

CUSTOMER SATISFACTION ON PENANG HAWKER  
CENTRE, MALAYSIA: THE PERCEPTION OF PENANG  
TOURISTS

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## DECLARATION

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- (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.
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## **LIST OF ABBREVIATIONS**

A	Assurance
ACSI	American Customer Satisfaction Index
AIRQUAL	Airlines Service Quality
CS	Customer Satisfaction
DINESERV	Services Quality in Restaurant Services Sector
DV	Dependent Variable
ECOSERV	Ecotourism Service Quality
E-S-QUAL	Electronic Service Quality
FQ	Food Quality
HISTOQUAL	Service Quality Provided in Historic Houses
IV	Independent Variable
LibQUAL	Library Service Quality
LODGSERV	Lodging Industry Service Quality
MBPP	City Council of Penang Island
MLR	Multiple Linear Regression
MOTCM	Ministry of Tourism and Culture Malaysia
R	Reliability
RP	Responsiveness

SERVPERF	Service Performance
SERVQUAL	Service Quality
SITEQUAL	Perceived Quality of Internet Shopping Sites
T	Tangibles
TQM	Total Quality Management
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WebQual	Website Quality
WHO	World Health Organization
WOM	Word of Mouth
WTO	World Trade Organization



## **PREFACE**

This research methodology project is conducted to fulfill the requirement of Bachelor of Commerce (Hons) Accounting completion. This project is furnished and accomplished by referencing to the conducted researches which were cited as references.

The title of this research project is “Customer satisfaction on Penang hawker centre, Malaysia: the perception of Penang tourists”. As street foods and hawker centre are essential toward culinary tourism of Penang, Malaysia, thus we were driven to conduct this research in order to figure out the variables of service and food quality which will affect the satisfaction level of Penang tourists. Therefore, Penang state government can apply the result of this study to modify their policy in promoting Penang culinary tourism.

## **ABSTRACT**

An extended review of the past literatures indicates that there are limited number of past researches which address the customer satisfaction by taking into consideration of both service quality and food quality. Therefore, this research is conducted to provide a new understanding into the impact of both food and service quality on satisfaction level of customers particularly diners by combining SERVQUAL model together with food quality. The objective of this study is to identify the factors that affect satisfaction of Penang tourists who patronize Penang hawker centres. This study surveyed the Penang tourists who patronize Penang hawker centres through self-administered questionnaire. The collected data were analyzed and hypotheses were test through Multiple Linear Regression (MLR) analysis. Result of this study shows food quality and service qualities (reliability & assurance) have a significant positive relationship with customer satisfaction. However, tangibles and responsiveness have no significant positive relationship with customer satisfaction. Moreover, in term of theoretical significance, this study proved that food quality has greater significant positive relationship with customer satisfaction than service quality. The combination of SERVQUAL model and food quality in testing the customer satisfaction has been validated in this study. Result of this study could also serves as a reference for Penang state government in setting policy to promote Penang culinary tourism. Last but not least, it is undeniable that this study was subjected to various limitations. Hence, several recommendations for future researches were given.

## **CHAPTER 1: RESEARCH OVERVIEW**

### **1.0 Introduction**

An outline of this study is presented in Chapter 1. Primarily, research background explained the main idea of this study. Subsequently, the problems and deficiencies of past studies were addressed in problem statement. After that, research objectives and research questions were determined. Lastly the outlines of each chapter were provided in chapter layout.

### **1.1 Research Background**

Out of the whole Malaysia, Penang is the best culinary destination to travel and taste the street foods as it was recognized by the Time Magazine as having the best street foods in Asia (Time Magazine, 2004). One of the selling points that Georgetown, Penang attracts visitors is food-tripping (Sultana, 2013; Khoo & Badarulzaman, 2014). As the “food paradise”, Penang is chosen by the CNN as one of the top ten street food cities in Asia (Goldberg, 2013). As the statistic shows, the number of international visitors of Penang had grown dramatically by 60.2% from 448,000 arrivals in 2007 to 718,000 arrivals in 2014 (George, 2015).

As the street food are playing an essential role towards Penang tourism sector, thus we are conducting this research in order to investigate what are the attributes influencing the satisfaction level of Penang tourists who have patronized street food hawker centre. The term “street foods” is defined as the foods and beverages prepared and sold by hawker on the streets and other public places for consumption without further preparation (World Health Organization [WHO], 1996). Moreover, in this study, the term “hawker centre” is referred to a defined place where the street vendors, hawkers and itinerant salespersons carry out their business activity (Tan, 2015).

Besides, in this study, the term “Penang tourists” refers to the people who leave their usual environment, travel and stay in Penang for not more than one consecutive year for business, leisure and other purposes (United Nations [UN] & World Trade Organization [WTO], 1994; Forbes, Berthur, & Sebastian, 2014).

In order to conduct this research, service quality is taken in consideration to test the customer satisfaction. This is because service quality is the main factor affecting customer satisfaction (Angelova & Zekiri, 2011; Agyapong, 2011). Moreover, food quality also plays an important role in influencing customers’ dining experiences and their satisfaction (Namkung & Jang, 2007; Tan, Oriade, & Fallon, 2014). Thus, food quality is also being taken as one of the independent variables (IVs) in this research. The detail explanation and definition of the variables will be discussed in chapter 2: literature review.

## **1.2 Problem Statement**

### **1.2.1 Research Problem**

Recent research results have shown that expectation of Penang tourists has increased sharply, Penang’s foods as the contributor towards tourist amenities require further improvement (Shida, Diana, Saliza, & Badaruddin, 2017; Schoepp & Vaghefi, 2017). Besides, Malaysia is facing intense competition in the tourism sector with other Asian countries such as China and Thailand as the number of tourist arrival in Malaysia reduced from 27 million in 2014 to 22 million in 2016 (Salman & Hasim, 2012; Ministry of Tourism and Culture Malaysia [MOTCM], 2017).

Moreover, there is a substantial increase in the number of street food vendors in the major Asian cities (Sharath, 2016). Some Asian countries such as Taiwan are being recognized as an excellent culinary travel destination and become strong competitors to Penang (Chuang, 2009; Kuo, Chung, & Kuo, 2012; CNN Travel, 2015).

Various prior researches have confirmed tourists' satisfaction is an essential factor towards the successful of a tourism sector (Kozak, 2002; Río, Agüera, Cuadra, & Morales, 2017). Thus, Penang gastronomy tourism sector has to strive for improvement by providing better food and service quality that can enhance satisfaction level of tourists (Mihaela, 2014).

### **1.2.2 Review of Past Studies & Deficiency of Past Studies**

In the past, there are many researches applied different model in investigating how service qualities influence customer satisfaction such as ACSI Model (Angelova & Zekiri, 2011); DINESERV model (Stevens, Knutson, & Patton, 1995; Bougoure & Neu, 2010; Markovic, Komsic, & Stifanic, 2013); SERVPERF model (Mengi, 2009; Phan & Nham, 2015); Restaurant Quality Attribute model (Bujisic, Hutchinson, & Parsa, 2014) and others.

Moreover, various past studies had studied on how service quality affects customer satisfaction by applying SERVQUAL model (Saleh & Ryan, 1991; Aghdaie & Faghani, 2012; Agyei & Kilika, 2013; Albarq, 2013). However, some of the studies were not focusing food service sector but other sectors such as mobile telecommunication sector (Eshghi, Roy, & Ganguli, 2008; Agyapong, 2011); public transport sector (Horsu & Yeboah, 2015; Singh, 2016); maritime sector (Thai, 2015) and so on.

Furthermore, several past studies have conducted on the food service sector but rarely focusing on hawker centre, most of them are focusing on restaurants such as chain restaurant (Polyorat & Sophonsiri, 2010); cafes (Moorthy et al., 2016); limited service restaurant (Ahmad, 2015); quick-casual restaurant (Ryu & Han, 2009) and others. Therefore, hawker centre is chosen as the area to conduct this study in order to fill in the gap of how SERVQUAL attributes affect the customer satisfaction in food service sector.

Additionally, other than the service quality, from the review of past studies, we've also discovered that various research results show that food quality is an essential factor that contributes to customer satisfaction (Clark & Wood, 1999; Liang & Zhang, 2009; Zhang, Zhang, & Law, 2014; Koshki, Esmailpour, & Ardestani, 2014; Tan et al., 2014). However, there are very limited studies have addressed customer satisfaction by taken into consideration of the SERVQUAL dimensions together with food quality. Thus, in this study, SERVQUAL are adapted to combine with food quality in order to conduct a study on factors affecting customer satisfaction on Penang hawker centre.

Furthermore, there are only a few studies conducted on Penang food services sector (Zainol, Rozali, Razali, Tazijan, & Ngelambong, 2015; Moorthy et al., 2016). For instance, Moorthy et al. (2016) have conducted a study on Penang newly opened café and Zainol et al. (2015) on Penang Chinese coffee shop. However, their target respondents were customers of newly opened cafés instead of tourists. Therefore, their result may not be as appropriate as our research which focuses on tourists' perception toward Penang's tourism sector.

### 1.3 Research Objectives and Research Questions

Table 1.1: Research Objectives and Research Questions

The research objectives and questions of are showed by table 1.1.

	Research Objective	Research Question
General	<ul style="list-style-type: none"> <li>✚ To identify the factors that affect satisfaction of Penang tourists who patronize Penang hawker centres.</li> </ul>	<ul style="list-style-type: none"> <li>✚ What are the factors that affect satisfaction of Penang tourists who patronize Penang hawker centres?</li> </ul>
Specific	<ul style="list-style-type: none"> <li>✚ To investigate the SERVQUAL variables (tangibles, reliability, responsiveness and assurance) that affect Penang tourists' satisfaction on Penang hawker centre.</li> <li>✚ To examine the food quality that affect Penang tourists' satisfaction on Penang hawker centre.</li> </ul>	<ul style="list-style-type: none"> <li>✚ Will SERVQUAL variables (tangibles, reliability, responsiveness and assurance) affect Penang tourists' satisfaction on Penang hawker centre?</li> <li>✚ Will food quality affect Penang tourists' satisfaction on Penang hawker centre?</li> </ul>

Source: Developed for the research.

## **1.4 Significance of Study**

### **1.4.1 Theoretical Significance**

This research will contribute by once again confirm the result of past studies in which service quality and food quality are positively correlated with customer satisfaction. Besides, a clear picture on the antecedents which affecting satisfaction of diners unable to be given by merely applying SERVQUAL model as food quality serves as an important variable as well. Thus, food quality is added to combine with SERVQUAL model to form the proposed conceptual model for this research, which is rarely done by the past literatures. In the future, other academicians or researchers can apply this research framework in their research on other food service areas. Thus, through this research, the readers will obtain a new understanding regarding the impact of service and food quality toward the satisfaction level of customer in food service sector.

Besides, this study serves as a reference for researchers whose interest areas are in service quality and total quality management (TQM) or researchers who focusing on food service and tourism sector.

In addition, most of the past studies were being conducted out of Penang and from the customers' point of view instead of tourists. Therefore, we are going to conduct this study in the context of Penang and tourists based in order to overcome the problems and contribute to tourism related journals.

### **1.4.2 Managerial Significance**

This research can assist Penang State Government in setting policies to promote Penang street food hawker centre for culinary tourism. By referring to the result of this study, Penang state government can better understand the dimensions needed to be emphasized, focused and prioritized in policy setting and educate the hawkers in order to improve the satisfaction level of Penang tourists.



Besides, this study would also assist the Penang hawkers to better understand about the expectations of their customer particularly tourists on the services provided and how to enhance the satisfaction level of their customers. With the higher satisfaction level, they can improve their business performance and generate more revenue (Homburg, Koschate, & Hoyer, 2006).

## **1.5 Chapter Layout**

The overview of this research which comprises of research background, problem statement, research objectives, research questions, significance and research outline are provided in the Chapter 1.

Chapter 2 covers the review of literature, review of relevant theoretical models, proposed conceptual model and hypotheses development.

On the other hand, Chapter 3 presents the research methodology which consists of research design, data collection method, sampling design, research instrument, construct measurement and data analysis techniques.

## **1.6 Conclusion**

The essential of service quality and food quality towards satisfaction of customers particularly diners were briefly discussed in Chapter 1. Meanwhile, significance of the study is covered. Chapter 2 is going to present the literature review and proposed conceptual model of the research.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.0 Introduction**

Prior researches associated with this study were discussed in Chapter 2. Every antecedent was deliberated comprehensively as well. SERVQUAL model was also introduced extensively in this chapter. Moreover, proposed conceptual model was built to analyze the relationship between IVs (tangibles, reliability, assurance, responsiveness and food quality) and DV (customer satisfaction). Besides, five hypotheses were also formulated in this chapter.

## 2.1 Review of Literature

### 2.1.1 Customer Satisfaction (DV)

Table 2.1: Definition of Customer Satisfaction (DV)

Definition of Customer Satisfaction	Sources
Customer satisfaction refers to a customer's feeling of disappointment or pleasure resulting from comparing a product/service's perceived performance to his or her expectations.	<ul style="list-style-type: none"> <li>✚ Oliver (1981)</li> <li>✚ Lin, Chen, and Chiu (2010)</li> <li>✚ Namukasa (2013)</li> </ul>
Customer satisfaction is the post purchase appraisal judgment about the purchase decision.	<ul style="list-style-type: none"> <li>✚ Day (1984)</li> <li>✚ Ha and Jang (2010)</li> </ul>
Customer satisfaction is an evaluative judgment made after the transaction.	<ul style="list-style-type: none"> <li>✚ Parasuraman et al. (1985)</li> <li>✚ Hui and Zheng (2010)</li> </ul>
Satisfaction is being defined as a cognitive-based phenomenon which measuring the customer's subjective assessment of an experience of buying a product.	<ul style="list-style-type: none"> <li>✚ Westbrook (1987)</li> </ul>
Satisfaction can be defined closely to, but not similar as the customer's general attitude towards the service provided.	<ul style="list-style-type: none"> <li>✚ Bitner (1990)</li> </ul>
Customer satisfaction refers to the overall evaluation made by customers according to the consumption experiences and total purchase with a product or service over time.	<ul style="list-style-type: none"> <li>✚ Anderson, Fornell, and Lehmann (1994)</li> </ul>
Satisfaction of customers is referring to the attitude of customer towards a service provided. It also may refer to emotional reaction to the difference between what customers receive and anticipate regarding the fulfillment of certain goals, desire or needs.	<ul style="list-style-type: none"> <li>✚ Hansemark and Albinsson (2004)</li> </ul>
Customer satisfaction refers to the affective aspects caused by consumption experiences and cognitive assessment of food/service quality.	<ul style="list-style-type: none"> <li>✚ Ha and Jang (2010)</li> </ul>
Customer satisfaction may be defined as the customer's general impression on comparative inferiority and superiority of a service.	<ul style="list-style-type: none"> <li>✚ Leong, Hew, Lee, and Ooi (2015)</li> </ul>

Source: Developed for the research.

