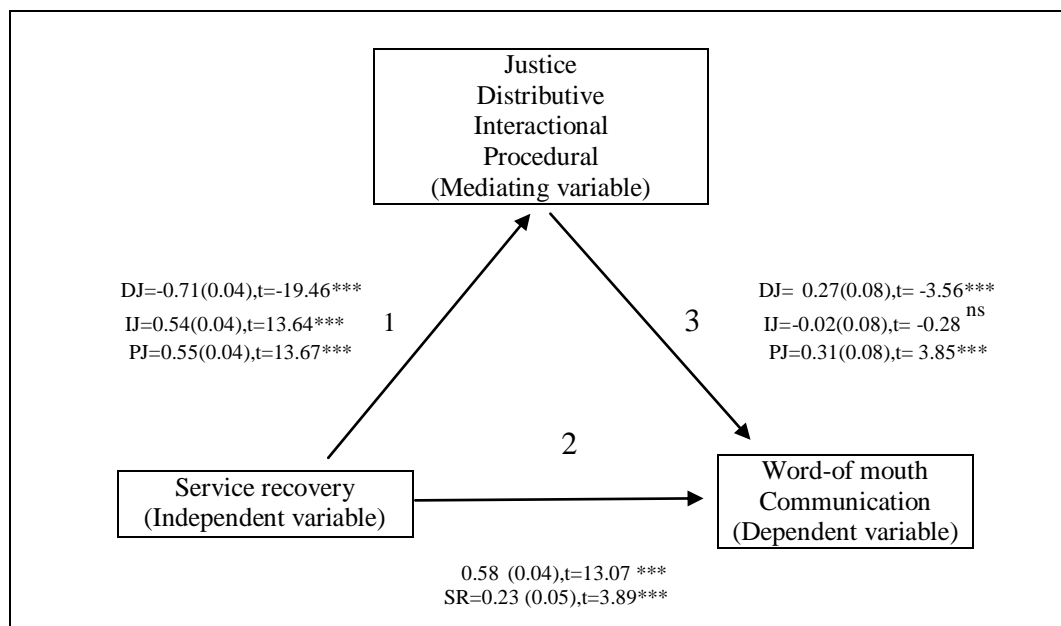
\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used; Durbin Watson: 1.965(a); 1.966(b); 1.867(c)

Tolerance: 1.000(a); 1.000(b); .486(c); VIF: 1.000(a); 1.000(b); 2.058(c); NS = non-significant

Summary of the analysis results: Table 4.41 showed that the influence of justice on service recovery was significant (distributive justice = -19.46,  $p < .001$ , interactional justice = 13.64,  $p < .001$ , procedural justice = 14.82,  $p < .01$ ). The influence of service recovery on post-recovery satisfaction was significant (13.07,  $p < .001$ ). Additionally, there is no significant effect of interactional justice on word-of-mouth communication ( $t = -0.28^{ns}$ )

**Figure 4.2(b): Justice Mediation Analysis Model for Word-of-Mouth Communication (11b)**



Notes: DJ = distributive justice; IJ= interactional justice; PJ= procedural justice; SR= service recovery; NS=non-significant

Figure 4.2 (a) showed the mediation effect of justice on word-of-mouth communication. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model.



**Table 4.42: Justice Mediation Analysis for Intention to Repurchase (H11c)**

Predictor	$\beta$	SEB	BETA	t
1.(a)Predicting distributive justice Service Recovery	-0.71	0.04	-0.71	-19.46***
1.(b)Predicting interactional justice Service Recovery	0.54	0.04	0.58	13.64***
1.(c)Predicting procedural justice Service Recovery	0.55	0.04	0.60	13.67***
2. Predicting intention to repurchase Service Recovery	0.51	0.05	0.49	10.67***
3. Predicting intention to repurchase Service Recovery	0.17	0.07	0.16	3.49***
Distributive justice	0.29	0.08	0.28	3.49***
Interactional justice	-0.03	0.09	-0.03	-0.34 <sup>ns</sup>
Procedural justice	0.27	0.09	0.24	3.12***

Notes: Figures obtained from OLS regression

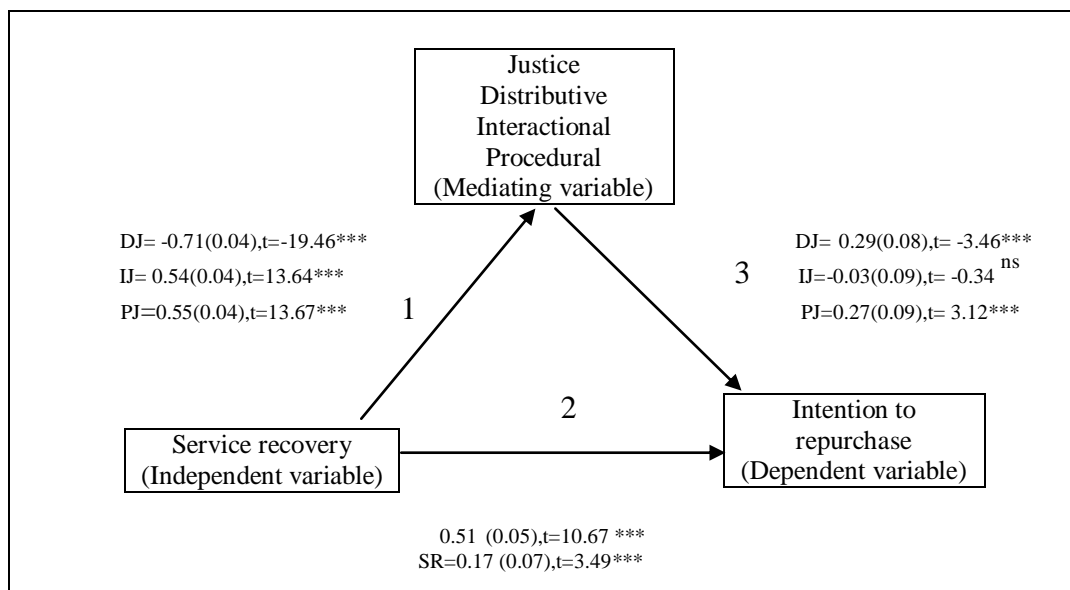
\*\*\* Significant at the  $p < 0.01$  level

Standardised beta coefficients were used.

Durbin Watson: 1.695(a); 2.005(b); 1.973(c); Tolerance: 1.000(a); 1.000(b); .486(c); VIF: 1.000(a); 1.000(b); 2.058(c)

NS = non-significant

Summary of the analysis results: Table 4.41 showed that the influence of justice on service recovery was significant (distributive justice = -19.46,  $p < .001$ , interactional justice = 13.64,  $p < .001$ , procedural justice = 14.82,  $p < .01$ ). The influence of service recovery on post-recovery satisfaction was significant (13.07,  $p < .001$ ). Additionally, there is no significant effect of interactional justice on intention to repurchase ( $t = -0.34^{ns}$ )

**Figure 4.2(c): Justice Mediation Analysis Model for Intention to Repurchase (H11c)**

Notes: DJ = distributive justice; IJ = interactional justice; PJ = procedural justice; SR = service recovery; NS = non-significant

Figure 4.2 (a) showed the mediation effect of justice on intention to repurchase. The mediation analysis is divided into three main steps: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variables, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model

## Chapter 5

### Conclusion and Recommendations

#### 5.1 Introduction

The previous chapter presented the data analysis of 11 hypothesis tests and a discussion of previous research findings. This chapter presents a summary of each research objectives and methods used in this study. The chapter then highlights the limitations for the study. Thereafter, the summary to the chapter is presented.

#### 5.2 Research objectives and questions

This section will highlight how the research objectives and questions were addressed. The specific objectives and questions of this study are show in the following:

**Objective 1: Analyse the impact of failure severity on post-failure satisfaction, world-of-mouth communication and intention to repurchase.**

The aim of this objective was to understand the impact of failure severity on post failure satisfaction, word-of-mouth communication and intention to repurchase. The hypothesis results show that failure severity has a significant influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase. This finding is consistent with previous research on service failure and recovery which also found failure severity has a significant influence on all three variables

(McQuilken and Bednall, 2008; Wang et al., 2011; Kim and Ulgado, 2012). As such, the extent of failure may adversely affect the way customers regard an organisation and affects their willingness to repurchase from the organisation in the future. This conclusion was also made by Wang et al., 2011 and Kim and Ulgado, (2012). The implications of this conclusion are that organisations should have a policy of identifying where a severe failure has taken place. This will enable the organisation to attempt to rectify the complaint before the severity increases. Based on this conclusion it may be recommended that organisation train staff to identify when failure occurs and the extent of the failure. In addition, staff could be trained to offer remedial actions where failure occurs. The aim of this recommendation is to enable the organisation to identify and rectify failure situations. The costs associated with the recommendation are those with staff training, instigating a compensation scheme and managing the compensation scheme. The benefits of this recommendation are to enable the organisation to manage its own failures and to prevent poor word-of-mouth communication by customers. In addition the recommendation should increase the level of repurchase by customers. A summary of research question, objective, survey methods, analytical methods and hypothesis results are presented in Table 5.1.

**Table 5.1: Research question and objective one**

<b>Research question</b>	<b>Linked Research objective</b>	<b>Survey methods</b>	<b>Analytical method</b>	<b>Hypothesis results</b>	<b>Implication</b>
Does failure severity have an impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	Analyse the impact of failure severity on post- failure satisfaction, world-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel survey	OLS regression analysis	Supported	Future research should be examined trust and commitment in order to understand customer loyalty behaviour after service failure and recovery

**Objective 2: Analyse the impact of failure severity on post failure satisfaction, world-of-mouth communication and intention to repurchase.**

The research question and objective are shown in Table 5.2. The purpose of this objective was to understand the impact of failure criticality on post-failure satisfaction, world-of-mouth communication and intention to repurchase. The hypothesis results show that failure criticality has a significant influence on all three dependent variables. This conclusion was also made by Webster and Sundaram (1998), Hoffman and Kelly (2000) and Watson (2012). The implications of this conclusion are that airline management and staff should be well-trained and responsive staff so they are able to handle seriousness of the service failure and this can help to avoid loss of customers with a high degree of operating leverage. Also, airline management must encourage passenger to complaint in order have opportunity to correct a mistake. This will enable the organisation to deal more effectively with criticality of failure incidents. The costs associated with the recommendation are training of frontline staff to motivate them to provide a high level of customer service and to identify service failure, so they can take correction actions. The benefits of this recommendation are to reduce negative word-of-mouth communication by customer. In addition, the recommendation should increase an airline's customer service and reputation.

**Table 5.2: Research question and objective two**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Does failure criticality have an impact on post-failure satisfaction, world-of-mouth communication and intention to repurchase?	Analyse the impact of failure criticality on post failure satisfaction, world-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel survey	OLS regression analysis	Supported	Future research should consider other culture groups for analysis, in order to strengthen the results

**Objective 3: Identify the different types of service failure’s influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The research question and objective are shown in Table 5.3. The major aim of this objective was to explore the impact of failure type influences post-failure satisfaction, word-of-mouth communication and intention to repurchase. The test results show that the impact of service failure type is not significant for any of the three outcome variables. The implication of this finding was that organisation is able to generate service recovery strategies enabling staff able to deal with different types of service failure.

**Tables 5.3: Research question and objective three**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothes is results	Implication
Do different types of service failure have a differential impact on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	Identify the different types of service failure’s influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel survey	One-way between groups ANOVA	Not supported	Future research is needed to use other countries setting for analysis, in order to verify the results of this hypothesis test.

**Objective 4: Analyse the mediating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The research question and objective are shown in Table 5.4. The aim of this objective was to understand the moderating effect of passenger type on failure type and criticality in relation to the outcome variables. The findings show that the moderating effect of passenger type on failure type and criticality in relation to the

outcome variables was not significant. The implication of this finding is that generic recovery strategies are applicable to all types of service failure. As such, training of staff should focus on identifying potential failure and having timely intervention. The costs of this recommendation are these associated staff training and empowering staff to implement appropriate recovery strategies. The benefits are those associated with satisfied customers.

**Tables 5.4: Research question and objective four**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Does passenger type moderate the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	Analyse the mediating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel	Two- way between groups ANOVA	Not supported	Future research is needed to consider examine the mediating effect of passenger type on the three outcome variables in airline sector in order to verify the results of this hypothesis test.

**Objective 5: Analyse the mediating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The research question and objective are shown in Table 5.5. The purpose of this objective was to understand the moderating effect of passenger type on the influence of failure type and criticality of failure on post-failure satisfaction, word-of-mouth communication and intention to repurchase. The findings show that the

moderating effect of passenger type on the influence of failure type and criticality of failure in relation to the outcome variables was not significant. Again, these enable generic strategies to be apply to all customer types in order to identify and resolved potential service failure.

**Tables 5.5: Research question and objective five**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Does passenger loyalty moderate the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	Analyse the mediating effect of passenger loyalty on the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel survey	Two- way between groups ANOVA	Not supported	Future studies should consider a larger sample size and other culture groups in order to verify the results of this hypothesis test.

**Objective 6: Analyse the moderating effect of airline type on failure type's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase.**

The research question and objective are shown in Table 5.6. The aim of this objective was to understand the moderating effect of airline type on failure type's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase. The test results show that the moderating effect of airline type on the outcome variables was not significant. This further support the importance of

training staff and operation manager and staff should to identify potential service failure and to empower them to take correction actions.

**Tables 5.6: Research question and objective six**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Does airline type moderate the influence of failure type, severity and criticality on post-failure satisfaction, word-of-mouth communication and intention to repurchase?	Analyse the moderating effect of airline type on failure type's influence on post-failure satisfaction, word-of-mouth communication and intention to repurchase	Street intercept survey  Online survey at Salford University  Marketest panel survey	Two- way between groups ANOVA	Not supported	Future research is needed to use other countries setting and with a larger sample size in order to verify the results of this hypothesis test.

**Objective 7: Identify the impact of service recovery on post-recovery satisfaction**

The research objective and question are shown in Table 5.7. The aim of this objective was to understand the impact of service recovery on post-recovery satisfaction. The findings show that there are significant differences between recovery actions. As such, this result was support by Park et al., (2008), Iyer and Muncy, (2008), Gruber et al., (2009), Wang and Mattila, (2011) and Ozgen and Kurt, (2012). The implications of this conclusion are that airline management should be should understand the importance of post-recovery satisfaction, as it can avoid disloyalty. Airline management and staff should deploy and develop high standard of customer skills that include: a high level of interpersonal skills, strong problem-solving skills and provide satisfactory explanations to the service failures.



This will enable the organisation to deal more effectively with customer post-recovery satisfaction. The costs associated with the recommendation are developing responsive staff with good communication skills. The benefits of this recommendation are enable to deal quickly and effectively to dissatisfaction unhappy airline customers. In addition the recommendation should increase an airline's customer service satisfaction.

**Tables 5.7: Research question and objective seven**

<b>Research question</b>	<b>Linked Research objective</b>	<b>Survey methods</b>	<b>Analytical method</b>	<b>Hypothesis results</b>	<b>Implication</b>
Do differences in service recovery type influence post-recovery satisfaction?	Identify the impact of service recovery on post-recovery satisfaction.	Street intercept survey  Online survey at Salford University  Marketest panel survey	The independent sample t-test	Supported	Future research should examine how the combination of service recovery actions influences post-recovery satisfaction, word-of-mouth communication and intention to repurchase.

**Objective 8: Identify the differences of gender perception on recovery strategy influence on post-recovery satisfaction.**

The research objective and question are shown in Table 5.8. The aim of this objective was to understand the impact of service recovery on post-recovery satisfaction. The test results show that there are significant gender differences in the relationship between post-recovery satisfaction. As such, this conclusion was also made by McColl-Kennedy et al., (2003), Mattila, 2010, Boo et al, 2013, Cambra-Fierro et al., (2013). The implication of this conclusion is that airline management

need to understand the different behaviours of men and women needs in the incident of service failure. The implications of this conclusion are that airline managers and staff can use these 13 recovery actions to deal with recovery issues of male and female customer: (1) acknowledgement of the service failure; (2) acceptance of responsibility for the failure; (3) apology; (4) explanation; (5) staff empowered; (6) correction; (7) compensation; (8) facilitation; (9) a prompt response to the service failure; (10) attentiveness; (11) empathy; (12) effort; and (13) an appropriate to explain/ handle my complaint. These 13 service recovery actions should help to increase post-recovery satisfaction.

**Tables 5.8: Research question and objective eight**

Research question	Linked Research objective	Survey methods	Analytical methods	Hypothesis results	Implication
Does gender moderate the influence of service recovery type on post-recovery satisfaction?	Identify the differences of gender perception on recovery strategy influence on post-recovery satisfaction.	Street intercept survey  Online survey at Salford University  Marketest panel survey	Independent sample t-test and two-way ANOVA	Supported	Future research should consider other service industries this may help to strengthen the context of study

**Objective 9: Identify the impact of post-recovery satisfaction on word-of-mouth communication and intention to repurchase.**

The research objective and question are shown in Table 5.9. The aim of this objective was to understand the impact of post-recovery satisfaction on word-of-

mouth communication and intention to repurchase. The results show that post-recovery satisfaction has a significant influence on word-of-mouth communication and intention to repurchase. As such, this conclusion was also made by Oh (2003), Weber and Sparks (2004), Kau and Loh (2006) and Swanson and Hsu (2011). The implications of this conclusion are that airline management should understand the importance of recovery satisfaction as it can avoid loss of customers and negative impact on repurchase intention. Airline management and staff should develop empower to deliver appropriate recovery strategies. Also, customer service staff need to be polite, helpful, and friendly. This can help the airlines increase post-recovery satisfaction and the reputation of the airline. In addition the recommendation should help to decrease customer disloyalty.

**Tables 5.9: Research question and objective nine**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Does post-recovery satisfaction influence word-of-mouth communication and intention to repurchase?	Identify the impact of post-recovery satisfaction on word-of-mouth communication and intention to repurchase.	Street intercept survey  Online survey at Salford University  Marketest panel survey	OLS regression analysis	Supported	Future research should consider other demographic characteristics of travellers and this can help strengthen the contribution of the research

**Objective 10: Analyse the mediating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction and loyalty.**

The research objective and question are shown in Table 5.10. The aim of this objective was to understand the moderating effect of emotion and perceived justice

on recovery actions/strategy's influence on post-recovery satisfaction and loyalty. The findings show that the moderating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction. This conclusion was also made by Davidow (2003), Wong (2004), Roos et al., (2009) and Varela-Neira et al (2010b). The implications of this conclusion are that airline management and staff should understand the impact of service recovery on customer emotions and should be aware of the importance of perceived justice on service recovery. Frontline staffs should provide customers with a high level of customer care that includes listening to the customer opinions and feelings of service failure. They also need to be polite (i.e. customer-friendly attitude) and helpful customer support. This can help the airlines avoid negative customer emotions and also help organisation handle complaints effectively during service failure.

**Tables 5.10: Research question and objective ten**

Research question	Linked Research objective	Survey methods	Analytical method	Hypothesis results	Implication
Do emotion and perceived justice mediate the impact of recovery actions/strategies on post-recovery satisfaction and loyalty?	Analyse the mediating effect of emotion and perceived justice on recovery actions/strategy's influence on post-recovery satisfaction and loyalty.	Street intercept survey  Online survey at Salford University  Marketest panel survey	OLS regression analysis	Supported	Future research should examine the impact of interactional justice, this may help us to understand the impact of interactional justice in airlines sector.

### **5.3 Limitations of the research**

There are several limitations which have been identified within this study. The first limitation is that this study only used quantitative methods to collect the data (i.e. a street intercept survey in Manchester; an online survey at Salford University; a Marketest panel survey). Consequently, a future study should include qualitative interviews with critical incident technique (CIT). The purpose of CIT is to acquire an insight into traveller perceptions on service failure and recovery experience and this can provide a more in depth insight into both service failure and recovery. The CIT method have been commonly used in the service failure research (Bejou et al., 1998; Lockshin and McDougall, 1998; Meuter et al., 2000; Edvardsson, 2001; Forbes et al., 2005; Zhang et al., 2010; Chelminski and Coulter, 2011; Swanson et al., 2014).

The second limitation of the study relates to the sample type and size. As stated in chapter three, service failure is not a common occurrence. As such, it is not possible to identify a sufficient number of airline service failures taking a random sample of the population. Consequently, a convenience and experiential sampling methods were used for the study and therefore the results cannot be generalised to the UK population. Moreover, the use of three surveys to acquire a sufficient number of relevant airline incidents may have biased the sample, although equally it may have resulted in a more representative sample. Additionally, while the sample size was adequate for a study of this type, a larger sample may have provided further opportunities to examine sub-samples based on service failure types.

The third limitation is the study's cross sectional design. The major limitation to the use of a cross sectional design is that the data collection is at one point in time only rather than extended over a longer period. Thus, future research should consider a longitudinal design using both qualitative and quantitative methods to strengthen the overall results of the research.

### 5.3.1 Implications for management practice

Several implications for management are based on the findings of this study and they are highlights in Table 5.11.

**Table 5.11 Implication of research findings**

Recommendation	Ways to achieved
Improve complaints handling	<p><b>Staff training</b> Regular staff training programme need to run every 4 to 8 months, this can help improve service standard and performance. Maintain high levels of the customer service standards that include service skills such as responsiveness (e.g. willing to help passengers to solve problem ( i.e flight cancellation or baggage lost). This can help to increase customer post-recovery satisfaction.</p> <p><b>Staff suggestion schemes</b> The major aim is to track customer expectations and find out what travellers expectations are. For example, identify different types of traveller and their specific needs (e.g. first time and loyal customer expectations). This will enable specific policies and processes to be applied to each passenger group. This will also enable appropriate service standards to be developed for each group of passenger and thus improve customer satisfaction</p> <p><b>Comprehensive customer feedback systems</b> The 24 hours telephone hotlines, comment cards and questionnaires, can help service provider to capture customer expectations and opinions. Customer feedback and suggestion should keep as guidelines for future references.</p>
Improve post- recovery satisfaction and intention to repurchase	<p>This study has highlighted the following five service recovery strategies as being significant in improving customer satisfaction:</p> <p><b>Acceptance of responsibility of service failure</b> To calm down an unhappy customer, A service provider needs to acknowledge the incident of service</p>

	<p>failure and frontline service staff need to have a good manner and attitude that enables them to develop, explain and implement the best solution to the problem.</p> <p><b>Apology</b> Service staff 'apologise' at the beginning of the conversation with customer. This will identify a positive attitude to the customer and the providers intention to find a solution.</p> <p><b>Correction</b> Correction is always the best way to solve a problem and the service provider needs to employ well-trained frontline staff that include the following skills: responsiveness, helpfulness and friendliness.</p> <p><b>Compensation</b> To attract and retain customer loyalty, appropriate compensation has become important in the customer intention to repurchase. A flexible compensation policy can increase brand image of the organization.</p> <p><b>Follow-up in writing</b> This can help service provider to understand more details about the customer perception in post-recovery satisfaction and can improve the relationship between the organization and customer.</p>
A system for staff service improvement	<p><b>Job Evaluation</b> Staff monitoring and evaluation activities should be conducted regularly (i.e. daily, weekly and monthly); this can help to identify the strengths and weaknesses of the service staffs performance.</p> <p><b>Internal staff motivation schemes</b> Overtime payment plans - Many airline staff usually work long hours including working Christmas and Bank holidays. A good overtime pay rate should helps to increase staff motivation and job satisfaction.</p> <p><b>The best alternative and implement the plan of action</b> Good tactical decisions are required to be taken by duty managers. As such, airline management teams should have a list of guidelines and tools that can help them make the right decision in specific service failure event /incident. For example when is an apology sufficient and if financial compensation is to be awarded what are the limits.</p> <p><b>Identify service problem guidelines</b></p> <ul style="list-style-type: none"> <li>• <b>Service problems identify</b> Highlight areas that require significant improvement that include internal and external operation issues. For example, identify service staff who need more training, this can help to improve service standards established by the airline team. Operations managers and staff should check regularly the equipment and facilities are working and safe to use in order to avoid and</li> </ul>

	<p>reduce system breakdown. Daily maintenance recording sheets can be used to evidence audit.</p> <ul style="list-style-type: none"> <li>• <b>Develop strong service guidelines</b> Airline management should design a list of common recovery strategies (backed-up-plan) with a set of guidelines to handle customer complaints. This may help reduce the number of dissatisfied customers and increase post-recovery satisfaction.</li> <li>• <b>Organization learning strategy</b> Airline research teams should develop a strategies program that can capture service failure incidents more accurately (e.g. why system breakdown in the check-in counter. This details can help management to effectively measure the measure of incident.</li> </ul>
Improve customer service standards	<p><b>Customer interactions</b> Increase value-add service to customer by providing a good customer service care. For example, daily complaints should be recorded and tracked to ensure efficient and effective handling and resolution. This can help to maintain service quality standards established by airline team.</p>
Service quality strategies	<p><b>Service quality improvement program</b> All frontline staff should be consulted about service quality performance by the management team on a regular basis. This can be done informally through suggestion boxes and more formally through customer complaint handling processes. This can help management and staff to identify problems and solve out quickly and effectively.</p>
Improve operation system	<p><b>Analyze competitor service quality</b> Management staff should conduct research regularly on competitors. For example, the management team should analyse complaints and issues raised by their staff and also seek to identify failings in competitors service offerings. Such actions may include:</p> <ul style="list-style-type: none"> <li>• Analyze service failure and recovery by daily, weekly and monthly. This can help airline research team to capture effectiveness of service recovery strategy.</li> <li>• Work with other airlines to identify current complex issue relevant to the airline industry.</li> <li>• Coordinate with other branch service managers to develop strategies and guidelines in relation to customer complaints and satisfaction issues.</li> <li>• Evaluate daily service complaints received from the front desk and to develop service</li> </ul>



	<p>recovery strategies.</p> <ul style="list-style-type: none"> <li>• Regularly conduct service quality analysis (i.e. facilities and service delivery system). This can help to assure that service quality and facilities standards established by the airline management team.</li> </ul>
--	---

## 5.4 Future research

This study used a cross sectional design which has been commonly used in service failure and recovery studies (Mattila, 1999; McCollough, 2000; Wirtz and Mattila, 2004; Schoefer and Ennew, 2005; Río-Lanza et al., 2009; Varela-Neira et al., 2010b; Betts et al., 2011; Lin et al., 2011; Sviri and Olsen, 2012; Wen and Chi, 2013; Baker and Meyer, 2014). However, cross sectional studies are carried out at a specific moment in time and don't show how variables change over time (Varela-Neira et al., 2009).

