EFFECT ANALYSIS OF STUDENT PERCEPTIONS ON SERVICE QUALITY TO STUDENT LOYALTY IN MANAGEMENT MASTER PROGRAM OF SEKOLAH TINGGI ILMU EKONOMI YAPAN

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ABSTRACT

Sekolah Tinggi Ilmu Ekonomi (School of Economics or STIE) YAPAN Management Master Degree Program stands in the midst of increasing competition. Nearly every university, both public and private as well as the College of Economics, holds a management master degree program with every advantage it has. Advances in information technology play a role in increasing competition intensity, because it is capable of granting the students access to more information. In addition, STIE YAPAN Management Master Degree Program must consider students’ perception, satisfaction, and student loyalty in order to compete with other universities and improve education services quality. Therefore, this study aims to analyze the influence of student perceptions on education services quality to student loyalty through the satisfaction on STIE YAPAN Management Master Degree Program. It is conducted to ensure the quality and consistency of education services to students to enable them achieving satisfaction that ultimately creates student loyalty. This study used survey method, with a sample of 68 students. The sampling method used was Total Sampling. Data were collected by questionnaire. Validity and reliability test were used to measure each research variable. Then each research variable is grouped into quality dimension by using factor analysis. The data were analyzed using multiple linear regression techniques to analyze the influence of student perception of education services quality to student's satisfaction and simple linear regression to analyze the influence of student's satisfaction on student loyalty. The significance level used in this study is 5%. Based on the analysis results, researchers obtained the following results: (1) based on factor analysis, 5 dimensions were formed: reputation, physical aspects, study factors, program issues, and location, (2) On multiple linear regression test: reputation and study factors, and (3) simple linear regression test exhibits student satisfaction influence to student loyalty. Based on these findings, the suggestion that can be given is to maintain the reputation of STIE YAPAN Management Master Degree Program and improve the quality of the physical factor dimension.

KEY WORDS
Service quality, student loyalty, satisfaction.

In the 21st century, every nation would be faced with a variety of serious and basic challenges, related to global competition. Global competition or globalization requires qualified human resources and insight of excellence. Quality human resources and insight of excellence are determinant factors in the competition among nations in the 21st century.

One of the indicators for determining the quality of human resources is the level of knowledge. It becomes the main resource for social, economic and political development. Educational and training services need to be placed in a decisive position, as knowledgeable human beings are the output of an education system or training, both formal, non-formal and informal where the quality of Indonesian human resources is much lower than that of other countries at the equivalent development stage, even in the ASEAN region. The low quality of Indonesia's human resources is reflected in Human Development Index 2004 survey which ranks at 113 out of 177 countries in the world (UNDP, 2004).

Indonesia requires reliable and professional human resources with management education background. The implementation of management education, especially management master program in Indonesia is growing rapidly since the early 1990s. This is a
good indication when viewed from national needs of professionals fulfillment in quantitative terms. However, what remains a question is related to education quality as well as satisfaction level and student loyalty provided by management master program organizers to students. According to Madu and Kuei (1993) students are seen as primary customers who receive educational services directly.

Sekolah Tinggi Ilmu Ekonomi (School of Economics or STIE) YAPAN Management Master Degree Program stands in the midst of an increasingly fierce competition in which almost every university, both public and private as well as the School of Economics, holds a Management Master Program with their respective advantages. Advances in information technology also play a role in increasing the intensity of competition, because it is capable of granting students access to more information about the various products offered. This means that the student as primary customer has more options in using the money they possess (Mardalis, 2004). Especially in education services, which according to Lupiyoadi et.al (2006) is included in "high contact system" category which is a high-level relationship between service providers with customers.

Judging from the number of new students enrolled, STIE YAPAN Management Master Degree Program experience fluctuations annually which tend to decrease in number. Based on data from academic office, 2015/2016 received 33 students enrollment and accepted 27 of them. In 2016/2017 the number of students who enroll was 22 people and 21 were accepted. The declining number of students and the increasing intensity of the competition requires STIE YAPAN Management Master Degree Program as the provider of education services to always make its business school more flexible and innovative (Ponzurick, France & Logar, 2000; Reingold & Schneider, 1999). Therefore, only a truly qualified Management Master Program can win the competition in the global marketplace.

