STAY OR SWITCH: THE INFLUENCE OF PERCEIVED SERVICE RECOVERY ON CUSTOMER SATISFACTION

BY

CARVEN YONG KAH VEN LIM YONG JUN LOKE CHEE KIAN TIONG SIEW TING

A research project submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF MARKETING (HONS)

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE DEPARTMENT OF MARKETING

APRIL 2018

Copyright @ 2018

ALL RIGHTS RESERVED. No part of this paper may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, graphic, electronic, mechanical, photocopying, recording, scanning, or otherwise, without the prior consent of the authors.

DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
- (4) The word count of this research report is 10303.

Name of Student:	Student ID:	Signature:
1. CARVEN YONG KAH VEN	15ABB03760	
2. LIM YONG JUN	14ABB05373	
3. LOKE CHEE KIAN	14ABB02893	
4. TIONG SIEW TING	14ABB05517	

Date: 09 APRIL 2018

ACKNOWLEDGEMENT

It was a genuine pleasure and privilege for us to express our upmost gratitude and appreciation to Puan Sharmeela Banu Binti Syed AbuThahir, Faculty of Business and Finance, Department of Marketing, University Tunku Abdul Rahman, for her keen assistance, guidance and supervision at every stage of our research.

It is also a great pleasure for us to thank Ms Lam Siew Yong for her prompt inspirations and valuable advises to us to further improve our research.

We also owe a deep sense of gratitude to all the participants who actively participated in this research and their feedbacks and suggestions which are extremely valuable to our research.

Finally it is our foremost duty to extend our special gratitude to our family and friends for their sincere emotional support and encouragement at all time that led to the completion of this project.

TABLE OF CONTENTS

	Page
Copyright Pag	geii
Declaration	iii
Acknowledge	mentiv
Table of Cont	entsv
List of Tables	ix
List of Figure	sX
List of Abbrev	viationsxi
List of Appen	dices xii
Preface	xiii
Abstract	xiv
CHAPTER 1	INTRODUCTION1
1.0	Introduction1
1.1	Research Background1
1.2	Problems Statement
1.3	Research Objectives4
	1.3.1 General Objective4
	1.3.2 Specific Objective
1.4	Research Questions4
1.5	Hypotheses of the Study
1.6	Research Significance
1.7	Conclusion7
CHAPTER 2	REVIEW OF LITERATURE8

2.0	Introduction	
2.1	Review of the Literature	
	2.1.1 Distributive Justice	
	2.1.2 Procedural Justice	
	2.1.3 Interactional Justice10	
	2.1.4 Emotion11	
2.2	Review of Theoretical Framework13	
	2.2.1 Theoretical Framework 1	
	2.2.2 Theoretical Framework 214	
2.3	Proposed Research Framework15	
2.4	Research Hypothesis15	
2.5	Conclusion17	
CHAPTER 3	METHODOLOGY18	
3.0	Introduction	
3.1	Research Design	
3.2	Data Collection Method19	
3.3	Sampling Design	
	3.3.1 Target Population20	
	3.3.2 Sampling Frame and Sampling Location20	
	3.3.3 Sampling Elements21	
	3.3.4 Sampling Techniques21	
	3.3.5 Sampling Size21	
3.4	Research Instrument	
	3.4.1 Pilot Test	
	3.4.2 Questionnaire Design	

3.5	Constr	ructs Measurement	24
	3.5.1	Scale of Measurement	23
	3.5.2	Operational Definition of Construct	24
3.6	Data F	Processing	26
	3.6.1	Data Checking	26
	3.6.2	Data editing	27
	3.6.3	Data Coding	27
	3.6.4	Data Transcribing	27
	3.6.5	Data Cleaning	27
3.7	Data A	Analysis	28
	3.7.1	Demographic Analysis	28
	3.7.2	Inferential Statistic	28
		3.7.2.1 Convergent Validity	
		3.7.2.2 Discriminant Validity	29
3.8	Repres	sentatives of Data to the Population	30
3.9	Conclu	ision	30
CHAPTER 4	DATA	ANALYSIS	31
4.1	Introd	uction	31
4.2	Survey Response Analysis		31
4.3	Demographic Profile of Research Respondents		
4.4	Validi	ty, Reliability, Multicollinearity Analyses	33
	4.4.1	Convergent Validity	33
	4.4.2	Discriminant Validity	35
4.5 Co	nclusio	n	
CHAPTER 5	DISCU	JSSION, CONCLUSION AND IMPLICATIONS	

5.0	Introduction	
5.1	Summ	nary of Statistical Analyses
	5.1.1	Descriptive Analysis
		5.1.1.1 Demographic Profile of Research Respondents39
	5.1.2	Scale Measurement of Research
		5.1.2.1 Convergent Validity
		5.1.2.2 Discriminant Validity40
	5.1.3	Inferential Analysis40
		5.1.3.1 Path Analysis40
5.2	Discussion of Major Findings4	
5.3	Implication of study43	
	5.3.1	Managerial Implication43
		5.3.1.1 Distributive Justice43
		5.3.1.2 Procedural Justice43
		5.3.1.3 Emotions
		5.3.1.4 Customer Satisfaction44
	5.3.2	Academic Implication44
5.4	Limita	ation of study45
5.5	Recommendation	
5.6	Concl	usion47
References		
Appendices		

LIST OF TABLES

Page

Table 3.1: Measurement of Demographic Profile of Target Respondent, Independent	
Variables and Dependent Variable	23
	24
Table 3.2: Operational Definition of Construct	24
Table 3.3 Pilot test of reliability	30
	~ ~
Table 4.1 Summary of Respondent' Demographic Profile	32
Table 4.2: Assessment of Convergent Validity	34
	25
Table 4.3: Assessment of Discriminant Validity	35
Table 4.4: Items' Loading and Cross-Loadings	36
	27
Table 4.5: Path Analyses	31
Table 5.1: Summary of Major Findings	41

LIST OF FIGURES

Figure 2.1: Theoretical framework 1	13
Figure 2.2: Theoretical framework 2	14
Figure 4.1: Result from Partial Least Square	33

LIST OF ABBRAVIATIONS

AVE	Average Variance Extracted
CR	Composite Reliability
CS	Customer Satisfaction
DJ	Disributive Justice
Е	Emotion
IJ	Interactional Justice
РЈ	Procedural Justice
SEM-PLS	Structural Equaling Modeling – Partial Least Square

LIST OF APPENDICES

Appendix 3.1:Questionnaire	60-65
Appendix 4.1: Outer Loadings (without withdrawal of item E1)	66
Appendix 4.2: Outer Loadings (with withdrawal of item E1)	67
Appendix 4.3: Construct Reliability and Validity	68
Appendix 4.4: Fornell and Larcker's Criterion	69
Appendix 4.5: Cross Loadings	70
Appendix 4.6: Inner VIF Values	71
Appendix 4.7: Path Coefficients	72

PREFACE

Malaysia online businesses is experiencing a substantial growth and become a vital sector to be concerned on. Past study showed that Malaysian have high acceptance towards online shopping and most Malaysian have experienced in shopping online. In additions, service recovery satisfaction has become an attractive topic to study due service failure could not be avoid entirely by all online service providers. Past studies suggested that justice theory as the theoretical framework that have gained high attention in study of service recovery satisfaction in Malaysia context. Thus, the purpose of this study is to investigate the influence of perceived service recovery on customer satisfaction, with the mediating role of emotions in Malaysia context.

Abstract

Service recovery of online service is a contemporary issue which need to be studied due to the shifting shopping trends. No past studies had been done to study the customer satisfaction with online service recovery in Malaysia. This research investigates the relationship among customer perceived justice, emotion and customer satisfaction upon service recovery context. The effect of the three dimensions of justice theory which are distributive justice, procedural justice and interactional justice (DJ, PJ and IJ) on customer satisfaction (CS) and emotion (E) evoked by the service recovery actions is examined in this study. A research model is developed in this study to analyze the direct effect of the three dimensions of justice theory on customer satisfaction, along with the indirect effect via emotions. 200 respondents were approached to answer the survey-questionnaire to gather customer's perception of online service failure. Partial Least Technique (Smart-PLS) is used to analyze the data collected in this study. The research findings demonstrate that the PJ and DJ have significant relationship with CS with service recovery actions and E triggered by service recovery actions. In turn, significant relationship was not found between IJ with both CS and E. Result also shows that customer emotions evoked by service recovery action mediate the effect of perceived justice on customer satisfaction

CHAPTER 1: INTRODUCTION

1.0 Introduction

The first chapter will provide a clear introduction of the entire study which compromises of six different parts. The first part is the research background followed by problem statement, research objectives, research questions, hypothesis of the study and research significance.

1.1 Research Background

The emerging of network and technology have changes the traditional business where retailers start to extent their businesses to online platform and use internet as a new channel for advertising, sales, customer service and distribution (Griffis et al., 2012). The trend of consumer shifting from traditional shopping to online shopping has contributed to the growth of online retailing. Internet has brought a humongous impact to the operations of retail businesses, in which internet is used as one of the important tool for online retailer to communicate and receive feedback from their customer aiming to improve business performance and customer satisfaction (Klaus, 2013; Salehi, 2012). In addition, internet has also changed the traditional consumers shopping behaviour. Consumer today are more concern with the effort needed to pay in order to shop for goods and services. Consumers have high acceptance towards online shopping as it enables the customers to shop anytime, anywhere while allowing them to compare price, quality and products review among various alternatives with just a single click (Salehi, 2012).

According to Surmacz (2016), an estimated number of 1.61 billion people around the globe have made online purchase, contributing into retail sales of 22.049 trillion USD. The figure has increase by six percent compared to 2015 and the retail sales is forecasted to hit 27 trillion USD in year 2020 (Emarketer, 2016). In addition, internet has virtually eliminated global geographic boundaries which enable the online retailer to connect with various buyers and seller around the globe (Salehi, 2012). The online retailing in Malaysia are also experiencing a growing trend where consumers are willing to make purchase through online channel. According to The Star (2016), out of 500 respondents being surveyed, half of them make at least one online purchase per month and only seven percent of respondents have never tried online shopping. This phenomenon reveals that Malaysia market is a viable market for online retailer as Malaysian have high acceptance on online shopping.

However, there are still some difference between the experience of shopping between online shopping and traditional shopping. Unlike traditional shopping which offers a physical store where customer can reach to, online retailing mainly involves virtual store which did not exist physically.

1.2 Problem Statement

Factors that fall beyond the individual organization's control often have direct or indirect influence on production and delivery of services (del Río-Lanza et al., 2013). Kuo & Wu (2012) claims firms are unlikely to get rid of all kinds of service failure due to the intangibility and inseparability of service. Many companies seek to provide superior service in their activities, however they often make mistakes and errors in the delivery of service, which will lead to customer dissatisfaction. Alzaydi et al. (2017) stated that even firms which poses superior and well planned service quality program, service failure are still inevitable.

Service failure will result in customer dissatisfaction. Customer who encountered service failure may spread negative word-of-moth to their friends, family, and other people to express their dissatisfaction and bad experience and this will adversely impact company reputation and profits (Kim et al., 2009; Bitner, Brown, & Meuter, 2000). Customer who have encountered service failure often expect service recovery action from the service provider (Mirani, Hanzaee, & Moghadam, 2015).

Service recovery is defined by Nikbin et al. (2012) as a moment of truth for the organizations that delivered a failed service. It is critical to the service providers as they can still appease dissatisfied customer and able to retain and even fostering its relationship with them, ultimately make the dissatisfied customers to be the loyal ones (Nikbin et al., 2012; Rio-Lanza et al., 2013).

Gronroos (1988) & Kelley & Davis (1994) suggested the efforts, actions and activities that will be taken by a service provider to address the problems and the process attempted to rectify the service failure are regarded as service recovery. In addition, service providers must attempt appropriate recovery strategies to relief the dissatisfied customer to the state of satisfaction (Choi et al., 2014).

Justice theory has received significant acknowledgement and attention as a theoretical framework in various studies that seek to investigate service recovery with CS (Crisafulli & Singh, 2016; Wirtz & Mattila, 2004). Perceived justice is found having significant influence on CS in service recovery actions (del Río-Lanza et al., 2009). Several researches stress that customer emotions triggered during the service recovery will impact their relative satisfaction (Menon and Dubé, 2004; Ozkan-Tektas & Basgoze, 2017, Cai & Qu, 2017). In addition, del Rio-Lanza et al. (2013) also pointed out that customer emotion evoked by service recovery actions is significantly effecting CS as emotion which generated through individual evaluation on the event, not the event itself. Besides, customer emotion in service recovery action is seldom evaluated empirically in past studies (Choi et al., 2014).

In addition, there is no prior studies and research have been done in Malaysia to investigate the effect of DJ, PJ, IJ and emotions on CS with service recovery. Therefore, this study will study empirically on the influences of perceived justice on CS in service recovery in Malaysia, with the effect of emotion between the perceived justice and CS.

1.3 Research Objectives

1.3.1 General Objective

The healthy growth online shopping trend in Malaysia with broad acceptance among Malaysia is in need of study where no studies have been done to address online customer satisfaction with service recovery in Malaysia context. Thus the general objective of is to study online customer satisfaction with service recovery in Malaysia context.

1.3.2 Specific Objectives

To elucidate the influence of the dimension of justice theory (DJ, PJ and IJ) on customer satisfaction and the mediating effect of emotion between DJ, PJ and IJ and customer satisfaction.

1.4 Research Questions

- i. Does DJ influence emotion with respect to CS in service recovery?
- ii. Does DJ influence CS in service recovery?
- iii. Does PJ influence emotion with respect to CS in service recovery?
- iv. Does PJ influence CS in service recovery?
- v. Does IJ influence emotion with respect to CS in service recovery?
- vi. Does IJ influence CS in service recovery?
- vii. Does emotion mediate the effect among perceived justice and CS?

1.5 Hypotheses of the Study

H1a. DJ influences CS in a positive manner.

H1b. DJ influences emotions with respect to customer satisfaction in service recovery in a positive manner.

H2a. PJ influences CS in a positive manner.

H2b. PJ influences emotions with respect to CS in service recovery in a positive manner.

H3a. IJ influences CS in a positive manner.

H3b. IJ influences emotions with respect to customer satisfaction in service recovery in a positive manner.

H4. Customer emotion in response to service recovery action mediates the effect of the elements of perceived justice on CS.

1.6 Research Significance

This research emphasis on the relative influences of perceived justice on CS in service recovery and the effect of emotion between customers perceived justice and CS. Singh & Crisafulli (2016) suggested that with the broad utilization of service recovery as a maintenance system, how to transform whining consumers into fulfilled and faithful ones successfully has acquired expanded consideration from all of the marketing promoters. So, things can and often do turn out badly, prompting the requirement for a deliberate service recovery exertion went for settling consumers dissensions, affecting progressing fulfillment, and investigating the connection between on-going contentment, feeling and even devotion (Jha & Balaji, 2015).

Furthermore, our research is aiming on local online market in Malaysia as there were no previous research studies that empirically study on online service recovery in Malaysia e-market place. As to their concern, many of the researchers are more focusing on foreigner markets instead. According to Smith and Bolton (1998), an association's reaction to unsuccessful service can possibly either reestablish

consumer loyalty or bother consumers' dismissive assessments and drive them to change to a contender. Indeed, even many of the customer-focused association with the most grounded quality program is probably not going to have the capacity to avoid service failure issues entirely (Gautam, 2011). Along these lines, it is vital to comprehend on the factors that contribute to an effective service recovery strategies and how consumers assess the organizations' service recuperation endeavors.

As proven by Nikbin et al. (2010), there are numerous of researchers and practitioners studying on service recovery towards different. The few service recovery studies that have been conducted including towards airline passengers (McCollough, 2000) buyers of smartphone (Kau & Loh, 2006), hotel customers (Smith, Bolton, & Wagner, 1999; Karatepe, 2006) and also co-created retail industry (Rashid, Ahmad, & Othman, 2014). Hence, it can be said that there are very few previous studies that have investigated on service recovery empirically among online shoppers in Malaysia.

In spite of the fact that earlier studies investigate perceived justice regarding brickand-mortar service recovery attempts (Qin, Chen, & Wan, 2012), the view of justice relating to online service recovery action plans is not tended to yet. Hence, the results of this research can enable the both researchers, specialists and even academicians to see more about purchasers' future behavioral goals in online service recovery settings in Malaysia.

Besides, this study will further examine the effect of perceived justice on CS by evaluating the relative effect of customer emotions between DJ, PJ and IJ and CS. Past study suggested that customer emotion triggered by service recovery actions have significant relationship with CS (Hayati, 2017). Thus, the findings of this study would be helpful to generate insights for future research to better understand and evaluate customer online shopping behavior. In addition, this study could serve as a guideline in manager to identify and formulate effective service recovery strategy to better address all kinds of service failure to improve CS.

1.7 Conclusion

The trend of online shoppers in Malaysia as well as the importance of delivering excellent service quality to fulfill customers' satisfaction have been outlined in this chapter. A detailed explanation of the research variables and theories involved in this study will be discussed further in the following chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter involves the relevant theoretical theories and review the relevant literature on the effects DJ, PJ and IJ on emotion and CS. An illustration of the proposed research framework and CS hypothesis are formed to examine the factors that affect the perceived service recovery on.

2.1 Review of the Literature

2.1.1 Distributive Justice

Migacz, Zou, & Petrick (2018) define DJ as the deployment of physical resources by the organization in the purpose of rectifying and compensating for a service failure. The central concern of distribution justice is compensation received by the customer owing to the inconveniences and losses borne by the customers as the result of the service failure (Rashid et al., 2014).

Yeoh, Wooford, Eshghi, & Butaney (2014) suggested that tangible remedy must be equate with the damages resulted from the service failure. In addition, prior studies shows that individuals would react positively to service recovery actions when the perceived recovery actions are equate or has exceeded the loss they encountered (Shin, Casidy, & Mattila, 2018; Lin, Wang, & Chang, 2011; Siu, Zhang, & Yau, 2013). In addition, Choi & Choi (2014) stated that compensation can exist in either monetary or nonmonetary which include exchange, refunds, replace and repair. Yeoh et al. (2014) and Bambauer-Sachse & Rabeson (2015) suggested that the compensation which allocated by the organization must be fair and adequate in order to restore damaged relationship. This is supported by del Río-Lanza (2009) claimed that DJ has the significance influence on the overall CS of the service recovery.

Most customers who encountered service failure may perceive the fairness and adequateness of received tangible remedy from the offending service provider (Shin & Casidy, 2017). According to Fred Feldman's theory of distributive justice mentioned that it was all about getting what individual deserve from their country (Dekker, 2016). Past studies found that DJ will influence CS with service recovery in a positive manner (Chang & Hsiao, 2008; Nikbin et al., 2012; Siu et al., 2013).

Individual often encounter emotions, either positive or negative emotions when they perceive the justice of service recovery action. Past studies analyzed individual's emotional response triggered by service recovery events, where they found that fair DJ could enhance pleasant emotions while alleviate negative emotions (Söderlund & Colliander, 2015; Mattila, Hanks, & Wang, 2014).

2.1.2 Procedural Justice

Nikbin et al. (2012) defines this dimension of justice as the various processes, systems and policies in place to address the service failure. People often having perceived fairness in the process, and the process will only be viewed as fair if people perceive that they possess control over the process (Liu et al. 2012). PJ pays high emphasis on the fairness of the process, in which compromises of policies, procedures, and various criteria in the entire service recovery action (Zhao, Lu, Zhang, & Chau, 2012).

The focal points of PJ of a recovery process are the efficiency and flexibility pertaining to the recovery rules and policies, as defined as customer perceptions (Kuo & Wu, 2012). Processes and policies that devote to outcomes embodying acceptable principles could help to develop and maintain long-term relationship between the exchanging parties (Chen, Yang, Shin Sheu, & Liu, 2012).

The goal and objective of PJ is to resolve conflicts while encouraging the continuation of a beneficial and productive between the disputants (Nikbin, Ismail, & Marimuthu, 2012). Prior studies found that there were six evaluation criteria and dimensions for perceived procedural fairness, namely consistency, unbiased, accuracy, corrective, representatives and ethical (Wu, 2012; Nikbin et al., 2012).

According to Griffis, Rao, Goldsby, & Niranjan (2012), PJ has strong significant effect upon overall customers' satisfaction as it could alleviate the psychological cost (e.g., inconvenience, frustration, annoyance, anxiety) of the customers.

Customer often have certain level of emotional association in perceiving the flexibility, efficiency, appropriateness and the process attempted by offending firms to address the service failure. In addition, del Río-Lanza et al. (2009) claims that PJ will affect both customer emotions and CS positively.

2.1.3 Interactional Justice

Choi & Choi (2014) describes IJ as the ways in which customers are being treated, involving elements of politeness, courtesy and the efforts of service personnel in dealing with the customers upon service failure. It signifies the effort from service providers to communicate with customers as well as to treat them without discrimination. (Bahri-Ammari & Bilgihan, 2017). IJ

implicates interpersonal responsiveness, encountering individual with elevation and esteem, and also presenting suitable clarifications for any service disappointment in the service recovery context (Kuo & Wu, 2012).

IJ in service recovery circumstance is regarded as the means of the conduct of recovery process and the display of recovery result (Siu et al., 2013). Interactional justice also regarded as the fairness in interpersonal treatment includes two elements: the communication of regret, explanation and clarification of failures; the service provider's attempts to discover solutions to problems as well as displaying courtesy, empathy, honesty and politeness (Bahri-Ammari & Bilgihan, 2017). Individual who recognize high level of IJ would be linked to lower level of self-reported negative emotions (Le Roy, Bastounis, & Poussard, 2012).

Negative emotion often associate within customer when they make complaints, customer perceive fair behaviors in the service redemption context based on the way of service provider in expressing concern, honesty and politeness; as well as the way of the service contributor to rectify the service disappointment and making genuine effort to address the service failure (Kumar & Kumar, 2016). Different types of injustice may raise particular emotions whereby interactional injustice triggers indignation (Stets & Turner, 2014). In the events of work involving justice, they are the prime triggers of emotion, whereby interactional injustice could evoke emotional reactions (Matta, Erol-Korkmaz, Johnson, & Biçaksiz, 2014).

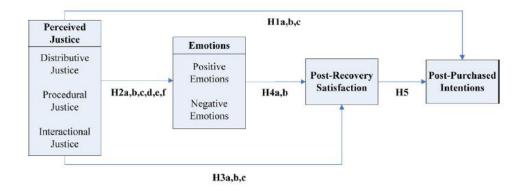
2.1.4 Emotion

Emotions is defined as the mental or affective states of an individual towards a unique incident or one's own thoughts (Nikbin, Iranmanesh, Hyun, Baharun, & Kim, 2015). Prior studies suggested that emotion can be categorized into two dimensions which are positive emotions and negative emotions. (Lu, Lu, & Wang, 2012). In addition, previous findings argue that customers' emotions have significant effect on customers' perception towards the satisfaction on service recovery context (Lee, Cho, & Ahn, 2012; Wen & Chi, 2013).

Customer will experience an emotional impact and become intensely emotional during service failure (Ozkan-Tektas & Basgoze, 2017). Such pre-recovery emotions would adversely impact customer attitude, behavior, evaluation, information processing and satisfaction (Ozkan-Tektas & Basgoze, 2017). The research of Williams and Aaker (2012) suggested that negative and positive emotions could exist within an individual perception towards an events at the same time in which this phenomenon might be obliterated in most of the other research. The distinct intensity of both positive and negative emotions impact subsequent subjective evaluation on customer satisfaction (Komunda & Osarenkhoe, 2012).

Customer's perceived justice during recovery context is a main influencer in producing either positive or negative emotions in which the emotions will later affect customer satisfaction (Wen & Chi, 2013). Higher level of each variables in perceived justice (distributive, procedural, interactional justice) can create precede level of positive emotions and vice versa.

