

**CUSTOMER LOYALTY: A STUDY ON NEWLY  
OPENED CAFÉS AND RESTAURANTS IN PENANG**

**BY**

**LIM EN CHEE  
OOI CHUAN YI  
OOI SOO YING  
OOI YEE WOEN  
TAN MUN WEI**

**A research project submitted in partial fulfillment  
of the requirement for the degree of**

**BACHELOR OF COMMERCE (HONS)  
ACCOUNTING**

**UNIVERSITI TUNKU ABDUL RAHMAN**

**FACULTY OF BUSINESS AND FINANCE  
DEPARTMENT OF COMMERCE & ACCOUNTACY**

**AUGUST 2014**

Copyright @ 2014

ALL RIGHT 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 10211.

Name of Student:	Students ID:	Signature:
1. LIM EN CHEE	12ABB07311	_____
2. OOI CHUAN YI	12ABB07526	_____
3. OOI SOO YING	12ABB06712	_____
4. OOI YEE WOEN	12ABB07333	_____
5. TAN MUN WEI	12ABB07408	_____

Date: 4th August 2014

## ACKNOWLEDGEMENT

The achievement of this research project would not be feasible if there is exclusive of the assistance and guidance. It would be practically hard to list every person who assisted us, yet certain people must be endorsed towards the degree of contributions in assisting us throughout the study. In that regard, we would like to acknowledge these parties for their contributions.

First of all, we would like to express our honest gratitude to our supervisor, Dr. Krishna for his guidance during accomplish of the study. He was unrelenting in providing proper guidance and integrated his motivation, passions and massive information with his research experience and expertise throughout every phase of this research. We would like to show appreciation that Dr. Krishna has sacrificed to assist us at all the time and effort. In his guidance and support, we have fruitfully defeated many difficulties.

Besides, we are also thankful to Ms. Shirley for her encouragement, thoughtful and insightful advices towards our research. Regardless of her tight time, she always made herself available for consultation and gives her complete attention towards our enquiries. All in all, she assisted us a lot in terms of avoiding fatal flaws which cause in severe failures.

Furthermore, we would like to take the opportunity to provide truthful compliments to all the respondents who participated in this research as well as the owners of cafés and restaurants who allowed us to distribute questionnaires even they knew that such action may disturbing them to manage their business. Without their cooperation and tolerance, we may unable to collect the data and this research also never comes to achievement. Lastly, we would also like to express our gratitude to all contributors who are not mentioned here.

## DEDICATION

We would like to dedicate this research to our most beloved supervisor, family, friends, respondents and group members. We appreciate the helpful assistance given by our knowledgeable supervisor whenever we encountered difficulties during the research. At the same time, this research is dedicated to our families and friends for their priceless support and motivations. We also dedicate this to the respondents who were willing to spend their precious time to answer the questionnaires. Lastly, the teamwork, collaboration and dedication from each of the members should not be forgotten. As a conclusion, this research was impossible to complete without their sincerity and boundless support.

TABLE OF CONTENTS

	Page
Copyright Page .....	ii
Declaration .....	iii
Acknowledgement .....	iv
Dedication.....	v
Table of Contents .....	vi
List of Tables .....	xi
List of Figures .....	xiii
List of Appendices .....	xiv
List of Abbreviations .....	xv
Preface .....	xvi
Abstract .....	xvii
CHAPTER 1 RESEARCH OVERVIEW .....	1
1.0 Introduction .....	1
1.1 Research Background .....	1
1.2 Problem Statement .....	2
1.3 Research Objectives .....	4
1.3.1 General Objective .....	4
1.3.2 Specific Objectives .....	4
1.4 Research Questions .....	4

1.5 Hypotheses of the Study .....	5
1.6 Significance of the Study .....	5
1.7 Chapter Layout .....	6
1.8 Conclusion .....	6
CHAPTER 2 LITERATURE REVIEW .....	7
2.0 Introduction .....	7
2.1 Review of the Literature .....	7
2.1.1 Customer Loyalty (Dependent Variable) .....	7
2.1.2 Service Quality (Independent Variable) .....	8
2.1.3 Tangibles and Customer Loyalty .....	8
2.1.4 Reliability and Customer Loyalty .....	10
2.1.5 Responsiveness and Customer Loyalty .....	11
2.1.6 Assurance and Customer Loyalty .....	12
2.1.7 Empathy and Customer Loyalty .....	13
2.1.8 Price Fairness and Customer Loyalty .....	15
2.2 Review of Relevant Theoretical Models .....	16
2.3 Proposed Conceptual Framework .....	19
2.4 Hypotheses Development .....	20
2.5 Conclusion .....	21
CHAPTER 3 METHODOLOGY .....	22
3.0 Introduction .....	22
3.1 Research Design .....	22
3.2 Data Collection Methods .....	23

3.2.1	Primary Data .....	23
3.2.2	Secondary Data .....	23
3.3	Sampling Design .....	24
3.3.1	Target Population .....	24
3.3.2	Sampling Frame and Sampling Location .....	24
3.3.3	Sampling Elements .....	24
3.3.4	Sampling Technique .....	25
3.3.5	Sampling Size .....	25
3.4	Research Instrument .....	26
3.5	Constructs Measurement .....	26
3.6	Data Processing .....	30
3.6.1	Data Checking .....	30
3.6.2	Data Coding .....	30
3.6.3	Data Entering .....	31
3.6.4	Data Recoding .....	31
3.6.5	Data Transcribing .....	31
3.7	Data Analysis .....	31
3.7.1	Descriptive Analysis .....	32
3.7.2	Scale Measurement .....	32
3.7.2.1	Reliability Test .....	32
3.7.2.2	Normality Test .....	33
3.7.3	Inferential Test .....	33
3.7.3.1	Pearson's Correlation Analysis.....	33



3.7.3.2 Multiple Linear Regression .....	34
3.8 Conclusion .....	36
CHAPTER 4 DATA ANALYSIS .....	37
4.0 Introduction .....	37
4.1 Pilot Test .....	37
4.1.1 Normality Test .....	37
4.1.2 Reliability Test .....	39
4.2 Descriptive Analysis .....	41
4.2.1 Demographic Profile of the Respondents .....	41
4.2.2 Central Tendencies Measurement of Constructs .....	45
4.3 Scale Measurement .....	46
4.3.1 Normality Test .....	46
4.3.2 Reliability Test .....	48
4.4 Inferential Analysis .....	49
4.4.1 Pearson's Correlation Analysis .....	49
4.4.2 Multiple Linear Regression .....	51
4.5 Conclusion .....	54
CHAPTER 5 DISCUSSION, CONCLUSION AND IMPLICATION .....	55
5.0 Introduction .....	55
5.1 Summary of Statistical Analysis .....	55
5.1.1 Summary of Descriptive Analysis .....	55
5.1.2 Summary of Inferential Analysis .....	56
5.2 Discussions of Major Findings .....	58

5.2.1	Tangibles .....	58
5.2.2	Reliability .....	59
5.2.3	Responsiveness .....	59
5.2.4	Assurance .....	60
5.2.5	Empathy .....	60
5.2.6	Price Fairness .....	61
5.3	Implications of the Study .....	61
5.3.1	Theoretical Implications .....	61
5.3.2	Managerial Implications .....	62
5.4	Limitations of the Study .....	63
5.5	Recommendations of Future Research .....	64
5.6	Conclusion .....	65
	References .....	66
	Appendices .....	79

LIST OF TABLES

	Page
Table 2.1: Description of SERVQUAL Theory	16
Table 2.2: Concepts of SERVQUAL Theory	18
Table 3.1: Definition of the Variables	27
Table 3.2: Variables and Measurements	28
Table 3.3: Correlation Coefficient	34
Table 4.1: Normality Test (Pilot Test)	37
Table 4.2: Reliability Test (Pilot Test)	39
Table 4.3: Gender	42
Table 4.4: Age	42
Table 4.5: Marital Status	43
Table 4.6: Occupation	43
Table 4.7: Monthly Income	44
Table 4.8: Most Recent Visit	44
Table 4.9: Central Tendencies Measurement of Constructs	45
Table 4.10: Normality Test	46
Table 4.11: Reliability Test	48
Table 4.12: Pearson's Correlation Analysis	49
Table 4.13: Model Summary	51
Table 4.14: ANOVA	51

Table 4.15: Multiple Linear Regression	52
Table 4.16: Tolerance and Variance Inflation	54
Table 5.1: Summary of Demographic Profiles	55
Table 5.2: Summary of Inferential Analyses	56

LIST OF FIGURES

	Page
Figure 2.1: Proposed Conceptual Model	19
Figure 4.1: Percentage of respondents based on Gender	97
Figure 4.2: Percentage of respondents based on Age	97
Figure 4.3: Percentage of respondents based on Marital Status	98
Figure 4.4: Percentage of respondents based on Occupation	98
Figure 4.5: Percentage of respondents based on Monthly Income	99
Figure 4.6: Percentage of respondents based on Most Recent Visit	99

LIST OF APPENDICES

	Page
Appendix A: Summary of Past Empirical Studies .....	79
Appendix B: Variables and Measurements .....	87
Appendix C: Permission Letter to Conduct Survey.....	90
Appendix D: Survey Questionnaires .....	91
Appendix D: Pie Charts for Demographic Profiles .....	97

LIST OF ABBREVIATIONS

A	Assurance
CL	Customer Loyalty
DV	Dependent Variable
E	Empathy
IV	Independent Variable
MLR	Multiple Linear Regression
PC	Pearson's Correlation
PF	Price Fairness
R	Reliability
RP	Responsiveness
SAS	Statistical Analysis System
T	Tangibles

## PREFACE

The increase establishment of different types of cafés and restaurants are the biggest trend nowadays. Customers will definitely make a comparison before visit the cafés and restaurants as there are various choices. Therefore, owners of the cafés and restaurants are encouraged to define the criterions that will lead to the business success as there is a huge competition. The main criterion to be considered is customer loyalty. Loyal patron of customers is the key to business success. Hence, this study aims to determine the factors that can influence customer loyalty to ensure that the cafés and restaurants are able to perform to a satisfactory level and keep customer patronage.

By emphasizing on the factors which are the five dimensions of service quality (tangibles, reliability, responsiveness, assurance, and empathy) and price fairness, this research project will provide an insight to the related parties such as the owners of cafés and restaurants, the entrepreneurs who are likely to engage in cafés and restaurants business and the researchers as there is no solid evidence or research done in Malaysia regarding service quality in food and beverage industry.



## ABSTRACT

The purpose of this research is to determine the impact of service quality and price fairness on customer loyalty in food and beverage industry in Penang. Customer loyalty is the commitment to repurchase a preferred product or service consistently and hence it is important to every newly opened cafés and restaurants in order to survive in the market. This paper surveys the customers of the newly opened cafés and restaurants in Penang by using a structured questionnaire. A total of 300 self-administered survey questionnaires will be distributed and 250 useful questionnaires are expected to collect back. Pearson's correlation coefficient and multiple regression analysis were performed to analyze the data. The predicted research outcome reveals that service quality (tangibles, reliability, responsiveness, assurance and empathy) and price fairness have a positive relationship with customer loyalty. This study only focuses on food and beverage industry in Penang. Future research can investigate on larger geographical areas of whole Malaysia to determine the factors that will affect customer loyalty. The data was collected using convenience sampling technique which may not represent the whole population. Future study can use other sampling technique with larger sample size to conduct the research. In addition, other variables that affect customer loyalty can also be included in future research. There are only several past studies that determine the relationship between service quality and customer loyalty in food and beverage industry. This paper addressed the problem by conducting a research to determine the correlation between service quality and customer loyalty. Besides, this paper also includes an additional independent variable which is price fairness to investigate its impact to customer loyalty.

**Keywords:** Service quality, price fairness, customer loyalty, Penang, newly opened cafés and restaurants.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

Chapter 1 presents an outline of this research. Firstly, research background describes the core idea of this research, while problem statement addresses the problems and deficiencies of past studies. Subsequently, research objectives and research questions are determined. Next, hypotheses and significance of the study are discussed. Finally, chapter layout provides outlines of each chapter.

### **1.1 Research Background**

There are increasing establishment of cafés and restaurants in Malaysia as the demand increases (Euromonitor, 2014). Cafés and restaurants which is categorized in food and beverage industry is emphasizing on the delivery of good customer service and continuous enhancement on service quality (Markovic, Raspor, & Segaric, 2010). Hence, high service quality is required in the business operation because service quality is crucial in keeping the customer loyalty (Panda, 2002). On the other hand, price fairness is one of the other determinants that promote customer loyalty because it is important in the effort of maintaining good relationship with customers (Martín-Consuegra, Molina & Esteban, 2007). Therefore, service quality and price fairness are applied in this research paper as the factors of customer loyalty.

The research is study on newly opened cafés and restaurants in Penang. This is because the number of newly opened cafés and restaurants is increasing rapidly within the heritage area in Penang (Mok, 2013). Cafés is classified as simple breakfast, snack outlets and smart coffee shops (“What To Buy,” 2007). Meanwhile, restaurants are places where its principle business is serving meals (Mcelroy, 2010).

The term newly opened is defined as the businesses that might survive beyond five years in operation (Miles, 2013). This included those businesses with the establishment date starting from 1 January 2009. Newly opened cafés and restaurants need to put in some efforts in order to gain customer loyalty and survive in the market. It is found that the service organizations had made hard efforts to provide good and quality services to acquire customer loyalty (Al-Rousan & Mohamed, 2010). Loyal customers refer to who will purchase repeatedly, make business referrals and publicity of the company (Al-Rousan & Mohamed, 2010). Hence, loyal customers play a crucial role in order to survive in the new businesses (Reichheld, 1993).

The capital of Penang, Georgetown was inscribed as a UNESCO World Heritage Site in 2008 (Invest Penang, 2014) and it became a main tourism site for heritage and arts (Mok, 2013). Penang tourism had driven the rapid growth of food and beverage outlets from day to day due to the great demand (Mok, 2013). Hence, Georgetown had become a potential place to start-up creative and innovative cafés and restaurants (Around Penang Tips, 2014). In addition, Penang also had been named as top food destination by famous travel guide, Lovely Planet (Malaysia Travel News, 2014). Therefore, the research is carried out in Penang.

## **1.2 Problem Statement**

As there are many competitors who provide similar products or services in the particular industry, loyal customers are difficult to retain as they are easy to find a substitute in the competitive market. It is important for every company to retain loyal customers (Tsai, 2011). The company is able to save costs since loyal customers are willing to purchase more (Seiders, Voss, Grewal, & Godfrey, 2005; Shugan, 2005). Customer loyalty is very important for the survival of the new business. Petrick (2004) stated that retention of existing customers is six times cheaper than attraction of new customers.

Previous research had found that various factors affect customer loyalty such as product brand (Yoo & Bai, 2013); high switching cost (Lam & Burton, 2006; Lee & Cunningham, 2001); trust (Finlay, 2011); service quality (Agyei & Kilika, 2010); and price fairness (Martin-Consuegra et al., 2007). Indeed, companies which fail to provide good services will fail to restore customer satisfaction and consequently enhance customer loyalty (Chu, 2007). Failure in responding to service problems will lead to the shifting of customers to competitor's products as most of the loyal customers tend to rely on service quality rather than product quality (Sum & Hui, 2009). This shows that service quality is crucial in measuring customer loyalty.

Hence, past studies had tried to address the problem by examining customer loyalty factors. Agyei and Kilika (2010) proven service quality (reliability, responsiveness, assurance and empathy) was positively correlated with customer loyalty in mobile telecommunication service industry in Kenya. The researchers only adapted four out of the five variables in SERVQUAL model. In contrast, this present research adopts all of the five variables in SERVQUAL model and includes an additional independent variable which is price fairness.

Previous studies signified that service quality was an important indicator to retain loyal customer in food and beverage industry in Thailand (Polyorat & Sophonsiri, 2010). The sample of the research was restricted to Thai undergraduate students which is insufficient to represent the whole population (Polyorat & Sophonsiri, 2010). Thus, this present research is conducted to respondents from other segments by distributing questionnaires to the customers which included different classes of people such as student, working adult and retiree in newly opened cafés and restaurants in Penang.

Jiang and Rosenbloom (2005) conducted a research and found that customers' price perception and their intention to return in online retail site had a positive relationship. All the purchasers are allowed to fill up the questionnaires on a self-selection basis. Therefore, the participation rate is low which only 8.4 percent. This present research

collects the data through distributing the questionnaires to the target respondent directly and collects back on the spot.

### **1.3 Research Objectives**

This research attempts to provide an overall view of the relationship between IVs (service quality and price fairness) with DV (customer loyalty) in newly opened cafés and restaurants in Penang.

#### **1.3.1 General Objective**

The general objective of this study is to determine what factors can influence customer loyalty.

#### **1.3.2 Specific Objectives**

The specific objectives of this study are to determine whether SERVQUAL model (tangibles, reliability, responsiveness, assurance, empathy) and price fairness can influence customer loyalty.

### **1.4 Research Questions**

Research questions are vital in the progress of conducting a research. The research questions are constructed as follow:

1. What are the factors that can influence customer loyalty?

2. Will SERVQUAL model (tangibles, reliability, responsiveness, assurance, empathy) and price fairness influence customer loyalty?

## **1.5 Hypotheses of the Study**

The research would like to examine the relationship between IVs (service quality and price fairness) with DV (customer loyalty). Thus, the relevant hypotheses are formulated as follow:

H1: There is a positive relationship between tangibles and customer loyalty.

H2: There is a positive relationship between reliability and customer loyalty.

H3: There is a positive relationship between responsiveness and customer loyalty.

H4: There is a positive relationship between assurance and customer loyalty.

H5: There is a positive relationship between empathy and customer loyalty.

H6: There is a positive relationship between price fairness and customer loyalty.

## **1.6 Significance of the Study**

From a practical perspective, this paper will be helpful for the entrepreneurs in food and beverage industry in Penang because the findings of the study can assist them to understand the importance of service quality and price fairness in retaining loyal customers. Entrepreneurs can emphasize on some specific types of service quality or price fairness that bring greatest impact on customer loyalty by referring this research.

On the other hand, SERVQUAL model had been tested by majority researchers in the banking and hotel industries in the past. There are insufficient past studies that tested SERVQUAL model in the food and beverage industry. Thus, the readers will have a

new insight into the impact of service quality and price fairness toward customer loyalty in food and beverage industry.

In addition, the dimensions in SERVQUAL model are insufficient to provide a clear picture on the factors that can influence customer loyalty. Hence, an additional variable, price fairness is added to extend the framework of the research. In future, other researchers and academicians can test the research framework in other research areas or in different industry.

