Analysis of the Influence of Perceptions on Parents' Decisions in Choosing Education Services

Agung Widarman¹, Haris Sandi Yudha²

¹²Departemen of Industrial Engineering, STT. Wastukancana, Purwakarta, West Java, Indonesia

Abstract: This study aims to determine whether the dimensions of a company's perceptions, namely facilities, price, quality and location influence the parents' decision to choose SDIT-X education services and analyze the most dominant factors in influencing parents' decisions in choosing SDIT-X education services. The population in this study were parents of students who send their children to school at SDIT-X. The samples taken were 86 respondents using the Non-Probability Sampling technique with a Purposive sampling approach, namely sampling based on a specific target, while the sampling criteria were respondents who had felt the performance of SDIT-X. Based on the results of the study, the regression equation is obtained as follows: Y = 0.215X1 + 0.217X2 + 0.181X3 + 0.249X4. Based on the analysis of statistical data, the indicators in this study are valid and the variables are reliable. In testing classical assumptions, the regression model is free from multicollinearity, there is no heteroscedasticity, and normal distribution. The individual sequence of each of the most influential variables is the Location variable with a regression coefficient of 0.249, then the price variable with a regression coefficient of 0.217, then followed by facility variables with a regression coefficient of 0.215. While the variable that has the lowest effect is quality with a regression coefficient of 0.181. SDIT-X needs to maintain the elements that have been valued well by the customer and need to improve things that are still lacking.

Keywords: perception, facility, price, quality, location, purchase decision

1. Introduction

Along with the development of science and technology that took place in Indonesia, making all business sectors in Indonesia experience progress and competition in almost all fields of business, both transportation, food and beverages, and education. The condition of competition in the world of education, especially basic education has begun to be felt by every elementary school. Education is a service that includes input and output. Inputs are students, facilities, infrastructure and environment, while the output is educational services, graduates or alumni and research results. Educational services are services provided by the education management to those who receive these services directly in accordance with certain quality standards. The quality of education services in the relative sense is the quality of service that is in line with expectations or exceeds the expectations of those who need and have an interest in the education services. Perception is the process of how individuals can recognize themselves and their surroundings, through the stimulus they receive, and individuals will experience perceptions, explaining that perception is a process that is preceded by sensing that is the process of receiving stimulus by an individual through its receptor, then the stimulus is forwarded to the center nervous system namely the brain, and the brain is a psychological process so that individuals can perceive the stimulus it receives (Walgito, 2002).

One of the private elementary schools in Kab. Purwakarta is SDIT-X. Apart from educating students by using modern technology, it also provides advantages such as Islamic religious education. With the school at SDIT-X, it is expected to be able to improve the ability of the nation's next generation who are clever and have noble ideals. It is known that the number of new SDIT students - X 2012-2013 school year and 2013-2014 school year is the same as 80 students, then in the following year 2014-2015 school year the number of new students experienced a large increase of 119 of 80 students. In the 2015-2016 school year there was a decline from 119 new students to 113 new students. In the following school year, namely in the 2016-2017 school year, it declined again from 113 to 95 new students. In order to maintain the number of students, SDIT-X should always strive to be able to improve the perceptions of parents of students by trying to add and improve existing facilities in schools, provide competitive prices, provide adequate quality education and a safe and affordable location by students.

2. Literature Review

2.1. Understanding Services and Consumer Behavior

According to Kotler (2005: 21) services are any actions or desires that can be offered by one party to another, basically services are intangible and do not result in any ownership. Production of services may be related to physical products or not (Rambat Lupiyoadi, 2001:6). According to Engel, Blackwell and Miniard (2004:3) Consumer behavior is an action that is directly involved in acquiring, consuming, and consuming products and services, including the process of decisions that precede and follow that action. There are three factors that are very essential for marketers in influencing consumer behavior, namely:

1) The consumer is the king where he has the freedom to determine the type, shape and type of goods and services desired.
2) Consumer motivation and behavior can be understood through research, so that an entrepreneur can always read the existing market opportunities.
3) Consumer behavior can be influenced through persuasive activities by seriously responding to consumers as the ruling party.

