

**AAMC 2019**  
**The 13th Asian Academy of Management International**  
**Conference 2019**

**SERVICE QUALITY AND CUSTOMER SATISFACTION IN**  
**RESTAURANT INDUSTRY USING PARTIAL LEAST SQUARE**

Norfadzilah Abdul Razak (a)\*, Zaidi Mohd Aminuddin (b), Ayu Rohaidah Ghazali (c)  
\*Corresponding author

(a) Faculty Business Management, Universiti Teknologi MARA Selangor, Kampus Puncak Alam, Malaysia  
norfadzilah0438@gmail.com

(b) Faculty Business Management, Universiti Teknologi MARA Selangor, Kampus Puncak Alam, Malaysia  
pmzaidi@yahoo.com

(c) Faculty Business Management, Universiti Teknologi MARA Selangor, Kampus Puncak Alam, Malaysia  
ayurohaidah@gmail.com

***Abstract***

The restaurant business has changed due to a new trend of customer preferences and demand. As an entrepreneur, being flexible and adaptability to the changes needed to ensure they can serve and fulfil customer demand. Maintaining the service quality is the main strategies to tackle the customer to remain satisfied and loyalty with the restaurant service. Fail to maintain good service, and the restaurant may lose the customer and struggle to survive in the market and industry. Hence, the purpose of this paper is to investigate the underlying key dimensions of service quality in selected local restaurants influence customer satisfaction. The fundamental of the SERVQUAL model of reliability, responsiveness, empathy, price, tangibility and assurance has applied to this study. A survey conducted among local restaurants located in Bukit Jelutong and there were 238 customers have participated. Data further analysed using Partial Least Square (PLS), and the finding revealed only responsiveness and tangibility were not supported while assurance, empathy, price and reliability were significant to this study. The finding implies to further into the service quality factors as perceived by the customer in having a local restaurant in Malaysia. Besides, this the finding implies to managers to consider the strategies to sustain and maintain customer satisfaction.

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**Keywords:** Customer loyalty, customer satisfaction, service quality.



## 1. Introduction

The business trend nowadays struggles to survive in the competitive restaurant industry. Most of the business strategy aims to attract more customers with dedicated services and high quality of food that ultimately will create customer loyalty and increase customer satisfaction (Gilbert et al., 2004) through improving the service quality. Service quality has widely discussed in the foodservice industry, and most of the owner of the restaurant agreed that the service quality is one of the competitive advantages for them to offer to the customers and compete with other competitors. Throughout the service quality, a restaurant capable of increasing their customer satisfaction, gain more profit, attract more numbers of customers, and create loyalty among the customer (Ha & Jang, 2010). Recently, the local restaurant industries are competing with the high numbers of the international restaurant such as China, United Kingdom, Australia and Indonesia. All the competitors' have started up their business in Malaysia. Therefore, customer, either local or foreigner may have varieties choice of restaurants and the restaurant is competing with each other to gain the number of customers.

## 2. Problem Statement

The critical challenge for foodservice is a competitive market where all the restaurants in Malaysia struggle to maintain and sustain their services in the market (Seth et al., 2005). The competitive market influenced by the changes in customer preferences which are inevitable. Customers have their right and choice to fulfil their demand and intent to have a new experience of the services provided in the restaurant. To this point, a customer looking forward to the high service quality that can make them feel satisfied and willing to be a loyal customer. According to Munhurrun (2012), the elements that used to study service quality and customer satisfaction. However, most of the relevance of the findings and related to the practice in other countries such as the United States and China compared to practice among local restaurants in Malaysia (Chow et al., 2007; Kim et al., 2009; Kivela et al., 2000; Soriano, 2002).

### 2.1. Service quality (SERQUAL) theory

Fundamentally Theory of Service Quality (SERQUAL) has been introduced by Parasuraman, Zeithaml, and Berry in 1988. Most of the studied in service quality applied the theory to measure the service quality in various areas included foodservice. There are five elements of services quality consist of reliability, assurance, empathy, responsiveness, and tangible assets. Reliability refers to the dependably and accurately of delivering services to customers. In restaurant practices, the service must deliver accurate information that offers and order by customers. The service and information that share to customers consistent with what the restaurant offer and practice. The second element is responsiveness which refers to the volunteering values to offer assistance to customers. The restaurant commonly is responsible and responsive to the demand of the customer to maintain and sustain customer satisfaction and loyalty (Chen & Myagmarsuren, 2013). On the other hand, assurance relates to the service and staffs they have high courtesy when they serve customers, competency of employees to influence customers trust and confidence to the service offered. Moreover, empathy is another element that most of the restaurant needed to add in their service quality. Staffs and restaurant well understand the customer needs and demand. Finally, it is

tangible that physically appear to the customer when they visit the restaurant. The facilities, furniture, equipment, ambience and personnel of staffs (Yarimoglu, 2014).