## **1.7 Chapter Layout**

Chapter 1 is the introductory paragraph that outlines the research overview of the study. Subsequent Chapter 2 presents the review of literature and theory used to support the study. Chapter 3 depicts the research methodology that being conducted meanwhile chapter 4 presents the results which generated based on data analysis. Lastly, chapter 5 explains the theoretical and managerial implication, limitation and recommendation for future research.

## **1.8 Conclusion**

Chapter 1 briefly discussed the importance of service quality and price fairness towards customer loyalty. At the meantime, hypotheses and significance of the study are covered. Chapter 2 will presents the literature review and theoretical model of the research.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

Previous studies related to this research were discovered in this chapter. Every independent and dependent variable were discussed extensively. Theoretical model related to the research was introduced and presented. Besides, theoretical framework was constructed to show the relation among variables and six hypotheses are developed as well.

### **2.1 Review of the Literature**

#### **2.1.1 Customer Loyalty (Dependent Variable)**

Customer loyalty is defined as the repurchasing behavior and favorable attitude of customers towards the company that provide goods and services (Sum & Hui, 2009; Malik, Naeem, & Arif, 2011).

Customer loyalty will leads to improvement of financial performance (Beerli, Martin, & Quintana, 2004) and long term success (Çerri, 2012). Customer loyalty is important as finding new customers and doing business with new customers take time, effort and money (Çerri, 2012). Therefore, building customer loyalty is essential to business survival (Reichheld, Markey, & Hopton, 2000).

Customer loyalty is determined by the attitudinal and behavioral practices (Yuen & Chan, 2010) which include likelihood of customers' returning and



repurchasing (Lewis & Soureli, 2006; Wangenheim & Bayon, 2004), endorsement of suppliers and establishment of strong word-of-mouth (Bowen & Shoemaker, 1998).

### **2.1.2 Service Quality (Independent Variable)**

Service quality is the degree of services between customer expectations and customer perceptions (Munusamy, Chelliah, & Mun, 2010). Likewise, it is also revealing that a meaning of particular behavior whether customers will retain in or depart from the company (Uddin & Akhter, 2012). The adoption of SERVQUAL model may enhance customer loyalty and improve the attraction of new customers which lead to better business reputation gained through an acceptable service quality delivery (Zeithaml, 2000).

In the past studies of perceived service quality, researchers comment positively on the adoption of SERVQUAL instruments. Many researchers have proposed that SERVQUAL model is the most prominent and widely used measurement tools for service quality (Chadha & Kapoor, 2009; Van Dun, Bloemer, & Hanseler, 2011). Many researchers from different countries also adopt SERVQUAL instruments in their researches such as in Riyadh (Bostanji, 2013); Hong Kong (Lau, Cheung, Lam, & Chu, 2013); and India (Kumar, Mani, Mahalingam, & Vanjikovan, 2010).

### **2.1.3 Tangibles and Customer Loyalty**

Tangibles are the physical appearance of the facilities, tools, personnel and material used to provide services to the customers (Parasuraman, Zeithaml, & Berry, 1988). Tangibles include the elements such as hygiene, interspace, atmosphere and location of an entity (Alex & Thomas, 2011). Besides, it also

means the physical attractiveness of the salesperson which included their facial attractiveness and style of dress (Sum & Hui, 2009).

Bostanji (2013) conducted a self-administered survey and distributed to 500 customers from five stars hotel in Riyadh. Result was assessed using the multiple regressions and found that the relationship between tangibles and customer loyalty was positive and significant.

Moreover, another empirical research had been conducted. A total of 395 self-administered questionnaires were distributed to Thai undergraduate students and revealed that tangibles had positive effect on customer loyalty by using multiple regression analysis (Polyorat & Sophonsiri, 2010).

In addition, a total of 341 questionnaires were distributed to postgraduate student of University Utara Malaysia. All the valid responses were assessed using multiple linear regression analysis and the result showed that tangibles and customer loyalty were positively correlated (Mokhtar, Sanuri, & Maiyaki, 2011).

Furthermore, 420 valid questionnaires were collected from the internet subscriber through delivery and collection method. The data was assessed using multiple regression analysis and showed that tangibles was positively correlated with customer loyalty (Deshmukh & Chourasia, 2012).

In contrast, Saeed, Iqbal, Lodhi, Sami, Riaz, Munir, and Mizna (2014) conducted a survey and distributed 200 survey questionnaires to customers of Islamic banking sector in five big cities in Pakistan. All the valid responses were assessed using Pearson's correlation and multiple correlation tests and found that the relationship between tangibles and customer loyalty was negative in the Islamic banking sector.

### **2.1.4 Reliability and Customer Loyalty**

Reliability denotes the firm's ability to provide the promised service consistently in a perfect manner (Malik et al., 2011; Taghizadeha, Taghipourianb, & Khazaieic, 2012). It means that the firm will keep the promises and perform task in the right way (Yuen & Chan, 2010). In a service context, the firm who's capable to provide the service appropriately at the first is considered reliable (Taghizadeha et al., 2012). According to Hensley and Utley (2011), reliability is important element in determining service quality.

Yuen and Chan (2010) had distributed 447 surveys to the current customers of curtain retailer, Hunter Douglas in Hong Kong. The result showed reliability has positive impact on customer loyalty to store and no impact to staff by employing multiple linear regressions.

Besides, in Činjurević, Tatić, and Avdić (2010)'s research paper, they found that reliability was positively related to customer loyalty by using multiple regression analysis. A total of 300 questionnaires were distributed to three dominant banks' customers in Bosnia and Herzegovina.

Furthermore, a research carried out by Yousaf, Yousaf, Altaf, and Mehmood Bagram (2013) also found the same result as previous researchers by employing correlation and multiple regression analysis. The data were collected from primary method (interview and questionnaire from bus passengers) and secondary method (materials from the previous researchers).

On the other hand, Lin (2012) had found different results which were e-service reliability and m-service reliability had insignificant negative impact on m-service customer loyalty by performing partial least squares (PLS). The researcher had distributed questionnaires to 102 consumers who had ever used

both the online (e-service) and mobile (m-service) services provided by a specific multi-channel retailer in Taiwan.

Moreover, a total of 250 self-administered questionnaires were distributed to two full-fledged Islamic banks' customers in Malaysia (Kishada & Wahab, 2013). Multiple linear regression analysis indicated that reliability had negative impact on customer loyalty.

### **2.1.5 Responsiveness and Customer Loyalty**

Many researchers defined responsiveness as the staff's willingness to help customers and to deliver quick and prompt services (Auka, Bosire, & Matern, 2013; Zeithaml, Bitner, & Gremler, 2006). In other words, it describes the speed of delivery and how quickly and affective the response to the customer is (Auka et al., 2013). Responsiveness requires the staff to understand the needs and wants of the customers and provides individual attention to requirements and inquiries of customer (Kumar et al., 2010).

Al-Rousan and Mohamed (2010) had proved that high level of staff's responsiveness can lead to customer loyalty by using multiple regression analysis. Self-administered questionnaires were distributed to 322 tourists who stayed in the Marriott hotel in Jordan.

Moreover, the research conducted by Auka et al. (2013) also shows that responsiveness and customer loyalty were positively correlated by utilizing Pearson's correlation and multiple linear regression. A total of 384 self-administered questionnaires were distributed to current customers of commercial banks in Kenya.

Furthermore, Amirosadat, Esfahani, and Moshkforosh (2013) concluded that responsiveness positively influences consumer loyalty. 260 questionnaires were distributed to internet users who purchase from internet and 250 were returned and analyzed using structural equation modeling.

In contrast, Sanayei, Ranjbarian, Shaemi, and Ansari (2011) had proved that responsiveness had no direct effect on customer loyalty. 320 questionnaires were distributed to experienced mobile bank system users who have used the mobile payment system. 265 questionnaires were returned and analyzed using structural equation modeling.

Besides, Kheng, Mahamad, Ramayah, and Mosahab (2010) also supported that responsiveness had no significant relationship with customer loyalty after analyzed using multiple regression. The survey questionnaires were distributed to 238 customers from various banks in Penang.

### **2.1.6 Assurance and Customer Loyalty**

Assurance is defined as the courtesy and knowledge of employees who can convey trust and confidence to customers (Berry & Parasuraman, 1991). According to Sadek, Zainal, Taher, Yahya, Shaharudin, Noordin, Zakaria, and Jusoff (2010), the assurance in British Bank refers to staff's politeness, pleasant, knowledge and willingness to provide financial advice.

Badara, Mat, Mujtaba, Al-Refai, Badara, and Abubakar (2013) had distributed 209 questionnaires to Nigerian students who are studying at University Utara Malaysia and the result showed that assurance had positive impact on customer loyalty in Islamic bank in Nigeria by using standardized regression weights analysis.

Besides, Movafegh and Movafegh (2013) also concluded that assurance and loyalty were positively related among tourist by self-distributed survey to 300 tourists in Malaysia. The researchers used correlation coefficient and multiple regression to analyze data.

In addition, Malik et al. (2011) had shown that assurance has positive relationship on the customer loyalty after conducted a research by retrieving 244 survey questionnaires from the customers whose bank account are in international, government-owned and private banks in Lahore, Pakistan. The data analysis technique used in the research was ANOVA test.

Furthermore, Hassan, Malik, and Faiz (2012) had indicated that assurance was positively influences to customer loyalty by correlation analysis. A total of 220 questionnaires were distributed directly (by researcher) to students of Bahauddin Zakariya University and through third party (indirectly by friends in different departments).

On the contrary, Al-Zoubi (2013) had proved that there was no relationship between assurance and customer loyalty by using stepwise regression analysis. 300 questionnaires were distributed to IT and MIS university students in Jordan, but 284 questionnaires were valid for the analysis.

### **2.1.7 Empathy and Customer Loyalty**

Empathy refers to the firms' extra caring and personalized attention to their customers (Parasuraman et al., 1988). It is reflected in the service provider's provision of access, communication and understanding to customers. It means the degree of understand, care and attention of company towards its customers (Parasuraman et al., 1988).

Obeidat, Sweis, Zyod, Masa'deh, and Alshurideh (2012) had conducted a study that shown empathy positively correlated to customer loyalty by using multiple regression analysis. A total of 422 survey questionnaires was carried out and distributed to customers who are visiting the sales shop, Umniah Company.

Albarq (2013) indicated empathy and customer loyalty were positively correlated by distributing 422 survey questionnaires to bank customers in Riyadh. The valid responses were assessed using multiple regressions analysis.

Furthermore, An and Noh (2009) also had distributed total of 520 self-administered questionnaires to passengers who used the route from North America or Europe to Korea. The results showed that empathy had significantly relationship towards customer loyalty. All the valid responses were assessed using multiple regression analysis.

Apart from that, Lu, Zhou, and Zhuo (2012) had indicated that empathy has positive relationship with customer loyalty. A total of 342 surveys questionnaires was carried out and distributed to Internet users who have had C2C shopping experience via mailing. All the valid responses were assessed using multiple regression analysis.

Furthermore, Agyei and Kilika (2013) had proved that empathy was significantly positive influences customer loyalty by using Pearson correlation coefficient and multiple linear regression. A total of 320 self-administered questionnaires were distributed to the members of the Kenyatta university student community and 313 responses were obtained.

### **2.1.8 Price fairness and Customer Loyalty**

Price fairness is the consumers' assessment whether the seller's price is reasonably justified (Xia, Monroe, & Cox, 2004). When customers infer price fairness, they will rely on the historical price, competitor's price and cost of goods sold (Bolton, Warlop, & Alba, 2003).

Martín-Consuegra et al. (2007) concluded that price fairness was positively influences customer loyalty by distributing a total of 721 survey questionnaires to airline passengers. Chi-square test was used to analyze the data.

Besides, Virvilaite, Saladiene, and Skindaras (2009) had indicated that price fairness and customer loyalty were positively correlated by using multiple linear regressions. Self-administered questionnaires were distributed to 112 current patients in AB Birštonas sanatorium "Versme".

Furthermore, Onlaor and Rotchanakitumnuai (2010) had showed that price fairness was positively related to customer loyalty by using multi-regression analysis. 400 valid questionnaires had been obtained from five mobile service providers' customers in Thailand.

In addition, Hassan, Hassan, Nawaz, and Aksel (2013) had found that price fairness and customer loyalty were positively and significantly correlated after conducting multiple linear regression analysis. A total of 220 questionnaires had been distributed to customers of telecom companies.

In contrast, Doong, Wang, and Shih (2008) found that price fairness has no significant relationship on customer loyalty by performed confirmatory factor analysis. 1123 survey questionnaires were retrieved from the customers who



had completed transactions in Yahoo! e-marketplace in Taiwan. All the valid responses were assessed using structural equation modeling.

## 2.2 Review of Relevant Theoretical Models

The theory used to support this present study is SERVQUAL theory (Parasuraman et al., 1988). The five elements of SERVQUAL which are tangibles, reliability, responsiveness, assurance and empathy have been adopted as the IVs. Besides, price fairness is an additional IV to expand research framework. Hence, each of the six IVs is used to measure the customer loyalty in this study.

Based on previous researches, SERVQUAL theory has been used in numerous studies in the service sector such as hotels (Al-Rousan & Mohamed, 2010), tourism (Movafegh & Movafegh, 2013), hospitals (Mostafa, 2005; Sohail, 2003) and dental services (Baldwin & Sohal, 2003).

Table 2.1 shows a detail description about SERVQUAL theory which include the definition, originator, year founded and evolution of theory.

Table 2.1: Descriptions of SERVQUAL Theory

<b>SERVQUAL Theory</b>	
<b>Definition</b>	Establishment of SERVQUAL (multi-item scale) was to assess customer perceptions on service quality in retail and service industry (Parasuraman et al., 1988).  Parasuraman, Zeithaml, and Berry (1985) explained that service quality is a dimension on the level of service delivered that match customer's expectation. The researchers said that delivery of quality

	<p>service means the confirmation of customer expectations on a consistent basis.</p> <p>Zeithaml (1988) defined service quality as the judgment of consumer on the product's overall excellence and superiority.</p>
<b>Originator</b>	<p>a) Parasuraman, b) Zeithaml, and c) Berry</p>
<b>Year</b>	1985
<b>Changes / Evaluation</b>	<p>Originally, Parasuraman et al. (1985) proposed SERVQUAL with ten dimensions: access, reliability, responsiveness, competence, assurance, courtesy, credibility, security, tangibles, and knowing the customers.</p> <p>In further research, Parasuraman et al. (1988) had retained the dimensions that common and relevant to most of the service organization and deleted certain dimensions that relevant to some but not all organizations. The researchers then proposed a measurement scale for SERVQUAL in five dimensions: tangibles, reliability, responsiveness, assurance and empathy. These five dimensions are rationale and stable psychometric properties. Furthermore, the new SERVQUAL dimension is assessable and comparable within a wide variety of organizations or units within an organization.</p> <p>In addition, Cronin and Taylor (1992) indicated SERVQUAL is measuring the differences between perceived and actual performance. They suggested that the measurement based on performance is more effective and dependable in measuring the service quality. Hence, SERVPERF (service performance) is proposed in which it is more appropriate and accurate than SERVQUAL.</p>

	<p>However, Carrillat, Jaramillo, and Mulki (2007) believed that the diagnostic value of SERVQUAL would provide greater interest for practitioners. In addition, their findings also reveal that the adaption of SERVQUAL in the research paper is greater than SERVPERF. Thus, the researchers had decided to adapt SERVQUAL rather than SERVPERF in this research paper.</p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Source: Developed for the research

Table 2.2 shows the definition of each of the concepts in SERVQUAL theory from different researchers.

Table 2.2: Concepts of SERVQUAL Theory

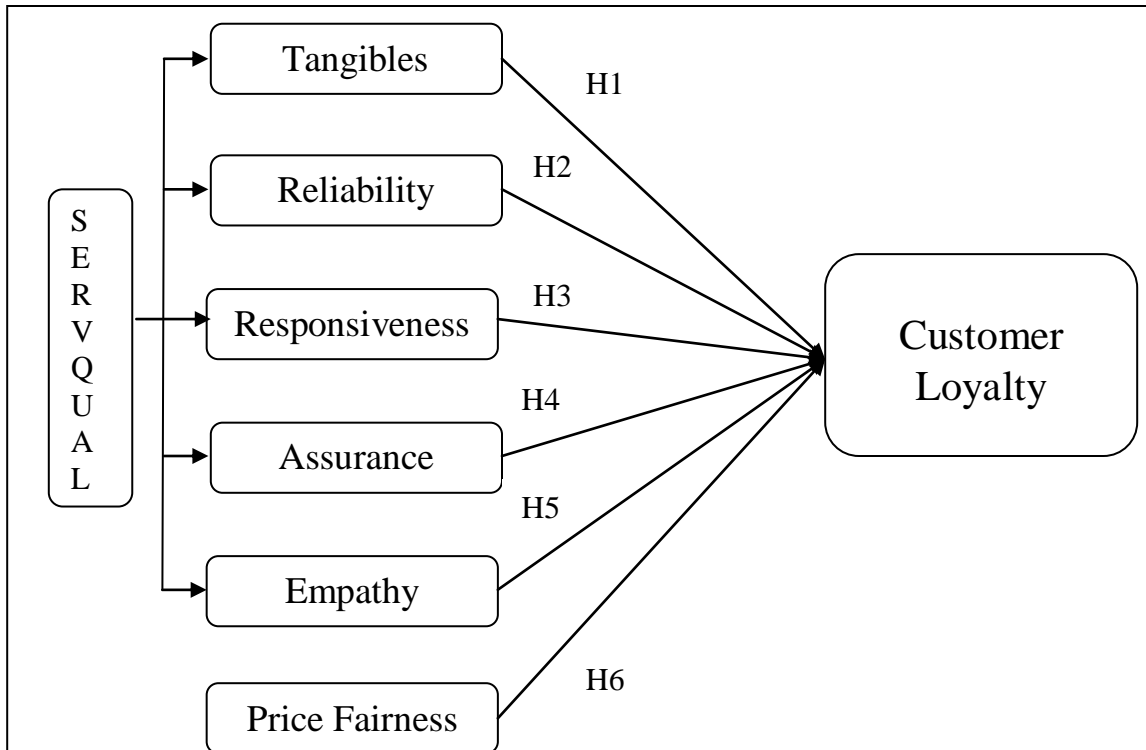
<b>Concepts</b>	<b>Definition</b>	<b>Citation</b>
Tangibles	It is the “appearance of physical facilities, tools and equipments used to provide the service, appearance of personnel and communication materials.”	- Onditi, Oginda, Ochieng, and Oso (2012) - Parasuraman et al. (1988)
Reliability	It is the “ability to perform the promised service dependably and accurately.”	- Murti, Deshp, & Srivastava (2013) - Parasuraman et al. (1988)
Responsiveness	It is the “willingness and readiness of employees to help customers to provide prompt service and timeliness of service.”	- Murti et al. (2013) - Parasuraman et al. (1988)
Assurance	It is the “knowledge and courtesy of employees and employees’ ability to convey trust and confidence.”	- Onditi et al. (2012) - Parasuraman et al. (1988)

Empathy	It is the “provision of caring, individualized attention to customers.”	- Murti et al. (2013) - Parasuraman et al. (1988)
---------	-------------------------------------------------------------------------	------------------------------------------------------

Source: Developed for the research

### 2.3 Proposed Conceptual Framework

Figure 2.1: Proposed Conceptual Model



Adapted from: Mart ín-Consuegra, D., Molina, A., & Esteban, A. 2007. An integrated model of price, satisfaction, and loyalty: An empirical analysis in the service sector. *Journal of Product & Brand Management*, 16(7), 459-468. and Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1998). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

## 2.4 Hypotheses Development

Based on the review of prior studies, we had developed the following hypotheses:

### **Hypothesis 1:**

Two of the past empirical researches from Bostanji (2013) and Polyorat and Sophonsiri (2010) found that tangibles have a significant correlation with the customer loyalty. These two past studies helped to develop the first hypothesis, H1.