The customer satisfaction's definitions proposed by different researchers in their studies were indicated in table 2.1. In the study of Ara (2016), customer satisfaction is significantly affected by service quality which is important to create positive image toward product and service provided and having a strong effect on competitive position and sales.

Besides, customer satisfaction was proved as having significant positive effect upon customer loyalty and customer retention (Eid, 2013; Swimberghe & Wooldridge, 2014; Lai, 2015). Not only that, various research results showed that satisfied customers tend to give positive word of mouth (WOM) in regard to the service provided (Jani & Han, 2013; Pizam, Shapoval, & Ellis, 2016). Positive WOM is referred to "the informal communication between consumers about the characteristics of a business or a product" (Kau & Loh, 2006, p.103). As satisfied tourists are expected to bring such benefits towards Penang culinary tourism sector and food service industry, thus this study is conducted to investigate the factors affecting satisfaction level of Penang tourists.

## 2.1.2 Tangibles and Customer Satisfaction (1<sup>st</sup> IV)

Table 2.2: Definition of Tangibles (1<sup>st</sup> IV)

Definition of Tangibles	Sources
Tangibles is referring to the physical appearance of the material, equipment or staffs used in serving the customers.	<ul style="list-style-type: none"> <li>✚ Parasuraman et al. (1988)</li> <li>✚ Lee and Ulgado(1997)</li> </ul>
Tangibles included appealing physical facilities, neat-appearing staff and modern-looking equipment.	<ul style="list-style-type: none"> <li>✚ Wakefield and Blodgett (1999)</li> <li>✚ Namkung and Jang (2008)</li> </ul>
Tangibles also being defined as the physical attractiveness of the person who delivered services which included their style of dress and facial attractiveness.	<ul style="list-style-type: none"> <li>✚ Cheng and Chi (2009)</li> </ul>
Tangibles can be further divided into comfort provided by service environment and facilities and cleanliness/tidiness of the tangible components.	<ul style="list-style-type: none"> <li>✚ Johnston (1995)</li> <li>✚ Barber, Goodman, and Goh (2011)</li> </ul>
Tangibles included elements such as space, cleanliness, appearance of location and atmosphere.	<ul style="list-style-type: none"> <li>✚ Alex and Thomas (2011)</li> </ul>
Tangibles also refer to a secure, quiet and clean environment.	<ul style="list-style-type: none"> <li>✚ Tsaur, Chiu, and Huang (2002)</li> <li>✚ Ladhari (2012)</li> </ul>
Tangibles refers to the physical environment embodied by subjects (such as employees appearances) and objects (such as interior design)	<ul style="list-style-type: none"> <li>✚ Leong et al. (2015)</li> </ul>
Tangibles can be referred to physical facilities' appearances, perceived quality of personnel, equipment and materials used by the service provider.	<ul style="list-style-type: none"> <li>✚ Rauch, Collins, Nale, and Barr (2015)</li> </ul>
Tangibles may be defined as "has a visually attractive dining area."	<ul style="list-style-type: none"> <li>✚ Hanks, Line, and Kim (2017)</li> </ul>

Source: Developed for the research.

The different definitions of tangibles dimension under SERVQUAL model given by different researchers in their studies were illustrated in table 2.2. In the study of Allan (2016), tangibles has been found to have strongest influence on the service quality and thereby affect the satisfaction of the customer of luxury hotel.

Moreover, even though the study of Kaura, Durga, and Sharma (2015) shows that tangibles does not significantly impact on customer satisfaction, but many research results shown tangibles is a significant antecedent of customer satisfaction (Hussain, Al-Nasser, & Hussain, 2015; Bostanji, 2013, Kawpong & Suvenus, 2010). In the context of hawker centre, the tangibles dimension is referring to cleanliness and appearance of the hawkers and hawker centre. If tangibles is in poor condition, tourists will definitely feel dissatisfied. Therefore, following hypothesis is proposed in this research to investigate the relationship between tangibles of Penang hawker centres and satisfaction level of Penang tourists.

H<sub>1</sub>: There is a significant positive relationship between tangibles and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

### 2.1.3 Reliability and Customer Satisfaction (2<sup>nd</sup> IV)

Table 2.3: Definition of Reliability (2<sup>nd</sup> IV)

<b>Definition of Reliability</b>	<b>Sources</b>
Reliability is defined as the promised services are able to be performed accurately and dependably	<ul style="list-style-type: none"> <li>✚ Parasaruman et al. (1988)</li> <li>✚ Lee and Ulgado (1997)</li> <li>✚ Namkung and Jang (2008)</li> <li>✚ Aghdaie and Faghani (2012)</li> </ul>
Reliability relates to the services provider's capability to offer trustworthy and precise services.	<ul style="list-style-type: none"> <li>✚ Leong et al. (2015)</li> </ul>
Reliability can be referred to the consistency performance of staff, service facilities and goods. It includes keeping to agreements made with customers and services delivered punctually.	<ul style="list-style-type: none"> <li>✚ Johnston (1995)</li> </ul>
Reliability also included sympathetic and reassuring	<ul style="list-style-type: none"> <li>✚ Cunningham, Young, and Lee (2002)</li> </ul>
Reliability means the service provider "does thing right" and keeps the promises.	<ul style="list-style-type: none"> <li>✚ Yuen and Chan (2010)</li> </ul>
Reliability not only mean to serve the customers in the time promised, but also means able to correct anything that is wrong and serve the food exactly as the customers have ordered.	<ul style="list-style-type: none"> <li>✚ Bougoure and Neu (2010)</li> </ul>
Meaning of reliability mainly focuses on the accuracy and timeliness of the outcome, dependably and provided problem solving support.	<ul style="list-style-type: none"> <li>✚ Gunawardane (2011)</li> </ul>
Reliability refers to the ability to consistently perform the promised service in a perfect manner.	<ul style="list-style-type: none"> <li>✚ Malik, Naeem, and Arif (2011)</li> </ul>

Source: Developed for the research.

The reliability defined by different academicians in their studies was demonstrated in table 2.3. According to the research conducted by Yuen and Thai (2015) and Sakhaei, Afshar, and Esmaili (2014), reliability was proved as having the most significant impact on customer satisfaction among all dimensions of SERVQUAL model. In addition, Dauda and Lee (2016), Teshome and Seyoum (2014) and Mahfooz (2014) found that reliability possess a positive and significant relationship with customer satisfaction.

In terms of hawker centre, reliability is related to the hawkers' ability to serve customer in accordance with what have requested and ordered. If the level of reliability is low, tourists will definitely feel dissatisfied with the service provided. Hence, the following hypothesis is formulated to analyze the impact of reliability on the satisfaction level of Penang tourists.

H<sub>2</sub>: There is a significant positive relationship between reliability and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

## 2.1.4 Responsiveness and Customer Satisfaction (3<sup>rd</sup> IV)

Table 2.4: Definition of Responsiveness (3<sup>rd</sup> IV)

Definition of Responsiveness	Sources
Responsiveness is the willingness to provide quick service as well as help customers.	<ul style="list-style-type: none"> <li>✚ Parasuraman et al. (1988)</li> <li>✚ Lee and Ulgado(1997)</li> <li>✚ Namkung and Jang (2008)</li> </ul>
Responsiveness can be defined as readiness to assist customers by providing efficient service performance.	<ul style="list-style-type: none"> <li>✚ Leong et al. (2015)</li> </ul>
Responsiveness can be referred to the ability of service provider to respond quickly to the customer requests, which minimize the queuing and waiting time.	<ul style="list-style-type: none"> <li>✚ Johnston (1995)</li> </ul>
Responsiveness includes how fast the response to the customers and waiting time in order to be served.	<ul style="list-style-type: none"> <li>✚ Auka, Bosire, and Matern (2013)</li> </ul>
Responsiveness also includes ability to tell customers exactly the time of the services will be performed and never be too busy to respond to customers' request.	<ul style="list-style-type: none"> <li>✚ Kumar, Mani, Mahalingam, and Vanjikovan (2010)</li> </ul>
Responsiveness reflects how the customers' requests are handled	<ul style="list-style-type: none"> <li>✚ Al-Rousan and Mohamed (2010)</li> </ul>

Source: Developed for the research.

The definitions describing responsiveness dimensions of SERVQUAL model suggested by different researchers in their studies were depicted in table 2.4. In the study of Shanka (2012), responsiveness was proved as the dimension of SERVQUAL which has the most essential role in affecting customer satisfaction. Furthermore, there are many past studies found that responsiveness is a variable that significantly and positively affecting customer satisfaction (Namin, 2017; Ismail, Zaki, & Rose, 2016; Leong et al, 2015; Aghdaie & Faghani, 2012). In the context of hawker centre, responsiveness is about how fast and how good the hawkers deliver their services. If the hawkers are highly responsive to the customer request, then the service provided is deemed to be satisfactory. Therefore, the following hypothesis is proposed.

H<sub>3</sub>: There is a significant positive relationship between responsiveness and customer satisfaction of Penang tourists who patronizes Penang hawker centres.



## 2.1.5 Assurance and Customer Satisfaction (4<sup>th</sup> IV)

Table 2.5: Definition of Assurance (IV4)

Definition of Assurance	Sources
Assurance means the courtesy and knowledge of employees and their ability to inspire confidence and trust.	<ul style="list-style-type: none"> <li>✚ Parasuraman et al. (1988)</li> <li>✚ Lee and Ulgado (1997)</li> <li>✚ Namkung and Jang (2008)</li> <li>✚ Badara et al. (2013)</li> </ul>
Assurance can be referred to the knowledge, experiences, politeness and friendliness of the staff.	<ul style="list-style-type: none"> <li>✚ Sadek et al. (2010)</li> </ul>
Assurance includes the miscellaneous features that provide confidence to customers such as the trustworthy behavior of staff and service knowledge of the service provider.	<ul style="list-style-type: none"> <li>✚ Leong et al. (2015)</li> </ul>
Assurance can be defined as the customers feel safe in the transaction with the service provider.	<ul style="list-style-type: none"> <li>✚ Allan (2016)</li> </ul>

Source: Developed for the research.













The definitions explaining assurance dimension of SERVQUAL model applied by various researchers were displayed in table 2.5. Based on the study of Omar, Ariffin, and Ahmad (2016), assurance dimension of SERVQUAL has the most significant positive influence on the customer satisfaction.

Moreover, various researches have confirmed that assurance is positively and significantly correlated with the customer satisfaction (Huang, 2012; Kitapci, Akdogan, & Dortyol, 2014; Chatzoglou, Chatzoudes, Vraimaki, & Leivaditou, 2014; Anjum, Aftab, Sultan, & Ahmed, 2016). In the context of hawker centre, if the hawkers are courteous, polite and friendly, the level of assurance can be concluded as high and it will delight the customers. Therefore, this study will put forward the following hypothesis to determine the effect of assurance on the satisfaction level of Penang tourists.

H4: There is a significant positive relationship between assurance and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

## 2.1.6 Food Quality and Customer Satisfaction (5<sup>th</sup> IV)

Table 2.6: Definition of Food Quality (IV5)

Definition of Food Quality	Sources
Taste is an essential element that constitutes food quality.	 Koo, Tao, and Yeung (1999)  Zhang, Jiang, and Li (2013)
Food quality contains a several attributes which including nutritious, menu variety and tastiness of food.	 Kivela, Inbakaran, and Reece (2000)
The food quality can be measured by menu design, food presentation, variety of food and serving size.	 Raajpoot (2002)  Ha and Jang (2010)
Food quality can be determined by 3 general characteristics, which are dietary acceptability, safety and appeal. Appeal including presentation, texture, taste, temperature, color and portion size.	 Sulek and Hensley (2004)
Food quality generally being described as menu variety, presentation, healthy option, taste, freshness and temperature.	 Namkung and Jang (2007)  Zhang, Zhang, and Law (2014)
Food safety is the most basic food quality	 Liu and Jang (2009)
Food quality including food cleanliness, food texture, food freshness and food temperature.	 Pei and Ayub (2015)
Food quality may be referred to the elements such as smell and tastiness of food, visual appearance and presentation of food, color, texture, portion size or temperature.	 Djekic et al. (2016)
Food quality includes various components such as food cleanliness, healthiness, freshness and variety of foods offered.	 Namin (2017)

Source: Developed for the research.

Different elements of food quality that has been considered by different researchers in their research were demonstrated in table 2.6. In the research of Ramanathan, Di, and Ramanathan (2016), food quality is proven as the factor correlated mostly with customer satisfaction.

In addition, Hanaysha (2016), Rashid, Adbullah, Yusuf, and Shaari (2016), El-Said and Fathy (2015) and Stranjancevic and Bulatovic (2015) discovered that customer satisfaction is strongly influenced by the food quality. In the context of hawker centre, the tastiness and freshness of foods will definitely affect the customer dining experience and satisfaction. Thus, in order to analyze the effect of hawker's food quality on the satisfaction level of Penang tourists, following hypothesis is formulated.

H<sub>5</sub>: There is a significant positive relationship between food quality and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

## 2.2 Review of Relevant Theoretical Model

SERVQUAL model is being adapted in this study. It is a model explaining how the services qualities affect customer satisfaction. This particular SERVQUAL model is based on the SERVQUAL theory which is introduced since 1985 to describe the development of multi-item scale measurement for service quality. Initially it contained 10 dimensions (Parasuraman, Zeithaml, & Berry, 1985; 1988).

However, this 10-dimensions SERVQUAL model was criticized by various researchers (Brown & Swartz, 1989; Carman, 1990; Cronin & Taylor, 1992; Brown, Churchill, & Peter, 1993; Teas, 1993). As some of the 10 initial dimensions of SERVQUAL were auto-correlated, thus the founders of SERVQUAL model had refined the model to only consist of 22 items and 5 dimensions (Parasuraman et al., 1991; 1993; 1994).

Subsequently, various studies have confirmed the 5-dimensions SERVQUAL model is applicable in different nations and different sectors (Gabbie & O'Neill, 1996; Mehta & Durvasula, 1998; Lam & Zhang, 1999). In addition, numerous studies have adapted SERVQUAL model as a base to develop different model to measure services rendered in different areas as shown in the table 2.7.

**Table 2.7: Modern Model Developed Based on SERVQUAL Model**

Model	Area of Service Provided	Source
HISTOQUAL	Historic houses for tourism industry	Frochot and Hughes (2000)
SITEQUAL	Online shopping	Yoo and Donthu (2001)
WebQual	Cyber bookshop business	Barnes and Vidgen (2001)
LibQUAL	Library	Cook, Heath, and Thompson (2001)
ECOSERV	Ecotourism	Khan (2003)
E-S-QUAL	Electronic service business	Parasuraman, Zeithaml, and Malhotra (2005)
LODGSERV	Hotel Services	Keith and Simmers (2013)
AIRQUAL	Airlines services	Ali, Dey, and Filieri (2015)

Source: Developed for the research.