2.2 Review of Theoretical Framework



2.2.1 Theoretical Framework 1

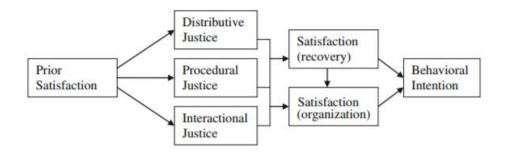
Source: Kuo, Y. F., & Wu, C. M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management*, *32*(2), 127-138.

According to Kuo & Wu (2012), the theory of perceived justice was being employed extensively for service recovery studies and it is a fundamental cognitive impact in creating ensuing CS as well as their post-purchase intentions. In addition, they suggested that effects of emotional responses towards subsequent customer satisfaction shall be evaluated to better understand the customers' evaluative judgment in recovery context.

Their framework identifies that perceived justice theory which constitutes DJ, PJ and IJ have significant impact on customer's post-recovery emotions. Different levels of perceived justice may cause either positive or negative emotions. Additionally, both of the dimensions of emotion can influence post-recovery gratification. Post-purchase intention is viewed as an outcome of customer satisfaction. Perceived justice theory also affects the customers' post-recovery gratification as well as post-purchase desires.

In this research, post-purchase intention is not included since the outcome of this theoretical framework displays insignificant influence of PJ and IJ towards post-purchase intention.

2.2.2 Theoretical Framework 2

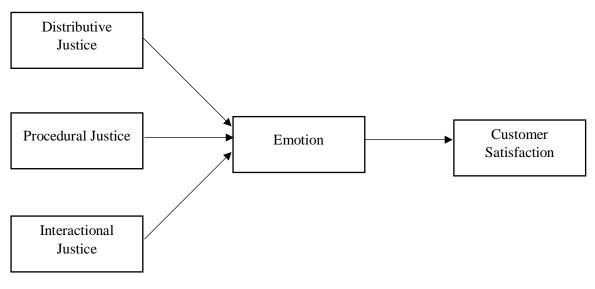


Source: Siu, N. Y. M., Zhang, T. J. F., & Yau, C. Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, *114*(4), 675-686.

This theoretical framework was proposed by Siu et al. (2013) to examine the effect of justice and customer satisfaction in retenting customer. The research tested dimensions of perceived justice during service recovery actions. This study indicates that different recovery actions and compensations provided by the company and distinct variables might imposed different effects which lead to unique outcome of customer satisfaction level.

Previous studies have proven that percevied justice have positive effects towards ustomer satisfaction on recovery action. The result from the study had further verified the significant relationship between perceived justice and satisfaction towards organization. Customer evalution towards perceived justice through dimensions such as ethicalness, fairness and also appropriateness gave also been discussed within the research. Positive evaluations on these dimensions enhance customer satisfaction towards service recovery action.

2.3 Proposed Research Framework



Source: Developed from research

Perceived Justice Theory has gained significant acknowledge and attention as theoretical framework in study of service recovery context (Choi & Choi 2014; Kuo & Wu, 2012; Wirtz & Mattila, 2004). Thus the perceived justice is adopted as the proposed research framework for this study, and emotion is included in this framework as mediator to evaluate and analyse the relationship between DJ, PJ, IJ, emotion and CS on online shopping among the Malaysia online shoppers.

2.4 Research hypothesis

DJ concentrates on the equitable outcomes provided by the company aiming to make up for customers' loss or inconvenience (Ro, Heejung, & Eric, 2014). It can be distributed as in vouchers, coupons, discounts and rebates to customers who encountered service failure (Rashid et al., 2014). Customers will react positively when they perceive that the company offers a significant equate to the costs and efforts that they sacrificed (Bahri-Ammari & Bilgihan, 2017). Past studies show that a fair DJ has significant effect to emotion triggered by the service recovery actions and subsequent CS (Mattila et al., 2014; Choi & Choi, 2014). Hence Hypothesis 1 is proposed as follows:

H1a. DJ positively affects CS.

H1b. DJ positively affects emotions with respect to CS in service recovery.

Ozkan-Tektas & Basgoze (2017) defined PJ as the methods and ways of companies taken to address service failure. The major concern of PJ is about the speed, flexibility and responsiveness in the recovery process (Rashid et al., 2014). Customers not only concerned about the way that their remuneration being made, but also the procedure that companies used to resolve their difficulties faced (Park & Park, 2016). According to Chang, Lai, & Hsu (2012), the responsiveness and flexibility of one service provider has a high interrelationship with CS rate. Past studies show that PJ will significantly affect CS (Griffis et al., 2012; del Río-Lanza et al., 2009). Furthermore, the findings of del Río-Lanza et al. (2009) potrays that customer emotion that evoked by the service recovery actions have significant effect on CS whereas high perception of PJ will significantly affect emotions and CS. Thus hypothesis 2 is proposed as follows:

H2a. PJ positively affects CS.

H2b. PJ positively affects emotions with respect to CS in service recovery.

IJ focus on the attitude portrayed by the service provider in customer perspective, practically is all about complaint handling. An expression of guiltiness can be made from the company conveys their sincerity towards consumers who encounter disappointment in the company, thus improving consumers' impression towards the company (Bambauer-Sachse & Rabeson, 2015).

According to Kumar & Kumar (2016), customers perceived fair behaviors in the service recovery context anticipate the service providers to make appropriate efforts and actions to address the problems. In the events of work involving justice, they are the prime triggers of emotion, whereby interactional injustice could evoke emotional reactions (Matta, Korkmaz, Johnson, & Biçaksiz, 2014). Hence, Hypothesis 3 is thus proposed as follows:

H3a. IJ positively affects CS.

H3b. IJ positively affects emotions with respect to CS in service recovery.

There are increasing number of researches focusing on customer emotion such as anger or joyfulness towards CS on the service provider company (Ozkan-Tektas & Basgoze, 2017). Consumption emotions can be categorized into positive and negative emotions (Deng, Yeh, & Sung, 2013).

Consumer evaluation on the perceived recovery justice is the main cause which lead to the creation of positive and negative emotions (Wen & Geng-qing, 2013). There are a few of research studies focusing on significant relationship between customer emotion and their satisfaction rate (Bonnefoy-Claudet & Ghantous, 2013; Hosany & Prayag, 2013). Hypothesis 4 is thus proposed as follow:

H4. Customer emotion in response to service recovery action mediate the effect of the dimensions of perceived justice on CS.

2.5 Conclusion

This chapter has clearly identified a few of relevant theoretical models and developed a research framework indicating the relationship between each IV and DV. Relevant analyses and research methodology in this study will be discussed in the following chapters.

CHAPTER 3 METHODOLOGY

3.0 Introduction

This chapter compromises a comprehensive description of the ways on how the research being carried out, encompassing research and sampling design, data collection methods, questionnaire formulation, pilot test, data processing steps and data analysis techniques that been employed.

3.1 Research Design

According to Tranter (2013), quantitative research is the appropriate way to conclude results on the proven or unproved hypothesis. In this study, quantitative research is used to explore further into details about the relationship between perceived justice, emotion and CS (Creswell, 2012). In order to test the propositions, a survey consisting of structured questionnaires was distributed through physical distribution and online forms. Besides, questionnaires were distributed to different major which are Johor Bahru, Kuala Lumpur and Penang to represent major Malaysians' responses towards the topic of the research (Abdelfatah, Shah, & Puan, 2015).

Descriptive research design is mainly emphasizing on figuring out "what is" by providing answers to who, what, when and how regarding the research problem instead of determining cause and effect relationship (Salaria, 2012). Hence, descriptive research design helps to identify on details into each variables that are being studied (Salaria, 2012) In addition, this study uses cross-sectional research design as it is easier and takes a shorter time to collect relevant data in order to finalize results (Ibrahim & Abdallahamed, 2014). Different variables can be compared and contrast at the same time to answer the research questions (Ibrahim & Abdallahamed, 2014).

3.2 Data Collection Method

Data collection method is an essential step in conducting a research as the right data collection method enables researchers to generate the most accurate and validate results (Maynard, Baker, & Harding, 2017). There are basically two types of data which include primary and secondary data. In this research, both types of data were being used (Maynard et al., 2017).

First of all, primary data is being collected in the form of questionnaires. 100 sets of self-administered questionnaires were at different cities which are Kuala Lumpur, Penang and Johor Bahru. The estimated time to complete the survey questionnaire is 10 minutes to 15 minutes. Besides, 100 sets of online survey forms were distributed through social media platform such as Facebook to reach more respondents at different states. Thus, 200 sets of survey-questionnaire were distributed altogether. In addition, a pilot study was conducted prior the full-scale study. Pilot study indicates a small scale of trial test which enable the researchers get to make amendments or changes to the questionnaires based on the feedback collected from the respondents (Hozawa, Tanaka, Mori, & Tohda, 2016).

Secondary data is also used in this research study. The sources of secondary data that used consists of journals, articles, textbooks and online websites. The additional information that is collected were used to generate new insights in this study (Neuman & Robson, 2014). Furthermore, secondary data can easily be collected without spending much cost or effort (Neuman & Robson, 2014). As majority of secondary data are longitudinal, changes or trends of targeted respondents can be observed over a period of time by analysing the data that have been collected (Johnston, 2017).

3.3 Sampling design

3.3.1 Target Population

Target population is the cluster or compilation of human beings that consists of information which is needed by researcher in their research (Malhotra, 2010).The target population for the study is the online shoppers in Malaysia. According to a research done by Malaysia Digital Association (2016), the population of Malaysia internet users were up to 21 million. At the same time, a survey conducted by Malaysian Communication and Multimedia Commission (2016) reveals that e-shopping or online shopping occupied 35.3 percent of the total online activities done by the Malaysia internet users. There are approximately 15.3 million of Malaysian are shopping through online channel and 62 percent of them use mobile devices in online shopping (Export.Gov, 2017).

3.3.2 Sampling Frame and Sampling Location

Sampling frame can be interpreted as a lists, maps or directions that provide guidance to researcher in looking for the sampling elements in a more effective and efficient method (Warnecke, 1998). However, there are no sampling frame for the research there is no listings which is able to provide detail information on the online shoppers.

The questionnaire of the research will be distributed through online and physical distribution. Both online and physical distribution have their own pros and cons and applying both method in the sampling process can cover up the shortcoming of respective method. The sampling location for the physical distribution of questionnaires will be Kuala Lumpur, Johor and Penang. On the other hand, the sampling location for online distribution unable to be defined in a clear manner. This is because the questionnaire will be designed to exist in Qualtrics form and distributed to respondents through social media. There are no geographic boundary for online channel hence causing the sampling location for the study to become uncertainty as the respondents could come from different states in Malaysia.

3.3.3 Sampling Elements

The sampling element for the research would be internet users that have experienced online shopping or e-shopping. It is important for the targeted respondent in the research to have experienced at least once in online shopping and service failure so they could provide information regard to the actual service recovery they have gone through.

3.3.4 Sampling Techniques

There are probability or non-probability sampling method that can be chose to conduct a survey for a research. Non-probability sampling method is chosen in the study in which the element of population is not selected according to probabilistic chance but instead researchers rely on their determination during the selection of sampling element. (Malhotra, 2010). Judgmental sampling is applied to the research as judgmental sampling is a convenience method that allows researcher to involve their judgment during the sampling process to decide what elements to be involved in the research (Marshall, 1996).

3.3.5 Sampling Size

Malhotra (2010) defines sampling size as the numbers of elements which is required in the research. The sample size of this study is set at 200 which adhere to the typology of Hinkin (1995), stating that the item-to-response is recommended to range from 1:4 to 1:10. 23 items were designed in the

research instrument hence the ideal sample size of this study should range from 92 to 230.

3.4 Research Instrument

3.4.1 Pilot Test

Pilot Testing serves to examine whether the questionnaires are able to perform it function effectively. Pilot test does not only test on the ambiguity and correctness of the questions, but it is important to ensure all the target respondents perceive and understand the questions in the same direction. Smaller scale of respondents will be targeted during the pilot test to ensure the questionnaires are flawless before the exact data collection process.

During the pilot testing, 50 sets of questionnaires were distributed through online channel. Respondents are asked to voice out their opinion on the structure, ambiguity and complexity of the questions in the distributed questionnaire. Besides, the using of straightforward, easy to understand questions and proper English are being concerned during the pilot test to ensure the questionnaires are able to understand by respondents. The respondents involved in the pilot test provides positive feedback after the completion of questionnaires and hence reflects that the questionnaires are ready to be apply in the research sampling.

3.4.2 Questionnaire Design

In the study of the research, close-ended structured questions is applied in the construction of the questionnaire. Respondents approached and reqested to answer the questionnaire by selecting answer from a series of provided choices. Questions are composed with simple English and straightforward manner to optimize respondent's understanding towards the questions. The questionnaire are made up of three distinct sections. Section A is designed to gather demographic profile such as gender, age and income level of respondents. Multiple choices are offered within the section and respondents are requested to select answers that match the respondent. Section B consists the research variables of the research. There three dimensions of perceived justice theory applied in the research which are DJ, PJ, IJ, and Emotion (E) as the mediator whereas Customer Satisfaction is the dependent variable of this study. Questions in section B are designed according to Likert scale and there are around 4-5 questions for each construct. Respondents are required to choose between 7 point of scale in which scale 1 signifies strongly disagree while scale 7 signifies strongly agree. Section C will prompt for respondents' opinion on the emotion triggered by the service recovery actions. Section D focus on the customer satisfaction towards service recovery and the questions are designed in the same way as section B. Respondent need to select answer within 7 point of Likert scale in which scale 1 signifies strongly disagree while scale 7 signifies strongly agree.

3.5 Constructs Measurement

3.5.1 Scale of Measurement

Table 3.1: Measurement of Demographic Profile of Target Respondent,	
Independent Variables and Dependent Variable	

Section	Variables	Primary Scale of Measurement	Scaling Technique
Section A: Demographic	Gender	Nominal	-
Profile	Age	Ordinal	-

	Income Level	Ordinal	-
Section B:	Distributive Justice	Interval	7-Point Likert
Independent Variables	Procedural Justice	Interval	7-Point Likert
	Interactional Justice	Interval	7-Point Likert
Section C: Mediator	Emotion	Interval	7-Point Likert
Section D: Dependent Variable	Customer Satisfaction	Interval	7-Point Likert

Source: Developed for research

A 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" has been employed. As compared to 5-point scale, the 7-point Likert scale increases the probability of achieving people's objective reality by providing more varieties of options (Joshi, Kale, Chandel, & Pal 2015).

3.5.2 Operational Definition of Construct

	- Accept compensations upon service
	failure.
	- Satisfy with compensation equate to loss
Distributive Justice	caused by service failure.
	- Fair compensation able to offset
	dissatisfaction
	- Get what ought to be compensated.

Table 3.2:Operational Definition of Construct

	- Compensation is sufficient to relieve dissatisfaction.
Procedural Justice	 Service provider alert to the service failure and take responsibility immediately. Customer complaint has taken care of to their satisfaction. Service failure being responded and resolved as soon as possible. Responsive and immediate service recovery action could maintain a long term beneficial relationship. Responsive service recovery action could relieve inconvenience, frustration, annoyance, anxiety.
Interactional Justice	 Service personnel provide appropriate explanation and solution. Service provider treats with dignity and respect. Service provider expresses their concern and empathy. Service provider being honest during the resolution of problem. Service provider treats in a courteous manner.
Emotion	 Company conducts service recovery actions. Disseminate positive word-of-mouth.

	 How the service firm reacts to recover a service failure Ability to evaluate the service recovery action without affected by prior service failure. Satisfaction towards the service recovery action doesn't affect the dissatisfaction towards prior service failure.
Customer Satisfaction	 Likely to repurchase. Spread positive word-of-mouth. How the service firm reacts to recover a service failure. Please with the solution. Feel delighted about the solution.
Source: Developed for	research

3.6 Data Processing

Saunder & Lewis (2009) suggested that data that have neither been processed nor analyzed are classified as raw data, which represents limited or meaningless. Data processing is referring to the data process preparation, in which included data checking, coding, editing and transcribing in order to eliminate invalid and irrelevant data. This is done to achieve completeness, accuracy and precision of the data filled by the respondents.

3.6.1 Data Checking

This step involves ensuring all the questionnaire is completely filled, all the data collected is complete and the pages of all questionnaire are intact. This

step is crucial as it can enable the researchers to filter and eliminate the incomplete or invalid responses to ensure the quality of the data to be used in subsequent statistical analysis.

3.6.2 Data Editing

The second step compromises of editing the questionnaires to filter and remove any questionnaire with inconsistent response and to eliminate questionnaire which contains any form of ambiguity.

3.6.3 Data Coding

Data coding involves transforming the data into the form that can be processed by the analytical software. Each response are assigned with a numerical value ranging from 1-7 in this study. This is important as it will make the data easier to be interpreted and also for comparison on the similarity and distinction of the variables from each other.

3.6.4 Data Transcribing

Data transcribing involves entering the data into the computer in the form excel sheets or tables form for following statistical analysis and interpretation.

3.6.5 Data Cleaning

Lastly, data entered into computer will undergo data cleaning which involve the rectification of any missing entries and identification of extreme values, range exceeded and data which is incompatible with the title.

3.7 Data Analysis

Partial Least Square (Smart-PLS) is employed to analyze the data collected in this research. Smart-PLS was originally developed by Professor Herman Wold in 1982. Smart-PLS is operating in a way as multiple regression analysis (Hair *et al.*, 2014). Moreover, Smart-PLS has the ability to specify multiple independent variables as well as multiple dependent variables in a single model; the ability to handle the multicollinearity issues among the independent latent variables, which make stronger and more accurate predictions (Wong, 2013).

3.7.1 Demographic Analysis

Demographic information provides data pertaining to the research respondents. The overall demographic information collected form the research respondents will be generated and presented in table form.

3.7.2 Inferential Statistic

Path coefficients is used to examine the whether there is any possible causal linkage exist between the statistical variables. The path coefficients is supported if the path coefficients value (β) is greater than 0.1; the T-statistic is more than 1.96 and the significant level is at least 0.05. The hypothesized relationships can be concluded as statistical significant these criteria have been fulfilled (Memom et al., 2018).

3.7.2.1 Convergent Validity

Convergent validity is a test to examine whether the items designed to measure the construct are associated with each other. According to the study of Fornell & Larcker (1981), there are three aspects to be examined in order to establish a fair convergent validity, in which are average variance expected (AVE), composite reliability and the outer loading values. This is supported by the study of Bagozzi & Yi (1988), suggesting that the desirable value for AVE should be greater than 0.5 in order to support that the majority of the variance in the item is resulted by the latent variable and the threshold value of acceptance of magnitude of outer loadings is at 0.6 and above. Chin (1988) claims that internal consistency of respective construct is indicated by composite reliability (CR). In addition, Fornell and Larcker (1981) suggested that the threshold value of acceptance for the internal consistency reliability of the model more than 0.7, which is the threshold value of CR.

3.7.2.2 Discriminant Validity

Russell, Peplau, & Cutrona (1980) stated that discriminant validity examines whether the indicators that designed to measure to each construct is distinct from other variables. Henseler, Ringle, & Sarstedt (2015) suggested that the AVE of every construct must be compared with each other in the model using its squared correlations in order to establish a satisfactory discriminant validity. AVE is a value that explains the average amount of variance that could be explained by a construct in its indicator variables as compared to the overall variance of its indicators. Fornell & Larcker (1981) suggested that fair discriminant validity is said to have achieved if the square root of AVE is larger as compared to the correlation value with other variable.

In addition, Chin (1998) stated that cross-loadings need to be analyzed to indicate discriminant validity. This is adhere to the typology of Fornell & Larcker (1981) suggested that each indicator's loading must have a greater loading value on its respective construct as compared to other construct.

3.8 Representativeness of Data to the Population

Pilot test it referring to feasibility studies or trail run done in preparation for a fullscale study. Pilot study can provide an insight to the researchers where the proposed methods instruments are too complicated or inappropriate and the identification of potential problems associated in the current research (Van Teijlingen & Hundley, 2001). Pilot test was conducted before collecting the data collection for the study in order to provide insight whether the respondent are able to comprehend the content of each item and the time taken for each respondent to answer the survey question. Survey questionnaires were distributed to 50 respondents and their respective response and feedback were recorded. As shown in Table 3.1, each construct have achieve a fair Cronbach's Alpha value which ranges from 0.762 to 0.858, Hair et al. (2010) suggested that the Cronbach Alpha value should exceed 0.7.

Construct	Number	Cronbach's Alpha
	of Items	
Distributive Justice	4	0.762
Procedural Justice	5	0.851
Interactional Justice	5	0.858
Emotion	4	0.776
Customer Satisfaction	5	0.763

Table 3.3: Pilot test of reliability

Source: Developed from research

3.8 Conclusion

This chapter has address the data collection methods and analyses be employed to study the relevant data. The subsequent results of the data analysed will be further discussed in the following chapter.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

This chapter outlines several analysis of the data collection by using survey questionnaires distributed to the respondents in Kuala Lumpur, Johor Bahru and Penang and also collected from respondents by using Qualtrics, a leading survey tool. The questionnaire mainly contains respondents' demographic profile and their own level of perception on CS towards service recovery upon service failure. In addition, this chapter also provides cross-tabulation and statistical test results performed by Partial Least Squares (Smart-PLS).

4.2 Survey Response Analysis

In this study, we are using two methods to collect data including online questionnaires distribution and also physical distribution in Kuala Lumpur, Johor Bahru and Penang. We had collected a total of 200 questionnaires where 100 sets of questionnaires through online and another 100 sets through physical distribution. In addition, all responses collected are valid to be used in data analysis all sections in the questionnaire had been completely filled.

4.3 Demographic Profile of Research Respondents

Table 4.1 shows the demographic characteristic of the research respondents. In this study, there are a total of 111 (55.5%) female respondents and 89 (45.5%) male respondents. Figures show that majority of respondents are female respondents. In this study, majority of the respondents come from the age group 20 - 24 years old with 143 respondents (71.5%), followed by the age group of 25 - 30 years old, with 27 respondents (13.5%). 22 respondents come from the age group below 20 years

old, representing 11% of the study. The minority of respondents are from the age group of 30 - 34 years old and above 40 years old, with 3 and 5 respondents, representing 1.5% and 2.5% respectively.

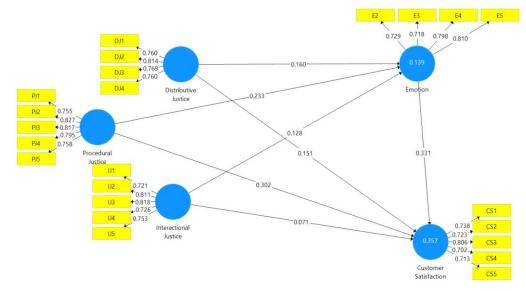
The majority of the respondents have an income of below RM 2000 with 150 respondents, representing 75% of the study. Followed by the income group of RM 2001 – RM 3000, with 20 respondents (10%). Income group of RM 3001 – RM 4000 and above RM 5000 are both ranked third, with 11 respondents come from each income group. Both representing 5.5% of the study respectively. There are only 8 respondents (4%) come from the income group of RM 4001 – RM 5000.

