

## **Consumers' Purchase Intentions in Fast Food Restaurants: An Empirical Study on Undergraduate Students**

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### **Abstract**

*The fast food industry in Malaysia is facing increasingly competitive challenges as with other industries around the world. The purpose of this study was to identify the key determinants of customer satisfaction in fast food outlets and the current perceived service quality level amongst undergraduate students in a public university in Malaysia. Besides, this study was aimed at identifying the significant relationships between customer satisfaction and customers purchase intentions. Questionnaires were distributed to 380 undergraduate students in the university where 358 (94.21%) students responded to the survey. Among the five dimensions tested, assurance was found to be the strongest determinant of customer satisfaction towards fast food restaurants (FFRs), followed by responsiveness, reliability, tangibility and empathy. The results also supported the contention that customer satisfaction can lead to customer purchase intentions. Recommendations to FFRs and discussions for future studies are also provided.*

**Keywords:** Service quality, Customer satisfaction, Purchase intentions, Undergraduate students, Fast food restaurants (FFRs)

### **1. Introduction**

Service quality is one of the vital determinants of customer satisfaction and it will directly affect the organizational success especially in the service industry such as fast food restaurants (FFRs). Nowadays, almost all the FFRs focus on several ways to increase their service quality in order to increase the level of satisfaction among their customers and thus increase their purchase intentions as well as loyalty (Qin & Prybutok, 2008; Gillbert, Veloutsou, Goode, & Moutinho, 2004; Kara, Kaynak, & Kucukemiroglu, 1995). When FFRs are able to achieve or exceed the expectations of customers, the customer will be satisfied with the service. For instance, McDonald's, KFC and Pizza Hut are striving hard to offer superior and unique service to their customers. Therefore, service quality measurement has to be done frequently and in a timely manner to obtain an accurate current level of service quality provided by the fast food industry in order to increase the customer satisfaction as well as to encourage the customer purchase intentions towards the restaurants (Gilbert et al., 2004).

Customer satisfaction is the individual's perception of the performance of the product or service in relation to his or her expectations. The concept of customer satisfaction is a function of customer expectations. A customer whose experience falls below expectations (e.g. a limited beverage list at an expensive restaurant or cold chicken served at a KFC) will be dissatisfied. Diners whose experiences match expectations will be satisfied; customers whose expectations are exceeded (e.g. by small samples of delicious food "from the Chef" served between courses at an expensive restaurant, or a well-designed play area for children at a McDonald's outlet) will be very satisfied or delighted. Besides, the degree of satisfaction provided by the goods or services of a firm as measured by the number of repeated customers (Leon & Leslie, 2006). As for many mature industries, high quality service is a cornerstone to every successful company to gain competitive advantage. Intense competition and high quality expectation from consumer have forced fast food industry to transform from a product-centric approach to a customer-centric approach. In Malaysia, fast food outlets such as McDonald's, KFC and Pizza Hut are undergoing dramatic transformations and are experiencing heightened competition (Yap & Kew, 2007). As stated by Chu, Kuang, and Chung (2000), FFRs are evolved from the conventional catering methods and standards to a more sophisticated operations and styles of services.

Flexibility and comfort are provided to consumers at more reasonable prices. Different customers' satisfaction in terms of tastes, drives, and upbringing are met; customer satisfaction is vital to other service-oriented establishments as well. Therefore, customers support and satisfaction are credited for the existences and mushrooming of FFRs. As a result, understanding each customer's distinct needs and recent service quality level are essential for FFRs to maintain and expand their market in this aggressive competitive environment. Thus, the purpose of this study is to identify the key determinants of customer satisfaction in those fast food outlets as well as the current perceived service quality level amongst undergraduate students in a Malaysian public university. Moreover, this study also aims to find out the significant relationships between customer satisfaction and customers purchase intentions.

## **2. Literature review**

### **2.1 The conceptual definition of the service quality and SERVPERF dimensions**

#### **2.1.1 Service Quality**

Service quality is reflected in a consumer's evaluative perception of an encountered service (Cronin & Taylor, 1994). They suggested that there are problems inherent in the use of the disconfirmation paradigm to measure service quality. Specifically, they argued that, if service quality is to be considered "similar to an attitude," as proposed by Parasuraman, Zeithaml, and Berry (1985), its operationalization could be better represented by an attitude-based conceptualization. Zeithaml and Bitner (2000) suggested that consumers judge the quality of the services based on their perceptions of the technical outcome provided, the process by which the outcome is delivered, and the quality of the physical surroundings where the service is delivered. Good execution on these aspects would result in highly perceived service quality for the company.