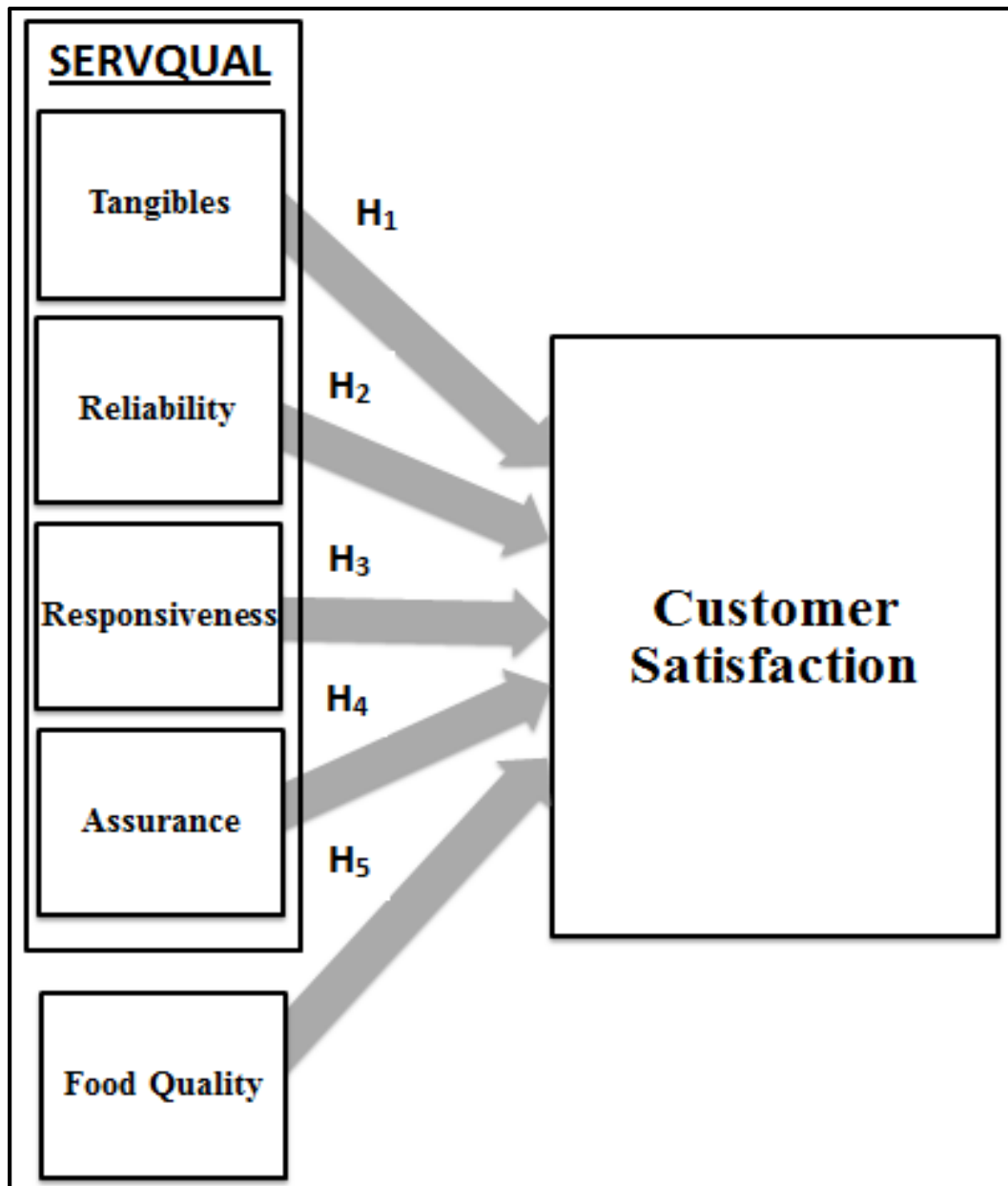
After the refinement in 1991, currently SERVQUAL model consists of five dimensions, which are reliability, assurance, empathy, tangibles and responsiveness (Parasuraman et al., 1991). In this research, four of the SERVQUAL dimensions are being adapted, which are reliability, assurance, tangibles and responsiveness. Empathy is forfeited because it's not relevant to the services able to be rendered by the hawker who selling street food in the hawker centre.

On the other hand, other than the SERVQUAL dimensions, there is another variable able to influence customer satisfaction, which is food quality. In fact, poor food quality usually resulted in serious customer dissatisfaction (Johns & Howard, 1998). Food quality has been proved as a fundamental variable affecting customer satisfaction in various literatures (Sulek & Hensley, 2004; Law, Hui, & Zhao, 2004; Haghghi, Dorosti, Rahnama, & Hoseinpour, 2012).

Furthermore, food quality of the local foods such as taste is one of the attractions to the tourists (Sengel et al., 2015). There are sufficient literatures supporting that food quality has significant positive correlation with the tourists' satisfaction (Kivela & Crofts, 2006). As this research is studying the satisfaction of tourists who patronizes hawker centre, thus food quality is adapted to combine with the SERVQUAL model in the construction of proposed conceptual model for this study.

## 2.3 Proposed Theoretical Framework

Figure 2.1: Proposed Conceptual Model



Source: Parasuraman et al. (1991) and Ryu, Lee, and Kim (2012)

Figure 2.1 indicates the proposed theoretical model applied in this research. Four dimensions of SERVQUAL model (tangibles, reliability, responsiveness and assurance) are adapted to combine with food quality as a set of IVs. Customer satisfaction is the DV going to be tested in this study.

## **2.4 Hypotheses Development**

According to the review of literatures, following hypotheses are developed in this study:

H<sub>1</sub>: There is a significant positive relationship between tangibles and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

H<sub>2</sub>: There is a significant positive relationship between reliability and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

H<sub>3</sub>: There is a significant positive relationship between responsiveness and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

H<sub>4</sub>: There is a significant positive relationship between assurance and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

H<sub>5</sub>: There is a significant positive relationship between food quality and customer satisfaction of Penang tourists who patronizes Penang hawker centres.

## **2.5 Conclusion**

The review of past researches conducted by different academicians was provided in Chapter 2. Five hypotheses were formulated based on the theoretical SERVQUAL model and literature review. Moreover, a proposed conceptual model was built for the purpose of examining the correlation and relationship between food and service quality (IVs) with customer satisfaction (DV). The following chapter is going to discuss the research methodology in testing the hypotheses developed.

## **CHAPTER 3: METHODOLOGY**

### **3.0 Introduction**

The research methodology applied in this research was extensively explained in Chapter 3. It including the discussion of how the required data were collected and the research was being conducted. After that, this chapter will explain the data analysis techniques applied in this research and describe on how the collected data being processed and analyzed.

### **3.1 Research Design**

A questionnaire survey was conducted in order to investigate the tourist's perception towards their satisfaction level on food and service provided by Penang street food hawkers. Tourists who patronize Penang hawker centres were chosen to be the unit of analysis in this research as they understand better regarding the satisfaction level of tourists and what are the attributes affecting their satisfaction. A self-administered questionnaire was used as an instrument to collect empirical data in several hawker centres located at Georgetown, Penang.

In this study, quantitative study and cross sectional study was conducted to measure the relationship between food quality, service quality and customer satisfaction. This research utilize cross sectional approach instead of longitudinal survey as this research was facing a time constraint. Cross-sectional is more suitable in this research because it enables complete information to be collected without waiting for a longer time period (Bahrlick, Bahrlick, & Wittlinger, 1975). Besides, no follow-up is needed in cross-sectional research and therefore it consumes less resources, quicker and cheaper (Mann, 2003).



## **3.2 Data Collection Method**

This research applied two type of data collection method, which are primary data and secondary data (Burns & Bush, 2000). In this research, primary data were collected through questionnaire survey while secondary data were collected through journals, news articles and books from different sources (Yasseen, 2011).

### **3.2.1 Primary Data**

Self-administered questionnaires were used to collect the primary data for this study. According to Kaiser (2011), As this study is a quantitative study, thus the questionnaire survey serves as a useful tool in collecting primary data regarding tourist's perception as it is easier, less time-consuming and economical to be used.

### **3.2.2 Secondary Data**

Several relevant research books were being used for the purpose of analyzing the research results. secondary data especially academic journals used were retrieved by using online databases such as Emerald Insight, Jstor, EbscoHost, ScienceDirect and so on. They were used to develop the hypotheses of the study, assist in setting the survey questionnaires and form the proposed conceptual model. In addition, relevant news article and government statistics were referred to identify the relevant issues in this study.

### **3.3 Sampling Design**

Sampling instead of census was preferred in this study because of the budget and time constraints. It is impractical to survey the whole population of Penang tourists, thus sampling technique was applied as it is able to represent the entire population (Saunders, Lewis, & Thornhill, 2012). Besides, sampling is less costly, less time-consuming and able to provide timely information as the data can be collected quicker (Cochran, 1966).

#### **3.3.1 Target Population**

The population in this research will be the tourist who patronizes Penang hawker centre as they are the one who able to give information regarding tourist's needs and wants. The information given would be most relevant to satisfaction level of tourists and most useful for Penang tourism sector.

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

There is no sampling frame can be used in this research as number of Penang tourists is huge and it is impossible to obtain the information of every Penang tourists. Thus, probability sampling technique is infeasible in this research (Lucas, 2016). Due to this feasibility constraint, non-probability sampling is most appropriate technique to be applied in this research (Feild, Pruchno, Bewley, Lemay, & Levinsky, 2006; Uprichard, 2013).

The data collection for this study was conducted from 20 May 2017 to 27 May 2017, at several hawker centres in Georgetown, Penang. This is because most of the tourists are crowded at Georgetown when they visit Penang as Georgetown was announced by UNESCO as the World Heritage Town (UNESCO, 2008). Gurney Drive hawker centre was chosen as one of the locations to collect data because it is well-known by the international and domestic tourists as it has been a

street food paradise for over 40 years (Loh, 2016). Besides, it serves a variety of Penang local food. Therefore, Gurney Drive hawker centre has the sufficient number of tourists and data collection at there was convenient (Goldberg, 2013). In order to collect more representative data, some other well-known hawker centres in Georgetown were selected, which are Medan Renong Padang Kota Lama Hawker Centre and Pulau Tikus Hawker (Lonely Planet, 2017).

### **3.3.3 Sampling Elements**

In this research, the sample chosen were tourists of Penang and they must patronize Penang hawker centres (UN & WTO, 1994; Forbes et al., 2014). The tourists can be the one who come from overseas or Malaysia other than Penang state. They were asked politely on their willingness to fill in the survey questionnaire.

### **3.3.4 Sampling Technique**

Judgmental sampling technique was applied in this study by obtaining data from specific target respondents (Penang's tourists) as this technique is more efficient (Karmel & Jain, 1987). Furthermore, specific target respondents are able to provide more unique, relevant and valuable information to the research (Sekaran, 1992; Etikan, 2016).

According to Zikmund, Babin, Carr, and Griffin (2013), if judgment sampling technique is applied, samples are being chosen based on the judgment about some suitable characteristics required.

### **3.3.5 Sampling Size**

According to Hinkin (1995), the recommended sample size should be ranged from item-to-response ratio of 1:4 and to 1:10. Hence, the recommended sample size for this study should be ranged from 128 to 320 respondents. Hence, a total of 303 survey questionnaires were administered to the Penang's tourists who consented to take part in this survey. Out of 303 set of questionnaires, only 259 set of questionnaires are usable and had been employed in the analysis of this research. This sample size shall be considered to be appropriate and representative for the population in this study. In order to avoid misrepresentation in the data analysis, 44 set of questionnaires collected were due to incomplete data and recurrent selection.

## **3.4 Research Instrument**

In this research, self-administered questionnaires were being used to collect primary data. This is because this data collection method could reach to more target respondents in short time, assure high response rate, minimize biases and obtain honest answer because target respondents were allowed to be anonymous (Akbayrak, 2000; Muijs, 2004; Mitchell & Jolley, 2012). The questionnaires were delivered by hand to the tourists of hawker centres in George Town, Penang. The respondents who agreed to help were requested to fill in the questionnaires in the presence of researchers and return it to the researchers immediately.

Besides, a pre-test was conducted by consulting various experts in the area of TQM and the validity of the questionnaire was confirmed. Moreover, a pilot test had been conducted to confirm the reliability of the questionnaire (Molla & Licker, 2005). The ideal sample size of pilot test was recommended to be 10% of the sample projected for the large parent study (Connelly, 2008; Waweru & Omwenga, 2015). Therefore, 25 respondents collected for pilot test shall be considered as sufficient.

Table 3.1: Pilot Test for Questionnaire Reliability

Variables	Cronbach's Alpha Value
Tangibles (T)	0.7703
Reliability (R)	0.8440
Responsiveness (RP)	0.7956
Assurance (A)	0.7904
Food Quality (FQ)	0.8256
Customer Satisfaction (CS)	0.8920

Source: Developed for the research

Table 3.1 illustrates the result of the pilot test of 25 questionnaires collected from the tourists who patronize Gurney Drive Hawker Centre, Georgetown. The Cronbach's alpha values for each of the variables ranged from 0.7703 to 0.8920 in which customer satisfaction is the highest while tangibles is the lowest. Based on the outcome of pilot test, all variables have fulfilled the threshold of Cronbach's alpha value 0.7, thus this survey questionnaire is concluded to be reliable (Cronbach & Shavelson, 2004).

### 3.5 Constructs Measurement

Table 3.2: Definition of the Variables Used in Questionnaires

Variables	Definition	Source
Customer Satisfaction (DV)	Defined as the customers are satisfied and enjoyable with their experience to dine in the hawker centre. The customers also feel that their choice to dine in the hawker centre is right and wise one. The hawker centre put them in a good mood and the customer will introduce this hawker centre to other people.	<ul style="list-style-type: none"> <li>✚ Wen, Qin, Prybutok, and Blankson (2012)</li> <li>✚ Phan and Nham (2015)</li> <li>✚ Ryu, Lee, and Kim (2012)</li> </ul>
Tangibles (IV)	Defined as the dining area is clean and comfortable with available seats in the hawker centre. The hawkers' appearance are neat, the menu attached is easily readable and visually attractive.	<ul style="list-style-type: none"> <li>✚ Wen et al. (2012)</li> <li>✚ Bougoure and Neu (2010)</li> </ul>
Reliability (IV)	Defined as the hawkers serve the customers in the time promised with the food exactly as customers' order, and immediately correct anything that is wrong. The hawkers are dependable and willing to give diners the menu items' information and their ingredients.	<ul style="list-style-type: none"> <li>✚ Bougoure and Neu (2010)</li> <li>✚ Wen et al. (2012)</li> <li>✚ Hwang (2011)</li> </ul>
Responsiveness (IV)	Defined as the hawkers are always willing to help the customers and respond to their requests; handle customer complaints immediately, provide prompt and quick service, and put extra effort on handling customers' special requests.	<ul style="list-style-type: none"> <li>✚ Hwang (2011)</li> <li>✚ Ryu et al. (2012)</li> <li>✚ Allan (2016)</li> <li>✚ Cheng and Chi (2009)</li> </ul>
Assurance (IV)	Defined as the hawker is polite, trustable, friendly, courteous, knowledgeable in the food and beverage questions, and make customer feel safe in making financial transaction with them.	<ul style="list-style-type: none"> <li>✚ Wen et al. (2012)</li> <li>✚ Al-Rousan and Mohamed (2010)</li> </ul>
Food Quality (IV)	Defined as the food served are tasty, fresh, with appropriate temperature, enticing smell and served with suitable portion size.	<ul style="list-style-type: none"> <li>✚ Hwang (2011)</li> <li>✚ Ryu et al. (2012)</li> </ul>

Source: Developed for the research.