Demographic		
Characteristic	Frequency	Percentage %
Gender		
Male	89	44.5
Female	111	55.5
Age		
Below 20 years old	22	11.0
21 - 24 years old	143	71.5
25 - 29 years old	27	13.5
30 - 34 years old	3	1.5
35 - 39 years old	0	0.0
Above 40 years old	5	2.5
Income Level		
Below RM 2000	150	75.0
RM 2001 - RM 3000	20	10.0
RM 3001 - RM 4000	11	5.5
RM 4001 - RM 5000	8	4.0
Above RM 5000	11	5.5

Table 4.1: Summary of Respondent' Demographic Profile

Source: Developed from research





Source: Developed from research

4.4 Validity, Reliability, and Multicollinearity Analyses

4.4.1 Convergent Validity

Convergent Validity is a test examines whether two or more items used to measure the construct or phenomenon will produce a similar score. According to Fornell & Larcker (1981), there are three elements need to be considered in order to establish a fair convergent validity, in which are (1) the factor loading of the indicator; (2) the AVE and (3) the CR. Khan, Dewan, & Chowdhurdy (2016) suggests that if AVE value which greater than 0.5 is desirable for convergent validity as it suggests that the majority of the variance in the indicator is caused by the latent construct. Referring from Table 4.2, each construct have scored more than 0.5 AVE which ranges from 0.544 to 0.625. According to Bagozzi & Yi (1988), the threshold value for acceptance of magnitude of outer loading is 0.7 and above. Therefore, E1 was withdrawn from the overall measurement scale due to the outer loading is lower than 0.7 (0.643). The constructs in the research are accepted since the values are above 0.7 after withdrawing the under-scored item. Each

construct have achieved more than 0.7 CR which ranges from 0.849 to 0.893. Table 4.2 shows the result of each component that evident the measurement model had achieved a fine convergent validity.

Constructs	Item	Factor	Average	•	Cronbach's
		Loading	Variance	Reliability	
			Extracted		
			(AVE)		
Distributive	DJ1	0.760	0.602	0.858	0.783
Justice					
	DJ2	0.814			
	DJ3	0.769			
	DJ4	0.760			
Procedural	PJ1	0.755	0.625	0.893	0.850
Justice					
	PJ2	0.827			
	PJ3	0.817			
	PJ4	0.795			
	PJ5	0.758			
Interactional	IJ1	0.721	0.588	0.877	0.828
Justice					
	IJ2	0.811			
	IJ3	0.818			
	IJ4	0.726			
	IJ5	0.753			
Emotion	E2	0.729	0.585	0.849	0.767
	E3	0.718			
	E4	0.798			
	E5	0.810			
Customer	CS1	0.738	0.544	0.856	0.797
Satisfaction					

Table 4.2: Assessment of Convergent Validity

CS5	0.713		
CS4	0.702		
CS3	0.806		
CS2	0.723		

Source: Developed from research

4.4.2 Discriminant Validity

Discriminant validity is vital for research that contains latent variables which use more than one items to represent a construct. In other words, discriminant validity is examined to prevent the existence of multicollinearity issues in the reseach. (Ab Hamid, Sami, & Sidek, 2017) The interpretation of a hypothesized model could be incorrect and misleadingif the researcher failed to address this issue. Ab Hamid et al. (2017) and Fornell & Larcker (1981) suggest that there are few criteria can be used to access discriminant validity. (1) The factor loading items on the delegated construct must larger than all factor loadings of other constructs, (2) the square root of AVE of each construct should larger as compared to the correlations with other latent construct and (3) by accessing the cross-loading value and comparison of the item's loading.

	Customer	Distributiv	Emotio	Interaction	Procedur
	Satisfactio	e Justice	n	al Justice	al Justice
	n				
Customer	0.737				
Satisfaction					
Distributive	0.277	0.776			
Justice					
Emotion	0.475	0.219	0.765		

Table 4.3: Assessment of Discriminant Validity

Interaction	0.315	0.239	0.260	0.767	
al Justice					
Procedural	0.450	0.121	0.304	0.403	0.791
Justice					

Source: Developed from research

Result in Table 4.3 shows that all the constructs in this study have scored a larger square root of AVE than other constructs' coefficient.

	Customer	Distributiv	Emotion	Interactional	Procedura
	Satisfaction	e Justice		Justice	l Justice
CS1	0.738	0.253	0.386	0.158	0.319
CS2	0.723	0.112	0.283	0.111	0.252
CS3	0.806	0.235	0.491	0.390	0.483
CS4	0.702	0.198	0.234	0.176	0.274
CS5	0.713	0.191	0.244	0.234	0.225
DJ1	0.271	0.760	0.204	0.243	0.133
DJ2	0.163	0.814	0.180	0.202	0.095
DJ3	0.213	0.769	0.130	0.176	0.076
DJ4	0.188	0.760	0.150	0.096	0.054
E2	0.347	0.099	0.729	0.256	0.303
E3	0.311	0.217	0.718	0.123	0.095
E4	0.315	0.224	0.798	0.192	0.129
E5	0.448	0.154	0.810	0.208	0.338
IJ1	0.151	0.125	0.228	0.721	0.246
IJ2	0.196	0.156	0.160	0.811	0.316
IJ3	0.332	0.270	0.281	0.818	0.321
IJ4	0.250	0.142	0.145	0.726	0.309
IJ5	0.222	0.175	0.138	0.753	0.357
PJ1	0.325	0.051	0.222	0.260	0.755
PJ2	0.346	0.084	0.163	0.337	0.827

Table 4.4: Items' Loading and Cross-Loadings

	•			•	
PJ3	0.369	0.103	0.254	0.407	0.817
PJ4	0.361	0.094	0.278	0.311	0.795
PJ5	0.369	0.137	0.269	0.275	0.758
Source: De	eveloped from r	esearch			

Stay or Switch: The Influence of Perceived Service Recovery on Customers Satisfaction

Chin (1998) suggested that each indicator's loading must have a larger loading value on its own construct relative to the values of other constructs. Results in Table 4.4 have proven that the desirable result had been achieved.

According to the results of Table 4.3 and 4.4, it is proven that the model had achieved fair discriminant validity as both tests yielded a satisfactory fair result.

Table 4.5. Path Analyses					
Path	VIF	Path Coefficient	T-Statistic	Result	
DJ > Emotion	1.061	0.16	2.416	Accepted	
PJ > Emotion	1.195	0.233	2.816	Accepted	
IJ > Emotion	1.249	0.128	1.662	Rejected	
DJ > CS	1.091	0.151	2.378	Accepted	
PJ > CS	1.258	0.302	4.857	Accepted	
				-	
IJ > CS	1.268	0.071	1.032	Rejected	
Emotion > CS	1.162	0.331	4.891	Accepted	

Table 4.5: Path Analyses

Source: Developed from research

The VIF values, path coefficient and T-statistic for the all the paths in the study are showed in Table 4.5. The VIF value in all paths range from 1.061-1.249. Hence, this research had successfully get rid of the multicollinearity issues as all the VIF values are lesser than 2.5. Furthermore, the result show

that five out of seven hypothesis proposed had significant effect (T-statistics > 1.96). The first findings is DJ significantly affects CS and emotion emotions evoked by service recovery actions. This result provide support for both H1a and H1b. The result of PJ aligned with DJ whereas the expected effect is evident in both CS and emotion. This shows that PJ can improve CS (H2a) and will affect customer emotion triggered by service recovery action. In turn, IJ is not significantly affecting both CS and emotion evoked by the service recovery action. This result does not support for both H3a and H3b.

In turn, the result in this study support that emotions is having significant mediating effect of both PJ and DJ on CS. Accoding to Memon et al. (2018) a bias-corrected bootstrapping is considered as one of the powerful tools to recognize mediation. In addition, Preacher & Hayes (2004) and Zhao et al. (2010) suggested that indirect effect (T-statistic > 1.96) which is statistically significant should be taken to prove the existence of mediation. Thus referring to the results in Table 4.5, mediating effect of emotion exists for both DJ (T-statistic = 2.416) and PJ (T-statistic = 2.816), but not for IJ (T-statistic = 1.662).

4.5 Conclusion

In summary, we can conclude that distributive justice and procedural justice have a significant positive correlation with the customer satisfaction. Emotions, a mediator had also enhance the positive relationship between distributive justice and procedural justice with customer satisfaction. However, interactional justice does not have a significant positive correlation with the customer satisfaction. The data in this chapter was proven to be reliable and validated.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

This is considered as the finale chapter that summarizes the whole chapter one to four in a brief discussion on the major findings. Further, it involves the managerial implications, the limitations and recommendation in order to improve the quality of the overall study. This concludes the entire findings of our research.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

5.1.1.1 Demographic Profile of Research Respondents

There are 111(55.5%) female and 89 (45.5%) male respondents in total. 71.5% of the respondents fall into the age group of 20-24 years old. 75% of the respondents are from the income group of below RM 2000.

5.1.2 Scale Measurement of Research

5.1.2.1 Convergent Validity

According to the result from the assessment of Convergent Validity, every constructs of our research achieved AVE with over 0.5, ranging from 0.544 to 0.625. There is one item E1 has been withdrawn since the outer loading value is lower than 0.7. In overall, all of the constructs in the research are accepted since they all achieved Composite Reliability value with more than 0.7, which is ranging from 0.849 to 0.893.

5.1.2.2 Discriminant Validity

In determining the discriminant validity, two tests have been conducted. The square root of AVEs along with all the other constructs in our research is higher than other constructs' coefficient. In the result of loadings and cross-loading, each of our indicator's loading value is greater on its corresponding construct as compared to other constructs. These have proven that our research model had obtained fair discriminant validity.

5.1.3 Inferential Analysis

5.1.3.1 Path Analysis

The VIF values of the paths is the study are ranging from 1.061 – 1.249. All the IV are positively linked to both E and CS as their T-statistics values exceed 1.96 except for the interactional justice. The T-Statistic values for interactional justice towards emotion and customer satisfaction are at 1.662 and 1.032 respectively.

5.2 Discussion of Major Findings

Hypothesis	Result			
H1a. DJ influences CS in a positive manner.	Accepted			
H1b. DJ influences emotions with respect to				
customer satisfaction in service recovery in a positive	Accepted			
manner.				
H2a. PJ influences CS in a positive manner.	Accepted			
H2b. PJ influences emotions with respect to CS in	Accepted			
service recovery in a positive manner.				
H3a. IJ influences CS in a positive manner.	Rejected			
H3b. IJ influences emotions with respect to				
customer satisfaction in service recovery in a positive	Rejected			
manner.				
H4. Customer emotion in response to service				
recovery action mediates the effect of the elements of	Accepted			
perceived justice on CS.				

Table 5.1: Summary of Major Findings

Source: Developed for the research.

In this research paper, the result outcomes indicate that all of the hypotheses are accepted except for H3a and H3b. This signifies that IJ have insignificant relationship towards CS in service recovery as well as towards E with respect to customer satisfaction in service recovery.

DJ which identify customer perceived level of fairness and adequateness of received tangible remedy (Shin & Casidy, 2017) significantly influence CS towards service recovery. Fair DJ could enhance pleasant emotions while alleviate negative emotions (Söderlund & Colliander, 2015; Mattila, Hanks, & Wang, 2014). Past study also shows that perceived DJ significantly affect E in post-recovery (Ozgen & Duman Kurt, 2012). DJ is the locus of the formation of CS whereby it represents the compensation fairness and transaction-specific judgements (Chang et al., 2012).

Customer's emotions will be negatively affected whenever they perceive certain outcome to be unequally distributed (Chen, Liu, Sheu, & Yang, 2012).

As for PJ, the outcome adheres with the findings of Qin et al., (2012), whereby PJ is positively effecting CS. The process control, timing, flexibility, accessibility and design control which contribute to procedural justice can significantly influence the customer degree of satisfaction towards service recovery. Research of Del Río-Lanza et al. (2013) supports that PJ will significantly affect customer E triggered by service recovery actions. In addition, the research findings of Barkworth & Murphy (2015) indicates that the all of the discrete E are connected to the perceived PJ. Moreover, Wen & Chi (2013) also claim that the influence of PJ on CS towards service recovery is partially mediated by positive emotion.

There is a past research indicates that the effect of interactional justice on postrecovery satisfaction towards organization was found to be insignificant (Siu, Zhang, & Yau, 2013). Customers are more particular about the results and procedures of service recovery rather than their interaction with the service provider. As E has found to be significantly associated with CS, the negative relationship between IJ and E can be explained by the research which discovered that attributes in IJ are not important concerns to customer in the recovery process along with its result showing that IJ has no significant influence on satisfaction (Yang, 2012).

Customer emotions triggered by service recovery action mediate the influence of perceived justice on CS. The result is supported by the findings of past studies indicating that E induced within several marketing settings have significant influence on CS (Pedragosa, Biscaia, & Correia, 2015; Söderlund & Colliander, 2015). In addition, Biscaia et al. (2012) indicates that positive and negative E can directly influence CS where it can either ruin or improve the customer evaluation of the service quality provided.

5.3 Implication of study

5.3.1 Managerial Implication

5.3.1.1 Distributive Justice

Distributive justice is justified to significantly affect emotions and customer satisfaction. This indicates the physicals or tangibles compensated by the service providers did played a certain roles in affecting customers emotions which in latter bring effect to customer satisfaction towards service recovery. Service providers should exert more effort in deciding an appropriate compensation for customers who have went through a service failure. Compensation provided by service provider should be customized according to the loss of customer due to the event of failure. A gratified distribution and compensation could reduce the possible generation of negative emotions and increase customer satisfaction in extent.

5.3.1.2 Procedural Justice

PJ has positive effects towards emotions and CS on service recovery. Compliance to fair process and procedures when it comes to a service recovery actions can result in positive customer emotions. Service provider can develop a general guideline of recovery procedures for service failure and inform customers on the actions, steps and process in a recovery action. Service provider can ensure customers are notified on the progress of service recovery action. Customers who are well known on the procedural aspect of the recovery process are less likely to generate negative emotions and resulted better satisfaction level towards service recovery action.

5.3.1.3 Emotions

Emotions is being proved to have significant effect to mediate perceived justice and bring effect to CS towards service recovery. Service providers should be more attentive during service recovery process to observe customers' reactions and responses towards the recovery offered by service providers. Customer evaluation and perception on DJ and PJ lead to the creation of either positive or negative emotions. Service provider should be more compassionate and learn to communicate with customers in an appropriate manner. Service providers who can identify and comprehend the causal of customer's emotion during a service failure could customize their response and recovery action to calm down the involved customer more effectively.

5.3.1.4 Customer Satisfaction

Customer satisfaction towards service recovery are driven by distributive and procedural justice in addition with mediator effect from emotions. In order to manage service recovery action in effective way, service providers are advised to pay focus on distributive and procedural justice during the execution of recovery action. Well planned and developed recovery actions are not enough if emotions are being ignored in the event of recovery. Service providers should constantly note the changes of customer's emotion to secure better customer satisfaction.

5.3.2 Academic Implication

In most of the previous study on the customer satisfaction towards service recovery such as research done by Nikbin et al. (2012) and Choi & Choi

(2014), theory of perceived justice is the only framework being applied into the research. However, our research does not only apply theory of perceived justice but searching for extension of affecters that can significantly affect customer satisfaction. Finding from the research have proven the significant effect of emotions as a mediator in the framework in affecting customer satisfaction. Emotions which serve as a mediator, is generated when customers evaluate the perceived recovery justice and has the ability to impact customer satisfaction towards service recovery. This finding could serve as a base for the researcher who are conducting studies with related topic about customer satisfaction on service recovery process.

Besides, the study has revealed some contrasting point of view as compared to some previous research done on the same topic. Unlike previous studies which claimed that all available variables in Justice Theory have significant effect towards customer satisfaction, the finding shows that interactional justice was unable to affect both emotions and customer satisfaction towards service recovery. This finding could help researcher to reinterpret on the application of theory of perceived justice in the market segment in Malaysia.

5.4 Limitation of Study

There are few limitations in the research that needed to be noted. First, cross sectional data is collected in the survey which mean the data reflect a respondent feedback only on the particular time. Previous study by Wen and Chi in 2013 suggests that customer emotions keep on changing and vary across the time. Cross sectional study might not be adequate to collect accurate data on customer emotions.

The study has focused on the variables that might affect customer's satisfaction towards service recovery. However, there was no specification on the types and significance of the service failure in the study. Service failure happened in a grocery shop and service failure in an air flight transportation cannot be equalized since the consequence generated from both failure lead to different level of customer's lost. The former might only lost few minutes or hours to get an appropriate service recovery but the latter might have need to cancel a booked hotel because he or she are unable to reach the vacation destination as planned. Without pre-mentioning in the survey, respondents might generate their own imagination on the type of service failure in order for them to answer the questions regarding to the service recovery. This would lead to an inconsistent of data resulted by the variation of respondent's imagination.

There is another limitation on the research in which quantitative research method is being used within the study. As compared to qualitative research, quantitative research do not include depth experience description (Choy, 2014) whereby respondents were unable to provide more detailed and personal responses within the data collection process. This could result in leave out of potential variables or influences in the study.

5.5 Recommendation

Future researchers can apply longitudinal study in research which requires measurement and responses on customer emotion. Longitudinal data are more appropriate to describe customer emotions because it allows researchers to collect respondent's feedback throughout the time. This could provide researcher better and more accurate data on customer emotions and enable researcher to observe the changing trends on emotions towards service failure or recovery actions.

Future researchers are suggested to insert a condition of service failure when they are conducting research regarding service failure. This implementation mainly serve to standardize the respondent's answers towards the service recovery action. Researchers can choose to implement a service failure condition with higher significant, lower significant or both at the same time to examine different customer's responses when they are dealing with different level of service failure involvement.

Besides, future researcher are advised to apply qualitative research or a mix strategy of quantitative and qualitative research when dealing with study which requires depth customer's personal opinion. This implementation could allow respondents to provide better explanation, evaluation and responses during the survey process. Better responses from respondent can hence lead to a better quality of the study.

5.6 Conclusion

To sum up, this research determines the variables that influence affect the perceived service recovery on CS. Hence, we can conclude that DJ and IJ has a significant correlation with CS while IJ does not have a significant correlation with CS. Additionally, the moderation interaction (emotions) helps to reinforce this research.

References

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). IOP Publishing.
- Abdelfatah, A. S., Shah, M. Z., & Puan, O. C. (2015). Evaluating the sustainability of traffic growth in Malaysia. *Journal of Traffic and Logistics Engineering Vol*, *3*(1).
- Ali, F., & Amin, M. (2014). The influence of physical environment on emotions, customer satisfaction and behavioural intentions in Chinese resort hotel industry. *Journal for Global Business Advancement*, 7(3), 249-266.
- Alzaydi, Z. M., Al-Hajla, A., Nguyen, B., & Jayawardhena, C. (2017). A Review of Service Quality and Service Delivery: Towards A Customer Co-Production and Customer-Integration Approach. *Business Process Management Journal*, (just-accepted), 00-00.
- Augusto de Matos, C., Luiz Henrique, J., & de Rosa, F. (2013). Customer reactions to service failure and recovery in the banking industry: the influence of switching costs. *Journal of Services Marketing*, 27(7), 526-538.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, *16*(1), 74-94.
- Bahri-Ammari, N., & Bilgihan, A. (2017). The effects of distributive, procedural, and interactional justice on customer retention: An empirical investigation in the mobile telecom industry in Tunisia. *Journal of Retailing and Consumer Services*, 37, 89-100.

- Bambauer-Sachse, S., & Rabeson, L. (2015). Determining adequate tangible compensation in service recovery processes for developed and developing countries: The role of severity and responsibility. *Journal of Retailing and Consumer Services*, 22, pp. 117-127.
- Barkworth, J. M., & Murphy, K. (2015). Procedural justice policing and citizen compliance behaviour: The importance of emotion. Psychology, Crime & Law, 21(3), 254-273.
- Biscaia, R., Correia, A., Rosado, A., Maroco, J., & Ross, S. (2012). The effects of emotions on football spectators' satisfaction and behavioural intentions. *European Sport Management Quarterly*, 12(3), 227-242.
- Bitner, M. J., Brown, S. W., & Meuter, M. L. (2000). Technology infusion in service encounters. Journal of Academy of Marketing Science, 28(1), 138–149.
- Bonnefoy-Claudet, L., & Ghantous, N. (2013). Emotions' impact on tourists' satisfaction with ski resorts: the mediating role of perceived value. *Journal of Travel & Tourism Marketing*, *30*(6), 624-637.
- Cai, R., & Qu, H. (2017). Customers' perceived justice, emotions, direct and indirect reactions to service recovery: moderating effects of recovery efforts. Journal of Hospitality Marketing & Management, 1-23.
- Chang, H. H., Lai, M. K., & Hsu, C. H. (2012). Recovery of online service: Perceived justice and transaction frequency. *Computers in Human Behavior*, 28(6), 2199-2208.
- Chang, H. S., & Hsiao, H. L. (2008). Examining the casual relationship among service recovery, perceived justice, perceived risk, and customer value in the hotel industry. *The Service Industries Journal*, 28(4), 513-528.
- Chen, H. G., Yu-Chih Liu, J., Shin Sheu, T., & Yang, M. H. (2012). The impact of financial services quality and fairness on customer satisfaction. *Managing Service Quality: An International Journal*, 22(4), 399-421.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.

- Choi, B., & Choi, B. J. (2014). The effects of perceived service recovery justice on customer affection, loyalty, and word-of-mouth. *European Journal of Marketing*, 48(1/2), 108-131.
- Choi, B., & 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*, 27(3), 223-233.
- Choi, C. H., Kim, T. T., Lee, G., & Lee, S. K. (2014). Testing the stressor–strain– outcome model of customer-related social stressors in predicting emotional exhaustion, customer orientation and service recovery performance. *International Journal of Hospitality Management*, 36, 272-285.
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science*, *19*(4), 99-104.
- Conducting, and Evaluating Quantitative and Qualitative Research. Fourth ed. Boston: Pearson, 204-35.
- Creswell, J. W. (2012). Collecting qualitative data. *Educational Research: Planning,*
- Crisafulli, B., & Singh, J. (2016). Service guarantee as a recovery strategy: The I mpact of guarantee terms on perceived justice and firm motives. *Journal of Service Management*, 27(2), 117-143.
- Dekker, T. J. (2016). Fred Feldman's Distributive justice: getting what we deserve from our country. Oxford: Oxford University Press, 2016, 288 pp. *Erasmus Journal for Philosophy and Economics*, 9(2), 208-212.
- Del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2009). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, 62(8), 775-781.
- Del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2013). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, 62(8), 775-781.
- Deng, W. J., Yeh, M. L., & Sung, M. L. (2013). A customer satisfaction index model for international tourist hotels: Integrating consumption emotions

into the American Customer Satisfaction Index. International Journal of Hospitality Management, 35, 133-140.

- Emarketer. (2016). Worldwide Retail Ecommerce Sales Will Reach \$1.915 Trillion This Year. Retrieved March 18, 2018 from https://www.emarketer.com/Article/Worldwide-Retail-Ecommerce-Sales-Will-Reach-1915-Trillion-This-Year/1014369
- Export.Gov. (2017). Malaysia-eCommerce. Retrieved January 17, 2018 from https://www.export.gov/apex/article2?id=Malaysia-E-Commerce
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Fang, Y., Qureshi, I., Sun, H., McCole, P., Ramsey, E., & Lim, K. H. (2014). Trust, Satisfaction, and Online Repurchase Intention: The Moderating Role of Perceived Effectiveness of E-Commerce Institutional Mechanisms. Mis Quarterly, 38(2).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 39-50.
- Gautam, V. (2011). Investigating the moderating role of corporate image in the relationship between perceived justice and recovery satisfaction: evidence from Indian aviation industry. *International Review of Management and Marketing*, *1*(4), 74.
- Ghalandari, K. (2013). Perceived Justice's Influence on Post-Purchase Intention s and Post-Recovery Satisfaction in Online Purchasing: the Moderating Role o f Firm Reputation in Iran. Research Journal of Applied Sciences, Engineerin g and Technology, 5, 1022-1031.
- Griffis, S. E., Rao, S., Goldsby, T. J., & Niranjan, T. T. (2012). The customer consequences of returns in online retailing: An empirical analysis. *Journal* of Operations Management, 30(4), 282-294.
- Gronroos, C. (1988), "Service quality: the six criteria of good perceived service quality", Review of Business, Vol. 9 No. 3, pp. 10-13

- Hair Jr., J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) Multivariate Data Analysis: A Global Perspective. 7th Edition, Pearson Education, Upper Saddle River.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hayati, B. (2017). Customer satisfaction with e-service *Hayati* recovery: roles of perceived justice and customer emotions. *Proceedings of The 17th International Conference on Electronic Business* (pp. 319-320).
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of management*, 21(5), 967-988.
- Hosany, S., & Prayag, G. (2013). Patterns of tourists' emotional responses, satisfaction, and intention to recommend. *Journal of Business Research*, 66(6), 730-737
- Hozawa, S., Tanaka, H., Mori, F., & Tohda, Y. (2016). Development Of A Questionnaire To Evaluate Asthma Control In Japanese Asthma Patients: A Pilot Study. In A36. CLINICAL PROBLEMS IN ASTHMA AND ALLERGY (pp. A1399-A1399). American Thoracic Society.
- Ibrahim, M., & Abdallahamed, S. (2014). Service recovery and customer satisfaction: a case of uganda telecom. *European Journal of Business and Management*, 6(4), 197-209.
- Jha, S., & Balaji, M. S. (2015). Perceived justice and recovery satisfaction: the moderating role of customer-perceived quality. *Management & Marketing*, 10(2), 132-147.
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. *Qualitative and Quantitative Methods in Libraries*, *3*(3), 619-626.
- Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. British Journal of Applied Science & Technology, 7(4), 396.