#### **2.1.2 SERVPERF model**

According to Audrey (2003), the development of the SERVPERF model is aimed at providing an alternative method of measuring perceived service quality and significance of the relationships between service quality, customer satisfaction, and purchase intentions. This model consisted of five dimensions which are:

**(1) Tangibility** – The concern here is with the condition of physical aspects of the FFRs, more specifically the physical environment of the FFRs, the equipments used to provide services and the FFRs' products consumed by the customers (Yuksel, 2001). Besides, it also referred to the presentation of the facilities' physical layout (i.e. clean environment with a nice decoration of the place) and the convenience offered to the customer (Subhash, Ashok, & Soon, 2000).

**(2) Reliability** – Reliability is the FFRs' regularity and consistency in performing services and the degree to which it inspires confidence and trust in customers. In operational terms, this means keeping promises, trustworthiness in transactions and the efficiency of the recovery process if anything goes wrong (Yuksel, 2001).

**(3) Responsiveness** – According to Parasuraman et al. (1985), Zeithaml, Parasuraman, and Berry (1990) and Fetus, Maxwell, and Godwin (2006) responsiveness is defined as willingness and readiness to help customers and provide prompt service.

**(4) Assurance** – Assurance means the knowledge and courtesy of employees and their ability to convey trust and confidence the firm provides to its customers. It also includes three main elements which are (i) Courtesy: politeness, respect, consideration, and friendliness of contact personnel; (ii) Credibility: trustworthiness, believability, and honesty of the service provider as well as (iii) Security: freedom from danger, risk, or doubt (Parasuraman et al., 1985; Zeithaml et al., 1990; Fetus et al., 2006).

**(5) Empathy** – This term means caring, individualized attention the firm provides to its customers. There are several components in this dimension which are (i) Access: approachability and ease of contact; (ii) Communication: keeping customers informed in languages they can understand and also listening to them; and (iii) Understanding Customers: making the effort to know customers and their needs (Parasuraman et al., 1985; Zeithaml et al., 1990; Hyung, 2006).

### **2.2 Interrelationship among service quality, customer satisfaction and purchase intentions**

The literature largely addresses the relationship between quality and satisfaction. Therefore, we focused on two most important and relevant studies. First, Cronin and Taylor (1992) tested the causal relationship between service quality and customer satisfaction. In their article, they noted that there is no consensus on the causal order of the quality and satisfaction from the perspective of marketing researchers, and suggested that the true nature of this empirical relationship is required for further justification. The findings confirmed that perceived service quality can have powerful impact on satisfaction.

Second, there are quite a number of studies exploring the relationship between service quality and satisfaction, for example, Spreng and Mackoy (1996) tested a model developed by Oliver (1993). There are two constructs reside in Oliver's model, and he proposes that perceived service quality is an antecedent of satisfaction. The results indicated that service quality leads to satisfaction. There are a lot of prior studies that illustrated the positive association of satisfaction with purchase intentions, likewise the characteristics of a product or service, customer loyalty and profitability (Anderson & Fornell, 1994; Anton, 1996; Bitner, 1990). Findings from Rust and Williams (1994) found that a high customer satisfaction leads to a high intent of repurchasing. On the other hand, dissatisfaction has been seen as a primary reason for customer defection or discontinuation of purchase. For example, Anton (1996) suggested that "customers switch suppliers because they are not satisfied with the company's perceived value, relative to the competition." As shown in Figure 1, the five SERVPERF dimensions serve as the independent variables and are used to find out which dimensions affect the most in customer satisfaction (dependent variable) towards FFRs. Besides, these dimensions also serve as indicators of customer perceived service quality level provided by FFRs. Simultaneously, there is no doubt that some studies did examine the consequences of customer satisfaction (e.g., Cronin, Brady, & Hult, 2000). However, to the best of the author's knowledge, few of the previous studies had attempted to investigate empirically in the Malaysian higher education context and the undergraduate students specifically.