How the variables are being defined in this research was showed in table 3.2. Besides, all of the variables were measured by interval scale because interval scale assists the researchers to perform arithmetical operations on the data collected from the respondents (Sekaran, 2003). Five point Likert scale (i.e. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree & 5 = Strongly Agree) was applied in measuring all the variables in this study because it is less confusing, can results in higher response rate and better quality of the data collected (Babakus & Mangold, 1992; Zikmund, 2003).

A total number of 32 items were used in this research to measure the variables. The dependent variable - customer satisfaction was measured by using 6 items adapted from the past literatures (Wen et al., 2012; Phan & Nham, 2015; Ryu et al., 2012). For the IVs, tangibles were measured by using 6 items adapted from past literatures (Wen et al., 2012; Bougoure & Neu, 2010). The remaining variables - reliability, responsiveness, assurance and food quality were measured by using 5 items adapted from past literatures (Cheng & Chi, 2009; Al-Rousan & Mohamed, 2010; Bougoure & Neu, 2010; Hwang 2011; Wen et al., 2012; Ryu et al., 2012; Allan, 2016).

On top of it, the survey questionnaire employed in this research included items related to the demographic profile of the respondents. It were adopted and adapted from several past literatures (Lee, Leong, Hew, & Ooi, 2013; Chang, Backman, & Chih Huang, 2014; Choovanichchannon, 2015; Ara, 2016; Pizam, Shapoval, & Ellis, 2016; Pabel, Prideaux, & Thompson, 2017).

### **3.6 Data Processing**

The collected survey questionnaires were checked, filtered and coded to choose only the usable data to proceed in the subsequent data generation process. The entire raw data was keyed in to the Microsoft Excel software and then exported to SAS Enterprise Guide 7.11 (SAS 7.11). Subsequently, SAS 7.11 was used to analyze the data and generate required outcomes or statistics for the study.

## **3.7 Data Analysis**

### **3.7.1 Descriptive Analysis**

For this section, respondents' demographic profile was presented in frequency and percentage tables as well as pie charts to show the respondents' characteristics (Saunders, Lewis, & Thornhill, 2012).

Besides, the central tendencies and dispersion of variables were measured. Mean was used to measure the average score of each variable while standard deviation was used to indicate the gap difference between mean and the findings (Saunders et al., 2009).

### **3.7.2 Scale Measurement**

#### **3.7.2.1 Reliability Test**

A reliability test was conducted by using Cronbach's Alpha test in order to ensure the inter-correlation of the variable items in measuring the same variable and data collected can generate consistent and reliable result (Hair, Black, Babin, Anderson, & Tatham, 2007). The benchmark proposed by Sekaran (2003) was applied, which stated the Cronbach's Alpha value larger than 0.6 is considered moderate, greater than 0.7 is good and go beyond 0.8 is considered excellent.



### **3.7.2.2 Normality Test**

On top of it, a normality test has conducted to confirm the normality of the collected data because it is required to fulfill the assumption of parametric test (Norman, 2010). Skewness and kurtosis test was conducted in this research to conclude the normality of the data collected. According to Kline (2005), the value of skewness should be within the range of  $\pm 3$  and the value of kurtosis should be within the range of  $\pm 10$ .

### **3.7.3 Inferential Analysis**

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

In addition, a Pearson's correlation analysis has conducted in order to ensure that multicollinearity problem is not exists as it is one of the assumptions that must be met in order to conduct multiple linear regression analysis (Rhoton, 2014). According to Hair, Anderson, Tatham, & Blank (1998), multicollinearity problem occurs if the coefficient value between IVs exceeds 0.9.

#### **3.7.3.2 Multiple Linear Regression (MLR) Analysis**

Based on Osborne and Waters (2002), if the collected data fulfills all the assumption of MLR analysis (reliability, normality and no multicollinearity), MLR analysis can be conducted to analyze the multivariate relationship between IVs and DV. As this study involved 5 IVs, thus the conceptual model in this study is considered to be a complex model and thereby it is best to analyze by using MLR analysis (Brown, 2009). By applying MLR analysis, the relationships among a set of IVs and DV were tested (Saunders et al., 2012). In this analysis, the relationship between independent variables and dependent variable is considered to be significant and the hypothesis will be supported if the p-value of that particular IV is less than 0.05 (Hair, Babin, Money, and Samouel, 2003).

Besides, MLR analysis would also use to assists this study in ascertain whether multicollinearity problem exists. Multicollinearity problem doesn't exist if the tolerance value is 0.10 or above. Besides, variance inflation factors required to be lower than 10 (Hair, Black, Babin, Anderson, & Tatham, 2005; O'brien, 2007). The MLR equation was formed as follow:

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

Where:

Y = Customer Satisfaction

X<sub>1</sub> = Tangibles

X<sub>2</sub> = Reliability

X<sub>3</sub> = Responsiveness

X<sub>4</sub> = Assurance

X<sub>5</sub> = Food Quality

### **3.8 Conclusion**

In a nutshell, chapter 3 explained the research methodology and design of this study. The following chapter is going to discuss the result of analysis for the data collected.

## **CHAPTER 4: DATA ANALYSIS**

### **4.0 Introduction**

SAS 7.11 was used to generate the analysis results through evaluating 259 sets of collected usable questionnaires. The result of the descriptive analysis, scale measurement and inferential analysis prove the research's hypotheses as well as illustrated the relationship between IVs and DV.

### **4.1 Descriptive Analysis**

#### **4.1.1 Demographic Profile of the Respondents**

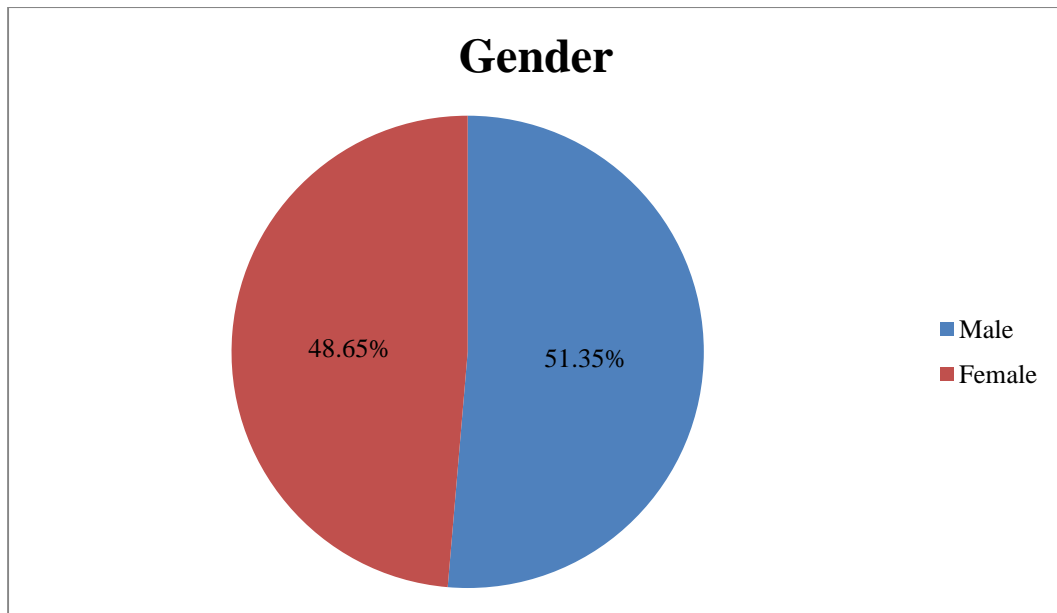
The survey questionnaire used in this study is including the demographic characteristics of the target respondents. It consisting eight items which include the respondent's gender, age, marital status, visitation pattern, length of stay in Penang, purpose of visit, geographical origin and people the respondent comes along with.

Table 4.1: Gender

Gender	Frequency	Percentage (%)
Male	133	51.35
Female	126	48.65
Total	259	100

Source: Developed for the research

Figure 4.1: Gender



Source: Developed for the research

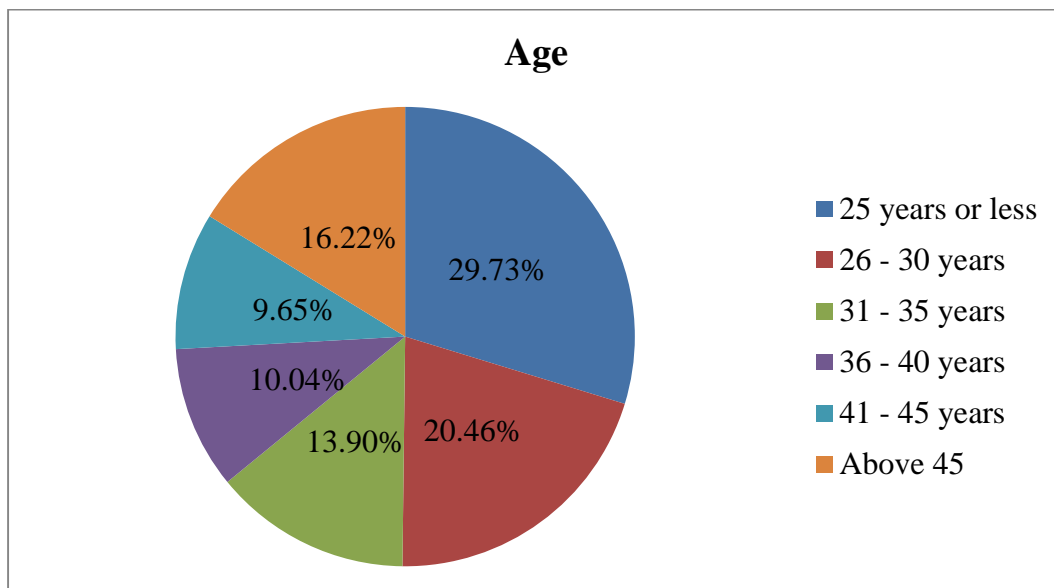
The table 4.1 and figure 4.1 demonstrate the frequency and percentage of gender of 259 valid respondents who have participated in this research. Based on the result, among 259 valid respondents, 133 respondents (51.35 %) are male and 126 respondents (48.65 %) are female.

Table 4.2: Age

Age	Frequency	Percentage (%)
25 years or less	77	29.73
26 - 30 years	53	20.46
31 – 35 years	36	13.90
36 – 40 years	26	10.04
41 – 45 years	25	9.65
Above 45	42	16.22
Total	259	100

Source: Developed for the research

Figure 4.2: Age



Source: Developed for the research

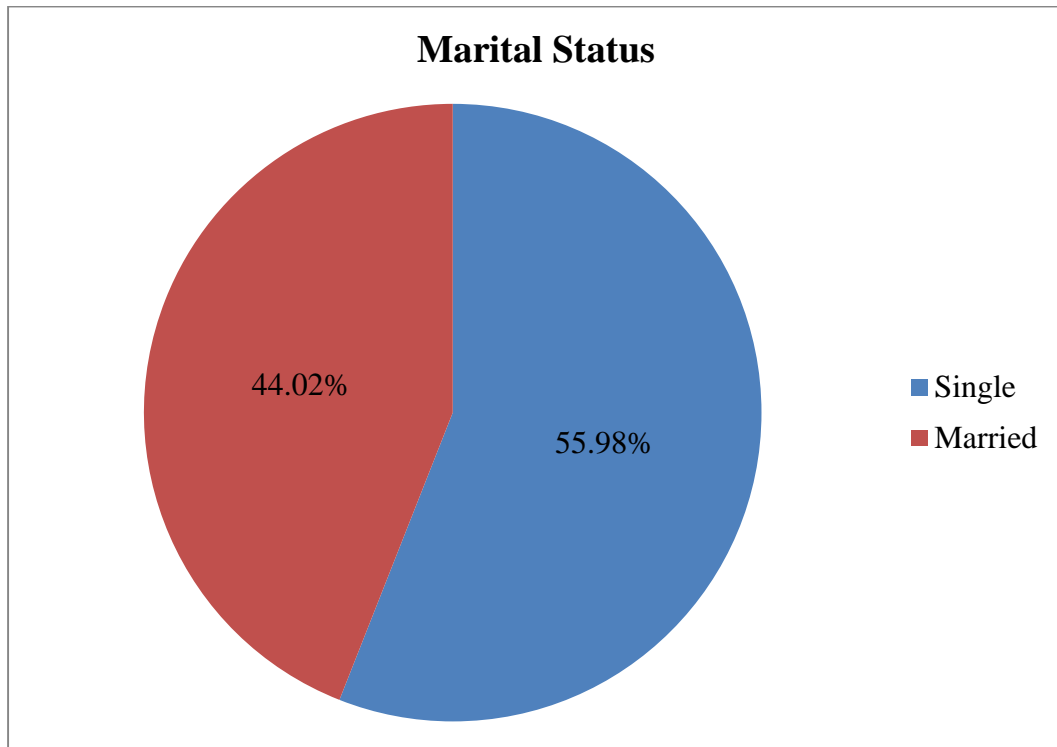
The table 4.2 and figure 4.2 display the frequency and percentage of all the valid respondents from different age groups. The result indicates that the majority respondents are in the age group of 25 years old or less, which is 77 out of total 259 respondents (29.73 %). Besides, the age group of 26 to 30 years old is containing 53 respondents (20.46 %). Moreover, 42 respondents (16.22 %) and 36 respondents (13.90%) are fall under the age group above 45 years old and 31 to 35 years old respectively. Besides, the respondents who fall under the age group of 36 to 40 years old as well as 41 to 45 years old are 26 respondents (10.04 %) and 25 respondents (9.65 %) respectively.