- Jung, N. Y., & Seock, Y. K. (2017). Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. *Journal of Retailing and Consumer Services*, 37, 23-30.
- Karatepe, O.M. (2006). Customer complaints and organizational responses: The effects of complaints' perceptions of justice on satisfaction and loyalty. *International Journal of Hospitality Management*, 25(1), 69-90
- Kau, A. K., & Wan-Yiun Loh, E. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and noncomplainants. *Journal of Services Marketing*, 20(2), 101-111.
- Kelley SW, Davis MA. Antecedents to customer expectations for service recovery. Journal of the Academy of Marketing Science 1994;22:52–61.
- Khan, E. A., Dewan, M. N. A., & Chowdhury, M. M. H. (2016). Reflective or formative measurement model of sustainability factor? A three industry comparison. *Corporate Ownership and Control*, 13(2), 83-92.
- Kim, I., Mi Jeon, S., & Sean Hyun, S. (2012). Chain restaurant patrons' well-being perception and dining intentions: The moderating role of involvement. *International Journal of Contemporary Hospitality Management*, 24(3), 402-429.
- Kim, T., Kim, W.G. and Kim, H.B. (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.
- Klaus, P. (2013). The case of Amazon. com: towards a conceptual framework of online customer service experience (OCSE) using the emerging consensus technique (ECT). *Journal of Services Marketing*, 27(6), 443-457.
- Komunda, M., & Osarenkhoe, A. (2012). Remedy or cure for service failure? Effects of service recovery on customer satisfaction and loyalty. *Business Process Management Journal*, 18(1), 82-103.
- Kumar, M., & Kumar, N. (2016). Three dimensions of service recovery: examining relationship and impact. Supply Chain Management: An International Journal, 21(2), 273-286.

- Kuo, Y. F., & Wu, C. M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management*, 32(2), 127-138.
- Le Roy, J., Bastounis, M., & Poussard, J. M. (2012). Interactional justice and counterproductive work behaviors: The mediating role of negative emotions. *Social Behavior and Personality: an international journal*, 40(8), 1341-1355.
- Lee, T. J., Cho, H., & Ahn, T. H. (2012). Senior citizen satisfaction with restaurant service quality. *Journal of Hospitality Marketing & Management*, 21(2), 215-226.
- Li-hua, Yang. (2012). Customer satisfaction antecedents within service recovery context: Evidences from "Big 4" banks in China. Nankai Business Review International, 3(3), 284-301.
- Lin, H. H., Wang, Y. S., & Chang, L. K. (2011). Consumer responses to online retailer's service recovery after a service failure: A perspective of justice theory. Managing Service Quality: An International Journal, 21(5), 511– 534.
- Liu, Y., Huang, Y., Luo, Y., & Zhao, Y. (2012). How does justice matter in achieving buyer–supplier relationship performance?. *Journal of Operations Management*, 30(5), 355-367.
- Lu, Y., Lu, Y., & Wang, B. (2012). Effects of dissatisfaction on customer repurchase decisions in e-commerce-an emotion-based perspective. *Journal* of Electronic Commerce Research, 13(3), 224.
- Luo, H., Yu, Y., Huang, W., Cai, Z., & Chen, Y. (June, 2017). Impact of service recovery quality on consumers' repurchase intention: The moderating effect of customer relationship quality. In Service Systems and Service Management (ICSSSM), 2017 International Conference on (pp. 1-6). IEEE.
- Mahalingam, E. (2016). Online Shopping Uptrend in Malaysia. The Star Online.RetrievedMarch18,2018from

http://www.thestar.com.my/business/business-news/2016/06/27/online-shopping-uptrend/

- Malaysia Digital Association. (2016). Exploring the Digital Landscape in Malaysia Boosting Growth for a Digital Economy. Retrieved August 18, 2017 from http://www.malaysiandigitalassociation.org.my/wpcontent/uploads/2016/08/Malaysia-Digital-Landscape-August-2016.pdf
- Malaysian Communication And Multimedia Commission (2016). Internet Users Survey 2016. Retrieved August 18, 2017 from https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS2016.pdf
- Malhotra, N. K. (2010). *Marketing research: An applied orientation, 6/e*. Pearson Education India.
- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, *13*(6), 522-526.
- Matta, F. K., Erol-Korkmaz, H. T., Johnson, R. E., & Biçaksiz, P. (2014). Significant work events and counterproductive work behavior: The role of fairness, emotions, and emotion regulation. Journal of Organizational Behavior, 35(7), 920-944.
- Mattila, A., Hanks, L., & Wang, C. (2014). Others service experiences: emotions, perceived justice, and behavior. *European Journal of Marketing*, 48(3/4), 552-571.
- Maynard, M., Baker, G., & Harding, S. (2017). Exploring childhood obesity prevention among diverse ethnic groups in schools and places of worship: Recruitment, acceptability and feasibility of data collection and intervention components. *Preventive Medicine Reports*, *6*, 130-136.
- McCollough M. A. (2000). The effect of perceived justice and attribution regarding service failure and recovery on post-recovery customer satisfaction and service quality attributes. *Journal of Hospitality & Tourism Research*, 24(4), 423-447
- Memon, M. A., Ting, H., Ramayah, T., Chuah, F., & Cheah, J. H. (2018). Mediation Analysis Issues And Recommendation. Journal of Applied Structural EquationModeling: 2(1), i-ix.

- Menon K, Dubé L. Service provider responses to anxious and angry customers: different challenges, different payoffs. Journal of Retailing 2004;80(3):229– 37.
- Migacz, S. J., Zou, S., & Petrick, J. F. (2018). The "Terminal" Effects of Service Failure on Airlines: Examining Service Recovery with Justice Theory. *Journal of Travel Research*, 57(1), 83-98.
- Mirani, W., Hanzaee, K. H., & Moghadam, M. B. (2015). The Effect of Service Recovery on Customer's Post-Behavior in the Banking Industry by Using the Theory of Perceived Justice. J. Appl. Environ. Biol. Sci, 5(5), 465-474.
- Neuman, W. L., & Robson, K. (2014). Basics of social research. Pearson Canada.
- Nikbin, D., Iranmanesh, M., Hyun, S. S., Baharun, R., & Kim, I. (2015). The role of airline travelers' pre-recovery emotions during the service recovery process. *Journal of Travel & Tourism Marketing*, *32*(6), 677-691.
- Nikbin, D., Ismail, I., Marimuthu, M. & Slarzehi, H. (2012). The relationship of service failure attributions, service recovery justice and recovery satisfaction in the context of airlines, Scandinavian Journal of Hospitality and Tourism, 12 (3), pp. 232-254.
- Nikbin, D., Ismail, I., Marimuthu, M., & Armesh, H. (2012). Perceived justice in service recovery and switching intention: Evidence from Malaysian mobile telecommunication industry. *Management Research Review*, 35(3/4), 309-325.
- Nikbin, D., Ismail, I., Marimuthu, M., & Jalalkamali, M. (2010). Perceived justice in service recovery and recovery satisfaction: The moderating role of corporate image. *International Journal of Marketing Studies*, 2(2), 47.
- Ozgen, O., & Duman Kurt, S. (2012). Pre-recovery and post-recovery emotions in the service context: a preliminary study. *Managing Service Quality: An International Journal*, 22(6), 592-605.
- Ozkan-Tektas, O., & Basgoze, P. (2017). Pre-recovery emotions and satisfaction: a moderated mediation model of service recovery and reputation in the banking sector. *European Management Journal*, *35*(3), 388-395.

- Park, J. J., & Park, J. W. (2016). Investigating the effects of service recovery quality elements on passengers' behavioral intention. *Journal of Air Transport Management*, 53, 235-241.
- Pedragosa, V., Biscaia, R., & Correia, A. (2015). The role of emotions on consumers' satisfaction within the fitness context. *Motriz: Revista de Educação Física*, 21(2), 116-124.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments, & Computers, 36(4), 717-731
- Qin, J., Chen, Q., & Wan, Y. (2012). The effects of service recovery justice and perceived switching costs on customer loyalty in e-tailing. In POMS 23rd Annual Conference.
- Rashid, M. H. A., Ahmad, F. S., & Othman, A. K. (2014). Does service recovery affect customer satisfaction? A study on co-created retail industry. *Procedia-Social and Behavioral Sciences*, 130, 455-460.
- Ro, H., & Olson, E. D. (2014). The effects of social justice and stigmaconsciousness on gay customers' service recovery evaluation. *Journal of Business Research*, 67(6), 1162-1169.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of personality and social psychology*, 39(3), 472.
- Salaria, N. (2012). Meaning of the term descriptive survey research method. International journal of transformations in business management, 1(6), 161-175.
- Salehi, M. (2012). Consumer buying behavior towards online shopping stores in Malaysia. International Journal of Academic Research in Business and Social Sciences, 2(1), 393-403.
- Saunders, M. L., & Lewis, P. (2009). P. & Thornhill, A.(2009). Research methods for business students, 4.

- Shin, H., & Casidy, R. (2017). Customer Responses to Service Failure in Direct and Indirect Harm Context: An Abstract. In *Marketing at the Confluence between Entertainment and Analytics* (pp. 247-247). Springer, Cham.
- Shin, H., Casidy, R., & Mattila, A. S. (2018). Service Recovery, Justice Perception, and Forgiveness: The "Other Customers" Perspectives. Services Marketing Quarterly, 39(1), 1-21.
- Singh, J., & Crisafulli, B. (2016). Managing online service recovery: procedures, justice and customer satisfaction. *Journal of Service Theory and Practice*, 26(6), 764-787.
- Siu, N. Y. M., Zhang, T. J. F., & Yau, C. Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, 114(4), 675-686.
- Smith, A. K., & Bolton, R. N. (1998). An experimental investigation of customer reactions to service failure and recovery encounters: paradox or peril?. *Journal of service research*, 1(1), 65-81.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of marketing research*, 356-372.
- Söderlund, M., & Colliander, J. (2015). Loyalty program rewards and their impact on perceived justice, customer satisfaction, and repatronize intentions. *Journal of Retailing and Consumer Services*, 25, 47-57.
- Stets, J. E., & Turner, J. H. (Eds.). (2014). Handbook of the Sociology of Emotions (Vol. 2). Springer.
- Surmacz, D. (2017). Top 3 Technologies Revolutionising Economy. *Digital Market Asia*. Retrieved March 18, 2018 from https://www.digitalmarket.asia/top-3-technologies-revolutionising-ecommerce-2/
- Tranter, B. K. (2013). Quantitative Research in the Australian Journal of Political Science. In Australian Political Studies Association Annual Conference (pp. 1-19).

Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies.

Warnecke, R. B. (1998). Sampling frames. Encyclopedia of Biostatistics.

- Wen, B., & Geng-qing 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*, 25(3), 306-327.
- Williams, P., & Aaker, J. L. (2002). Can mixed emotions peacefully coexist?. *Journal of Consumer Research*, 28(4), 636-649.
- Wirtz, J., & Mattila, A. S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. International Journal of Service Industry
- Wong, K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- Yeoh, P. L., Woolford, S. W., Eshghi, A., & Butaney, G. (2014). Customer response to service recovery in online shopping. *Journal of Services Research*, 14(2), 33.
- Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision support systems*, 52(3), 645-656.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. Journal of Consumer Research, 37(3), 197-206.

APPENDICIES

Appendix 3.1 Survey-Questionnaire



University Tunku Abdul Rahman Faculty of Business and Finance BACHELOR OF MARKETING (HONS-MK) FINAL YEAR PROJECT Research Title: Stay or Switch: The influence of perceived service recovery on customer satisfaction

Survey Questionnaire

Introduction

We are undergraduate students from University Tunku Abdul Rahman (UTAR) enrolling in Bachelor of Marketing (HONS). This study is attempt to determine the influence of perceived service recovery on customer satisfaction. The results will be analyzed solely for this research purpose. Your kind participation will help us to obtain more information pertaining to customer satisfaction towards perceived service recovery upon service failure.

Confidentiality

The information provided will only be analyzed for academic purpose. Rest assured that the answers provided to this survey questionnaire will be treated with utmost confidentiality.

Participation

Your participation in this research is completely voluntary. There is no right or wrong answers for any statements in this questionnaire. This survey questionnaire consist of four sections. Please answer **ALL** questions for all sections. This survey will take you approximately 5-10 minutes to complete.

Thank you for sparing your valuable time on filling this survey-questionnaire and your kind cooperation and participation in the conduct of this study.

Best Regards,	
Loke Chee Kian	cheekianloke@1utar.my
Carven Yong Kar Ven	carvenyong95@1utar.my
Lim Yong Jun	ernestlim10@1utar.my
Tiong Siew Ting	sssjang@lutar.my

Section A: Demographic Profile

(Please tick at the appropriate answer that best describe yourself.)

- Q1. Gender
 - □ Male
 - □ Female
- Q2. Age
 - \Box Below 20 years old
 - \Box 20 24 years old
 - \Box 25 30 years old
 - \Box 30 34 years old
 - \Box 35 40 years old
 - □ Above 40 years old

Q3. Income Level

- □ Below RM 2000
- □ RM 2001 RM 3000
- □ RM 3001 RM 4000
- □ RM 4001 RM 5000
- □ Above RM 5000

Section B: Perceived Justice on Customer Satisfaction

This section consists of three dimensions of perceived justice that would influence your satisfaction towards the service recovery in respond to the service failure. You are required to indicate the extent to which your opinion to the following statements by *CIRCLING* one answer out of the seven Likert scale as per below;

Strongly	Disagree	Slightly	Neutral	Slightly	Agree	Strongly
Disagree		Disagree		Agree		Agree
1	2	3	4	5	6	7

	Distributive Justice (DJ)	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
DJ1	I accept compensations from service provider upon service failure.	1	2	3	4	5	6	7

DJ2	I would satisfy with compensations that equate to my loss that caused by the service failure.	1	2	3	4	5	6	7
DJ3	Fair compensation able to offset my dissatisfaction towards the service failure.	1	2	3	4	5	6	7
DJ4	I should get what I ought to be compensated during the service failure.	1	2	3	4	5	6	7

	Procedural Justice (PJ)		Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PJ1	Service provider should alert to the service failure and take responsibility for the problem immediately.	1	2	3	4	5	6	7
PJ2	Service provider should check with the offended customers whether their complaint has taken care of to their satisfaction.	1	2	3	4	5	6	7
PJ3	Service failure should be responded and resolved as soon as possible.	1	2	3	4	5	6	7
PJ4	A responsive and immediate service recovery action could maintain a long term beneficial relationship.	1	2	3	4	5	6	7
PJ5	A responsive service recovery action could relieve my inconvenience, frustration, annoyance, anxiety caused by the service failure.	1	2	3	4	5	6	7

Interactional Justice (IJ)	Strongly Disagree Disagree	Slightly Disagree Neutral	Slightly Agree Agree	Strongly Agree
----------------------------	----------------------------------	---------------------------------	----------------------------	-------------------

IJ1	service personnel provides an appropriate explanation and solution to the failed service.		2	3	4	5	6	7
IJ2	I would be more pleased with the service recovery when the service provider treats me with dignity and respect.	1	2	3	4	5	6	7
IJ3	Service provider should express their concern and empathy towards service failure.	1	2	3	4	5	6	7
IJ4	Service provider should be honest during the resolution of problem.	1	2	3	4	5	6	7
IJ5	I would be happier with the service recovery if the service provider treats me in a courteous manner.	1	2	3	4	5	6	7

Section C: Mediating Role of Emotions on Customer Satisfaction

This sections consists of some of the emotional response that are likely to trigger during the service recovery. You are required to indicate the extent to which your opinion to the following statements by *CIRCLING* one answer out of the seven Likert scale as per below:

	Emotions (E)	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
E1	I will be satisfied as long as the company conducts service recovery actions.	1	2	3	4	5	6	7
E2	I will be more pleasant only if a proper and reasonable service recovery action is provided.	1	2	3	4	5	6	7
E3	I am able to remain calm and rational after a service failure.	1	2	3	4	5	6	7

E4	I am able to evaluate the service recovery action without affected by the emotions caused by the service failure.	1	2	3	4	5	6	7
E5	A proper service recovery action could relief my dissatisfaction towards the service failure.	1	2	3	4	5	6	7

Section D: Customer Satisfaction towards service recovery actions

Please indicate the extent to which your opinion to the following statements after

receiving a service recovery. Kindly circle your answers.

	Customer Satisfaction	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
CS1	I am likely to repurchase if service provider provide successful service recovery.	1	2	3	4	5	6	7
CS2	I will spread positive word-of- mouth if service provider provides successful service recovery.	1	2	3	4	5	6	7
CS3	How the service firm reacts to recover a service failure will determine my recovery satisfaction level.	1	2	3	4	5	6	7
CS4	I always pleased with the solution provided by the service provider.	1	2	3	4	5	6	7
CS5	I always feel delighted about the solution to my problem.	1	2	3	4	5	6	7

*End of survey-questionnaire

Thank you for your participation!

Appendix 4.1: Outer Loadings (without withdrawal item of E1)

Outer Loadings

	Customer Satisfaction	Distributive Justice	Emotion	Interactional Justice	Procedural Justice
CS1	0.738				
CS2	0.720				
CS3	0.808				
CS4	0.703				
CS5	0.712				
DJ1		0.762			
DJ2		0.816			
DJ3		0.765			
DJ4		0.759			
E1			0.643		
E2			0.720		
E3			0.708		
E4			0.770		
E5			0.800		
IJ1				0.722	
IJ2				0.812	
IJ3				0.819	
IJ4				0.723	
IJ5				0.752	
PJ1					0.753
PJ2					0.825
PJ3					0.818
PJ4					0.796
PJ5					0.759

Appendix 4.2: Outer Loadings (with withdrawal item of E1)

	Customer Satisfaction	Distributive Justice	Emotion	Interactional Justice	Procedural Justice
CS1	0.738				
CS2	0.723				
CS3	0.806				
CS4	0.702				
CS5	0.713				
DJ1		0.760			
DJ2		0.814			
DJ3		0.769			
DJ4		0.760			
E2			0.729		
E3			0.718		
E4			0.798		
E5			0.810		
IJ1				0.721	
IJ2				0.811	
IJ3				0.818	
IJ4				0.726	
IJ5				0.753	
PJ1					0.755
PJ2					0.827
PJ3					0.817
PJ4					0.795
PJ5					0.758

Outer Loadings

Appendix 4.3: Construct Reliability and Validity

Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	
Customer Satisfaction	0.797	0.839	0.856	0.544	
Distributive Justice	0.783	0.793	0.858	0.602	
Emotion	0.767	0.783	0.849	0.585	
Interactional Justice	0.828	0.863	0.877	0.588	
Procedural Justice	0.850	0.852	0.893	0.625	

Appendix 4.4: Fornell and Larcker's Criterion

Fornell-Larcker Criterion

	Customer Satisfaction	Distributive Justice	Emotion	Interactional Justice	Procedural Justice
Customer Satisfaction	0.737				
Distributive Justice	0.277	0.776			
Emotion	0.475	0.219	0.765		
Interactional Justice	0.315	0.239	0.260	0.767	
Procedural Justice	0.450	0.121	0.304	0.403	0.791

Appendix 4.5: Cross Loadings

Cross Loadings

	Customer Satisfaction	Distributive Justice	Emotion	Interactional Justice	Procedural Justice	
CS1	0.738	0.253	0.386	0.158	0.319	
CS2	0.723	0.112	0.283	0.111	0.252	
CS3	0.806	0.235	0.491	0.390	0.483	
CS4	0.702	0.198	0.234	0.176	0.274	
CS5	0.713	0.191	0.244	0.234	0.225	
DJ1	0.271	0.760	0.204	0.243	0.133	
DJ2	0.163	0.814	0.180	0.202	0.095	
DJ3	0.213	0.769	0.130	0.176	0.076	
DJ4	0.188	0.760	0.150	0.096	0.054	
E2	0.347	0.099	0.729	0.256	0.303	
E3	0.311	0.217	0.718	0.123	0.095	
E4	0.315	0.224	0.798	0.192	0.129	
E5	0.448	0.154	0.810	0.208	0.338	
IJ1	0.151	0.125	0.228	0.721	0.246	
IJ2	0.196	0.156	0.160	0.811	0.316	
IJ3	0.332	0.270	0.281	0.818	0.321	
IJ4	0.250	0.142	0.145	0.726	0.309	
IJ5	0.222	0.175	0.138	0.753	0.357	
PJ1	0.325	0.051	0.222	0.260	0.755	
PJ2	0.346	0.084	0.163	0.337	0.827	
PJ3	0.369	0.103	0.254	0.407	0.817	
PJ4	0.361	0.094	0.278	0.311	0.795	
PJ5	0.369	0.137	0.269	0.275	0.758	

Appendix 4.6: Inner VIF Values

Inner VIF Values

	Customer Satisfaction	Distributive Justice	Emotion	Interactional Justice	Procedural Justice
Customer Satisfaction					
Distributive Justice	1.091		1.061		
Emotion	1.162				
Interactional Justice	1.268		1.249		
Procedural Justice	1.258		1.195		

Appendix 4.7: Path Coefficients

Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Distributive Justice -> Customer Satisfaction	0.151	0.154	0.064	2.378	0.009
Distributive Justice -> Emotion	0.160	0.168	0.066	2.416	0.008
Emotion -> Customer Satisfaction	0.331	0.334	0.068	4.891	0.000
Interactional Justice -> Customer Satisfaction	0.071	0.076	0.069	1.032	0.151
Interactional Justice -> Emotion	0.128	0.130	0.077	1.662	0.048
Procedural Justice -> Customer Satisfaction	0.302	0.304	0.062	4.857	0.000
Procedural Justice -> Emotion	0.233	0.236	0.083	2.816	0.002

Appendix 6.1: Turnitin Report

Stay or Switch: The influence of perceived service recovery on customer satisfaction

by Loke Chee Kian

Submission date: 29-Mar-2018 12:53PM (UTC+0800) Submission ID: 935764677 File name: FYP-FINAL-MK006.docx (964.4K) Word count: 14628 Character count: 83159 Abstract

Service recovery of online service is a contemporary issue which need to be studied due to the shifting shopping trends. No past studies had been done to study the customer satisfaction with online service recovery in Malaysia. This research investigates the relationship among customer perceived justice, emotion and customer satisfaction upon service recovery context. The effect of the three dimensions of justice theory which are distributive justice, procedural justice and interactional justice (DJ, PJ and IJ) on customer satisfaction (CS) and emotion (E) evoked by the service recovery actions is examined in this study. A research model is developed in this study to analyze the direct effect of the three dimensions of justice theory on customer satisfaction, along with the indirect effect via emotions. 200 respondents were approached to answer the survey-questionnaire to gather customer's perception of online service failure. Partial Least Technique (Smart-PLS) is used to analyze the data collected in this study. The research findings demonstrate that the PJ and DJ have significant relationship with CS with service recovery actions and E triggered by service recovery actions. In turn, significant relationship was not found between IJ with both CS and E. Result also shows that customer emotions evoked by service recovery action mediate the effect of perceived justice on customer satisfaction.