Given the above, the following hypotheses are formulated:

- H1: *Tangibility will have a positive relationship with customer satisfaction.*
- H2: *Reliability will have a positive relationship with customer satisfaction.*
- H3: *Responsiveness will have a positive relationship with customer satisfaction.*
- H4: *Assurance will have a positive relationship with customer satisfaction.*
- H5: *Empathy will have a positive relationship with customer satisfaction.*
- H6: *Customer perceived service quality will have a positive relationship with customer satisfaction.*
- H7: *Customer satisfaction will have a positive relationship with purchase intentions.*

### **3. Methodology**

#### **3.1 Sample**

The research instrument of this research is in the form of a questionnaire. The research was conducted in a Malaysian public university where the population of this research was the students. The chosen population consisted of those who have had experiences with patronizing fast food outlets in Malaysia. The sampling technique used in this research was the convenience sampling and the total undergraduates were estimated to be more than 25000 people. According to Krejcie and Morgan (1970), the determination of sample size was based on the population and the number of sample size selected in this research was 380 undergraduate students. Only 358 questionnaires out of the total 380 had been collected due to the incomplete data and data error.

#### **3.2 Measurement**

In general, the measures employed in this study were acquired from previous researchers. The measurements used to gauge the five SERVPERF dimensions, customer satisfaction and purchase intentions were adapted mostly from Qin and Prybutok (2008) and Cronin and Taylor (1992). Most of the 22 items in the SERVPERF instrument were retained, and all of the items used in this research were selected from previous marketing and food research and later modified to the FFR experience. The measurement of tangibility consisted of five items (Johns & Howard, 1998; Kara et al., 1995). Whereas Cronin and Taylor's (1992) works were adapted to construct the reliability dimension – 4 items, responsiveness – 3 items, assurance – 5 items (John & Howard, 1998) and empathy – 4 items (John & Howard, 1998) of the service quality provided by FFRs. On the other hand, four items were used to gauge customer satisfaction and these were adapted from Cronin and Taylor (1992). Lastly, purchase intentions were evaluated through 3 items obtained from Boulding, Kalra, Staelin, and Zeithaml (1993) and Keillor, Huit, and Kandemir (2004). The respondents were asked to rate on a five-point Likert scale (1 = "strongly disagree" to 5 = "strongly agree"). The cronbach's alpha for tangibility, reliability, responsiveness, assurance, empathy, customer satisfaction and purchase intentions were 0.798, 0.877, 0.849, 0.792, 0.866, 0.842, and 0.804, respectively. As shown in Table 1, these results provided strong evidence for the reliability of the measures used in this study.

#### **3.3 Statistical methods**

Means and standard deviations were used to identify the levels of customers' perceived service quality towards FFRs. Whereas, Pearson correlation coefficient and linear regression were used to investigate both the correlation and relationship between customers' perceived service quality and customer satisfaction as well as between customer satisfaction and purchase intentions.

Lastly, multiple linear regression was used to identify the most important factors or SERVPERF dimensions that contribute to customer satisfaction.

#### **4. Data Analysis**

##### **4.1 Level of customer-perceived service quality toward FFRs**

As shown in Table 2, students perceived the FFRs' service quality based on the five SERVPERF dimensions which are tangibility ( $M = 3.316$ ;  $SD = 0.766$ ), reliability ( $M = 3.539$ ;  $SD = 0.906$ ), responsiveness ( $M = 3.263$ ;  $SD = 0.857$ ), assurance ( $M = 3.354$ ;  $SD = 0.679$ ) and empathy dimensions ( $M = 3.871$ ;  $SD = 0.775$ ). Empathy was the most important element in how a customer perceived the service quality in relative to other dimensions. Besides, the overall average mean score of 3.469 with standard deviation of 0.595 showed that the overall services provided by FFRs are favorably perceived by their customers. In addition, all the dimensions had standard deviations lower than 1.000 which means the students' perception of service quality towards these five dimensions was not widely scattered.