STIE YAPAN Management Master Degree Program needs to understand education service quality factors implemented according to the students' perception. The application of factor analysis is necessary to study a very complex product or service to identify characteristics (or factors) considered important for consumer regarding product or service (Rangkuti, 2002: 2). By understanding factors considered important by the consumer, STIE YAPAN Management Master Degree Program can acknowledge students expectations and specific needs. Therefore the master program can increase student satisfaction. According to Tjiptono (2005), customer satisfaction contributes to the creation of switching barriers, switching costs, and customer student loyalty. Therefore, it is hoped the programs’ mission and vision will be realized by the institution. It could be conducted by analyzing the influence of the students’ perception of education service quality to student’s student loyalty through satisfaction factor in STIE YAPAN Management Master Degree Program. To guarantee the quality and consistency of education services to the students, which would enable them to achieve satisfaction that ultimately creates student loyalty from students.

According to Kotler, Hayes and Bloom in Mardalis (2005) mentioned six reasons why an institution needs to gain customer student loyalty. First: existing customers are more prospective, meaning loyal customers will provide huge profits to the institution. Secondly: the cost of acquiring new customers is much greater than keeping and maintaining existing customers. Third: customers who already believe in the institution in an affair will believe also in other affairs. Fourth: the cost of institutional operations will be efficient if it has many loyal customers. Fifth: institutions can reduce psychological and social costs because old customers have had many positive experiences with the institution. Sixth: loyal customers will always defend the institution even try also to attract and advise others to become customers.

Hence, the exclusion of student voices is an incorrect strategy, because the quality is not determined by the producer but by the consumer. Manufacturers merely create goods and services while those who judge them are consumers. The principle stating anything producers create would do well in the market is no longer relevant today. Therefore, producers must tailor their products and services to what consumers needs.

Based on the background of the problems raised above, formulated research problems are as follows:
1. Is the student's perception of education services quality have a positive and significant impact on student satisfaction of STIE YAPAN Management Master Degree Program?

2. Is student satisfaction on education services quality positively and significantly influence to the student loyalty in STIE YAPAN Management Master Degree Program?

The purpose of this study is to analyze the influence of students' perceptions of the education services quality to students' satisfaction of STIE YAPAN Management Master Degree Program as well as analyzing the influence of student satisfaction on education service quality to student loyalty in STIE YAPAN Management Master Degree Program.

Benefits of research for the reader is to apply direct implementation of the theory in the field related to applying service quality, satisfaction, and student loyalty on universities services, especially in STIE YAPAN Management Master Degree Program. For the institution itself (STIE YAPAN Management Master Degree Program), this information is important to the management as an effort to obtain a valid and reliable picture of the company's services student’s point of view. In addition, it can be useful in making marketing strategy decisions and improving service quality in the future where the community also obtains an overview and feedback on STIE YAPAN Management Master Degree Program in terms of education service quality, student satisfaction, and student loyalty.

METHODS OF RESEARCH

The type of research used is explanatory research because it is capable of explaining the causal relationship that occurs between the students' perceptions of education services quality to student loyalty through satisfaction by examining the hypothesis mentioned above. The research method used is descriptive survey method which is a research method which obtains samples from a population and uses the questionnaire as a means of data collection. After the data is obtained, then the result will be presented descriptively and at the end of this research. It will be analyzed to test the hypothesis proposed at the beginning of this research (Effendi, 2003: 3).

Based on the background of the problem, the formulation of the problem and the purpose of the research, variables in this study can be classified into three groups of variables namely (1) independent variables, dimensions \(X_1, X_2, \ldots, X_n\) used by students to perceive education services quality based on factor analysis of indicators emerging through FGD (Focus Group Discussion) (2) intermediate variables are student satisfaction \((Y)\) and (3) dependent variable, i.e. student loyalty \((Z)\).