CHAPTER 1: INTRODUCTION

1.0 Introduction

The first chapter will provide a clear introduction on the study and compromises of six different parts which includes research background, problem statement, research objectives, research questions, hypotheses of the study and research significance.

1.1 Research Background

The emerging of network and technology have changes the traditional business where retailers start to extent their businesses to online platform and use internet as a new channel for advertising, sales, customer service and distribution (Griffis et al., 2012). The trend of consumer shifting from traditional shopping to online shopping has contributed to the growth of online retailing. Internet has brought a humongous impact to the operations of retail businesses, in which internet is used as one of the important tool for online retailer to communicate and receive feedback from their customer aiming to improve business performance and customer satisfaction (Klaus, 2013; Salehi, 2012). In addition, internet has also changed the traditional consumers shopping behaviour. Consumer today are more concern with the effort needed to pay in order to shop for goods and services. Consumers have high acceptance towards online shopping as it enables the customers to shop anytime, anywhere while allowing them to compare price, quality and products review among various alternatives with just a single click (Salehi, 2012).

According to Surmacz (2016), an estimated number of 1.61 billion people around the globe have made online purchase, contributing into retail sales of 22.049 trillion USD. The figure has increase by six percent compared to 2015 and the retail sales is forecasted to hit 27 trillion USD in year 2020 (Emarketer, 2016). In addition, internet has virtually eliminated global geographic boundaries which enable the online retailer to connect with various buyers and seller around the globe (Salehi,

2012). The online retailing in Malaysia are also experiencing a growing trend where consumers are willing to make purchase through online channel. According to The Star (2016), out of 500 respondents being surveyed, half of them make at least one online purchase per month and only seven percent of respondents have never tried online shopping. This phenomenon reveals that Malaysia market is a viable market for online retailer as Malaysian have high acceptance on online shopping.

However, there are still some difference between the experience of shopping between online shopping and traditional shopping. Unlike traditional shopping which offers a physical store where customer can reach to, online retailing mainly involves virtual store which did not exist physically.

1.2 Problem Statement

Factors that fall beyond the individual organization's control often have direct or indirect influence on production and delivery of services (del Río-Lanza et al., 2013). Kuo & Wu (2012) claims firms are unlikely to get rid of all kinds of service failure due to the intangibility and inseparability of service. Many companies seek to provide superior service in their activities, however they often make mistakes and errors in the delivery of service, which will lead to customer dissatisfaction. Alzaydi et al. (2017) stated that even firms which poses superior and well planned service quality program, service failure are still inevitable.

Service failure will result in customer dissatisfaction. Customer who encountered service failure may spread negative word-of-moth to their friends, family, and other people to express their dissatisfaction and bad experience and this will adversely impact company reputation and profits (Kim et al., 2009; Bitner, Brown, & Meuter, 2000). Customer who have encountered service failure often expect service recovery action from the service provider (Mirani, Hanzaee, & Moghadam, 2015).

Service recovery is defined by Nikbin et al. (2012) as a moment of truth for the organizations that delivered a failed service. It is critical to the service providers as

they can still appease dissatisfied customer and able to retain and even fostering its relationship with them, ultimately make the dissatisfied customers to be the loyal ones (Nikbin et al., 2012; Rio-Lanza et al., 2013).

Gronroos (1988) & Kelley & Davis (1994) suggested the efforts, actions and activities that will be taken by a service provider to address the problems and the process attempted to rectify the service failure are regarded as service recovery. In addition, service providers must attempt appropriate recovery strategies to relief the dissatisfied customer to the state of satisfaction (Choi et al., 2014).

Justice theory has received significant acknowledgement and attention as a theoretical framework in various studies that seek to investigate service recovery with CS (Crisafulli & Singh, 2016; Wirtz & Mattila, 2004). Perceived justice is found having significant influence on CS in service recovery actions (del Río-Lanza et al., 2009). Several researches stress that customer emotions triggered during the service recovery will impact their relative satisfaction (Menon and Dubé, 2004; Ozkan-Tektas & Basgoze, 2017, Cai & Qu, 2017). In addition, del Rio-Lanza et al. (2013) also pointed out that customer emotion evoked by service recovery actions is significantly effecting CS as emotion which generated through individual evaluation on the event, not the event itself. Besides, customer emotion in service recovery action is seldom evaluated empirically in past studies (Choi et al., 2014).

In addition, there is no prior studies and research have been done in Malaysia to investigate the effect of DJ, PJ, IJ and emotions on CS with service recovery. Therefore, this study will study empirically on the influences of perceived justice on CS in service recovery in Malaysia, with the effect of emotion between the perceived justice and CS.

1.3 Research Objectives

1.3.1 General Objective

The healthy growth online shopping trend in Malaysia with broad acceptance among Malaysia is in need of study where no studies have been done to address online customer satisfaction with service recovery in Malaysia context. Thus the general objective of is to study online customer satisfaction with service recovery in Malaysia context.

1.3.2 Specific Objectives

To elucidate the influence of the dimension of justice theory (DJ, PJ and IJ) on customer satisfaction and the mediating effect of emotion between DJ, PJ and IJ and customer satisfaction.

1.4 Research Questions

- i. Does DJ influence emotion with respect to CS in service recovery?
- ii. Does DJ influence CS in service recovery?
- iii. Does PJ influence emotion with respect to CS in service recovery?
- iv. Does PJ influence CS in service recovery?
- v. Does IJ influence emotion with respect to CS in service recovery?
- vi. Does IJ influence CS in service recovery?
- vii. Does emotion mediate the effect among perceived justice and CS?

1.5 Hypotheses of the Study

H1a. DJ influences CS in a positive manner.
H1b. DJ influences emotions with respect to customer satisfaction in

service recovery in a positive manner.

H2a. PJ influences CS in a positive manner.

H2b. PJ influences emotions with respect to CS in service recovery in a positive manner.

H3a. IJ influences CS in a positive manner.

H3b. IJ influences emotions with respect to customer satisfaction in service recovery in a positive manner.

H4. Customer emotion in response to service recovery action mediates the effect of the elements of perceived justice on CS.

1.6 Research Significance

This research emphasis on the relative influences of perceived justice on CS in service recovery and the outcome of emotion between customers perceived justice and CS. Singh & Crisafulli (2016) suggested that with the broad utilization of service recovery as a maintenance system, how to transform whining consumers into fulfilled and faithful ones successfully has acquired expanded consideration from all of the marketing promoters. So, things can and often do turn out badly, prompting the requirement for a deliberate service recovery exertion went for settling consumers dissensions, affecting progressing fulfillment, and investigating the connection between on-going contentment, feeling and even devotion (Jha & Balaji, 2015).

Furthermore, our research is aiming on local online market in Malaysia as there were no previous research studies that empirically study on online service recovery in Malaysia e-market place. As to their concern, many of the researchers are more focusing on foreigner markets instead. According to Smith and Bolton (1998), an association's reaction to unsuccessful service can possibly either reestablish consumer loyalty or bother consumers' dismissive assessments and drive them to change to a contender. Indeed, even many of the customer-focused association with the most grounded quality program is probably not going to have the capacity to avoid service failure issues entirely (Gautam, 2011). Along these lines, it is vital to

comprehend on the factors that contribute to an effective service recovery strategies and how consumers assess the organizations' service recuperation endeavors.

As proven by Nikbin et al. (2010), there are numerous of researchers and practitioners studying on service recovery towards different. The few service recovery studies that have been conducted including towards airline passengers (McCollough, 2000) buyers of smartphone (Kau & Loh, 2006), hotel customers (Smith, Bolton, & Wagner, 1999; Karatepe, 2006) and also co-created retail industry (Rashid, Ahmad, & Othman, 2014). Hence, it can be said that there are very few previous studies that have investigated on service recovery empirically among online shoppers in Malaysia.

In spite of the fact that earlier studies investigate perceived justice regarding brickand-mortar service recovery attempts (Qin, Chen, & Wan, 2012), the view of justice relating to online service recovery action plans is not tended to yet. Hence, the results of this research can enable the both researchers, specialists and even academicians to see more about purchasers' future behavioral goals in online service recovery settings in Malaysia.

Besides, this research will further investigate the effect of perceived justice on CS by evaluating the relative effect of customer emotions between DJ, PJ and IJ and CS. Past study suggested that customer emotion triggered by service recovery actions have significant relationship with CS (Hayati, 2017). Thus, the findings of this study would be helpful to generate insights for future research to better understand and evaluate customer online shopping behavior. In addition, this study could serve as a guideline in manager to identify and formulate effective service recovery strategy to better address all kinds of service failure to improve CS.

1.7 Conclusion

The trend of online shoppers in Malaysia and the importance of providing superior service quality to fulfill customers' satisfaction have been outlined throughout the

chapter. Detailed explanation on the involved research variables and theories will be further discussed in next chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 involves the reviews on previous theoretical theories and literature on the effects DJ, PJ and IJ on emotion and CS. An illustration of the proposed research framework and CS hypothesis are formed to explore the factors that affect the perceived service recovery on.

2.1 Review of the Literature

2.1.1 Distributive Justice

Migacz, Zou, & Petrick (2018) define DJ as the deployment of physical resources by the organization in the purpose of rectifying and compensating for a service failure. The central concern of distribution justice is compensation received by the customer owing to the inconveniences and losses borne by the customers as the result of the service failure (Rashid et al., 2014).

Yeoh, Wooford, Eshghi, & Butaney (2014) suggested that tangible remedy must be equate with the damages resulted from the service failure. In addition, prior studies shows that individuals would react positively to service recovery actions when the perceived recovery actions are equate or has exceeded the loss they encountered (Shin, Casidy, & Mattila, 2018; Lin, Wang, & Chang, 2011; Siu, Zhang, & Yau, 2013). In addition, Choi & Choi (2014) stated that compensation can exist in either monetary or non-monetary which include exchange, refunds, replace and repair.

Yeoh et al. (2014) and Bambauer-Sachse & Rabeson (2015) suggested that the compensation which allocated by the organization must be fair and adequate in order to restore damaged relationship. This is supported by del Río-Lanza (2009) claimed that DJ has the significance influence on the overall CS of the service recovery.

Most customers who encountered service failure may perceive the fairness and adequateness of received tangible remedy from the offending service provider (Shin & Casidy, 2017). According to Fred Feldman's theory of distributive justice mentioned that it was all about getting what individual deserve from their country (Dekker, 2016). Past studies found that DJ will influence CS with service recovery in a positive manner (Chang & Hsiao, 2008; Nikbin et al., 2012; Siu et al., 2013).

Individual often encounter emotions, either positive or negative emotions when they perceive the justice of service recovery action. Past studies analyzed individual's emotional response triggered by service recovery events, where they found that fair DJ could enhance pleasant emotions while alleviate negative emotions (Söderlund & Colliander, 2015; Mattila, Hanks, & Wang, 2014).

2.1.2 Procedural Justice

Nikbin et al. (2012) defines this dimension of justice as the various processes, systems and policies in place to address the service failure. People often having perceived fairness in the process, and the process will only be viewed as fair if people perceive that they possess control over the process (Liu et al. 2012). PJ pays high emphasis on the fairness of the process, in which compromises of policies, procedures, and various criteria in the entire service recovery action (Zhao, Lu, Zhang, & Chau, 2012).

The focal points of PJ of a recovery process are the efficiency and flexibility pertaining to the recovery rules and policies, as defined as customer perceptions (Kuo & Wu, 2012). Processes and policies that devote to outcomes embodying acceptable principles could help to develop and maintain long-term relationship between the exchanging parties (Chen, Yang, Shin Sheu, & Liu, 2012).

The goal and objective of PJ is to resolve conflicts while encouraging the continuation of a beneficial and productive between the disputants (Nikbin, Ismail, & Marimuthu, 2012). Prior studies found that there were six evaluation criteria and dimensions for perceived procedural fairness, namely consistency, unbiased, accuracy, corrective, representatives and ethical (Wu, 2012; Nikbin et al., 2012).

According to Griffis, Rao, Goldsby, & Niranjan (2012), PJ has strong significant effect upon overall customers' satisfaction as it could alleviate the psychological cost (e.g., inconvenience, frustration, annoyance, anxiety) of the customers.

Customer often have certain level of emotional association in perceiving the flexibility, efficiency, appropriateness and the process attempted by offending firms to address the service failure. In addition, del Río-Lanza et al. (2009) claims that PJ will affect both customer emotions and CS positively.

2.1.3 Interactional Justice

Choi & Choi (2014) describes IJ as the ways in which customers are being treated, involving elements of politeness, courtesy and the efforts of service personnel in dealing with the customers upon service failure. It signifies the effort from service providers to communicate with customers as well as to treat them without discrimination. (Bahri-Ammari & Bilgihan, 2017). IJ

implicates interpersonal responsiveness, encountering individual with elevation and esteem, and also presenting suitable clarifications for any service disappointment in the service recovery context (Kuo & Wu, 2012).

IJ in service recovery circumstance is regarded as the means of the conduct of recovery process and the display of recovery result (Siu et al., 2013). Interactional justice also regarded as the fairness in interpersonal treatment includes two elements: the communication of regret, explanation and clarification of failures; the service provider's attempts to discover solutions to problems as well as displaying courtesy, empathy, honesty and politeness (Bahri-Ammari & Bilgihan, 2017). Individual who recognize high level of IJ would be linked to lower level of self-reported negative emotions (Le Roy, Bastounis, & Poussard, 2012).

Negative emotion often associate within customer when they make complaints, customer perceive fair behaviors in the service redemption context based on the way of service provider in expressing concern, honesty and politeness; as well as the way of the service contributor to rectify the service disappointment and making genuine effort to address the service failure (Kumar & Kumar, 2016). Different types of injustice may raise particular emotions whereby interactional injustice triggers indignation (Stets & Turner, 2014). In the events of work involving justice, they are the prime triggers of emotion, whereby interactional injustice could evoke emotional reactions (Matta, Erol-Korkmaz, Johnson, & Biçaksiz, 2014).

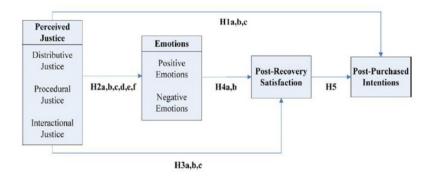
2.1.4 Emotions

Emotions is defined as the mental or affective states of an individual towards a unique incident or one's own thoughts (Nikbin, Iranmanesh, Hyun, Baharun, & Kim, 2015). Prior studies suggested that emotion can be categorized into two dimensions which are positive emotions and negative emotions. (Lu, Lu, & Wang, 2012). In addition, previous findings argue that customers' emotions have significant effect on customers' perception towards the satisfaction on service recovery context (Lee, Cho, & Ahn, 2012; Wen & Chi, 2013).

Customer will experience an emotional impact and become intensely emotional during service failure (Ozkan-Tektas & Basgoze, 2017). Such pre-recovery emotions would adversely impact customer attitude, behavior, evaluation, information processing and satisfaction (Ozkan-Tektas & Basgoze, 2017). The research of Williams and Aaker (2012) suggested that negative and positive emotions could exist within an individual perception towards an events at the same time in which this phenomenon might be obliterated in most of the other research. The distinct intensity of both positive and negative emotions impact subsequent subjective evaluation on customer satisfaction (Komunda & Osarenkhoe, 2012).

Customer's perceived justice during recovery context is a main influencer in producing either positive or negative emotions in which the emotions will later affect customer satisfaction (Wen & Chi, 2013). Higher level of each variables in perceived justice (distributive, procedural, interactional justice) can create precede level of positive emotions and vice versa.

2.2 **Review of Theoretical Framework**



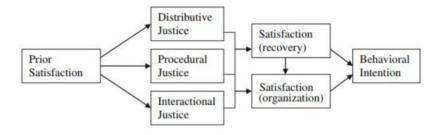
2.2.1 Theoretical Framework 1

Source: Kuo, Y. F., & Wu, C. M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management*, *32*(2), 127-138.

According to Kuo & Wu (2012), the theory of perceived justice was being employed extensively for service recovery studies and it is a fundamental cognitive impact in creating ensuing CS as well as their post-purchase intentions. In addition, they suggested that effects of emotional responses towards subsequent customer satisfaction shall be evaluated to better understand the customers' evaluative judgment in recovery context.

Their framework identifies that perceived justice theory which constitutes DJ, PJ and IJ have significant impact on customer's post-recovery emotions. Different levels of perceived justice may cause either positive or negative emotions. Additionally, both of the dimensions of emotion can influence post-recovery gratification. Post-purchase intention is viewed as an outcome of customer satisfaction. Perceived justice theory also affects the customers' post-recovery gratification as well as post-purchase desires. In this research, post-purchase intention is not included since the outcome of this theoretical framework displays insignificant influence of PJ and IJ towards post-purchase intention.

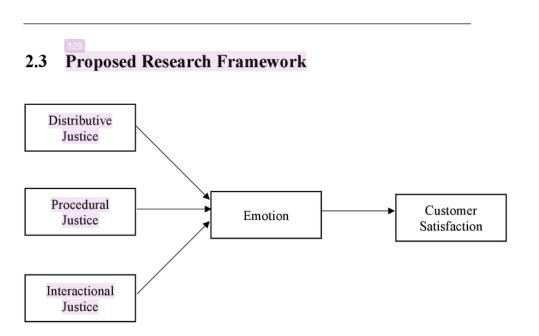
2.2.2 Theoretical Framework 2



Source: Siu, N. Y. M., Zhang, T. J. F., & Yau, C. Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, *114*(4), 675-686.

This theoretical framework was proposed by Siu et al. (2013) to examine the effect of justice and customer satsifaction in retenting customer. The research tested dimensions of perceived justice during service recovery actions. This study indicates that different recovery actions and compensations provided by the company and distinct variables might imposed different effects which lead to unique outcome of customer satisfaction level.

Previous studies have proven that percevied justice have positive effects towards ustomer satisfaction on recovery action. The result from the study had further verified the significant relationship between perceived justice and satisfaction towards organization. Customer evalution towards perceived justice through dimensions such as ethicalness, fairness and also appropriateness gave also been discussed within the research. Positive evaluations on these dimensions enhance customer satisfaction towards service recovery action.



Source: Developed from research

Perceived Justice Theory has gained significant acknowledge and attention as theoretical framework in study of service recovery context (Choi & Choi 2014; Kuo & Wu, 2012; Wirtz & Mattila, 2004). Thus the perceived justice is adopted as the proposed research framework for this study, and emotion is included in this framework as mediator to evaluate and analyse the relationship between DJ, PJ, IJ, emotion and CS on online shopping among the Malaysia online shoppers.

2.4 Research Hypothesis

DJ concentrates on the equitable outcomes provided by the company aiming to make up for customers' loss or inconvenience (Ro, Heejung, & Eric, 2014). It can be distributed as in vouchers, coupons, discounts and rebates to customers who encountered service failure (Rashid et al., 2014). Customers will react positively when they perceive that the company offers a significant equate to the costs and efforts that they sacrificed (Bahri-Ammari & Bilgihan, 2017). Past studies show that a fair DJ has significant effect to emotion triggered by the service recovery actions and subsequent CS (Mattila et al., 2014; Choi & Choi, 2014). Hence Hypothesis 1 is proposed as follows:

H1a. DJ positively affects CS.

H1b. DJ positively affects emotions with respect to CS in service recovery.

Ozkan-Tektas & Basgoze (2017) defined PJ as the methods and ways of companies taken to address service failure. The major concern of PJ is about the speed, flexibility and responsiveness in the recovery process (Rashid et al., 2014). Customers not only concerned about the way that their remuneration being made, but also the procedure that companies used to resolve their difficulties faced (Park & Park, 2016). According to Chang, Lai, & Hsu (2012), the responsiveness and flexibility of one service provider has a high interrelationship with CS rate. Past studies show that PJ will significantly affect CS (Griffis et al., 2012; del Río-Lanza et al., 2009). Furthermore, the findings of del Río-Lanza et al. (2009) potrays that customer emotion that evoked by the service recovery actions have significant effect on CS whereas high perception of PJ will significantly affect emotions and CS. Thus hypothesis 2 is proposed as follows:

H2a. PJ positively affects CS.

H2b. PJ positively affects emotions with respect to CS in service recovery.

IJ focus on the attitude portrayed by the service provider in customer perspective, practically is all about complaint handling. An expression of guiltiness can be made from the company conveys their sincerity towards consumers who encounter disappointment in the company, thus improving consumers' impression towards the company (Bambauer-Sachse & Rabeson, 2015).

According to Kumar & Kumar (2016), customers perceived fair behaviors in the service recovery context anticipate the service providers to make appropriate efforts and actions to address the problems. In the events of work involving justice, they are the prime triggers of emotion, whereby interactional injustice could evoke emotional reactions (Matta, Korkmaz, Johnson, & Biçaksiz, 2014). Hence, Hypothesis 3 is thus proposed as follows:

H3a. IJ positively affects CS.

H3b. IJ positively affects emotions with respect to CS in service recovery.

There are increasing number of researches focusing on customer emotion such as anger or joyfulness towards CS on the service provider company (Ozkan-Tektas & Basgoze, 2017). Consumption emotions can be categorized into positive and negative emotions (Deng, Yeh, & Sung, 2013).

Consumer evaluation on the perceived recovery justice is the main cause which lead to the creation of positive and negative emotions (Wen & Geng-qing, 2013). There are a few of research studies focusing on significant relationship between customer emotion and their satisfaction rate (Bonnefoy-Claudet & Ghantous, 2013; Hosany & Prayag, 2013). Hypothesis 4 is thus proposed as follow:

H4. Customer emotion in response to service recovery action mediate the effect of the dimensions of perceived justice on CS.

2.5 Conclusion

This chapter has illustrated the development of the research framework which indicates the relationship between IV, mediator and DV. The following chapter will focus on relevant analyses and research methodology.

CHAPTER 3 METHODOLOGY

3.0 Introduction

This chapter compromises a comprehensive description on the methods in carrying out the research, encompassing research and sampling design, data collection methods, questionnaire formulation, pilot test, data processing steps and data analysis techniques that been employed.

3.1 Research design

According to Tranter (2013), quantitative research is the appropriate way to conclude results on the proven or unproved hypothesis. In this study, quantitative research is used to explore further into details about the relationship between perceived justice, emotion and CS (Creswell, 2012). To test the propositions, a survey consisting of structured questionnaires was distributed through physical distribution and online forms. Besides, questionnaires were distributed to different major which are Johor Bahru, Kuala Lumpur and Penang to represent major Malaysians' responses towards the topic of the research (Abdelfatah, Shah, & Puan, 2015).

Descriptive research design is mainly emphasizing on figuring out "what is" by providing answers to who, what, when and how regarding the research problem instead of determining cause and effect relationship (Salaria, 2012). Hence, descriptive research design helps to identify on details into each variables that are being studied (Salaria, 2012) In addition, this study uses cross-sectional research design as it is easier and takes a shorter time to collect relevant data in order to finalize results (Ibrahim & Abdallahamed, 2014). Different variables can be compared and contrast at the same time to answer the research questions (Ibrahim & Abdallahamed, 2014).

3.2 Data Collection Method

Data collection method is an essential step in conducting a research as the right data collection method enables researchers to generate the most accurate and validate results (Maynard, Baker, & Harding, 2017). There are basically two types of data which include primary and secondary data. In this research, both types of data were being used (Maynard et al., 2017).