##### **4.2 Relationship between service quality and customer satisfaction**

Table 2 shows the results of the Pearson correlation coefficient analysis on the associations between SERVPERF dimensions with customer satisfaction towards the FFRs. At the 0.01 significant level, customers' perceived overall service quality provided by FFRs was significant to the customer satisfaction where the "r" value was 0.793. Customers' perceived service quality according to assurance had the strongest correlation with customer satisfaction where its "r" value was 0.687. In contrast, customers' perceived empathy service quality showed the weakest correlation with customer satisfaction of FFRs because its Pearson correlation coefficient was only 0.463. Although it had the lowest correlation but this is significant because of the p value was smaller than 0.01. This result also showed that FFRs' consumers' satisfaction of the service provided was not influenced by the empathy dimension. As seen in Table 3, service quality ( $\beta = 0.793$ ,  $p = 0.000$ ) was considered as a strong variable that significantly and positively influenced customer satisfaction in FFRs. The value of  $R^2$  (0.629) implied that this model explained about 62.9% of the total variance in customer satisfaction towards FFRs.

##### **4.3 Key determinants of customers satisfaction in FFRs according to SERVPERF dimensions**

Multiple linear regressions were conducted to identify the most dominant variable that influenced the customers' satisfaction of FFRs. The significant level of 0.01 was used. Factors which were not significant were removed according to the significant level of the regression technique. The dependent variable was customer satisfaction of FFRs. The independent variables included the five SERVPERF dimensions which were tangibility, reliability, responsiveness, assurance and empathy. Multiple linear regression analysis was used to assess the direct effect of these five SERVPERF dimensions on customer satisfaction towards the FFRs and the results are summarized in Table 4. As shown in the table, all the five SERVPERF dimensions were positively and significantly affected customer satisfaction. Table 4 also showed the model summary of the multiple regression analysis. The  $R^2$  for this regression model was 0.642. This means 64.2% of the variation in the customer satisfaction towards FFRs' services in Malaysia could be explained by the five SERVPERF dimensions. As seen in Table 4, the strongest variable that significantly influenced the satisfaction of FFRs' customers was the SERVPERF dimension of assurance because it obtained the largest standardized coefficients score ( $\beta = 0.297$ ,  $p = 0.000$ ), followed by responsiveness ( $\beta = 0.262$ ,  $p = 0.000$ ), reliability ( $\beta = 0.226$ ,  $p = 0.000$ ), tangibility ( $\beta = 0.150$ ,  $p = 0.000$ ), and empathy ( $\beta = 0.100$ ,  $p = 0.007$ ). This means that the assurance was the key factor in deciding the customer satisfaction towards FFRs in the context of Malaysian public university students.

##### **4.4 Relationship between Customer Satisfaction and Purchase Intentions**

Table 2 showed that there was a strong correlation between customer satisfaction and purchase intentions of FFRs' customers because its Pearson correlation coefficient was 0.702 at the significant level = 0.01. As seen in Table 5, customer satisfaction ( $\beta = 0.702$ ,  $p = 0.000$ ) was found to be significantly and positively influenced the customer purchase intentions in FFRs. The value of  $R^2$  (0.492) implied that this model explained about 49.2% of the total variance in purchase intentions towards FFRs.

#### **5. Discussions and recommendations**

First of all, the findings showed that empathy dimension contributed the highest perception level in service quality and this is consistent with the study of Chow and Luk (2005, pg.6) where it claimed that "customers regarded 'empathy' as the highest priority in assessing service quality of a "fast-food" restaurant. It is apparent that it is important for a restaurant to provide a caring and personalized service to customers." The findings also revealed that among the five SERVPERF dimensions, namely tangibility, reliability, responsiveness, assurance and empathy, assurance was found to have the strongest positive influence on customer satisfaction towards FFRs.

The fact that assurance has the strongest positive significance influence is somewhat parallel with a prior study by Zhou (2004). However, the finding did not corroborate with some studies such as Festus et al. (2006), and Landrum, Prybutok, and Zhang (2006) who stated that other dimensions were more dominant in predicting the customer satisfaction. These differing results could be due to the different models used, industries or sampling applied and conducted. These results also provided some useful practical implications. In this respect, because employee expertise is an important component of overall service quality (Tsai & Huang, 2002), it is a paramount importance for the service providers of FFRs to improve their assurance by becoming more welcoming, courteous, knowledgeable and trustworthiness during the servings or transactions. It is also important to improve employee performance during their person-to-person encounters with customers, and this area merits the attention of FFR managers because the service encounter between customers and employees is an important factor of customer satisfaction (Johns & Howard, 1998; Seidman, 2001). This promised behavior will ensure the purchasers (students) of FFRs would have a high level of assurance, which consequently would enhance their satisfaction. One of the efficient ways to build up high level of assurance is to responsively provide customers with timely, accurate, and knowledgeable information about the food and beverages (Qin & Prybutok, 2008).