Several of the dependent variables should be examined in future research. For example, it is important to understand customer loyalty behaviour after service failure and recovery because prevent customers switching to other airline. Therefore, future research should include variables such as trust and commitment. Previous research on service failure and recovery has reported that service failure has a significant influence on trust and commitment. Both variables have used in a variety of service failure contexts such as airline (Bejou and Palmer, 1998), banking (Komunda and Osarenkhoe, 2012), restaurant (Palmer et al., 2000; Mattila, 2004; Tsai et al., 2014), hospitality (Weun et al., 2004; Magnini et al., 2007; Kim et al., 2008; McQuilken, 2010; Xie and Heung, 2012), online retailers (Wang et al., 2011).

Other dependent variables should also be examined in the future studies such as interactional justice. The results from this study indicated that there is no significant effect from interactional justice on post-recovery satisfaction, word-of-mouth communication and intention to repurchase. This means, staff responsiveness did not have a significant influence on all three dependent variables. Previous studies have reported that interactional justice to have a significant impact on customer post-recovery satisfaction and loyalty (Weun et al., 2004; Mattila and Cranage, 2005; Rio-Lanza et al., 2009; Lin et al., 2011; Wang et al., 2011; Kim et al., 2012). Therefore, further tests for this justice dimension need to be conducted in an airline context to assess the external validity of the results. Future research should also examine the effectiveness of recovery strategies for each service failure type. It is also important to examine how the combination of service recovery actions influences post-recovery satisfaction, word-of-mouth communication and intention to repurchase.

## **5.5 Chapter summary**

This chapter has outlined the research objectives and questions for the study and presented the hypotheses results that were used to address research objectives and questions. It has also presented the implications for management practice. The recommendation for future research is also discussed in the chapter.

## References

Aaker, D., Kumar, V., Day, G., and Leone, R. (2011). *Marketing Research*, (10nd ed), Danvers: John Wiley and Sons.

Abrahams, M. (1983). A service quality model of air travel demand: an empirical study, *Transport Research*, Vol. 17, No.5, pp.385-393.

Abili, K., Thani, F., and Afarinandehbin, M. (2012). Measuring university service quality by means of SERVQUAL method, *Asian Journal on Quality*, Vol.13, No.3, pp. 204 – 211.

Adams, J. (1965). Inequity in social exchange, *Advances in Experimental Social Psychology*, Vol. 62, No.1, pp. 335-343.

Adamson, C. (1993). Evaluating complaint procedures, *Managing Service Quality*, Vol. 3, No.2, pp.439-48.

Agusdinata, B., and Klein, W. (2002). The dynamics of airline alliances, *Journal of Air Transport Management*, Vol. 8, No. 4, pp. 201-211.

Ahmed, A., Zairi, M., and Almarri, K. (2006). SWOT analysis for Air China performance and its experience with quality, *Benchmarking: An International Journal*, Vol. 13, No.1, pp.160-173.

Ahmad, S., Jabeen, F., and Khan, M. (2014). Entrepreneurs choice in business venture: Motivations for choosing home-stay accommodation businesses in Peninsular Malaysia, *International Journal of Hospitality Management*, Vol. 36, No.1, pp.31-40.

Akbaba, A. (2006). Measuring service quality in the hotel industry: a study in a business hotel in Turkey, *International Journal of Hospitality Management*, Vol. 25, No. 2, pp.170-192.

Aksoy, S., Atilgan, E., and Akinci, S. (2003). Airline services marketing by domestic and foreign firms: differences from the customers viewpoint, *Journal of Air Transport Management*, Vol. 9, No.6, pp.343–351.

Akbaba, A. (2006). Measuring service quality in the hotel industry: a study in a business hotel in Turkey, *Hospitality Management*, Vol. 25, No. 2, pp.170–192.

Alas, R., and Vadi, M. (2006). The employee attitude and their connections with the organizational culture in the process of change in the Estonian organizations, *Baltic Journal of Management*, Vol. 1, No.1, pp. 49-66.

Alexandris, K., Dimitriadis, N., and Markata, D. (2002). Can perceptions of service quality predict behavioural intentions: an exploratory study in the hotel sector in Greece, *Managing Service Quality*, Vol. 12, No.4, pp.224-231.

Alexandris, K., Douka, S., Papadopoulos, P., and Kaltsatou, A. (2008). Testing the role of service quality on the development of brand associations and brand loyalty, *Managing Service Quality*, Vol.18, No.3, pp.239 – 254.

Alvarez, M., Jaca, C., Viles, E., and Colomer, A. (2012). Quality management in hotels in the Basque country, *International Journal of Quality and Service Sciences*, Vol. 4, No.1, pp.51-60.

Angell, R. (1964). Social values of soviet and American elites: content analysis of elite media, *Journal of Conflict Resolution*, Vol. 8, No.1, pp.329-385.

Anderson, E., and Sullivan, M. (1993). The antecedents and consequences of customer satisfaction for firms, *Marketing Science*, Vol. 12, No.2, pp.125–143.

Anderson, J., and Narus. J. (1995). Capturing the value of supplementary services, *Harvard Business Review*, Vol. 73, No.1, pp.75-83.

Anderson, J., and Gerbing, D. (1998). Structural equation modelling in practice: a review and recommended two-step approach, *Psychological Bulletin*, Vol.103, No.3, pp.411-423.

Andreassen, T. (2000). Antecedents to satisfaction with service recovery, *European Journal of Marketing*, Vol. 34, No.1, pp.156-175.

Andreassen, T. (2001). From disgust to delight: do customers hold a grudge, *Journal of Service Research*, Vol. 4, No.1, pp.39-49.

Antony, J., Antony, F., and Ghosh, S. (2004). Evaluating service quality in a UK hotel chain: a case study, *International Journal of Contemporary Hospitality Management*, Vol.16, No. 6, pp.380 – 384.

Appelbaum, S., and Fewster, B. (2003). Global aviation human resource management: contemporary compensation and benefits practices, *Management Research Review*, Vol. 26, No.7, pp.59-71.

Argyris, C. and Schon, D. (1978). *Organizational Learning*, London: Addison-Wesley Longman Publisher.

Armstrong, R., Mok, C., Go, F., and Chan, A. (1997). The importance of cross-cultural expectation in the measurement of service quality perceptions in the hotel industry, *International Journal of Hospitality Management*, Vol. 16, No.2, pp.181-190.

Ashill, N., Carruthers, J., and Krisjanous, J. (2005). Antecedents and outcomes of service recovery performance in a public healthcare environment, *Journal of Services Marketing*, Vol. 19, No.5, pp.293 – 308.

Atalik, O. (2007). Customer complaints about airline service: a preliminary study of Turkish frequent flyers, *Management Research News*, Vol. 30, No.6, pp.409-419.

- Atkin, T., and Johnson, R. (2010). Appellation as an indicator of quality, *International Journal of Wine Business Research*, Vol. 22, No.1, pp.42-61.
- Babbar, S., and Koufteros, X. (2008). The human element in airline service quality: contact personnel and the customer, *International Journal of Operation Production Management*, Vol. 28, No.9, pp.804-830.
- Babbie, E. (1990). *Survey Research Methods*, Belmont: Wadsworth Publisher.
- Babbie, E. (2010). *The Practice of Social Research*, (3rd ed), Belmont: Cengage Learning Publisher.
- Bagozzi, R., Gopinath, M., and Nyer, P. (1999). The role of emotions in marketing, *Journal of the Academy of Marketing Science*, Vol. 27, No.2, pp.184-206.
- Balaji, M., and Sarkar, A. (2013). Does successful recovery mitigate failure severity: a study of the behavioural outcomes in Indian context, *International Journal of Emerging Markets*, Vol. 8, No.1, pp.65 – 81.
- Baker, T. (1999). *Doing Social Research*, (3rd ed), London: McGraw-Hill.
- Baker, H., and Mukherjee, T. (2007). Survey research in finance: views from journal editors, *International Journal of Managerial Finance*, Vol. 3, No.1, pp.11 – 25.
- Bamford, D., and Xystouri, T. (2005). A case of service failure and recovery within an international airline, *Managing Service Quality*, Vol. 15, No.3, pp.206-322.
- Bamber, G., Lansbury, R., Rainthorpe, K., Yazbeck, C. (2006). Low-cost airlines product and labour market strategic choices: Australian perspectives, *Proceedings of the 58th Annual Meeting of the Labour and Employment Relations Association (LERA)*, pp.77-85.
- Baron, R., and Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations, *Journal of Personality and Social Psychology*, Vol. 51, No.6, pp.1173-1182.
- Baron, S., and Harris, K. (1995). *Service Marketing: Text and Cases*, London: Palgrave Macmillan.
- Barsky, J. D., and Labagh, R. (1992). A strategy for customer satisfaction, *Cornell Hotel and Restaurant Administration Quarterly*, Vol.33, No.5, pp.32-40.
- Barber, N., and Scarcelli, J. (2010). Enhancing the assessment of tangible service quality through the creation of a cleanliness measurement scale, *Managing Service Quality*, Vol. 20, No.1, pp.70-88.
- Bateson, J. (1995). *Managing Services Marketing*, (2nd ed), Fort Worth: Dryden Press.

- Bebko, C. (2000). Service intangibility and its impact on consumer expectations of service quality, *Journal of Service Marketing*, Vol. 14, No.1, pp. 9-26.
- Beckford, J. (2010). *Quality: a Critical Introduction*, (3rd ed), New York: Routledge.
- Bejou, D., and Palmer, A. (1998). Service failure and loyalty: an exploratory empirical study of airline customers, *Journal of Service Marketing*, Vol. 12, No.1, pp.7-22.
- Bell, C. and Zemke, R. (1987). Service breakdown: the road to recovery, *Management Review*, Vol. 46, No.2, pp. 32-5.
- Bell, S., Auh, S., and Smalley, K. (2005). Customer relationship dynamics: service quality and customer loyalty in the context of varying levels of customer expertise and switching costs, *Journal of the Academy of Marketing Science*, Vol.33, No.2, pp.169-183.
- Bellou, V., and Andronikidis, A. (2009). Examining organizational climate in Greek hotels from a service quality perspective, *International Journal of Contemporary Hospitality Management*, Vol. 21, No. 3, pp.294 – 307.
- Bendapudi, N. and Leone, R. (2003). Psychological implications of customer participation in co-production, *Journal of Marketing*, Vol. 67, No.1, pp. 14-28.
- Berry, L., and Parasuraman, A. (1992). Prescriptions for a service quality revolution in America, *Organizational Dynamics*, Vol. 20, No.4, pp.21–28.
- Berezina, K., Cobanoglu, C., Miller, B., and Kwansa, F. (2012). The impact of information security breach on hotel guest perception of service quality, satisfaction, revisit intentions and word-of-mouth, *International Journal of Contemporary Hospitality Management*, Vol. 24, No.7, pp.489-501.
- Betts, T., Wood, M., and Tadisina, S. (2011). The impact of failure severity, prior failure, and company control on service recovery outcomes, *Journal of Leadership and Organizational Studies*, Vol. 18, No.3, pp. 365– 376.
- Bhandari, M., Tsarenko, Y., and Polonsky, M. (2007). A proposed multi-dimensional approach to evaluating service recovery, *Journal of Services Marketing*, Vol. 21, No. 3, pp.174 – 185.
- Bitner, M., Booms, B., and Tetreault, M. (1990). The service encounter: diagnosing favourable and unfavourable incidents, *Journal of Marketing*, Vol. 54, No.1, pp.71-84.
- Bitner, M., Brow, S., and Meuter, M. (2000). Technology infusion in service encounters, *Journal of the Academy of Marketing Science*, Vol. 28, No.1, pp.138-149.

- Bies, R., and Moag, J. (1986). Interactional justice: communication criteria of fairness, *Research on negotiation in organizations*, Vol. 1, No. 2, pp.43-55.
- Bigne, J., Martinez, C., Miquel, M., and Andreu, L. (2003). SERVQUAL reliability and validity in travel agencies, *Annals of Tourism Research*, Vol. 30, No.1, pp. 258-262.
- Bijmolt, T., Huizingh, E., and Krawczyk, A. (2014). Effects of complaint behaviour and service recovery satisfaction on consumer intentions to repurchase on the internet, *Internet Research*, Vol. 24, No. 5, pp.1-42.
- Blodgett, J., Wakefield, K., and Barnes, J. (1995). The effect of customer service on consumer complaining behaviour, *Journal of Service Marketing*, Vol. 9, No. 4, pp.31-42.
- Blodgett, J., Hill, D. J., and Tax, S. (1997). The effects of distributive, procedural and interactional justice on post-complaint behaviour, *Journal of Retailing*, Vol. 73, No.2, pp.185-210.
- Bowen, D., and Johnston, R. (1999). Internal service recovery: developing a new construct, *International Journal of Service Industry Management*, Vol. 10, No. 2, pp.118 – 131.
- Boetsch, T., Bieger, T., and Wittmer, A. (2011). A customer value framework for analyzing airline service, *Transportation Journal*, Vol. 50, No. 3, pp.251-270.
- Boshoff, C. (1997). An experimental study of service recovery options, *International Journal of Service Industry Management*, Vol. 8, No. 2, pp.110-130.
- Boshoff, C., and Leong, J. (1998). Empowerment, attribution and apologising as dimensions of service recovery an experimental study, *International Journal of Service Industry Management*, Vol. 9, No. 1, pp. 24-47.
- Boshoff, C. (2005). A re-assessment and refinement of RECOVSAT, *Managing service quality*, Vol. 15, No. 5, pp. 410-425.
- Bostchen, G., Bstieler, A., and Woodside, A. (1996). Sequence-oriented problem identification within service encounters, *Journal of Euromarketing*, Vol. 5, No. 2, pp.19-52.
- Booms, B., and Bitner, M. (1982). Marketing services by managing the environment, *Connell Hotel and Restaurant Administration Quarterly*, Vol. 23, No.1, pp. 35-9.
- Boo, H., Mattila, A., and Tan, C. (2013). Effectiveness of recovery actions on deviant customer behaviour, the moderating role of gender, *International Journal of Hospitality Management*, Vol. 35, No.1, pp. 180–192.
- Bourque, L., and Fielder, E. (1995). *How to Conduct Self-Administered and Mail Surveys*, Thousand Oaks, CA: Sage.

Boo, H., Mattila, A., and Tan, C. (2013). Effectiveness of recovery actions on deviant customer behaviour, the moderating role of gender, *International Journal of Hospitality Management*, Vol. 35, No.1, pp. 180–192.

Bowers, M., and Kiefe, C. (2002). Measuring health-care quality: comparing and contrasting the medical and the marketing approaches, *American Journal of Medical Quality*, Vol. 17, No. 4, pp.136.

Bor, R and Hubbard, T. (2006). *Aviation Mental Health: Psychological Implications for Air Transportation*, Hampshire: Ashgate Publishing.

Boyd, E. (2006). Revenue management in the airline industry: from gumball dispensers to rocket science, *Journal of Revenue and Pricing Management*, Vol. 5, No. 2, pp. 157-66.

Brace, I. (2008). *Questionnaire Design How to Plan, Structure and Write Survey Material for Effective Market Research*, (2nd ed), London: Kogan Page Publisher.

Bradley, G., and Spark, B. (2012). Explanations: if, when, and how they aid service recovery, *Journal of Services Marketing*, Vol. 26, No.1, pp. 41–50.

Brady, M. Croninb, J., and Brand, R. (2002). Performance-only measurement of service quality: a replication and extension, *Journal of Business Research*, Vol. 55, No.1, pp. 17–31.

Bramford, D., and Xystouri, T. (2005). A case study of service failure and recovery within an international airline, *Managing Service Quality*, Vol. 15, No. 3, pp.306-322.

Brey, E., Klenosky, D., Lehto, X., and Morrison A. (2008). Standard hospitality elements at resorts: an empirical assessment, *Journal of Travel Research*, Vol. 47, No. 2, pp. 247-258.

Bristow, R., Yang, W., and Lu, M. (2011). Sustainable medical tourism in Costa Rica, *Tourism Review*, Vol. 66, No. 1, pp.107–117.

Brown, T., Churchill. G., and Peter, J. (1993). Improving the measurement of service quality, *Journal of Retailing*, Vol. 69, No. 1, pp. 127-39.

Bruce, M. (1987). Managing people first bringing the service concept to British Airways, *Industrial and Commercial Training*, Vol. 19, No. 2, pp. 21 – 26.

Bryman, A., and Teevan, J. (2005). *Social Research Methods*, London: Oxford University Press.

Bryman, A., and Bell, E. (2007). *Business Research Methods*, (3nd ed), Oxford: Oxford University Press.

Bryman, A. (2008). *Social Research Methods*, (3nd ed), Oxford: Oxford University Press.



Blaxter, L., Hughes, C., and Tight, M. (2006). *How to Research*, (2nd ed), New York: McGraw-Hill.

Blodgett, J., Hill, D., and Tax, S. (1997). The effects of distributive, procedural, and interactional justice on post-complaint behaviour, *Journal of Retailing*, Vol. 73, No.2, pp.185– 210.

Bunz, U., and Maes, J. (1998). Learning excellence: Southwest Airlines approach, *Managing Service Quality*, Vol. 8, No. 3, pp.163 – 169.

Button, K. (2004). *Wings across Europe: Towards an Efficient European Air Transport System*, Hampshire: Ashgate Publishing.

Buttle, F. (1996). SERVQUAL: review, critique, research agenda, *European Journal of Marketing*, Vol. 30, No.1, pp.8-32.

Cacioppo, J., and Gardner, W. L. (1993). What underlies medical donor attitudes and behaviour, *Health Psychology*, Vol. 14, No. 4, pp.269-271.

Cai, S., and Jun, M. (2003). Internet user perceptions of online service quality: a comparison of online buyers and information searchers, *Managing Service Quality*, Vol. 13, No. 6 pp. 504-519.

Cambra-Fierro, J., Berbrl-Pineda, J., Ruiz-Benitez, R., and Vazquez, R. (2013). Analysis of the moderating role of the gender variable in service recovery processes, *Journal of Retailing and Consumer Services*, Vol. 20, No.4, pp.408–418.

Cameron, K., and Quinn, R. (2006). *Diagnosing and Changing Organizational Culture: based on the Competing Values Framework*, London: John Wiley and Sons.

Camgoz-Akdag, H., and Zineldin, M.(2010). Quality of health care and patient satisfaction: An exploratory investigation of the 5Qs model at Turkey, *Clinical Governance*, Vol.15, No.2, pp. 92-101.

Carmen, J. (1990). Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions, *Journal of Retailing*, Vol. 65, No. 1, pp. 33-55.

Caro, L., and Garcia, J. (2008). Developing a multidimensional and hierarchical service quality model for the travel agency industry, *Tourism Management*, Vol. 29, No. 4, pp. 706–720.

Caruana, A. (2002). Service loyalty: the effects of service quality and the mediating role of customer satisfaction, *European Journal of Marketing*, Vol. 36, No. 7, pp. 811-828.

Casado-Diaz, A., Mas-Ruiz, F., and Kasper, H. (2007). Explaining satisfaction in double deviation scenarios: the effects of anger and distributive justice, *International Journal of Bank Marketing*, Vol. 25, No. 5, pp. 292 – 314.

- Casado-Diaz, A., Nicolau, J., and Mas, F. (2011). The harmful consequences of failed recoveries in the banking industry, *International Journal of Bank Marketing*, Vol. 29, No. 1, pp.32 – 49.
- Cassab, H., and MacLachlan, D. (2009). A consumer-based view of multi-channel service, *Journal of Service Management*, Vol. 20, No. 1, pp.52 – 75.
- Cavusgil, S., and Elvey-Kirk, L. (1998). Mail survey response behaviour: a conceptualization of motivating factors and an empirical study, *European Journal of Marketing*, Vol. 32, No. 11, pp.1165 – 1192.
- Chan, D. (2000). The story of Singapore Airlines and the Singapore girl, *Journal of Management Development*, Vol. 19, No. 6, pp. 456-472.
- Chang, C., and Chen, C. (2013). Alleviating the negative impact of delayed recovery: process-versus outcome-focused explanations, *Journal of Services Marketing*, Vol. 27, No. 7, pp. 564 – 571.
- Chang, Y., and Chen, F. (2007). Relational benefits, switching barriers and loyalty: A study of airline customers in Taiwan, *Journal of Air Transport Management*, Vol. 13, No. 2, pp. 104-109.
- Chang, Y., and Chang, Y. H. (2010). Does service recovery affect satisfaction and customer loyalty, an empirical study of airline services, *Journal of Air Transport Management*, Vol. 16, No.6, pp. 340-342.
- Chang, Y., and Yeh, C. (2002). A survey analysis of service quality for domestic airlines, *European Journal of Operation Research*, Vol. 139, No.1, pp. 166-177.
- Chang, Y., Yeong, Y., and Loh, L. (1997). Critical success factors for in-flight catering services: Singapore airport terminal services practices as management benchmarks, *The TQM Magazine*, Vol. 9, No. 4, pp. 255–259.
- Chandon, J., Leo, P., and Philippe, J. (1997). Service encounter dimensions a dyadic perspective: measuring the dimensions of service encounters as perceived by customers and personnel, *International Journal of Service Industry Management*, Vol. 8, No. 1, pp. 65-86.
- Charantimath, P. (2011). *Total Quality Management*, New Delhi: Pearson.
- Charmaz, K. (2000). *Grounded Theory: Objectivist and Constructivist Methods*. In N. Denzin and Y. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 509-535). Thousand Oaks, CA: Sage.
- Chaston, I. (1994). Internal customer management and service gaps within the UK manufacturing sector, *International Journal of Operations and Production Management*, Vol. 14, No. 9, pp. 45-56.
- Chau, V., and Kao, Y. (2009). Bridge over troubled water or long and winding road gap-5 in airline service quality performance measures, *Managing Service Quality*, Vol. 19, No. 1, pp. 106-134.

- Chebat, J., and Slusarczyk, W. (2005). How emotions mediate the effects of perceived justice on loyalty in service recovery situations: an empirical study, *Journal of Business Research*, Vol. 58, No. 5, pp. 664-673.
- Chelminski, P., and Coulter, R. (2011). An examination of consumer advocacy and complaining behaviour in the context of service failure, *Journal of Services Marketing*, Vol. 25, No. 5 pp. 361 – 370.
- Chen, C. F. (2008). Investigating structural relationships between service quality, perceived value, satisfaction, and behavioural intentions for air passengers: evidence from Taiwan, *Transportation Research Part A*, Vol. 42, No.4, pp. 709–717.
- Chen, C., Deng, W., Chung, Y., and Tsai, C. (2008). A study of general reducing criteria of customer oriented perceived gap for hotel service quality, *Asian Journal on Quality*, Vol. 9, No. 1, pp. 113 – 133.
- Chen, F., and Chang, Y. (2005). Examining airline service quality from a process perspective, *Journal of Air Transport Management*, Vol. 11, No.2, pp.79-87.
- Chen, F., Chang, Y., and Lin, Y. (2012). Customer perceptions of airline social responsibility and its effect on loyalty, *Journal of Air Transport Management*, Vol. 20, No. 1, pp. 49-51.
- Chen, Y., and Corkindale, D. (2008). Towards an understanding of the behavioural intention to use online news services: An exploratory study, *Internet Research*, Vol. 18, No. 3, pp.286 – 312.
- Chen, Y., and Chang, Y. (2010). Does service recovery affect satisfaction and customer loyalty, an empirical study, *Journal of Transport Management*, Vol. 16, No. 6, pp. 340-342.
- Chiou, Y., and Chen, Y. (2010). Factors influencing the intentions of passengers regarding full service and low-cost carriers, *Journal of Air Transport Management*, Vol. 16, No.4, pp. 226-228.
- Choi, B., and La, S. (2013). The impact of corporate social responsibility (CSR) and customer trust on the restoration of loyalty after service failure and recovery, *Journal of Services Marketing*, Vol. 27, No. 3, pp. 223–233.
- Choi, B., and Choi, J. (2014). The effects of perceived service recovery justice on customer affection, loyalty, and word-of-mouth, *European Journal of Marketing*, Vol. 48, No. 1, pp. 1-6.
- Choi, B., and Kim, H. (2013). The impact of outcome quality, interaction quality, and peer-to-peer quality on customer satisfaction with a hospital service, *Managing Service Quality*, Vol. 23, No. 3, pp. 188 – 204.