First of all, primary data is being collected in the form of questionnaires. 100 sets of self-administered questionnaires were at different cities which are Kuala Lumpur, Penang and Johor Bahru. The estimated time to complete the survey questionnaire is 10 minutes to 15 minutes. Besides, 100 sets of online survey forms were distributed through social media platform such as Facebook to reach more respondents at different states. Thus, 200 sets of survey-questionnaire were distributed altogether. In addition, a pilot study was conducted prior the full-scale study. Pilot study indicates a small scale of trial test which enable the researchers get to make amendments or changes to the questionnaires based on the feedback collected from the respondents (Hozawa, Tanaka, Mori, & Tohda, 2016).

Secondary data is also used in this research study. The sources of secondary data that used consists of journals, articles, textbooks and online websites. The additional information that is collected were used to generate new insights in this study (Neuman & Robson, 2014). Furthermore, secondary data can easily be collected without spending much cost or effort (Neuman & Robson, 2014). As majority of secondary data are longitudinal, changes or trends of targeted respondents can be observed over a period of time by analysing the data that have been collected (Johnston, 2017).

3.3 Sampling Design

3.3.1 Target Population

Target population is the cluster or compilation of human beings that consists of information which is needed by researcher in their research (Malhotra, 2010). The target population for the study is the online shoppers in Malaysia. According to a research done by Malaysia Digital Association (2016), the population of Malaysia internet users were up to 21 million. At the same time, a survey conducted by Malaysian Communication and Multimedia Commission (2016) reveals that e-shopping or online shopping occupied 35.3 percent of the total online activities done by the Malaysia internet users. There are approximately 15.3 million of Malaysian are shopping through online channel and 62 percent of them use mobile devices in online shopping (Export.Gov, 2017).

3.3.2 Sampling Frame and Sampling Location

Sampling frame can be interpreted as a lists, maps or directions that provide guidance to researcher in looking for the sampling elements in a more effective and efficient method (Warnecke, 1998). However, there are no sampling frame for the research there is no listings which is able to provide detail information on the online shoppers.

The questionnaire of the research will be distributed through online and physical distribution. Both online and physical distribution have their own pros and cons and applying both method in the sampling process can cover up the shortcoming of respective method. The sampling location for the physical distribution of questionnaires will be Kuala Lumpur, Johor and Penang. On the other hand, the sampling location for online distribution unable to be defined in a clear manner. This is because the questionnaire will be designed to exist in Qualtrics form and distributed to respondents through social media. There are no geographic boundary for online channel hence causing the sampling location for the study to become uncertainty as the respondents could come from different states in Malaysia.

3.3.3 Sampling Elements

The sampling element for the research would be internet users that have experienced online shopping or e-shopping. It is important for the targeted respondent in the research to have experienced at least once in online shopping and service failure so they could provide information regard to the actual service recovery they have gone through.

3.3.4 Sampling Techniques

There are probability or non-probability sampling method that can be chose to conduct a survey for a research. Non-probability sampling method is chosen in the study in which the element of population is not selected according to probabilistic chance but instead researchers rely on their determination during the selection of sampling element. (Malhotra, 2010). Judgmental sampling is applied to the research as judgmental sampling is a convenience method that allows researcher to involve their judgment during the sampling process to decide what elements to be involved in the research (Marshall, 1996).

3.3.5 Sampling Size

Malhotra (2010) defines sampling size as the numbers of elements which is required in the research. The sample size of this study is set at 200 which adhere to the typology of Hinkin (1995), stating that the item-to-response is

recommended to range from 1:4 to 1:10. 23 items were designed in the research instrument hence the ideal sample size of this study should range from 92 to 230.

3.4 Research Instrument

3.4.1 Pilot Test

Pilot Testing serves to examine whether the questionnaires are able to perform it function effectively. Pilot test does not only test on the ambiguity and correctness of the questions, but it is important to ensure all the target respondents perceive and understand the questions in the same direction. Smaller scale of respondents will be targeted during the pilot test to ensure the questionnaires are flawless before the exact data collection process.

During the pilot testing, 50 sets of questionnaires were distributed through online channel. Respondents are asked to voice out their opinion on the structure, ambiguity and complexity of the questions in the distributed questionnaire. Besides, the using of straightforward, easy to understand questions and proper English are being concerned during the pilot test to ensure the questionnaires are able to understand by respondents. The respondents involved in the pilot test provides positive feedback after the completion of questionnaires and hence reflects that the questionnaires are ready to be apply in the research sampling.

3.4.2 Questionnaire Design

In the study of the research, close-ended structured questions is applied in the construction of the questionnaire. Respondents approached and reqested to answer the questionnaire by selecting answer from a series of provided choices. Questions are composed with simple English and straightforward manner to optimize respondent's understanding towards the questions.

The questionnaire are made up of three distinct sections. Section A is designed to gather demographic profile such as gender, age and income level of respondents. Multiple choices are offered within the section and respondents are requested to select answers that match the respondent. Section B consists the research variables of the research. There three dimensions of perceived justice theory applied in the research which are DJ, PJ, IJ, and Emotion (E) as the mediator whereas Customer Satisfaction is the dependent variable of this study. Questions in section B are designed according to Likert scale and there are around 4-5 questions for each construct. Respondents are required to choose between 7 point of scale in which scale 1 signifies strongly disagree while scale 7 signifies strongly agree. Section C will prompt for respondents' opinion on the emotion triggered by the service recovery actions. Section D focus on the customer satisfaction towards service recovery and the questions are designed in the same way as section B. Respondent need to select answer within 7 point of Likert scale in which scale 1 signifies strongly disagree while scale 7 signifies strongly agree.

3.5 Constructs Measurement

3.5.1 Scale of Measurement

Table: Measurement of Demographic Profile of Target Respondent,

Independent Variables and Dependent Variable

Section	Variables	Primary Scale of Measurement	Scaling Technique
Section A:	Gender	Nominal	-
Demographic Profile	Age	Ordinal	-
FIOINC	Income Level	Ordinal	-
Section B:	Distributive Justice	Interval	7-Point Likert
Independent Variables	Procedural Justice	Interval	7-Point Likert
variables	Interactional Justice	Interval	7-Point Likert
Section C: Mediator	Emotion	Interval	7-Point Likert
Section D: Dependent Variable	Customer Satisfaction	Interval	7-Point Likert

Source: Developed for research

101

A 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" has been employed. As compared to 5-point scale, the 7-point Likert scale increases the probability of achieving people's objective reality by providing more varieties of options (Joshi, Kale, Chandel, & Pal 2015).

3.5.2 Operational Definition of Construct

Table: Operational Definition of Construct

Distributive Justice	 Accept compensations upon service failure. Satisfy with compensation equate to loss caused by service failure. Fair compensation able to offset dissatisfaction Get what ought to be compensated. Compensation is sufficient to relieve dissatisfaction.
Procedural Justice	 Service provider alert to the service failure and take responsibility immediately. Customer complaint has taken care of to their satisfaction. Service failure being responded and resolved as soon as possible. Responsive and immediate service recovery action could maintain a long term beneficial relationship. Responsive service recovery action could relieve inconvenience, frustration, annoyance, anxiety.
Interactional Justice	 Service personnel provide appropriate explanation and solution. Service provider treats with dignity and respect. Service provider expresses their concern and empathy. Service provider being honest during the resolution of problem. Service provider treats in a courteous manner.

Emotion	 Company conducts service recovery actions. Disseminate positive word-of-mouth. How the service firm reacts to recover a service failure Ability to evaluate the service recovery action without affected by prior service failure. Satisfaction towards the service recovery action doesn't affect the dissatisfaction towards prior service failure.
Customer Satisfaction	 Likely to repurchase. Spread positive word-of-mouth. How the service firm reacts to recover a service failure. Please with the solution. Feel delighted about the solution.

3.6 Data Processing

Saunder & Lewis (2009) suggested that data that have neither been processed nor analyzed are classified as raw data, which represents limited or meaningless. Data processing is referring to the data process preparation, in which included data checking, coding, editing and transcribing in order to eliminate invalid and irrelevant data. This is done to achieve completeness, accuracy and precision of the data filled by the respondents.

3.6.1 Data Checking

This step involves ensuring all the questionnaire is completely filled, all the data collected is complete and the pages of all questionnaire are intact. This step is crucial as it can enable the researchers to filter and eliminate the incomplete or invalid responses to ensure the quality of the data to be used in subsequent statistical analysis.

3.6.2 Data Editing

The second step compromises of editing the questionnaires to filter and remove any questionnaire with inconsistent response and to eliminate questionnaire which contains any form of ambiguity.

3.6.3 Data Coding

Data coding involves transforming the data into the form that can be processed by the analytical software. Each response are assigned with a numerical value ranging from 1-7 in this study. This is important as it will make the data easier to be interpreted and also for comparison on the similarity and distinction of the variables from each other.

3.6.4 Data Transcribing

Data transcribing involves entering the data into the computer in the form excel sheets or tables form for following statistical analysis and interpretation.

3.6.5 Data Cleaning

Lastly, data entered into computer will undergo data cleaning which involve the rectification of any missing entries and identification of extreme values, range exceeded and data which is incompatible with the title.

3.7 Data Analysis

Partial Least Square (Smart-PLS) is employed to analyze the data collected in this research. Smart-PLS was originally developed by Professor Herman Wold in 1982. Smart-PLS is operating in a way as multiple regression analysis (Hair *et al.*, 2014). Moreover, Smart-PLS has the ability to specify multiple independent variables as well as multiple dependent variables in a single model; the ability to handle the multicollinearity issues among the independent latent variables, which make stronger and more accurate predictions (Wong, 2013).

3.7.1 Demographic Analysis

Demographic information provides data pertaining to the research respondents. The overall demographic information collected form the research respondents will be generated and presented in table form.

3.7.2 Inferential Statistic

Path coefficients is used to examine the whether there is any possible causal linkage exist between the statistical variables. The path coefficients is supported if the path coefficients value (β) is greater than 0.1; the T-statistic is more than 1.96 and the significant level is at least 0.05. The hypothesized relationships can be concluded as statistical significant these criteria have been fulfilled (Memom et al., 2018).

3.7.2.1 Convergent Validity

Convergent validity is a test to examine whether the items designed to measure the construct are associated with each other. According to the study of Fornell & Larcker (1981), there are three aspects to be examined in order to establish a fair convergent validity, in which are average variance expected (AVE), composite reliability and the outer loading values. This is supported by the study of Bagozzi & Yi (1988), suggesting that the desirable value for AVE should be greater than 0.5 in order to support that the majority of the variance in the item is resulted by the latent variable and the threshold value of acceptance of magnitude of outer loadings is at 0.6 and above. Chin (1988) claims that internal consistency of respective construct is indicated by composite reliability (CR). In addition, Fornell and Larcker (1981) suggested that the threshold value of acceptance for the internal consistency reliability of the model more than 0.7, which is the threshold value of CR.

3.7.2.2 Discriminant Validity

Russell, Peplau, & Cutrona (1980) stated that discriminant validity examines whether the indicators that designed to measure to each construct is distinct from other variables. Henseler, Ringle, & Sarstedt (2015) suggested that the AVE of every construct must be compared with each other in the model using its squared correlations in order to establish a satisfactory discriminant validity. AVE is a value that explains the average amount of variance that could be explained by a construct in its indicator variables as compared to the overall variance of its indicators. Fornell & Larcker (1981) suggested that fair discriminant validity is said to have achieved if the square root of AVE is larger as compared to the correlation value with other variable.

In addition, Chin (1998) stated that cross-loadings need to be analyzed to indicate discriminant validity. This is adhere to the typology of Fornell & Larcker (1981) suggested that each indicator's loading must have a greater loading value on its respective construct as compared to other construct.

3.8 Representativeness of Data to the Population

Pilot test it referring to feasibility studies or trail run done in preparation for a fullscale study. Pilot study can provide an insight to the researchers where the proposed methods instruments are too complicated or inappropriate and the identification of potential problems associated in the current research (Van Teijlingen & Hundley, 2001). Pilot test was conducted before collecting the data collection for the study in order to provide insight whether the respondent are able to comprehend the content of each item and the time taken for each respondent to answer the survey question. Survey questionnaires were distributed to 50 respondents and their respective response and feedback were recorded. As shown in Table 3.1, each construct have achieve a fair Cronbach's Alpha value which ranges from 0.762 to 0.858, Hair et al. (2010) suggested that the Cronbach Alpha value should exceed 0.7.

Table 3.1: Pilot test of reliability

Construct	Number	Cronbach's Alpha
	of Items	

138 Distributive Justice	4	0.762	
Procedural Justice	5	0.851	
Interactional Justice	5	0.858	
Emotion	4	0.776	
Customer Satisfaction	5	0.763	
<u> </u>			

3.9 Conclusion

This chapter has address the data collection methods and analyses be employed to study the relevant data. The subsequent results of the data analysed will be further discussed in the following chapter.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

Chapter 4 outlines several interpretation of the data collected from respondents in Kuala Lumpur, Johor Bahru and Penang through physically distribution including data gathered from respondents by using Qualtrics, a leading survey tool. The questionnaire mainly contains respondents' demographic profile and their own level of perception on CS towards service recovery upon service failure. In addition, this chapter also provides cross-tabulation and statistical test results performed by Partial Least Squares (Smart-PLS).

4.2 Survey Response Analysis

In this study, we are using two methods to collect data including online questionnaires distribution and also physical distribution in Kuala Lumpur, Johor Bahru and Penang. We had collected a total of 200 questionnaires where 100 sets of questionnaires through online and another 100 sets through physical distribution. In addition, all responses collected are valid to be used in data analysis all sections in the questionnaire had been completely filled.

4.3 Demographic Profile of Research Respondents

Table 4.1 shows the demographic characteristic of the research respondents. In this study, there are a total of 111 (55.5%) female respondents and 89 (45.5%) male respondents. Figures show that majority of respondents are female respondents. In this study, majority of the respondents come from the age group 20 - 24 years old with 143 respondents (71.5%), followed by the age group of 25 - 30 years old, with 27 respondents (13.5%). 22 respondents come from the age group below 20 years

old, representing 11% of the study. The minority of respondents are from the age group of 30 - 34 years old and above 40 years old, with 3 and 5 respondents, representing 1.5% and 2.5% respectively.

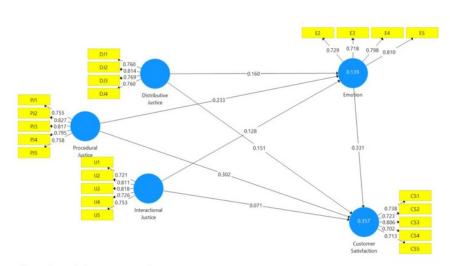
The majority of the respondents have an income of below RM 2000 with 150 respondents, representing 75% of the study. Followed by the income group of RM 2001 – RM 3000, with 20 respondents (10%). Income group of RM 3001 – RM 4000 and above RM 5000 are both ranked third, with 11 respondents come from each income group. Both representing 5.5% of the study respectively. There are only 8 respondents (4%) come from the income group of RM 4001 – RM 5000.

Table 4.1: Summary of Respondent' Demographic Profile

Demographic		
Characteristic	Frequency	Percentage %
Gender		
Male	89	44.5
Female	111	55.5
Age		
Below 20 years old	22	11.0
21 - 24 years old	143	71.5
25 - 29 years old	27	13.5
30 - 34 years old	3	1.5
35 - 39 years old	0	0.0
Above 40 years old	5	2.5
Income Level		31
Below RM 2000	150	75.0
RM 2001 - RM 3000	20	10. <mark>0</mark>
RM 3001 - RM 4000	11	5.5
RM 4001 - RM 5000	8	4.0
Above RM 5000	11	5.5

Source: Developed from research

Figure 4.1: Result from Partial Least Squares



Source: Developed from research

4.4 Validity, Reliability, and Multicollinearity Analyses

4.4.1 Convergent Validity

Convergent Validity is a test examines whether two or more items used to measure the construct or phenomenon will produce a similar score. According to Fornell & Larcker (1981), there are three elements need to be considered in order to establish a fair convergent validity, in which are (1) the factor loading of the indicator; (2) the AVE and (3) the CR. Khan, Dewan, & Chowdhurdy (2016) suggests that if AVE value which greater than 0.5 is desirable for convergent validity as it suggests that the majority of the variance in the indicator is caused by the latent construct. Referring from Table 4.2, each construct have scored more than 0.5 AVE which ranges from 0.544 to 0.625. According to Bagozzi & Yi (1988), the threshold value for acceptance of magnitude of outer loading is 0.7 and above. Therefore, E1 was withdrawn from the overall measurement scale due to the outer loading is lower than 0.7 (0.643). The constructs in the research are accepted since the values are above 0.7 after withdrawing the under-scored item. Each

construct have achieved more than 0.7 CR which ranges from 0.849 to 0.893. Table 4.2 shows the result of each component that evident the measurement model had achieved a fine convergent validity.

Constructs	Item	Factor	Average	Composite	Cronbach's
		Loading	Variance	Reliability	Alpha
			Extracted		
			(AVE)		
Distributive	DJ1	0.760	0.602	0.858	0.783
Justice					
	2 DJ2	0.814			
	DJ3	0.769			
	DJ4	0.760			
Procedural	PJ1	0.755	0.625	0.893	0.850
Justice					
	PJ2	0.827			
	PJ3	0.817			
	PJ4	0.795			
	PJ5	0.758			
Interactional	IJ1	0.721	0.588	0.877	0.828
Justice					
	IJ2	0.811			
	IJ3	0.818			
	IJ4	0.726			
	IJ5	0.753			
Emotion	E2	0.729	0.585	0.849	0.767
	E3	0.718			
	E4	0.798			
	E5	0.810			

Table 4.2: Assessment of Convergent Validity

118 Customer	CS1	<mark>0</mark> .738	<mark>0</mark> .544	0.856	0.797
Satisfaction					
	CS2	0.723			
	CS3	0.806			
	CS4	0.702			
	CS5	0.713			

4.4.2 Discriminant Validity

Discriminant validity is vital for research that contains latent variables which use more than one items to represent a construct. In other words, discriminant validity is examined to prevent the existence of multicollinearity issues in the reseach. (Ab Hamid, Sami, & Sidek, 2017) The interpretation of a hypothesized model could be incorrect and misleadingif the researcher failed to address this issue. Ab Hamid et al. (2017) and Fornell & Larcker (1981) suggest that there are few criteria can be used to access discriminant validity. (1) The factor loading items on the delegated construct must larger than all factor loadings of other constructs, (2) the square root of AVE of each construct should larger as compared to the correlations with other latent construct and (3) by accessing the cross-loading value and comparison of the item's loading.

Table 4.3: Assessment of Discriminant Validity

	Customer Satisfactio n	Distributiv e Justice	Emotio n	Interaction al Justice	Procedur al Justice
Customer	0.737				
Satisfaction					
Distributive	0.277	0.776			
Justice					

Emotion	0.475	0.219	0.765		
Interaction	0.315	0.239	0.260	0.767	
al Justice					
Procedural	0.450	0.121	0.304	0.403	0.791
Justice					

Result in Table 4.3 shows that all the constructs in this study have scored a larger square root of AVE than other constructs' coefficient.

	Customer	Distributive	Emotion	Interactional	Procedural
	Satisfaction	Justice		Justice	Justice
CS1	0.738	0.253	0.386	0.158	0.319
CS2	0.723	0.112	0.283	0.111	0.252
CS3	0.806	0.235	0.491	0.390	0.483
CS4	0.702	0.198	0.234	0.176	0.274
CS5	0.713	0.191	0.244	0.234	0.225
DJ1	0.271	0.760	0.204	0.243	0.133
DJ2	0.163	0.814	0.180	0.202	0.095
DJ3	0.213	0.76 9	0.130	0.176	0.076
DJ4	0.188	0.760	0.150	0.096	0.054
E2	0.347	0.099	0.729	0.256	0.303
E3	0.311	0.217	0.718	0.123	0.095
E4	0.315	0.224	0.798	0.192	0.129
E5	0.448	0.154	0.810	0.208	0.338
IJ1	0.151	0.125	0.228	0.721	0.246
IJ2	0.196	0.156	0.160	0.811	0.316
IJ3	0.332	0.270	0.281	0.818	0.321
IJ4	0.250	0.142	<mark>0</mark> .145	0.726	0.309
IJ5	0.222	0.175	0.138	0.753	0.357
PJ1	0.325	0.051	0.222	0.260	0.755

Table 4.4: Items' Loading and Cross-Loadings

111 PJ2	0.346	0.084	0.163	0.337	0.827
PJ3	<mark>0</mark> .369	0.103	0.254	0.407	0.817
PJ4	0.361	0.094	0.278	0.311	0.795
PJ5	0.369	<mark>0</mark> .137	0.269	0.275	0.758

Chin (1998) suggested that each indicator's loading must have a larger loading value on its own construct relative to the values of other constructs. Results in Table 4.4 have proven that the desirable result had been achieved.

According to the results of Table 4.3 and 4.4, it is proven that the model had achieved fair discriminant validity as both tests yielded a satisfactory fair result.

Path	VIF	Path Coefficient	T-Statistic	Result
DJ > Emotion	1.061	0.16	2.416	Accepted
PJ > Emotion	1.195	0.233	2.816	Accepted
IJ > Emotion	1.249	0.128	1.662	Rejected
DJ > CS	1.091	0.151	2.378	Accepted
PJ > CS	1.258	0.302	4.857	Accepted
IJ > CS	1.268	0.071	1.032	Rejected
Emotion > CS	1.162	0.331	4.891	Accepted

Table 4.5: Path Analyses

Source: Developed from research

The VIF values, path coefficient and T-statistic for the all the paths in the study are showed in Table 4.5. The VIF value in all paths range from 1.061-1.249. Hence, this research had successfully get rid of the multicollinearity

issues as all the VIF values are lesser than 2.5. Furthermore, the result show that five out of seven hypothesis proposed had significant effect (T-statistics > 1.96). The first findings is DJ significantly affects CS and emotion emotions evoked by service recovery actions. This result provide support for both H1a and H1b. The result of PJ aligned with DJ whereas the expected effect is evident in both CS and emotion. This shows that PJ can improve CS (H2a) and will affect customer emotion triggered by service recovery action. In turn, IJ is not significantly affecting both CS and emotion evoked by the service recovery action. This result does not support for both H3a and H3b.

In turn, the result in this study support that emotions is having significant mediating effect of both PJ and DJ on CS. Accoding to Memon et al. (2018) a bias-corrected bootstrapping is considered as one of the powerful tools to recognize mediation. In addition, Preacher & Hayes (2004) and Zhao et al. (2010) suggested that indirect effect (T-statistic > 1.96) which is statistically significant should be taken to prove the existence of mediation. Thus referring to the results in Table 4.5, mediating effect of emotion exists for both DJ (T-statistic = 2.416) and PJ (T-statistic = 2.816), but not for IJ (T-statistic = 1.662).

4.5 Conclusion

In summary, we can conclude that distributive justice and procedural justice have a significant positive correlation with the customer satisfaction. Emotions, a mediator had also enhance the positive relationship between distributive justice and procedural justice with customer satisfaction. However, interactional justice does not have a significant positive correlation with the customer satisfaction. The data in this chapter was proven to be reliable and validated.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

Chapter five summarizes contents from chapter one to four into a brief discussion on the major findings. Further, it provides managerial implications, limitations and recommendation to enhance the quality of the overall study.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

5.1.1.1 Demographic Profile of Research Respondents

There are 111(55.5%) female and 89 (45.5%) male respondents in total. 71.5% of the respondents fall into the age group of 20-24 years old. 75% of the respondents are from the income group of below RM 2000.

5.1.2 Scale Measurement of Research

5.1.2.1 Convergent Validity

According to the result from the assessment of Convergent Validity, every constructs of our research achieved AVE with over 0.5, ranging from 0.544 to 0.625. There is one item E1 has been withdrawn since the outer loading value is lower than 0.7. In overall, all of the constructs in the research are accepted since they all achieved Composite Reliability value with more than 0.7, which is ranging from 0.849 to 0.893.