H1: There is a positive relationship between tangibles and customer loyalty.

### **Hypothesis 2:**

The past researches from Yousaf et al. (2013) and Yuen and Chan (2010) illustrated that the most important dimension in ascertaining the service quality is reliability. The researchers showed that reliability had positively influences customer loyalty. These past researches had assisted in the development of the second hypothesis, H2 in this research.

H2: There is a positive relationship between reliability and customer loyalty.

### **Hypothesis 3:**

Sanayei et al. (2011) stated that people tend to be more loyal if assistance is providing to them. This indicates responsiveness will also affect customer loyalty. Previous study by Auka et al. (2013) also supported that willingness to assist customers has significant impact on customer loyalty. Therefore, the formulation of third hypothesis, H3 is developed.

H3: There is a positive relationship between responsiveness and customer loyalty.

**Hypothesis 4:**

Badara et al. (2013) indicated that assurance has a positively affect customer loyalty. In addition, Malik et al. (2011) also indicated that assurance has positively related to customer loyalty. Hence, these two past studies had led to the fourth hypothesis, H4.

H4: There is a positive relationship between assurance and customer loyalty.

**Hypothesis 5:**

Past empirical researches indicated that caring and personalized attention have significant relationship in determining the level of customer loyalty which supported by Agyei and Kilika (2013) and Saravanakumar (2014). Hence, the fifth hypothesis, H5 is formulated.

H5: There is a positive relationship between empathy and customer loyalty.

**Hypothesis 6:**

Previous research indicated that perceived price fairness is a threshold factor in maintaining customer loyalty in service organizations (Martín-Consuegra et al., 2007). This had been supported by Virvilaite et al. (2009) who confirmed that the price fairness has positively relationship on customer loyalty. Therefore, the sixth hypothesis, H6 is formed from this independent variable.

H6: There is a positive relationship between price fairness and customer loyalty.

## **2.5 Conclusion**

Chapter 2 had provided the review of past studies done by different academic scholars. The conceptual framework and six hypotheses had developed to determine the relationship between IVs and DV. Next, research methodology will be expounded thoroughly in the Chapter 3.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

Chapter 3 depicts the research methodology used in the study comprehensively. It briefly discusses on how the research is being conducted and how the data is being collected. Subsequently, it will explain on how the data is being processed. The data analysis techniques used in the study will be determined.

### **3.1 Research Design**

A survey is implemented to determine the customer perception towards their loyalty based on service quality and price fairness. Survey research can assist in the collection of large quantity of recent data in a shorter time and lower cost (Kaiser, 2011). The subjects of this study are the customers of the newly opened cafés and restaurants in Penang.

In addition, quantitative study and cross sectional study were chosen in this research to measure the relationship between IVs (service quality and price fairness) and DV (customer loyalty). Cross sectional study which was looking at one phenomenon and researchers had been allowed to gain knowledge at a particular time within a short period of time and before other problems such as delay imposed (Bahrlick, Bahrlick, & Wittlenger, 1975). Besides, it was generally quick and cheap (Mann, 2003).

## **3.2 Data Collection Methods**

Two data collection methods had been adopted which were primary and secondary data (Burns & Bush, 2000). Primary data can be collected by survey distribution while secondary data can be collected through literature study from online journal databases (Yasseen, 2011).

### **3.2.1 Primary Data**

In this research, primary data had been collected through the self-administered questionnaires. Survey questionnaire was an effective tool to collect the primary data as the information was easy and fast to collect and it can be accessed easily with low cost and less time consuming (Kaiser, 2011).

### **3.2.2 Secondary Data**

Secondary data such as scholarly journals which were found from online databases like ProQuest and ScienceDirect were used to form the conceptual framework and develop the hypothesis of this study. Besides, it helped to set the survey questionnaires. Relevant research books were also used to analyze the findings.



### **3.3 Sampling Design**

#### **3.3.1 Target Population**

The target population for this study consists of all customers of newly opened cafés and restaurants in Penang.

#### **3.3.2 Sampling Frame and Sampling Location**

In this research, there is no sampling frame since there was a large number of newly opened cafés and restaurants in Penang and it is impossible to get the details of the customers. Therefore, a non-probability sampling is used (Feild, Pruchno, Bewley, Lemay, & Levinsky, 2006). According to Guthrie (2010), non-probability sampling is cost and time efficient. Besides, non-probability sampling is useful for survey research (Huysamen, 1993).

The sampling location of this study is the newly opened cafés and restaurants in Penang. Penang had been chosen as it had been named as top food destination by famous travel guide in 2014 (Malaysia Travel News, 2014) and also awarded as “Food Paradise of Asia”.

#### **3.3.3 Sampling Elements**

The customers of newly opened cafés and restaurants in Penang were the respondents in this research. The customers consist of student, self-employed, working adults in private and government sector, professional and retiree.

### **3.3.4 Sampling Technique**

Sampling was needed in conducting the research because it facilitates generalizability of results to a larger population (Ahmad & Taylor, 2009). Besides, it is impossible that the researchers will obtain the responses from all in the entire population. In addition, the researchers were always lack of budget and time. Through sampling procedures, the researchers can lower administrative costs and have ability to administer controlled follow-up procedures (Kitchenham & Pfleeger, 2002).

The choice of the sample from the set of population is through convenience sampling. This technique is selected as it is an easy way to obtain the raw data from large population (Tripathi, 2013). Furthermore, it is also economical, simple, convenient and less time consuming (Cope, 2003; Gravetter & Forzano, 2009).

### **3.3.5 Sampling Size**

According to Hill and Alexander (2000), a sample of 200 to 500 respondents is adequate to achieve meaningful estimates. Tinsley and Tinsley (1987) suggest that about 5 to 10 subjects are required for each item. In this research, 29 items had been constructed which indicated that approximately 290 questionnaires were considered adequate. Besides, a sample size of 300 is considered as a good sample (Comrey & Lee, 1992). Therefore, a total of 300 questionnaires had been self-administered to the customers of newly opened cafés and restaurants in Penang who agreed to participate in the survey. All of the questionnaires had been collected back immediately. Out of 300 sets, 15 sets of questionnaires consisted of recurrent selection, outliers and incomplete data which were removed to evade misrepresentation in the data analysis. Thus, a total of 285 questionnaires had been utilized in statistical analysis.

### **3.4 Research Instrument**

Self-administrated questionnaires had been employed in this study since it is time and cost-efficient (Russell, 2010). Besides, it allows easier coding and data analysis for researchers (Kaiser, 2011). Questionnaires had been delivered personally by hand to the customers of newly opened cafés and restaurants in Penang. Approximately 10 sets of questionnaire had been distributed to the customers in each newly opened cafés and restaurants. The respondents had completed the questionnaires in the presence of researchers and the completed questionnaires had been collected back immediately.

Before the distribution of questionnaires, a pilot test had been carried out for customers of newly opened cafés and restaurants to assess the reliability and validity of the survey questionnaires. According to Fink (2003), a sample size of 10 is found as a minimum numbers of participants that enrolling in the pilot test. Diener, Larner, Pazdan, Pfahler, Strickland, Vukovinsky, and Andersen (2009) stated that pilot testing required 10 to 30 sets to assess content uniformity. Thus, 30 sets of survey questionnaires had been distributed. The importance of conducting pilot test is to test the reliability and suitability of the questions (Saunders, Lewis, & Thornhill, 2009).

### **3.5 Constructs Measurement**

The questionnaire consists of three sections.

Section A presents the demographic profile of the respondents by using nominal and ordinal scale as scale of measurement. The gender, marital status and occupation were measured using nominal scale. In contrast, the age, monthly income and length of time for most recent visiting to the newly opened cafés and restaurants were measured using ordinal scale.

Section B includes questions related to the five dimensions of SERVQUAL and price fairness. In this section, the questions are divided into six parts, namely (i) tangibles, (ii) reliability, (iii) responsiveness, (iv) assurance, (v) empathy and (vi) price fairness.

Simultaneously, section C consists of questions related to customer loyalty. All of the items in section B and C were measured using interval scale which is the five-point Likert-type scale. The scale ranges from 1 to 5 which indicate from strongly disagree to strongly agree.

Table 3.1 shows the definition of each variable. The IVs consisted of the five dimensions from SERVQUAL, which included tangibles, reliability, responsiveness, assurance and empathy. Besides, price fairness is an additional IV. Meanwhile, customer loyalty is the DV. A total of 24 items will be asked in section B while 5 items will be asked in section C.

Table 3.1: Definition of the Variables

<b>Variable</b>	<b>Definition</b>	<b>Citation</b>
Customer Loyalty (DV)	It refers to customer’s repurchase intention and preferences towards a product or service regularly, thus it lead to repetitive purchasing of the same product.	- Auka et al. (2013) - Dick and Basu (1994)
Tangibles (IV)	It refers to “the appearance of physical facilities, tools and equipments used to provide the service, appearance of personnel and communication materials.”	- Onditi et al. (2012) - Parasuraman et al. (1988)
Reliability (IV)	It refers to the “ability to perform the promised service dependably and accurately.”	- Murti et al.(2013) - Parasuraman et al. (1988)

Responsiveness (IV)	It refers to the “willingness and readiness of employees to help customers to provide prompt service and timeliness of service.”	- Murti et al.(2013) - Parasuraman et al. (1988)
Assurance (IV)	It refers to the “knowledge and courtesy of employees and employees’ ability to convey trust and confidence.”	- Onditi et al. (2012) - Parasuraman et al. (1988)
Empathy (IV)	It refers to the “provision of caring, individualized attention to customers.”	- Murti et al.(2013) - Parasuraman et al. (1988)
Price Fairness (IV)	It refers to the “consumers’ assessment of whether the difference between a seller’s price and the price of a comparative other party is reasonable, acceptable, or justifiable.”	- Bolton et al. (2003) - Xia et al. (2004)

Source: Developed for the research

Table 3.2 shows the measurement used for all the variables. All of the items were framed based on the past empirical studies on service quality, price fairness and customer loyalty. The sources of each item were shown in Appendix B.

Table 3.2: Variables and Measurements

<b>Variables</b>	<b>Items</b>	<b>Sources</b>	<b>Sample Items</b>	<b>Measurement</b>
Customer Loyalty (CL)	5	- Al-Rousan and Mohamed, (2010) - Chu (2007)	<i>‘I am extremely satisfied with this cafe and restaurant.’</i>	Interval (five-point Likert scale)

Tangibles (T)	4	- Al-Rousan and Mohamed, (2010) - Hwang (2011) - Sum and Hui (2009)	<i>'The interior and exterior decoration is attractive.'</i>	Interval (five-point Likert scale)
Reliability (R)	4	- Hwang (2011) - Liu (2008)	<i>'The staff serve the meals exactly as you ordered it.'</i>	Interval (five-point Likert scale)
Responsiveness (RP)	4	- Hwang (2011) - Sum and Hui (2009) - Tripathi (2013)	<i>'The staff are willing to response and help you.'</i>	Interval (five-point Likert scale)
Assurance (A)	4	- Al-Rousan and Mohamed, (2010) - Hwang (2011) - Sum and Hui (2009)	<i>'The staff are polite.'</i>	Interval (five-point Likert scale)
Empathy (E)	4	- Al-Rousan and Mohamed, (2010) - Tripathi (2013)	<i>'The staff understand your requirements.'</i>	Interval (five-point Likert scale)
Price Fairness (PF)	4	- Doong et al. (2008) - Martín-Consuegra et al. (2007) - Tuan (2012)	<i>'The price is fair.'</i>	Interval (five-point Likert scale)

Source: Developed for the research

## **3.6 Data Processing**

The data preparation process which included data checking, coding, entering, recoding and transcribing were described. These processes were carried out to ensure all of the data is ready to be analyzed for data analysis in SAS.

### **3.6.1 Data Checking**

Data checking is an important step to ensure the completeness and accuracy of the questionnaires. The 300 sets of questionnaires which had been collected back was sifted for recurrent selection and missing data. Those responses that contain these issues were removed from the samples to avoid distortion in the data analysis.

### **3.6.2 Data Coding**

The raw data from the questionnaires were coded into numerical format in order to insure that the data can be entered easily and quickly into SAS. The responses were coded by assigning a unique number for each item in the questionnaires. For example, the item gender in the section A of the questionnaire was coded as 1= single and 2= married. Meanwhile, responses from section B and C were coded based on the 5-point Likert scale which is from 1 to 5 (from strongly disagree to strongly agree).

### **3.6.3 Data Entering**

All of the data were entered into the SAS and were rechecked to ensure the accuracy and consistency between the responses from the questionnaires and the data entered into the software.

### **3.6.4 Data Recoding**

Data from negatively worded scale items were recoded into positively worded scale by reassigning a new number to the responses. For instance, for the PF4 item in price fairness, all of the responses were recoded from 1 to 5 (from strongly disagree to strongly agree), 2 to 4, 3 to 3, 4 to 2 and 5 to 1 accordingly.

### **3.6.5 Data Transcribing**

All of the data from section B and C were transcribed into average summated scores for statistical data analysis.

## **3.7 Data Analysis**

After data processing, data analysis was preceded. SAS 5.1 which consisted of numerous data analysis tool were used in the statistical data analysis in this study. Descriptive statistics, reliability test and normality test were chosen as our data analysis tools. Besides, Pearson's correlation analysis and multiple linear regression analysis were the parametric statistical tools used to test the hypotheses in this study.



### **3.7.1 Descriptive Analysis**

Descriptive analysis demonstrated the demographic profile of respondents and central tendencies measurement of each constructs. Demographic profile exhibited the characteristics of elements that comprised of gender, age, marital status, occupation, monthly income and length of time for most recent visiting to the newly opened cafés and restaurants. The data were showed in frequency and percentage by using tables and written explanations. Conversely, central tendencies measurement of constructs provides mode, average, and standard deviation values for each item of a variable.

### **3.7.2 Scale Measurement**

#### **3.7.2.1 Reliability Test**

The purpose of reliability test was to ensure the data collection techniques or analyses were consistent which will yield reliable results (Hair, Black, Babin, Anderson, & Tatham, 2007). In this research, Cronbach's Alpha test was conducted. Hair et al. (2007) stated that each variable item should be measuring the same variable and be highly inter-correlated in order to generate consistent findings. According to Sekaran (2003), the value of Cronbach's Alpha that exceeds 0.6 is considered moderate, exceeds 0.7 is good and exceeds 0.8 is excellent.

### **3.7.2.2 Normality Test**

Normality test had been conducted to ensure that the data were normally distributed. It is very important that this assumption was satisfied when conducting parametric tests (Drezner, Turel, & Zerom, 2010). In this research, skewness and kurtosis were used to determine the normality of the data. Data is considered normally distributed if the values of skewness and kurtosis were all within the acceptable range, which is  $\pm 2$  (Garson, 2012). Besides, Kline (2005) stated that data with skewness within  $\pm 3$  and kurtosis within  $\pm 10$  is considered as normal.

### **3.7.3 Inferential Test**

Inferential analysis was used to investigate the relationship between IVs and DV. In the research, Pearson's correlation coefficient and multiple linear regressions were employed as the statistical analysis tool.

#### **3.7.3.1 Pearson's Correlation Analysis**

Pearson correlation analysis had been conducted to determine the direction, strength, and significance of the Bivariate relationships between service quality and price fairness (IVs) and customer loyalty (DV). Pearson correlation is preferred because it can assess the linear relationship between two variables by using a single number that falls within the range of  $\pm 1$  (Auka et al., 2013; Welkowitz, Cohen, & Ewen, 2006).

Table 3.3 shows the values that explain the direction and strength of correlation coefficient between IVs and DV.

Table 3.3: Correlation Coefficient

Value	Correlations
-1	Perfect negative correlation
0	No correlation
+1	Perfect positive correlation

Source: Morgan, G., Leech, N., Gloeckner, G., & Barrett, K. (2004). *SPSS for Introductory Statistics* (2nd ed.). New Jersey: Lawrence Erlbaum Associates, Inc.

Pearson’s Correlation analysis is also useful to test multicollinearity problems between variables. Multicollinearity problem refers to the high correlations between IVs. The coefficient should not exceed 0.90 to avoid multicollinearity problem among multiple IVs (Hair, Anderson, Tatham, & Blank, 1998).

### **3.7.3.2 Multiple Linear Regressions**

Multiple linear regressions had been employed in the study to assess the strength of the relationship between multiple IVs and a single DV, for instances, to investigate the multivariate relationship between IVs (service quality and price fairness) and DV (customer loyalty). Beta coefficient had been used to examine the expected change in the DV due to the change in one unit of the IVs;  $R^2$  coefficient had been used to investigate the strength that the IVs can explain the DV. The predictors are stronger when the  $R^2$  value is nearer to 1.

P-value had been used to determine the significant relationship between IVs and DV. There was a significant relationship between the IVs and DV if the p-value is less than 0.05. Meanwhile, F-test had

been used to investigate the fitness of the regression model. The regression model is considered as fit if the p-value is less than 0.05.