Meanwhile, what is meant by consumer behavior according to Basu Swasta and T. Hani Handoko (2003: 9) are individual activities directly involved in obtaining and using goods and services, including the decision making process in the preparation and determination of these activities. There are three variables that can be used to study consumer
behavior, namely stimulus variables, response variables, and interving variables, according to the opinion of Engel, Blackwell and Miniard (2004: 26).

2.2. Definition of Purchases and Purchasing Decisions

2.2.1. Purchases
Purchases are the number of items purchased by someone or the frequency of someone in the process of purchasing an item to meet their needs (Anwar Prabu Mangkunegara, 1998: 42). Purchase is an activity to buy an item or service, while the meaning of consumers according to Indonesian is the user of industrial products (Basu Swastha, 1993: 256).

2.2.2. Purchasing Decisions
Kotler (2005: 212) suggests that decision making is an activity of individuals who are directly involved in obtaining and using the goods offered. Before deciding to buy a consumer product usually through various stages. The stages in the activity process of a purchase are described by Kotler (2005: 174) as shown below:

![Purchasing Decision Process](source: kotler (2015))

2.3. Understanding Perception
Perception is how we see the world around us. Perception is defined as a process carried out by individuals to select, organize, and interpret stimuli into meaningful and reasonable images of the world (Schiffman, G.Leon, Lazar, Leslie, 2004: 137). Whereas according to Simamora and Bilson (2002: 102) quoted from Harjati. "Perception can be defined as a process whereby someone, organizing, interpreting stimuli in a picture of the world that means comprehensive". Individuals will be open to a variety of influences that tend to deflect their perceptions, namely physical appearance, stereotypes, irrelevant instructions, first impressions, too quick to make decisions, halo effects.

2.4. Framework

![Framework](source: kotler (2015))

2.5. Hypothesis
The hypothesis is a temporary answer to the problem formulation, therefore the formulation of research problems is usually arranged in the form of questions (sugiyono, 2005: 51). The hypothesis in this study are:
H1 : Facility perceptions have a positive effect on parents' decisions to use educational services in SDIT-X
H2 : Price perception has a positive effect on parents' decisions to use educational services in SDIT-X
H3 : Quality perception has a positive effect on parents' decisions to use educational services in SDIT-X
H4 : Location perception has a positive effect on parents' decisions to use education services in SDIT-X

3. Results and Discussion

Based on research at SDIT-X, several results of the study can be stated as follows: Parents' views about SDIT-X are very diverse. The views they convey are based on the knowledge and experience they get. As obtained from the results of interviews with parents of students who send their children to school in SDIT-X

3.1. Population and Sample

The sampling technique in this study is Probability Sampling with Purposive Sampling. Probability Sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample member. To determine how many respondents in this study, researchers refer to the determination of the number of samples using Slovin formula.

\[
n = \frac{N}{(1 + \frac{N \cdot e^2}{n})} = \frac{567}{(1 + \frac{567 \cdot (10\%)^2}{n})} = 85.007 \approx 86
\]

Where
n = minimum sample
N = population
e = presentation error tolerated (%)

Based on the calculation results obtained the value of n = 86 for the minimum number of samples or respondents who will be given questionnaire. However, to avoid shortages of data or the number of samples, the researchers took the initiative to increase the number of samples over a minimum sample of 86 to 120 questionnaires distributed. Questioners who return and can be processed have fulfilled the minimum sample requirements of 98 questionnaires (greater than the minimum requirement of 86 samples). Questionnaire sheets that are returned and can be processed, will then be tested for their relevance by using the Validation Test - Product moment (Pearson) and in the reliability test using the Reliability Test - Cronbach Alpha.

