The effect of service quality and satisfaction on customer loyalty at Kumon East Jakarta

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ABSTRACT
This study aims to determine Service Quality and Satisfaction Customer Loyalty at the Kumon Seulawah Raya Jaatiwaringin Course - East Jakarta. The population in this study were all customers of the Kumon Seulawah Raya Jaatiwaringin course. Researchers used the accidental sampling method with a sample of 83 people from the population of Kumon Seulawah Raya Jaatiwaringin Course Customers. Instrument testing in this study uses validity and reliability tests, while the analytical method used is multiple linear regression with t-test and F test and coefficient of determination (R2) test. In this study, an analysis was carried out using the SPSS for windows version 24.0 computer application. Based on the regression analysis, the model (regression equation) formed is Y = 1.760 + 0.166X1 + 0.361X2. The results of the analysis on the t-test, the Service Quality variable (X1) shows the results of the t-count value of 3.011 > t-table of 1.990 and a significant value of 0.003 < 0.05 then Ho1 is rejected and Ha1 is accepted, meaning that there is a positive and partially significant effect between Quality Service with Customer Loyalty. While the Customer Satisfaction variable (X2) shows the results of the t-count value of 4.712 > t-table of 1.990 and a significant value of 0.000 < 0.05 then Ho2 is rejected and Ha2 is accepted, meaning that there is a positive and partially significant effect between Customer Satisfaction and Customer Loyalty Kumon Seulawah Raya Jaatiwaringin. In the results of the F test analysis, the value of F-count is 20.144 > Ftable is 3.11 with a significant level of 0.000 < 0.05, then Ha is accepted. So that it can be said that the service quality variable (X1) and the customer satisfaction variable (X2) has a positive and significant effect on customer loyalty (Y). The results of the analysis of determination (R2) are known that the value of R Square is 0.335. This shows that 33.5% of the independent variables consisting of Service Quality and Customer Satisfaction affect the dependent variable, namely Customer Loyalty. The remaining 66.5% is influenced by other variables not examined.

Keywords: Customer Satisfaction, Customer Loyalty

1. INTRODUCTION

The current era of globalization, many advances and changes occur in the modern business world. The changes that occur are marked by the mindset of a developing society, technological advances, and lifestyles that cannot be separated from the influence of globalization. These advances and changes indirectly require us to be able to balance it in everyday life. The influence of the times is that a lot of goods and services have emerged that offer various advantages and uniqueness of each of these products and services. This makes consumers have many choices in using goods and services offered by producers. But for producers, this is a form of threat because the more products and services offered, the tougher the competition in the business world. This increasingly fierce competition requires business people to be able to maximize the performance of their companies to compete in the market. To overcome this, the company must have a strong marketing strategy in marketing its goods and services so that it can survive in business competition. One of the service industries that is currently developing is tutoring services or educational institutions.
Indirectly, conditions like this can increase competition among similar tutoring services in terms of offering the best products and services to meet consumer needs. This situation requires parents to be more selective in choosing the type of tutoring that has good quality. It is not easy to be the best, price is also the element that is most often taken into account by consumers.

Service quality is an important factor that Kumon must pay attention to achieve customer satisfaction. Service quality is a dynamic condition related to service products, people, processes, and environments that can meet or exceed consumer expectations. Good service quality must also be implemented for the survival of a company, whether or not the quality of service of goods or services depends on the ability of producers to consistently meet consumer expectations.

To increase loyalty, companies must increase the satisfaction of each customer and maintain that level of satisfaction in the long term. To increase satisfaction, companies must add value that can make them get what they pay for or more than they expect so that they can survive and lead to repeat purchases, recommendations, and an increased proportion of spending. From the description above, it can be concluded that customer loyalty is the level of the customer's role in the services provided by the Kumon Course organizer after comparing the performance or perceived results with their expectations. Loyal customers are an important asset for the company.

There is an important relationship between service quality and customer loyalty. This relationship is especially strong when the customer is highly satisfied. Thus, the Kumon Course manager who truly aims to satisfy his customers is not enough to generate customer loyalty, therefore the Kumon course manager must aim more than satisfying, namely satisfying the hearts of his customers.

Service

The customer is the main focus in carrying out excellent service, therefore, in this case, the customer plays an important role in measuring the services provided by the company (Frimayasa, 2017a).

Service (customer service) in general is any activity that is intended or intended to provide satisfaction to customers, through this service the desires and needs of customers can be fulfilled. In the Indonesian Dictionary it is explained that service is an effort to serve the needs of others, while serving is helping to prepare (helping what someone needs). In essence, service is a series of activities that process. As a service process that takes place regularly and continuously covering the entire life of people in society, the process of meeting needs through the activities of others.