There were few assumptions that must be met in this analysis. The value of each IVs and DV should be normally distributed, which can be tested by using skewness and kurtosis test. Besides, the mean of DV for each IV should fall along a straight line and the spread should be constant to meet the linearity assumption.

Multiple linear regressions can also test the multicollinearity problem by referring to the tolerance and variance inflation factor. According to O'brien (2007), the tolerance value must be more than 0.1 and the variance inflation must be less than 10 to avoid multicollinearity problem.

An equation had been formed to explain the relationship between IVs and DV. The multiple linear regression equation:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Y= Customer Loyalty

X<sub>1</sub>= Tangibles

X<sub>2</sub>=Reliability

X<sub>3</sub>=Responsiveness

X<sub>4</sub>=Assurance

X<sub>5</sub>=Empathy

X<sub>6</sub>=Price Fairness

### **3.8 Conclusion**

Quantitative and cross sectional study had been chosen in this study. Self-administered questionnaires had been distributed to the target respondents which were the customers within newly opened cafés and restaurants in Penang to collect primary data. Questions for each variable that had been used in the survey questionnaires were adopted from various past studies. Descriptive analysis, scale measurement and inferential analysis were carried out in this research. Chapter 4 will discuss the pattern and analyses of the results.

## Chapter 4: Data Analysis

### 4.0 Introduction

Chapter 4 discusses the findings of this research. 285 out of 300 sets of questionnaires were evaluated using SAS Enterprise Guide 5.1. The data outcomes demonstrated the relationship between service quality and price fairness towards customer loyalty and were displayed in table forms. Besides, the following parts of this topic illustrated the results of descriptive analysis, scale measurement and inferential analysis.

### 4.1 Pilot Test

#### 4.1.1 Normality Test

Table 4.1: Normality Test (Pilot Test)

<b>Variables</b>	<b>Items</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b>Alpha</b>
<b>Tangibles (T)</b>	T1	0.0948	1.744	0.7117
	T2	0.0539	-0.3517	
	T3	0.1079	-1.085	
	T4	-0.3194	1.5987	
<b>Reliability (R)</b>	R1	-0.1985	-0.8354	0.7215

	R2	-0.1662	-0.5022	
	R3	0.0000	-1.3554	
	R4	-0.1061	0.0975	
<b>Responsiveness (RP)</b>	RP1	-0.1923	0.4590	0.7245
	RP2	-0.3852	0.5562	
	RP3	-0.5558	0.8643	
	RP4	0.0000	1.1220	
<b>Assurance (A)</b>	A1	-0.1071	-0.5568	0.9245
	A2	-0.2142	-1.0191	
	A3	0.1209	-1.3318	
	A4	-0.0874	-0.7699	
<b>Empathy (E)</b>	E1	-0.2618	3.7489	0.7487
	E2	0.1170	-0.2984	
	E3	-0.2742	-0.0977	
	E4	-0.0503	-0.6986	
<b>Price Fairness (PF)</b>	PF1	0.1231	-0.0647	0.8928
	PF2	-0.2890	-0.4028	
	PF3	-0.1736	-0.4914	
	PF4	-0.1560	-0.4277	

<b>Customer Loyalty (CL)</b>	CL1	-0.1408	0.0561	0.9286
	CL2	-0.7755	0.7676	
	CL3	-0.6678	0.5527	
	CL4	-0.4668	0.6729	
	CL5	0.0659	-0.5272	

Source: Developed for the research

The results of normality test in skewness and kurtosis conducted from pilot test is shown in Table 4.1. The items in each variable have a skewness and kurtosis value of  $\pm 2$ , which is considered as acceptable and normal (Garson, 2012). E1 which has the highest kurtosis value of 3.7489 are also considered as normal as it is fall within the acceptable range of  $\pm 10$  (Kline, 2005).

#### 4.1.2 Reliability Test

Table 4.2: Reliability Test (Pilot Test)

<b>Variables</b>	<b>Items</b>	<b>No. of Items</b>	<b>Reliability</b>
<b>Tangibles (T)</b>	T1	4	0.7117
	T2		
	T3		
	T4		
<b>Reliability (R)</b>	R1	4	0.7215
	R2		



	R3		
	R4		
<b>Responsiveness (RP)</b>	RP1	4	0.7245
	RP2		
	RP3		
	RP4		
<b>Assurance (A)</b>	A1	4	0.9245
	A2		
	A3		
	A4		
<b>Empathy (E)</b>	E1	4	0.7487
	E2		
	E3		
	E4		
<b>Price Fairness (PF)</b>	PF1	4	0.8928
	PF2		
	PF3		
	PF4		
<b>Customer Loyalty (CL)</b>	CL1	5	0.9286
	CL2		

	CL3		
	CL4		
	CL5		

Source: Developed for the research

Table 4.2 showed the results of reliability test conducted from pilot test. The Cronbach's alpha values of the variables are in the range from 0.7117 to 0.9286. Customer loyalty has the highest Cronbach's alpha value among all variables, which was 0.9286. This indicates that the items in customer loyalty (DV) were valid and highly reliable to produce consistent results compared to other variables. Assurance and price fairness also have a higher Cronbach's alpha value compare to other independent variables, which were 0.9245 and 0.8928 respectively. Empathy, responsiveness, reliability and tangibles achieved Cronbach's alpha of 0.7487, 0.7245, 0.7215 and 0.7117 respectively. In overall, all of the variables were considered reliable as the value of Cronbach's alpha exceeds 0.7 (Sekaran, 2003).

## **4.2 Descriptive Analysis**

### **4.2.1 Demographic Profile of the Respondents**

This section showed the demographic profile of the respondents. Closed-ended questions which forced-choice questions were adopted in the questionnaire. Choices given make it easy for respondents to understand the questions.

Table 4.3: Gender

<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Male</b>	117	41.05
<b>Female</b>	168	58.95
<b>Total</b>	285	100

Source: Developed for the research

The frequency and percentage of gender is shown in Table 4.3. Among the 285 respondents, 117 out of them were males (41.05%) while 168 of them were females (58.95%).

Table 4.4: Age

<b>Age Group</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>18-29</b>	188	65.96
<b>30-39</b>	46	16.14
<b>40-49</b>	30	10.53
<b>50 and above</b>	21	7.37
<b>Total</b>	285	100

Source: Developed for the research

The age distribution among the respondents is shown in Table 4.4. A majority of 188 respondents were between age of 18 to 29 years (65.96 %). The next dominant age group was fall under 30 to 39 years with 46 respondents (16.14 %), followed by 40 to 49 years with 30 respondents (10.53%) and the remaining 21 respondents were between age of 50 years or above (7.37%).

Table 4.5: Marital Status

<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Single</b>	191	67.02
<b>Married</b>	94	32.98
<b>Total</b>	285	100

Source: Developed for the research

The marital status of the respondents is shown in Table 4.5. There are 191 (67.02%) respondents were single whereas 94 (32.98%) were married.

Table 4.6: Occupation

<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Student</b>	137	48.07
<b>Self-employed</b>	39	13.68
<b>Government</b>	13	4.56
<b>Private sector</b>	61	21.40
<b>Professional</b>	18	6.32
<b>Retired</b>	17	5.96
<b>Total</b>	285	100

Source: Developed for the research

Table 4.6 showed that 137 respondents were students with percentage of 48.07% followed by 61 respondents were private sector workers. Next, 39 respondents were self-employed, 18 respondents were professionals and 17 respondents were retirees. Minority group of respondents were government sector workers with total of 13 (4.56%).

Table 4.7: Monthly Income

<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>No Income</b>	153	53.68
<b>RM1,000 and below</b>	2	0.70
<b>RM1,001-2,000</b>	19	6.67
<b>RM2,001-3,000</b>	44	15.44
<b>RM3,001-4,000</b>	32	11.23
<b>Above RM4,000</b>	35	12.28
<b>Total</b>	285	100

Source: Developed for the research

The monthly income of the respondents is shown in Table 4.7. 153 respondents (53.68%) fall in the major category of no income. Next, 44 respondents (15.44%) earned RM 2,001 to 3,000, followed by 35 respondents (12.28%) earned more than RM 4,000 and 32 respondents (11.23%) earned RM3,001 to 4,000 per month. 19 respondents had salary of RM 1,001 to 2,000 whereas 2 respondents had salary below RM 1,000.

Table 4.8: Most Recent Visit

<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
<b>Within the past one week</b>	85	29.82
<b>Within the past two weeks</b>	56	19.65
<b>Within the past one month</b>	76	26.67
<b>More than one month ago</b>	68	23.86
<b>Total</b>	285	100

Source: Developed for the research

Table 4.8 illustrated that 85 respondents visit newly opened cafés and restaurants within the past one week followed by 76 respondents visit within the past one month. There were 68 (23.86%) respondents visit newly opened

cafes and restaurants more than one month ago meanwhile 56 respondents visit within the past two weeks.

#### 4.2.2 Central Tendencies Measurement of Constructs

Table 4.9: Central Tendencies Measurement of Constructs

<b>Variables</b>	<b>Items</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Mode</b>
<b>Tangibles (T)</b>	T1	285	4.0175	0.6994	4.0000
	T2		3.8526	0.6966	4.0000
	T3		3.8667	0.6417	4.0000
	T4		3.7053	0.6259	4.0000
<b>Reliability (R)</b>	R1	285	4.1018	0.6819	4.0000
	R2		3.7544	0.7755	4.0000
	R3		3.7263	0.6783	4.0000
	R4		3.4526	0.6571	3.0000
<b>Responsiveness (RP)</b>	RP1	285	3.9439	0.6083	4.0000
	RP2		3.4246	0.6269	3.0000
	RP3		3.5228	0.6584	3.0000
	RP4		3.8000	0.6650	4.0000
<b>Assurance (A)</b>	A1	285	3.9860	0.6108	4.0000
	A2		3.9649	0.6214	4.0000
	A3		3.8106	0.5986	4.0000
	A4		3.8140	0.5539	4.0000
<b>Empathy (E)</b>	E1	285	3.7649	0.7002	4.0000
	E2		3.3754	0.6017	3.0000
	E3		3.4667	0.6020	3.0000
	E4		3.5404	0.6413	4.0000
<b>Price Fairness (PF)</b>	PF1	285	3.4842	0.8290	4.0000
	PF2		3.5860	0.7853	4.0000
	PF3		3.5193	0.8074	4.0000
	PF4		3.6281	0.8692	4.0000

<b>Customer Loyalty (CL)</b>	CL1	285	3.8561	0.6794	4.0000
	CL2		3.7789	0.7761	4.0000
	CL3		3.6035	0.7368	4.0000
	CL4		3.6561	0.7513	4.0000
	CL5		3.4035	0.7086	3.0000

Source: Developed for the research

According to Table 4.9, the mean values of each variable were in the range between 3.3754 and 4.1018. This indicates that most target respondents were chosen more towards neutral and agreed. The highest mean (4.1018) falls under reliability whereas the lowest mean (3.3754) falls under empathy.

Besides, the values of standard deviation were ranging from 0.5539 to 0.8692. Price fairness contributes highest standard deviation of 0.8692 whereas assurance contributes lowest standard deviation of 0.5539. Referring to Table 4.9, values of standard deviation of all the variables was less than 1.

## 4.3 Scale Measurement

### 4.3.1 Normality Test

Table 4.10: Normality Test

Variables	Items	Skewness	Kurtosis	Alpha
<b>Tangibles (T)</b>	T1	-0.7703	1.2966	0.7649
	T2	-0.8619	2.0002	
	T3	-0.7590	1.9591	
	T4	0.0529	-0.3087	
<b>Reliability (R)</b>	R1	-0.7338	1.3176	0.7731

	R2	-0.0906	-0.4726	
	R3	-0.3510	0.1945	
	R4	-0.2510	0.1384	
<b>Responsiveness (RP)</b>	RP1	-0.4450	1.1082	0.7516
	RP2	0.5901	0.0260	
	RP3	0.2137	-0.2401	
	RP4	-0.0405	-0.2424	
<b>Assurance (A)</b>	A1	-0.2730	0.6091	0.8634
	A2	-0.4204	0.9536	
	A3	-0.2019	0.2296	
	A4	-0.3035	0.4727	
<b>Empathy (E)</b>	E1	-0.1352	-0.1651	0.6625
	E2	0.4899	0.0726	
	E3	0.1289	-0.3440	
	E4	-0.1114	-0.2032	
<b>Price Fairness (PF)</b>	PF1	-0.9204	0.4872	0.9465
	PF2	-1.0999	0.9649	
	PF3	-0.9724	0.8298	
	PF4	-0.8203	0.3728	
<b>Customer Loyalty (CL)</b>	CL1	-0.4248	0.4611	0.9117
	CL2	-0.5497	0.3981	
	CL3	-0.3884	0.2011	
	CL4	-0.3432	-0.0990	
	CL5	-0.1629	0.3420	

Source: Developed for the research

The normality result of the final data is illustrated in Table 4.10. The items in each variable that have a skewness and kurtosis value of  $\pm 2$  are considered as acceptable and normal (Garson, 2012). T2 which has the highest kurtosis of 2.0002 are also considered as normal as it falls within the acceptable range of  $\pm 10$  (Kline, 2005).



### 4.3.2 Reliability Test

Table 4.11: Reliability Test

<b>Variables</b>	<b>Item</b>	<b>No. of Items</b>	<b>Reliability</b>
<b>Tangibles (T)</b>	T1	4	0.7649
	T2		
	T3		
	T4		
<b>Reliability (R)</b>	R1	4	0.7731
	R2		
	R3		
	R4		
<b>Responsiveness (RP)</b>	RP1	4	0.7516
	RP2		
	RP3		
	RP4		
<b>Assurance (A)</b>	A1	4	0.8634
	A2		
	A3		
	A4		
<b>Empathy (E)</b>	E1	4	0.6625
	E2		
	E3		
	E4		
<b>Price Fairness (PF)</b>	PF1	4	0.9465
	PF2		
	PF3		
	PF4		
<b>Customer Loyalty (CL)</b>	CL1	5	0.9117
	CL2		
	CL3		
	CL4		

	CL5		
--	-----	--	--

Source: Developed for the research

Table 4.11 shows the reliability results of the final data. The Cronbach’s alpha values of the variables were fall in the range from 0.6625 to 0.9465. Price fairness has the highest Cronbach’s alpha value which was 0.9465 followed by customer loyalty and assurance which have a value of 0.9117 and 0.8634 respectively. The Cronbach’s alpha values of reliability, tangibles and responsiveness were 0.7731, 0.7649 and 0.7516. This indicates that the items in price fairness, customer loyalty, assurance, reliability, tangibles and responsiveness were favorable and highly reliable with Cronbach’s alpha of more than 0.7 (Sekaran, 2003). Empathy which has the lowest Cronbach’s alpha value of 0.6625 was also considered as moderate reliable and internally consistent as it achieved at least 0.6 (Sekaran, 2003).

## 4.4 Inferential Analysis

### 4.4.1 Pearson’s Correlation Analysis

Table 4.12: Pearson’s Correlation Analysis

Variables	T	R	RP	A	E	PF	CL
T	1.0000						
R	0.2760	1.0000					
RP	0.3380	0.5235	1.0000				
A	0.4173	0.3905	0.4723	1.0000			
E	0.2613	0.3942	0.5669	0.4159	1.0000		
PS	0.2677	0.2752	0.3263	0.4139	0.3433	1.0000	

<b>CL</b>	0.3914*	0.5096*	0.5337*	0.5679*	0.5499*	0.6209*	1.0000
-----------	---------	---------	---------	---------	---------	---------	--------

Source: Developed for the research

\* Correlation is significant at the 0.05 level.

The results of Pearson's correlation test which indicates the Bivariate correlation coefficient between IV and DV is demonstrated in Table 4.12. Apart from that, it determines whether there is multicollinearity problem exists among all of the independent variables.

The results indicated that service quality and price fairness are positively correlated with customer loyalty. In fact, the coefficient correlation value of the variables falls under the range of 0.3914 to 0.6209 where tangibles has the coefficient correlation value of 0.3914 ( $p < 0.0001$ ); reliability is 0.5096 ( $p < 0.0001$ ); responsiveness is 0.5337 ( $p < 0.0001$ ); assurance is 0.5679 ( $p < 0.0001$ ); empathy is 0.5499 ( $p < 0.0001$ ) and price fairness is 0.6209 ( $p < 0.0001$ ). This indicates that all of the variables are more towards moderate positive relationship except tangibles which shows a weak positive relationship.

The results show that as the cafés and restaurants increase the service quality and price fairness levels, the level of customer loyalty increases. Nonetheless, the degree of correlation varies between different variables, in which price fairness had the highest correlation whereas tangibles had the least.

Besides, the R-value between each IV was used to test the multicollinearity problems. The correlation between all of the IVs should not exceed 0.90 to avoid multicollinearity problem (Hair et al., 1998). Referring to the Table 4.12, correlation for all of the IVs were in the range from 0.26131 to 0.56691. Empathy and responsiveness had the highest correlation which is 0.56691.

However, all of the correlation values had not exceeded 0.90. Hence, there was no multicollinearity problem in this model.

#### 4.4.2 Multiple Linear Regression

Table 4.13: Model Summary

<b>Model</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	0.6203	0.6121	0.24643

Source: Developed for the research

- a. Predictors: Tangibles, reliability, responsiveness, assurance, empathy and price fairness.
- b. Dependent variable: Customer loyalty

R Square (coefficient of determination) is to investigate the strength that the IVs can explain the variations in the DV. Table 4.13 showed that R<sup>2</sup> value was 0.6203. It indicates that 62.03% of the changes in the customer loyalty (DV) can be explained by tangibles, reliability, responsiveness, assurance, empathy and price fairness (IVs). According to Bonate (2005), R<sup>2</sup> that is exceeded 0.4 was considered acceptable.

Table 4.14: ANOVA

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	69.6135	6	11.6023	75.69	<0.0001
<b>Residual</b>	42.6124	278	0.1533		

<b>Total</b>	112.2259	284			
--------------	----------	-----	--	--	--

Source: Developed for the research

F ratio is used to assess the overall fitness of the regression model. F value, 75.69 is large by a small significant p-value of <0.0001 which is less than 0.05. This indicates that the customer loyalty (DV) was predictable by tangibles, reliability, responsiveness, assurance, empathy and price fairness (IVs). In other words, the regression model was considered as fit.