**Table 4.3: Marital Status**

Marital Status	Frequency	Percentage (%)
Single	145	55.98
Married	114	44.02
Total	259	100

Source: Developed for the research

**Figure 4.3: Marital Status**



Source: Developed for the research

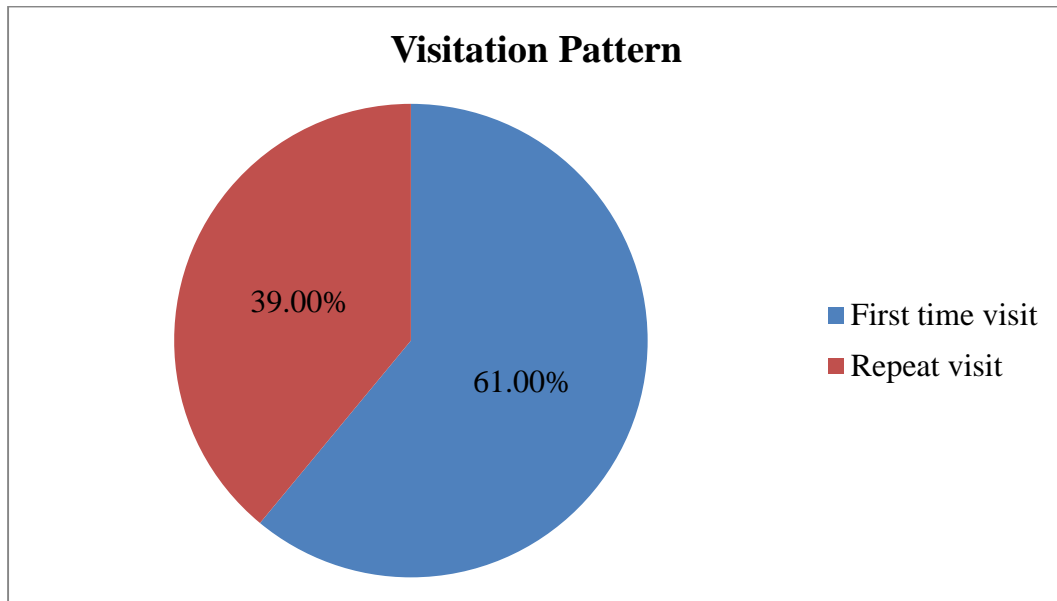
According to the table 4.3 and figure 4.3 above, majority of the valid respondents are single, which are 145 respondents (55.98%). The remaining 114 valid respondents (44.02%) have married.

**Table 4.4: Visitation Pattern**

Visitation Pattern	Frequency	Percentage (%)
First time visit	158	61.00
Repeat visit	101	39.00
Total	259	100

Source: Developed for the research

**Figure 4.4: Visitation Pattern**



Source: Developed for the research

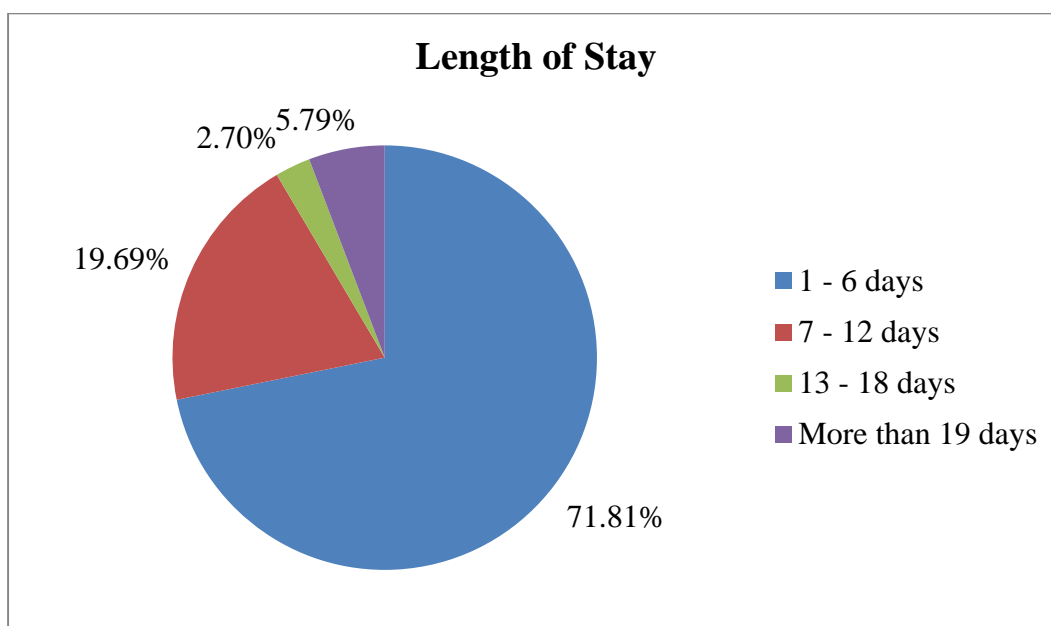
According to the table 4.4 and figure 4.4, 158 respondents (61.00 %) out of 259 valid respondents are first time visiting Penang, while 101 respondents (39.00 %) had visited Penang before.

**Table 4.5: Length of Stay**

Length of Stay	Frequency	Percentage (%)
1 – 6 days	186	71.81
7-12 days	51	19.69
13-18 days	7	2.70
More than 19 days	15	5.79
Total	259	100

Source: Developed for the research

**Figure 4.5: Length of Stay**



Source: Developed for the research

The table 4.5 and figure 4.5 depict that most of the valid respondents (186 persons, 71.81 %) stay in Penang for 1 to 6 days, followed by 51 valid respondents (19.69 %) who stay in Penang for 7 to 12 days. The remaining of the valid respondents who stay in Penang for 13 to 18 days and more than 19 days are 7 respondents (2.7 %) and 15 respondents (5.79 %) respectively.

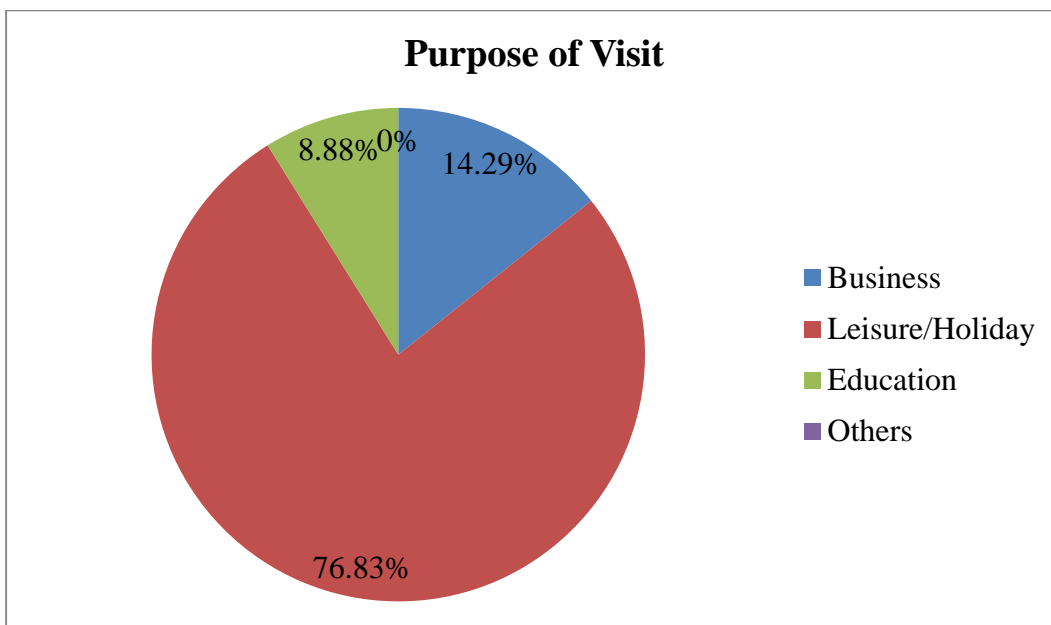


Table 4.6: Purpose of Visit

Purpose of Visit	Frequency	Percentage (%)
Business	37	14.29
Leisure/Holiday	199	76.83
Education	23	8.88
Others	0	0
Total	259	100

Source: Developed for the research

Figure 4.6: Purpose of Visit



Source: Developed for the research

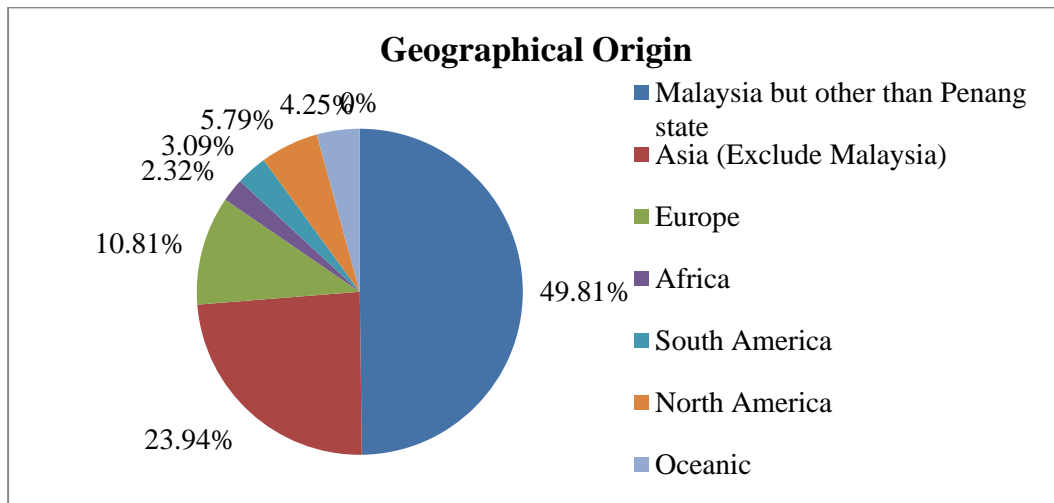
The table 4.6 and figure 4.6 explain the frequency and percentage of different visitation purpose of the valid respondents. There are 199 respondents (76.83 %) visit Penang for leisure or holiday purpose, 37 respondents (14.29 %) visit Penang for business purpose and 23 respondents (8.88 %) visit Penang for education purpose. None of the valid respondents visit Penang for other purpose.

Table 4.7: Geographical Origin

Geographical Origin	Frequency	Percentage (%)
Malaysia but other than Penang state	129	49.81%
Asia (Exclude Malaysia)	62	23.94%
Europe	28	10.81%
Africa	6	2.32%
South America	8	3.09%
North America	15	5.79%
Oceanic	11	4.25%
Antarctic	0	0%
Total	259	100

Source: Developed for the research

Figure 4.7: Geographical Origin



Source: Developed for the research

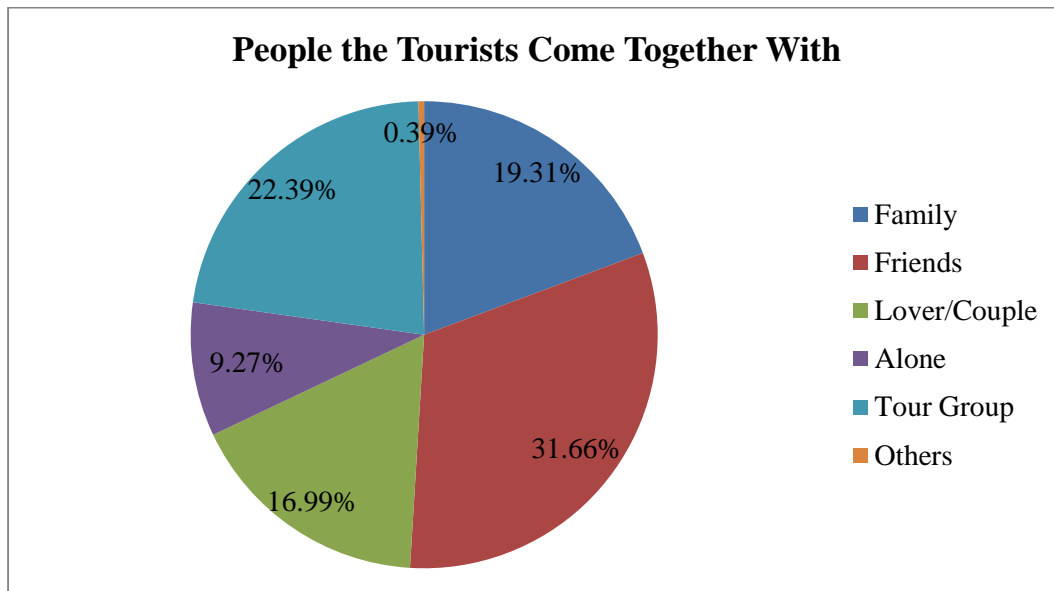
Based on the table 4.7 and figure 4.7, out of 259 valid respondents, 129 respondents are originated from Malaysia but other than Penang state, which forms the largest portion (49.81 %) of all respondents. Besides, there are 62 respondents (23.94 %) originated from Asia (excludes Malaysia), 28 respondents (10.81 %) from Europe, and 11 respondents (4.25 %) from Oceanic. Respondents who originated from South America and North America are consisted of 8 respondents (3.09 %) and 15 respondents (5.79 %) respectively. Only 6 respondents (2.32 %) are originated from Africa. However, none of the valid respondent is originated from Antarctic.

**Table 4.8: People the Respondent Come Together With**

People the Respondents Come Together With	Frequency	Percentage (%)
Family	50	19.31
Friends	82	31.66
Lover/Couple	44	16.99
Alone	24	9.27
Tour Group	58	22.39
Others	1	0.39
Total	259	100

Source: Developed for the research

**Figure 4.8: People the Respondent Come Together With**



Source: Developed for the research

Figure 4.8 and table 4.8 present the statistics regarding people the respondents come along with. Among the 259 valid respondents, 82 of them (31.66 %) come along with their friends, 58 of them (22.39 %) are with tour group, 50 of them (19.31 %) are with family, 44 of them (16.99%) are with lovers/couple, and 24 of them (9.27 %) are travelling alone to Penang. The result also shows that only 1 valid respondent comes along with colleagues (categorized as others).

#### 4.1.2 Central Tendencies Measurement of Constructs

Table 4.9: Statistics of Constructs' Central Tendencies Measurement

Variables	Items	N	Mean	Standard Deviation
<b>Tangibles (T)</b>	T1	259	3.5521	1.2137
	T2		3.6139	0.9792
	T3		3.7954	0.9445
	T4		3.7799	0.9075
	T5		3.7529	0.9887
	T6		3.6023	0.9845
<b>Reliability (R)</b>	R1	259	3.6564	0.8945
	R2		3.7027	0.9727
	R3		3.8185	0.9694
	R4		3.6178	0.9174
	R5		3.7104	0.9219
<b>Responsiveness (RP)</b>	RP1	259	3.6216	0.9461
	RP2		3.6834	0.8627
	RP3		3.6795	0.9930
	RP4		3.6564	1.0276
	RP5		3.7027	0.8894
<b>Assurance (A)</b>	A1	259	3.7645	0.8227
	A2		3.8069	0.9072
	A3		3.7915	0.8732
	A4		3.7297	0.9130
	A5		3.9266	0.9184
<b>Food Quality (FQ)</b>	FQ1	259	4.0695	0.8508
	FQ2		3.9537	0.8792
	FQ3		3.9923	0.8848
	FQ4		3.9151	0.8982
	FQ5		3.8340	0.9722
<b>Customer Satisfaction (CS)</b>	CS1	259	3.7297	0.9002
	CS2		3.6911	0.9509
	CS3		3.7683	0.8629
	CS4		3.7683	0.9152
	CS5		3.8069	0.9692
	CS6		3.7992	0.8435

Source: Developed for the research

The means and standard deviations for all the items in this research is depicted in table 4.9. The mean value for tangibles (T) range from 3.5521 to 3.7954, reliability (R) range from 3.6178 to 3.8185, responsiveness (RP) range from 3.6216 to 3.7027, assurance (A) range from 3.7297 to 3.9266, food quality (FQ) range from 3.8340 to 4.0695, and the DV - customer satisfaction (CS) is ranged from 3.6911 to 3.8069. This indicates that majority of the items were answered by the respondents with the answers of “neutral” or “agree” except for FQ 1 which the respondents responded in the questionnaire with the answer of “agree” or “strongly agree”.