According to (Rahman, 2017), "Good service in a company will create satisfaction for customers, therefore a company must have a special strategy to manage services well". The occurrence of competition to seize the market to increase sales brings a positive change in the business world because they compete in providing the best service for each customer. It changed the perception of many people who initially clung to products and sales to marketing.

To (Panjaitan, J. E., & Yuliati, 2016), "Quality service plays an important role in creating customer satisfaction, but it is also closely related to creating profits for the company. The higher the quality of services provided by the company, the higher the satisfaction felt by the company.

According to Abedniya, at. all in Mardo, (2016:25) suggests that "The perceived service quality is a scale or measure for companies to measure how much the company has succeeded in providing solutions to customer problems".

According to Lupiyoadi in Rasyid (2017: 212) defines that, "Service Quality (Service Quality) is how far the difference between the expectations and reality of customers for the services they receive or obtain"

Customer satisfaction

Customer satisfaction can be felt after customers compare their experience in purchasing goods/services from sellers or providers of goods/services with the expectations of the buyers themselves. These expectations are formed through their first experience in buying an item/service, comments from friends and acquaintances, as well as promises and information from marketers and competitors.

Marketers who want to excel in the competition must pay attention to customer expectations and customer satisfaction. According to Kotler in Kasmir, (2017: 236), "Mentioning customer satisfaction is an assessment of customers on the use of goods or services compared to expectations before their use". According to Oliver ((Rahman, 2017), "Customer satisfaction is a response to consumer fulfillment. Satisfaction is the result of an assessment from consumers that the product or service has provided a level of enjoyment where this level of fulfillment can be more or less ".

According to Wijayanti (2017: 186), "Satisfaction is the level of one's feelings after comparing the performance of a product or service and the perceived results with consumer expectations". Meanwhile, according to Lupiyoadi et al in (Frimayasa, 2017), "Satisfaction is the main thing. Efforts to satisfy customer needs must be carried out profitably or in a win-win solution, namely a situation where both parties feel that they have won and no one is harmed.

Customer satisfaction or dissatisfaction is the customer's response to the evaluation of the perceived discrepancy between previous expectations and the actual performance of the product that is felt after its use (Frimayasa, 2017b).

Customer satisfaction with a product or service, is actually something that is difficult to obtain if the service company or
industry does not really understand what is expected by consumers (Lupiyoadi, 2016).

Customer loyalty
Loyalty measurement includes an instrumental conditioning approach. The instrumental conditioning approach states that consistent purchases over time indicate brand loyalty. Repeat purchase behavior reflects a strong reinforcement or stimulus so that the measurement of loyal or disloyal patients can be seen from the frequency and consistency of their buying behavior towards a particular brand. Measurement with this approach emphasizes behavior in the past. But this approach has a weakness that is only based on past behavior whereas loyalty is also an estimate of future buying behavior. The behavior measurement method is a direct way to determine loyalty, especially for habitual behavior. Customer loyalty is measured based on purchases made by customers.

According to (Nina 2013), Loyalty is the percentage of people who have bought in a certain time frame and made repeat purchases since the first purchase.

Satisfaction is identified as the thing that determines the amount of one's commitment to a relationship that affects loyalty. Providing services to consumers can occur with the interaction between consumers and employees, this is an activity or a series of activities that are invisible (Ratminto and Winarsih, 2005).

2. METHODOLOGY

This study uses quantitative methods, and descriptive analysis by interpreting the existing data to provide an overview assisted by the SPSS 24.0 application program tools and the various tests carried out include;

1. Descriptive Analysis
Descriptive analysis is a statistic used to analyze data by describing or describing the data that has been collected as it is without the intention of making conclusions that apply to the public. Descriptive analysis can be used if the researcher only wants to describe the sample data, and does not want to make conclusions that apply to the population where the sample is taken.

2. Classical Assumption Test
These classical assumptions must be tested to meet the use of multiple linear regression. After calculating the multiple regression using the SPSS for Windows tool, the classical assumption test was then carried out.

3. Normality Test
Normality test aims to test whether in the regression model, confounding variables or residuals have a normal distribution. There are two ways to detect whether the residuals are normally distributed or not.

4. Multicollinearity Test
Multicollinearity test is used to show whether there is a correlation between the independent variables. In research that uses multiple analysis techniques, the independent variables should not be correlated with each other or multicollinearity occurs. Detection of non-occurrence of multicollinearity can be seen in collinearity statistics, provided that if the VIF value of each independent variable is < 10 and tolerance > 0.10, there is no multicollinearity.