Table 4.15: Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Hypothesis	Supported/Not Supported
	B	Std. Error	Beta				
<b>Intercept</b>	-.9375	.2464		-3.8	.0002		
<b>T</b>	.1009	.0512	.0820	1.97	.0495	H <sub>1</sub>	Supported
<b>R</b>	.2205	.0519	.1893	4.24	<.0001	H <sub>2</sub>	Supported
<b>RP</b>	.1098	.0657	.0846	1.67	.0960	H <sub>3</sub>	Not Supported
<b>A</b>	.2259	.0584	.1806	3.87	.0001	H <sub>4</sub>	Supported
<b>E</b>	.2826	.0651	.2020	4.34	<.0001	H <sub>5</sub>	Supported
<b>PF</b>	.3086	.0344	.3752	8.97	<.0001	H <sub>6</sub>	Supported

Source: Developed for the research

P-value of tangibles, reliability, assurance, empathy and price fairness were less than 0.05 as showed in Table 4.15. This indicates that each of the IV is significantly affecting customer loyalty in newly opened cafés and restaurants. However, the p-value of responsiveness is exceeded 0.05 and it indicates that responsiveness was not a significant predictor of customer loyalty. Hence, all

of the independent variables were correlated with the customer loyalty in newly opened cafés and restaurants whereby H<sub>1</sub>, H<sub>2</sub>, H<sub>4</sub>, H<sub>5</sub> and H<sub>6</sub> were supported by this research model, except H<sub>3</sub> which was not supported by this research model.

In addition, the effectiveness of each IV in affecting the DV is determined by the standardized coefficients beta value. From the Table 4.15, it is found that price fairness ( $\beta = 0.3752$ ) is the most influential factor followed by empathy ( $\beta = 0.2020$ ), reliability ( $\beta = 0.1893$ ), assurance ( $\beta = 0.1806$ ), responsiveness ( $\beta = 0.0846$ ) and lastly tangibles ( $\beta = 0.0820$ ) was the least influential factor in affecting the customer loyalty in newly opened cafés and restaurants.

The regression equation is written as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e$$

Y= Customer Loyalty
X <sub>1</sub> = Tangibles
X <sub>2</sub> =Reliability
X <sub>3</sub> =Responsiveness
X <sub>4</sub> =Assurance
X <sub>5</sub> =Empathy
X <sub>6</sub> =Price Fairness

Therefore, the regression equation employed in this research was written as:

$$\text{Customer loyalty} = -0.9375 + 0.1009 (\text{Tangibles}) + 0.2205 (\text{Reliability}) + 0.1098 (\text{Responsiveness}) + 0.2259 (\text{Assurance}) + 0.2826 (\text{Empathy}) + 0.3086 (\text{Price Fairness})$$

Table 4.16: Tolerance and Variance Inflation

<b>Variables</b>	<b>Tolerance</b>	<b>Variance Inflation</b>
<b>Tangibles</b>	0.7908	1.2645
<b>Reliability</b>	0.6868	1.4560
<b>Responsiveness</b>	0.5322	1.8787
<b>Assurance</b>	0.6264	1.5965
<b>Empathy</b>	0.6300	1.5873
<b>Price Fairness</b>	0.7804	1.2815

Source: Developed for the research

Table 4.16 showed that the value of tolerance of each IV is within the range of 0.5322 to 0.7908 and the value of variance inflation factor was within the range of 1.2645 to 1.8787. According to O'brien (2007), the tolerance value for all IVs which were greater than 0.1 and variance inflation factor which were lesser than 10 were considered acceptable. Hence, the results indicate no multicollinearity problem.

## **4.5 Conclusion**

The findings related to the study were analyzed in this chapter. All hypotheses proposed have been accepted except the responsiveness, H<sub>3</sub>. Finally, a regression equation has been developed. The next topic will discuss the findings based on the results that have been analyzed.

## **CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION**

### **5.0 Introduction**

Chapter 5 provides major discussions on data analysis and finding, follow by implications and limitations of the research. Subsequently, recommendations for future research were proposed for future researchers. Lastly, comprehensive conclusions will be made in the end of the chapter 5.

### **5.1 Summary of Statistical Analysis**

#### **5.1.1 Summary of Descriptive Analysis**

Table 5.1: Summary of Demographic Profiles

<b>Profile</b>	<b>Category</b>	<b>Frequency</b>	<b>Percent (%)</b>
Gender	Male	117	41.05
	Female	168	58.95
Age Group	18-29	188	65.96
	30-39	46	16.14
	40-49	30	10.53
	50 and above	21	7.37
Marital Status	Single	191	67.02
	Married	94	32.98
Occupation	Student	137	48.07



	Self-employed	39	13.68
	Government	13	4.56
	Private Sector	61	21.40
	Professional	18	6.32
	Retired	17	5.96
Monthly Income	No Income	153	53.68
	RM1,000 and below	2	0.70
	RM1,001-2,000	19	6.67
	RM2,001-3,000	44	15.44
	RM3,001-4,000	32	11.23
	Above RM4,000	35	12.28
Most Recent Visit	Within the past one week	85	29.82
	Within the past two weeks	56	19.65
	Within the past one month	76	26.67
	More than one month ago	68	23.86

Source: Developed for the research

The demographic profile of the target respondents is depicted in Table 5.1, which were customers of newly opened cafés and restaurants in Penang. In overall, most of them were females, aged from 18 to 29, single, who were student with no income and visit newly opened cafés and restaurants within the past one week.

### 5.1.2 Summary of Inferential Analysis

Table 5.2: Summary of Inferential Analyses

Hypothesis	Pearson's Correlation	Multiple Linear Regression	Result

		<b>P-value</b>	<b>Beta</b>	
H1: There is a positive relationship between tangibles and customer loyalty.	0.39138	0.0495	0.0820	Supported
H2: There is a positive relationship between reliability and customer loyalty.	0.50958	<.0001	0.1893	Supported
H3: There is a positive relationship between responsiveness and customer loyalty.	0.53365	0.0960	0.0846	Not Supported
H4: There is a positive relationship between assurance and customer loyalty.	0.56793	0.0001	0.1806	Supported
H5: There is a positive relationship between empathy and customer loyalty.	0.54993	<.0001	0.2020	Supported
H6: There is a positive relationship between price fairness and customer loyalty.	0.62092	<.0001	0.3752	Supported

Source: Developed for the research

The result of Pearson's correlation indicated that tangibles, reliability, responsiveness, assurance, empathy and price fairness (IVs) are positively and moderately correlated with customer loyalty (DV). It showed that the relationship between price fairness and customer loyalty was the strongest

among all the IVs (0.62092). On the contrary, the relationship between tangibles and customer loyalty was the weakest (0.39138).

The result of multiple linear regression implies that tangibles, reliability, assurance, empathy and price fairness (IVs) were positively related with customer loyalty (DV) since the p-value for the IVs were less than 0.05. Hence, all the five alternative hypotheses were accepted. However, there was one alternative hypothesis is rejected since the p-value for responsiveness was more than 0.05. Therefore, there was no relationship between responsiveness and customer loyalty.

According to table 5.2, the most influential factor in affecting the customer loyalty in newly opened cafés and restaurant in Penang was price fairness (0.3752), while the least influential factor was tangibles (0.0820). On the overall, R-square was at 0.6203 which indicates that 62.03% of variation in DV can be explained by the IVs.

## **5.2 Discussions of Major Findings**

### **5.2.1 Tangibles**

The finding displayed that the hypothesis 1 is supported but the relationship between tangibles and customer loyalty is considered as the weakest among all the IVs. It shows that tangibles were not the most important factor that leads to customer loyalty.

Simultaneously, the result was congruent with previous studies done by Bostanji (2013) which indicates that tangibles was positively and significantly correlated with customer loyalty. The result was also consistent with previous

empirical research done by Polyorat and Sophonsiri (2010), Mokhtar et al. (2011) as well as Deshmukh and Chourasia (2012).

### **5.2.2 Reliability**

The finding demonstrated that hypothesis 2 is supported. According to Činjurević et al. (2010), reliability was considered the most important dimension in determining the quality of services.

Moreover, the result was congruent with previous studies done by Yuen and Chan (2010), Yousaf et al. (2013) and Činjurević et al. (2010) which signified that reliability and customer loyalty had a positive and significant relation. Besides, it stated that reliability has the strongest influence in forecasting customer loyalty and thus it is require tracking customers' perspective frequently in order to scheme service strategies.

### **5.2.3 Responsiveness**

Responsiveness is an important components that help organization to cope with the customer's demand in order to improve the organization overall performance (Sharifi & Zhang, 1999; Stalk, Evans & Sgulman, 1992). However, the finding indicates that responsiveness was not significantly associated with the customer loyalty.

This results was in conflict with the prior findings of some other past studies which concluded that responsiveness was positive correlated to customer loyalty (Al-Rousan and Mohamed, 2010; Amirosadat et al., 2013; Auka et al., 2013). The reason might be due to the different culture in different countries. All of these researches were conducted in other countries which were Jordan,

Kenya and Iran respectively. Target respondents may have different perspectives in term of service quality as compared to Malaysia.

However, the result was congruent with the previous empirical studies by Kheng et al. (2010) as well as Sanayei et al. (2011) which the researchers proven that responsiveness had no significant relationship on customer loyalty. Past study of Kheng et al. (2010) is conducted in the banking sector in Malaysia. The target respondents are having the same culture and might have similar perspective toward service quality with the target respondents in this research.

#### **5.2.4 Assurance**

The finding indicated that assurance and customer loyalty were positively correlated. In order to maintain customer loyalty of Islamic banks, Islamic banks should give assurance in terms of Islamic banking compliance (Badara et al., 2013). Simultaneously, the result was congruent with prior researches by Badara et al. (2013), Hassan et al. (2012), Movafegh and Movafegh (2013) and Malik et al. (2011).

#### **5.2.5 Empathy**

The finding indicated that empathy and customer loyalty are positively related. It shows that empathy is a significant predictor of customer loyalty. According to Obeidat et al. (2012), empathy is crucial as the fact of each customer is attracted to the source of caring, compassion and personalized attention.

Simultaneously, the finding was congruent with the empirical results of Agyei and Kilika (2013), which indicated that empathy and customer loyalty are

significantly positive associated. Additionally, it also considered as a major predictor of customer loyalty. Furthermore, the result was consistent with previous studies which were Albarq (2013), An and Noh (2009) and Lu et al. (2012) which showed empathy is significantly positive related with customer loyalty.

### **5.2.6 Price Fairness**

The finding showed that the hypothesis 6 is supported. In service organizations, perceived price fairness acts as a threshold factor in retaining customer loyalty (Martín-Consuegra et al., 2007). Perceived price fairness can attract customer to be loyal as customers who feel satisfy with the price will plan to repeat their purchase in future (Huber, Herrmann, & Wricke, 2001). This is because price is the underlying element when customers purchase products or services.

In addition, the result was congruent with previous studies done by Martín-Consuegra et al. (2007), Virvilaite et al. (2009), Onlaor and Rotchanakitumnuai (2010) as well as Hassan et al. (2013).

## **5.3 Implications of the Study**

### **5.3.1 Theoretical Implications**

This study confirmed the positive relationship between service quality and customer loyalty as well as between price fairness and customer loyalty. Nevertheless, the term of responsiveness in service quality proved that there is

no relationship with customer loyalty. However, this research was required to further explore previous studies on SERVQUAL theory, therefore can determine how customer loyalty correlates with other service quality indicator and price fairness. In fact, this would facilitate a better perspective on customer loyalty and its antecedents along with its consequences.

Besides, prospect researchers can reproduce the model of this study to make an indication of the relationship between service quality and customer loyalty as well as between price fairness and customer loyalty for food and beverage industry in Malaysia. This research was useful to identify more other service quality and price factors that may affect customer loyalty that take place in other countries. According to this, researchers should adopt SERVQUAL in any newly opened food and beverage industry in order to gain clearer picture of these multidimensionality of construct.

### **5.3.2 Managerial Implications**

Most of the managers of cafés and restaurants found that it was difficult to make resource allocation decision to maximize the customer loyalty. The useful findings in this research conducted can be utilized by managers to optimize their resource allocation as to improve the customer loyalty. This was because managers can aware of how the customer perception of service quality will affect customer loyalty. Therefore, managers can implement the correct practices in their daily operations of the cafés and restaurants. Managers were advisable to allocate the resources to the elements in service quality which can be found more essential to improve customer loyalty. For example, managers can emphasis on the understanding specific requirements, listen to complaints and quick apologize to the customers because the result of study shows that empathy play an important role to gain customer loyalty.

Food and beverage industry is service-oriented industry. Hence, the sustainability of cafés and restaurants highly depends on the customers. In order to improve customer loyalty, service quality plays as a vital role. The elements in services quality which include tangibles, reliability, responsiveness, assurance, empathy have been proven essential to increase customer loyalty. Besides, price fairness also important to retrieve loyal customers in the food and beverage industry. Conclusively, providing a good service quality and price fairness are important to gain a competitive advantage among managers in food and beverage industry.

#### **5.4 Limitations of the Study**

The research was not free from limitation. Thus, several limitations of the study should be acknowledged. Firstly, the survey questionnaires were developed in English Language only. As such, there was a probability that some of the respondents may not understand well of the questionnaires and answer the questions properly. Therefore, the outcome may be incomplete or untrustworthy and the results of the research cannot be strongly generalized. The reason due to English Language was not the mother tongue and it acts merely as a second language to most of the Malaysians. If the respondents have weak command of English language, there was a likelihood that they may misunderstand the questions even though measures have been taken to ensure that the questionnaires are written in simple and straightforward English sentences.

Secondly, there was a boundary restriction in terms of geographical area and focuses solely on Penang, Malaysia only. The samples were come from customers of newly opened cafés and restaurants which were located in Penang Malaysia. The limitation of scope and location of sample will limit the external validity of the research results. Since other states were not included, the result may be biased and inaccurate. Furthermore, the survey was not conducted in most of the populated states in



Malaysia such as Selangor, Johor, and Sabah which have a population of 5.46 million, 3.35 million, and 3.21 million respectively. Although the survey questionnaires were spread all over the length and breadth of the Penang in Malaysia, but the respondents did not represent every state of Malaysia.

Finally, this research was proposed with cross-sectional model. The intentions and perceptions will be measured at one specific time point of survey. Nevertheless, perceptions may change as time has changed as people gain experience, which embrace implications for the researchers. Therefore, the results were only limited to the relationship at that particular time and they were possibly to be outdated quickly (Venkatesh, Morris, Davis, & Davis, 2003).

## **5.5 Recommendations for Future Research**

In the future survey, survey questionnaires should be prepared in different languages such as Malay, Chinese and Tamil for the ease of the respondents' understanding. Besides, another alternative was to spend time explaining the survey questions verbally to the respondents in order to produce more accurate and reliable answers.

In addition, future research may include other states of Malaysia. Among the benefits to be gained by collecting data include other states of Malaysia is that it will increase the reliability and comparability of the results from this research. This was because the results were currently restricted in only Penang. It was unable to prove that the results were the same with the other states of Malaysia affected by the same factors.

Lastly, it was highly recommended that future research can adopt a longer term of longitudinal study to promote our understanding of the cause-and-effect relationships between different variables that were essential to customer loyalty of newly opened cafés and restaurants. Moreover, over a longstanding period of the longitudinal study

will provide a better outcome for this research. Hence, additional research efforts were required to test the proposed model (Lin, 2012).

## **5.6 Conclusion**

All in all, the purpose of this research was to examine whether the six IVs (tangibles, reliability, responsiveness, assurance, empathy and price fairness) were influencing the DV (customer loyalty). Referring to results of data analysis and discussion on findings, we can conclude that five out of six IVs (tangibles, reliability, assurance, empathy and price fairness) and customer loyalty have positive relationships. Price fairness has the strongest relationship with customer loyalty, while tangibles was the weakest among the six variables. Meanwhile, responsiveness has no relationship on loyalty of customers in cafés and restaurants in Penang.

## REFERENCES

- Agyei, P. M. & Kilika, J. M. (2013). The relationship between service quality and customer loyalty in the Kenyan mobile telecommunication service industry. *European Journal of Business and Management*, 5(23), 26-36.
- Ahmad, Z., & Taylor, D. (2009). Commitment to independence by internal auditors: The effects of role ambiguity and role conflict. *Managerial Auditing Journal*, 24(9), 899-925.
- Albarq, A. N. (2013). Applying a SERVQUAL model to measure the impact of service quality on customer loyalty among local Saudi banks in Riyadh. *American Journal of Industrial and Business Management*, 3, 700-707.
- Alex, D. & Thomas, S. (2011). Impact of product quality, service quality and contextual experience on customer perceived value and future buying intentions. *European Journal of Business and Management*, 3(3), 307-315.
- Al-Rousan, M. R. & Mohamed, B. (2010). Customer loyalty and the impacts of service quality: The case of five star hotels in Jordan. *International Journal of Business, Economics, Finance & Management Sciences*, 2(3), 886-892.
- Al-Zoubi, M. R. (2013). Service quality effects on customer loyalty among the Jordanian telecom sector “Empirical Study”. *International Journal of Business and Management*, 8(7), 35-45.
- Amirosadat, S. N., Esfahani, M. T., & Moshkforosh, A. (2013). An empirical study of customers' perceptions of service quality and loyalty with using structural equation modeling. *International Journal of Academic Research in Economics and Management Sciences*, 2(4), 15-26.
- An, M., & Noh, Y. (2009). Airline customer satisfaction and loyalty: Impact of in-flight service quality. *Service Business*, 3(3), 293-307.
- Auka, D. O., Bosire, J. N., & Matern, V. (2013). Perceived service quality and customer loyalty in retail banking in Kenya. *British Journal of Marketing*

*Studies*, 1(3), 32-61.

Badara, M. S., Mat, N. K. N., Mujtaba, A. M., Al-Refai, A. N., Badara, A. M., & Abubakar, F. M. (2013). Direct effect of service quality dimensions on customer satisfaction and customer loyalty in Nigerian Islamic bank. *Management*, 3(1), 6-11.

Bahrick, H. P., Bahrick, P. O., & Wittlinger, R. P. (1975). Fifty years of memory for names and faces: A cross-sectional approach. *Journal of Experimental Psychology: General*, 104(1), 54-75.

Baldwin, A. & Sohal, A. (2003). Service quality factors and outcomes in dental care. *Managing Service Quality*, 13(3), 207-216.

Berli, A., Martin, J. D., & Quintana, A. (2004). A model of customer loyalty in the retail banking market. *European Journal of Marketing*, 38(1/2), 253-275.