Choi, B., and La, S. (2013). The impact of corporate social responsibility (CSR) and customer trust on the restoration of loyalty after service failure and recovery, *Journal of Services Marketing*, Vol. 27, No. 3, pp. 223–233.

Choi, S., and Mattila, A. (2008). Perceived controllability and service expectations: Influences on customer reactions following service failure, *Journal of Business Research*, Vol. 61, No. 1, pp. 24-30.

Chou, C., Liu, L., Huan, G., Yih, J., and Han, T. (2011). An evaluation of airline service quality using the fuzzy weighted SERVQUAL method, *Applied Soft Computing*, Vol. 11, No. 2, pp. 2117–2128.

Chung-Herrera, B., Goldschmidt, N., and Hoffman, K. (2004). Customer and employee views of critical service incidents, *Journal of Services Marketing*, Vol. 18, No. 4, pp. 241-254.

Chung-Herrera, B., Gonzalez, G., and Hoffman, K. (2010). When demographic differences exist: an analysis of service failure and recovery among diverse participants, *Journal of Services Marketing*, Vol. 24, No. 2, pp.128–141.

Churchill, G.A., and Suprenant, C. (1982). An investigation into the determinants of customer satisfaction, *Journal of Marketing Research*, Vol. 19, No. 4, pp. 491 -504.

Clark, G. L., Kaminski, P.F., and Rink, D.R. (1992). Consumer complaints: advice on how companies respond based on an empirical study, *Journal of Service Marketing*, Vol. 6, No. 1, pp. 41-50.

Clarke, J. (2000). Tourism brands: an exploratory study of the brands box model, *Journal of Vacation Marketing*, Vol. 6, No. 4, pp. 329-345.

Clemes, M., and Gan, C., and Ren, M. (2011). Synthesizing the effects of service quality, value, and customer satisfaction on behavioural intentions in the motel industry: an empirical analysis, *Journal of Hospitality and Tourism Research*, Vol. 35, No.4, pp. 530-568.

Clifford, Y., Cunningham, L., and Moomkyu, L. (1994). Assessing service quality as an effective management tool: the case of the airline industry, *Journal of Marketing Theory and Practice*, Vol. 2, No. 3, pp. 79-96.

Clough, P., and Nutbrown, C. (2002). *A Student's Guide to Methodology*, London: Sage.

Cunningham, L.F., Young, C.E., and Lee, M. (2004). Perceptions of airline service quality: pre and post 9/11, *Public Works Management and Policy*, Vol. 9, No.1, pp.10-25.

Cooper, D., and Schindler, P.S. (2011). *Business Research Methods*, New York: McGraw-Hill.

Cooper, C. (2008). *Tourism: Principles and Practice*, London: Pearson.

- Cook, C., and Thompson, B. (2000). Reliability and validity of SERVQUAL scores used to evaluate perceptions of library service quality, *The Journal of Academic Librarianship*, Vol. 26, No. 4, pp. 248-258.
- Collier, J., and Bienstock, C. (2006). Measuring service quality in e-retailing, *Journal of Service Research*, Vol. 8, No. 3, pp. 260-275.
- Collis, J., and Hussey, R. (2009). *Business Research a Practical Guide for Undergraduate and Postgraduate Students*, (3rd ed), London: Palgrave Macmillan.
- Cowart, K., Ramirez E., and Brady, M. (2014). Religious affiliation: buffering negative reactions to service failures, *Journal of Services Marketing*, Vol. 28, No.1 pp. 1 – 9.
- Craighead, C., Karwan, K., and Miller, J. (2004). The effects of severity of failure and customer loyalty on service recovery strategies, *Production and Operations Management Society*, Vol. 13, No. 4, pp. 307–321.
- Cranage, D. (2004). Conservative choice, service failure, and customer loyalty: testing the limits of informed choice, *Journal of Hospitality and Tourism Research*, Vol. 8, No. 3, pp. 327-345.
- Crosby, P. (1979). *Quality is Free*, New York: McGraw-Hill.
- Cronin, J., and Taylor, S. (1992). Measuring service quality: a re-examination and extension, *Journal of Marketing*, Vol. 56, No. 3, pp. 55-68.
- Cronin, J., and Taylor, S. (1994). SERVPERF versus SERVQUAL: reconciling performance based and perception-minus-expectations measurement of service quality, *Journal of Marketing*, Vol. 58, No.1, pp.125-31.
- Croney, P. (1998). An analysis of human resource management in the UK hotel industry, *Proceedings of the International Association of Hotel Management School Symposium*, Leeds Polytechnic, Leeds.
- Corston, R., and Colman, A. (2000). *A Crash Course in SPSS for Windows*, Oxford: Blackwell Publisher.
- Cresswell, J. W., and Clark, V. (2007). *Designing and Conducting Mixed Methods Research*, Thousand Oaks, CA: Sage.
- Creswell, J. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, (3rd ed), London: Sage.
- Cunningham, L., Gerlach, J., Harper, M., and Young, C. (2005). Perceived risk and the consumer buying process: internet airline reservations, *International Journal of Service Industry Management*, Vol. 16, No. 4, pp. 357-372.

Czepiel, J., Solomon, M., Surprenant, C., and Gutman, E. (1985). *Service Encounter: An overview*. In J. Czepiel, M. R. Solomon and C.F. Surprenant (Eds), the service encounter: *Managing Employee Customer Interaction in Business*. Lexington, MA.

Daft, J., and Albers, S. (2012). A profitability analysis of low-cost long-haul flight operations, *Journal of Air Transport Management*, Vol. 19, No. 3, pp. 49-54.

Dalmiya, V., and Alcoff, L. (1993). Are old wives tales justified, in Alcoff. L., and Potter, E. (eds), *Feminist Epistemologies*, London: Routledge.

Dallimore, K., Sparks, B., and Butcher, K. (2007). The influence of angry customer outbursts on service providers facial displays and affective states, *Journal of Service Research*, Vol. 10, No. 1, pp. 78-92.

Dagger, T., and Sweeney, J. (2006). The effect of service evaluations on behavioural intentions and quality of life, *Journal of Service Research*, Vol. 9, No. 1, pp. 3-18

Dagger, T., Sweeney, J., and Johnson, L. (2007). A hierarchical model of health service quality: scale development and investigation of an integrated model, *Journal of Service Research*, Vol. 10, No. 2, pp. 123-142.

Das, T., and Reisel, W. (1997). Strategy marketing options in the U.S. airline industry, *Journal of Commerce and Management*, Vol. 7, No. 2, pp.84-98.

Dasu, S., and Rao, J. (1999). Nature and determinants of customer expectation of service recovery in health care, *Quality Management in Health Care*, Vol.7, No.4, pp.32-50.

Davenport, T., and Prusak, L. (1998). *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School Press, Boston, MA.

Davidow, M. (2000). The bottom line impact of organizational responses to customer complaints, *Journal of Hospitality and Tourism Research*, Vol.24, No.4, pp.473-490.

Davidow, M. (2003). Have you heard the word, the effect of word-of- mouth on perceived justice, satisfaction and repurchase intentions following complaint handling, *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, Vol. 16, No. 1, pp. 67-80.

David, M., and Sutton, C. (2011). *Social Research*, (2nd ed), London: Sage.

Davis, H., and Rasool, S.A. (1988). Values research and managerial behaviour: implications for devising culturally consistent managerial styles, *Management International Review*, Vol. 28, No. 3, pp. 11-20.

Day, J. (1986). The use of annual reports by UK investment analysis, *Accounting and Business Research*, Vol. 16, No.4, pp. 295-307.

De Jager, J.W., Van Zyl, D., and Toriola, A.L. (2012). Airline service quality in South Africa and Italy, *Journal of Air Transport Management*, Vol. 24, No.2, pp.1-3.

Del Rio-Lanza, A., Vazquez-Casielles, R., and Diaz-Martin, A.M. (2009). Satisfaction with service recovery: perceived justice and emotional responses, *Journal of Business Research*, Vol.62, No.8, pp.775-781.

Denstadli, J. (2000). Analysing air travel: a comparison of different survey methods and data collection procedures, *Journal of Travel Research*, Vol. 39, No.4, pp.4-10.

Denscome, M. (2007). *The Good Research Guide for Small- Scale Social Research Projects*, (3rd ed), New York: Open University Press.

Denzin, N., and Lincoln, Y. (1998). *The Landscape of Qualitative Research: Theories and Issues*, Thousand Oaks, CA: Sage.

Denzin, N., and Lincoln, Y. (2000). *Introduction: The Discipline and Practice of Qualitative Research* in Denzin, N.K. and Lincoln, Y.S. (eds), *Handbook of Qualitative research*, (2nd ed), London: Sage.

Deutskens, E., Jong, A., Ruyter, K., and Wetzels, M. (2006). Comparing the generalizability of online and mail surveys in cross-national service quality research, *Marketing Letters*, Vol. 17, No. 2, pp. 119-136.

Delfmann, W., Baum H., Auerbach, S., and Albers, S. (2005). *Strategic Management in the aviation industry*, Hampshire: Ashgate Publishing.

Deming, E. (1950). *Some Theory of Sampling*, Dover Publications, Inc. New York.

Dewberry, C. (2004). *Statistical Methods for Organizational Research: Theory and Practice*, New York: Routledge.

Dolnicar, D., Grabler, K., Grun, B., and Kuning, A. (2011). Key drivers of airline loyalty, *Tourism Management*, Vol. 32, No. 5, pp. 1020-1026.

Dolnicar, S., Laesser, C., and Matus, K. (2009). Online versus paper: format effects in tourism surveys, *Journal of Travel Research*, Vol. 47, No. 3, pp. 295-316.

Doucet, A., and Mauthner, N. (2002). *Knowing Responsibly: Linking Ethics, Research Practice and Epistemology*, in M. Mauthner, M. Birch, J. Jessop and T.Miller (eds), *Ethics in Qualitative Research*, London: Sage.

Douglas, J., McClelland, R., Davies, J., and Sudbury, J. (2009). Using critical incident technique (CIT) to capture the voice of the student, *The TQM Journal*, Vol. 21, No. 4, pp. 305 – 318.

Dresner, M. (2006). Leisure versus business passengers: similarities, differences and implications, *Journal of Air Transport Management*, Vol. 12, No. 3, pp. 28-32.

- Dunning, J., O'Cass, A., and Pecotich, A. (2004). Retail sales explanations: resolving unsatisfactory sales encounters, *European Journal of Marketing*, Vol. 38, No. 11, pp. 1541– 1561.
- Duval, D. (2005). Public/stakeholder perceptions of airline alliances: the New Zealand experience, *Journal of Air Transport Management*, Vol. 11, No. 6, pp. 355-462.
- Du, F., Fan, X., and Fen, T. (2010). An experimental investigation of the role of face in service failure and recovery encounters, *Journal of Consumer Marketing*, Vol. 27, No. 7, pp. 584–593.
- Dutka, A. (1995). *Handbook for Customer Satisfaction: A Complete Guide to Research, Planning, and Implementations*, Chicago: NTC Pub Group Publisher.
- Durvasula, S., and Lysonski, S. (2011). Beyond service attributes: do personal values matter, *Journal of Services Marketing*, Vol. 25, No. 1, pp. 33 – 46.
- Dursun, M., O'Connell, J., Lei, Z., and Warnock-Smith, D. (2014). The transformation of a legacy carrier, a case study of Turkish Airlines, *Journal of Air Transport Management*, Vol. 40, No. 1, 106-118.
- Dutta, K., Venkatesh, U., and Parsa, H.G. (2007). Service failure and recovery strategies in the restaurant sector, *International Journal of Contemporary Hospitality Management*, Vol. 19, No.5, 351-363.
- De Jager, J., Van Zyl, D., and Toriola, A. (2012). Airline service quality in South Africa and Italy, *Journal of Air Transport Management*, Vol. 24, No. 2, pp. 1-3.
- De Matos, C., Rossi, C., Veiga, R., and Veira, V. (2009). Consumer reaction to service failure and recovery: the moderating role of attitude toward complaining, *Journal of Services Marketing*, Vol. 23, No.7, pp. 462–475.
- De Matos, C., Henrique, J., and De Rosa, F. (2013). Customer reactions to service failure and recovery in the banking industry: the influence of switching costs, *Journal of Services Marketing*, Vol. 27, No. 7, pp. 526 – 538.
- De Rada, V. (2005). Measure and control of non-response in a mail survey, *European Journal of Marketing*, Vol. 39, No.1, pp. 16 – 32.
- De Witt, T., and Martin, D. (2009). Writing a credible form letter: implications for hospitality and tourism service recovery strategy, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 3, No. 4, pp. 361 – 368.
- Dortyol , I., Varinli , I., and Kitapci , O. (2014). How do international tourists perceive hotel quality: An exploratory study of service quality in Antalya tourism region, *Journal of Contemporary Hospitality Management*, Vol. 26, No. 3, pp.470 – 495.



- Dos Santos, C., and Fernandes, D. (2008). Antecedents and consequences of consumer trust in the context of service recovery, *Brazilian Administrative Review*, Vol. 5, No. 3, pp. 225-244.
- Do Valle, P., Correia, A., and Rebelo, E. (2008). Determinants of tourism return behaviour, *Tourism and Hospitality Research*, Vol. 8, No. 3, pp. 205-219.
- Easterby-Smith, M., Thorpe, E., and Jackson, P. (2008). *Management Research*, (3rd ed), London: Sage.
- Eccles, G., and Durand, P. (1998). Complaining customers, service recovery and continuous improvement, *Managing Service Quality*, Vol. 8, No. 1, pp. 68–71.
- Edvardsson, B. (1992). Service breakdowns: a study of critical incidents in an airline, *International Journal of Service Industry Management*, Vol. 3, No. 4, pp. 17-29.
- Edvardsson, B. (2005). Service quality: beyond cognitive assessment, *Managing Service Quality*, Vol.15, No.2, pp.127-131.
- Edvardsson, B., Tronvoll, B., and Hoykinpuro, R. (2011). Complex service recovery processes: how to avoid triple deviation, *Managing Service Quality*, Vol. 21, No. 4, pp. 331 – 349.
- Edwardson, M. (1998). Measuring consumer emotions in service encounters: an exploratory analysis, *Australasian Journal of Market Research*, Vol. 6, No.2, pp. 34-48.
- Eisenberg, E., and Monge, P., and Miller, K. (1987). Involvement in communication networks as a predictor of organizational commitment, *Human Communication Research*, Vol. 10, No. 2, pp. 179-201.
- Ekinci, Y., and Riley, M. (1998). A critique of the issues and theoretical assumptions in service quality measurement in the lodging industry: time to move the goal-posts, *Hospitality Management*, Vol. 17, No. 4, pp. 349-62.
- Ekinci, Y., Riley, M., and Fife-Schaw, C. (1998). Which school of thought? The dimensions of resort hotel quality, *International Journal of Contemporary Hospitality Management*, Vol. 10, No. 2, pp.63 – 6.
- Ellsworth, P., and Smith, C. (1988). Shades of joy: patterns of appraisal differentiating pleasant emotions, *Cognition and Emotion*, Vol. 2, No. 4, pp. 301-331.
- Elliott, T. L. (2003). Maximising revenue production while cutting costs: an airline industry mandate, *Journal of Revenue and Pricing Management*, Vol. 1, No.4, pp. 355-68.
- Evans, N. (2001). Collaborative strategy: an analysis of the changing world of international airline alliances, *Tourism Management*, Vol. 22, No. 3, pp. 229-243.

Evans, J., and Collier, D. (2007). *Operations Management an Integrated goods and Services Approach*, Mason: Thomson South-Western.

Fang, Y., Chiu, C., and Wang, E. (2011). Understanding customers' satisfaction and repurchase intentions: an integration of IS success model, trust, and justice, *Internet Research*, Vol. 21, No. 4, pp. 479-503.

Faria, A., and Dickinson, J. (1995). The use of charitable contributions in mail surveys with a business population, *Management Research News*, Vol. 18, No.10, pp.20 – 29.

Feigenbaum, A. (1961). *Total Quality Control*, New York: McGraw-Hill.

Ferguson, R., Paulin, M., Pigeassou, C., and Gauduchon, R. (1999). Assessing service management effectiveness in a health resort: implications of technical and functional quality, *Managing Service Quality*, Vol. 9, No. 1 pp. 58 – 65.

Ferguson, J. (2009). *Careers in Focus, Aviation*, New York: Ferguson Publisher.

Ferrell, O., Lukas, B., Schembri, S., and Niininen, O. (2012). *Marketing Principles*, Victoria: Cengage Learning Australia Publisher.

Fick, G., and Ritchie, J. (1991). Measuring service quality in the travel and tourism industry, *Journal of Travel Research*, Vol. 30, No. 2, pp. 2-9.

Filieri, R., and McLeay, F. (2013). E-WOM and accommodation: an analysis of the factors that influence travellers adoption of information from online reviews, *Journals of Travel Research*, Vol. 53, No. 1, pp. 44-57.

Finn, D., and Lamb, C. (1991). An Evaluation of the SERVQUAL Scales in a retailing setting, *Advances in Consumer Research*, Vol. 18, No. 4, pp. 483-90.

Fink, D., and Nyaga, C. (2009). Evaluating web site quality, the value of a multi paradigm approach, *Benchmarking: An International Journal*, Vol.16, No.2, pp. 259 – 273.

Finn, M., Elliott-White, M., and Walton, M. (2000). *Tourism and Leisure Research Methods: Data Collection, Analysis and Interpretation*, London: Pearson.

Finn, G., and Ritchie, J. (1991). Measuring service quality in the travel and tourism industry, *Journal of travel research*, Vol. 30, No. 2, pp. 2-9.

Forbes, L., Kelley, S., and Hoffman, K. (2005). Typologies of e-commerce retail failures and recovery strategies, *Journal of Services Marketing*, Vol. 19, No. 5, pp.280 – 292.

Forgas, S., Moliner, M., Sanchez, J., and Palau, R. (2010). Antecedents of airline passenger loyalty: low-cost versus traditional airlines, *Journal of Air Transport Management*, Vol. 16, No. 4, pp. 229-233.

Fourie, C. and Lubbe, B. (2006). Determinants of selection of full-service airlines and low-cost carriers: a note on business travellers in South Africa, *Journal of Air Transport Management*, Vol. 12, No. 2, pp. 98–102.

Fornell, C. and Wernerfelt, B. (1987). Defensive marketing strategy by customer complaint management: a theoretical analysis, *Journal of Marketing Research*, Vol. 24, No. 4, pp. 337- 346.

Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience, *Journal of Marketing*, Vol. 56, No.1, pp. 6-21.

Fox, S. (2012). Getting real about innovations formulating innovation descriptions that can reduce ontological uncertainty, *International Journal of Managing Projects in Business*, Vol. 5, No. 1, pp. 86-104.

Frankfort-Nachmias, C., and Nachmias, D. (2008). *Research Methods Social Sciences*, (7nd ed), New York: Worth Publisher.

Fraering, M., and Minor, M. (2006). Sense of community: an exploratory study of US consumers of financial services, *Journal of Bank Marketing*, Vol. 24, No. 5, pp.284 – 306.

Frost, F., and Kumar, M. (2000). INTSERVQUAL: an internal adaptation of the GAP model in a large service organization, *Journal of Service Marketing*, Vol.14, No.5, pp. 358-377.

Frost, F., and Kumar, M. (2001). Service quality between internal customers and internal suppliers in an international airline, *International Journal of Quality and Reliability Management*, Vol. 18, No. 4, pp. 371-386.

Funches, V. (2011). The consumer anger phenomena: causes and consequences, *Journal of Services Marketing*, Vol. 25, No. 6, pp. 420–428.

Gable, G. (1994). Integrating case study and survey research methods: an example in information system, *European Journal of Information System*, Vol. 3, No. 2, pp. 112-126.

Ganguli, S., and Roy, S. (2010). Service quality dimensions of hybrid services, *Managing Service Quality*, Vol. 20, No. 5, pp.404 – 424.

Garbarino, E., and Johnson, M. (1999). The different roles of satisfaction, trust, and commitment in customer relationships, *Journal of Marketing*, Vol. 63, No.2, pp.70-87.

Garcia, M., Ferrer-Rosell, B., and Coenders, G. (2011). Profile of business and leisure travellers on low-cost carriers in Europe, *Journal of Air Transport Management*, Vol. 20, No. 3, pp.1-3.

Garvin, D. (1983). Quality on the line, *Harvard Business Review*, Vol. 61, No. 5, pp. 65-73.

Garvin, D. (1987) Competing on the eight dimensions of quality, *Harvard Business Review*, Vol. 69, No. 6, pp. 101-109.

Gray, E. (2014). *Doing Research in the Real World*, London: Sage.

Gabbott, M., and Hogg G. (1998). *Consumers and Services*, London: John Wiley and Sons.

Gelbrich, K., and Roschk, H. (2011). A meta-analysis of organizational complaint handling and customer responses, *Journal of Service Research*, Vol. 14, No. 1, pp. 24-43.

George, D., and Mallery, P. (2008). *SPSS for Windows Step-by-Step, A Simple Guide and Reference, 15.0*, (8nd ed), London: Pearson.

Gerson, R. (1993). *Measuring Customer Satisfaction*, Menlo Park, CA: Crip Publisher.

Geraldine, O., and David, C. (2013). Effects of airline service quality on airline image and passengers' loyalty: Findings from Arik Air Nigeria passengers, *Journal of Hospitality and Management Tourism*, Vol. 4, No.2, pp. 19-28.

Getz, D. (2012). *Event Studies: Theory, Research and Policy for Planned Events*, New York: Routledge.

Ghiselli, R., La Lopa, J. and Bai, B. (2001). Job satisfaction, life satisfaction, and turnover intent, *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 42, No. 2, pp. 28-37.

Gilly, M., and Betsy, D. G. (1982). Post-purchase consumer processes and the complaining consumer, *Journal of Consumer Research*, Vol. 9, No. 1, pp.323–28.

Gilbert, D., Guerrier, Y. and Guy, J. (1998). Sexual harassment issues in the hospitality industry, *International Journal of Contemporary Hospitality Management*, Vol. 10, No. 2, pp. 48-53.

Gilbert, D., and Wong, K. (2003). Passenger expectations and airline services: a Hong Kong based study, *Tourism Management*, Vol. 24, No. 5, pp.519–532.

Gil, I., Berenguer, G., and Cervera, A. (2008). The roles of service encounters, service value, and job satisfaction in achieving customer satisfaction in business relationships, *Industrial Marketing Management*, Vol. 37, No. 8, pp. 921–939.

Giritlioglu, I., Jones, E., and Avcikurt, C. (2014). Measuring food and beverage service quality in spa hotels, *International Journal of Contemporary Hospitality Management*, Vol. 26, No.2 pp. 183 – 204.

Goeldner, C., and Ritchie, J. (2012). *Tourism principles, practices, philosophies*, (12nd ed) NJ: Wiley.

Goodrich, J. (2002). September 11, 2001 attack on America: a record of the immediate impacts and reactions in the USA travel and tourism industry, *Tourism Management*, Vol. 23, No. 6, pp. 573-580.

Goodwin, C., and Ross, I. (1989). Salient dimensions of perceived fairness in resolution of service complaint, *Journals of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, Vol. 2, No. 3, pp. 87-92.

Goodwin, C., and Ross, I. (1990). Consumer evolutions of responses to complaints what is fair and why, *The Journal of Consumer Marketing*, Vol. 7, No. 2, pp. 39-47.

Goodwin, D., and Johnson, S. (2000). Teamwork training an innovative use of flight simulators, *Industrial and Commercial Training*, Vol. 32, No. 4, pp. 132-134.

Gordon, G., and DiTomaso, N. (1992). Predicting corporate performance from organizational culture, *Journal of Management Studies*, Vol. 29, No. 6, pp. 783-98.

Gounaris, S., Stathakopoulos, V., and Athanassopoulos, A. (2003). Antecedents to perceived service quality: an exploratory study in the banking industry, *Journal of Bank Marketing*, Vol. 21, No. 4, pp.168 – 190.

Gronroos, C. (1984). A service quality model and its marketing implications, *European Journal of Marketing*, Vol. 18, No. 4, pp. 36-44.

Gronroos, C. (1988). Service quality: the six criteria of good perceived service quality, *Review of Business*, Vol. 9, No. 3, pp. 10-13.

Gronroos, C. (2000). *Service Management and Marketing: A Customer Relationship Management Approach*, Chichester: John Wiley and Sons.

Gronroos, C. (1994). From marketing mix to relationship marketing: towards a paradigm shift in marketing, *Management Decision*, Vol. 32, No. 2, pp. 4 – 20.

Gronroos, C. (2007). *Service Management and Marketing: Customer Management in Service. Competition*, (3rd ed), Chichester: John Wiley and Sons.