5. Heteroscedasticity Test
Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another observation. If the variance of the residual from one observation to another is different, it is called heteroscedasticity. A good regression model is that there is no heteroscedasticity. Whether or not heteroscedasticity occurs can be seen from the scatterplot graph. The statistical test used to detect the presence or absence of heteroscedasticity in this study is the Glejser test, if the significance probability is > 0.05, it can be concluded that there is no heteroscedasticity.

6. Multiple Linear Regression Analysis
Multiple linear regression analysis is a linear relationship between two or more independent variables (X1, X2, ....Xn) with the dependent variable (Y).

7. Individual Significance Test (Test Statistical t)
That is a test to determine the significance of the effect of the independent variable partially or individually on the dependent variable.

8. Simultaneous Significance Test (F)
The F test is a test to determine the effect of the independent variable, namely Service Quality (X1) and Customer Satisfaction (X2) simultaneously on the dependent variable, namely Customer Loyalty (Y).

3. RESULT AND DISCUSSION

VALIDITY TEST
A validity test is used to measure whether or not a questionnaire is valid. A questionnaire is said to be valid if the questions on the questionnaire can reveal something that will be measured by the questionnaire. The variable validity test is declared valid if the value of r-count > r-table. Thus all variables can be declared valid if each tested variable has a correlation coefficient (r-count) greater than r-table. The criteria used in this study was to use a sample of 83 people (df = n-2), with a significance value of 0.05, r-table 0.2159 was obtained. The following are the results of the validity test using SPSS for windows version 24 calculations for each variable:
Based on the results of the validity test using the SPSS for windows version 24.0 program, it is known that the Cronbach alpha produced in each research variable is greater than 0.60. That is, all statement items in each variable are reliable.

**Normality**

In graphical analysis, if the data spread around the diagonal line and follows the direction of the diagonal line or the histogram graph shows a normal distribution pattern, then the regression model meets the assumption of normality. Meanwhile, if the data spreads far from the diagonal and or does not follow the direction of the diagonal line or the histogram graph does not show a normal distribution pattern, then the regression model does not meet the assumption of normality. The statistical analysis is supported by a simple statistical test using the Kolmogorov-Smirnov test. In the Kolmogorov-Smirnov test, it shows a significant value above 0.05, then the residual data is normally distributed. Meanwhile, if the Kolmogorov-Smirnov results show a significant value below 0.05, the residual data is not normally distributed.

**Histogram Graph**

Based on the results of the reliability test using the SPSS for windows version 24.0 program, it is known that the Cronbach alpha produced in each research variable is greater than 0.60. That is, all statement items in each variable are reliable.

**RELIABILITY TEST**

A reliability test is a tool to measure a questionnaire which is an indicator of a variable. A questionnaire is said to be reliable or reliable if a person's answers to questions are consistent or stable from time to time. SPSS software for windows version 24.0 provides facilities to measure reliability with statistical tests with Cronbach alpha (α). A variable is said to be reliable if the value of > 0.60. The results of the reliability test for the variables used in the study using SPSS for windows version 24 are shown in the following table:

**Variable Reliability Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's α</th>
<th>Minimum Cronbach's α</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality (X1)</td>
<td>0.749</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Customer Satisfaction (X2)</td>
<td>0.738</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Customer Loyalty (X3)</td>
<td>0.714</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS 24.0

In the analysis of the graph above, it is seen that the points or data spread around the diagonal line and follow the direction of the diagonal line or the histogram graph shows a normal distribution pattern, then the regression model meets the assumption of normality.

**Kolmogorov-Smirnov Test Results**

Based on the Kolmogorov-Smirnov test, it shows a significant value of 0.200 > 0.05, so it can be concluded that the residual data is normally distributed.
**Multicollinearity Test**

Multicollinearity test is used to show whether there is a correlation between the independent variables. In research that uses multiple analysis techniques, the independent variables should not be correlated with each other or multicollinearity occurs. Detection of the non-occurrence of multicollinearity can be seen in collinearity statistics, provided that if the VIF value of each independent variable is below 10 and tolerance is above 0.10, then there is no multicollinearity. The results of the multicollinearity test can be seen as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.944</td>
<td>1.060</td>
<td>There is not any multi collinearity</td>
</tr>
<tr>
<td>X2</td>
<td>0.944</td>
<td>1.060</td>
<td>There is not any multi collinearity</td>
</tr>
</tbody>
</table>

Based on the results of the analysis in table 5.10, it is known that the VIF value for the Product Quality variable (X1) is 1.060 and the Promotion variable (X2) is 1.060. The VIF value of the two independent variables shows < 10.00 so this study it is free from the assumption of multicollinearity. And the service quality tolerance value (X1) is 0.944 and the Customer Satisfaction variable (X2) is 0.944 indicating a tolerance value > 0.10, so there is no multicollinearity.