Berry, L. L. & Parasuraman, A. (1991). *Marketing services*. New York: Free Press.

Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price (un)fairness. *Journal of Consumer Research*, 29(4), 474-491.

Bonate, P. (2005). *Pharmacokinetic-pharmacodynamic modeling and simulation*. New York: Springer Science & Business Media, Inc.

Bostanji, G. M. A. (2013). The impact of service quality on customers loyalty: A study on five stars hotel's customers in Riyadh, KSA. *European Journal of Business and Management*, 5(31), 230-240.

Bowen, J. T. & Shoemaker, S. (1998). Loyalty: A strategic commitment. *Cornell Hotel and Restaurant Administration Quarterly*, 39(1), 12-25.

Burns, A. C., & Bush, R. F. (2000). *Marketing Research (5th ed.)*. Pearson International Edition.

*Business trend around Georgetown heritage city* (n.d.). Retrieved February 26, 2014, from <http://www.aroundpenangtips.com/penang-news/georgetown-business->

trend.php

*Cafés / Bars in Malaysia*. (2013, November) Retrieved February 26, 2014, from <http://www.euromonitor.com/cafes-bars-in-malaysia/report>

Carrillat, F., Jaramillo, F., & Mulki, J. (2007). The validity of the SERVQUAL and SERVPERF scales: A meta-analytic view of 17 years of research across five continents. *International Journal of Service Industry Management*, 18(5), 472-490.

Çerri, S. (2012). The impact of the quality of logistics activities on customer commitment, loyalty and firm's performance. *Journal of Advanced Research in Management*, 3(2), 79-88.

Chadha, S. K. & Kapoor, D. (2009). Effect of switching cost, service quality and customer satisfaction on customer loyalty of cellular service providers in Indian market. *The Icfai University Journal of Marketing Management*, 8(1), 23-37.

Chu, Y. (2007). A comparative study of the influence of failure classes, failure severity, and the effectiveness of recovery effort on recovery satisfaction and consequent customer loyalty in the casual dining restaurant segment in the U.S.: An application of justice theory. (Doctoral dissertation, Oklahoma State University, 2007). *ProQuest Dissertations and Theses*, 293, 3303086.

Činjurević, M., Tatić, K., & Avdić, A. (2010). An integrated model of price, service quality, satisfaction and loyalty: An empirical research in the banking sector of Bosnia and Herzegovina. *Ekonomika Istraživanja*, 23(4), 142-161.

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). New Jersey: Erlbaum.

Cope, C. M. (2003). *Occupational stress, strain and coping in a professional accounting organization*. Master's thesis, University of South Africa, South Africa.

Cronin Jr, J. J. & Taylor, S. A. (1992). Measuring service quality: A reexamination

and extension. *The Journal of Marketing*, 56, 55-68.

Deshmukh, M., & Chourasia, G. (2012). The impact of perceived service quality on customer loyalty in IT sector of India. *International Journal of Science and Research*, 1(2), 66-71.

Dick, A. S. & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of The Academy of Marketing Science*, 22(2), 99-113.

Dierner, M., Larner, G., Pazdan, J., Pfahler, L., Strickland, H., Vukovinsky, K. E., & Andersen, S. (2009). Development of a content uniformity test suitable for sample sizes between 30 and 100. *Drug Information Journal*, 43, 287-298.

Doong, H., Wang, H., & Shih, H. (2008). Exploring loyalty intention in the electronic marketplace. *Electronic Markets*, 18(2), 142-149.

Drezner, Z., Turel, O., & Zerom, D. (2010). A modified kolmogorov–smirnov test for normality. *Communications in Statistics-Simulation and Computation*, 39, 693-704.

Feild, L., Pruchno, R. A., Bewley, J., Lemay, E. P., & Levinsky, N. G. (2006). Using Probability vs. Nonprobability Sampling to Identify Hard-to-Access Participants for Health-Related Research. *Journal of Aging and Health*, 18(4), 565-583.

Fink, A. (2003). *The survey handbook* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publication, Inc.

Finlay, J. (2011). Doing the right thing: the effect of image and performance on consumer trust and loyalty (Doctoral dissertation, University of Manitoba).

Garson, G. D. (2012). *Testing statistical assumptions* (2012 ed.). USA: Statistical Associates Publishing.

Gravetter, F. J., & Forzano, L.-A. B. (2009). *Research Methods for the Behavioral Sciences* (4th ed.). USA: Linda Schreiber-Ganster.

- Hair, J., Anderson, R., Tatham, R., & Blank, W. (1998). *Multivariate Data Analysis (5th ed.)*. New Jersey: Prentice-Hall.
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2007). *Multivariate Data Analysis (6th ed.)*. New Jersey: Pearson Education, Inc.
- Hassan, M., Hassan, S., Nawaz, M., & AKSEL, I. (2013). Measuring customer satisfaction and loyalty through service fairness, service quality and price fairness perception: An empirical study of Pakistan mobile telecommunication sector. *Science International*, 25(4), 971-980.
- Hassan, M., Malik, A. A., & Faiz, M. F. (2012). An empirical assessment of service quality and its relationship with customer loyalty. Evidence from the telecom sector of Pakistan. *International Journal of Asian Social Sciences*, 2(10), 1647-1663.
- Hensley, R. L. & Utley, J. S. (2011). Using reliability tools in service operations. *International Journal of Quality & Reliability Management*, 28(5), 587-598.
- Hill, N. & Alexander, J. (2000). *Handbook of customer satisfaction and loyalty measurement*. United Kingdom: Gower Publishing Company.
- Huber, F., Herrmann, A. and Wricke, M. (2001). Customer satisfaction as an antecedent of price acceptance: Results of an empirical study. *Journal of Product & Brand Management*, 10(3), 160-169.
- Hwang, J. (2011). Brand preference and its impacts on customer share of visits and word-of-mouth intention: an empirical study in the full-service restaurant segment. (Doctoral dissertation, Kansas State University, 2011). *ProQuest Dissertations and Theses*, 186, 3493793.
- Invest penang (2014). *All about Penang*. Retrieved February 26, 2014, from: <http://www.investpenang.gov.my/portal/about-penang/all-about-penang.html>
- Jiang, P. & Rosenbloom, B. (2005). Customer intention to return online: Price perception, attribute-level performance, and satisfaction unfolding over time.

*European Journal of Marketing*, 39(1/2), 150-174.

Kaiser, E. Y. (2011). Self-efficacy, burnout, and success of small business owners in New York. (Doctoral dissertation, Capella University, 2011). *ProQuest Dissertations and Theses*, 146, 3457088.

Kheng, L. L., Mahamad, O., Ramayah, T., & Mosahab, R. (2010). The impact of service quality on customer loyalty: A study of banks in Penang, Malaysia. *International Journal of Marketing Studies*, 2(2), 57-66.

Kishada, Z. M. E. & Wahab, N. A. (2013). Factors Affecting Customer Loyalty in Islamic Banking: Evidence from Malaysian Banks. *International Journal of Business and Social Science*, 4(7), 264-273.

Kitchenham, B. & Pfleeger, S. L. (2002). Principles of survey research: Part 5: Populations and samples. *ACM SIGSOFT Software Engineering Notes*, 27(5), 17-20.

Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford Press.

Kumar, S. A., Mani, B., Mahalingam, S., & Vanjikovan, M. (2010). Influence of service quality on attitudinal loyalty in private retail banking: An empirical study. *IUP Journal of Management Research*, 9(4), 21-38.

Lam, R. & Burton, S. (2006). SME banking loyalty (and disloyalty): A qualitative study in Hong Kong. *International Journal of Bank Marketing*, 24(1), 37-52.

Lau, M. M., Cheung, R., Lam, A. Y., & Chu, Y. T. (2013). Measuring service quality in the banking industry: A Hong Kong based study. *Contemporary Management Research*, 9(3), 263-282.

Lee, M. & Cunningham, L. F. (2001). A cost/benefit approach to understanding service loyalty. *Journal of Services Marketing*, 15(2), 113-130.

Lewis, B. R. & Soureli, M. (2006). The antecedents of consumer loyalty in retail



- banking. *Journal of Consumer Behaviour*, 5(1), 15-31.
- Lin, H. (2012). The effect of multi-channel service quality on mobile customer loyalty in an online-and-mobile retail context. *The Service Industries Journal*, 32(11), 1865-1882.
- Liu, Y. C. (2008). An analysis service quality, customer satisfaction and customer loyalty of commercial swim clubs in Taiwan. (Doctoral dissertation, United States Sports Academy, 2008). *ProQuest Dissertations and Theses*, 148, 332874.
- Lu, X., Zhou, Y., & Zhuo, X. (2012). The effects of service quality on consumer satisfaction and consumer loyalty in the context of C2C e-commerce. *International Conference on Information Management and Engineering*, 52(38).
- Malaysia Travel News, D. (2014). *Lonely planet names Penang as the top food destination for 2014*. Retrieved February 26, 2014, from <http://malysiatravelnews.com/lonely-planet-names-penang-as-the-top-food-destdestina-for-2014/>
- Malik, M., Naeem, B., & Arif, Z. (2011). Impact of perceived service quality on banking customers' loyalty. *Interdisciplinary Journal of Contemporary Research in Business*, 3(8), 637-645.
- Mann, C. (2003). Observational research methods. Research design II: Cohort, cross sectional, and case-control studies. *Emergency Medicine Journal*, 2(1), 54-60.
- Markovic, S., Raspor, S., & Segaric, K. (2010). Does restaurant performance meet customers' expectations? An assessment of restaurant service quality using a modified dineserv approach. *Tourism & Hospitality Management*, 16(2), 181-195.
- Martín-Consuegra, D., Molina, A., & Esteban, .2007. An integrated model of price, satisfaction and loyalty: An empirical analysis in the service sector. *Journal of Product & Brand Management*, 16(7), 459-468.
- McElroy, J. (2010). *The knoxville news-sentinel, tenn., Jack McElroy column:*

- McElroy: *Living a lie: Restaurants, bars and guns*. Retrieved 26 February, 2014, from <http://search.proquest.com/docview/312797612?accountid=50207>
- Miles, K. J. (2013). Exploring factors required for small business success in the 21st century. (Doctoral dissertation, Walden University, 2013). *ProQuest Dissertations and Theses, 201*, 3560237.
- Mok, O. (2013, September 18). Penang tourism boom spurs growth of F&B outlets. *The Malay Mail Online*. Retrieved April 10, 2014, from <http://www.themalaymailonline.com/malaysia/article/penang-tourism-boom-spurs-growth-of-fb-outlets>
- Mokhtar, M., Sanuri, S., & Maiyaki, A. (2011). The relationship between service quality and satisfaction on customer loyalty in Malaysian mobile communication industry. *School of Doctoral Studies (European Union) Journal*, (3), 32-38.
- Morgan, G., Leech, N., Gloeckner, G., & Barrett, K. (2004). *SPSS for Introductory Statistics* (2nd ed.). New Jersey: Lawrence Erlbaum Associates, Inc.
- Mostafa, M. M. (2005). An empirical study of patients' expectations and satisfactions in Egyptian hospitals. *International Journal of Health Care Quality Assurance*, 18(7), 516-532.
- Movafegh, A. & Movafegh, A. (2013). The impact of service quality on tourist loyalty in Malaysian tourism industry. *Int. J. Innovative Ideas*, 13(1), 1-19.
- Munusamy, J., Chelliah, S., & Mun, H. (2010). Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. *International Journal of Innovation, Management and Technology*, 1(4), 398-404.
- Murti, A., Deshp, E, A., & Srivastava, N. (2013). Patient satisfaction and consumer behavioural intentions an outcome of service quality in health care services. *Journal of Health Management*, 15(4), 549-577.
- O'brien, R. M. (2007). A Caution Regarding Rules of Thumb for Variance Inflation Factors. *Quality & Quantity*, 41(5), 673-690.

- Obeidat, B. Y., Sweis, R. J., Zyod, D. S., Masa'deh, R., & Alshurideh, M. (2012). The effect of perceived service quality on customer loyalty in internet service providers in Jordan. *Journal of Management Research*, 4(4), 224-242.
- Onditi, A. A., Oginda, M. N., Ochieng, I., & Oso, W. (2012). Implications of service quality on customer loyalty in the banking sector. A survey of banks in Homabay county, Kenya. *International Journal of Business and Social Science*, 3(21), 223-233.
- Onlaor, W., & Rotchanakitumnuai, S. (2010). Enhancing customer loyalty towards corporate social responsibility of Thai mobile service providers. *World Academy of Science, Engineering and Technology*, 4(6), 1288-1292.
- Panda, T. K. (2002). Creating customer life time value through effective CRM in financial services industry. *Journal of Services Research*, 2(2), 157-171.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research, *Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Petrick, J. F. (2004). Are loyal visitors desired visitors?. *Tourism Management*, 25(4), 463-470.
- Polyorat, K. & Sophonsiri, S. (2010). The influence of service quality dimensions on customer satisfaction and customer loyalty in the chain restaurant context: A Thai case. *Journal of Global Business & Technology*, 6(2), 64-76.
- Reichheld, F. F. (1993). Loyalty-based management. *Harvard Business Review*, 71(2), 64-73.
- Reichheld, F. F., Markey Jr, R. G., & Hopton, C. (2000). The loyalty effect - The relationship between loyalty and profits. *European Business Journal*, 12(3),

134-139.

Russell, J. (2010). Chapter 3: Research methods in psychology. Exploring Psychology Study and Revision Guide for AS Level AQA A (Ed.), *Proof Copy* (pp.36-59). New York: Oxford University Press.

Sadek, D. M., Zainal, N. S., Taher, M. S., Yahya, A. F., Shaharudin, M. R., Noordin, N., Zakaria, Z., & Jusoff, K. (2010). Service quality perceptions between cooperative and islamic banks of Britain. *American Journal of Economics and Business Administration*, 2(1), 1-5.

Saeed, R., Iqbal, A., Lodhi, R. N., Sami, A., Riaz, A., Munir, M., & Mizna (2014). Impact of Service Quality on Customer Loyalty in Islamic Banking Sector of Pakistan: A Mediating Role of Customer Satisfaction.

Sanayei, A., Ranjbarian, B., Shaemi, A., & Ansari, A. (2011). Determinants of customer loyalty using mobile payment services in Iran. *Interdisciplinary Journal of Contemporary Research in Business*, 3(6), 22-34.

Saravanakumar, G. (2014). Effect of service quality on customer loyalty: Empirical evidence from co-operative bank. *International Journal of Business and Administration Research Review*, 2(4), 87-94.

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students (5th edition)*. England: Pearson Education Limited.

Seiders, K., Voss, G. B., Grewal, D., & Godfrey, A. L. (2005). Do satisfied customers buy more? Examining moderating influences in a retailing context. *Journal of Marketing*, 69(4), 26-43.

Sekaran, U. (2003). *Research methods for business: A skill building approach* (4<sup>th</sup> ed.). New York: John Wiley & Sons, Inc.

Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. *International Journal of Production Economics*, 62(1), 7-22.

- Shugan, S. M. (2005). Brand loyalty programs: Are they shams?. *Marketing Science*, 24(2), 185-193.
- Sohail, M. S. (2003). Service quality in hospitals: More favourable than you might think. *Managing Service Quality*, 13(3), 197-206.
- Stalk, G., Evans, P., & Sgulman, L. E. (1992). *Competing on capabilities: The new rules of corporate strategy* (Vol. 63). Harvard Business Review.
- Sum, C. Y. & Hui, C. L. (2009). Salespersons' service quality and customer loyalty in fashion chain stores: A study in Hong Kong retail stores. *Journal of Fashion Marketing and Management*, 13(1), 98-108.
- Taghizadeha, H., Taghipourianb, M. J., & Khazaeic, A. (2012). Prioritization of customer satisfaction dimensions in the banking industry by using entropy. *Interdisciplinary Journal of Contemporary Research in Business*, 4(4), 247-255.
- Tripathi, S. (2013). An empirical study - Awareness of customers on service quality of public sector banks in Varanasi. *Journal of Business Management & Social Sciences Research*, 2(1), 24-29.
- Tsai, S. (2011). Fostering international brand loyalty through committed and attached relationships. *International Business Review*, 20(5), 521-534.
- Tuan, N. M. (2012). Effects of service quality and price fairness on student satisfaction. *International Journal of Business and Social Science*, 3(19), 132-150.
- Uddin, M. B. & Akhter, B. (2012). Customer satisfaction in mobile phone services in Bangladesh: A survey research. *Management and Marketing-Craiova*, X(1), 20-36.
- Van Dun, Z., Bloemer, J., & Henseler, J. (2011). Perceived customer contact centre quality: Conceptual foundation and scale development. *The Service Industries Journal*, 31(8), 1347-1363.

- Venkatesh, V., Morris, M., Davis, G. and Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 27(3), 425-478.
- Virvilaite, R., Saladiene, V., & Skindaras, D. (2009). The relationship between price and loyalty in services industry. *Inzinerine Ekonomika-Engineering Economics*, 3, 96-104.
- Wangenheim, F. & Bayon, T. (2004). Satisfaction, loyalty and word of mouth within the customer base of a utility provider: Differences between stayers, switchers and referral switchers. *Journal of Consumer Behaviour*, 3(3), 211-220.
- Welkowitz, J., Cohen, B. H., & Ewen, R. B. (2006). *Introductory Statistics for the Behavioural Sciences* (6th ed.). New Jersey: John Wiley and Sons, Inc.
- What to buy for a café* (2007, May). Retrieved February 26, 2014, from <http://search.proquest.com/docview/222777578?accountid=50207>
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, 68(4), 1-15.
- Yasseen, Y. (2011). *Outsourcing the internal audit function: A survey of the South African public and private sectors*. University of the Witwatersrand.
- Yoo, M. & Bai, B. (2013). Customer loyalty marketing research: A comparative approach between hospitality and business journals. *International Journal of Hospitality Management*, 33, 166-177.
- Yousaf, U., Yousaf, J., Altaf, M., & Mehmood Bagram, M. M. (2013). Studying customer loyalty at Daewoo Express Bus Service, Pakistan. *Scientific Journal of Logistics*, 9(3), 145-152.
- Yuen, E. F. & Chan, S. S. (2010). The effect of retail service quality and product quality on customer loyalty. *Journal of Database Marketing & Customer Strategy Management*, 17(3), 222-240.
- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of

customers: What we know and what we need to learn. *Journal of the Academy of Marketing Science*, 28(1), 67-85.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). *Services marketing: Integrating customer focus across the firm* (4th ed.). Boston: McGraw-Hill/Irwin.

Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence, *Journal of Marketing*, 52(3), 2-22.

## Appendix A: Summary of Past Empirical Studies

Independent Variable	Study	Country	Purpose	Data	Major Findings
Tangibles	Bostanji (2013)	Riyadh	The purpose of this study is to determine the impact of service quality on customer loyalty in five stars hotels level.	Self-administered questionnaires to 500 customers who stay in five stars hotel in Riyadh through self-delivery and collection method.	Tangibility, empathy and quick responsiveness have positive statistically significant relationship on hotels customer loyalty in Riyadh. Multiple linear regression analysis was used to analyze the data.
	Polyorat and Sophonsiri (2010)	Thailand	A study was conducted to examine whether each dimension of service quality influences customer satisfaction and customer loyalty in the chain restaurant in Thailand.	Self-administered survey with 395 Thai undergraduate students was conducted in the chain restaurant through self-delivery and collection method.	The results have revealed that the service quality dimensions of tangible and empathy have positive relationship on customer satisfactions and customer loyalty. However, the service quality dimensions of reliabilities, responsiveness and assurance do not have significant relationship on customer satisfaction and customer loyalty. Multiple linear regressions analysis was used to analyze the data.
	Mokhtar, Sanuri, and Maiyaki (2011)	Malaysia	This survey discuss about the effect of service quality on customer loyalty of mobile phone users in University Utara Malaysia.	.A total of 341 survey questionnaires were distributed to postgraduate students in University Utara Malaysia.	Four dimensions of service quality: tangibility, reliability, responsiveness and assurance have a positive and significant correlation on customer loyalty in mobile communication industry. However, empathy shows negative correlation on customer loyalty using multiple regression analysis.
	Deshmukh and Chourasia, (2012)	India	This research was conducted to show the correlation between service quality and customer loyalty of IT sector in India.	500 self-administered survey questionnaires were distributed to the internet subscribers who pay their bills in different sales shop. A total of 443 questionnaires were collected and only 420 were found to be valid.	All the five dimensions of service quality: tangibility, reliability, responsiveness, assurance and empathy have a positive and significant relationship on customer loyalty in IT sector in India by using multiple regression analysis.



	Saeed, Iqbal, Lodhi, Sami, Riaz, Munir, and Mizna (2014)	Pakistan	The aim of this survey is to determine the service quality effects on customer loyalty in the Islamic banking sector in Pakistan.	A total of 200 survey questionnaires were distributed to customers of Islamic banking sector in Pakistan.	There is no significant effect of tangible, reliability and responsiveness on customer loyalty. However, assurance and empathy show positive relationship on customer loyalty in the Islamic banking sector by using Pearson's correlation and multiple correlation tests.
Reliability	Yuen and Chan (2010)	Hong Kong	To examine the impacts of the retail service quality dimensions and the product quality dimension on customer loyalty.	447 surveys distributed to the current customers of Hunter Douglas which in curtain retail sector. It is through direct calling and sending e-mail. 200 surveys contributed to the final sample of data for a response rate of 44.7 per cent.	Reliability, physical aspects and problem solving positively influence customer loyalty to store; and personal interaction positively influence customer loyalty to staff. However, personal interaction, policy, product features, aesthetics and customer-perceived quality do not positively influence customer loyalty to store; and policy, physical aspects, reliability and problem solving do not positively influence customer loyalty to staff. Multiple linear regressions analysis was used to analyze the data.
	Činjarević, Tatić, and Avdić (2010)	Bosnia and Herzegovina	To examine the sustainability of service quality dimensions and service price dimensions in Bosnia and Herzegovina's retail banking.	300 self-administered questionnaires were collected from retail bank customers who are over 18 years old of three leading banks in Bosnia and Herzegovina.	Reliability, customer orientation, tangibles, price transparency, reference price and price reliability were positively and significantly related to customer loyalty. It is also found that the customer loyalty is largely determined by the reliability, followed by customer orientation and tangibles. Multiple regression analysis was conducted to analyze the data.
	Yousaf, Yousaf, Altaf, and Mehmood Bagram (2013)	Pakistan	To study the level of customer loyalty at Daewoo Express Bus Service in Sargodha.	96 self-administered and valid questionnaires were collected from bus passengers of Daewoo Express Bus Service in Sargodha, Pakistan. Besides, the researchers also conducted an interview to the bus passengers and took the material from the previous researchers to investigate the level of customer loyalty.	Reliability, smoothing and retrieving were significantly and positively related to loyalty. However, the price perception was insignificantly and negatively related to loyalty. On the other hand, price perceptions, retrieving, reliability and smoothing significantly explain the variance in loyalty. It is found that reliability was the most important dimension among other independent variables (price perceptions, smoothing, reliability, retrieving) which effecting customers loyalty at Daewoo Express. The data analysis techniques used were correlation and multiple regression analysis.

	Lin (2012)	Taiwan	To explore the effects of multi-channel service quality on mobile customer loyalty in the context of online-and-mobile retailing.	Self-administered questionnaires of 102 consumers of online and mobile services in Taiwan through convenience sampling. The respondents who had ever used both the online and mobile services provided by a specific multi-channel retailer were only invited to participate in the survey.	M-service and e-service reliability have a negative relationship on m-service and e-service customer loyalty. In addition, m-service assurance, e-service assurance and e-service empathy have negatively relationship on m-service and e-service customer loyalty. On the other hand, m-service tangible, reliability and empathy have significant positive effect on m-service customer loyalty. E-service tangible and responsiveness have significant positive relationship on e-service customer loyalty. Partial least squares (PLS) was used to analyze the data.
	Kishada and Wahab (2013)	Malaysia	To determine the factors affect the loyalty among the Islamic banking customers.	A total of 250 self-administered questionnaires were distributed to the two full-fledged Islamic banks in Malaysia but only 124 completed questionnaires were collected and resulting in a response rate of 49.6%.	There is only one variable, trust positively affect the customer loyalty. Reliability, service encounter, social value, service experience, service dependability, satisfaction, expectation and convenience value have negatively related to customer loyalty. Multiple linear regressions analysis was used to analyze the data.
Responsiveness	Al-Rousan and Mohamed (2010)	Jordan	This study focusing on the importance of tourism service quality dimensions and customer loyalty at five star hotels in Jordan.	Self-administered questionnaire of 322 tourists who stayed in all three branches of the Marriott hotel by using delivery and collection method.	Service quality like tangibility, reliability, responsiveness and empathy were found positively significant to customer loyalty, while assurance was found not significant with customer loyalty by using multiple regression analysis.
	Auka, Bosire, and Matern (2013)	Kenya	The purpose of this study is to examine the effect of service quality dimensions on customer loyalty to the providers of retail banking services in Kenya.	Self-administered questionnaire of 384 current customers of commercial banks which consists of public owned banks, private domestic banks and foreign-owned banks by using delivery and collection method.	All the dimensions of service quality: tangibility, reliability, responsiveness, assurance and empathy have a positive and significant influence on customer loyalty in retail banking by using Pearson's correlation analysis and multiple regression analysis.

	Amirosadat, Esfahani, and Moshkforosh (2013)	Iran	The aim of this study is to investigate the relationship between service quality and loyalty of online buyers in Isfahan city.	260 questionnaires were distributed to internet users who purchase from internet at least one time in Isfahan city through random sampling. 250 questionnaires with completed answers were return back and were used in statistical analyses.	Responsiveness, e-service quality, reliability and ease of use had been found to have positive influence on customer loyalty; meanwhile, security had no effect on customer loyalty among online buyers in Isfahan city by using structural equation modeling.
	Sanayei, Ranjbarian, Shaemi, and Ansari (2011)	Iran	This study discuss about the importance and identifying key factors on customer loyalty in mobile payment system in the Iranian banks.	265 questionnaires were responded out of 320 questionnaires distributed to experienced mobile bank system users who have used the mobile payment system in Iran.	All the data were analyzed using structural equation modeling and proven responsiveness and security had no direct effects on customer loyalty; however customization, perceived risk and customer satisfaction had direct effects on customer loyalty. On the other hand, security, customization, ease of use, responsiveness and perceived risk were found to have direct effects on customer satisfaction whereas usefulness had no direct effects on customer satisfaction.
	Kheng, Mahamad, Ramayah, and Mosahab (2010)	Malaysia	The researchers conducted a study to find out the impact of service quality on customer loyalty among bank customers in Penang.	Self-administered questionnaire of 238 various local bank customers in Penang Island which has been the banking center of Malaysia before Kuala Lumpur using delivery and collection method.	Responsiveness and tangibles do not observe to have any significant relationship with customer loyalty. However, empathy, reliability and assurance have a positive relationship with customer loyalty in banking industry in Penang. Multiple regressions analysis was used to analyze the data.
Assurance	Badara, Mat, Mujtaba, Al-Refai, Badara, and Abubakar (2013)	Malaysia	The objective of this paper is to examine the direct effect of service quality dimensions on customer satisfaction and customer loyalty in Nigerian Islamic Bank Primary.	Self-administered questionnaires to 240 Nigerian students who are studying in University Utara Malaysia and experienced the service in Islamic Banking in Nigeria. 209 were completed and returned which represents 87% of the respond rate.	Assurance has a significant positive effect on customer loyalty whereas responsiveness has a significant positive effect on customer satisfaction. However, tangibility, reliability, responsiveness, empathy and compliance do not have significant effect on customer loyalty whereas tangibility, reliability, assurance, empathy and compliance do not have significant effect on customer satisfaction. Standardized regression weights analysis was used to analyze the data.

Movafegh and Movafegh (2013)	Malaysia	The purpose of this study is to gain an understanding of the structure and antecedents of tourists' loyalty and also to extend a model in which the combined effects of service quality on loyalty and the effects of those measures on each other.	Self-administered questionnaires to 300 tourists in Kuala Lumpur, the capital city of Malaysia. The researchers only focused on the KLIA and ICCT airports and four and five-star hotels in the city.	Assurance, reliability, responsiveness, tangible and empathy have significant positive relationship on loyalty among tourist in tourism context in Malaysia. However, there is no significant relationship between chosen demographic characteristics such as gender, age, level of education and element from and loyalty among tourist in tourism context in Malaysia. Correlation coefficient and multiple linear regression were used to analyze the data.
Malik, Naeem, and Arif (2011)	Pakistan	The research is aimed to determine the differential impact of perceived service quality on banking clients' loyalty.	244 self-administered questionnaires with the response rate of 96% were successfully retrieved from the customers having bank account in government-owned, international and private banks in Lahore.	Assurance, tangibles and empathy have positively related to banking customers' loyalty. Meanwhile, reliability and responsiveness have negative relationship on customer loyalty. The results also showed that tangibles post more impact on customer loyalty and followed by assurance and empathy. Correlation matrix and stepwise regression were used to analyze the data.
Hassan, Malik, and Faiz (2012)	Pakistan	The purpose of the survey is to address the service quality gaps and interrelations of service quality attributes with customer loyalty in the telecom sector of Pakistan.	220 self-administered questionnaires were distributed directly by researcher to students and indirectly by friends in different departments to students in Bahauddin Zakariya University, Multan.	Assurance, tangibles, reliability, responsiveness, empathy and network were positively and significantly related with customer loyalty in the telecom sector in Pakistan. Meanwhile, convenience had positive but insignificant relationship with customer loyalty. Correlation analysis was carried out to test the data.
Al-Zoubi (2013)	Jordan	The study is to investigate the effects of service quality on customer loyalty in the Jordanian telecom sector.	284 self-administered questionnaires were valid for the analysis and collected from IT and MIS students in 5 Jordanian Universities.	Assurance and physical appearance had no relationship on customer loyalty in Jordanian telecom market. At the meantime, reliability, responsiveness and empathy had significant relationship on customer loyalty in Jordanian telecom market. The study carried out stepwise regression analysis to come out the results.

Empathy	Obeidat and Sweis (2012)	Jordon	The researchers conducted a study to investigate whether service quality has significant impact on customer loyalty in the Internet Service Provider industry in Jordon.	420 survey questionnaires distributed to customers who visiting the sales shop, Umniah which is a company of Internet service provider by using the method of self delivery and collection in Jordon.	The results show that perceived service quality in terms of tangibles, reliability, responsiveness, assurance and empathy are significantly affect customer loyalty. More specifically it is found that empathy dimension is the strongest predictor of customer loyalty. Multiple regressions analysis was carried out to evaluate the data.
	Albarq (2013)	Riyadh	The researcher conducted a study focusing on the impact of service quality on customer loyalty among local Saudi banks in Riyadh.	Self-administered questionnaire consist of two versions of English and Arabic distributed to 422 customers of 5 local banks in Riyadh, the capital of Saudi Arabia through self delivery and collection method.	Empathy, reliability and assurance have a positive relationship with customer loyalty of local banks in Riyadh. However, tangible and responsiveness do not shows any significant relationship with customer loyalty. Multiple regressions analysis was used to analyze the data.
	An and Noh (2009)	Korea	The researchers conducted a study to investigate whether service quality has significant impact on customer loyalty in the Internet Service Provider industry in Jordon.	520 self-administered questionnaires distributed to passengers who were using North America–Korea route or the Europe–Korea route from categorized of prestige and economy class. A total of 494 usable questionnaires from the prestige class and economy class were returned back with completed answers.	The results shown that responsiveness and empathy have a significant relationship towards customer loyalty in both prestige and economy class. Moreover, alcoholic beverage and non-alcoholic beverage also shown that the significant relationship towards customer loyalty in prestige class. However, alcoholic beverage shown significant relationship towards customer loyalty. All the valid responses were assessed using multiple regression analysis.
	Lu, Zhou, and Zhuo (2012)	China	The researcher conducted a study focusing on the impact of service quality on customer loyalty among local Saudi banks in Riyadh.	342 surveys questionnaires distributed to Internet users who have had C2C shopping experience in China. Total of 264 survey questionnaires which resulted in a 77% available response rates were returned back with completed answers and were used via mailing.	The results revealed that tangibles, reliability, responsiveness, assurance and empathy are significantly correlated with customer loyalty by assessed using correlation analysis. However, the modified results shown that tangibles, reliability, responsiveness and empathy have positive relationship with customer loyalty. Multiple regression analysis was carried out to analyze data.

	Agyei and Kilika (2013)	Kenya	The researchers conducted a study focusing on to investigate the impact of the in-flight service quality on airline customer satisfaction and loyalty in South Korea.	313 responses were obtained out of 320 self-administered structured questionnaires distributed to the members of the Kenyatta university student community within the main campus and five other satellite campuses by using delivery and collection method.	Empathy and responsiveness of service quality had a positive and significant relationship with customer loyalty; however, there is no statistical significant relationship between reliability and customer loyalty in mobile telecommunication service industry in Kenya by using Pearson product-moment, correlation coefficient and multiple regression analysis.
Price Fairness	Martín-Consuegra and Molina (2007)	Spain	To investigate the effects of price fairness and customer loyalty in all international airports.	Total of 721 survey questionnaires to each airline passengers in international airport were carried out via the method of personal interviews.	The results revealed that price fairness is positively associated with customer satisfaction; customer satisfaction and price fairness are positively associated with customer loyalty. Structural equation modeling was carried out to analyze the data.
	Virvilaite, Saladiene, and Skindaras (2009)	Kaunas	To identify causality consistent patterns between loyalty and its determinants and service price.	Self-administered questionnaires to a sample of 112 current patients who having treatment in hospital by using the self-delivery and collection method.	The results shown that there is a direct positive relationship between price fairness and customer loyalty and yet, the regression analysis shows that price fairness has direct relationship on price acceptance. Multiple linear regressions analysis was used to analyze data.
	Onlaor and Rotchanakitumnuai (2010)	Thailand	To gain understanding of corporate social responsibility (CSR) from consumers' perspective and how CSR perception affects the customer loyalty of Thai mobile service providers.	Self-administered questionnaires to 400 existing customers who used mobile phone either subscribers or non-subscribers in Thailand.	Price fairness, legal component, ethical component, philanthropic component have positively affect the customer loyalty. Furthermore, the result explains that philanthropic component which mostly affect on customer loyalty. Multiple linear regressions analysis was used to analyze the data.
	Hassan, Hassan, Nawaz, and Aksel (2013)	Pakistan	To examine the effect of service fairness, service quality, and price fairness perception on the customer satisfaction and customer loyalty in the mobile telecom sector of Pakistan.	Self-administered questionnaires to 220 youth user of mobile telecom service in Pakistan. The data for current study were collected from the students of three universities of Multan.	Price fairness perception, service fairness and service quality have significant positive relationship on customer loyalty in Pakistan. Moreover, these results showed that price fairness perception, service fairness and service quality are also the main predictors of customer loyalty. Multiple linear regressions analysis was used to analyze the data.

	Doong, Wang, and Shih (2008)	Taiwan	To reveal the factors that determines customers' loyalty intentions in e-marketplace.	1123 of self-administered questionnaires were successfully retrieved from customers who had completed the transactions in Yahoo! e-marketplace in Taiwan. The questionnaires were carried out using the method of postal to customers.	The results indicated that the major determinants of customers' loyalty intention in the electronic marketplace were trust and satisfaction. However, the results also indicated that price fairness has no significant relationship on customer loyalty. Structural equation modeling was used to analyze the model fit as well as whether the price fairness and customer loyalty is significantly associated.
--	------------------------------	--------	---------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Appendix B: Variables and Measurements

Variables	Items	Descriptions	References	Measurements
Independent Variable 1:  Tangibles  (It refers to the appearance of physical facilities, tools and equipments used to provide the service, appearance of personnel and communication materials.)	T1	The interior and exterior decoration is attractive.	Al-Rousan & Mohamed (2010)	Interval
	T2	The seats are comfortable.	Hwang (2011)	
	T3	The overall lighting level is appropriate.		
	T4	The staff are well dressed and do not appear neat.	Sum & Hui (2009)	
Independent Variable 2:  Reliability  (It refers to the ability to perform the promised service dependably and accurately.)	R1	The staff serve the meals exactly as you ordered it.	Hwang (2011)	Interval
	R2	The staff serve the meals to you in the time promised.		
	R3	The staff are able and willing to give you information about menu items and their ingredients.		
	R4	The staff address your problems appropriately.	Liu (2008)	



<p>Independent Variable 3: Responsiveness (It refers to the willingness and readiness of employees to help customers to provide prompt service and timeliness of service.)</p>	RP1	The staff are willing to respond and help you.	Tripathi (2013)	Interval
	RP2	The staff are able to handle your complaints immediately.	Sum & Hui (2009)	
	RP3	The staff give extra effort to handle your special requests.	Hwang (2011)	
	RP4	The staff provide prompt and quick services.		
<p>Independent Variable 4: Assurance (It refers to the knowledge and courtesy of employees and employees' ability to convey trust and confidence.)</p>	A1	The staff are polite.	Al-Rousan & Mohamed (2010)	Interval
	A2	The staff are friendly.		
	A3	The staff are trustworthy.	Sum & Hui (2009)	
	A4	The staff make you feel comfortable and confident when dealing with them.	Hwang (2011)	
<p>Independent Variable 5: Empathy (It refers to the provision of caring, individualized attention to customers.)</p>	E1	The staff understand your requirements.	Al-Rousan & Mohamed (2010)	Interval
	E2	The staff listen carefully when you complain.		
	E3	The staff quickly apologize when service mistakes are made.		