Groth, M. (2005). Customers as good soldiers: examining citizenship behaviours in internet service deliveries, *Journal of Management*, Vol. 31, No. 1, pp. 7-27.

Gruber, T., Szmigin, I., and Voss, R. (2009). Handling customer complaints effectively: a comparison of the value maps of female and male complainants, *Managing Service Quality*, Vol. 19, No. 6, pp. 636-656.

Gruber, T., and Frugone, F. (2011). Uncovering the desired qualities and behaviours of general practitioners (GPs) during medical (service recovery) encounters, *Journal of Service Management*, Vol. 22, No. 4, pp.491 – 521.

Greaves, N., and Skinner, H. (2010). The importance of destination image analysis to UK rural tourism, *Marketing Intelligence and Planning*, Vol. 28, No. 4, pp. 486 – 507.

Grigoroudis, E., and Siskos, Y. (2010). *Customer satisfaction evaluation: methods for Measuring and Implementing Service Quality*, London: Springer Publisher.

Greenfield, D. (2014). Competition and service quality: new evidence from the airline industry, *Economics of Transportation*, Vol. 3, No. 1, pp.80–89.

Guba, E. (1990). *The Paradigm Dialog*, Thousand Oaks: Sage.

Guba, E. and Lincoln, Y. (1994). *Competing Paradigms in Qualitative Research*, in N. K. Denzin and Y. S. Lincoln (eds), *Handbook of Qualitative Research*, pp. 105–17, Thousand Oaks, CA: Sage.

Guba, E., and Lincoln, Y. (2005). *Paradigmatic Controversies, Contradictions, and Emerging Influences* (p. 200). In N.K. Denzin and Y. S. Lincoln (Eds.), the *sage Handbook of Qualitative Research* (3rd ed.), pp. 191-215, Thousand Oaks, CA: Sage.

Gursoy, D., Chen, H., and Kim, H. (2005). The US airlines relative positioning based on attributes of service quality, *Tourism Management*, Vol. 26, No.1, pp.57-67.

Ha, J., and Jang, S. (2009). Perceived justice in service recovery and behavioural intentions: the role of relationship quality, *International Journal of Hospitality Management*, Vol, 28, No. 3, pp. 319-327.

Habermas, J. (1978). *Knowledge and Human Interests*, London: Heinemann.

Hair, J., Money, A., Samouel, P., and Page, M. (2007). *Research Methods for Business*, Chichester: John Wiley and Sons.

Halnon, J. (2007). *Global Airlines: Competition in a Transnational Industry*, London: Butterworth-Heinemann.

Hart, C., Heskett, J., and Sasser, W. (1990). The profitable art of service recovery, *Harvard Business Review*, Vol. 68, No. 2, pp. 148-156.

Harison, E., and Boonstra, A. (2008). Reaching new altitudes in e-commerce: assessing the performance of airline websites, *Journal of Air Transport Management*, Vol. 14, No. 2, pp. 92–98.

Hartley, J. (2001). Employee surveys: strategic aid or hand-grenade for organisational and cultural change, *International Journal of Public Sector Management*, Vol. 14, No. 3, pp. 184 – 204.

Hamill, J. (1993). Competitive strategies in the world airline industry, *European Management Journal*, Vol. 11, No. 3, pp. 332-341.

Hamann, P., Schiemann, F., Bellora, L., and Guenther, T. (2013). Exploring the dimensions of organizational performance: a construct validity study, *Organizational Research Methods*, Vol. 16, No. 1, pp. 67-87.

Hall, C., and Page, S. (2005). *The Geography of Tourism and Recreation: Environment, Place and Space*, London: Routledge.

Hall, M. (2010). *Fieldwork in Tourism: Methods, Issues and Reflections*, London: Routledge.

Halstead, D. and Page, T. (1992). The effects of satisfaction and complaining behaviour on consumers repurchase behaviour, *Journal of Consumer Satisfaction Dissatisfaction and Complaining Behaviour*, Vol. 5, No. 1, pp. 1-11.

Hamer, L. (2006). A confirmation perspective on perceived service quality, *Journal of Services Marketing*, Vol. 20, No. 4, pp. 219 – 232.

Harris, K., Mohr, L., and Bernhardt, K. (2006a). Online service failure, consumer attributions and expectations, *Journal of Services Marketing*, Vol. 20, No. 7, pp. 453 – 458.

Harris, K., Grewal, D., Mohr, L., and Bernhardt, K. (2006b). Consumer responses to service recovery strategies: the moderating role of online versus offline environment, *Journal of Business Research*, Vol. 59, No. 4, pp. 425–431.

Harrison-Walker, L. J. (2001). The measurement of word-of-mouth communication and an investigation of service quality and customer commitment as potential antecedents, *Journal of Service Research*, Vol. 4, No. 1, pp. 60-75.

Harrison, R., and Reilly, T. (2011). Mixed methods designs in marketing research, qualitative market research, *An International Journal*, Vol. 14, No. 1, pp. 7-26.

Harrison-Walker, L., (2012). The role of cause and affect in service failure, *Journal of Services Marketing*, Vol. 26, No. 2, pp. 115 – 123.

Hatch, M. (1993). The dynamics of organizational culture, *Academy of Management Review*, Vol. 18, No. 4, pp. 657-76.

Hebert, P., and Chaney, S. (2012). Using end-user surveys to enhance facilities design and management, *Facilities*, Vol. 30, No. 11, pp. 458 – 471.

Hedrick, N., Beverland, M., and Minahan, S. (2007). An exploration of relational customers response to service failure, *Journal of Financial Services Marketing*, Vol. 21, No. 1, pp. 64-72.

Hellriegel, D. (2010). *Organizational Behaviour*, Mason: Cengage Learning Publisher.

Henderson, K. (1990). Reality comes through a prism: method choices in leisure research, *Society and Leisure*, Vol. 13, No. 1, pp. 169-88.

Herbert, F. (1994). Service quality: an unobtrusive investigation of interlibrary loan in large public libraries in Canada, *Library and Information Science Research*, Vol. 16, No.1, pp.3-21.

- Hess, R., Ganesan, S., and Klein, N. (2007). Interactional service failures in a pseudorelationship: the role of organizational attributions, forthcoming, *Journal of Retailing: Special Issue on Competing through Service*, Vol. 83, No. 1, pp. 79-95.
- Hess, R. (2008). The impact of firm reputation and failure severity on customer responses to service failures, *Journal of Services Marketing*, Vol. 22, No.5, pp. 385–398.
- Herstein, R., Mitki, Y., and Jaffe, E. (2008). Communicating a new corporate image during privatization: the case of El Al airlines, corporate communications: *An International Journal*, Vol. 13, No. 4, pp. 380-393.
- Heracleous, L., Wirtz, J., and Pangarkar, N. (2009). *Flying High in a Competitive Industry, the Secrets of the World's Leading Airline*, London: McGraw-Hill.
- Herington, C., and Weaven, S. (2009). E-retailing by banks: eservice quality and its importance to customer satisfaction, *European Journal of Marketing*, Vol. 43, No. 9, pp. 1220 – 1231.
- Hirschman, A. (1970). Exit, voice and loyalty: responses to decline in firm's organisations and states, Cambridge, MA: Harvard University Press.
- Hinkin, T. and Tracey, J. (2000). The cost of turnover, *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 41, No. 3, pp. 14-21.
- Hill, N., Roche, G., and Allen, R. (2007). *Customer Satisfaction: the Customer Experience through the Customer's Eyes*, London: Cogent Publishing.
- Hocutt, M., Bowers, M., and Donovan, D. (2006). The art of service recovery: fact or fiction, *Journal of Services Marketing*, Vol. 20, No. 3, pp. 199-207.
- Hoffman, K., and Bateson, J. (1997). *Essentials of Services Marketing*, London: Dryden Press.
- Hoffman, K., Kelly, S., and Rotalsky, H. (1995). Tacking service failures and employee recovery efforts, *Journal of Service Marketing*, Vol. 9, No. 2, pp. 49-61.
- Hoffman, K., and Kelly, S. (2000). Perceived justice needs and recovery evaluation: a contingency approach, *European Journal of Marketing*, Vol. 34, No.3, pp. 418-433.
- Holmberg, S., and Cummings, J. (2009). Building successful strategic alliances: strategic process and analytical tool for selecting partner industries and firms, *Long Range Planning*, Vol. 42, No.2, pp.164-193.
- Housden, M. (2008). *CIM coursebook Marketing Research and Information*, Oxford: Elsevier.
- Holsti, O. (1969). *Content Analysis for the Social Sciences and Humanities*, London: Addison-Wesley Publisher.



- Hofstede, G. (1980). *Culture's Consequences*, London: Sage.
- Hofstede, G. (1985). The interaction between national and organizational value systems, *Journal of Management Studies*, Vol. 22, No. 4, pp. 347-57.
- Hofstede, G. (2001). *Cultures Consequences: International Differences in Work Related Values*, London: Sage.
- Hoffman, D., and Bateson, J. (2010). *Services Marketing: Concepts, Strategies, and Cases*, (4nd ed), Mason: Cengage Learning Publisher.
- Homburg, C., and Furst, A. (2005). How organizational complaint handling drives customer loyalty: an analysis of the mechanistic and the organic approach, *Journal of Marketing*, Vol. 69, No. 3, pp. 95-114.
- Howard, J., and Sheth, J. (1969). *The Theory of Buyer Behaviour*, New York: John Wiley and Sons.
- Hoshmand, L. (1994). *Orientation to Inquiry in a Reflective Professional Psychology*, New York: State University of New York Press.
- Hsieh, A., and Tsai, C. (2009). Does national culture really matter, hotel service perceptions by Taiwan and American tourists, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 3, No.1, pp. 54 – 69.
- Hsu, J., and Chiu, V. (2008). Complaints and perceptions of failure recovery in buffet restaurants a link to family communication for adolescent customers, *Chinese Management Studies*, Vol. 2, No. 4, pp. 243-259.
- Hua, Y. (2012). Customer satisfaction antecedents within service recovery context evidences from “Big 4” banks in China, *Nankai Business Review International*, Vol. 3, No. 3, pp. 284-301.
- Huang, W. (2008). The impact of other-customer failure on service satisfaction, *International Journal of Service Industry Management*, Vol. 19, No. 4, pp.521 – 536.
- Huang, W., and Lin, T. (2010). Developing effective service compensation strategies, *Journal of Service Management*, Vol. 22, No. 2, pp. 202-216.
- Huang, W. (2010). Other-customer failure effects of perceived employee effort and compensation on complainer and non-complainer service evaluations, *Journal of Service Management*, Vol. 21, No. 2, pp. 191-211.
- Huang, M. (2011). Re-examining the effect of service recovery: the moderating role of brand equity, *Journal of Services Marketing*, Vol. 25, No. 7, pp.509 – 516.
- Hudson, S., Hudson, P., and Miller, G. (2004). The measurement of service quality in the tour operating sector: a methodological comparison, *Journal of Travel Research*, Vol. 42, No.3, pp. 305-312.

Hung, K., and Law, R. (2011). An overview of internet-based surveys in hospitality and tourism journals, *Tourism Management*, Vol. 32, No. 4, pp. 717-724.

Hurst, J., Niehm, I., and Littrell, M. (2009). Retail service dynamics in a rural tourism community: Implications for customer relationship management, *Managing Service Quality*, Vol. 19, No. 5, pp.511 – 540.

Hur, W., Moon, T., and Jun, J. (2013). The role of perceived organizational support on emotional labour in the airline industry, *Journal of Contemporary Hospitality Management*, Vol. 25, No. 1, pp. 105 – 123.

Huppertz, J. (2007). Firm complaint handling policies and consumer complaint voicing, *Journal of Consumer Marketing*, Vol. 24, No. 7, pp. 428 – 437.

Hwang, J., and Wen, L. (2009). The effect of perceived fairness toward hotel overbooking and compensation practices on customer loyalty, *International Journal of Contemporary Hospitality Management*, Vol. 21, No. 6, pp. 659-675.

Iacobucci, D., and Churchill, G. (2010). *Marketing Research Methodological Foundations*, (10nd ed), London: Cengage Learning.

Ingram, H. (1996). Classification and grading of smaller hotels, guesthouses and bed and breakfast accommodation, *International Journal of Contemporary Hospitality Management*, Vol. 8, No. 5 pp. 30 – 34.

International Organization of Standardization. (2000). The ISO Survey of ISO 9000 and ISO 14000 Certificates, Ninth Cycle, Geneva: International Organization for Standardization.

Isgrove, R., and Patel, A. (1993). Quality Progress in UK Social Services Departments: An Exploratory Study, *International Journal of Public Sector Management*, Vol. 6, No.6 pp.55-66.

Iwaarden, J., Wiele, T., Ball, L., and Millen, R. (2004). Perceptions about the quality of web sites: a survey amongst students at North-Eastern University and Erasmus University, *Information and Management*, Vol. 41, No. 8, pp. 947-959.

Iyer, R., and Muncy, J. (2008). Service recovery in marketing education: it's what we do that counts, *Journal of Marketing Education*, Vol. 30, No. 1, pp. 21-32.

Jackson, D., and Sirianni, N. (2009). Building the bottom line by developing the frontline: Career development for service employees, *Business Horizons*, Vol. 52, No.3, pp. 279-287.

Jain, A., and Cox. R. (2011). Airfare price insurance: a real option model, *The Journal of Risk Finance*, Vol. 12, No.1, pp. 5-14.

Janic, M. (1997). Liberalisation of European aviation: analysis and modelling of the airline behaviour, *Journal of Transport Management*, Vol. 3, No. 4, pp. 167-180.

- Janis, I. (1965). The problem of validating content analysis. In H. D. Lasswell, N. Leites, et al. (Eds.), *Language of politics* (pp. 55– 82). Cambridge: MIT.
- Jankowicz, A. (2005). *Business Research Projects*, (4nd ed), London: Thomson Leaning Publisher.
- Janta, H. (2011). Polish migrant workers in the UK hospitality industry: Profiles, work experience and methods for accessing employment, *International Journal of Contemporary Hospitality Management*, Vol. 23, No. 6, pp. 803 – 819.
- Jennings, G. (2001). *Tourism Research*, Milton: John Wiley and Sons.
- Jiang, L., Yang, Z., and Jun, M. (2013). Measuring consumer perceptions of online shopping convenience, *Journal of Service Management*, Vol. 24, No. 2, pp. 191 – 214.
- Jiang, H. (2013). Service quality of low-cost long-haul airlines, the case of Jetstar Airways and AirAsia X, *Journal of Air Transport Management*, Vol. 26, No. 1, pp. 20-24.
- Jobber, D., and O'Reilly, D. (1996). Industrial mail surveys: techniques for inducing response, *Marketing Intelligence and Planning*, Vol. 14, No. 1, pp.29 – 34.
- Johnson, G., and Grier, A. (2011). Understanding the influence of cross-cultural consumer-to-consumer interaction on consumer service satisfaction, *Journal of Business Research*, Vol. 66, No. 3, pp. 306–313.
- Johnston, R. (1995). Service failure and recovery: impact, attributes and process, *Advances in Service Marketing*, Vol. 4, No. 3, pp. 411-228.
- Johnston, R. (2001). Linking complaint management to profit, *International Journal of Service Industry Management*, Vol. 12, No. 1, pp. 60-69.
- Johnson, R., and Bruwer, J. (2007). Regional brand image and perceived wine quality: the consumer perspective, *International Journal of Wine Business Research*, Vol. 19, No. 4, pp. 276 – 297.
- Johnson, R., and Christensen, L. (2012). *Educational research: Quantitative, qualitative, and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Johnston, R., and Michel, S. (2008). Three outcomes of service recovery customer recovery, process recovery and employee recovery, *International Journal of Operations and Production Management*, Vol. 28, No. 1, pp. 79-99.
- Jones, H., and Farquhar, J. (2007). Putting it right: service failure and customer loyalty in UK banks, *International Journal of Bank Marketing*, Vol. 25, No.3, pp. 161-172.

Joseph, M., Sekhon, Y., Stone, G., and Tinson, J. (2005). An exploratory study on the use of banking technology in the UK: A ranking of importance of selected technology on consumer perception of service delivery performance, *Journal of Bank Marketing*, Vol. 23, No.5, pp.397 – 413.

Juran, J. (1980). *Upper Management and Quality*, New York: McGraw-Hill.

Juwaheer, T and Ross (2003). A study of hotel guest perceptions in Mauritius, *International Journals Contemporary Hospitality Management*, Vol. 15, No. 2, pp. 105 – 115.

Kamran, S., and Attiq, M. (2011). Value recovery with customer dissatisfaction: A study of restaurant services in Pakistan, *Tourism and Hospitality Research*, Vol. 11, No. 3, pp. 169–180.

Kanafani, A., and Kuroda, K. (2005). *Global Competition in Transportation Markets: Analysis and Policy Making*, London: Elsevier.

Kandampully, J., Mok, B., and Spark, B. (2001). *Service Quality Management in Hospitality, Tourism, and Leisure*, New York: The Haworth Hospitality Press.

Kang, S., Hsu, C., and Wolfe, K. (2003). Family traveller segmentation by vacation decision-making patterns, *Journal Hospitality and Tourism Research*, Vol. 27, No. 4, pp. 448-469.

Kang, G., and James, J. (2004). Service quality dimensions: an examination of Gronroos service quality model, *Managing Service Quality*, Vol. 14, No. 4, pp. 266–277.

Kang, G. (2006). The hierarchical structure of service quality: integration of technical and functional quality, *Managing Service Quality*, Vol. 16, No. 1, pp.37-50.

Kaplan, N., and Duchon, D. (1998). Combining qualitative and quantitative methods in information system research a case study, *Management Information System Quarterly*, Vol. 12, No. 4, pp. 571-587.

Karatepe, O. M., and Ekiz, H. (2004). The effects of organizational responses to complaint on satisfaction and loyalty: a study of hotel guests in Northern Cyprus, *Managing Service Quality*, Vol. 14, No. 6, pp. 476-486.

Kau, A., and Loh, E. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants, *Journal of Services Marketing*, Vol. 20, No. 2, pp. 101–111.

Kahle, L., Hall, D., and Kosinski, M. (1997). The real-time response survey in new product research: it's about time, *Journal of Consumer Marketing*, Vol. 14, No. 3, pp. 234 – 248.

Kanafani, A., and Kuroda, K. (2005). *Global Competition in Transportation Markets: Analysis and Policy Making*, London: Elsevier.

Kanousi, A. (2005). An empirical investigation of the role of culture on service recovery expectations, *Managing Service Quality*, Vol. 15, No. 1, pp. 57 – 69.

Kalamas, M., Laroche, M., and Makdessian, L. (2008). Reaching the boiling point: consumers' negative affective reactions to firm-attributed service failures, *Journal of Business Research*, Vol. 61, No.8, pp. 813-824.

Karatepe, O., and Ekiz, E. (2004). The effects of organizational responses to complaints on satisfaction and loyalty: a study of hotel guests in Northern Cyprus, *Managing Service Quality*, Vol. 14, No .6, pp. 476-486.

Karatepe, O. M. (2011). Job resourcefulness as a moderator of the work–family conflict job satisfaction relationship: a study of hotel employees in Nigeria. *Journal of Hospitality and Tourism Management*, Vol. 18, No. 1, pp. 10–17.

Karatepe, O., Uludag, O., Menevis, I., Hadzimehmedagic, L., and Baddar, L. (2006). The effects of selected individual characteristics on frontline employee performance and job satisfaction, *Tourism Management*, Vol. 27, No. 4, pp. 547-560.

Karatepe, O., and Uludag, O. (2007). Conflict, exhaustion, and motivation: a study of frontline employees in Northern Cyprus hotels, *Hospitality Management*, Vol. 26, No. 3, pp. 645–665.

Karatepe, O., Yavas, U., and Babakus, E. (2005). Measuring service quality of banks: Scale development and validation, *Journal of Retailing and Consumer Services*, Vol. 12, No.5, pp. 373-383.

Kau, A., and Loh, E. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants, *Journal of Services Marketing*, Vol. 20, No 2, pp. 101-111.

Kaynak, E., and Kucukemiroglu, O. (1993). Successful Marketing for Survival: the airline industry, *Management Decision*, Vol. 31, No. 5, pp. 32-43.

Kayaman, R., and Arasli, H. (2007). Customer based brand equity: evidence from the hotel industry, *Managing Service Quality*, Vol. 17, No. 1 pp. 92 – 109.

Keaveney, S. M. (1995). Customer switching Behaviour in service industries: an exploratory study, *Journal of Marketing*, Vol. 59, No. 1, pp. 71–82.

Kelley, S., Hoffman, K. D., and Davis, M. A. (1993). A typology of retail failures and recoveries, *Journal of Retailing*, Vol. 69, No. 4, pp. 429-452.

Kent, R. (2007). *Marketing Research Approaches, Methods and Applications in Europe*, London: Thomson Publisher.

Kernbach, S., and Schutte, N. (2005). The impact of service provider emotional intelligence on customer satisfaction, *Journal of Services Marketing*, Vol. 19, No. 7, pp.438 – 444.

Keyser, A., and Lariviere, B. (2014). How technical and functional service quality drive consumer happiness, *Journal of Service Management*, Vol. 25, No. 1 pp. 30 – 48.

Krejcie, R., Morgan, D. (1970). Determining sample size for research activities, *Educational and Psychological Measurement*, Vol. 30, No. 3, pp.607-610.

Kettinger, W., and Lee, C. (1997). Pragmatic perspectives on the measurement of information systems service quality, *MIS Quarterly*, Vol. 21, No. 2, pp. 223–240.

Keillor, B., Lewison, D., Hult, G., and Hauser, W. (2007). The service encounter in a multi-national context, *Journal of Services Marketing*, Vol. 21, No. 6, pp. 451–461.

Kim, G. (2007). The service recovery strategies, customer satisfaction, customer loyalty, *The Asian Journal on Quality*, Vol. 8, No. 1, pp. 76-86.

Kim, M., Lee, C., Chung, N., and Kim, W. (2014). Factors affecting online tourism group buying and the moderating role of loyalty, *Journal of Travel Research*, Vol. 53, No. 3, pp. 380–394.

Kim, N., and Ulgado, F. (2012). The effect of on-the-spot versus delayed compensation: the moderating role of failure severity, *Journal of Services Marketing*, Vol. 26, No. 3, pp. 158-167.

Kim, S., and Jin, B. (2002). Validating the retail service quality scale for US and Korean customers of discount stores: an exploratory study, *Journal of Services Marketing*, Vol. 16, No.3, pp.223 – 237.

Kim, T., Kim, W., and Kim, H. (2009). The effects of perceived justice on recovery satisfaction, trust, word-of-mouth, and revisit intention in upscale hotels, *Tourism Management*, Vol. 30, No. 1, pp. 51-62.

Kim, T., Yoo, J., and Lee, G. (2012). Post-recovery customer relationships and customer partnerships in a restaurant setting, *International Journal of Contemporary Hospitality Management*, Vol. 24, No. 3, pp.381 – 401.

Kim, T, Kim, W., and Kim, H. (2008). The effects of perceived justice on recovery satisfaction, trust, work-of-mouth, and revisit intention in upscale hotels, Vol. 30, No. 1, pp. 51-62.

Kim, Y., and Smith, A. (2005). Crime and punishment: examining customers' responses to service organizations' penalties, *Journal of Service Research*, Vol. 8, No. 2, pp. 162-80.

- Kim, Y., and Hancer, M. (2010). The effect of knowledge management resource inputs on organizational effectiveness in the restaurant industry, *Journal of Hospitality and Tourism Technology*, Vol. 1, No. 2, pp. 174–189.
- Kim, Y., and Lee, H. (2009). Airline employees service behaviour toward different nationalities, *International Journal of Hospitality Management*, Vol. 28, No.3, pp.454–465.
- Kim, Y., and Lee, H.R. (2011). Customer satisfaction using low-cost carriers, *Tourism Management*, Vol. 32, No. 2, pp. 235-243.
- Kilbourne, W., Duffy, J., Duffy, M., and Giarchi, G. (2004). The applicability of SERVQUAL in cross-national measurements of health care quality, *Journal of Services Marketing*, Vol. 18, No.7, pp. 524 – 533.
- Klendauer, R., and Deller, J. (2009). Organizational justice and managerial commitment in corporate mergers, *Journal of Managerial Psychology*, Vol. 24, No. 1, pp. 29-45.
- Kleymann, B., and Seristo, H. (2004). *Managing Strategic Airline Alliance*, Hampshire: Ashgate Publishing.
- Klungseth, N., and Olsson, E. (2013). Norwegian cleaning research: an overview and categorization, *Journal of Facilities*, Vol. 31, No. 7, pp. 290 – 313.
- Knowles, P., Grove, S., and Pickett, G. (1999). Mood versus service quality effects on customers' responses to service organizations and service encounters, *Journal of Service Research*, Vol. 2, No. 2, pp.187-199.
- Koelemeijer, K. (1991). Perceived customer service quality: issues on theory and management, *16th World Conference on Research in the Distributive Trades*, Vol. 70, No.1, pp. 68-76.
- Komunda, M., and Osarenkhoe, A. (2012). Remedy or cure for service failure effect of service recovery on customer satisfaction and loyalty, *Business Process Management Journal*, Vol. 18, No. 1, pp. 82-103.
- Kossmann, M. (2006). *Delivering Excellent Service Quality in Aviation: A Practical Guide for Internal and External Service Providers*, London: Ashgate Publisher.
- Kotler, P. (1986). *Principles of Marketing* (3rd ed.), Englewood Cliffs: Prentice-Hall.
- Kotter, J., and Heskett, J. (1992). *Corporate Culture and Performance*, New York: Free Press.
- Kotler, P., and Armstrong, G. (2010). *Principles of marketing*. (13rd ed). Englewood: Prentice-Hall.