The population in this research is students of STIE YAPAN Management Master Degree Program. Sampling technique utilized is Non-Probability Sampling. To be able to assess education services quality properly and appropriately, researchers used purposive sampling technique where sample meeting the purpose of research is students with a minimum study period of one year. Total students who meet the above criteria are 68 people (Info Program of STIE YAPAN Management Master Degree Program, 2017).

The analysis model used to prove first hypothesis is "Student Perceptions on Service Education Services Quality Influence Positively and Significantly on STIE YAPAN Management Master Degree Program " used multiple linear regression analysis (Multiple Linear Regression Analysis). Meanwhile, to test second hypothesis "Student Satisfaction on Education Service Quality Influence Positively and Significantly to Student loyalty In STIE YAPAN Management Master Degree Program" analysis model used simple linear regression analysis assisted with program SPSS for Windows version 13.0.

RESULTS OF STUDY

Based on factor analysis, it yields five factors or dimensions. The dimensions are as follows: (1) Reputation, with variable that is ease of administration procedure for new students, degree reputation, competence and quality of instructor and lecturer, punctuality of
education completion, conformity of cost incurred during education, and availability of information opportunity or vacancy work; (2) Physical Aspects, supporting facilities or accommodation (canteen, parking lot, religious facilities), academic-related facilities (library room, classroom, internet room, lecture media, books or research journals); Overall building layout (classroom location, cafeteria, library); (3) Study Factor, with variable of flexible subject structure, curriculum, and practice component balance (demand of skill, profession, and work world) in study program; (4) Program issues, the diversity and completeness of the program or concentration options for students and easy procedure on switching concentration programs; (5) Location, easy to access.

Table 1 – Identification of Perception Dimension on Education Service Quality at STIE YAPAN Management Master Degree Program

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator</th>
<th>Factor Loading</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>Diversity and completeness concentration options</td>
<td>0.758</td>
<td>Program Issue</td>
</tr>
<tr>
<td>V2</td>
<td>Ease of procedure for switching concentration</td>
<td>0.707</td>
<td>Program Issue</td>
</tr>
<tr>
<td>V3</td>
<td>Flexible course structure and curriculum</td>
<td>0.796</td>
<td>Study</td>
</tr>
<tr>
<td>V4</td>
<td>Ease of admission procedure for new students.</td>
<td>0.653</td>
<td>Reputation</td>
</tr>
<tr>
<td>V5</td>
<td>Balance of practice component</td>
<td>0.778</td>
<td>Study</td>
</tr>
<tr>
<td>V6</td>
<td>Reputable degrees generated.</td>
<td>0.802</td>
<td>Reputation</td>
</tr>
<tr>
<td>V7</td>
<td>Competence and quality of instructors and lecturers.</td>
<td>0.758</td>
<td>Reputation</td>
</tr>
<tr>
<td>V8</td>
<td>Supporting facilities or accommodation.</td>
<td>0.906</td>
<td>Physical</td>
</tr>
<tr>
<td>V9</td>
<td>Academic facilities</td>
<td>0.933</td>
<td>Physical</td>
</tr>
<tr>
<td>V10</td>
<td>Overall building layout</td>
<td>0.820</td>
<td>Physical</td>
</tr>
<tr>
<td>V11</td>
<td>Punctuality of education completion</td>
<td>0.500</td>
<td>Reputation</td>
</tr>
<tr>
<td>V12</td>
<td>Costs incurred during education.</td>
<td>0.667</td>
<td>Reputation</td>
</tr>
<tr>
<td>V13</td>
<td>Opportunity or job vacancy information.</td>
<td>0.822</td>
<td>Reputation</td>
</tr>
<tr>
<td>V14</td>
<td>Easy to access campus</td>
<td>0.822</td>
<td>Location</td>
</tr>
<tr>
<td>V15</td>
<td>The calmness and comfort of the campus atmosphere.</td>
<td>0.470</td>
<td>Ungrouped</td>
</tr>
</tbody>
</table>

Multiple linear regression analysis was used to find out the influence of student perception of education service quality to student satisfaction in STIE YAPAN Management Master Degree Program. This regression analysis uses enter method. The results of multiple linear regression which is exhibited in Table 2 below.