On the other hand, the result of the analysis demonstrates that the standard deviations of all variables are ranged between 0.8227 to 1.2137, which are represented by the variable of assurance (A1) and tangibles (T1) respectively. Both of them are the sub-variables of service quality.

## 4.2 Scale Measurement

### 4.2.1 Reliability Test

In order to test the internal consistency for all the items in the questionnaire, SAS 7.11 was used to perform the Cronbach's alpha test. According to Sekaran (2003), the Cronbach's alpha value of 0.7 and above is deemed to be reliable. Higher Cronbach's alpha value indicates that the items in the questionnaire are more reliable.

Table 4.10: The Summary of Reliability Test

Variables	Number of Items	Cronbach's alpha value
Tangibles (T)	6	0.8892
Reliability (R)	5	0.8449
Responsiveness (RP)	5	0.8547
Assurance (A)	5	0.8447
Food Quality (FQ)	5	0.8443
Customer Satisfaction (CS)	6	0.9083

Source: Developed for the research

According to table 4.10, all of the items in the variables have excellently met the reliability test because all variables scores Cronbach's alpha value within 0.8443 to 0.9083. This indicates that all items for each variable are reliable because Cronbach's alpha value for all items had exceeded 0.8 (Sekaran, 2003). Based on the result, food quality (FQ) scores the lowest Cronbach's alpha value of 0.8443. However, customer satisfaction (CS) marks the uppermost Cronbach's alpha value of 0.9083 among every IVs and DV.

## 4.2.2 Normality Test

**Table 4.11: Summarized Information of Normality Test**

Variables	Items	Skewness	Kurtosis
Tangibles (T)	T1	-0.5551	-0.6420
	T2	-0.3850	-0.4461
	T3	-0.6930	0.2568
	T4	-0.8048	0.6336
	T5	-0.5786	-0.2567
	T6	-0.3865	-0.3780
Reliability (R)	R1	-0.5442	-0.1464
	R2	-0.5453	-0.0273
	R3	-0.6322	-0.0361
	R4	-0.6248	0.2700
	R5	-0.4398	-0.1868
Responsiveness (RP)	RP1	-0.5344	0.0401
	RP2	-0.4342	0.2980
	RP3	-0.6379	0.0027
	RP4	-0.5244	-0.2946
	RP5	-0.2784	-0.3153
Assurance (A)	A1	-0.5487	-0.0532
	A2	-0.5187	-0.1446
	A3	-0.6018	0.3120
	A4	-0.5773	0.2799
	A5	-0.7312	0.2518
Food Quality (FQ)	FQ1	-0.8945	0.6431
	FQ2	-0.4957	-0.3171
	FQ3	-0.7969	0.4184
	FQ4	-0.7052	0.1867
	FQ5	-0.6051	-0.0159
Customer Satisfaction (CS)	CS1	-0.6605	0.3091
	CS2	-0.6278	0.0476
	CS3	-0.4455	-0.0047
	CS4	-0.5941	0.1746
	CS5	-0.6341	-0.0707
	CS6	-0.4644	-0.2460

Source: Developed for the research

Table 4.11 demonstrates the results of normality test for every item of each variable. Among all the variables, FQ1 has the greatest skewness value at -0.8945 while RP5 has the smallest skewness value at -0.2784. Besides, the greatest kurtosis value is 0.6431 for FQ1 while the smallest kurtosis value is 0.0027 for RP3. Since every item has the value of skewness fall within range of  $\pm 3$  and the value of kurtosis fall within range of  $\pm 10$ , thus all items for each variable are normally distributed (Kline, 2005). The assumption of parametric test was fulfilled (Norman, 2010).

### 4.3 Inferential Analysis

#### 4.3.1 Pearson’s Correlation Analysis

Table 4.12: Results of Pearson’s Correlation Analysis

Variables	T	R	RP	A	FQ
T	1.0000				
R	0.5630 Sig.<0.0001	1.0000			
RP	0.4846 Sig.<0.0001	0.6793 Sig.<0.0001	1.0000		
A	0.5358 Sig.<0.0001	0.6797 Sig.<0.0001	0.6725 Sig.<0.0001	1.0000	
FQ	0.4548 Sig.<0.0001	0.4716 Sig.<0.0001	0.4460 Sig.<0.0001	0.5156 Sig.<0.0001	1.0000

Source: Developed for the research

Based on Hair et al. (1998), multicollinearity problem exists if the coefficient values among the IVs exceed 0.9. From the table 4.12, the result of Pearson’s correlation analysis depicts that the coefficient values among the IVs range from 0.4460 to 0.6797 in which the highest is scored between reliability and assurance while the lowest is scored between responsiveness and food quality. Hence, it can be concluded that multicollinearity problem doesn’t exist in this study as the highest coefficient value is merely 0.6797, which is lower than the threshold level of 0.9.



### 4.3.2 Multiple Linear Regression (MLR) Analysis

Table 4.13: Model Summary

Root MSE	Dependent Mean	Coefficient Variation	R-square	Adjusted R-square
0.4418	3.7606	11.7483	0.6615	0.6548

Source: Developed for the research

By referring to table 4.13 above, value of R-square scores at 0.6615. This means 66.15% of the variation of the DV (customer satisfaction) can be explained by the IVs consisting of food quality, reliability, tangibles, assurance and responsiveness. In other words, 33.85% of the variation of the DV is accounted for other predictors that are not tested in this study.

Table 4.14: Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr>F
Model	5	96.4963	19.2993	98.87	<0.0001
Error	253	49.3843	0.1952		
Corrected Total	258	145.8805			

Source: Developed for the research

From the table 4.14, the F-value (98.87) is large and the p-value (<0.0001) is less than 0.05. This means at least one of the 5 IVs can be used in modeling DV. Hence, model fit is achieved.

Table 4.15: Multiple Linear Regression

Variable	Parameter Estimate	Pr > t	Standard Estimate	Tolerance	Variance Inflation	Hypotheses testing
Intercept	-0.1396	0.4451	0	.	0	
T	-0.0681	0.1186	-0.0732	0.6118	1.6347	Not Supported
R	0.3422	<.0001	0.3345	0.4125	2.4243	Supported
RP	0.0425	0.4363	0.0425	0.4508	2.2181	Not Supported
A	0.2359	0.0001	0.2187	0.4166	2.4002	Supported
FQ	0.4633	<.0001	0.4343	0.6753	1.4808	Supported

Source: Developed for the research

Based on the table 4.15, tolerance values of every IV range within 0.4125 to 0.6753 and variance inflation factors range within of 1.4808 to 2.4243. These once again proved that multicollinearity problem doesn't exist as all IVs have variance inflation factors lower than 10 and tolerance values more than 0.10 (Hair et al., 2005; O'brien, 2007).

In addition, according to Hair et al. (2003), the relationship between IV and DV will be significant and alternative hypothesis will be supported if the p-value of the IV is smaller than 0.05. By referring to the table 4.3.2.3, the hypotheses for three IVs which are H<sub>2</sub> (R), H<sub>4</sub> (A) and H<sub>5</sub> (FQ) are supported as their p-values are less than 0.05. On the contrary, the hypotheses for two IVs which are H<sub>1</sub> (T) and H<sub>3</sub> (RP) are not supported as their p-values are larger than 0.05 which are 0.4451 and 0.4363 respectively. Consequently, it can be concluded that reliability, assurance and food quality are significantly related to customer satisfaction while tangibles and responsiveness are insignificantly related to customer satisfaction in this study.

Furthermore, the parameter estimates ( $\beta$ ) is used to determine which IVs is most effectively in affecting the DV (Hair, Black, Babin, Anderson, & Tatham, 2006). Based on the table 4.15, food quality ( $\beta = 0.4633$ ) is the greatest significant antecedent affecting customer satisfaction, followed by reliability ( $\beta = 0.3422$ ), assurance ( $\beta = 0.2359$ ), tangibles ( $\beta = -0.0681$ ) and ultimately responsiveness ( $\beta = 0.0425$ ) which is the antecedent least affecting customer satisfaction.

Therefore, the regression equation is formulated as:

$$CS = -0.1396 - 0.0681 (T) + 0.3422 (R) + 0.0425 (RP) + 0.2359 (A) + 0.4633 (FQ)$$

This equation implies that all the IVs possess a positive relationship with the customer satisfaction excluding tangibles (T). From the equation, we can conclude that customer satisfaction will decrease by 0.0681 if tangibles increases by 1 provided other IVs remain unchanged. Besides, if reliability, responsiveness, assurance and food quality increase by 1 respectively, the customer satisfaction will increase by 0.3422, 0.0425, 0.2359 and 0.4633 respectively provided that the remaining four IVs remain constant. The value of intercept indicates the mean value of customer satisfaction of Penang tourists when all IVs are equal to 0. In short, food quality was proved to be the dominant IV which has the strongest influence on customer satisfaction.

## **4.4 Conclusion**

The research findings were discussed in Chapter 4. The supported hypotheses are H<sub>2</sub>, H<sub>4</sub> and H<sub>5</sub> and hypotheses which are not supported in this study are H<sub>1</sub> and H<sub>3</sub>. Besides, a MLR equation has been developed in this chapter. The following chapter is going to deliberate findings based on the analyzed results.

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

### **5.0 Introduction**

In Chapter 5, a deep discussion on the data analysis and findings were carried out by comparing the past literatures hypotheses with our actual data outcome. Besides, the implications, limitations as well as recommendations of the research also would be discussed in this chapter. Lastly, Chapter 5 would comprehensively and extensively conclude the result of this research.

## 5.1 Summary of Statistical Analysis

### 5.1.1 Summary of Descriptive Analysis

Table 5.1: Summarized Information of Demographic Profile

Profile	Category	Frequency	Percentage (%)
Gender	Female	126	48.65
	Male	133	51.35
Age Group	25 or less	77	29.73
	26-30	53	20.46
	31-35	36	13.90
	36-40	26	10.04
	41-45	25	9.65
	45 and above	42	16.22
Marital Status	Single	145	55.98
	Married	114	44.02
Visitation Pattern	First time	158	61.00
	Repeat	101	39.00
Length of Stay	1-6	186	71.81
	7-12	51	19.69
	13-18	7	2.70
	More than 19	15	5.79
Purpose of Visit	Business	37	14.29
	Leisure/Holiday	199	76.83
	Education	23	8.88
	Others	0	0.00
Geographical Origin	Malaysia but other than Penang state	129	49.81
	Asia (Exclude Malaysia)	62	23.94
	Europe	28	10.81
	Africa	6	2.32
	South America	8	3.09
	North America	15	5.79
	Oceanic	11	4.25
Antarctic	0	0.00	
Who do you come with	Family	50	19.31
	Friends	82	31.66
	Lover/Couple	44	16.99
	Alone	24	9.27
	Tour group	58	22.39
	Others	1	0.39

Source: Developed for the research

The demographic profile of 259 valid respondents is presented in table 5.1. This data was collected from 126 (48.65%) female and 133 (51.35%) male. Majority of the valid respondents are not older than 25 years old (29.73%) and not married (55.98%). Out of the 259 valid respondents, 61.00% of them are visiting Penang for the first time and the remaining 39.00% had visited Penang before.

Additionally, most of the respondents stayed at Penang for 1 to 6 days (71.81%) for leisure/holiday purpose (76.83%) and most of them come together with friends (31.66%). Furthermore, nearly half of the respondents (49.81%) are Malaysians come from other than Penang state while the largest portion of foreign tourists come from other Asian nations (23.94%).

### **5.1.2 Summary of Scale Measurement**

According to the outcome of the research, all items in the survey questionnaire scores Cronbach's alpha value of not less than 0.8, thus reliability test has been met excellently and the questionnaire is reliable (Sekaran, 2003).

Additionally, all items in the survey questionnaire score the value of skewness within range of  $\pm 3$  and the value of kurtosis within range of  $\pm 10$ , thus all items for each variable are normally distributed (Kline, 2005). Hence the assumption of parametric test was fulfilled (Norman, 2010).

### 5.1.3 Summary of Inferential Analysis

Based on the result of Pearson's correlation analysis, multicollinearity problem wasn't exist in this study as the coefficient values among all IVs are less than 0.9. Besides, non-existence of multicollinearity problem was proved as the results of MLR analysis demonstrate tolerance values scored by all IVs are more than 0.10 and variance inflation factors scored by all IVs are lower than 10 (Hair et al., 1998; Hair et al., 2005; O'brien, 2007).

Table 5.2: Summarized Information of Inferential Analyses

Hypothesis	MLR		Result
	P-value	Beta	
H <sub>1</sub>	0.1186	-0.0681	Not Supported
H <sub>2</sub>	<.0001	0.3422	Supported
H <sub>3</sub>	0.4363	0.0425	Not Supported
H <sub>4</sub>	0.0001	0.2359	Supported
H <sub>5</sub>	<.0001	0.4633	Supported

Source: Developed for the research

Apart from it, as shows at table 5.2, MLR model's R-square scored at 0.6615. This means 66.15% of the variation of the customer satisfaction of Penang tourists can be explained by the IVs consisting of tangibles, reliability, responsiveness, assurance and food quality. Moreover, for the analysis of variance in MLR analysis, F-value (98.87) is large and the p-value (<0.0001) is less than 0.05. This means at least one of the 5 IVs can be used in modeling DV. Hence, model fit is achieved.

Based on the MLR analysis, the hypotheses are supported with the condition of p-value <0.05 (Hair et al., 2003). Hence, based on the outcome of MLR analysis in this study, H<sub>2</sub>, H<sub>4</sub> and H<sub>5</sub> are supported which means reliability, assurance and food quality have a significant positive relationship with customer satisfaction of Penang tourists who patronize Penang hawker centres. Furthermore, H<sub>1</sub> and H<sub>3</sub> are not supported in this study. This means tangibles and responsiveness do not have significant positive relationship with customer satisfaction of Penang tourists who patronize Penang hawker centres.

## 5.2 Discussions of Major Findings

### 5.2.1 Tangibles

Table 5.3: Tangibles

Hypothesis	Result
H <sub>1</sub> : There is a significant positive relationship between tangibles and customer satisfaction of Penang tourists who patronizes Penang hawker centres.	Not Supported

Source: Developed for the research

Table 5.3 depicts that tangibles doesn't have significant positive relationship with the customer satisfaction of Penang tourists.

This result is contradicted with the past researches conducted by Allan (2016), Bostanji (2013) and Hussain et al. (2015) but consistent with the result of prior researches concluded by Kaura et al. (2015) as well as Ojo, Amoako-Sakyi, and Agyeman (2015). However, those previous studies were not conducted in food service sector as our study. Hence, this result can be said as a new finding for the application of SERVQUAL model in food service sector context.