Kothari, C. (2004). *Research Methodology Methods and Techniques*, (2nd ed), New Delhi: New Age International Publisher.

Koro-Ljungberg, M., Douglas E., Therriault, D., and Malcolm, Z. (2012). Reconceptualising and decentering think-aloud methodology in qualitative research, *Qualitative Research*, Vol. 13, No. 6, pp. 735–753.

Kozak, M., and Nield, K. (1998) Importance-performance analysis and cultural perspectives in Romanian Black Sea Resorts, *Anatolia: An international Journal Tourism and Hospitality Research*, Vol. 9, No. 2, pp. 99-116.

Kozub, K., O'Neill, M., and Palmer, A. (2014). Emotional antecedents and outcomes of service recovery an exploratory study in the luxury hotel industry, *Journal of Services Marketing*, Vol. 28, No. 3, pp. 233–243.

Krejcie, R., Morgan, D. (1970). Determining sample size for research activities, *Educational and Psychological Measurement*, Vol. 30, No.3, pp. 607-610.

Krueger, J. (1996). Personal beliefs and cultural stereotypes about racial characteristics, *Journal of Personality and Social Psychology*, Vol. 71, No. 2, pp.536–548.

Ku, H., Kuo, C., and Chen, M. (2013). Is maximum customer service always a good thing, customer satisfaction in response to over-attentive service, *Managing Service Quality*, Vol. 23, No. 5, pp. 437 – 452.

Kua, Y., Yen S., and Chen, L. (2011). Online auction service failures in Taiwan: typologies and recovery strategies, *Electronic Commerce Research and Applications*, Vol. 10, No.2, pp.183-193.

Kumar, R. (1999). *Research Methodology, a Step-by Step Guide for Beginners*, London: Sage.

Kumar, S., Johnson K., and Lai, T. (2009). Performance improvement possibilities within the US airline industry, *International Journal of Productivity and Performance Management* Vol. 58, No.7, pp. 694-717.

Kumar, M., Kee, F., and Charles, V. (2010). Comparative evaluation of critical factors in delivering service quality of banks, *International Journal of Quality and Reliability Management*, Vol. 27, No. 3 pp. 351 – 377.

Kuo, M. (2011). A novel interval-valued fuzzy MCDM method for improving airlines service quality in Chinese cross-strait airlines, *Transportation Research Part E*, Vol. 47, No.6, pp. 1177–1193.

Kuo, C., and Jou, R. (2014). Asymmetric response model for evaluating airline service quality: An empirical study in cross-strait direct flights, *Transportation Research Part A*, Vol. 62, No.1, pp. 63–70.



- Kwok, L. (2012). Exploratory-triangulation design in mixed methods studies: a case of examining graduating seniors who meet hospitality recruiters' selection criteria, *Tourism and Hospitality Research*, Vol. 12, No. 3, pp. 125–138.
- Lacey, R. (2012). How customer voice contributes to stronger service provider relationships, *Journal of Services Marketing*, Vol. 26, No. 2, pp.137–144.
- Ladhari, R. (2008). Alternative measure of service quality: a review, *Journal of Managing Service Quality*, Vol. 18, No. 1, pp. 65-86.
- Lam, S. (1997). SERVQUAL: a tool for measuring patients opinion of hospital service quality in Hong Kong, *Total Quality Management*, Vol. 8, No.4, pp.145–152.
- Landrum, H., and Prybutok, V. (2004). A service quality and success model for the information service industry, *European Journal of Operational Research*, Vol. 156, No. 3, pp .628–642.
- Landis, J. R., and Koch, G. (1977). The measurement of observer agreement for categorical data, *Biometrics*, Vol. 33, No.1, pp. 159-74.
- Lashley, C. (1988). Matching the management of human resources to service operations *International Journal of Contemporary Hospitality Management*, Vol. 10, No.1, pp.24-33.
- Lassar, W., Manolis, C., and Winsor, R. (2000). Service quality perspectives and satisfaction in private banking, *Journal of Service Marketing*, Vol. 14, No. 3, pp.244-271.
- Laszlo, G.P. (1999). Southwest airlines living total quality in a service organization, *Managing Service Quality*, Vol. 9, No. 2, pp. 90–95.
- Law A., Hui, Y., and Zhao, X. (2004). Modelling repurchase frequency and customer satisfaction for fast food outlets, *International Journal of Quality and Reliability Management*, Vol. 21, No. 5, pp. 545 – 563.
- Law, R., and Cheung, C. (2003). Developing a performance indicator for hotel websites, *International Journal of Hospitality Management*, Vol. 22, No. 1, pp. 119–125.
- Law, R., Leung, K., and Wong, R. (2004). The impact of the Internet on travel agencies, *International Journal of Contemporary Hospitality Management*, Vol. 16, No. 2, pp.100 – 107.
- Law, R., and Hsu, C. (2005). Customers perceptions on the importance of hotel web site dimensions and attributes, *International Journal of Contemporary Hospitality Management*, Vol. 17, No. 6, pp. 493 – 503.
- Lee, A. (1991). Integrating positivist and interpretive approaches to organizational research, *Organization Science*, Vol. 2, No.1, pp. 342-265.

- Lee, E., and Park, J. (2010). Service failures in online double deviation scenarios: justice theory approach, *Managing Service Quality*, Vol. 20, No. 1, pp. 46-69.
- Lee, G., and Lin, H. (2005). Customer perceptions of e-service quality in online shopping, *International Journal of Retail and Distribution Management*, Vol. 33 No. 2, pp. 161-176.
- Lee, M., Singh, N., and Chan, E. (2011). Service failures and recovery actions in the hotel industry: A text-mining approach, *Journal of Vacation Marketing*, Vol.17, No. 3, pp. 197-207.
- Lee, N., and Lings, I. (2008). *Doing Business Research, a Guide to Theory and Practice*, London: Sage.
- Lee, S., Johnson, K., Gahring, S. (2008). Small town consumers disconfirmation of expectations and satisfaction with local independent retailers, *International Journal of Retail and Distribution Management*, Vol. 36, No. 2, pp. 143 – 157.
- Lee, H., Au, N., and Law, R. (2013). Presentation formats of policy statements on hotel websites and privacy concerns: a multimedia learning theory perspective, *Journal of Hospitality and Tourism Research*, Vol. 37, No. 4, pp. 470-489.
- Lee-Ross, D. (2008). An exploratory study of the contextual stability of SERVQUAL amongst three retail clusters in far North Queensland", *Journal of Place Management and Development*, Vol. 1, No. 1, pp.46 – 61.
- Ledwidge, J. (2007). British airways: the case for a human makeover, new approach would leave the airline less prone to disruptions and PR blunders, *Human Resource Management International Digest*, Vol. 15, No. 5, pp.7-10.
- Lehmann, D., Gupta, S., and Steckel, J. (1998). *Marketing Research*, Harlow: Addison-Wesley Publisher.
- Leong, C. (2008). An importance-performance analysis to evaluate airline service quality: the case study of a budget airline in Asia, *Journal of Quality Assurance in Hospitality and Tourism*, Vol. 8, No. 3, pp. 39-59.
- Lewis, B., and McCann, P. (2004). Service failure and recovery: evidence from the hotel industry, *International Journal of Cotemporary Hospitality Management*, Vol. 16, No.1, pp.6-17.
- Lewis, B., and Spyropoulos, S. (2001). Service failures and recovery in retail banking: the customers' perspective, *International Journal of Bank Marketing*, Vol.19, No.1, pp. 37-47.
- Levesque, T., and McDougall, G. (2000). Service problems and recovery strategies: an experiment, *Canadian Journal of Administrative Sciences*, Vol. 17, No.1, pp.20–37.

Liao, H. (2007). Doing it right this time: the role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures, *Journal of Applied Psychology*, Vol. 92, No. 2, pp. 475-489.

Liburd, J. (2012). Tourism research, *Annals of Tourism Research*, Vol. 39, No. 2, pp. 883-907.

Lii, Y., Pant, A., and Lee, M. (2012). Balancing the scales: recovering from service failures depends on the psychological distance of consumers, *The Service Industries Journal*, Vol. 32, No.11, pp. 1775-1790.

Liljander, V., and Strandvik, T. (1997). Emotions in service satisfaction, *International Journal of Service Industry Management*, Vol. 8, No. 2, pp. 148 -169.

Lin, H., Wang, Y., and Chang, L. (2011). Consumer responses to online retailer's service recovery after a service failure: a perspective of justice theory, *Managing Service Quality*, Vol. 21, No.5, pp.511 – 534.

Lin, W. (2010). Service failure and consumer switching behaviours: Evidence from the insurance industry, *Expert Systems with Applications*, Vol. 37, No. 4, pp. 3209-3218.

Lin, W. (2010). Service failure and consumer switching behaviors: evidence from the insurance industry, *Expert Systems with Applications*, Vol. 37, No.4, pp.3209-3218.

Lincoln, Y., and Guba, E. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin and Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage.

Ling, N. and Lings, I. (2008). *Doing Business Research, a Guide to Theory and Practice*, London: Sage.

Lirn, T. C. (2003). The job attractiveness of airlines to students in Taiwan: an AHP approach, *Journal of the Eastern Asia Society for Transportation Studies*, Vol.5, No.1, pp.556-571.

Liou, J., and Tzeng, G. (2007). A non-additive model for evaluating airline service quality, *Journal of Air Transport Management*, Vol. 13, No. 3, pp. 131-138.

Llach, J., Marimon, F., Alonso-Almeida, M., and Bernardo, M. (2013). Determinants of online booking loyalties for the purchasing of airline tickets, *Tourism Management*, Vol. 35, No. 2, pp. 23-31.

Lloyd, A., and Luk, T. (2011). Interaction behaviours leading to comfort in the service encounter, *Journal of Services Marketing*, Vol. 25, No.3, pp. 176–189.

Lovelock, C. (1994). *Product Plus: How Product Service*, New York: McGraw-Hill.

- Lovelock, C., and Wirtz, J. (2010). *Services Marketing: People, Technology, Strategy*, (7nd ed), London: Prentice-Hall.
- Looy, B., Gemmel, P., and Dierdonck, R. (2003). *Services Management: an Integrated Approach*, London: Prentice-Hall.
- Loveman, G. (1998). Employee satisfaction, customer loyalty, and financial performance, *Journal of Service Research*, Vol. 1, No. 1, pp. 18-31.
- Long, M., and McMellon C. (2004). Exploring the determinants of retail service quality on the internet, *Journal of Service Marketing*, Vol. 18, No. 1, pp.78-90.
- Lopez-Mosquera, N., and Sanchez, M. (2014). Cognitive and affective determinants of satisfaction, willingness to pay, and loyalty in suburban parks, *Urban Forestry and Urban Greening*, Vol. 13, No.1, pp. 375–384.
- Longino, H, E. (1990). *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*, Princeton: Princeton University Press.
- Lu, J. L., and Ling, F. I. (2008). Cross-cultural perspective regarding to service quality and satisfaction in Chinese cross-strait airlines, *Journal of Air Transport Management*, Vol. 14, No. 1, pp. 16-19.
- Lu, Z., and Chiang, D. (2003). Strategic issues faced by Ontario hotels, *International Journal of Contemporary Hospitality Management*, Vol. 15, No. 6, pp. 343-345.
- Lubbe, B. (2007). The effect of internet apprehension and website satisfaction on air travellers adoption of an airline's website, *Journal of Air Transport Management*, Vol. 13, No.2, pp.75–80.
- Lucas, R. (2012). *Customer Service Skills for Success*, New York: McGraw-Hill.
- Luoh, H., and Tsaur, S. (2007). Gender stereotypes and service quality in customer Waitperson encounters, *Total Quality Management and Business Excellence*, Vol. 18, No. 9, pp. 1035–1054.
- Lusty, D. (2009). Find out what your people really think: How to maximize response rates to employee satisfaction surveys, *Human Resource Management International Digest*, Vol. 17, No.4, pp.32 – 36.
- Lytle, R., and Timmerman, J. (2006). Service orientation and performance: an organizational perspective, *Journal of Services Marketing*, Vol. 20, No. 2, pp.136 – 147.
- Magnini, V., Ford, J., Markowski, E., and Honeycutt, E., (2007). The service recovery paradox: justifiable theory or smoldering myth, *Journal of Services Marketing*, Vol. 21, No. 3, pp.213 – 225.

Magnini, V., and Karande, K. (2009). The influences of transaction history and thank you statements in service recovery, *International Journal of Hospitality Management*, Vol. 28, No. 4, pp. 540-546.

Malaval, P., and Benaroya, C. (2002). *Aerospace Marketing Management*, Norwell, Massachusetts: Kluwer Academic Publisher.

Malhotra, N., and Birks. (2007). *Marketing Research an Applied Approach*, (3rd ed), London: Prentice Hall.

Malhotra, N. (2010). *Marketing Research an Applied Orientation*, (6nd ed), London: Pearson.

Manchester Airport. (2012). *Market Research and Surveys*, Retrieved from <http://www.manchesterairport.co.uk>

Mattila, A. (1999). An examination of factors affecting service recovery in a restaurant setting, *Journal of Hospitality and Tourism Research*, Vol. 23, No. 3, pp. 284-298.

Mattila, A. (2001). Emotional bonding and restaurant loyalty, *The Cornell Hotel and Restaurant Administration Quarterly*, Vol. 42, No. 6, pp. 73-79.

Mattila, A., and Cranage, D. (2005). The impact of choice on fairness in the context of service recovery, *Journal of Services Marketing*, Vol. 19, No. 5, pp. 271 – 279.

Mattila, A., and Patterson, P. (2004). Service recovery and fairness perceptions in collectivist and individualist contexts, *Journal of Service Research*, Vol. 6, No. 4, pp. 336-346.

Mattila, A. (2006). The power of explanations in mitigating the ill-effects of service failures, *Journal of Services Marketing*, Vol. 20, No. 7, pp. 422–428.

Mattila, A. (2010). Do women like options more than men, an examination in the context of service recovery, *Journal of Services Marketing*, Vol. 24, No. 7, pp.499 – 508.

Mattila, A., Hanks L., and Wang, C, (2014). Others service experiences: emotions, perceived justice, and behaviour, *European Journal of Marketing*, Vol. 48, No.3, pp. 552 – 571.

Mathenge, G. (2013). Responsible tourism and hotel management: an empirical analysis of the ethical dimensions in tourism and hospitality industry in Kenya, *American International Journal of Contemporary Research*, Vol. 3, No. 6, pp. 17-29.

Maxham, J. (1999). Service recovery influence on consumer satisfaction, positive word-of-mouth, and purchase intentions, *Journal of Business Research*, Vol. 54, No.4, pp.11 – 24.

Maxham, J. (2001). Service recovery influence on consumer satisfaction, positive word-of-mouth, and purchase intentions, *Journal of Business Research*, Vol. 54, No. 1, pp.11-24.

Maxham, J., and Netemeyer, R. (2002). Modelling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent, *Journal of Retailing*, Vol. 78, No .4, pp. 239-52.

Maxwell, J. (2004). Using qualitative methods for causal explanation, *Field Methods*, Vol. 16, No. 3, pp. 243-264.

May, T. (2011). *Social Research, Issues, Methods and Process*, (4nd ed), New York: McGraw-Hill.

Maykut, P., and Morehouse, R. (1994). *Beginning Qualitative Research: a Philosophic and Practical Guide*, London: The Falmer Press.

Maylor, H., and Blackmon, K. (2005). *Researching Business and Management*, London: Palgrave Macmillan.

Mayr, T., and Zins, A. (2012). Extensions on the conceptualization of customer perceived value: insights from the airline industry, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 6, No. 4, pp. 356-376.

Mazanec, J. (1995). Positioning analysis with self-organization maps: an exploratory study on luxury hotels, *The Connell Hotel and Restaurant Administration Quarterly*, Vol. 31, No. 2, pp. 84-91.

McCollough, M. (2000). The effect of perceived justice and attributions regarding service failure and recovery on post-recovery customer satisfaction and service quality attitudes, *Journal of Hospitality and Tourism Research*, Vol. 24, No. 4, pp. 423-447.

McCollough, M., Berry, L., and Yadav, M. (2000). An empirical investigation of customer satisfaction after service failure and recovery, *Journal of Services Research*, Vol. 3, No. 2, pp. 121-37.

McColl-Kennedy, J., and Spark, B. (2003). Application of fairness theory to service failures and service recovery, *Journal of Service Research*, Vol. 5, No. 3, pp. 251-266.

McDougall, G., and Levesque, T. (1999). Waiting for service: the effectiveness of recovery strategies, *International Journal of Contemporary Hospitality Management*, Vol. 11, No.1, pp.6-15.

McQuilken, L., and Bednall, D. (2008). Service recovery in a service guarantee context in: Spanjard, D. et al. (Eds.), *Paper Proceedings of the Australian and New Zealand Academy of Marketing Conference*, Sydney: University of Western Sydney.

McQuilken, L. (2010). The influence of failure severity and employee effort on service recovery in a service guarantee context, *Australasian Marketing Journal*, Vol. 18, No. 4, pp. 214–221.

McQuilken, L., McDonald, H., and Vocino, A. (2013). Is guarantee compensation enough, the important role of fix and employee effort in restoring justice, *International Journal of Hospitality Management*, Vol.33, No.2, pp. 41-50.

McDougall, G., and Levesque, T. (1994). A review of service quality dimensions: an empirical investigation, *Journal of Professional service Marketing*, Vol. 11, No. 1, pp. 189-210.

McCollum, W. (2006). *Process Improvement in Quality Management Systems*, London: Trafford Publishing.

McColl-Kennedy, J., and White, T. (1997). Service provider training programs at odds with customer requirements in five star hotels, *Journal of Services Marketing*, Vol. 11, No.4 pp. 249 – 264.

McColl-Kennedy, J.R. and Sparks, B.A. (2003). Application of fairness theory to service failures and service recovery, *Journal of Service Research*, Vol. 5, No. 3, pp. 251-66.

McDaniel, C., and Gates, R. (1993). *Contemporary Marketing Research*, (2nd ed), Minneapolis: West Publishing.

McDaniel, C, and Gates, R. (2006). *Marketing Research Essentials*, (5nd ed), Danvers: John Wiley and Sons.

Mehta, S., and Durvasula, S. (1998). Relationships between SERVQUAL dimensions and organizational performance in the case of a business-to business service, *Journal of Business and Industrial Marketing*, Vol. 19, No. 1, pp. 40-53.

Mei, A., Dean, A., and White, C. (1999). Analysing service quality in the hospitality industry, *Managing Service Quality*, Vol. 9, No. 2, pp. 136–143.

Menon, K., and Dube, L. (2004). Service provider responses to anxious and angry customers: different challenges, different payoffs, *Journal of Retailing*, Vol. 80, No. 3, pp. 229-237.

Meyer, C., and Schwager, A. (2007). Understanding customer experience, *Harvard Business Review*, Vol. 85, No. 1, pp. 116-28.

Michel, S. (2001). Analysing service failures and recoveries: a process approach, *International Journal of Service Industry Management*, Vol. 12, No. 1, pp. 20-33.

Michel, S., Bowen, D., and Johnston, R. (2009). Why service recovery fails: Tensions among customer, employee, and process perspectives, *Journal of Service Management*, Vol. 20, No. 3, pp.253 – 273.

Michel, S., and Meuter, M. (2008). The service recovery paradox: true but overrated, *International Journal of Service Industry Management*, Vol. 19, No.4, pp.441 - 457

Mikulic, J., and Prebezac, D. (2011). What drives passenger loyalty to traditional and low-cost airlines, a formative partial least squares approach, *Journal of Air Transport Management*, Vol. 17, No. 4, pp. 237-240.

Miller, J., Craighead, C., and Karwan, K. (2000). Service recovery: a framework and empirical investigation, *Journal of Operations Management*, Vol. 18, No. 4, pp. 387-400.

Miles, P., Miles, G, and Cannon, A. (2012). Linking servicescape to customer satisfaction: exploring the role of competitive strategy, *International Journal of Operations and Production Management*, Vol, 32, No.7, pp.772-795.

Minghetti, V., and Celotto, E. (2014). Measuring quality of information services: combining mystery shopping and customer satisfaction research to assess the performance of tourist offices, *Journal of Travel Research*, Vol. 53, No. 5, pp. 565–580.

Mohsin, A., and Lockyer, T. (2010). Customer perceptions of service quality in luxury hotels in New Delhi, India: an exploratory study, *International Journal of Contemporary Hospitality Management*, Vol. 22 , No.2, pp.160 – 173.

Morrish, S., and Hamilton, R.T. (2002). Airline alliances who benefits, *Journal of Air Transport Management*, Vol. 8, No. 6, pp. 401-407.

Morris, T. (2006). *Social Work Research Methods, Four Alternative Paradigms*, London: Sage.

Mostafa, R., Lages C., and Saaksjarvi, M. (2014). The CURE scale: a multidimensional measure of service recovery strategy, *Journal of Services Marketing*, Vol. 28, No. 4 pp. 300 – 310.

Mouton, J., and Marais, H. (1988). *Basic Concepts in the Methodology of the Social Sciences*, Pretoria: HARC Publisher.

Moutinho, L., and Hutcheson, G. (2011). *The SAGE Dictionary of Quantitative Management Research*, London: Sage.

Mueller, R., Palmer, A., Mack, R., and McMullan, R. (2003). Service in the restaurant industry: an American and Irish comparison of service failures and recovery strategies, *International Journal of Hospitality Management*, Vol. 22, No. 4, pp. 395–418.

Mundy, L. (2010). *A journey to Quality Leadership Quality*, Milwaukee: ASQ Quality Press.

Mudie, P., and Pirrie, A. (2006). *Services Marketing Management*, Oxford: Routledge.



Mullins, L. (1995). *Hospitality Management, a Human Resources Approach*, (2nd ed), Harlow: Addison Wesley Longman.

Mummаланeni, V., and Meng, J. (2009). An exploratory study of young Chinese customers' online shopping behaviours and service quality perceptions, *Young Consumers*, Vol. 10, No. 2, pp.157 – 169.

Mwaura, D., Acquaye, D., and Jargal, S. (2013). Marketing implications of the destination image of Mongolia, *Worldwide Hospitality and Tourism Themes*, Vol. 5, No. 1, pp. 80 – 91.

Myers, M. (2013). *Qualitative Research in Business and Management*, (3rd ed), London: Sage.

Nadiri, H., Hussain, K., Ekiz, H., and Erdogan, S. (2008). An investigation on the factors influencing passengers loyalty in the north Cyprus national airline, *The TQM Journal*, Vol. 20, No.3, pp.265 –280.

Neelankavil, J. (2007). *International Business Research*, New York: MESharpe Publisher.

Nair, C., and Mertova, P. (2009). Conducting a graduate employer survey: a Monash University experience, *Quality Assurance in Education*, Vol. 17, No.2, pp.191 – 203.

Namkung, Y., Jang, S., Almanza, B., and Ismail, J. (2009). Identifying the underlying structure of perceived service fairness in restaurants, *International Journal of Contemporary Hospitality Management*, Vol. 21, No. 4, pp.375 – 392.

Namkung, Y., and Jang, S. (2010a). Service failures in restaurants: which stage of service failure is the most critical, *Cornell Hospitality Quarterly*, Vol. 51, No. 3, pp. 323-343.

Namkung, Y., and Jang, S. (2010b). Effects of perceived service fairness on emotions, and behavioural intentions in restaurants, *European Journal of Marketing*, Vol. 44, No. 9, pp.1233 – 1259.

Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry, *The TQM Journal*, Vol. 25, No.5, pp.520 – 532.

Nand, A., Singh, P., and Power, D. (2013). Testing an integrated model of operations capabilities, *International Journal of Operations and Production Management*, Vol. 33, No. 7 pp. 887 – 911.

Narteh, B. (2013). Service quality in automated teller machines: an empirical investigation, *Managing Service Quality*, Vol. 23, No. 1, pp. 62 – 89.