## **2.2. Service quality and restaurant**

Empirical studies of service quality, and restaurant highlight discussion of reliability and empathy are the most common elements that highlight in restaurant services studies. Studies conducted by Lee et al. (2007) investigated the internal service quality of few restaurants in Jordan found reliability and empathy are significant to increase the restaurant performance and customer satisfaction. Another finding found that reliability and tangibles are also elements to promote more customers to the restaurant (Chowdhary & Prakash, 2007). Furthermore, Chowdhary and Prakash (2007) claimed elements of assurance and empathy are needed to have good communication and interpersonal relationship between staffs and customers. With those elements mentioned strongly convinced the restaurant to deliver high service quality to customers. However, the restaurant service quality is difficult to evaluate as the different assessments made to different service, theme, and operation of the restaurant. Therefore, the elements of service quality might be useful to drive the restaurant owners or managers to upgrade and deliver high service quality to the customers.

## **3. Research Questions**

Is there a significant relationship of reliability, assurance, empathy, responsiveness, and tangible assets towards customer satisfaction?

## **4. Purpose of the Study**

Consequently, this study aims to investigate the five elements of service quality consists of reliability, assurance, empathy, responsiveness, and tangible assets on customer satisfaction within local restaurants in Selangor. This study expected to facilitate local restaurants in Selangor to boost customer satisfaction by strengthening their food service.

## **5. Research Methods**

This study has surveyed 238 of customers who walked into the restaurant of One Serambi Cafe as located in Bukit Jelutong. There are 26 items of assurance, empathy, price, reliability, responsiveness and tangible and four items of customer satisfaction which adapted from Parasuraman et al. (1988). The selection of the customer used a convenient sampling technique that every customer entered the restaurant was selected as the sample of this studied. The data collected further analysis using statistical analysis of Partial Least Square (PLS) to investigate the significance of five dimensions of SERQUAL towards customer satisfaction. In PLS, there is a thorough analysis of the measurement model structural model.

## 6. Findings

### 6.1. Background of respondents

As shown in Table 01, a total of 235 respondents' shows that 150 customers group as working and 85 of them were non-working. Most of the customers visited and enjoyed the meal were among the working people. Moreover, the result indicated 57.44 per cent, which total of 135 customers was female and 42.55 per cent of 100 customers were male. The finding revealed this study dominantly responded by the female. Next, the highest number of customers which was 120 aged in between 25 to 35 years. The second higher responses were the customers who were aged 35 to 45 years old, with a total of 70 customers fast-food and only 20 of the respondents was aged 15 to 25 years old. The finding revealed that most of the customers who always visit the restaurant categorized as young and adults of this study.

**Table 01.** Demographic analysis

Demographic Profile		Total (n=235)	Frequency (%)
Status	Working	150	63.83
	Non-Working	85	36.17
Gender	Female	135	57.44
	Male	100	42.55
Aged	15-25	25	10.64
	25-35	120	51.06
	35-45	70	29.78
	45 and above	20	8.51

### 6.2. Measurement model assessment

Table 02 revealed the results of the measurement model. The result of factor loading indicates that of 26 indicators was higher than 0.5, which all were loaded highly on the construct. The constructs showed the convergent validity of assurance, empathy, price, reliability, responsiveness, tangible and customer satisfaction exceeded the recommended value 0.7 of composite reliability (Hair et al., 2010). Meanwhile, the result of the average variance extracted (AVE) is in the range of 0.564 to 0.756 and can explain that all the items tested are relevant and reliable to this study. As shown in Table 03, Fornell Lacker analysis interpreted the indicators measuring that constructs are adequate discriminant validity. The result assesses as the AVE values of the construct do not higher than the other constructs values. According to Compeau et al. (1999) that constructs should load more strongly on their construct while the AVE share between each construct also should be greater than the variance shared. The Figure 01 illustrated the measurement model of this study.