Therefore, responsiveness of FFRs' employees can be increased through increased employee motivations, improved selling skills, positive training attitude, clearer role perceptions, high service knowledge and high awareness of organizational policies. As such, service quality and organizational effectiveness (for example high sales volume and new customer attraction) can be improved simultaneously (Bush, Bush, Ortinau, & Hair Jr, 1990). Thus, FFRs' top management must improve service improvement programs continuously in order to motivate employees and increase customer satisfaction more effectively and efficiently (Lee, Lee, & Yoo, 2000). Furthermore, there is a positive relationship between customer satisfaction and purchase intentions as reported in the current study. This result is congruent with the findings of Cronin and Taylor (1992), Oliver (1993), Spreng and MacKoy (1996), and Woodside, Frey, and Daly (1989). The result suggested that service quality is an antecedent of customer satisfaction and that customer satisfaction can influence more on purchase intentions than service quality.

In addition, Spreng, Harrell, and MacKoy (1995) pointed out that prior research had consistently found that there was a significant relationship between satisfaction and repurchase intentions; therefore an important consequence of customer satisfaction was increased repurchase intentions. For example, Liu and Jang (2008) stated "friendly and helpful employees can also please customers and enhance their satisfaction level. Thus, it is necessary for restaurants' top management to try their best on delivery the promised service more accurately, dependably and friendly in order to enhance customer satisfaction as well as encourage the repeat patronage." Therefore, it is reasonable to state that in order to better capture and maintain new or current customers, restaurants' top management must continuously maintain their customers' satisfaction at a favorable level. However, in the view of how safety and correctly is the food provided by FFRs' staff, FFRs' top management must ensure that their staff prepare the food based on the specific standards. Apart from enhancing customer satisfaction, FFRs should also guarantee quality assurance with the hope to attract more buyers through the creation of consumer confidence, a reputation as a preferred restaurant, or a marketing edge with a registered restaurant status (Hooker & Caswell, 1999).

In addition, service quality and satisfaction could affect consumers' likelihood to recommend the store to others. This is known as word of mouth advertising. The store can benefit from the word of mouth in terms of repurchase intentions from customers. Thus managers should design programs that increase consumer likelihood of recommending the restaurant to others. Incentive programs (free coupons or special discounts) or advertising that encourages consumers to recommend the restaurant to their friends is essential (Eugene & Jamie, 2000). Managing customer satisfaction levels is a critical strategy for FFRs to retain their current customers and also enable them to attract more potential customers via word of mouth (Qin & Prybutok, 2008).

### **6. Suggestions for future research**

This study implies some limitations and scarcity, logic suggests that future study should use probability sampling methods such as stratified sampling or cluster sampling which are more generalizable or to conduct a nationwide study. For example, a related study on this topic might consider differences between adults and children in the factors used to judge quality and in the weights they place on these factors. Therefore, this deserves the attention from researcher's concern children's perceptions of quality at a FFR. It is of great importance for the proposed model to include other service industries or other types of restaurants. In terms of measurement issues, future research may use multiple items to strengthen the reliability of satisfaction and purchase intentions constructs.

Also, the intervenient relationships among these three constructs should be examined. Moreover, researcher can consider some additional dimensions apart from service quality that can be added into this model for the purpose of identifying the core influencer of customer satisfaction more accurately such as price, food quality and image of restaurant, environment and personality's factor based on the literature, and be tested empirically. The key driver of customer satisfaction (assurance) that results in customer purchase intentions towards FFRs' services was identified in this research. Hence, the conclusion and implications in this research can serve as a guideline for the top management of FFRs' services in operating, marketing, promotion and planning. The recommendations about the ways of motivating and improving the FFRs employees' performances are also helpful for FFRs' top management. As a result, the FFRs' providers can enhance service quality according to relevant customers' perceived service quality to develop higher degree of customer satisfaction and customer purchase intentions. This research's implications may also assist FFRs to continually stay afloat in an aggressive competitive environment and ultimately become the choice restaurant in Malaysia.