5.1.2.2 Discriminant Validity

In determining the discriminant validity, two tests have been conducted. The square root of AVEs along with all the other constructs in our research is higher than other constructs' coefficient. In the result of loadings and cross-loading, each of our indicator's loading value is greater on its corresponding construct as compared to other constructs. These have proven that our research model had obtained fair discriminant validity.

5.1.3 Inferential Analysis

5.1.3.1 Path Analysis

The VIF values of the paths is the study are ranging from 1.061 – 1.249. All the IV are positively linked to both E and CS as their T-statistics values exceed 1.96 except for the interactional justice. The T-Statistic values for interactional justice towards emotion and customer satisfaction are at 1.662 and 1.032 respectively.

5.2 Discussion of Major Findings

Tuble 5.1. Summary of Major Thangs				
Hypothesis	Result			
H1a. DJ influences CS in a positive manner.	Accepted			
H1b. DJ influences emotions with respect to				
customer satisfaction in service recovery in a positive	Accepted			
manner.				
H2a. PJ influences CS in a positive manner.	Accepted			
H2b. PJ influences emotions with respect to CS in	Accepted			
service recovery in a positive manner.	recepted			
H3a. IJ influences CS in a positive manner. $\frac{20}{20}$	Rejected			
H3b. IJ influences emotions with respect to				
customer satisfaction in service recovery in a positive	Rejected			
manner.				
H4. Customer emotion in response to service				
recovery action mediates the effect of the elements of	Accepted			
perceived justice on CS.				

Table 5.1: Summary of Major Findings

Source: Developed for the research.

In this research paper, the result outcomes indicate that all of the hypotheses are accepted except for H3a and H3b. This signifies that IJ have insignificant relationship towards CS in service recovery as well as towards E with respect to customer satisfaction in service recovery.

DJ which identify customer perceived level of fairness and adequateness of received tangible remedy (Shin & Casidy, 2017) significantly influence CS towards service recovery. Fair DJ could enhance pleasant emotions while alleviate negative emotions (Söderlund & Colliander, 2015; Mattila, Hanks, & Wang, 2014). Past study also shows that perceived DJ significantly affect E in post-recovery (Ozgen & Duman Kurt, 2012). DJ is the locus of the formation of CS whereby it represents the compensation fairness and transaction-specific judgements (Chang et al., 2012).

Customer's emotions will be negatively affected whenever they perceive certain outcome to be unequally distributed (Chen, Liu, Sheu, & Yang, 2012).

As for PJ, the outcome adheres with the findings of Qin et al., (2012), whereby PJ is positively effecting CS. The process control, timing, flexibility, accessibility and design control which contribute to procedural justice can significantly influence the customer degree of satisfaction towards service recovery. Research of Del Río-Lanza et al. (2013) supports that PJ will significantly affect customer E triggered by service recovery actions. In addition, the research findings of Barkworth & Murphy (2015) indicates that the all of the discrete E are connected to the perceived PJ. Moreover, Wen & Chi (2013) also claim that the influence of PJ on CS towards service recovery is partially mediated by positive emotion.

There is a past research indicates that the effect of interactional justice on postrecovery satisfaction towards organization was found to be insignificant (Siu, Zhang, & Yau, 2013). Customers are more particular about the results and procedures of service recovery rather than their interaction with the service provider. As E has found to be significantly associated with CS, the negative relationship between IJ and E can be explained by the research which discovered that attributes in IJ are not important concerns to customer in the recovery process along with its result showing that IJ has no significant influence on satisfaction (Yang, 2012).

Customer emotions triggered by service recovery action mediate the influence of perceived justice on CS. The result is supported by the findings of past studies indicating that E induced within several marketing settings have significant influence on CS (Pedragosa, Biscaia, & Correia, 2015; Söderlund & Colliander, 2015). In addition, Biscaia et al. (2012) indicates that positive and negative E can directly influence CS where it can either ruin or improve the customer evaluation of the service quality provided.

5.3 Implication of study

5.3.1 Managerial Implication

5.3.1.1 Distributive Justice

Distributive justice is justified to significantly affect emotions and customer satisfaction. This indicates the physicals or tangibles compensated by the service providers did played a certain roles in affecting customers emotions which in latter bring effect to customer satisfaction towards service recovery. Service providers should exert more effort in deciding an appropriate compensation for customers who have went through a service failure. Compensation provided by service provider should be customized according to the loss of customer due to the event of failure. A gratified distribution and compensation could reduce the possible generation of negative emotions and increase customer satisfaction in extent.

5.3.1.2 Procedural Justice

PJ has positive effects towards emotions and CS on service recovery. Compliance to fair process and procedures when it comes to a service recovery actions can result in positive customer emotions. Service provider can develop a general guideline of recovery procedures for service failure and inform customers on the actions, steps and process in a recovery action. Service provider can ensure customers are notified on the progress of service recovery action. Customers who are well known on the procedural aspect of the recovery process are less likely to generate negative emotions and resulted better satisfaction level towards service recovery action. **5.3.1.3 Emotions** Emotions is being proved to have significant effect to mediate perceived justice and bring effect to CS towards service recovery. Service providers should be more attentive during service recovery process to observe customers' reactions and responses towards the recovery offered by service providers. Customer evaluation and perception on DJ and PJ lead to the creation of either positive or negative emotions. Service provider should be more compassionate and learn to communicate with customers in an appropriate manner. Service providers who can identify and comprehend the causal of customer's emotion during a service failure could customize their response and recovery action to calm down the involved customer more effectively.

5.3.1.4 Customer Satisfaction

Customer satisfaction towards service recovery are driven by distributive and procedural justice in addition with mediator effect from emotions. In order to manage service recovery action in effective way, service providers are advised to pay focus on distributive and procedural justice during the execution of recovery action. Well planned and developed recovery actions are not enough if emotions are being ignored in the event of recovery. Service providers should constantly note the changes of customer's emotion to secure better customer satisfaction.

5.3.2 Academic Implication

In most of the previous study on the customer satisfaction towards service recovery such as research done by Nikbin et al. (2012) and Choi & Choi (2014), theory of perceived justice is the only framework being applied into the research. However, our research does not only apply theory of perceived

justice but searching for extension of affecters that can significantly affect customer satisfaction. Finding from the research have proven the significant effect of emotions as a mediator in the framework in affecting customer satisfaction. Emotions which serve as a mediator, is generated when customers evaluate the perceived recovery justice and has the ability to impact customer satisfaction towards service recovery. This finding could serve as a base for the researcher who are conducting studies with related topic about customer satisfaction on service recovery process.

Besides, the study has revealed some contrasting point of view as compared to some previous research done on the same topic. Unlike previous studies which claimed that all available variables in Justice Theory have significant effect towards customer satisfaction, the finding shows that interactional justice was unable to affect both emotions and customer satisfaction towards service recovery. This finding could help researcher to reinterpret on the application of theory of perceived justice in the market segment in Malaysia.

5.4 Limitation of Study

There are few limitations in the research that needed to be noted. First, cross sectional data is collected in the survey which mean the data reflect a respondent feedback only on the particular time. Previous study by Wen and Chi in 2013 suggests that customer emotions keep on changing and vary across the time. Cross sectional study might not be adequate to collect accurate data on customer emotions.

The study has focused on the variables that might affect customer's satisfaction towards service recovery. However, there was no specification on the types and significance of the service failure in the study. Service failure happened in a grocery shop and service failure in an air flight transportation cannot be equalized since the consequence generated from both failure lead to different level of customer's lost. The former might only lost few minutes or hours to get an appropriate service recovery but the latter might have need to cancel a booked hotel because he or she are unable to reach the vacation destination as planned. Without pre-mentioning in the survey, respondents might generate their own imagination on the type of service failure in order for them to answer the questions regarding to the service recovery. This would lead to an inconsistent of data resulted by the variation of respondent's imagination.

There is another limitation on the research in which quantitative research method is being used within the study. As compared to qualitative research, quantitative research do not include depth experience description (Choy, 2014) whereby respondents were unable to provide more detailed and personal responses within the data collection process. This could result in leave out of potential variables or influences in the study.

5.5 Recommendation

Future researchers can apply longitudinal study in research which requires measurement and responses on customer emotion. Longitudinal data are more appropriate to describe customer emotions because it allows researchers to collect respondent's feedback throughout the time. This could provide researcher better and more accurate data on customer emotions and enable researcher to observe the changing trends on emotions towards service failure or recovery actions.

Future researchers are suggested to insert a condition of service failure when they are conducting research regarding service failure. This implementation mainly serve to standardize the respondent's answers towards the service recovery action. Researchers can choose to implement a service failure condition with higher significant, lower significant or both at the same time to examine different customer's responses when they are dealing with different level of service failure involvement.

Besides, future researcher are advised to apply qualitative research or a mix strategy of quantitative and qualitative research when dealing with study which requires depth customer's personal opinion. This implementation could allow respondents to provide better explanation, evaluation and responses during the survey process. Better responses from respondent can hence lead to a better quality of the study.

5.6 Conclusion

To sum up, this research determines the variables that influence affect the perceived service recovery on CS. Hence, we can conclude that DJ and IJ has a significant correlation with CS while IJ does not have a significant correlation with CS. Additionally, the moderation interaction (emotions) helps to reinforce this research.

References

 Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). IOP Publishing.

- Abdelfatah, A. S., Shah, M. Z., & Puan, O. C. (2015). Evaluating the sustainability of traffic growth in Malaysia. *Journal of Traffic and Logistics Engineering Vol*, 3(1).
- Ali, F., & Amin, M. (2014). The influence of physical environment on emotions, customer satisfaction and behavioural intentions in Chinese resort hotel industry. *Journal for Global Business Advancement*, 7(3), 249-266.
- Alzaydi, Z. M., Al-Hajla, A., Nguyen, B., & Jayawardhena, C. (2017). A Review of Service Quality and Service Delivery: Towards A Customer Co-Production and Customer-Integration Approach. *Business Process Management Journal*, (just-accepted), 00-00.
- Augusto de Matos, C., Luiz Henrique, J., & de Rosa, F. (2013). Customer reactions to service failure and recovery in the banking industry: the influence of switching costs. *Journal of Services Marketing*, 27(7), 526-538.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), 74-94.
- Bahri-Ammari, N., & Bilgihan, A. (2017). The effects of distributive, procedural, and interactional justice on customer retention: An empirical investigation in the mobile telecom industry in Tunisia. *Journal of Retailing and Consumer Services*, 37, 89-100.
- Bambauer-Sachse, S., & Rabeson, L. (2015). Determining adequate tangible compensation in service recovery processes for developed and developing countries: The role of severity and responsibility. *Journal of Retailing and Consumer Services*, 22, pp. 117-127.

- Barkworth, J. M., & Murphy, K. (2015). Procedural justice policing and citizen compliance behaviour: The importance of emotion. Psychology, Crime & Law, 21(3), 254-273.
- Biscaia, R., Correia, A., Rosado, A., Maroco, J., & Ross, S. (2012). The effects of emotions on football spectators' satisfaction and behavioural intentions. *European Sport Management Quarterly*, 12(3), 227-242.
- Bitner, M. J., Brown, S. W., & Meuter, M. L. (2000). Technology infusion in service encounters. Journal of Academy of Marketing Science, 28(1), 138–149.
- Bonnefoy-Claudet, L., & Ghantous, N. (2013). Emotions' impact on tourists' satisfaction with ski resorts: the mediating role of perceived value. *Journal* of Travel & Tourism Marketing, 30(6), 624-637.
- Cai, R., & Qu, H. (2017). Customers' perceived justice, emotions, direct and indirect reactions to service recovery: moderating effects of recovery efforts. Journal of Hospitality Marketing & Management, 1-23.
- Chang, H. H., Lai, M. K., & Hsu, C. H. (2012). Recovery of online service: Perceived justice and transaction frequency. *Computers in Human Behavior*, 28(6), 2199-2208.
- Chang, H. S., & Hsiao, H. L. (2008). Examining the casual relationship among service recovery, perceived justice, perceived risk, and customer value in the hotel industry. *The Service Industries Journal*, 28(4), 513-528.
- Chen, H. G., Yu-Chih Liu, J., Shin Sheu, T., & Yang, M. H. (2012). The impact of financial services quality and fairness on customer satisfaction. *Managing Service Quality: An International Journal*, 22(4), 399-421.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Choi, B., & Choi, B. J. (2014). The effects of perceived service recovery justice on customer affection, loyalty, and word-of-mouth. *European Journal of Marketing*, 48(1/2), 108-131.
- Choi, B., & 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*, 27(3), 223-233.

- Choi, C. H., Kim, T. T., Lee, G., & Lee, S. K. (2014). Testing the stressor-strainoutcome model of customer-related social stressors in predicting emotional exhaustion, customer orientation and service recovery performance. *International Journal of Hospitality Management*, 36, 272-285.
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR Journal of Humanities and Social Science*, 19(4), 99-104. *Conducting, and Evaluating Quantitative and Qualitative Research. Fourth ed. Boston: Pearson*, 204-35.
- Creswell, J. W. (2012). Collecting qualitative data. *Educational Research: Planning*,
- Crisafulli, B., & Singh, J. (2016). Service guarantee as a recovery strategy: The I mpact of guarantee terms on perceived justice and firm motives. *Journal of Service Management*, 27(2), 117-143.
- Dekker, T. J. (2016). Fred Feldman's Distributive justice: getting what we deserve from our country. Oxford: Oxford University Press, 2016, 288 pp. *Erasmus Journal for Philosophy and Economics*, 9(2), 208-212.
- Del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2009). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, 62(8), 775-781.
- Del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2013). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, 62(8), 775-781.
- Deng, W. J., Yeh, M. L., & Sung, M. L. (2013). A customer satisfaction index model for international tourist hotels: Integrating consumption emotions into the American Customer Satisfaction Index. *International Journal of Hospitality Management*, 35, 133-140.
- Emarketer. (2016). Worldwide Retail Ecommerce Sales Will Reach \$1.915 Trillion This Year. Retrieved March 18, 2018 from https://www.emarketer.com/Article/Worldwide-Retail-Ecommerce-Sales-Will-Reach-1915-Trillion-This-Year/1014369

- Export.Gov. (2017). Malaysia-eCommerce. Retrieved January 17, 2018 from https://www.export.gov/apex/article2?id=Malaysia-E-Commerce
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Fang, Y., Qureshi, I., Sun, H., McCole, P., Ramsey, E., & Lim, K. H. (2014). Trust, Satisfaction, and Online Repurchase Intention: The Moderating Role of Perceived Effectiveness of E-Commerce Institutional Mechanisms. Mis Quarterly, 38(2).
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of marketing research, 39-50.
- Gautam, V. (2011). Investigating the moderating role of corporate image in the relationship between perceived justice and recovery satisfaction: evidence from Indian aviation industry. *International Review of Management and Marketing*, 1(4), 74.
- Ghalandari, K. (2013). Perceived Justice's Influence on Post-Purchase Intention s and Post-Recovery Satisfaction in Online Purchasing: the Moderating Role o f Firm Reputation in Iran. Research Journal of Applied Sciences, Engineering and Technology, 5, 1022-1031.
- Griffis, S. E., Rao, S., Goldsby, T. J., & Niranjan, T. T. (2012). The customer consequences of returns in online retailing: An empirical analysis. *Journal* of Operations Management, 30(4), 282-294.
- Gronroos, C. (1988), "Service quality: the six criteria of good perceived service quality", Review of Business, Vol. 9 No. 3, pp. 10-13
- Hair Jr., J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) Multivariate Data Analysis: A Global Perspective. 7th Edition, Pearson Education, Upper Saddle River.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.

- Hayati, B. (2017). Customer satisfaction with e-service Hayati recovery: roles of perceived justice and customer emotions. Proceedings of The 17th International Conference on Electronic Business (pp. 319-320).
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. Journal of management, 21(5), 967-988.
- Hosany, S., & Prayag, G. (2013). Patterns of tourists' emotional responses, satisfaction, and intention to recommend. *Journal of Business Research*, 66(6), 730-737
- Hozawa, S., Tanaka, H., Mori, F., & Tohda, Y. (2016). Development Of A Questionnaire To Evaluate Asthma Control In Japanese Asthma Patients: A Pilot Study. In A36. CLINICAL PROBLEMS IN ASTHMA AND ALLERGY (pp. A1399-A1399). American Thoracic Society.
- Ibrahim, M., & Abdallahamed, S. (2014). Service recovery and customer satisfaction: a case of uganda telecom. *European Journal of Business and Management*, 6(4), 197-209.
- Jha, S., & Balaji, M. S. (2015). Perceived justice and recovery satisfaction: the moderating role of customer-perceived quality. *Management & Marketing*, 10(2), 132-147.
- Johnston, M. P. (2017). Secondary data analysis: A method of which the time has come. Qualitative and Quantitative Methods in Libraries, 3(3), 619-626.
- Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. British Journal of Applied Science & Technology, 7(4), 396.
- Jung, N. Y., & Seock, Y. K. (2017). Effect of service recovery on customers' perceived justice, satisfaction, and word-of-mouth intentions on online shopping websites. *Journal of Retailing and Consumer Services*, 37, 23-30.
- Karatepe, O.M. (2006). Customer complaints and organizational responses: The effects of complaints' perceptions of justice on satisfaction and loyalty. *International Journal of Hospitality Management*, 25(1), 69-90

- Kau, A. K., & Wan-Yiun Loh, E. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and noncomplainants. *Journal of Services Marketing*, 20(2), 101-111.
- Kelley SW, Davis MA. Antecedents to customer expectations for service recovery. Journal of the Academy of Marketing Science 1994;22:52–61.
- Khan, E. A., Dewan, M. N. A., & Chowdhury, M. M. H. (2016). Reflective or formative measurement model of sustainability factor? A three industry comparison. *Corporate Ownership and Control*, 13(2), 83-92.
- Kim, I., Mi Jeon, S., & Sean Hyun, S. (2012). Chain restaurant patrons' well-being perception and dining intentions: The moderating role of involvement. International Journal of Contemporary Hospitality Management, 24(3), 402-429.
- Kim, T., Kim, W.G. and Kim, H.B. (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.
- Klaus, P. (2013). The case of Amazon. com: towards a conceptual framework of online customer service experience (OCSE) using the emerging consensus technique (ECT). *Journal of Services Marketing*, 27(6), 443-457.
- Komunda, M., & Osarenkhoe, A. (2012). Remedy or cure for service failure? Effects of service recovery on customer satisfaction and loyalty. *Business Process Management Journal*, 18(1), 82-103.
- Kumar, M., & Kumar, N. (2016). Three dimensions of service recovery: examining relationship and impact. Supply Chain Management: An International Journal, 21(2), 273-286.
- Kuo, Y. F., & Wu, C. M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management*, 32(2), 127-138.
- Le Roy, J., Bastounis, M., & Poussard, J. M. (2012). Interactional justice and counterproductive work behaviors: The mediating role of negative

emotions. *Social Behavior and Personality: an international journal*, *40*(8), 1341-1355.

- Lee, T. J., Cho, H., & Ahn, T. H. (2012). Senior citizen satisfaction with restaurant service quality. *Journal of Hospitality Marketing & Management*, 21(2), 215-226.
- Li-hua, Yang. (2012). Customer satisfaction antecedents within service recovery context: Evidences from "Big 4" banks in China. Nankai Business Review International, 3(3), 284-301.
- Lin, H. H., Wang, Y. S., & Chang, L. K. (2011). Consumer responses to online retailer's service recovery after a service failure: A perspective of justice theory. Managing Service Quality: An International Journal, 21(5), 511– 534.
- Liu, Y., Huang, Y., Luo, Y., & Zhao, Y. (2012). How does justice matter in achieving buyer-supplier relationship performance?. *Journal of Operations Management*, 30(5), 355-367.
- Lu, Y., Lu, Y., & Wang, B. (2012). Effects of dissatisfaction on customer repurchase decisions in e-commerce-an emotion-based perspective. *Journal* of Electronic Commerce Research, 13(3), 224.
- Luo, H., Yu, Y., Huang, W., Cai, Z., & Chen, Y. (June, 2017). Impact of service recovery quality on consumers' repurchase intention: The moderating effect of customer relationship quality. In Service Systems and Service Management (ICSSSM), 2017 International Conference on (pp. 1-6). IEEE.
- Mahalingam, E. (2016). Online Shopping Uptrend in Malaysia. *The Star Online*. Retrieved March 18, 2018 from http://www.thestar.com.my/business/business-news/2016/06/27/onlineshopping-uptrend/
- Malaysia Digital Association. (2016). Exploring the Digital Landscape in Malaysia Boosting Growth for a Digital Economy. Retrieved August 18, 2017 from http://www.malaysiandigitalassociation.org.my/wpcontent/uploads/2016/08/Malaysia-Digital-Landscape-August-2016.pdf

MalaysianCommunicationAndMultimediaCommission(2016).InternetUsersSurvey2016.RetrievedAugust18,2017fromhttps://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS2016.pdf

Malhotra, N. K. (2010). *Marketing research: An applied orientation, 6/e*. Pearson Education India.

Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526.

- Matta, F. K., Erol-Korkmaz, H. T., Johnson, R. E., & Biçaksiz, P. (2014). Significant work events and counterproductive work behavior: The role of fairness, emotions, and emotion regulation. Journal of Organizational Behavior, 35(7), 920-944.
- Mattila, A., Hanks, L., & Wang, C. (2014). Others service experiences: emotions, perceived justice, and behavior. *European Journal of Marketing*, 48(3/4), 552-571.
- Maynard, M., Baker, G., & Harding, S. (2017). Exploring childhood obesity prevention among diverse ethnic groups in schools and places of worship: Recruitment, acceptability and feasibility of data collection and intervention components. *Preventive Medicine Reports*, 6, 130-136.
- McCollough M. A. (2000). The effect of perceived justice and attribution regarding service failure and recovery on post-recovery customer satisfaction and service quality attributes. *Journal of Hospitality & Tourism Research*, 24(4), 423-447
- Memon, M. A., Ting, H., Ramayah, T., Chuah, F., & Cheah, J. H. (2018). Mediation Analysis Issues And Recommendation. Journal of Applied Structural EquationModeling: 2(1), i-ix.
- Menon K, Dubé L. Service provider responses to anxious and angry customers: different challenges, different payoffs. Journal of Retailing 2004;80(3):229– 37.
- Migacz, S. J., Zou, S., & Petrick, J. F. (2018). The "Terminal" Effects of Service Failure on Airlines: Examining Service Recovery with Justice Theory. *Journal of Travel Research*, 57(1), 83-98.

Mirani, W., Hanzaee, K. H., & Moghadam, M. B. (2015). The Effect of Service Recovery on Customer's Post-Behavior in the Banking Industry by Using the Theory of Perceived Justice. J. Appl. Environ. Biol. Sci, 5(5), 465-474.

Neuman, W. L., & Robson, K. (2014). Basics of social research. Pearson Canada.