Table 2 – Results of Multiple Linear Regression Analysis Summary

<table>
<thead>
<tr>
<th>Code</th>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>t-count</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>1.546</td>
<td>0.593</td>
<td>3.269</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>reglir</td>
<td>0.202</td>
<td>0.097</td>
<td>2.086</td>
<td>0.041</td>
</tr>
<tr>
<td></td>
<td>fsik</td>
<td>0.138</td>
<td>0.114</td>
<td>1.208</td>
<td>0.232</td>
</tr>
<tr>
<td></td>
<td>stdi</td>
<td>0.301</td>
<td>0.113</td>
<td>2.659</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>isprog</td>
<td>0.116</td>
<td>0.106</td>
<td>1.094</td>
<td>0.278</td>
</tr>
<tr>
<td></td>
<td>location</td>
<td>0.074</td>
<td>0.073</td>
<td>1.019</td>
<td>0.312</td>
</tr>
</tbody>
</table>

Fcount model = 9.040
Durbin Waston = 1.668

Source: processed data.

Multiple linear regression equation influence of student perception on education service quality to student satisfaction of STIE YAPAN Management Master Degree Program is as follows: Y = 1.546 + 0.202 Reputation + 0.138 Physical Aspect + 0.301 Study Factor + 0.116 Program Issues + 0.074 Location. After feasibility test of the model above, it can be concluded that the linear model that has been formed is feasible to be used as a model of conjecture.

Simple linear regression analysis is used to determine the effect of student satisfaction on education service quality to students student loyalty of STIE YAPAN Management Master Degree Program. The results of this simple linear regression analysis can be seen in Table 3 below.
Table 3 – Simple Linear Regression Analysis Results Summary

<table>
<thead>
<tr>
<th>Code</th>
<th>Variable</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t-count</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>1.705</td>
<td>0.511</td>
<td></td>
<td>3.334</td>
<td>0.001</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Satisfaction to education services</td>
<td>0.580</td>
<td>0.124</td>
<td>0.5</td>
<td>4.692</td>
<td>0.000</td>
</tr>
</tbody>
</table>

R square = 0.250
F count = 22.607
Durbin Watson = 1.798

Source: processed data

Simple linear regression equation influence of satisfaction on education service quality to student loyalty of STIE YAPAN Management Master Degree Program is as follows: \( Y = 1.705 + 0.580 \text{ satisfaction} \). After the feasibility test of the model above, it can be concluded that the linear model that has been formed is feasible to be used as a model of conjecture.

DISCUSSION OF RESULTS

Based on factor analysis, there are five-dimensional classifications. The five dimensions are further explained in the following section.

Reputation. There are six variables possessing high correlation with the first dimension, namely: easy administration procedure for a new student, degree reputation, competence and quality of instructor and lecturer, punctuality of education completion, conformity of costs incurred during the course of education, and the availability of opportunities or job vacancies.

Based on West, Noden and Gosling’s research (2000) entitled "Quality in Higher Education: An International Perspective" by approaching the system, then on education services quality, education quality could be diverged into three parts: input (raw materials) related to student enrollment requirement, process (teaching and learning process) relates to the learning and teaching process at the institution, and output (product and services) relating to the level of ease of students looking for work as well as academic reputation of the institution in the eyes of society.

Easy administration process for new students will affect Management Master Program reputation. Should the procedure entailed in Management Master Program is complicated, the public can assume that service quality in Management Master Program is inadequate. Especially for degree reputation variables that greatly affect Management Master Program reputation. Should degree reputation produced by Management Master Program is considered good, the community will opt to choose said program. Similarly, should the lecturers and instructors are competent and qualified, it would raise Management Master Program reputation. According to Alma (2000), lecturers are the potential resource in determining the quality of education provided where said lecturer is a "marketing agent" for students.