- Nasurdin, A., and Khuan, S. (2011). Organizational justice, age, and performance connection in Malaysia, *International Journal of Commerce and Management*, Vol. 21, No. 3, pp. 273-290.
- Nataraja, S., and Aali, A. (2011). The exceptional performance strategies of Emirate airlines competitiveness review: *An International Business Journal*, Vol. 21, No. 5, pp. 471-486.
- Nawijn, J., and Mitas, O. (2012). Resident attitudes to tourism and their effect on subjective well-being: the case of Palma de Mallorca, *Journal of Travel Research*, Vol. 51, No. 5, pp. 531-541.
- Nejati, M., Nejati, M., and Shafaei, A. (2009). Ranking airline service quality factors using a fuzzy approach: study of the Iranian society, *International Journal of Quality and Reliability Management*, Vol. 26, No.3, pp.247–260.
- Neuman, W. (2011). *Social Research Methods, Qualitative and Quantitative Approaches*, London: Pearson.
- Newman, K. (2001). Interrogating SERVQUAL: a critical assessment of service quality measurement in a high street retail bank, *International Journal of Bank Marketing*, Vol. 19, No. 3, pp. 126-139.
- Nguyen, D., McColl-Kennedy, J., and Dagger, T. (2012). Matching service recovery solutions to customer recovery preferences, *European Journal of Marketing*, Vol. 46, No. 9, pp. 1171 – 1194.
- Nikbin, D., Ismail, I., and Marimuthu, M. (2012). The impact of causal attributions on customer satisfaction and switching intention: empirical evidence from the airline industry, *Journal of Transport Management*, Vol. 25, No. 2, pp. 37-39.
- Nitin, S., Deshmukh, S.G., and Vrat, P. (2005). Service quality models: a review, *International Journal of Quality Reliability Management*, Vol. 22, No. 9, pp.913-949.
- Nickson, D. (2007). *Human Resource Management for the Hospitality and Tourism Industries*, Oxford: Butterworth-Heinemann.
- Niger, H., Brierley, J., and MacDougall, R. (1999). *How to Measure Customer Satisfaction*, Hampshire: Gower Publishing.
- Nnaji, A., Igbojekwe, P., and Nnaji, C. (2011). An assessment of developmental potential of Oguta lake as a tourist destination, *E-Review of Tourism Research*, Vol. 9, No. 6, pp. 265-278.
- Normann, R. (1991). *Service Management*, London: John Wiley and Sons.
- Noone, B. (2012). Overcompensating for severe service failure: perceived fairness and effect on negative word-of-mouth intent, *Journal of Services Marketing*, Vol. 26, No. 5, pp.342 – 351.

Nwabueze, U., and Mileski, J. (2008). The challenge of effective governance: the case of Swiss Air, *Corporate Governance*, Vol. 8, No. 5, pp. 583-594.

O'Connell, J., and Williams, G. (2005). Passenger perceptions of low --cost airlines and full services carriers: a case study involving Ryanair, Aer Lingus, Air Asia and Malaysia Airlines, *Journal of Air Transport Management*, Vol.11, No. 4, pp.259-272.

Oh, H. (2003). Re-examining recovery paradox effects and impact ranges of service failure and recovery, *Journal of Hospitality and Tourism Research*, Vol. 27, No. 4, 402-418.

Okazaki, S. (2012). *Handbook of Research on International Advertising*, Cheltenham: Edward Elgar Publisher.

Olsen, W. (2011). *Data Collection: Key Debates and Methods in Social Research*, London: Sage Publication.

Oliveira, A., and Huse, C. (2002). Localized competitive advantage and price reactions to entry: Full-service vs. low-cost airlines in recently liberalized emerging markets, *Transportation Research*, Vol. 45, No. 2, pp. 307–320.

Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions, *Journal of Marketing Research*, Vo. 17, No. 11, pp. 460-469.

Oliver, R. L., and De Sarbo, W.S. (1988). Response determinants in satisfaction judgments, *Journal of Consumer Research*, Vol. 14, No. 4, pp. 495–507.

Orlikowski, W. (2000). Using technology and constituting structures: a practice lens for studying technology in organization, *organization Science*, Vol. 11, No. 4, pp.404-428.

Orlikowski, W., and Baroudi, J. (1991). Studying information technology in organization research approaches and assumptions, *Information System Research*, Vol. 2, No. 1, pp. 1-28.

Ostrowski, P., O'Brien, T., and Gordon, G. (1993). Service quality and customer loyalty in the commercial airline industry, *Journal of Travel Research*, Vol. 32, No. 2, pp. 16-24.

Ostrom, A., and Iacobucci, D. (1998). The effect of guarantees on consumer evaluation of service, *Journal of Service Marketing*, Vol. 12, No.5, pp.362-378.

Othman, Z., Zahari, M., and Radzi, S. (2014). Customer behavioural intention: influence of service delivery failures and service recovery in Malay restaurants, *Social and Behavioural Sciences*, Vol. 105, No.1, pp. 115-121.

Ozgen, O., and Kurt, S. (2012). Pre-recovery and post-recovery emotions in the service context: a preliminary study, *Managing Service Quality*, Vol. 22, No .6, pp. 592-605.

Palmer, A., Beggs, R., and Keown-McMullan, C. (2000). Equity and repurchase intention following service failure, *Journal of Service Marketing*, Vol. 14, No. 6, pp.513-528.

Palmer, A. (2011). *Principles of Services Marketing*, (6nd ed), London: McGraw-Hill.

Pallant, J. (2007). *SPSS Survival Manual*, (3nd ed), Berkshire: McGraw-Hill.

Pakdil, F., and Aydin, O. (2007). Expectations and perceptions in airline services: an analysis using weighted SERVQUAL scores, *Journal of Air Transport Management*, Vol. 13, No.4, pp. 229-237.

Pakdil, F., and Harwood, T. (2005). Patient satisfaction in a preoperative assessment clinic: An analysis using SERVQUAL dimensions, *Total Quality Management and Business Excellence*, Vol. 16, No. 1, pp 15–30.

Pak, S., and Pol, L. (1995). Two-stage data collection for retail stores, *International Journal of Retail and Distribution Management*, Vol. 23, No. 7, pp. 24 – 30.

Park, J. (2007). Passenger perception of service quality: Korean and Australian case studies, *Journal of Air Transport Management*, Vol. 13, No. 4, pp .238-242.

Park, O., Lehto, X., and Park, J. (2008). Service failures and complaints in the family travel market: a justice dimension approach, *Journal of Services Marketing*, Vol. 22, No. 7, pp. 520 – 532.

Park, G., Kim, K., and O'Neill, M. (2014). Complaint behaviour intentions and expectation of service recovery in individualistic and collectivistic cultures, *International Journal of Culture, Tourism and Hospitality Research*, Vol. 8, No. 3, pp.255 – 271.

Paraskevas, A. (2001). Exploring hotel internal service chains: a theoretical approach, *International Journal of Contemporary Hospitality Management*, Vol. 13, No.5, pp. 251 – 258.

Parast, M., and Fini, E. (2010). The effect of productivity and quality on profitability in US airline industry: an empirical investigation, *Managing Service Quality*, Vol. 20, No. 5, pp. 458 – 474.

Parasuraman, A. (1986). *Customer-Oriented Organizational Culture: a Key to Successful Services Marketing*. In: M. Venkatesan et al. (Eds), *Creativity in Services Marketing*, Chicago: American Marketing Association.

Parasuraman, A., Berry, L., and Zeithaml, V. (1991). Understanding customer expectations of service, *Sloan Management Review*, Vol. 32, No. 3, pp. 39–48.

Parasuraman, A., Zeithaml, V., and Berry, L. (1985). A conceptual model of service quality and its implications for future research, *Journal of Marketing*, Vol. 49, No. 4, pp. 41-50.

Parasuraman, A., Zeithaml, V., and Berry, L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality, *Journal of Retailing*, Vol. 64, No.1, pp. 12-40.

Parasuraman, A., Zeithaml, V., and Berry, L. (1994). Reassessment of expectations as a comparison standard on measuring service quality: implications for further research, *Journal of Marketing*, Vol. 58, No. 1, pp. 111-24.

Parasuraman, A., Grewal, D., and Krishnan, R. (2006). *Marketing Research*, (2nd ed), New York: South-Western College Pub Publisher.

Patterson, P., Cowley, E., and Prasongsukarn, K. (2006). Service failure recovery: The moderating impact of individual-level cultural value orientation on perceptions of justice, *International Journal of Research in Marketing*, Vol. 23, No. 3, pp. 263-277.

Pechlaner, H., and Volgger, M. (2012). How to promote cooperation in the hospitality industry generating practitioner-relevant knowledge using the GABEK qualitative research strategy, *International Journal of Contemporary Hospitality Management*, Vol. 24, No. 6, pp. 925-945.

Pedrick, D., Babakus, E., and Richardson, A. (1993). The value of qualitative data in quality improvement efforts: the case of the airline catering services, *Journal of Services Marketing*, Vol. 7, No.3, pp.26–35.

Pernecky, T., and Jamal, T. (2010). Phenomenology in tourism studies, *Annals of Tourism Research*, Vol. 37, No. 4, pp. 1055–1075.

Petzer, D., De Meyer, C., Sviri, S., and Svensson, G. (2012). Service receivers negative emotions in airline and hospital service settings, *Journal of Services Marketing*, Vol. 26, No.7, pp. 484–496.

Pettigrew, A. (1979). On studying organizational cultures, *Administrative Science Quarterly*, Vol. 24, No. 4, pp. 570-81.

Petrick, J., Tonner, C., and Quinn, C. (2006). The utilization of critical incident technique to examine cruise passengers' repurchase intention, *Journal of Travel Research*, Vol. 44, No. 3, pp. 273-280.

Peter, J., Churchill, G. and Brown, T. (1993). Caution in the use of difference scores in consumer research, *Journal of Consumer Research*, Vol. 19, No. 4, pp. 655-62.

Phillips, D., Burbules, N. (2000). *Post-Positivism and Education Research*, New York: Rowman and Littlefield Publisher.

Poll, R., and Payne, P. (2006). Impact measures for libraries and information services, *Library Hi Tech*, Vol. 24, No. 4, pp. 547 – 562.

Porter, S. (2006). *Doing Postgraduate Research*, (2nd ed), London: Sage.

Powers, T., and Valentine, D. (2009) Response quality in consumer satisfaction research, *Journal of Consumer Marketing*, Vol. 26, No. 4, pp. 232 – 240.

Prayag, G. (2007). Assessing international tourist perceptions of service quality at Air Mauritius, *International Journal of Quality and Reliability Management*, Vol. 24, No. 5, pp. 492-514.

Prasongsukarn, K., and Patterson, P. (2012). An extended service recovery model: the moderating impact of temporal sequence of events, *Journal of Services Marketing*, Vol. 26, No.7, pp. 510 – 520.

Pride, W., and Ferrell, O. (2011). *Marketing*, Manson: South-Western Cengage Learning Publisher.

Prideaux, B., Moscardo, G., and Laws, E (2006). *Managing Tourism and Hospitality Services: Theory and International Applications*, Oxfordshire: CABI Publisher.

Price, L. (1994). Poor personnel practice in the hotel and catering industry: does it matter, *Human Resource Management Journal*, Vol. 4, No. 4, pp. 44-62.

Priluck, R., and Lala, V, (2009). The impact of the recovery paradox on retailer-customer relationship, *Managing Service Quality*, Vol. 19, No. 1, pp. 42-59.

Prince, M., Manolis, C., and Tratner, S (2009). Qualitative analysis and the construction of causal models, *Qualitative Market Research: An International Journal*, Vol. 12, No. 2, pp. 130-152.

Proctor, T. (2003). *Essentials of Marketing Research*, (3rd ed), Financial Times, New York: Prentice-Hall.

Punch, K. (2003). *Introduction to Social Research: Quantitative and Qualitative Approaches*, (2nd ed), London: Sage.

Quinton, S., and Harridge-March, S. (2008). Trust and online wine purchasing: insights into UK consumer behaviour, *International Journal of Wine Business Research*, Vol. 20, No.1, pp.68 – 85.

Qantas Airlines (2011). *Qantas Airlines Strike Report*, Retrieved from <http://aviaed.wordpress.com/2011/10/30/how-are-passengers-affected-by-the-qantas-dispute/>

Raghavan, S., and Rhoades, D. (2008). Core competencies, competitive advantage, and outsourcing in the U.S. airline industry. *International Journal of Strategic Management*, Vol. 8, No.2, pp. 125-135.

Rai, A. K. (2005). *Customer Relationship Management: Concepts and Cases*, New Delhi: Learning PHI Publisher.

- Rajpoot, N. (2004). Reconceptualizing service encounter quality in a non-western context, *Journal of Service Research*, Vol. 7, No.2, pp. 181-201.
- Rajaobelina, L., Brun, I., and Toufaily, E. (2013). A relational classification of online banking customers, *International Journal of Bank Marketing*, Vol. 31, No.3, pp.187 – 205.
- Rakic, T., and Chambers, D. (2011). *An Introduction to Visual Research Methods in Tourism*, Oxon: Routledge.
- Ramsden, B. (2009). *Patterns of Higher Education Institutions in the UK*, Retrieved <http://www.universitiesuk.ac.uk/Publications/Documents/Patterns9.pdf>.
- Ranchhod, A., and Zhou, F. (2001). Comparing respondents of e-mail and mail surveys: understanding the implications of technology, *Marketing Intelligence and Planning*, Vol. 19, No.4, pp.254 – 262.
- Raven, P., and Welsh, D. (2004). An exploratory study of influences on retail service quality: a focus on Kuwait and Lebanon, *Journal of Services Marketing*, Vol. 18, No. 3, pp.198 – 214.
- Rea, L., and Parker, R. (2005). *Designing and Conducting Survey Research: a Comprehensive Guide*, (3rd ed), London: Jossey-Bass Publisher.
- Reddy, N., and Acharyulu, G. (2008). *Marketing Research*, New Delhi: Anurag Jain Publisher.
- Reid, W. (2002). In the land of the paradigms, method rules, *Qualitative Social Work*, Vol. 1, No. 3, pp. 291-295.
- Rhoades, D. (2006). Growth, customer service and profitability southwest style, *Managing Service Quality*, Vol. 16, No. 5, pp. 538-547.
- Rhoades, D., and Waguespack, B. (2005). Strategic imperatives and the pursuit of quality in the US airline industry, *Managing Service Quality*, Vol. 15, No. 4, pp. 344 – 356.
- Rhoades, D., and Waguespack, B. (2008). Twenty years of service quality performance in the US airline industry, *Managing Service Quality*, Vol. 18, No. 1, pp.20-34.
- Richins, M. L. (1987). A multivariate analysis of responses to dissatisfaction, *Journal of the Academy of Marketing Science*, Vol. 15, No.3, pp. 24–31.
- Richins, M. (1997). Measuring emotions in the consumption experience, *Journal of Consumer Research*, Vol. 24, No. 2, pp.127-146.
- Ringle, C., Sarstedt, M., and Zimmermann, L. (2011). Customer satisfaction with commercial airlines: the role of perceived safety and purpose of travel, *Journal of Marketing Theory and Practice*, Vol. 19, No. 4, pp. 459–472.

- Rio-Lanza, A., Vazquez-Casielles, R., and Diaz-Martin A.M. (2009). Satisfaction with service recovery: perceived justice and emotional responses, *Journal of Business Research*, Vol. 62, No. 8, pp.775-781.
- Ritchie, B., Burns, P., and Palmer, C. (2005). *Tourism Research Methods: Integrating Theory with Practice*, Cambridge: CABI Publishing.
- Rhoades, D., Waguespack, B., Treudt. E. (1998). Service quality in the US airline industry: progress and problems, *Managing Service Quality*, Vol. 8, No. 5, pp. 306-311.
- Robert, J. (1995). *Human Resource Practice in the Hospitality Industry*, London: Hodder and Stoughton Publisher.
- Robert, J., Kwortnik, J., and Xiao, H. (2011). The influence of guest perceptions of service fairness on lodging loyalty in China, *Cornell Hospitality Quarterly*, Vol.52, No.3, pp. 321–332.
- Robinson, P. (2009). *Operation Management in Travel Industry Operations Management in the Travel Industry*, Oxford: CABI Publisher.
- Robinson, L., Neeley, S, and Williamson, K. (2011). Implementing service recovery through customer relationship management: identifying the antecedents, *Journal of Service Marketing*, Vol. 25, No. 2, pp. 90-100.
- Roos, I., Friman, M., and Edvardsson, B. (2009). Emotions and stability in telecom-customer relationships, *Journal of Service Management*, Vol. 20, No.2, pp.192-208.
- Roshnee, R. (2007). Developing a service quality questionnaire for the hotel industry in Mauritius, *Journal of Vacation Marketing*, Vol. 13, No.1, pp. 19-27.
- Rothfelder, K., Ottenbacher, M., and Harrington, R. (2012). The impact of transformational, transactional and non-leadership styles on employee job satisfaction in the German hospitality industry, *Tourism and Hospitality Research*, Vol. 12, No. 4, pp. 201–214.
- Rosile, G., Boje, D., Carlon, D., Downs, A., and Saylor, R. (2013). Storytelling diomand, an anternarrative integration of the six facets of storytelling in organization research design, *Organisation Research Methods*, Vol. 16, No. 4, pp. 557-580.
- Rust, R., Zahorik, A., and Keiningham, T. (1996). *Service Marketing*, New York: Herper Collins College Publisher.
- Ruyter, K., and Wetzels, M. (2000). Customer equity considerations in service recovery: a cross-industry perspective, *International Journal of Service Industry Management*, Vol. 11, No. 1, pp. 91 – 108.



- Ryu, K., and Han, H. (2011). New or repeat customers: how does physical environment influence their restaurant experience, *International Journal of Hospitality Management*, Vol. 30, No. 3, pp. 599-611.
- Sackmann, S. (1991). Uncovering culture in organizations, *Journal of Applied Behavioural Science*, Vol. 27, No. 3, pp. 295-317.
- Saha, G., and Theingi. (2009). Service quality satisfaction and behavioural intentions: a study of low-cost airline carriers in Thailand, *Managing Service Quality*, Vol. 19, No. 3, pp. 350-372.
- Saks, A., and Haccoun, R. (2010). *Managing Performance through Training and Development*, Scarborough: Nelson Publishing.
- Santos-Vijande, M., Maria Diaz, A., Suarez Alvarez, L., and Del Rio Lanza, A. (2013). An integrated service recovery system (ISRS), *European Journal of Marketing*, Vol. 47, No. 5, pp. 934 – 963.
- Sapsford, R., and Jupp, V. (1998). *Data Collection and Analysis*, London: Sage.
- Sarantakos, S. (1998). *Social Research*, (2nd ed), London: Palgrave Macmillan Publisher.
- Satons, C., and Fernandes, D. (2008). Antecedents and consequences of consumer trust in the context of service recovery, *Brazilian Administration Review*, Vol. 5, No. 3, pp. 225-244.
- Saunders, S. (2008). Measuring and applying the PAKSERV service quality construct: Evidence from a South African cultural context, *Managing Service Quality*, Vol. 18, No. 5, pp.442 – 456.
- Saunders, M., Lewis, P., and Thornhill, A. (2009). *Research Methods for Business Students*, (5th ed), London: Prentice-Hall.
- Schlesinger, L., and Heskett, J. (1991). Breaking the cycle of failure in service, *Sloan Management Review*, Vol. 32, No. 3, pp.17-28.
- Schooler, C. (1983). Cultures consequences, contemporary sociology, *A Journal of Reviews*, Vol. 12, No. 2, pp. 167-188.
- Schneider, B. (1988). *Notes on Climate and Culture*, in Lovelock, C, *Managing Service*, Englewood Cliffs, NJ: Prentice-Hall.
- Schneider, B., and Bowen, D. (1993). The service organization: Human resources management is crucial, *Organizational Dynamics*, Vol. 21, No.4, pp. 39-52.
- Schneider, B. (2004). *Service Quality Research Perspectives*, London: Sage.
- Schofer, K. (2002). *Customer Evaluations of Service Failure and Recovery Encounters*, Norderstedt: GRIN Verlag Publisher.

Schoefer, K., and Ennew, C. (2005). The impact of perceived justice on consumer emotional responses to service complaints experiences, *Journal of Service Marketing*, Vol.19, No.5, pp. 261-270.

Schoefer, K., and Diamantopoulos, A. (2008). Measuring experienced emotions during service recovery encounters: construction and assessments of the ESRE Scale, *Service Business*, Vol.2, No.1, pp. 65-81.

Schoefer, K. (2010). Cultural moderation in the formation of recovery satisfaction judgments: a cognitive-affective perspective, *Journal of Service Research*, Vol. 13, No.1, pp. 52-66.

Schumann, J., Wunderlich, N., and Evanschitzky, H. (2014). Spillover effects of service failures in coalition loyalty programs: the buffering effect of special treatment benefits, *Journal of Retailing*, Vol. 90, No.1, pp.111–118.

Seawright, K., DeTienne, K., Bernhisel, M., and Larson, C. (2008). An empirical examination of service recovery design, *Marketing Intelligence and Planning*, Vol. 26, No. 3, pp. 253–274.

Sekaran, U., and Bougie, R. (2013). *Research Methods for Business a Skill-Building Approach*, (6nd ed), London: John Willey and Sons.

Seppala-Esser, R., Airey, D., and Szivas, E. (2009). The dependence of tourism SMEs on NTOs: the case of Finland, *Journal of Travel Research*, Vol. 48, No. 2, pp.177-190.

Seristo, H. (1996). The executive view on the cost problem of European airlines, *European Business Review*, Vol. 96, No. 4, pp. 14–17.

Shapiro, T., and Nieman-Gonder, J. (2006). Effect of communication mode in justice-based service recovery, *Managing Service Quality*, Vol. 16, No.2, pp.124 – 144.

Sharma, N., and Patterson, P. (1999). The impact of communication effectiveness and service quality on relationship commitment in consumer, professional services, *Journal of Services Marketing*, Vol. 13, No. 2, pp. 151-70.

Shewhart, W. (1931). *Economic Control of Quality of Manufactured Product*, New York: Van Nostrand Publisher.

Shi, W., Liu, J., and Zhang, Y. (2011). The effect of service failure attribution on consumer complaint behaviour: the mediating role of negative emotion, *The Journal of China Universities of Posts and Telecommunications*, Vol. 18, No. 2, pp. 169-173.

Shostack, G. (1985). *Planning the Service Encounter*, New York: Lexington Publisher.

Sim, L., Koh, H., and Shetty, S. (2006). Some potential issues of service quality reporting for airlines, *Journal of Air Transport Management*, Vol. 12, No. 6, pp.293–299.

Sim, K., Song, C., and Killough, L. (2010). Service quality, service recovery, and financial performance: an analysis of the US airline industry, *In Advances in Management Accounting, Advances in Management Accounting*, Vol. 18, No.1, pp. 27-53.

Singh, A., and Sushil, S. (2013). Modelling enablers of TQM to improve airline performance, *International Journal of Productivity and Performance Management*, Vol. 62, No. 3, pp. 250-275.

Singh, K. (1984). Successful strategies: The story of Singapore airlines (SIA), *Long Range Planning*, Vol. 17, No. 5, pp. 17-22.

Singh, P., Fook, C., and Sidhu, G. (2006). A comprehensive guide to writing research proposal, London: Venton Publisher.

Slack, N., Chambers, S., and Johnston, R. (2010). *Operation Management*, London: Prentice-Hall.

Smith, A., Bolton, R., and Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery, *Journal of Marketing Research*, Vol. 36, No. 3, pp. 356-72.

Smith, A., and Bolton, R. (2002). The effects of customer, emotional responses to service failure on their recovery effort evaluations and satisfaction judgments, *Journal of the Academy of Marketing Science*, Vol. 30, No. 1, pp. 5-23.

Smith, G. (2004). An evaluation of the corporate culture of Southwest airline, *Measuring Business Excellence*, Vol. 8, No. 4, pp. 26 -33.

Smith, J., Nagy, P., Karwan, K., and Ramirez, E. (2012). The contingent nature of service recovery system structures, *International Journal of Operations and Production Management*, Vol. 32, No. 7, pp. 877-903.

Smith, J., Fox, G., and Ramirez, E. (2010). An integrated perspective of service recovery: a sociotechnical systems approach, *Journal of Service Research*, Vol. 13, No. 4, pp. 439-452.

Smith, M. (2003). Changing an organization culture: correlates of success and failure, *Leadership and Organization Development Journal*, Vol. 24, No. 5, pp. 249-261.

Smith, S. (2010). *Practical Tourism Research*, Oxford: CABI Publishing.

Smucker, J. (1982). Geert Hofstede: culture's consequences, sociology, *Reviews of New Books*, Vol. 9, No. 2, pp. 55-6.