A heteroscedasticity test is conducted to test whether in a regression model there is an inequality of variance from the residual of one observation to another observation. A good regression model is that there is no heteroscedasticity (Ghozali: 2012). One way to see whether there is heteroscedasticity is to use a scatterplot graph.

![Scatterplot Graph](Image)

Based on the scatterplot output above, it can be seen that the dots spread above and below or around zero, the dots do not form a pattern. Thus it can be concluded that there is no heteroscedasticity problem.

**MULTIPLE LINEAR REGRESSION TEST**

Linear regression analysis was used in this study to know the effect of the independent variables consisting of product quality and promotion on the dependent variable, namely purchasing decisions, displayed in the form of a regression equation. Statistical calculations in the multiple linear regression analysis used in this research is to use the computer program SPSS for Windows version 24.0. The complete results of data processing using the SPSS program are in the appendix and are further summarized as follows:

**Variable Reliability Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>0.944</td>
<td>1.060</td>
<td>There is not any multi collinearity</td>
</tr>
<tr>
<td>X2</td>
<td>0.944</td>
<td>1.060</td>
<td>There is not any multi collinearity</td>
</tr>
</tbody>
</table>

Based on the table in column B, constanta (a) is 1.760, Service Quality score (bX1) is 0.166, Customer Satisfaction score (bX2) is 0.361. Based on the data above, it can be said that the constant of 1.760 regression coefficient X1 is 0.166 and the regression coefficient X2 is 0.361 so that it can be written in the form of a regression equation in the form of Standardized Coefficients, the following equation is obtained:

\[ Y = 1.760 + 0.166X1 + 0.361X2 \]

From the above equation it can be explained that:

a. The constant of 1.760 means that if the service quality (X1) and Customer Satisfaction (X2) the value is 0, then the amount of Customer Loyalty (Y) is 1.760.

b. The regression coefficient of the service quality variable (X1) is 0.166, meaning that if the other independent variables are fixed and Customer Satisfaction (X1) has increased 1 time, then Customer Loyalty will increase by 0.166. The increase in positive value means that there is a positive relationship between service quality and customer loyalty. The higher the quality of the Customers on the Kumon Course, the more the Customer Loyalty on the Kumon Course will increase.

c. An increase of 0.361. The increase in positive value means that there is a positive relationship between customer satisfaction and customer loyalty. The higher the customer satisfaction of the Kumon Course, the higher the Customer Loyalty of the Kumon Course.

From the above equation it can be explained that:

a. The constant of 1.760 means that if the service quality (X1) and Customer Satisfaction (X2) the value is 0, then the amount of .
HYPOTHESIS TESTING

Hypothesis testing in this study was carried out using the SPSS for Windows version 24.0 computer application. The purpose of testing this hypothesis is to determine whether the hypothesis proposed by the author can be accepted or otherwise rejected by two methods, namely partial testing (t test) and simultaneous testing (f test).

PARTIAL TEST (t-Test)

To show how far the influence of one independent variable individually in explaining the variation of the dependent variable. The following will explain the partial test of each variable:

<table>
<thead>
<tr>
<th>Variable</th>
<th>t count</th>
<th>Sig</th>
<th>ttable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality (X1)</td>
<td>3.011</td>
<td>.003</td>
<td>1.990</td>
</tr>
<tr>
<td>Customer Satisfaction (X2)</td>
<td>4.712</td>
<td>.000</td>
<td>1.990</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS 24.0

In the table above, it can be seen in column t that the t value for the service quality variable is 3.011 and the t value for the customer satisfaction variable is 4.712. With the number of respondents as many as 83 people, the value of df (degree of freedom) = n-k (83-3 = 80) with a significant 5% (0.05) so that it can be seen that the t value in this study is 1.990. Based on the results of the t-test analysis in this study, it can be explained that:

a. The product quality variable (X1) has a tcount of 3.011, which is significant 0.003 while ttable is 1.990, so tcount > ttable with a significance of less than 0.05, this indicates that the results of this study are Ho1 rejected and Ha1 accepted, meaning that there is a positive and significant effect, partially between service quality and customer loyalty in the Kumon Seulawah Raya Jatiwaringin-East Jakarta course.

b. The customer satisfaction variable (X2) has a tcount of 4.712 which is significant 0.000 while the t table is 1.990, then tcount > ttable with a significant less than 0.05, this indicates that the results of this study are Ho1 rejected and Ha1 accepted, meaning that there is a positive influence and partially significant between customer satisfaction and customer loyalty in the Kumon Seulawah Raya Jatiwaringin-East Jakarta course.