**Table 02.** Convergent validity analysis

Indicators	Factor Loadings	Composite Reliability	Average Variance Extracted (AVE)
Assurance1	0.780	0.89	0.67
Assurance2	0.847		
Assurance3	0.800		
Assurance4	0.845		
Empathy1	0.852	0.919	0.738

Empathy2	0.861		
Empathy3	0.852		
Empathy4	0.871		
Price1	0.841	0.806	0.675
Price2	0.801		
Reliability1	0.784	0.874	0.584
Reliability2	0.807		
Reliability3	0.812		
Reliability4	0.819		
Reliability5	0.572		
Responsiveness1	0.826	0.875	0.699
Responsiveness2	0.817		
Responsiveness3	0.865		
Tangible2	0.705	0.838	0.564
Tangible3	0.777		
Tangible5	0.776		
Tangible1	0.742		
Satisfaction1	0.854	0.925	0.756
Satisfaction2	0.868		
Satisfaction3	0.882		
Satisfaction4	0.874		

**Table 03.** Fornell lacker analysis

Constructs	1	2	3	4	5	6	7
1.Assurance	<b>0.819</b>						
2.Empathy	0.667	<b>0.859</b>					
3.Price	0.445	0.55	<b>0.822</b>				
4.Reliability	0.565	0.544	0.344	<b>0.764</b>			
5.Responsiveness	0.611	0.524	0.379	0.615	<b>0.836</b>		
6.Satisfaction	0.592	0.575	0.433	0.555	0.478	<b>0.87</b>	
7.Tangible	0.484	0.409	0.242	0.578	0.424	0.47	<b>0.751</b>