- Sousa, R., and Voss, C. (2009). The effects of service failures and recovery on customer loyalty in e-services an empirical investigation, *International Journal of Operations and Production Management*, Vol. 29, No. 8, pp. 834-864.
- Sparks, B., and McColl-Kennedy, J. (2001). Justice strategy options for increased customer satisfaction in a services recovery setting, *Journal of Business Research*, Vol. 54, No. 3, pp. 209-218.
- Sparks, B., and Fredline, L. (2007). Providing an explanation for service failure: context, content, and customer responses, *Journal of Hospitality and Tourism Research*, Vol. 31, No. 2, pp. 241-260.
- Spencer, R. (2010). *Development Tourism*, London: Ashgate Publisher.
- Swanson, S., and Kelley, S. (2001). Service recovery attributions and word-of-mouth intentions, *European Journal of Marketing*, Vol. 35, No. 1, pp.194 – 211.
- Swanson, S., and Hsu, M. (2011). The effect of recovery locus attributions and service failure severity on word-of-mouth and repurchase behaviours in the hospitality industry, *Journal of Hospitality and Tourism Research*, Vol. 35, No.4, pp. 511-529.
- Sweeney, J., and Lapp, W (2004). Critical service quality encounters on the Web: an exploratory study, *Journal of Services Marketing*, Vol. 18, No. 4, pp.276 – 289.
- Singh, Y., and Nath, R. (2005). *Research Methodology*, New Delhi: APH Publisher.
- Singhal, D., and Singhal, K. (2008). *Implementing ISO 9001:2000: Quality Management System a Reference Guide*, New Delhi: PHI Learning Publisher.
- Sobh, R., and Perry, C. (2006). Research design and data analysis in realism research, *European Journal of Marketing*, Vol. 40, No. 11, pp. 1194-1209.
- Solis, L., Rao, S., Raghu-Nathan, T., Chen, C., and Pan, S. (1998). Quality management practices and quality results: a comparison of manufacturing and service sectors in Taiwan, *Managing Service Quality*, Vol. 8, No.1, pp.46 – 54.
- Spreng, R., Harrell, G., and Mackoy, R. (1995). Service recovery: Impact on satisfaction and intentions, *Journal of Services Marketing*, Vol. 9, No. 1, pp. 15 – 23.
- Stevens, P., Knutson, B. and Patton, M. (1995). DINESERV: a tool for measuring service quality in restaurants, *The Cornell Hotel and Restaurant Administration Quarterly*, Vol. 36, No. 2, pp. 56-60.
- Steven, A., and Dong, Y., and Dresner, M. (2012). Linkages between customer service, customer satisfaction and performance in the airline industry: Investigation of non-linearities and moderating effects, *Transportation Research Part E*, Vol. 48, No.4, pp. 743-754.

Stoeckl, N., Greiner, R., and Mayocch, C. (2006). The community impacts of different types of visitors: an empirical investigation of tourism in North-west Queensland, *Tourism Management*, Vol. 27, No. 1, pp. 97-112.

Strizhakova, Y., Tsarenko, Y., and Ruth, J. (2012). I'm mad and I can't get that service failure off my mind: coping and rumination as Mediators of anger effects on customer intentions, *Journal of Service Research*, Vol. 15, No. 4, pp. 414-429.

Sultan, F., and Simpson, M. (2000). International service variants: airline passenger expectations and perceptions of service quality, *Journal of Service Marketing*, Vol. 14, No. 3, pp. 188-216.

Sumathi, S., and Saravanavel, P. (2003). *Marketing Research and Consumer Behaviour*, New Delhi: Vikas Publisher.

Sunder, V. (2009). *Outsourcing and Customer Satisfaction*, Bloomington: Xlibris Publisher.

Susskind, A., and Viccari, A. (2011). A look at the relationship between service failures guest satisfaction, and repeat-patronage intentions of casual dining guests, *Cornell Hospitality Quarterly*, Vol. 52, No. 4, pp. 438-444.

Sutton, C., and David, M. (2004). *Social Research*, London: Sage.

Suki, N. (2014). Passenger satisfaction with airline service quality in Malaysia: a structural equation modelling approach, *Research in Transportation Business and Management*, Vol. 10, No. 1, pp. 26-32.

Svari, S., and Olsen, L. (2012). The role of emotions in customer complaint behaviours, *International Journal of Quality and Service Sciences*, Vol. 4, No. 3, pp. 270-282.

Swanson, S., and Kelley, S. (2001). Attributions and outcomes of the service recovery process, *Journal of Marketing Theory and Practice*, Vol. 9, No. 4, pp. 50-65.

Swanson, S., and Hsu, M. (2011). The effect of recovery locus attributions and service failure severity on word-of-mouth and repurchase behaviours in the hospitality industry, *Journal of Hospitality and Tourism Research*, Vol. 35, No. 4, pp. 511-529.

Svari, S., and Olsen, L. (2012). The role of emotions in customer complaint behaviours, *International Journal of Quality and Service Sciences*, Vol. 4, No. 3, pp. 270-282.

Taguchi, G., and Clausing, D. (1990). Robust quality, *Harvard Business Review*, Vol. 68, No.1, pp. 65-75,

Taneja, N. (2003). *Airline Survival Kit*, Aldershot: Ashgate Publishing.

- Tax, S., Brown, S., and Chandrashekar, M. (1998). Customer evaluations of service complaint experience: implications for relationship marketing, *Journal of Marketing*, Vol. 62, No. 2, pp. 60-76.
- Tax, S., and Brown, S. (2000). *Service Recovery: Research Insights and Practices*, in Swartz, T. and Iacobucci, D. (Eds), *Handbook of Services Marketing and Management*, Sage, Thousand Oaks CA, pp. 271-86.
- Thibaut, J., and Walker, L. (1975). *Procedural Justice*, Hillsdale, NJ: Lawrence Erlbaum.
- Thwaites, E., and Williams, C. (2006). Service recovery: a naturalistic decision-making approach, *Managing Service Quality*, Vol. 16, No. 6, pp. 641-653.
- Tiedemann, N., Birgele, M., and Semeijn, J. (2009). Increasing hotel responsiveness to customers through information sharing, *Tourism Review*, Vol. 64, No.4, pp. 12 – 26.
- Tiernan, S., Rhoades, D., and Waguespack, B. (2008). Airline service quality exploratory analysis of consumer perceptions and operational performance in the USA and EU, *Managing Service Quality*, Vol. 18, No.3, pp. 212-224.
- Toh, R., and Hu, M. (1998). Frequent flyer programs: passenger attributes and attitudes, *Journal of Transport Management*, Vol. 28, No.2, pp.11-12.
- Tojib, D., and Khajehzadeh, S. (2014). The role of meta-perceptions in customer complaining behaviour, *European Journal of Marketing*, Vol. 48, No.7, pp. 1-36.
- Tourigny, L., Baba, V., and Wang, X. (2010). Stress episode in aviation: the case of China, cross cultural management: *An International Journal*, Vol. 17, No.1, pp.62-78.
- Tribe, J. (2009). *Philosophical Issues in Tourism Aspects of Tourism*, London: Channel View Publication.
- Trott, P. (2005). *Innovation Management and New Product Development*, London: Person Publisher.
- Tsantoulis, M., and Palmer, A. (2008). Quality convergence in airline co-brand alliances, *Managing Service Quality*, Vol. 18, No.1, pp. 34-64.
- Tsaur, S., Chang T., and Yen, C. (2002). The evaluation of airline service quality by fuzzy MCDM, *Tourism Management*, Vol. 23, No. 2, pp.107-115.
- Tsai, C, Yang, Y., and Cheng, Y. (2014). Does relationship matter, customer response to service failure, *Managing Service Quality*, Vol. 24, No. 2 pp. 139 – 159.
- Tull, D., and Hawkins, D. (1990). *Marketing Research, Measurement, and Method*, New York: Palgrave Macmillan.

Tybout, A., and Calkins, T. (2005). *Kellogg on Branding*, New York: John Wiley and Sons.

Tyrrell, T., and Spaulding, I. (1984). A survey of attitudes toward tourism growth in Rhode Island, *Journal of Hospitality and Tourism Research*, Vol. 8, No. 22, pp. 22-33.

Tyson, E., and Schell, J. (2012). *Small Business for Dummies*, (4nd ed), Hoboken: John Wiley and Sons.

Unbehaun, W., Probstl, U., and Haider, W. (2008). Trends in winter sport tourism: challenges for the future, *Tourism Review*, Vol. 63, No. 1, pp.36 – 47.

Utle, J., and May, G. (2009). Monitoring service quality with residuals control charts, *Managing Service Quality*, Vol. 19, No. 2, pp.162 – 178.

Uysal, M., Perdue, R., and Sirgy, J. (2012). *Handbook of Tourism and Quality-of-Life Research: Enhancing the Lives of Tourists and Residents of Host Communities*, London: Sprinder Publishing.

Vaerenbergh, Y., Vermeir, I., and Lariviere, B. (2013). Service recovery impact on customers next-in-line, *Managing Service Quality*, Vol. 23, No. 6, pp. 495-512.

Vaerenbergh, Y., De Keyser, A., and Lariviere, B. (2014). Customer intentions to invoke service guarantees: do excellence in service recovery, type of guarantee and cultural orientation matter, *Managing Service Quality*, Vol. 24, No.1, pp. 45 – 62.

Vaughan, E., and Woodruffe-Burton, H. (2011). The disabled student experience: does the SERVQUAL scale measure up, *Quality Assurance in Education*, Vol. 19, No. 1, pp.28 – 49.

Valente, F., Dredge, D., and Lohmann, G. (2014). Leadership capacity in two Brazilian regional tourism organisations, *Tourism Review*, Vol. 69, No. 1, pp. 10-24.

Van Dyke, T., Kappelman, L., and Prybutok, V. (1997). Measuring information systems service quality: concerns on the use of the SERVQUAL questionnaire, *MIS Quarterly*, Vol. 21, No. 2, pp. 195-208.

Van Dyke, T., Prybutok, V., and Kappelman, L. (1999). The use of SERVQUAL measure to assess the quality of information systems services, *Decision Sciences*, Vol. 30, No. 3, pp.15-38.

Varela-Neira, C., Vazquez-Casielles, R., and Iglesias, V. (2010a). Explaining customer satisfaction with complaint handling, *International Journal of Bank Marketing*, Vol. 28, No. 2, pp. 88-112.

Varela-Neira, C., Vasques-Casielles, R. and Iglesias, V. (2010b). The effects of customer age and recovery strategies in a service failure setting, *Journal of Financial Services Marketing*, Vol. 15, No. 1, pp. 32-48.

- Vignali, C., Gomez, E., Vignali, M., and Vranesevic, T. (2001). The influence of consumer behaviour within the Spanish food retail industry, *British Food Journal*, Vol. 103, No. 7, pp.460 – 478.
- Vij, M. (2012). A survey of factors influencing cost structures in the Indian hotel sector, *Worldwide Hospitality and Tourism Themes*, Vol. 4, No. 5, pp.449 – 462.
- Vervest, P., Liere, D., and Zheng, L. (2009). *The Network Experience: New Value from Smart Business Networks*. London: Springer-Verlag.
- Veal, A. (1992). *Research Methods for Leisure and Tourism a Practical Guide*, (1nd ed), London: Longman Publisher.
- Vogt, P., and Johnson, R. (2011). *Dictionary of Statistics and Methodology: a Nontechnical Guide for the Social Sciences*, London: Sage.
- Vrana, V., and Zafiroopoulos, C. (2006). Tourism agents attitudes on internet adoption: an analysis from Greece, *International Journal of Contemporary Hospitality Management*, Vol. 18, No. 7, pp.601 – 608.
- Waguespack, B., Rhoades, D.L., and Tiernan, S. (2007). An investigation into airline service quality performance between US legacy carriers and their EU competitors and partners, *Journal of Air Transportation*, Vol. 12, No. 2, pp. 59-71.
- Waguespack, B., and Rhoades, D. (2014). Twenty five years of measuring airline service quality or why is airline service quality only good when times are bad, *Research in Transportation Business and Management*, Vol. 10, No.1, pp. 33–39.
- Walliman, N. (2011). *Your Research Project*, (3nd ed), London: Sage.
- Wall, E., and Berry, L. (2007). The combined effects of the physical environment and employee behaviour on customer perception of restaurant service quality, *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 48, No. 1, pp. 56-69.
- Walter, U., and Edvardsson, B. (2012). The physical environment as a driver of customers' service experiences at restaurants, *International Journal of Quality and Service Sciences*, Vol. 4, No. 2, pp.104 – 119.
- Wang, Y., Wu, S., Lin, H., and Wang, Y. (2011). The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing, *International Journal of Information Management*, Vol. 31, No. 4, pp.350-359.
- Wang, C., and Mattila, A. (2011). A cross-cultural comparison of perceived informational fairness with service failure explanations, *Journal of Services Marketing*, Vol. 25, No. 6, pp. 429 – 439.



- Wang, J., Ayres, H., and Huyton, J. (2009). Job ready graduates: a tourism industry perspective, *Journal of Hospitality and Tourism Management*, Vol. 16, No.1, pp.62–72.
- Wang, Y., and Beise-Zee, R. (2013). Service responses to emotional states of business customers, *Managing Service Quality*, Vol. 23, No.1, pp.43 – 61.
- Wang, K., Hsu, L., and Chih, W. (2014). Retaining customers after service failure recoveries: a contingency model, *Managing Service Quality*, Vol. 24, No. 4, pp. 318-338.
- Watson, S. (2012). Consumer responses to service situations: tests for main and interaction effects, *Journal of Retailing and Consumer Services*, Vol. 19, No.3, pp.287-296.
- Watson, D., Clark, L., and Tellegen, A. (1998). Development and validation of brief measures of positive and negative affect: The PANAS scales, *Journal of Personality and Social Psychology*, Vol. 54, No. 6, pp. 1063-1070.
- Waters, D. (2008). *Quantitative Methods for Business*, (4nd ed), London: Prentice-Hall.
- Watson, R., Pitt, L., and Kavan, C. (1998). Measuring information systems services quality: Lessons from two longitudinal case studies, *MIS Quarterly*, Vol. 22, No.1, pp.61–79.
- Watson, G. (1994). *Business Systems Engineering: Managing Breakthrough Changes for Productivity and Profit*, New York: John Wiley and Sons.
- Weaver, D., and Lawton, L. (2011). Visitor loyalty at a private South Carolina protected area, *Journal of Travel Research*, Vol. 50, No. 3, pp. 335-346.
- Weber, R. (1990). *Basic Content Analysis*, Newbury: Sage.
- Weber, K. (2005). Traveller perceptions of airline alliance benefits and performance, *Journal of Travel Research*, Vol. 43, No. 3, pp. 257-265.
- Weber, K., and Sparks, B. (2004). Consumer attributions and behavioural responses to service failures in strategic airline alliance settings, *Journal of Air Transport Management*, Vol. 10, No. 5, pp. 361-367.
- Weber, K., and Sparks, B. (2009). The effect of pre-consumption mood and service recovery measures on consumer evaluation and behaviour in a strategic alliance setting, *Journal of Hospitality and Tourism Research*, Vol. 33, No. 1, pp.106-125.
- Webster, C., and Sundaram, D. S. (1998). Service consumption criticality in failure recovery, *Journal of Business Research*, Vol. 41, No. 2, pp. 153-159.
- Weeb, J. (2001). *Understanding and Designing Marketing Research*, (2nd ed), Stamford: Cengage Learning Business Press.

- Weed, M. (2007). *Sport and Tourism: a Reader*, Oxon: Routledge.
- Weiss, H., Scukow, K., and Cropanzano, R. (1999). Effects of justice condition on discrete emotions, *Journal of Applied Psychology*, Vol. 84, No. 5, pp.789-794.
- Wen, B., and Chi, C. (2013). Examine the cognitive and affective antecedents to service recovery satisfaction a field study of delayed airline passengers, *International Journal of Contemporary Hospitality Management*, Vol. 25, No. 3, pp. 306-327.
- Weun, S., Beatty, S., and Jones, M. (2004). The impact of service failure severity on service recovery evaluation and post-recovery relationship, *Journal of Services Marketing*, Vol. 18, No. 2, pp.133-146.
- Westbrook, R. (1987). Product/consumption-based affective responses and post-purchase processes, *Journal of Marketing Research*, Vol. 24, No. 3, pp. 258-270.
- Wirtz, J., and Johnson, R. (2003). Singapore airlines: what it takes to sustain service excellence: a senior management perspective, *Managing Service Quality*, Vol. 13, No. 1, pp.10-19.
- Wirtz, J., and Mattila, A. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure, *International Journal of Service Industry Management*, Vol. 15, No. 2, pp.150-166.
- Wirtz, J., Kum, D., and Lee, K. (2000). Should a firm with a reputation for outstanding service quality offer a service guarantee, *Journal of Services Marketing*, Vol. 14, No. 6, pp.502 – 512.
- Wirtz, J., Heracleous, L., and Pangarkar, N. (2008). Managing human resources for service excellence and cost effectiveness at Singapore Airlines, *Managing Service Quality*, Vol. 18, No.1, pp. 4-19.
- Williams, C. (2007). Small business and the informal economy: evidence from the UK, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 13, No. 6, pp. 349-366.
- Williams, G. (2002). *Airline Competition: Deregulation Mixed Legacy*, Ashgate Publishing.
- Winsted, K. (1997). The service experience in two cultures: a behavioural perspective, *Journal of Retailing*, Vol. 73, No. 3, pp. 337-360.
- Wisker, G. (2008). *The Postgraduate Research Handbook*, (2nd ed), New York: Palgrave Macmillan.
- Wilson, J. (2010). *Essentials of Business Research a Guide to Doing Your Research Project*, London: Sage.

- Wittman, M. (2014). Are low-cost carrier passengers less likely to complain about service quality, *Journal of Air Transport Management*, Vol. 35, No. 1, pp. 64-71.
- Wong, A., Dean, A., and White, C. (1999). Analysing service quality in the hospitality industry, *Managing Service Quality*, Vol. 9, No.2, pp. 136-143.
- Wong, A., and Sohal, A. (2003). Service quality and customer loyalty perspective on two levels of retail relationships, *Journal of Service Marketing*, Vol. 17, No. 5, pp. 495-513.
- Wong, A. (2004). The role of emotional satisfaction in service encounters, *Managing Service Quality*, Vol. 14, No.5, pp.365-376.
- Wong, J., and Chung, P. (2007). Managing valuable Taiwanese airline passengers using knowledge discovery in database techniques, *Journal of Air Transport Management*, Vol. 13, No. 6, pp.362-370.
- Woodruffe, H. (1995). *Service Marketing*, London: Prentice-Hall.
- Woodcock, M., and Francis, D. (1989). Clarifying organizational values, Gower Publishing, Aldershot.
- Wood, R. (1997). *Personnel Management, Labour Turnover and the Role of Trade Unions*, in Wood, R.(ed), *Working in Hotels and Catering*, Oxford: International Thompson Business Press.
- Worthington, S., and Devlin, J. (2013). Fairness and financial services in Australia and the United Kingdom, *International Journal of Bank Marketing*, Vol. 31, No. 4, pp. 289-304.
- Wu, W., and Liao, Y. (2014). A balanced scorecard envelopment approach to assess airlines' performance, *Industrial Management and Data Systems*, Vol. 114, No. 1, pp. 123 – 143.
- Wyckham, R., Fitzroy, P.T., and Mandry, G.D. (1975). Marketing of services an evaluation of the theory, *European Journal of Marketing*, Vol. 9, No. 1, pp. 59-67.
- Xie, D., and Heung, V. (2012). The effects of brand relationship quality on responses to service failure of hotel consumers, *International Journal of Hospitality Management*, Vo. 31, No.2, pp.735– 744.
- Xie, L., and Chen, C. (2014). Hotel loyalty programs: how valuable is valuable enough, *International Journal of Contemporary Hospitality Management*, Vol. 26, No. 1, pp. 107 – 129.
- Xu, Y., Marshall R., Edvardsson B., and Tronvoll, B. (2014). Show you care: initiating co-creation in service recovery, *Journal of Service Management*, Vol. 25, No. 3, pp. 369 – 387.

- Yang, K., Hsieh, T., Li, H., and Yang, C. (2012). Assessing how service quality, airline image and customer value affect the intentions of passengers regarding low-cost carriers, *Journal of Air Transport Management*, Vol. 20, No. 2, pp. 52-53.
- Yaya, L., Marimon, F., and Casadesus, M. (2013). Can ISO 9001 improve service recovery, *Industrial Management and Data Systems*, Vol. 113, No.8, pp.1206 – 1221.
- Yoon, S., and Kim, J. (2000). An empirical validation of a loyalty model based on expectation disconfirmation, *Journal of Consumer Marketing*, Vol.17, No. 2, pp. 120 – 136.
- Yuksel, A., and Rimmington, M. (1998). Customer-Satisfaction Measurement, *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 39, No. 6, pp. 60-71.
- Zaid, A. (1994). Malaysia airlines corporate vision and service quality strategy, *Managing Service Quality*, Vol. 4, No. 6, pp. 11-15.
- Zeithaml, V., Berry, L., and Parasuraman, A. (1993). The nature and determinants of customer expectations of service, *Journal of the Academy of Marketing Science*, Vol. 21, No. 1, pp.1-12.
- Zeithaml, V., Bitner, M., Gremler, D. (2006). *Services Marketing: Integrating customer Focus Across the Firm*, (4nd ed), New York: McGraw-Hill.
- Zeithaml, V., Parasuraman, A., and Berry, L. (1985). *Delivering Service Quality*, New York: Free Press.
- Zeithaml, V. (1990). *Review of Marketing*, Chicago: American Marketing Association.
- Zemke, R., and Bell, C. (1990). Service recovery: doing it right the second time, training, *Journal of Quality Management*, Vol. 27, No. 6, pp. 42-48.
- Zikmund, W., and Babin, B. (2009). *Essentials of Marketing Research*, (5nd ed), Mason: Cengage Learning.
- Zikmund, W., Babin, B., Carr, J., and Griffin, M. (2012). *Business Research Methods*, (9nd ed), Mason: Cengage Learning Publisher.
- Zineldin, M. (2006). The quality of health care and patient satisfaction: An exploratory investigation of the 5Qs model at some Egyptian and Jordanian medical clinics, *International Journal of Health Care Quality Assurance*, Vol. 19, No.1, pp.60 – 92.
- Zhao, X., Liu, Y., and Bi, H., and Law, R. (2014). Influence of coupons on online travel reservation service recovery, *Journal of Hospitality and Tourism Management*, Vol. 21, No. 1, pp. 18-26.

Zhou, Y., Huang, M., Tsang, A., and Zhou, N. (2013). Recovery strategy for group service failures the interaction effects between recovery modes and recovery dimensions, *European Journal of Marketing*, Vol. 47, No. 8, pp. 1133-1156.

Zhu, Z., Nakata, C., Sivakumar, K., and Grewal, D. (2013). Fix it or leave it? customer recovery from self-service technology failures, *Journal of Retailing*, Vol. 89, No. 1, pp. 15-29.

Zoghbi-Manrique-de-Lara, P., Suarez-Acosta, M., and Aguiar-Quintana, T. (2014). Hotel guests responses to service recovery: how loyalty influences guest behaviour, *Cornell Hospitality Quarterly*, Vol. 55, No. 2, pp. 152–164.

Zwaal, W., and Otting, H. (2007). Hospitality management student conception of education, *Tourism and Hospitality Research*, Vol. 7, No. 3. pp. 256-2.

## Appendix 1

### Definitions of justice and measurement constructs

The definitions of three justice dimensions:

- Distributive justice (the fairness of the outcome of the complaint resolution process)
- Procedural justice (whether the procedures for resolving the failure were considered to fair)
- Interactional justice (which concerns interpersonal behaviour employed in the complaint resolution procedures and delivery of outcomes).

Source: Palmer (2011,p.29)

### Measurement constructs

Distributive justice (adapted from Smith, Bolton and Wagner 1999; dos Santos and Fernandes, 2008)

1. The outcome I received was fair.
2. I did not get what I deserved.
3. I received what I required.
4. The result of the complaint was right.
5. In resolving the problem, the service firm gave me what I needed.

Procedural justice (adapted from Blodgett et al.,1997 and Smith and Wagner, 1999; dos Santos and Fernandes, 2008)

1. The firm responded quickly and fairly to my needs.
2. The firm showed adequate flexibility in dealing with my problem.
3. I had some control over the result I received from the complaint.
4. I got a chance to tell them the details of my problem.
5. The policies and procedures the firm had in place were adequate for addressing my concerns.

Interactional justice (adapted from Smith and Wagner, 1999; dos Santos and Fernandes, 2008)

1. The firm was appropriately concerned about my problem.
2. The firm did not put the proper effort into resolving my problem.
3. The firm's communications with me were appropriate.
4. I was given a reasonable explanation as to why the original problem occurred.

Positive emotions (adapted from Ellsworth and Smith, 1988, Richins, 1997)

1. Enjoyment
2. Joy
3. Pleasure
4. Happiness
5. Distressed

Negative emotions (adapted from Smith and Bolton, 2002)

1. Enraged
2. Incensed
3. Furious
4. Irate
5. Distressed

Loyalty (adapted from Garbarino and Johnson,1999)

1. I intend to switch to a competitor of the service firm.
2. I would not use this service firm again.
3. I will not acquire services of this service firm anymore in the future.

## Appendix 2

### Statement of Confidentiality

#### Original Message -----

**From:** [Schofield Peter](#)  
**To:** '[emma.clark@kgs.co.uk](mailto:emma.clark@kgs.co.uk)'  
**Sent:** Monday, March 11, 2013 2:17 PM  
**Subject:** Application for Conducting Market Research at Manchester Airport

Dear Emma

My PhD student, Steve Leow Sen Choon, is researching airline service quality with particular reference to service failure and recovery and would like permission to carry out an intercept questionnaire survey at Manchester airport to obtain a sample of 500 respondents. The aim of this study is to examine incidents of service failure in full service airlines and low-cost carriers and assess the comparative effectiveness of alternative recovery actions/strategies and their impact on post-recovery satisfaction and loyalty for a range of failure types. It will also examine the mediating effects of emotion and justice on post-recovery behaviour. A review of the pertinent literature has facilitated the development of the conceptual framework for the study (Attachment 1).