3.2. Respondents Overview

The respondents in this study varied in their sex, age, education, and occupation because each parent had almost the same opportunity to pay attention related to children's education. The composition of male respondents was 14 people (16.28%) and women 72 people (83.72%), and for the age of respondents between 25-35 years. There are 12 people (13.95%), 36 - 45 years. There were 67 people (77.91%) and 46 - 55 years. There are 7 people (8.14%), this...
is seen from the estimated calculation when a married couple has children in productive age, when entering the middle age it is estimated that their children have entered elementary school. Most of the respondents had a strata education level (S1 / D4) which was 32 respondents or 32.56% then followed by Diploma academic education level as many as 24 respondents (27.91%), high school as many as 18 respondents (20.93%) and Others 12 respondents (13.95). If seen from the work, the highest number of respondents is from the group of respondents with Civil Servants' work as many as 15 respondents (17.44%), then private employees 24 respondents (27.91%), followed by entrepreneurs as many as 14 respondents (16.28%) and for other workers 33 respondents (38.37%).

3.3. Index Analysis of Respondents’ Responses

This analysis section will discuss the form of distribution of respondents’ answers to all the concepts measured. From the distribution of respondents’ answers, one tendency will be obtained for the respondents’ answers. In this study, questionnaires were distributed using a Likert scale. Then the calculation of the respondent’s answer index is done by the following formula:

\[ \text{Index value} = \frac{(F1\times1) + (F2\times2) + (F3\times3) + (F4\times4) + (F5\times5)}{5} \]

In this study used criteria 3 box (three box method), then 80: 3 = 26.67. The range is 80 divided by 3 and produces a range of 26.67. The range will be used as a basis for determining the index of consumer perceptions of the variables used in this study (Dewi quotes Ferdinand, 2006: 292), namely as follows:

- 20 – 46.6 = Low
- 46.7 – 73.3 = Medium
- 73.4 – 100 = High

The distribution of each respondent’s response categories for each variable is as follows:

1. Description of Facility Variables is the assessment of parents of students as consumers of the physical appearance and comfort (facilities and infrastructure) owned and offered by SDIT-X in supporting the teaching and learning process. In the first indicator of the Facilitator variable, 23 parents or 38.37% gave a dominant response to the disagreement with the attribute questions related to the facilities provided by SDIT-X. In the second indicator, 61 parents or 70.93% gave the dominant response agreed to the facilities provided by SDIT-X. Furthermore, in the third indicator, 60 parents or 69.77% of respondents gave the dominant response to the agreement. For the fourth indicator, 45 parents or 52.33% of respondents answered the dominant agreement.

2. Description of Price Variables is the assessment of parents of students as consumers about the level of fees set and the mechanism of payment in using SDIT-X education services. In the first indicator as many as 74 parents or 86.05% of respondents gave a dominant response to agreement. In the second indicator, 65 parents or 75.58% of respondents predominantly agreed. In the third indicator, 78 guardian parents or 90.70% of the dominant respondents expressed their agreement. For the fourth indicator, 76 parents or 88.37% of the dominant respondents responded to their answers.

3. Description of Quality Service Variables is the assessment of parents of students as consumers of the quality of education in SDIT-X. In the first indicator there were 72 parents or 83.72% of respondents giving approval responses. In the second indicator, 64 parents or 74.42% of respondents gave the dominant answer his agreement on the assessment of the quality of education and teaching from the teaching staff in the excellent SDIT-X. On the third indicator, 76 parents or 88.37% of respondents gave answers to their agreement. For the fourth indicator, 64 parents or 74.42% of respondents stated the dominant answer was approval.

4. Description of Location Variables is the assessment of parents of students as consumers about the convenience of the location or place where the SDIT-X is established. In the first indicator 54 parents of students or 97.67% of the dominant respondents expressed their response to the location of the school. In the second indicator, 83 parents or 96.51% of respondents stated their agreement. The third indicator, as many as 73 parents or 84.88% of respondents expressed their response to the statement of a broad indicator of land. For the fourth indicator, as many as 62 parents or 72.09% of respondents stated their agreement, while 19 parents or 22.09% gave a neutral response and 5 parents or 5.81% responded with an answer to disagreement with the location indicator SDIT-X is safe and comfortable.