	E4	The staff give you individual attention.	Tripathi (2013)	
Independent Variable 6: Price Fairness  (It refers to the consumers' assessment of whether the difference between a seller's price and the price of a comparative other party is reasonable, acceptable, or justifiable.)	PF1	The price is fair.	Martín-Consuegra, Molina, & Esteban, (2007)	Interval
	PF2	The price is acceptable.		
	PF3	The price is worth what you paid.	Tuan (2012)	
	PF4*	The price is unreasonable.	Doong, Wang, & Shih (2008)	

Dependent Variable: Customer loyalty  (It refers to deeply held commitment to rebuy or repatronize a preferred product or service consistently, thereby causing repetitive purchasing of the same brand, despite situational influences and marketing efforts.	CL1	I am extremely satisfied with this café and restaurant.	Chu (2007)	Interval
	CL2	I will recommend this café and restaurant to others.	Al-Rousan & Mohamed (2010)	
	CL3	I am more likely to dine again at this café and restaurant next time.	Chu (2007)	
	CL4	I will say positive things about this café and restaurant to others.		
	CL5	I will tend to be more loyal to this café and restaurant in future.		

## Appendix C: Permission Letter to Conduct Survey



**UNIVERSITI TUNKU ABDUL RAHMAN**

Wholly Owned by UTAR Education Foundation [Company No. 578227-M]

2nd April 2014

**To Whom It May Concern**

Dear Sir/Madam

**Permission to Conduct Survey**

This is to confirm that the following students are currently pursuing their *Bachelor of Commerce (HONS) Accounting* program at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR) Perak Campus.

I would be most grateful if you could assist them by allowing them to conduct their research at your institution. All information collected will be kept confidential and used only for academic purposes.

The students are as follows:

<u>Name of Student</u>	<u>Student ID</u>
LIM EN CHEE	12ABB07311
OOI CHUAN YI	12ABB07526
OOI SOO YING	12ABB06712
OOI YEE WOEN	12ABB07333
TAN MUN WEI	12ABB07408

If you need further verification, please do not hesitate to contact me.

Thank you.

Yours sincerely

Mr Fong Choong Ee  
Head of Department,  
Faculty of Business and Finance  
Email: fongce@utar.edu.my

Address: No.9, Jalan Bersatu 13/4, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia  
Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malaysia.  
Tel: (603) 7958 2628 Fax: (603) 7956 1923 Homepage: <http://www.utar.edu.my>

Ms Tan Cheng Peng  
Supervisor,  
Faculty of Business and Finance  
Email: cptan@utar.edu.my



## Appendix D: Survey Questionnaires



**UNIVERSITI TUNKU ABDUL  
RAHMAN**  
**Faculty of Business and Finance**

### **BACHELOR OF COMMERCE IN ACCOUNTING FINAL YEAR PROJECT**

**TITLE OF TOPIC: Customer loyalty: A study on newly opened cafés and  
restaurants in Penang.**

## **Survey Questionnaire**

---

---

Dear respondent,

I am a final year undergraduate student of Bachelor of Commerce in Accounting, from Universiti Tunku Abdul Rahman (UTAR). The **purpose** of this survey is to determine the impact of service quality and price fairness on customer loyalty in newly opened cafes and restaurants in Penang.

Thank you for your participation.

---

---

**Instructions:**

- 1) There are **THREE** (3) sections in this questionnaire. Please answer **ALL** questions in **ALL** sections.
- 2) Completion of this form will take you approximately 10 to 15 minutes.
- 3) Please feel free to share your comment in the space provided. The contents of this questionnaire will be kept **strictly confidential**.

**Section A: Demographic Profile**

**Please place a tick “√” in the blank for each of the following:**

1. Gender:

- Male
- Female

2. Age:

- 18-29
- 30-39
- 40-49
- 50 and above

3. Marital status:

- Single
- Married

4. Occupation:

- Student
- Self-employed
- Government
- Private sector
- Professional
- Retired

5. Monthly Income

- No income
- RM1,000 and below
- RM1,001-2,000
- RM2,001-3,000
- RM3,001-4,000
- Above RM4,000

6. When was your most recent visit to the café and restaurant?

- Within the past one week
- Within the past two weeks
- Within the past one month
- More than one month ago

**Section B: Services Quality and Price Fairness**

This section is seeking your opinion regarding the importance of different dimensions in services quality. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

**Tangibles**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
T1	The interior and exterior decoration is attractive.	1	2	3	4	5
T2	The seats are comfortable.	1	2	3	4	5
T3	The overall lighting level is appropriate.	1	2	3	4	5
T4	The staff are well dressed and appear neat.	1	2	3	4	5

**Reliability**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
R1	The staff serve the meals exactly as you ordered it.	1	2	3	4	5
R2	The staff serve the meals to you in the time promised.	1	2	3	4	5
R3	The staff are able and willing to give you information about menu items and their ingredients.	1	2	3	4	5
R4	The staff address your problems appropriately.	1	2	3	4	5

**Responsiveness**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
RP1	The staff are willing to respond and help you.	1	2	3	4	5
RP2	The staff are able to handle your complaints immediately.	1	2	3	4	5
RP3	The staff give extra effort to handle your special requests.	1	2	3	4	5
RP4	The staff provide prompt and quick services.	1	2	3	4	5

**Assurance**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A1	The staff are polite.	1	2	3	4	5
A2	The staff are friendly.	1	2	3	4	5
A3	The staff are trustworthy.	1	2	3	4	5
A4	The staff make you feel comfortable and confident when dealing with them.	1	2	3	4	5

**Empathy**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
E1	The staff understand your requirements.	1	2	3	4	5
E2	The staff listen carefully when you complain.	1	2	3	4	5
E3	The staff quickly apologize when service mistakes are made.	1	2	3	4	5
E4	The staff give you individual attention.	1	2	3	4	5

**Price Fairness**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
PF1	The price is fair.	1	2	3	4	5
PF2	The price is acceptable.	1	2	3	4	5
PF3	The price is worth what you paid.	1	2	3	4	5
PF4*	The price is unreasonable.	1	2	3	4	5



**Section C: Customer loyalty**

**This section is seeking your opinion regarding the impacts on customer loyalty with the types of services quality given. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.**

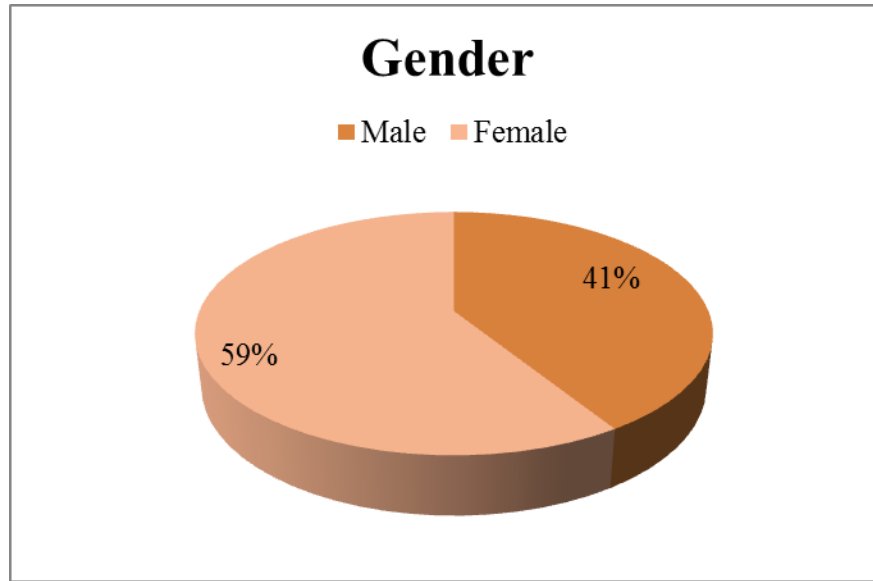
**Customer Loyalty**

No.	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
CL1	I am extremely satisfied with this cafe and restaurant.	1	2	3	4	5
CL2	I will recommend this café and restaurant to others.	1	2	3	4	5
CL3	I am more likely to dine again at this café and restaurant next time.	1	2	3	4	5
CL4	I will say positive things about this café and restaurant to others.	1	2	3	4	5
CL5	I will tend to be more loyal to this café and restaurant in future.	1	2	3	4	5

*Thank you for your time, opinion and comments.  
~ The End ~*

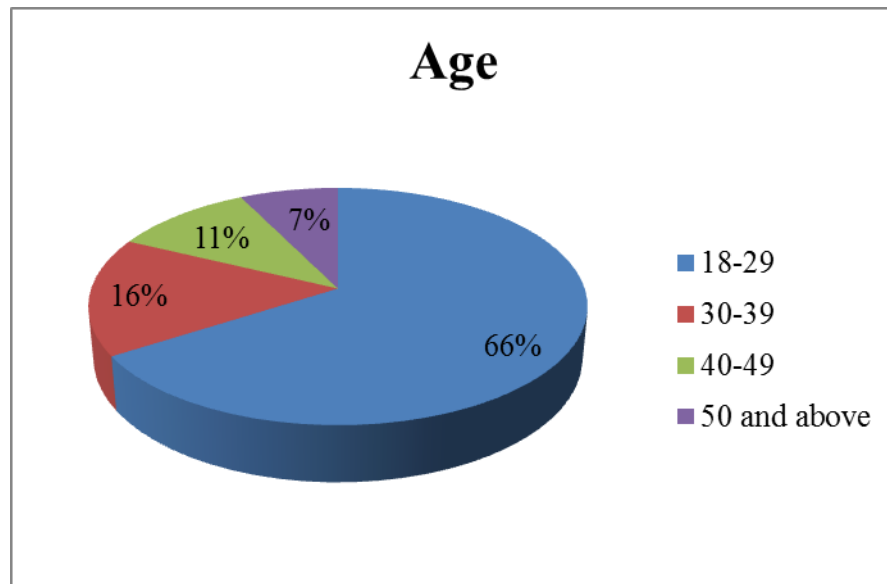
## Appendix E: Pie Charts for Demographic Profiles

Figure 4.1: Percentage of respondents based on Gender



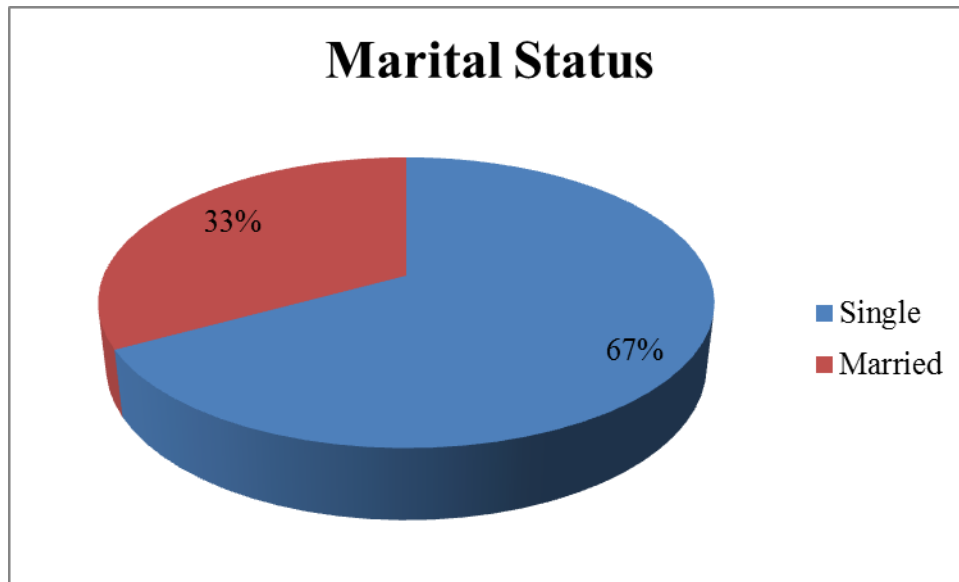
Source: Developed for the research

Figure 4.2: Percentage of respondents based on Age



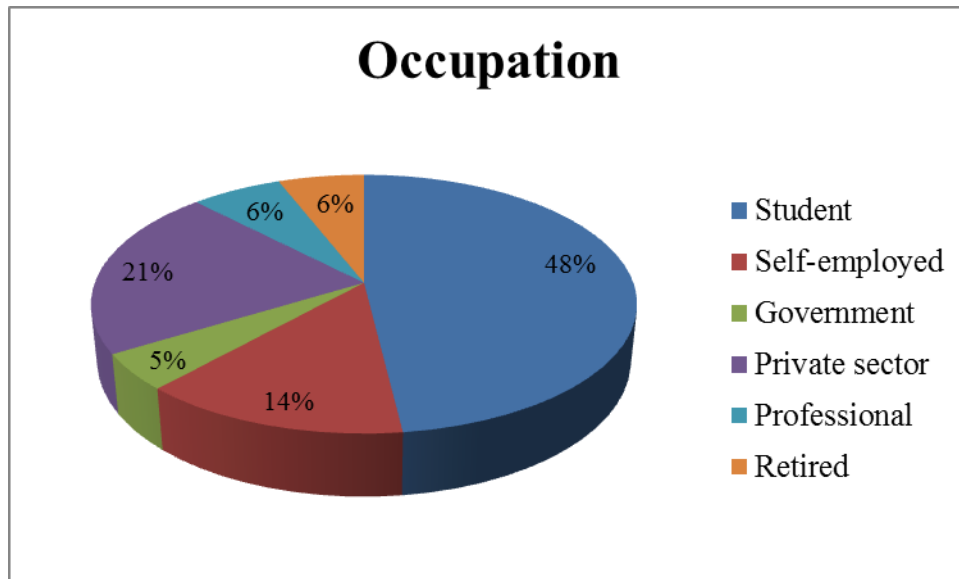
Source: Developed for the research

Figure 4.3: Percentage of respondents based on Marital Status



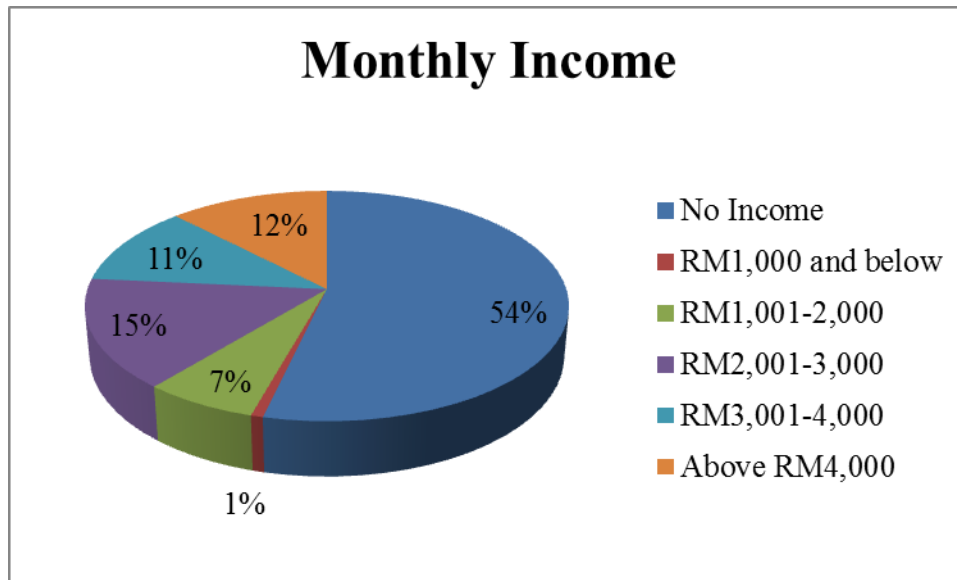
Source: Developed for the research

Figure 4.4: Percentage of respondents based on Occupation



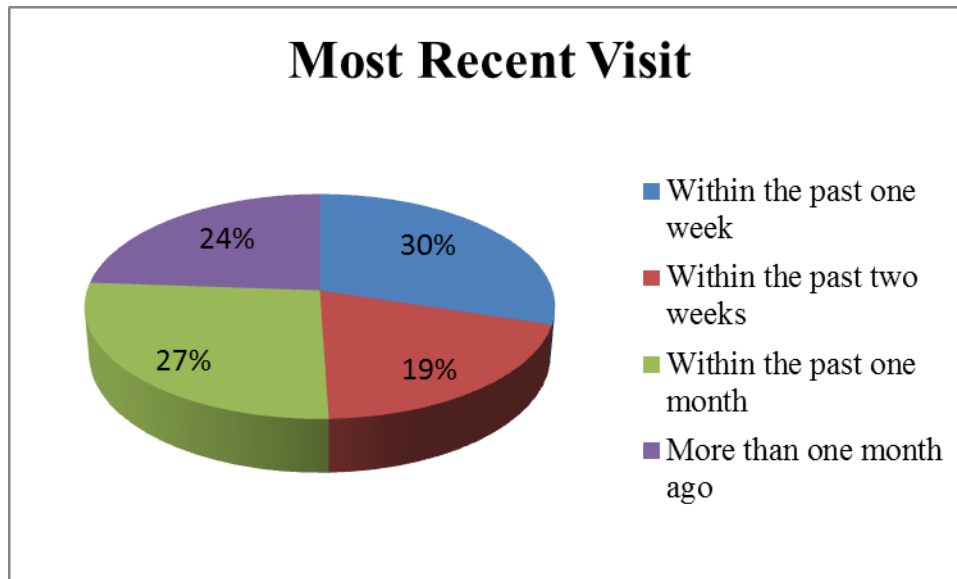
Source: Developed for the research

Figure 4.5: Percentage of respondents based on Monthly Income



Source: Developed for the research

Figure 4.6: Percentage of respondents based on Most Recent Visit



Source: Developed for the research