SIMULTANEOUS TEST (Test – f)

This test is to determine the effect of Service Quality (X1) and Customer Satisfaction (X2), simultaneously or together on the purchasing decision variable (Y). By using a significance level of 0.05 with df1 = (k-1) and df2 = (n-k-1) with the following information:

<table>
<thead>
<tr>
<th>Number of respondents (n)</th>
<th>83 people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of variables (k)</td>
<td>3</td>
</tr>
<tr>
<td>Significance level</td>
<td>5%</td>
</tr>
</tbody>
</table>

Degree of frequency df1 = k-1 = 3-1 = 2
Degree of freedom df2 = n-k = 83-3 = 80

There is 2 bases for decision making in the f test, namely:
Based on the calculated f value and f table fcount > ftable then Ho is rejected and Ha is accepted. If fcount < ftable then Ho is accepted and Ha is rejected.

2. Based on the significant value of the results of the SPSS output output
If the significance value is <0.05 then Ho is rejected and Ha is accepted
If the significance value is> 0.05 then Ho is accepted and Ha is rejected.

It is known that the f-table value is 3.11, from the calculation results, the f-count value is obtained. as shown in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Fcount</th>
<th>Sign</th>
<th>Ftable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>20.144</td>
<td>.000</td>
<td>3.11</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS 24.0

Based on the table above, it can be seen that the Fcount value of 20.144 is greater than Ftable, which is 3.11 with a significant level of 0.000 which is less than 0.05, so Ha is accepted. So that it can be said that the service quality variable (X1) and customer satisfaction variable (X2) have a positive and significant effect on customer loyalty (Y).

Determinant coefficient (R2)

The coefficient of determination (R2) essentially measures how far the model’s ability to explain variations in the dependent variable is. The value of the coefficient of determination can be seen in the table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.579a</td>
<td>.335</td>
<td>.3</td>
<td>1.06208</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS 24.0

The results of the above calculation can be seen that the value of R Square is 0.335. This shows that 33.5% means that the independent variables consisting of service quality and customer satisfaction affect the dependent variable, namely customer loyalty at the Kumon Seulawah Raya Jatiwaringin-East Jakarta course. The remaining 66.5% is influenced by other variables. which were not researched.
4. CONCLUSION

1. Partially it is known that the Service Quality variable (X1) has a significant influence on Customer Loyalty. This is supported by the magnitude of the t-count value of 3.011 with a significance of 0.003 while the t-table is 1.990, so t-count > t table with a significance of less than 0.05. The results of the regression analysis show that Ho is rejected and Ha is accepted. Thus the first hypothesis (Ha) is accepted.

2. Partially it is known that the Customer Satisfaction variable (X2) has a significant influence on Customer Loyalty. This is supported by the large value of the Customer Satisfaction Variable (X2), the t-count value of 4.712 is significant 0.000 while the t table is 1.990, then t-count > t table with a significant 0.000 <0.05. The results of the regression analysis show that Ho is rejected and Ha is accepted. Thus the second hypothesis (Ha) is accepted.

3. Based on the results of the analysis, it is known that Service Quality (X1) and Customer Satisfaction (X2) have a positive and significant influence on Customer Loyalty (Y). This is supported by the magnitude of F-count of 20.144 > F-table of 3.11 with a significant level of 0.000 <0.05, then Ha is accepted.

4. Based on the analysis of determination (R2), it is known that the value of R Square is 0.335. This shows that 33.5% of the independent variables consisting of Service Quality and Customer Satisfaction affect the dependent variable, namely Customer Loyalty of Kumon Seulawah Raya Jatiwaringin – East Jakarta, the remaining 66.5% is influenced by other variables not examined.

5. Looking at the magnitude of the regression coefficients of the two independent variables, namely the Service Quality variable (X1) and Customer Satisfaction (X2), it is known that the Customer Satisfaction variable (X2) has the greatest influence with a t-count value of 4.712 compared to the Customer Satisfaction variable (X1) with the value of t-count is 3.011.

REFERENCES