- Nikbin, D., Iranmanesh, M., Hyun, S. S., Baharun, R., & Kim, I. (2015). The role of airline travelers' pre-recovery emotions during the service recovery process. *Journal of Travel & Tourism Marketing*, 32(6), 677-691.
- Nikbin, D., Ismail, I., Marimuthu, M. & Slarzehi, H. (2012). The relationship of service failure attributions, service recovery justice and recovery satisfaction in the context of airlines, Scandinavian Journal of Hospitality and Tourism, 12 (3), pp. 232-254.
- Nikbin, D., Ismail, I., Marimuthu, M., & Armesh, H. (2012). Perceived justice in service recovery and switching intention: Evidence from Malaysian mobile telecommunication industry. *Management Research Review*, 35(3/4), 309-325.
- Nikbin, D., Ismail, I., Marimuthu, M., & Jalalkamali, M. (2010). Perceived justice in service recovery and recovery satisfaction: The moderating role of corporate image. *International Journal of Marketing Studies*, 2(2), 47.
- Ozgen, O., & Duman Kurt, S. (2012). Pre-recovery and post-recovery emotions in the service context: a preliminary study. *Managing Service Quality: An International Journal*, 22(6), 592-605.
- Ozkan-Tektas, O., & Basgoze, P. (2017). Pre-recovery emotions and satisfaction: a moderated mediation model of service recovery and reputation in the banking sector. *European Management Journal*, 35(3), 388-395.
- Park, J. J., & Park, J. W. (2016). Investigating the effects of service recovery quality elements on passengers' behavioral intention. *Journal of Air Transport Management*, 53, 235-241.
- Pedragosa, V., Biscaia, R., & Correia, A. (2015). The role of emotions on consumers' satisfaction within the fitness context. *Motriz: Revista de Educação Física*, 21(2), 116-124.

- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. Behavior Research Methods, Instruments, & Computers, 36(4), 717-731
- Qin, J., Chen, Q., & Wan, Y. (2012). The effects of service recovery justice and perceived switching costs on customer loyalty in e-tailing. In POMS 23rd Annual Conference.
- Rashid, M. H. A., Ahmad, F. S., & Othman, A. K. (2014). Does service recovery affect customer satisfaction? A study on co-created retail industry. *Procedia-Social and Behavioral Sciences*, 130, 455-460.
- Ro, H., & Olson, E. D. (2014). The effects of social justice and stigmaconsciousness on gay customers' service recovery evaluation. *Journal of Business Research*, 67(6), 1162-1169.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of personality and social psychology*, 39(3), 472.
- Salaria, N. (2012). Meaning of the term descriptive survey research method. International journal of transformations in business management, 1(6), 161-175.
- Salehi, M. (2012). Consumer buying behavior towards online shopping stores in Malaysia. International Journal of Academic Research in Business and Social Sciences, 2(1), 393-403.
- Saunders, M. L., & Lewis, P. (2009). P. & Thornhill, A.(2009). Research methods for business students, 4.
- Shin, H., & Casidy, R. (2017). Customer Responses to Service Failure in Direct and Indirect Harm Context: An Abstract. In *Marketing at the Confluence between Entertainment and Analytics* (pp. 247-247). Springer, Cham.
- Shin, H., Casidy, R., & Mattila, A. S. (2018). Service Recovery, Justice Perception, and Forgiveness: The "Other Customers" Perspectives. Services Marketing Quarterly, 39(1), 1-21.

- Singh, J., & Crisafulli, B. (2016). Managing online service recovery: procedures, justice and customer satisfaction. *Journal of Service Theory and Practice*, 26(6), 764-787.
- Siu, N. Y. M., Zhang, T. J. F., & Yau, C. Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, 114(4), 675-686.
- Smith, A. K., & Bolton, R. N. (1998). An experimental investigation of customer reactions to service failure and recovery encounters: paradox or peril?. *Journal of service research*, 1(1), 65-81.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of marketing research*, 356-372.
- Söderlund, M., & Colliander, J. (2015). Loyalty program rewards and their impact on perceived justice, customer satisfaction, and repatronize intentions. *Journal of Retailing and Consumer Services*, 25, 47-57.
- Stets, J. E., & Turner, J. H. (Eds.). (2014). Handbook of the Sociology of Emotions (Vol. 2). Springer.
- Surmacz, D. (2017). Top 3 Technologies Revolutionising Economy. *Digital Market Asia*. Retrieved March 18, 2018 from https://www.digitalmarket.asia/top-3-technologies-revolutionising-ecommerce-2/
- Tranter, B. K. (2013). Quantitative Research in the Australian Journal of Political Science. In Australian Political Studies Association Annual Conference (pp. 1-19).

Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies.

Warnecke, R. B. (1998). Sampling frames. *Encyclopedia of Biostatistics*.

Wen, B., & Geng-qing 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*, 25(3), 306-327.

- Williams, P., & Aaker, J. L. (2002). Can mixed emotions peacefully coexist?. Journal of Consumer Research, 28(4), 636-649.
- Wirtz, J., & Mattila, A. S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure. International Journal of Service Industry
- Wong, K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- Yeoh, P. L., Woolford, S. W., Eshghi, A., & Butaney, G. (2014). Customer response to service recovery in online shopping. *Journal of Services Research*, 14(2), 33.
- Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision support systems*, 52(3), 645-656.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. Journal of Consumer Research, 37(3), 197-206.

APPENDICIES

Appendix 3.1 Survey-Questionnaire



University Tunku Abdul Rahman Faculty of Business and Finance BACHELOR OF MARKETING (HONS-MK) FINAL YEAR PROJECT Research Title: Stay or Switch: The influence of perceived service recovery

on customer satisfaction

Survey Questionnaire

Introduction

We are undergraduate students from University Tunku Abdul Rahman (UTAR) enrolling in Bachelor of Marketing (HONS). This study is attempt to determine the influence of perceived service recovery on customer satisfaction. The results will be analyzed solely for this research purpose. Your kind participation will help us to obtain more information pertaining to customer satisfaction towards perceived service recovery upon service failure.

Confidentiality

The information provided will only be analyzed for academic purpose. Rest assured that the answers provided to this survey questionnaire will be treated with utmost confidentiality.

Participation

Your participation in this research is completely voluntary. There is no right or wrong answers for any statements in this questionnaire. This survey questionnaire

consist of four sections. Please answer ALL questions for all sections. This survey will take you approximately 5-10 minutes to complete.

Thank you for sparing your valuable time on filling this survey-questionnaire and your kind cooperation and participation in the conduct of this study.

Best Regards, Loke Chee Kian Carven Yong Kar Ven Lim Yong Jun Tiong Siew Ting

cheekianloke@lutar.my carvenyong95@lutar.my ernestlim10@lutar.my sssjang@lutar.my

Section A: Demographic Profile

(Please tick at the appropriate answer that best describe yourself.)

- Q1. Gender
 - □ Male
 - □ Female

Q2. Age

- Below 20 years old
- \square 20 24 years old
- \Box 25 30 years old
- □ 30 34 years old
- □ 35 40 years old
- □ Above 40 years old

Q3. Income Level

- Below RM 2000
- □ RM 2001 RM 3000
- □ RM 3001 RM 4000
- □ RM 4001 RM 5000
- □ Above RM 5000

Section B: Perceived Justice on Customer Satisfaction

This section consists of three dimensions of perceived justice that would influence your satisfaction towards the service recovery in respond to the service failure. You are required to indicate the extent to which your opinion to the following statements by *CIRCLING* one answer out of the seven Likert scale as per below;

Strongly	Disagree	Slightly	Neutral	Slightly	Agree	Strongly
Disagree		Disagree		Agree		Agree
1	2	3	4	5	6	7

Distributive Justice (DJ)	Strongly Disagree Disagree	Slightly Disagree Neutral	Slightly Agree Agree	Strongly Agree
---------------------------	----------------------------------	---------------------------------	----------------------------	-------------------

DJ1	I accept compensations from service provider upon service failure.	1	2	3	4	5	6	7
DJ2	I would satisfy with compensations that equate to my loss that caused by the service failure.	1	2	3	4	5	6	7
DJ3	Fair compensation able to offset my dissatisfaction towards the service failure.	1	2	3	4	5	6	7
DJ4	I should get what I ought to be compensated during the service failure.	1	2	3	4	5	6	7

	Procedural Justice (PJ)	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PJ1	Service provider should alert to the service failure and take responsibility for the problem immediately.	1	2	3	4	5	6	7
PJ2	Service provider should check with the offended customers whether their complaint has taken care of to their satisfaction.	1	2	3	4	5	6	7
PJ3	Service failure should be responded and resolved as soon as possible.	1	2	3	4	5	6	7
PJ4	A responsive and immediate service recovery action could maintain a long term beneficial relationship.	1	2	3	4	5	6	7
PJ5	A responsive service recovery action could relieve my inconvenience, frustration, annoyance, anxiety caused by the service failure.	1	2	3	4	5	6	7

	Interactional Justice (IJ)	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
IJ1	I would be more satisfied if service personnel provides an appropriate explanation and solution to the failed service.	1	2	3	4	5	6	7
IJ2	I would be more pleased with the service recovery when the service provider treats me with dignity and respect.	1	2	3	4	5	6	7
IJ3	Service provider should express their concern and empathy towards service failure.	1	2	3	4	5	6	7
IJ4	Service provider should be honest during the resolution of problem.	1	2	3	4	5	6	7
IJ5	I would be happier with the service recovery if the service provider treats me in a courteous manner.	1	2	3	4	5	6	7

Section C: Mediating Role of Emotions on Customer Satisfaction

This sections consists of some of the emotional response that are likely to trigger during the service recovery. You are required to indicate the extent to which your opinion to the following statements by *CIRCLING* one answer out of the seven Likert scale as per below:

	Emotions (E)	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
E1	I will be satisfied as long as the company conducts service recovery actions.	1	2	3	4	5	6	7
E2	I will be more pleasant only if a proper and reasonable service recovery action is provided.	1	2	3	4	5	6	7

E3	I am able to remain calm and rational after a service failure.	1	2	3	4	5	6	7
E4	I am able to evaluate the service recovery action without affected by the emotions caused by the service failure.	1	2	3	4	5	6	7
E5	A proper service recovery action could relief my dissatisfaction towards the service failure.	1	2	3	4	5	6	7

Section D: Customer Satisfaction towards service recovery actions

Please indicate the extent to which your opinion to the following statements after receiving a service recovery. Kindly **circle** your answers.

	Customer Satisfaction	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
CS1	I am likely to repurchase if service provider provide successful service recovery.	1	2	3	4	5	6	7
CS2	I will spread positive word-of- mouth if service provider provides successful service recovery.	1	2	3	4	5	6	7
CS3	How the service firm reacts to recover a service failure will determine my recovery satisfaction level.	1	2	3	4	5	6	7
CS4	I always pleased with the solution provided by the service provider.	1	2	3	4	5	6	7
CS5	I always feel delighted about the solution to my problem.	1	2	3	4	5	6	7

*End of survey-questionnaire

Thank you for your participation!

Stay or Switch: The influence of perceived service recovery on customer satisfaction

ORIGINALIT	TY REPORT			
31 SIMILARIT	70	27% INTERNET SOURCES	21% PUBLICATIONS	24% STUDENT PAPERS
PRIMARY S	SOURCES			
	eprints.ut	ar.edu.my		3%
	link.sprin			1%
	WWW.CCS	•		1%
4	etds.lib.n	cku.edu.tw		1%
	Submitte Student Paper	d to Universiti T	eknologi MAR	A 1 %
	business	perspectives.org]	1%
F	Submitte Pakistan _{Student Paper}	d to Higher Edu	cation Commis	ssion 1%
	pacis201	5.comp.nus.edu	.sg	1%

9	Submitted to Universiti Sains Malaysia Student Paper	1%
10	Submitted to Universiti Tunku Abdul Rahman Student Paper	1%
11	hrcak.srce.hr Internet Source	1%
12	Submitted to University of Wales Institute, Cardiff Student Paper	<1 %
13	studentjournal.petra.ac.id	<1%
14	fedetd.mis.nsysu.edu.tw Internet Source	<1%
15	www.ijmsbr.com Internet Source	<1%
16	Submitted to Central Queensland University Student Paper	<1%
17	Submitted to University of Northumbria at Newcastle Student Paper	<1%
18	dspace.nwu.ac.za Internet Source	<1%
19	etds.must.edu.mo Internet Source	<1%

20	www.emeraldinsight.com	<1%
21	aut.researchgateway.ac.nz	<1%
22	eprints.qut.edu.au Internet Source	<1%
23	Submitted to Pacific International Hotel Management School Student Paper	<1%
24	umexpert.um.edu.my Internet Source	<1%
25	Submitted to Massey University Student Paper	<1%
26	<mark>ijthr.or.kr</mark> Internet Source	<1%
27	www.reser2014.fi Internet Source	<1%
28	Jaime Ortiz, Tao-Sheng Chiu, Chih Wen-Hai, Che-Wei Hsu. "Perceived justice, emotions, and behavioral intentions in the Taiwanese food and beverage industry", International Journal of Conflict Management, 2017 Publication	< 1 %

Submitted to University of Southampton Student Paper

29

<1%

30	Submitted to University of Leeds Student Paper	<1%
31	Submitted to Segi University College Student Paper	<1%
32	Submitted to London School of Marketing Student Paper	<1%
33	Submitted to Anglia Ruskin University Student Paper	<1%
34	Submitted to ISM Vadybos ir ekonomikos universitetas, UAB Student Paper	<1%
35	Submitted to University of Greenwich Student Paper	<1%
36	d-nb.info Internet Source	<1%
37	Submitted to University of Queensland Student Paper	<1%
38	Submitted to Universiti Teknologi Petronas	<1%
39	econ.ubbcluj.ro Internet Source	<1%
40	Submitted to Acknowledge Education Pty Ltd Student Paper	<1%

41	Submitted to Middlesex University Student Paper	<1%
42	Submitted to Universiteit van Amsterdam Student Paper	<1%
43	Submitted to Vrije Universiteit Amsterdam Student Paper	<1%
44	Submitted to Trident University International Student Paper	<1%
45	Submitted to Austin Peay State Uniersity Student Paper	<1%
46	dspace.lboro.ac.uk Internet Source	<1%
47	edi-info.ir Internet Source	<1%
48	Abbas M. Abd, Alaa S. Khamees. "As built case studies for BIM as conflicts detection and documentation tool", Cogent Engineering, 2017 Publication	< 1 %
49	Submitted to Aston University Student Paper	<1%
50	Submitted to Emirates International School Student Paper	<1%
51	Submitted to American Intercontinental University Online	<1%

52	Submitted to Universiti Malaysia Sarawak Student Paper	<1%
53	Submitted to College of Professional and Continuing Education (CPCE), Polytechnic University Student Paper	<1%
54	tci-thaijo.org Internet Source	< 1 %
55	Submitted to Oklahoma State University Student Paper	<1 %
56	etd.lib.fsu.edu Internet Source	<1 %
57	repub.eur.nl Internet Source	<1 %
58	Yusheng Kong, Peter Yao Lartey, Fatoumata Binta Maci Bah, Nirmalya B. Biswas, Rupa Santosh Jaladi. "In Pursuit of Public Sector Efficiency and Value Innovation; the Blue Ocean Strategy", Journal of Public Administration and Governance, 2018 Publication	< 1 %
59	Submitted to University of Newcastle upon Tyne	<1%

Student Paper

60	journals.sagepub.com Internet Source	<1%
61	Submitted to 9676 Student Paper	<1%
62	Rui Gomes, Nuno Gustavo, Ricardo Melo, Vera Pedragosa. "Chapter 16 PORTUGAL: A Growing Sport Market in a Dominant State Model", Springer Nature, 2017 Publication	< 1 %
63	istanbuljuly2014.iibaconference.org	<1%
64	iletisimdergisi.gsu.edu.tr Internet Source	<1%
65	Submitted to Liverpool John Moores University Student Paper	<1%
66	Submitted to Radboud Universiteit Nijmegen Student Paper	<1%
67	d.lib.msu.edu Internet Source	<1%
68	Submitted to Strathmore University Student Paper	<1%
69	ir.nuk.edu.tw:8080 Internet Source	<1%

dr.library.brocku.ca

Internet Source

70	Internet Source	<1%
71	shura.shu.ac.uk Internet Source	<1%
72	university.taylors.edu.my	<1%
73	"Co-Creation and Well-Being in Tourism", Springer Nature, 2017 Publication	<1%
74	hydra.hull.ac.uk Internet Source	<1%
75	statwiki.kolobkreations.com	<1%
76	www.hhdev.psu.edu Internet Source	<1%
77	Submitted to Mansoura University Student Paper	<1%
78	journals.ama.org Internet Source	<1%
79	www.gestaoesociedade.org	<1 %
80	Submitted to Taylor's Education Group	<1%

www.vinaresearch.jp

81

82	Submitted to University of Portsmouth Student Paper	<1%
83	dspace1.isd.wordpress.com	<1%
84	media.neliti.com Internet Source	<1%
85	m3.ithq.qc.ca Internet Source	<1%
86	Lin, Wen-Bao. "Service recovery expectation model – from the perspectives of consumers", Service Industries Journal, 2010. Publication	<1%
87	libtreasures.utdallas.edu Internet Source	< 1 %
88	Peng Chen, Yeong Gug Kim. "Role of the perceived justice of service recovery: A comparison of first-time and repeat visitors", Tourism and Hospitality Research, 2017 Publication	<1%
89	www.econjournals.com	<1%
90	www.canberra.edu.au	<1%

91	vuir.vu.edu.au Internet Source	<1%
92	Submitted to CVC Nigeria Consortium Student Paper	<1%
93	researchbank.rmit.edu.au	<1%
94	rmdb.research.utas.edu.au	<1%
95	Submitted to EDMC Student Paper	<1%
96	imes.vse.cz Internet Source	<1%
97	Submitted to Sim University Student Paper	<1%
98	espace.curtin.edu.au Internet Source	<1%
99	media.proquest.com Internet Source	<1%
100	www.ukessays.com	<1%
101	lib.dr.iastate.edu Internet Source	<1%

M.S. Balaji, Sanjit Kumar Roy, Ali Quazi.

102

	"Customers' emotion regulation strategies in service failure encounters", European Journal of Marketing, 2017 Publication	< 1 %
103	drum.lib.umd.edu Internet Source	<1%
104	Yuji Tohda, Soichiro Hozawa, Hiroshi Tanaka. "Development of a questionnaire to evaluate asthma control in Japanese asthma patients", Allergology International, 2018 Publication	<1%
105	Sarah Mutonyi, Karin Beukel, Amos Gyau, Carsten Nico Hjortsø. "Price satisfaction and producer loyalty", British Food Journal, 2016 Publication	<1%
106	Submitted to National Kaohsiung University of Applied Science Student Paper	<1%
107	Fung Yi Millissa Cheung, Wai Ming To. "A customer-dominant logic on service recovery and customer satisfaction", Management Decision, 2016 Publication	<1%
108	www.auction.com	<1%



		<1%
110	Submitted to University of Sunderland Student Paper	<1%
<mark>111</mark>	Nidhi Sabharwal, Harmeen Soch. "Confirmatory Factor Analysis of Determinants of Service Recovery", Global Business Review, 2011 Publication	<1%
112	Submitted to University of Hull Student Paper	<1%
<mark>113</mark>	Ayesha Noor, Yuserrie Zainuddin, Shrikant Krupasindhu Panigrahi, Faridah binti Taju Rahim. "Investigating the Relationship among Fit Organization, Organization Commitment and Employee's Intention to Stay: Malaysian Context", Global Business Review, 2018 Publication	<1%
114	Ali Gohary, Hamid Alizadeh, Kambiz Heidarzadeh Hanzaee. "How co-creation uplift suggestion systems' performance", Asia-Pacific Journal of Business Administration, 2016 Publication	< 1 %
115	zujournal.org Internet Source	<1%
116	etheses.dur.ac.uk Internet Source	<1%

Submitted to University of Newcastle

Lin, Mei-Ju Wang, Wei-Tsong. "Explaining

Online Customer Repurchase Intentions from a

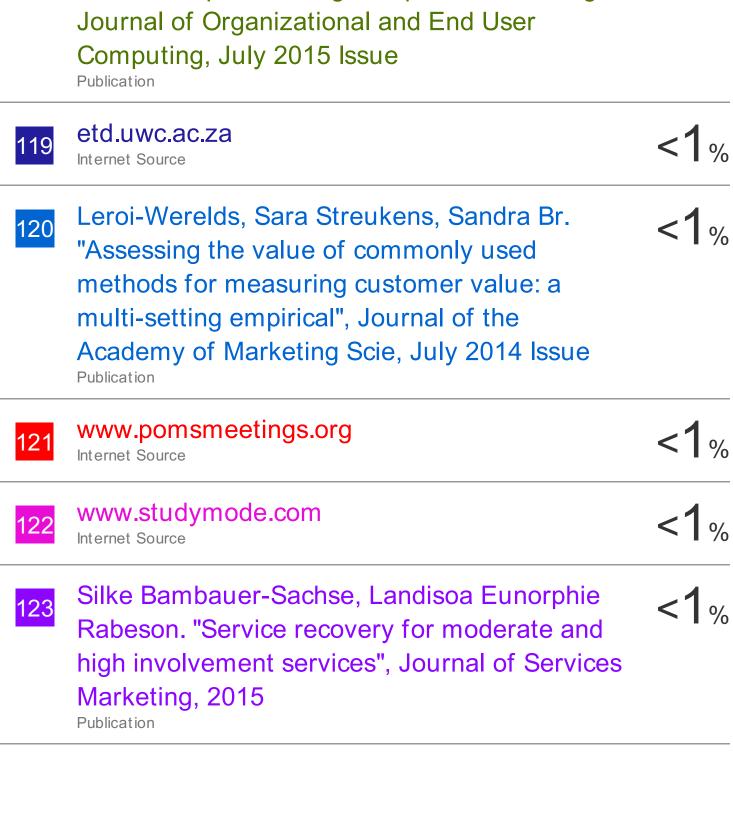
Relationship-Marketing Perspective: An Integ",

Student Paper

117

118

<1%



124	International Journal of Contemporary Hospitality Management, Volume 25, Issue 4 (2013-06-08) Publication	< 1 %
125	www.matec-conferences.org	<1%
126	abd.teikav.edu.gr Internet Source	<1%
127	Pallab Sikdar, Amresh Kumar, Munish Makkad. "Online banking adoption", International Journal of Bank Marketing, 2015 Publication	<1%
128	WWW.ANZMAC.Org	<1%
129	www.cogentoa.com	<1%
130	onlinelibrary.wiley.com	<1%
131	repositories.lib.utexas.edu Internet Source	<1%
132	www.palgrave-journals.com	<1%
<mark>133</mark>	Henry Boateng, Franklin Gyamfi Agyemang.	<1%

"The effects of knowledge sharing and

knowledge application on service recovery performance", Business Information Review, 2015

Publication

<mark>134</mark>	paduaresearch.cab.unipd.it	< 1 %
<mark>135</mark>	Ram Shankar Uraon. "Examining the Impact of HRD Practices on Organizational Commitment and Intention to Stay Within Selected Software Companies in India", Advances in Developing Human Resources, 2017 Publication	<1%
136	Submitted to KDU College Sdn Bhd Student Paper	<1%
137	eprints.glogster.com Internet Source	<1%
138	ueaeprints.uea.ac.uk Internet Source	<1%
139	Steven J. Migacz, Suiwen (Sharon) Zou, James F. Petrick. "The "Terminal" Effects of Service Failure on Airlines: Examining Service Recovery with Justice Theory", Journal of Travel Research, 2017 Publication	<1%
140	Journal of Services Marketing, Volume 28, Issue 4 (2014-09-16)	<1%

141	documents.mx Internet Source	<1%
142	www.swamfbd.org	<1%
143	www.ahtmm.com Internet Source	<1%
144	w.acrwebsite.org	<1%
<mark>145</mark>	uir.unisa.ac.za Internet Source	<1%
<mark>146</mark>	etheses.nottingham.ac.uk	<1%
<mark>147</mark>	WWW.Scielo.br Internet Source	<1%
148	bai-conference.org	<1%
149	Mobin Fatma, Imran Khan, Zillur Rahman. "The effect of CSR on consumer behavioral responses after service failure and recovery", European Business Review, 2016 Publication	<1%
150	journal.ui.ac.id	<1%

Yang, Tung-Mou, and Yi-Jung Wu. "Examining the socio-technical determinants influencing government agencies' open data publication: A study in Taiwan", Government Information Quarterly, 2016.

<1%

Publication

151

Exclude quotes	Off	Exclude matches	< 8 words
Exclude bibliography	Off		