5. Description of Variables of Service Purchase Decisions is the parents’ decision to choose SDIT-X education services. In the first indicator 50 parents or 58.14% of respondents gave their equal responses. The second and third indicators 75 parents of students or 87.21% of respondents stated their agreement. For the fourth indicator, as many as 66 parents or 76.74 percent stated the answer to their equality, while as many as 20 parents or 23.26 percent stated neutral, this is because there are parents who feel that what is promised is not appropriate fully with its interests.

3.4 Multicollinearity Testing

A variable showing the symptoms of multicollinearity can be seen from the high value of VIF (Variance Inflation Factor) in the independent variables of a regression model. The output of the Multicollinearity Test with VIF values obtained by IBM SPSS Statistics Version 24 is shown in the following table 4.16:

<table>
<thead>
<tr>
<th>Table 3.1 Multicollinearity Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients of Multicollinearity Testing</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Facility</td>
</tr>
<tr>
<td>Price</td>
</tr>
<tr>
<td>Quality</td>
</tr>
<tr>
<td>Place</td>
</tr>
</tbody>
</table>

Source : Primary data processed, 2018

Volume 7 Issue 11, November 2018

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

Paper ID: ART20192979

DOI: 10.21275/ART20192979

1207
3.5 Normality Testing

Normality testing is performed on residual regression. Testing is done using the P-P plot plot. Normal data is data that forms dots that spread not far from the diagonal line. The results of linear regression analysis with a normal P-P graph plot against the residual error of the regression model show that there is a normal graphical pattern, that is the distribution of points not far from the diagonal line.

Figure 3: Normal P-P Graph Plot Normality Test
Variable: Service Purchase Decision (SPD)
Source: Primary data processed, 2018

3.6 Analysis of Multiple Linear Regression

The statistical calculation in multiple linear regression analysis used in this study is to use the IBM SPSS statistical program version 24.

Table 3.2: Analysis of Multiple Linear Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>-3.492</td>
<td>2.865</td>
<td>-1.219</td>
<td>.226</td>
<td></td>
</tr>
<tr>
<td>Facility</td>
<td>.250</td>
<td>.110</td>
<td>.215</td>
<td>2.277</td>
<td>.025</td>
</tr>
<tr>
<td>Price</td>
<td>.320</td>
<td>.160</td>
<td>.217</td>
<td>1.997</td>
<td>.049</td>
</tr>
<tr>
<td>Quality</td>
<td>.291</td>
<td>.161</td>
<td>.181</td>
<td>1.803</td>
<td>.075</td>
</tr>
<tr>
<td>Place</td>
<td>.346</td>
<td>.137</td>
<td>.249</td>
<td>2.519</td>
<td>.014</td>
</tr>
</tbody>
</table>

Source : Primary data processed, 2018

Regression equation models that can be written from these results in the form of a regression equation as follows:

\[ Y = 0.215X_1 + 0.217X_2 + 0.181X_3 + 0.249X_4 \]

3.7 Hypothesis Testing

The t test was conducted to test the significance level of each parameter of the variable measured against the dependent variable, whether it can be accepted statistically by increasing the t count with t table or comparing the significance of t with an error tolerance of 5%. The test results of facility variables show a regression coefficient marked positive of 0.215 and the value of t calculated for the facility variable shows the value of t arithmetic = 2.277 with a significance value of 0.025 <0.05. A significance value smaller than 0.05 indicates that at a significance level of 5%. Then the facility variable has a positive influence on the purchasing decisions of education services received. The test results of location variables show a regression coefficient marked positive at 0.249 and the value of t calculated for the location variable shows the value of t count = 2.519 with a significance value of 0.014 <0.05. A significance value smaller than 0.05 indicates that at a significance level of 5%. Then the location variable has a positive influence on the education service purchasing decisions received.

3.8 Regression Analysis

The following is the output of the regression calculation results using the IBM SPSS version 24 program can be seen in table 3.3 below:
3.9 Coefficient of Determination

This coefficient of determination is used to determine how much influence the independent variables have on the dependent variable. The coefficient of determination is determined by the adjusted R square value.