In fact, the result of tangibles not significantly related to customer satisfaction in this study is justifiable as this study was focusing on hawker centre rather than the fine dining restaurants. Tangibles of fine dining restaurants was proved to be significantly and positively related to customer satisfaction. Thus, as compared to the fine dining, the customers of hawker centre may not expecting to have a highly comfortable dining area and may not too emphasized on the tangibles dimensions.



## 5.2.2 Reliability

Table 5.4: Reliability

Hypothesis	Result
H <sub>2</sub> : There is a significant positive relationship between reliability and customer satisfaction of Penang tourists who patronizes Penang hawker centres.	Supported

Source: Developed for the research

Table 5.4 displays that reliability is significantly and positively related with the customer satisfaction of Penang tourists.

This result is in correspondence with past studies carried out in the food service sector by Saad Andaleeb and Conway (2006), Teshome and Seyoum (2014) and Namin (2017). Besides, this result is also consistent with the research results conducted in non-food service sectors such as banking sector (Dauda & Lee, 2016), shipping sector (Yuen & Thai, 2015), retail sector (Mahfooz, 2014), mobile telecommunication sector (Agyapong, 2011), public transport sector (Horsu & Yeboah, 2015) and so on. This finding shows that the hawkers who serve customer precisely and timely will be able to amuse the tourists who order foods from them.

### 5.2.3 Responsiveness

Table 5.5: Responsiveness

Hypothesis	Result
H <sub>3</sub> : There is a significant positive relationship between responsiveness and customer satisfaction of Penang tourists who patronizes Penang hawker centres.	Not Supported

Source: Developed for the research

The satisfaction level of Penang tourists can't be predicted by the level of responsiveness as shown by the research result presented in table 5.5.

This outcome is in conformity with literatures issued by Saeed et al. (2014), Munusamy, Chelliah, and Hor (2010) and van Birgelen, Ghijsen, & Semeijn (2005) but inconsistent with the result of past studies conducted by Shanka (2012), Ismail et al. (2016) and Aghdaie and Faghani (2012).

Responsiveness dimension doesn't have a significant positive relationship with the customer satisfaction probably is because of this study choose tourists as target respondent. Majority of them may visit Penang only once in their life time. Hence, it is less likely that they will make complaints if they felt dissatisfied. Additionally, Hwang (2011) had included "extra effort to handle special request" as one of the features of responsiveness. This may be one of the reasons why responsiveness insignificantly related to tourist satisfaction because tourists are unlikely to make special request comparing to the local people. Moreover, tourists may also don't expect the hawkers not to be too busy and provide prompt service due to the hawker centres is perceived as a crowded dining area.

## 5.2.4 Assurance

Table 5.6: Assurance

Hypothesis	Result
H <sub>4</sub> : There is a significant positive relationship between assurance and customer satisfaction of Penang tourists who patronizes Penang hawker centres.	Supported

Source: Developed for the research

Assurance can significantly and positively affect the satisfaction level of Penang tourists based on the research result depicted in table 5.6.

This result is conflicting with the study conducted by Zhang, Xie, Huang, and He (2013) which conclude that assurance does not possess a significant direct relationship with customer satisfaction. However, this result is congruent with the research results concluded by Ahmad (2015), Keshavarz and Ali (2015) and Omar et al. (2016). This indicates that the courteous, friendly and polite hawkers able to delight the tourists who patronize their stalls.

### 5.2.5 Food Quality

Table 5.7: Food Quality

Hypothesis	Result
H <sub>5</sub> : There is a significant positive relationship between food quality and customer satisfaction of Penang tourists who patronizes Penang hawker centres.	Supported

Source: Developed for the research

Food quality has a positive and significant relationship with customer satisfaction of Penang tourists according to the research result presented in table 5.7.

Besides, in this study, food quality is found to be the most influential variable in affecting customer satisfaction. This result is conforming with various past researches that conducted by Ma, Qu, Njite, and Chen (2011), Haghghi et al. (2012) and Ryu et al. (2012).

Besides, there are also various past studies confirming the significance of food quality in affecting customer satisfaction (Hanaysha, 2016; Stranjancevic & Bulatovic, 2015; Ramanathan et al., 2016). This finding shows that the tasty and fresh foods served with enticing smell at Penang hawker centres are the main antecedent of Penang tourists' satisfaction.

## **5.3 Implications of the Study**

### **5.3.1 Managerial Implications**

Food quality has the largest influence in influencing the satisfaction level of Penang tourists was concluded in this research. Therefore, Penang State Government should emphasize on improving the quality of Penang street foods during policy setting process. More policies that assist in improving deliciousness, freshness, smell and unique taste of Penang street food should be framed. For instance, the policy of banning foreigners from cooking the street food at Penang hawker centres effective from 2016 is an excellent policy in improving Penang gastronomy tourism (Lim, 2014).

Besides that, the second most significant predictor of customer satisfaction was proved to be the reliability in this study. Thus, the hawkers who sell street foods at Penang hawker centres should be able to serve their customers timely and accurately. Besides, the hawkers themselves should be knowledgeable about the foods they are offering.

Considering assurance as another significant factor that positively related to customer satisfaction of Penang tourists, Penang State Government may conduct workshops to train the hawkers on how to serve their customer politely, courteous and friendly. Besides, the City Council of Penang Island (MBPP) should take actions to prevent the Penang hawkers from deceiving the tourists by overcharging them; thereby the tourists will feel safer in conducting transactions with the hawkers.

Last but not least, as tangibles and responsiveness was proved in this study as do not have significant relationship with customer satisfaction of Penang tourists, thus Penang State Government should prioritizes in considering other significant variables during policies setting. Subject to the scarce time and resource of Penang State Government, should prioritize other significant variables during policies setting. Moreover, Penang State Government are suggested to further investigate these two variables to ensure there is no any underlying reason that these two variables may affect the customer satisfaction of Penang tourists.

### **5.3.2 Theoretical Implications**

This research has confirmed the positive relationship between the food and service quality with satisfaction of customers particularly diners. Future researchers may refer to this study in their research on food service or tourism sector.

This study has adopted SERVQUAL model that developed by Parasuraman et al. (1988) which has been criticized as failed to take into consideration of food quality when this model is applied in food service sector (Namkung & Jang, 2007; Tan et al., 2014). In fact, food quality was proved by many literatures as one of the antecedents that has influence on customer satisfaction (Clark & Wood, 1999; Liang & Zhang, 2009; Koshki et al., 2014; Tan et al., 2014). Therefore, in order to better understand the quality attributes that lead to customer satisfaction, the scope of any research should go beyond the traditional SERVQUAL. In this respect, this study is contributable as this study takes food quality as one of the key variables. Not only that, the outcome of this study has shown that the parameter estimates ( $\beta$ ) of food quality is greater than service quality, which means that food quality has more significant influence on customer satisfaction than service quality.

Besides, in terms of sector, there are many past studies conducted to investigate customer satisfaction in various sectors. However, for food service sector, similar researches were conducted by focusing on restaurants instead of hawker centre (Polyorat & Sophonsiri, 2010; Ryu & Han, 2009; Ahmad, 2015). Hence, there is a doubt of whether SERVQUAL model is applicable in hawker centre. Thus, this study is contributable because the result of this study has shown that the R-square is valued at 0.6615 and the p-value of the model is less than 0.05; the SERVQUAL model in addressing customer satisfaction level in hawker centres has been validated.

Furthermore, in term of geographical location, there are only a few studies conducted on Penang, Malaysia food service sector (Zainol et al., 2015; Moorthy et al., 2016). Thus this study is contributable as it proved that SERVQUAL model is workable in Malaysia food service sector. The prospect researchers can reproduce the conceptual model of this study to indicate the relationship between service and food quality with customer satisfaction for food service sector in Penang, Malaysia. As there are limited literatures on the Penang hawker center and street food; thereby this study also enriches the foresaid literatures.

## **5.4 Limitations of the Study**

Due to time and budget constraints, cross-sectional approach was applied to conduct this research. Hence, the data only collected once (Mann, 2003). The collected data and analyzed results may only applicable for current situation and become plausible and irrelevant in the future (Carlson & Morrison, 2009).

Apart from this, due to cost effective reason, survey questionnaire is utilized in this research for data collection (McClelland, 1994). Hence, lack of cooperation and participation from respondents were faced during the data collection process. Besides, data collected through survey questionnaires might be bias due to the possibility of none of the questionnaire items and alternatives fit with respondent's perceptions and thought. Moreover, the respondent may felt irritated or being

forced. Hence, inappropriate responses may be collected and reduce the reliability of the research outcomes (Akbar, 2000).

Furthermore, in order to obtain the valid and accurate responses from the respondents, we could only select those respondents who have finished their meals. However, most of them left the hawker centres within short time once they have finished their meals. Thus, we only have limited time to approach them. This limitation has made the data collection to be more difficult.

In addition, as our target respondents consist of people come from different nations and speak in different languages, thereby communication barriers exist as not all of the tourists able to understand English even though we have adapted basic English in the questionnaire preparation and explained to the respondents regarding the questionnaire contents in their mother tongue such as Mandarin and Malay. Besides, the validity and reliability of the data collected may be affected by the misunderstanding of the respondents on the questionnaire items.

Additionally, H<sub>1</sub> and H<sub>3</sub> were not supported based on the result of this study means tangibles and responsiveness don't have significant positive relationship with customer satisfaction of Penang tourists. This may be due to some features of the variables are not included in the survey. For instance, surrounding temperature, scent, noise and lighting are not included in the questionnaires as the items of tangibles even though there are some researchers had included them (Bitner, 1992; Hanaysha, 2016).

On the other hand, based on the result of MLR analysis, value of R-square is 0.6615. This indicates that 33.85% of the variation of the customer satisfaction is accounted for other antecedents that are not tested in this study such as perceived quality, price fairness and so on. In fact, those variables were proved by various literatures as having significant positive relationship with customer satisfaction such as price fairness (Herrmann, Xia, Monroe, & Huber, 2007; Martín-Consuegra, Molina, & Esteban, 2007; Moorthy et al., 2016).



## **5.5 Recommendations for Future Research**

Throughout this research, few recommendations are proposed. Firstly, the future researchers are recommended to develop new conceptual framework which take into consideration of SERVQUAL, food quality, perceived value, price fairness and other variables to further investigate the antecedents of customer satisfaction. Hence, model with higher R-square value can be produced to better address the customer satisfaction of hawker centre as well as other segments of food service sector.

Furthermore, future researchers are suggested to apply interview as the data collection method to conduct further researches in the context of hawker centre. This enables the researchers to interpret the responses given by the respondents in a more comprehensive manner. Besides, collecting data through interview can prevent the respondents felt irritated when answering the questions by allowing them to “speak in their own voice and express their own thoughts and feelings” (Berg, 2007, p. 96). Moreover, open-ended questions asked during the interview able to discover the responses that respondents give spontaneously and therefore prevent the bias that arise from fixed alternatives given which do not fit with respondent’s thought (Reja, Manfreda, Hiebec, & Vehovar, 2003).

Additionally, the researchers may conduct longitudinal study in the similar context with this research as longitudinal research studies a phenomenon for various points of time. Thus, longitudinal study is more appropriate as it is able to investigate the changes of the perception and satisfaction of Penang tourists towards Penang hawker centres’ service and food quality which may vary over time (Caruana, Roman, Hernández-Sánchez, & Solli, 2015).

Besides, it is suggested that the questionnaires can be translated in several languages such as Japanese, Korean, Mandarin and others in order to enhance the respondents understanding toward the survey questionnaire. In addition, professional linguists and translators should be involved in the translation of the questionnaires to ensure the translated questionnaires contain the similar meaning.

## **5.6 Conclusion**

In a nutshell, all variables except for tangibles and responsiveness played their remarkable and significant roles in positively affecting the customer satisfaction of Penang tourists. Based on the result of this study, food quality was proved to be the most influential variable affecting customer satisfaction in food service sector. Moreover, few justifications were given to explain why tangibles and responsiveness have no significant positive relationship with customer satisfaction of Penang tourists. In other words, the objectives of this study have been achieved which is to examine the influences of service and food quality on customer satisfaction in the context of food service industry in Penang particularly hawker centres.

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Appendix A: Summary of Past Empirical Studies

Variables	Researcher(s)	Country	Sample size	Purpose	Unit of analysis / Target respondents	Major Findings
Tangibles	Allan (2016)	Ghana	421	To investigate the effect of service quality on customer satisfaction and retention among selected luxury hotels in Ghana.	Customers of selected luxury hotels in Accra.	Tangibles make the highest influence on service quality.
	Hussain, Al Nasser and Hussain (2015)	Dubai	253	To investigate the linkages among service quality, service provider image, customer expectations, perceived value, customer satisfaction and brand loyalty in a Dubai-based airline.	Passengers of Dubai International Airport Terminal 3 at the departure area close to the boarding area and at the “Duty Free Area”	Tangibles are significantly affecting service quality.
	Bostanji (2013)	Saudi Arabia	333	To determine the impact of service quality (quick responsiveness, empathy and tangibility) on customers loyalty in five stars hotels.	All five stars hotel's clients whom staying in hotels.	Tangibles is positively impacting the hotel service quality, which subsequently affecting the customer satisfaction and customer loyalty.
	Kawpong and Suvenus (2010)	Thailand	395	To examine how each dimension of service quality may exhibit different impacts on customer satisfaction and customer loyalty in the chain restaurant context	Thailand undergraduate students	Out of the five service quality dimensions, only tangibles and empathy have positive influences on customer satisfaction.
	Kaura, Durga and Sharma (2015)	India	445	To examine the extent to which service quality, perceived price and fairness and service convenience influence customer satisfaction and customer loyalty for Indian retail banking sector	Urban customers of retail banking in both public and new private sector banks in Rajasthan	Tangibility does not have significant impact on customer satisfaction and customer loyalty.

Variables	Researcher(s)	Country	Sample size	Purpose	Unit of analysis / Target respondents	Major Findings
Reliability	Dauda and Lee (2016)	Nigeria	1245	To evaluate the perceptions of Nigerian banking customers regarding customers' evaluation of their banks service quality based on their banks actual performance on current banking service delivery.	Current banking customers who had used one of the three major banks in Nigeria within the last 90 days.	Reliability has a significant impact on customer satisfaction.
	Teshome and Seyoum (2014)	Ethiopia	250	To investigate satisfaction level among guests who use the goods and services of hotels, restaurants, and pensions in Wolaita Sodo City.	Foreign and local guests who stayed and used the selected hotels and restaurants.	Reliability is one of the service quality dimensions that has significant impact on customer satisfaction.
	Sakhaei, Afshar and Esmaili (2014)	Iran	384	To understand the impact of service quality factors of Internet Banking on customer satisfaction in Iran.	Customers that use internet bank services in Tehran, Iran.	Reliability has the most significant influence on customer satisfaction among all the service quality dimensions.
	Yuen and Thai (2015)	Singapore	183	To identify the dimensions of service quality (SQ) in liner shipping and examine their effects on customer satisfaction.	The users of container shipping services.	Reliability is significantly influencing the customer satisfaction.
	Mahfooz (2014)	Saudi Arabia	185	To determine the perception of retail service quality and its relationship with satisfaction for customers of hypermarkets in the Kingdom of Saudi Arabia.	Customers of four hypermarkets having a majority market share in Saudi Arabia	Reliability has the second highest influence on customer satisfaction among all the service quality dimensions.