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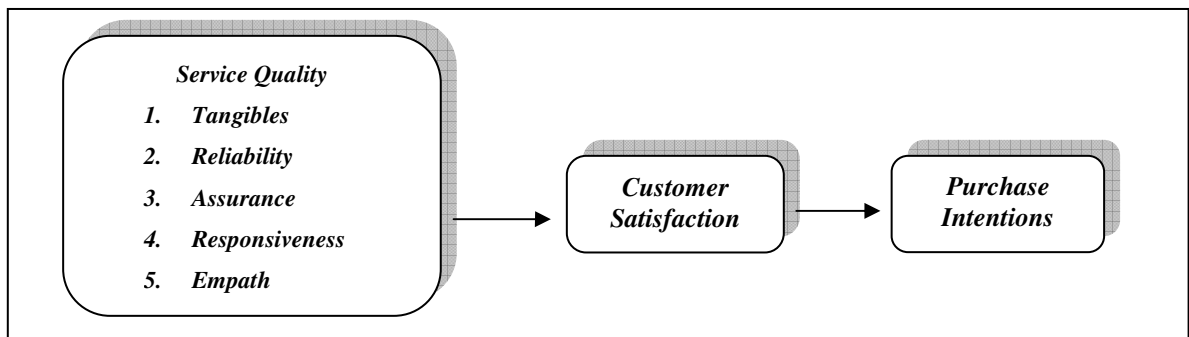
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**Figure 1. The conceptual framework on the association between SERVPERF attributes customer satisfaction and purchase intentions**



**Table 1. The Reliability Test Statistic**

Dimensions/constructs	Items	Cronbach's alpha
Tangibility	5	0.798
Reliability	4	0.877
Responsiveness	3	0.849
Assurance	5	0.792
Empathy	4	0.866
Customer satisfaction	4	0.842
Purchase intentions	3	0.804

**Table 2. Descriptive statistics and correlations**

	M	SD	1	2	3	4	5	6	7	8
<b>1. Tangibility</b>	3.31 6	0.76 6								
<b>2. Reliability</b>	3.53 9	0.90 6	0.379* *							
<b>3. Responsiveness</b>	3.26 3	0.85 7	0.439* *	0.568* *						
<b>4. Assurance</b>	3.35 4	0.67 9	0.493* *	0.535* *	0.554* *					
<b>5. Empathy</b>	3.87 1	0.77 5	0.313* *	0.339* *	0.351* *	0.495* *				
<b>6. Service Quality</b>	3.46 9	0.59 5	0.694* *	0.777* *	0.793* *	0.807* *	0.659**			
<b>7. Customer Satisfaction</b>			0.528* *	0.625* *	0.656* *	0.687* *	0.463**	0.793**		
<b>8. Purchase Intentions</b>			0.477* *	0.489* *	0.562* *	0.616* *	0.437**	0.689**	0.702**	

Note. \*\* p < .01, \*p < .05

**Table 3. Linear regression result of service quality (independent variable) on dependent variable (customer satisfaction in FFRs)**

	Customer Satisfaction towards FFRs	
	Beta ( $\beta$ )	Sig.
Service Quality	0.793	0.000
R <sup>2</sup>	0.629	
Adjusted R <sup>2</sup>	0.628	
F-value	603.023**	

Note. \*\* p < .01, \*p < .05

**Table 4. Multiple regression results of tangibility, reliability, responsiveness, assurance and empathy on dependent variable (customer satisfaction towards FFRs)**

	Customer satisfaction towards FFRs	
	Beta ( $\beta$ )	Sig.
Tangibility	0.150	0.000
Reliability	0.226	0.000
Responsiveness	0.262	0.000
Assurance	0.297	0.000
Empathy	0.100	0.007
R <sup>2</sup>	0.642	
Adjusted R <sup>2</sup>	0.637	
F-value	126.504**	

Note. \*\* p < .01, \*p < .05

**Table 5. Linear regression result of customer satisfaction (independent variable) on dependent variable (customer purchase intentions in FFRs)**

	Customer purchase intentions towards FFRs	
	Beta ( $\beta$ )	Sig.
Customer Satisfaction	0.702	0.000
R <sup>2</sup>	0.492	
Adjusted R <sup>2</sup>	0.491	
F-value	345.475**	

Note. \*\* p < .01, \*p < .05