<table>
<thead>
<tr>
<th>Table 3.4: Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Primary data processed, 2018</td>
</tr>
</tbody>
</table>

Based on table 3.4, obtained the coefficient of determination (adjusted R2) of 0.325. This means that 32.5% of parents' decision to use education services that are influenced by facilities, prices, quality, and location are very small, while the remaining 67.5% of education service purchase decisions are influenced by other variables that are not examined in this study.

4. Conclusion

From the results of data analysis and discussion in the previous chapter, it can be summarized as follows:

1) The analysis results obtained that the facility variable (X1) has a regression coefficient of 0.215 (positive) on service purchase decisions (Y) and the value of t count is 2.277 with a significance level of 0.025 (<0.05). This means that the facility variable (X1) has a positive effect on service purchase decisions (Y). Thus the hypothesis which states that the facility variable (X1) has a positive effect on education service purchasing decisions (Y) is acceptable.

2) The analysis results obtained that the price variable (X2) has a regression coefficient of 0.217 (positive) on service purchase decisions (Y) and the value of t count is 1.997 with a significance level of 0.049 (<0.05). This means that price (X2) has a positive effect on service purchase decisions (Y). Thus the hypothesis which states that price (X2) has a positive effect on service purchase decisions (Y) is acceptable.

3) The analysis results obtained that the quality variable (X3) has a regression coefficient of 0.181 (positive) on service purchase decisions (Y) and the value of t count is 1.803 with a significance level of 0.075 (<0.05). This means that quality (X3) has a positive effect on service purchase decisions (Y). Thus the hypothesis which states that quality (X3) has a positive effect on education service purchasing decisions (Y) is acceptable.

4) The results of the analysis show that the location variable (X4) has a regression coefficient of 0.249 (positive) on service purchase decisions (Y) and the value of t count is 3.068 with a significance level of 0.014 (<0.05). This means that location variable (X4) has a positive effect on service purchase decisions (Y). Thus Hypothesis 4 which states that location variable (X4) has a positive effect on education service purchasing decisions (Y) can be accepted.

5) Adjusted R square value is obtained at 0.325. This means that 32.5% of education service purchase decisions (Y) can be explained by facility variables (X1), price (X2), quality (X3), and location (X4). While 67.5% can be explained by other causes not examined in this study.

5. Limitation and Suggestion

This research is limited to facilities, prices, service quality and location variables. Based on the results of known processing of independent variables that affect the dependent variable, the decision of parents using SDIT-X Education Services has an effect of only 32.5%. While the remaining 67.5% is influenced by other variables besides the independent variables in this study. For future research, it is recommended to add other independent variables besides facilities, prices, service quality and location which of course can influence the dependent variable of parents' decision in purchasing SDIT-X services, in addition to being able to complete this research, because in this study it is still there are many other independent variables outside of this research that can influence parents' decisions to buy or use services.

6. Acknowledgement

Thankyou to the Directorate of Research and Community Service Ministry of Research and Technology and Higher Education which has provided beginner lecture researcher grants in 2018.

References

study: Natrabu Restaurant Jakarta), Publisher: Bogor Agricultural Institute.


[15] LP3ES.


[18] Oscar Ong Johan, 2014. Analysis of Customer Satisfaction With Importance Performance Analysis In Sbu Laboratory Cibitung PT Sucofindo (Persero), Faculty of Engineering, Department of Industrial Engineering, President University.


Author Profile

Agung Widarman, received Bachelor of Industrial Engineering (S.T.) at Industrial Engineering of STT Wastukancana Purwakarta, 2004 and Master of Industrial Engineering (M.T.) at Industrial Engineering of Pasundan University Bandung, 2016. Presently active as lecturer at industrial engineering of STT Wastukancana Purwakarta.

Haris Sandi Yudha, received Bachelor of Industrial Engineering (S.T.) at Industrial Engineering of STT Wastukancana Purwakarta, 2005. Presently active as lecturer at industrial engineering of STT Wastukancana Purwakarta.