Variables	Researcher(s)	Country	Sample size	Purpose	Unit of analysis / Target respondents	Major Findings
Responsiveness	Namin (2017)	United States of America	250	To investigate ways to improve behavioral intentions through customer satisfaction and service quality in the fast food restaurant context.	Customers from three locations of one of the largest and most popular fast food restaurants in the nation in a large city in the US.	Responsiveness is second dimension that affect the service quality, which subsequently impacts on the customer satisfaction.
	Leong et al. (2015)	Malaysia	300	To examine the impacts of the SERVPERF dimensions on customer satisfaction towards loyalty among low cost and full service airlines.	Passagers at Kuala Lumpur International Airport.	Responsiveness has positive and significant impact on customer satisfaction and loyalty.
	Ismail, Zaki and Rose (2016)	Malaysia	100	To measure the relationship between service quality, customer satisfaction and customers' loyalty.	Customers who received treatments at the medical organization.	Responsiveness has strong correlation with customer satisfaction.
	Shanka (2012)	Ethiopia	245	To measure the quality of service offered by private banks operating in Ethiopia.	Customer of banking services in Hawassa city	Responsiveness has the most significant impact on customer satisfaction.
	Aghdaie and Faghani (2012)	Iran	120	To examine the relationship between mobile banking services and customer satisfaction by applying SERVQUAL model.	Users of mobile banking service in Iran.	Responsiveness is strongly correlated with customer satisfaction.

Variables	Researcher(s)	Country	Sample size	Purpose	Unit of analysis / Target respondents	Major Findings
Assurance	Omar, Ariffin and Ahmad (2016)	Malaysia	411	To provide additional insight into the relationship between service quality and customer satisfaction by examining the moderating effect of customers' gender in Arabic restaurants and to identify the extent of each service quality attributes in relation with customer satisfaction as they are perceived by Malaysian customers.	Individuals who patronized and received services from the Arabic restaurants in Shah Alam, Selangor, Malaysia.	Assurance is the most significant dimension among the five service quality dimensions in affecting customer satisfaction.
	Kitapci, Akdogan and Dortyol (2014)	Turkey	369	To investigate the effect of service quality (SQ) dimensions on satisfaction, identifying the effect of satisfaction on word of mouth (WOM) communication and repurchase intention (RI) and searching a significant relationship between WOM and RI.	Patients who were treated in one of the largest university hospital in Turkey.	Out of the five service quality dimensions, only empathy and assurance have significant and positive impact on customer satisfaction.
	Anjum, Aftab, Sultan and Ahmed (2016)	Pakistan	255	To find if there is any relationship between service quality and customer satisfaction in the telecom industry of Pakistan.	Customers of telecom sector of Pakistan.	There is a significant and positive relationship between assurance dimensions of SERVQUAL and customer satisfaction.
	Chatzoglou, Chatzoudes, Vraimaki and Leivaditou (2014)	Greece	492	To measure the level of services provided by the Hellenic Post and evaluate the satisfaction of its customers (citizens).	Customers and branch managers of the Hellenic Post branches.	Among the SERVQUAL attributes, assurance has the second most significant impact on customer satisfaction.
	Huang (2012)	Taiwan	498	To examine the customers' perspectives with regard to service quality of night market in Taiwan.	Customers in night market of Taiwan.	Assurance is significantly influencing customer satisfaction.

Variables	Researcher(s)	Country	Sample size	Purpose	Unit of analysis / Target respondents	Major Findings
Food Quality	Ramanathan, Di and Ramanathan (2016)	United Kingdom	204	To examine the importance of factors influencing customer satisfaction in the context of a Chinese buffet restaurant in the UK.	Customers of a Chinese buffet restaurant in the UK.	Food quality is the most significant factor that influences customer satisfaction.
	Hanaysha (2016)	Malaysia	242	To examine the effects of food quality on customer satisfaction in fast food restaurant industry in Malaysian market.	Customers of international fast food restaurant in east coast Malaysia.	Food quality is one of the factor that has significant and positive impact on customer satisfaction.
	Rashid, Adbullah, Yusuf and Shaari (2016)	Malaysia	1000	To describe the relationship food quality and customer satisfaction.	Undergraduates at 20 Malaysia institutions and universities.	Food quality has a significant and positive impact on customer satisfaction.
	El-Said and Fathy (2015)	Egypt	543	To determine university students' satisfaction with different dimensions of food and beverage services.	All students enrolled in first, second, third and fourth years of undergraduate programs at the University of Alexandria, Alexandria, Egypt.	Food quality is positively correlated with the students' overall satisfaction.
	Stranjancevic and Bulatovic (2015)	Montenegro	156	To show that restaurant guest satisfaction depends on numerous factors as well as to show the connection between satisfaction and loyalty.	Restaurant guests of twenty restaurants located in the Municipality of Bar.	There is a strong and positive relationship between food quality and customer satisfaction.



Appendix B: Table of Variables and Measurements

Variables	Items	Descriptions	References	Measurements
Independent Variable 1: Tangibles	T1	The dining area is clean.	Wen et al. (2012)	Interval – Five-point Likert Scale
	T2	The hawkers appear neat.		
	T3	There are seats available for dining.		
	T4	The menu is easily readable.	Bougoure and Neu (2010)	
	T5	The menu is visually attractive.		
	T6	The dining area is comfortable.		

Variables	Items	Descriptions	References	Measurements
Independent Variable 2: Reliability	R1	The hawkers serve you in the time promised.	Bougoure and Neu (2010)	Interval – Five-point Likert Scale
	R2	The hawkers quickly correct anything that is wrong.		
	R3	The hawkers serve your food exactly as you ordered it.		
	R4	The hawkers are able and willing to give you information about menu items and their ingredients.	Hwang (2011)	
	R5	The hawkers are dependable.	Wen et al. (2012)	

<b>Variables</b>	<b>Items</b>	<b>Descriptions</b>	<b>References</b>	<b>Measurements</b>
Independent Variable 3: Responsiveness	RP1	The hawkers provide prompt and quick service.	Hwang (2011)	Interval – Five-point Likert Scale
	RP2	The hawkers give extra effort to handle your special requests.		
	RP3	The hawkers are always willing to help you.	Wen et al. (2012)	
	RP4	The hawkers are never too busy to respond your request.	Allan (2016)	
	RP5	The hawkers are able to handle your complaints immediately.	Sum and Hui (2009)	
<b>Variables</b>	<b>Items</b>	<b>Descriptions</b>	<b>References</b>	<b>Measurements</b>
Independent Variable 4: Assurance	A1	You can trust the hawkers in this hawker centre.	Wen et al. (2012)	Interval – Five-point Likert Scale
	A2	The hawkers are consistently friendly and courteous.		
	A3	You feel safe in conducting financial transactions with the hawkers.		
	A4	The hawkers are knowledgeable about your food and beverage questions.		
	A5	The hawkers are polite.	Al-Rousan and Mohamed (2010)	

<b>Variables</b>	<b>Items</b>	<b>Descriptions</b>	<b>References</b>	<b>Measurements</b>
Independent Variable 5: Food Quality	FQ1	This hawker centre serves tasty food.	Hwang (2011)	Interval – Five-point Likert Scale
	FQ2	This hawker centre serves fresh food.		
	FQ3	This hawker centre serves the food at appropriate temperature.		
	FQ4	This hawker centre serves the food with enticing smell.	Ryu et al. (2012)	
	FQ5	This hawker centre serves the food with suitable portion size.	Hwang (2011)	
<b>Variables</b>	<b>Items</b>	<b>Descriptions</b>	<b>References</b>	<b>Measurements</b>
Dependent Variable: Customer Satisfaction	CS1	You are satisfied with your decision to dine at this hawker centre.	Wen et al. (2012)	Interval – Five-point Likert Scale
	CS2	Your choice to dine at this hawker centre was a wise one.		
	CS3	You think you did the right thing when you chose to dine at this hawker centre.		
	CS4	You feel enjoyable with your experience to dine at this hawker centre.		
	CS5	You will introduce this hawker centre to other people.	Phan and Nham (2015)	
	CS6	Overall, this hawker centre puts you in a good mood.	Ryu et al. (2012)	

Appendix C: Permission letter to conduct survey



**UNIVERSITI TUNKU ABDUL RAHMAN**

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31<sup>st</sup> March 2017

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.

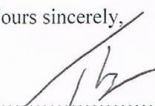
The students are as follows:


<u>Name of Student</u>	<u>Student ID</u>
Ong Zhan Hao	14ABB07860
Chong Kim Seong	15ABB01024
Emylia Cheong Ai Lin	14ABB00095
Teoh Yoon Chee	13ABB03965
Yong Chee Min	13ABB03333

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

Thank you.

Yours sincerely,

  
.....  
Ms Theresa Wong Lai Har  
Head of Department,  
Faculty of Business and Finance  
Email: wonglh@utar.edu.my

  
.....  
Dr Krishna Moorthy Manicka Nadar  
Supervisor,  
Faculty of Business and Finance  
Email: krishnam@utar.edu.my

Address: Jalan Sg. Long, Bandar Sg. Long, Cheras, 43000 Kajang, Selangor D.E. Postal Address: P O Box 11384, 50744 Kuala Lumpur, Malaysia  
Tel: (603) 9086 0288 Fax: (603) 9019 8868 Homepage: <http://www.utar.edu.my>



# Universiti Tunku Abdul Rahman

## Customer satisfaction on Penang hawker centre, Malaysia: The perception of Penang tourists

### Survey Questionnaire

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Dear Respondent,

We are final year undergraduate students of Bachelor of Commerce (Hons) Accounting, Universiti Tunku Abdul Rahman (UTAR). The purpose of this survey is to conduct a research to investigate the service quality dimensions (tangibles, reliability, responsiveness, assurance) and food quality that affect customer satisfaction of Penang tourists who patronize Penang hawker centres. Please answer all questions to the best of your knowledge. There are no wrong responses to any of these statements. All responses are collected for academic research purpose and will be kept strictly confidential.

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 less than 5 minutes.
  - 3) The contents of this questionnaire will be kept strictly confidential.
- 

#### Voluntary Nature of the Study

Participation in this research is entirely voluntary. Even if you decide to participate now, you may change your mind and stop at any time. There is no foreseeable risk of harm or discomfort in answering this questionnaire. This is an anonymous questionnaire; as such, it is not able to trace response back to any individual participant. All information collected is treated as strictly confidential and will be used for the purpose of this study only.

I have been informed about the purpose of the study and I give my consent to participate in this survey.  
YES ( ) NO ( )

*Note: If yes, you may proceed to next page or if no, you may return the questionnaire to researchers and thanks for your time and cooperation.*

#### Section A: Demographic Profile

***In this section, we would like you to fill in some of your personal details. Please tick your answer and your answers will be kept strictly confidential.***

QA 1: Gender:                     Female                     Male

QA 2: Age:

- 25 years or less
- 26 to 30 years
- 31 to 35 years
- 36 to 40 years
- 41 to 45 years
- Above 45

QA 3: Marital status:         Single                     Married

QA 4: Visitation Pattern:  First Time Visit         Repeat Visit

QA 5: Length of Stay in Penang

- 1-6 Days
- 7-12 Days
- 13-18 Days
- More than 19 Days

QA 6: Purpose of Visit

- Business
- Leisure / Holiday
- Education
- Others (Please Specify): \_\_\_\_\_

QA 7: Geographical Origin

- Malaysia but Other than Penang State
- Asia (Exclude Malaysia)
- Europe
- Africa
- South America
- North America
- Oceanic
- Antarctic

QA 8: Who Do You Come Together With

- Family
- Friends
- Lover / Couple
- Alone
- Tour Group
- Others (Please Specify): \_\_\_\_\_

**Section B: Quality Dimensions**

*This section is seeking your opinion regarding the importance of different types of service quality and food quality. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5-point 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.*

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Tangibles</b>						
T1	The dining area is clean.	1	2	3	4	5
T2	The hawkers appear neat.	1	2	3	4	5
T3	There are seats available for dining.	1	2	3	4	5
T4	The menu is easily readable.	1	2	3	4	5
T5	The menu is visually attractive.	1	2	3	4	5
T6	The dining area is comfortable.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Reliability</b>						
R1	The hawkers serve you in the time promised.	1	2	3	4	5
R2	The hawkers quickly correct anything that is wrong.	1	2	3	4	5
R3	The hawkers serve your food exactly as you ordered it.	1	2	3	4	5
R4	The hawkers are able and willing to give you information about menu items and their ingredients.	1	2	3	4	5
R5	The hawkers are dependable.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Responsiveness</b>						
RP1	The hawkers provide prompt and quick service.	1	2	3	4	5
RP2	The hawkers give extra effort to handle your special requests.	1	2	3	4	5
RP3	The hawkers are always willing to help you.	1	2	3	4	5
RP4	The hawkers are never too busy to respond your request.	1	2	3	4	5
RP5	The hawkers are able to handle your complaints immediately.	1	2	3	4	5

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Assurance</b>						
A1	You can trust the hawkers in this hawker centre.	1	2	3	4	5
A2	The hawkers are consistently friendly and courteous.	1	2	3	4	5
A3	You feel safe in conducting financial transactions with the hawkers.	1	2	3	4	5
A4	The hawkers are knowledgeable about your food and beverage questions.	1	2	3	4	5
A5	The hawkers are polite.	1	2	3	4	5



No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Food Quality</b>						
FQ1	This hawker centre serves tasty food.	1	2	3	4	5
FQ2	This hawker centre serves fresh food.	1	2	3	4	5
FQ3	This hawker centre serves the food at appropriate temperature.	1	2	3	4	5
FQ4	This hawker centre serves the food with enticing smell.	1	2	3	4	5
FQ5	This hawker centre serves the food with suitable portion size.	1	2	3	4	5

**Section C: Customer Satisfaction**

*This section is seeking your opinion regarding the impacts of customer satisfaction with the types of service quality and food quality provided. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 5-point 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.*

No	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>Customer Satisfaction</b>						
CS1	You are satisfied with your decision to dine at this hawker centre.	1	2	3	4	5
CS2	Your choice to dine at this hawker centre was a wise one.	1	2	3	4	5
CS3	You think you did the right thing when you chose to dine at this hawker centre.	1	2	3	4	5
CS4	You feel enjoyable with your experience to dine at this hawker centre.	1	2	3	4	5
CS5	You will introduce this hawker centre to other people.	1	2	3	4	5
CS6	Overall, this hawker centre puts you in a good mood.	1	2	3	4	5

- We appreciate your time and participation -