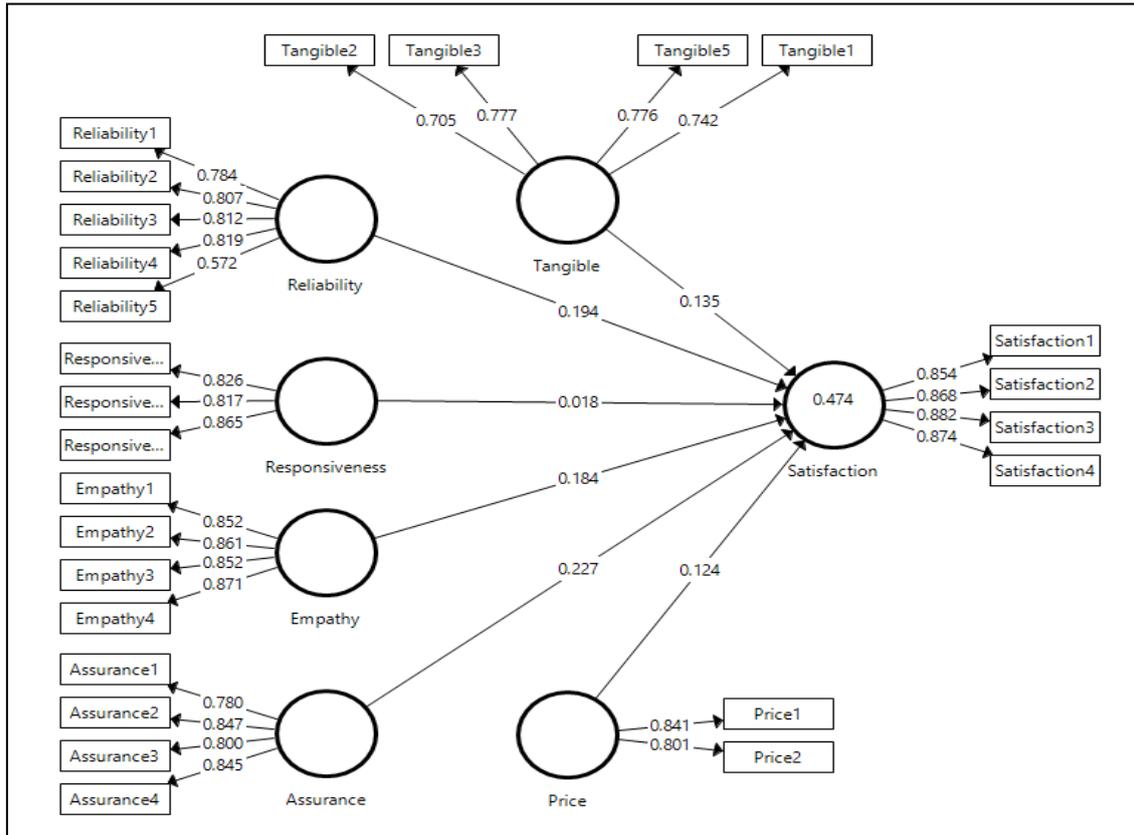
### 6.3. Structural model

In a structural model, Table 04 showed the path coefficient estimates using bootstrapping to assess significance value which is less than 0.05 equal to t-values must greater than 1.96 and confirmed with the confidence intervals assessment. The  $R^2$  value is 0.474, suggesting that 47.4 per cent of the variance in an extent of satisfaction can be explained by assurance, empathy, price, reliability, responsiveness and tangible. Result in Table 04 revealed that assurance, empathy, price and reliability are positively related to customer satisfaction. Hence, H1, H2, H3, H4 supported by this study. Besides, explained by Cohen (1988) the size of the effect of 0.02, 0.15 and 0.35 are weak, moderate and strong effects. In this study, there is a small effect size of assurance, empathy, price and reliability towards customer satisfaction. While responsiveness and tangible were not statistically significant towards customer satisfaction. Thus, H5 and H6 not supported for this studied. In final, the result revealed the lower limit, and upper limit values of assurance, empathy, price, reliability did not contain zero and explained the direct effects is significantly different from zero with 95 per cent confidence except for responsiveness and tangible.

The possibility of this happens to One Serambi Café highlight the most of the customer expects the employee knowledgeable of the food and attitude of the employees are presentable to the customer. The manager practically trains the employee to prioritise the customer. This possible create customer have appreciated and priority to the restaurant. More than that, this study highlights to understand the customer feeling and emotion are important due to minimising the feeling of dissonance or frustrated. For the price, this study explained that the affordable of the customer to pay the food and service with relevant price offer to them. Customer willing to pay more if the food and services meet their satisfaction. In the final finding, the reliability of the food and service delivery consistently significant to customer satisfaction as less error or mistake able to make the customer feel happy and satisfy. The dimension of responsiveness and tangible possible were not signed with customer satisfaction because the customer perceives and judge in a critical event such as peak hour of dining in, the employee lack of volunteering to assist the customers and provide excellent service. In the final discussion, the dimension of tangible was no significant due to the interior design, layout and physical of the restaurant need some improvement to fulfil the customer demand and satisfaction. The finding of this studied had similar finding with Lee et al. (2007) and Munhurrun (2012); however, all the dimensions of service quality measured were the strongest direct effects on user satisfaction. Hence, this study explained the different setting might influence the difference finding of this study.

**Table 04.** Structural model analysis

<b>Relationship</b>	<b>Beta Value</b>	<b>SE</b>	<b>T-Value</b>	<b>P Values</b>	<b>2.50%</b>	<b>97.50%</b>	<b>F</b>
Assurance -> Satisfaction	0.227	0.085	2.687	0.007	0.063	0.383	0.042
Empathy -> Satisfaction	0.184	0.083	2.218	0.027	0.012	0.339	0.029
Price -> Satisfaction	0.124	0.056	2.212	0.027	0.018	0.228	0.02
Reliability -> Satisfaction	0.194	0.082	2.367	0.018	0.051	0.365	0.033
Responsiveness -> Satisfaction	0.018	0.078	0.236	0.814	-0.129	0.167	0.000
Tangible -> Satisfaction	0.135	0.073	1.845	0.066	-0.011	0.286	0.022



**Figure 01.** Measurement model

## 7. Conclusion

As a conclusion, this study aimed to predict the reliability, the validity of determinant service quality and predict the relationship of the model in this study. The finding found that only responsiveness and tangibility were not statistically supported. In contrast to assurance, empathy, price and reliability supported by this study. The finding implies to perspective as manager. As a manager, the finding facilitates to learn about the demand of the customer towards their services and product. The entrepreneur has to improve the platform for the customer to give feedback while the staff will get feedback from the customer. Consistently, employees need well trained to response ethically and professional ways to customer's feedback and complaint. Training should concentrate not only to the business product and services but need included emotional intelligence as managing their own emotion and customer's emotion.

Further, improve and bring a new and creative idea to tackle the demand and changes in customer preferences. The change of customer preference is unpredictable; therefore, as an entrepreneur, they should be agile to the changes of the customer. The services and product that will increase the values of assurance, empathy, price and reliability. In a future study, this study recommends reviewing the SERQUAL dimension to purchase a mediating effect on customer loyalty and satisfaction among local restaurant.

## Acknowledgments

The research project conducted under the provision of a grant, the Internal Grant (DUCS 038/2018), awarded by the Universiti Teknologi MARA, Cawangan Selangor, Puncak Alam Campus for the support and other assistance.

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