The questionnaire (Attachment 2) has been designed to address the hypotheses outlined in Attachment 1 relating to airline service quality, service failure and recovery. At the first stage in the process, all prospective participants will be provided with details of the research and what they are required to do on the Survey Information Sheet (Attachment 3). At this stage, they will receive a guarantee of their anonymity and assurance that they may withdraw from the survey at any stage in the process. If they consent to participate in the survey, they will be asked to provide a signature on the Questionnaire Survey Consent Form (Attachment 4), confirming that they understand what the survey is about, what they are being asked to do and that their anonymity is assured throughout. All data elicited from the questionnaire survey will be entered into an SPSS 20.00 matrix and kept in a secure location at the University of Salford. The anonymised data will also be analysed at an aggregate level using a variety of analytical methods such as t-tests, analysis of variance (ANOVA), factor analysis, least squares regression and hierarchical regression procedures. On completion of the analysis, the data will be destroyed. We have submitted an application for ethical approval at the University of Salford and would be grateful for your permission to conduct the survey at Manchester airport.

Best wishes  
Peter

**Continue from previous section**

**Statement of Confidentiality**

**From:** Emma Clark [mailto:emma.clark@kgs.co.uk]

**Sent:** 13 March 2013 10:21

**To:** Schofield Peter

**Subject: Re: Application for Conducting Market Research at Manchester Airport**

Peter

I put your request to conduct research at Manchester Airport to the decision maker there and unfortunately, the request has been denied. It is not considered to be appropriate to discuss airline service failures in the airport environment as they are wary of creating dissatisfaction by highlighting problems. I am sorry that this will create a problem for your PhD student and hope that he can find an alternative approach. It may be just as fruitful to conduct street interviews, where he is bound to find people who have experienced problems when flying and they may even have taken a complaint as far as writing a letter and receiving a response.

I am sorry that I am not able to give Steve Leow Sen Choon the go ahead that he was hoping for and I wish him well in his studies.

Regards  
Emma Clark



## **Appendix 3**

### **Student Invitation Message**

#### **News: Airlines Study**

**Date: May 10, 2013**

Steve Leow Sen Choon, a PhD student in Salford Business School, is inviting people to undertake a short online survey for the chance to win a return flight to London (from Manchester) plus £100 in shopping vouchers in an optional prize draw.

He is interested in your experiences of service failure in the airline industry. The questionnaire takes less than 15 minutes to complete. The survey has received ethical approval from the College of Arts & Social Sciences. If you have any questions regarding the study, please contact Steve Leow Sen Choon at **[l.senchoon@edu.salford.ac.uk](mailto:l.senchoon@edu.salford.ac.uk)**.

## Appendix 4

### Questionnaire structure

In this study, the questionnaire consisted of three sections. The first section, was designed to measure the service failure aspects that include: service failure severity, criticality of failure, post-failure satisfaction and customer complaint behaviors. Second section, was intended to capture customers' opinions about the service recovery (SR) and the comparative effectiveness of alternative recovery strategies. It also measure customer perceived justice in service recovery and overall outcome measures also included: overall satisfaction, intention to recommend and intention to repurchase. Third section, was elicited subjects socio-demographic characteristics and these including: age group, gender, country of origin, passenger type (business; leisure), air routes (domestic; international). These three sections of questions have been designed to address eight individual research objectives for this study.

#### Section A: Question 1

This question is designed to identify the specific nature of the critical incident by asking respondent to describe in detail a recent/past experience with a service failure incident. An example is shown below. Open-ended questions were used in this question, because it was difficult to determine how many people have experienced airline service failure, therefore, the open-ended format was considered to be the most appropriate style for this question.

**Please recall ONE RECENT INCIDENT when you experienced a service failure/problem with an airline and briefly summarise the problem in the box below.**

--

In addition, open-ended questions have been commonly used in the research on service failure and recovery (Lorenzoni and Lewis, 2004; Huang, 2008; De Matos et al., 2009; Lee et al., 2011; Choi and La, 2013). Research by David and Sutton (2011, p. 253) noted that open-ended questions enables the respondent to express their response in their own words, this may help to increase the richness of data.

### Section A: Questions 2 and 3

These questions were designed to explore the impact of airline failure severity and criticality of failure. The response scale were used a five point-Likert scale (e.g.1=very slight failure to 5=very severe failure). The respondents were asked to rate the severity and criticality of the service failure (e.g. flight delays, flight cancellation, mishandled baggage, etc) on a five point-Likert scale.

**QA2.**Based on above experience, please indicate the **SEVERITY** of the failure/problem (*by circling the most appropriate option on the scale*).

	Very Slight Failure	Slight Failure	Moderate Failure	Severe Failure	Very Severe Failure	Don't Know
	1	2	3	4	5	0

**QA3.**Based on above experience, how would you rate the **CRITICALITY** of the failure incident i.e. how **IMPORTANT** was it to you? (*by circling the most appropriate option on the scale*).

	Not a Problem	Slight Problem	Moderate Problem	Serious Problem	Very Serious Problem	Don't Know
	1	2	3	4	5	0

The five point-Likert scales are the traditional way to evaluate service quality (Tsaur et al., 2002, p.107). The failure severity variable was measured on a five point-Likert scale (e.g.1=very slight failure to 5=very severe failure). This scale has regularly been used in previous research on severity of service failure (Mattila, 2001; Weun et al., 2004; Magnini et al., 2007). The criticality of failure variable

was measure on a five point-Likert scale (e.g.1=not a problem to 5=very serious problem). This scale also has been used in hospitality research (Ahmad et al., 2014).

The ‘don’t know’ response was included in the scale, because this may help to prevent response left in blank and also help researcher to avoid missing value in the statistical analysis and also help displays accuracy of statistical data. According to Brace (2008, p. 57) the option of ‘*don know*’ can be a legitimate response to many questions where the respondent does not know the answer. Moreover, the variables for failure severity and criticality of failure have been used previously in empirical research. For example, to examine the variable of severity of failure that includes (Weun et al., 2004; Bhandari et al., 2007; Huang, 2008; Balaji and Sarkar, 2013; Kim and Ulgado, 2012; Tojib and Khajehzadeh, 2014). The previous studies investigated the variable of criticality of failure that includes studies (Hoffman and Kelley, 2000; Cranage, 2004; Seawright et al., 2008; Webster and Sundaram, 2009).

#### Section A: Question 4

This question was designed to explore the perception of customer on post-failure satisfaction (PFS). The PFS have been consideration one of the importance variable in the literature of service failure and recovery, for instance, in previous studies that have include this variable as the measurement item such as (McCollough et al, 2000; Wirtz and Mattila, 2004; Boshoff, 2005; Shapiro and Nieman-Gonder, 2006; Hedrick et al., 2007; Wang and Mattila, 2011; Harrison-Walker, 2012; Lii et al, 2012; Chang and Chen, 2013; Wen and Chi, 2013).

**QA4.** Please indicate how you felt after the service failure (*by circling the most appropriate option on the scale*).

	Extremely Dissatisfied	Fairly Dissatisfied	Neither	Fairly Satisfied	Extremely Satisfied	Don't Know
	1	2	3	4	5	0

The variables for post-failure satisfaction (PFS) and post-recovery satisfaction (PRS) in the question B4, were measure on a five point-Likert scale (e.g. 1=extremely dissatisfied to 5=extremely satisfied). This scale have used for a variety of disciplines, for example, banking service quality (Karatepe et al., 2005), business research (Neelankavil, 2007), organisation behaviours (Hellriegel and Slocum, 2008), tourism research (Stoeckl et al., 2006; Wang et al., 2009), hospitality research (Karatepe et al., 2006; Karatepe, and Uludag 2007; Karatepe, 2011).

#### Section A: Questions 5 and 6

These questions were designed to measure customer complaint behaviour in service failure incident. The format for contingency questions was used for both questions 5 and 6. Babbie (2010, p.263) states that contingency question can be asked where one response is contingent on previous response. A study by Johnson and Christensen (2012, p.182) noted that “contingency question is an item that directs participants to different follow-up questions”. They have been used, for example, to understand the impact of service failure on customer complaints behaviour have been commonly investigate in the studies of service failure and recovery (Eccles and Durand, 1998; Andreassen, 2000; Lewis and Spyropoulos, 2001; Kau and Loh, 2006; Johnston and Miche, 2008; Hsu and Chiu, 2008; Michel et al., 2009;

Priluck, and Lala, 2009; Casado et al., 2011; Nguyen et al., 2012; Balaji and Sarkar, 2013; Choi and La, 2013).

**QA5. Did you complain to the airline about the service failure?**

Yes		No	
-----	--	----	--

**QA6. Please indicate your level of agreement with the following statements (by circling the most appropriate option on each scale).**

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Don't Know
I don't like complaining	1	2	3	4	5	0
I'm reluctant to complain even when service failure occurs	1	2	3	4	5	0

### Section B: Question B1

This question is designed to understand how airlines respond to service failure. The open-ended question was used in this question, because this question was similar to question 1. Moreover, previous literature show has show that a significant difference of customer responses to the service failure. For example, research by Bamford and Xystouri (2005) examined service quality in an international airline using US Department of Transport and EU transportation sources to analysis service failure and recovery of airlines. The study highlighted that the most common service recovery strategies for airlines were free business class tickets to any destination, printed letters of apology signed by the president of the airline, food vouchers, free hotel accommodations and re-booked flights free of charge. Wen and Chi (2013) investigated the relationship between customer perception in service failure and recovery, perceived justice and loyalty. A sample of 581 useable questionnaires was obtained from passengers travelling on domestic airlines from Baiyun International Airport in Guangzhou, China. The main findings found that explanation, solving the problem and compensating with a free meal or drink. The

studies from Bamford and Xystouri (2005) and Wen and Chi (2013) indicated that there were significant differences in the airlines service recovery actions.

**Section B: How did the Airline Respond to the Service Failure?**

**QB1. Please briefly describe the AIRLINE STAFF RESPONSE to the service failure (in the box below) i.e. what did they do about it?**

--

**Section B: Question B2**

This question is designed to measure the differences in post-recovery satisfaction based on the recovery action received. The list of question format and rating scale were used in this question. Gray (2013, p.362) noted that a list of questions provided the respondent with a list of response, any of which they can select. Moreover, previous research has examined 16 types of service recovery actions: acknowledgement of the service failure, acceptance of responsibility of the service failure, apology, explanation, opportunity to voice my view/feelings, staff empowered to solve my problem, correction, compensation, facilitation, a prompt response, attentiveness, empathy, effort, appropriate place to explain customer complaint, follow-up from the management staff and follow-up in writing. This question is designed to evaluate various types of service recovery actions/strategies with 20 categories option were provided to the respondents and they can choose to indicate their received from the airline.

**QB2. Please tick (✓) ONLY THOSE ITEMS FROM THE FOLLOWING LIST THAT YOU RECEIVED FROM THE AIRLINE during the attempted recovery from your service failure. For each one you received, please indicate HOW IMPORTANT it was to you (by circling the most appropriate option on each scale).**

Did the airline provide.... (Please tick ✓)	✓	Extremely Unimportant	Fairly Unimportant	Neither Unimportant Nor Important	Fairly Important	Extremely Important	Don't Know
An <i>acknowledgement</i> of the service failure		1	2	3	4	5	0
<i>Acceptance of responsibility</i> for the failure		1	2	3	4	5	0
An <i>apology</i> for the service failure		1	2	3	4	5	0
An <i>explanation</i> of the service failure		1	2	3	4	5	0
An <i>opportunity</i> to voice my view/feelings		1	2	3	4	5	0
<i>Staff empowered</i> to solve my problem		1	2	3	4	5	0
<i>Correction</i> of the problem		1	2	3	4	5	0
<i>Compensation</i> for the service failure		1	2	3	4	5	0
<i>Facilitation</i> (the airline made it easy to complain / had easy to follow procedures)		1	2	3	4	5	0
A <i>prompt response</i> from the airline in dealing with the service failure		1	2	3	4	5	0
<i>Attentiveness/Helpfulness</i> of staff		1	2	3	4	5	0
<i>Empathy/Understanding</i> from staff		1	2	3	4	5	0
<i>Effort</i> from the staff in resolving my complaint		1	2	3	4	5	0
An <i>appropriate place</i> to explain/handle my complaint		1	2	3	4	5	0
<i>Follow-Up</i> from the airline management / staff		1	2	3	4	5	0
<i>Follow-Up in writing</i> from the airline management / empowered staff		1	2	3	4	5	0



member							
<b>Rebooking a flight</b> with endorsement to another carrier where the airline has a code sharing agreement		1	2	3	4	5	0
<b>Pocket expenses</b> including accommodation, transfer services voucher (e.g. bus, car hire, taxi, train) where the airline has a partnership agreement		1	2	3	4	5	0
<b>Future discount</b> re-route travel with discount including holiday package and travel insurance voucher where the airline has a partnership agreement		1	2	3	4	5	0
<b>Free loyalty points</b> for member and non-member		1	2	3	4	5	0
<b>Nothing</b>							

The service recovery variables were measured on a five point-Likert scale (e.g. 1=extremely unimportant to 5=extremely important). This scale has used in the previous research on service failure and recovery (Boshoff, 1997; Neelankavil, 2007; Kozub et al., 2014). The 20 recovery actions were used regularly in the service failure and recovery literature and the key literature sources for these 20 recovery actions is presented in Table 3.9. In addition, the 16 different types of service recovery actions have been used in previous studies on service failure and recovery (e.g. acceptance of responsibility, apology, explanation, compensation, etc). The last 4 service recovery actions: rebooking a flight, pocket expenses, future discount and free loyalty points were adopted by Qantas airlines (2011). These four service recovery actions were used in the Qantas airlines strike on 30 October 2011.

**Table 3.9.2 Service recovery actions and key literature sources**

<b>Service recovery actions/ strategies</b>	<b>Literature sources</b>
Acceptance of responsibility of the service failure	Thibaut and Walker, (1975); Blodgett et al., (1997); Tax et al., (1998)
Apology	Hoffman et al., (1995); Boshoff and Leong, (1999); McDougall and Levesque, (1999); Ruyter and Wetzels, (2000); Wirtz and Mattila, (2004); Mattila and Cranage, (2005); Shapiro and Nieman-Gonder, (2006); Kim, (2007); Wang and Mattila (2011)
Explanation	Kanousi (2005); Mattila (2006); Edvardsson et al., (2011); Bradley and Sparks, (2012); Chang and Chen, (2013); Vaerenbergh et al., (2013); Zhou et al., (2013); Xu et al.,(2014)
Opportunity to voice my view/feelings	Priluck and Lala, (2009); Lacey, (2012)
Staff empowered to solve my problem	Boshoff and Leong, (1998); Thwaites and Williams, (2006); Michel et al., (2009)
Correction	Hoffman et al., (1995); Johnston and Michel, (2008); Seawright et al.,(2008); Chung-Herrera et al.,(2010)
Compensation	McDougall, Levesque, (1999); Wirtz and Mattila, (2004); Mattila and Cranage, (2005); Kim, (2007)
Facilitation	Karatepe and Ekiz, (2004); Bhandari et al., (2007); Casado et al., (2011)
A prompt response	Hart et al., (1990); Hocutt et al., (2006); Varela-Neira, (2010a); Hua, (2012)
Attentiveness	Karatepe, and Ekiz, (2004); Bhandari et al.,(2007); Casado et al., (2011)
Empathy	Bell and Zemke, (1987); Johnston, (1995); Gruber and Frugone,(2011);Vaerenbergh et al.,(2013)
Effort	McDougall and Levesque, (1999); Chung-Herrera et al.,(2004); Ozgen and Kurt, (2012)
Appropriate place to explain customer complaint	Gelbrich and Roschk, (2011)
Follow-up from the management staff	Cranage, (2004)
Follow-up in writing	Andreassen, (2000) ; Lewis and Spyropoulos, (2001)
Rebooking a flight	Qantas airlines (2011)
Pocket expenses	Qantas airlines (2011)
Future discount	Qantas airlines (2011)
Free loyalty points	Qantas airlines (2011)

### Section B: Question B3

A review from the service failure and recovery literature, emotions have been found to have an important role in customer evaluation of service failures and recovery satisfaction (Bagozzi et al., 1999, Weiss et al., 1999; Schoefer, 2010). Therefore, this question was designed to understand customer emotions after service recovery. The emotion scale was used by Schoefer (2010) and the scale contains 10 different emotion items: joyful, upset, angry, warm feeling, happy, sad, in a bad mood, being valued, proud and annoyed. The emotion scales used in the service failure and recovery, they was used in previous studies (Edwardson, 1998; McColl-Kennedy and Sparks, 2003; Kim and Smith, 2005; Varela-Neira et al., 2010b; Strizhakova et al., 2012). Among these emotion scales, the Schoefer scale was the most recognised in the context of service failure and recovery.

The response scale used a five point-Likert scale (e.g. 1= a little to 5= extremely). In addition, the emotion items used in previous studies on service failure and recovery are highlighted in the following. Research by Edwardson (1998) examined how service encounters impact on consumer emotion and the scale contains four difference emotion items: embarrassment, anger, frustration and irritation. A study by Chebat et al (2005) investigated the impact of consumer's complaints behaviours and the measurement scale contains seven difference emotion items: anger, sadness, acceptance, disgust, expectancy, surprise, anxiety.

Research by McColl-Kennedy and Sparks (2003) examined the impact of service failure and recovery on customer satisfaction and the scale contains four difference

positive and negative emotion items: feels angry, contented and delighted. A study by Kim and Smith (2005) examined how service quality impact on customer satisfaction and the scale contains three difference emotion items: angry, frustrated and irritated.

Research by Varela-Neira et al (2010b) examined the impact of service failure and perceived justice on customer satisfaction and the scale contains eight difference positive and negative emotion items: pleased, delighted, happy, relieved, angry, offended, disappointed, discontent. Strizhakova et al (2012) examined how service failure impact on customer intention behaviours and the scale contains eight difference emotion items: anger, frustration, irritation, fear, anxiety, sadness, despair, and disappointment. A summary of emotion items used in previous research is presented in Table 3.9.3.

**QB3.PLEASE SELECT THE EMOTIONS (tick) from the list below which most closely describe how you felt after the service recovery and indicate the strength of those feelings (by circling the most appropriate option on the scale).**

(Please tick ✓)	✓	A Little	Moderately	Quite a Bit	Quite a Lot	Extremely	Don't Know
Joyful		1	2	3	4	5	0
Upset		1	2	3	4	5	0
Angry		1	2	3	4	5	0
Warm feelings		1	2	3	4	5	0
Happy		1	2	3	4	5	0
Sad		1	2	3	4	5	0
In a bad mood		1	2	3	4	5	0
Being valued		1	2	3	4	5	0
Proud		1	2	3	4	5	0
Annoyed		1	2	3	4	5	0

**Table 3.9.3: A summary of emotion items used in service failure and recovery studies**

Author	Year	Journal	Total of emotion items	Emotions
Edwardson	1998	Australasian Journal of Market Research	4	Embarrassment, anger, frustration and irritation
McColl-Kennedy and Sparks	2003	Journal of Service Research	3	Feels angry, contented and delighted
Chebat et al	2005	Journal of Service Research	7	Anger, sadness, acceptance, disgust, expectancy, surprise, and anxiety
Kim and Smith	2005	Journal of Service Research	3	Angry, frustrated and irritated
Schoefer	2010	Journal of Service Research	10	Joyful, upset, angry, warm feeling, happy, sad, in a bad mood, being valued, proud and annoyed
Varela-Neira et al	2010 b	Journal of Financial Services Marketing	8	Pleased, delighted, happy, relieved, angry, offended, disappointed and discontent
Strizhakova et al	2012	Journal of Service Research	8	Anger, frustration, irritation, fear, anxiety, sadness, despair, and disappointment.

#### Section B: Question B4

This question is designed to understand customer perception on post-recovery satisfaction (PRS). The PFS variable has been tested in service failure and recovery literature (e.g. Wirtz and Mattila, 2004; Boshoff, 2005; Mattila and Cranage, 2005; Forbes, 2005; Casado-Diaz et al., 2007; Wang and Mattila, 2011; Huang, 2011; Hua, 2012; Lii et al, 2012). The response scale were used a five point-Likert scale (e.g. 1=extremely dissatisfied to 5=extremely satisfied).

**QB4. Please indicate how satisfied you were with the airline's service recovery? (Please circle the most appropriate option on the scale show below).**

	Extremely Dissatisfied	Fairly Dissatisfied	Neither	Fairly Satisfied	Extremely Satisfied	Don't Know
	1	2	3	4	5	0

## Section B: Question B5

This question is designed to explore customer perceived justice in service recovery and loyalty aspects that include word-of-mouth and intention to repurchase. These variables have been used commonly in the context of service failure and recovery. For example, three justice dimensions: distributive justice, procedural justice and interactional justice were used in the previous studies that contain 11 justice items and the studies are shown in the following: distributive justice adapted by Smith et al (1999) and Dos Santos and Fernandes (2008). The procedural justice and interactional justice were adapted by (Blodgett et al 1997; Smith and Wagner, 1999; Dos Santos and Fernandes, 2008). The loyalty aspects include: word-of-mouth and intention to repurchase, this was adapted by Garbarino and Johnson (1999). The response scale was used a five point-Likert scale (e.g.1=strongly disagree to 5=strongly agree).

The customer complaint behaviour, perceived justice and loyalty aspects were measure on a five point-Likert scale (e.g. 1=strongly disagree to 5=strongly agree). This scale has regularly been used in previous research on service failure and recovery (Karatepe and Ekiz, 2004; Nadiri et al., 2008; Sousa and Voss, 2009; Weaver and Lawton, 2010; Kamran and Attiq, 2011; Komunda and Osarenkhoe, 2012; Xie and Heung, 2012).

**QB5.**Please indicate your level of agreement with the following statements (*by circling the most appropriate option on each scale*).

Your Overall Impression	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Don't Know
I felt that the outcome I received was fair	1	2	3	4	5	0
I was treated fairly and with respect whilst the	1	2	3	4	5	0

complaint was being dealt with						
I felt the procedure followed by the airline to address my complaint was fair	1	2	3	4	5	0
I got what I deserved	1	2	3	4	5	0
In resolving the problem, the airline gave me what I needed	1	2	3	4	5	0
The airline showed adequate flexibility in dealing with my problem	1	2	3	4	5	0
I had some control over the result I received from the complaint	1	2	3	4	5	0
Overall , I was satisfied with the airline's performance despite the service failure	1	2	3	4	5	0
I have recommended/will recommend the airline to others	1	2	3	4	5	0
I will fly with the same airline again	1	2	3	4	5	0
I would not switch to another airline	1	2	3	4	5	0
I consider this airline to be my primary choice	1	2	3	4	5	0
I like switching airlines for variety	1	2	3	4	5	0
I like switching airlines to compare services	1	2	3	4	5	0

### Section C: Question C1

This section is to collect from respondent socio-demographic characteristics and this question is designed to collect gender information and two categories option were provide to the respondents. An example is shown as below.

**QC1.** Gender ?

Male		Female	
------	--	--------	--

### Section C: Question C1 and C3

These questions are designed to collect respondent's information such as age and the purpose of the trip. The format of category questions was used in these

questions. There are six categories from which respondents can chose to indicate their age group.

**QC2.** What is your age group?

15 – 24	
25 – 34	
35 – 44	
45 – 54	
55 – 64	
65 and Over	

**QC3.** The purpose of your trip?

Business	
Leisure/holiday	
Other (please write)	

#### Section C: Question C4, C5 and C6

These questions are designed to collect respondent's information including: nationality, job type and airline type. The format of specified response was used in the following questions.

**QC4.** What is your nationality (which country issued your passport)?

\_\_\_\_\_

**QC5.** What is your current job /occupation?

\_\_\_\_\_

**QC6.** Which airline did you fly with?

#### Section C: Question C7, C8 and C9

The last three questions are designed to collect respondents' travelling details, for example: passenger type (e.g. first class, business class, and economy class), air routes (e.g. domestic; international) and the amount of travel with the airline. The



format of category questions was used in below questions. Question C7 provide three categories from which respondents can choose to indicate their type of travel. For question C8 is designed to collect respondents information on air route (e.g. domestic or international) and the last question C9, is designed to determine how frequently passenger travel with the airline and with 6 categories option were provide to the respondents and they can choose to indicate their amount of travel with the airline.

**QC7.** How did you travel?

First class	
Business class	
Economy class	

**QC8.** Domestic or International flight?

Domestic Within the UK	
International (in Europe)	
International (outside Europe)	

**QC9.** How many times have you previously flown with this airline?

First time	
Once before	
Twice before	
3-5 times	
6-10 times	
More than 10 times	

## **Appendix 5**

### **Ethical Approval Application**

College of Arts & Social Sciences  
Room 626  
Maxwell Building  
The Crescent Salford,  
M5 4WT T  
Tel: 0161 295 5876

**30 April 2013**

**Leow Sen Choon**

University of Salford

Dear Leow Sen Choon

**Re: Ethical Approval Application – CASS120031**

I am pleased to inform you that based on the information provided, the Research Ethics Panel have no objections on ethical grounds to your project.

Yours sincerely

**Deborah Woodman**

**On Behalf of CASS Research Ethics Panel**