As for punctuality of education completion variable greatly affect Management Master Program reputation. Should the students are capable of completing their education on time, it will create a good image in the eyes of society. In turn, it will create a good reputation as well. In addition, the suitability of costs incurred during the course of education also affects Management Master Program reputation. If the community considers the costs incurred to be incompatible with the receipt, then Management Master Program reputation will fall. Previous research proves that consumers use price as an indicator of the quality of a product or service (Kotler and Fox, 1995). The last variable is the availability of opportunity or job vacancy information. Information on job vacancies is needed by every graduate candidate or graduate. Should there are a lack of job vacancy information in Master Program Management, it would the program's reputation. Therefore the variables above are mentioned as reputation dimension.

Based on regression analysis, reputation dimension of STIE YAPAN Management Master Degree Program has a significant and significant influence with student satisfaction, with significance level at 0.041. Therefore, STIE YAPAN Management Master Degree
Program should maintain its reputation considering intangible nature of its services. Therefore in order to increase the number of students and satisfaction level, according to Tjiptono (2006) to respond to these problems, service providers can apply by encouraging satisfied customers to recommend the company services to its peers where a good reputation will hold an important role.

**Physical Aspect.** Variables possessing high correlation with physical aspects, are as follows: supporting facilities or accommodation (canteen, parking, worship facilities), academic facilities (library room, classroom, internet room, lecture media, books or research journals), and the overall layout (classroom location, cafeteria, library) of the building. Physical facilities are physical environments in which services are created and where interaction takes place between service providers and consumers. Based on this connection, Lupiyoadi (2001) states there are two types of physical evidence: "essential evidence" and "peripheral evidence". Essential evidence is all physical forms that appear including the design and layout of the campus building, lecture room facilities, library, parking lots and other physical facilities. On the other hand, the peripheral evidence is supporting facilities in other physical evidence such as uniforms, physical environment around the campus, etc.

Three of the two variables are included in the facility. Both supporting facilities and the academic facility can be seen and perused. Similarly to building layout overall. Building layout could be directly seen by its users. Therefore, these three variables are called the physical aspect dimension.

Based on regression analysis result, this aspect has no significant effect on student satisfaction, with significance level at 0.232. Despite physical aspect is one of the important elements in service marketing mix, in reality, adequate facilities or high-quality physical aspect does not have a significant influence on student satisfaction. The students consider adequate facilities and high-quality physical aspect is a common factor they have rights to receive considering their expensive tuition fee.

**Study Factor.** Variables possessing high correlation with study factors are described as follows: flexible course structure and curriculum as well as the balance of practice components (skills demands, profession, and work field) in the study program for students. Based on Cook's research (1997), entitled "A Student's Perspective of Service Quality in Education" with a population of students majoring in nursing, there are five determinants of a higher education quality: academic staff, study factors, general welfare factors, nursing practice factors and extra-curricular activity. Structure and flexible curriculum as well as balance of practice components (skills demands, professions, and work field) in study course certainly closely related to the study factors. A student who is studying at a university will need course structure, curriculum course, and practice component (skill, profession, and workplace demands) to complete his / her studies. Therefore, these two variables are called study factor dimensions.

Based on regression analysis result, this dimension has a significant influence on student satisfaction, with significance level at 0.010. Therefore, STIE YAPAN Management Master Degree Program should improve the quality of the study factor dimension considering that educational service recipients are a person, which is considered as high contact system where customers and service providers continue to interact during service delivery process (Lupiyoadi, 2006). Interpersonal skills of service provider staff is a crucial aspect in high contact service, as service employees carry out a strategic function called "service trinity" (Bowen and Schneider, 1988): those who operate services, market services, and equate consumers as services.

**Program Issue.** Variables possessing a high correlation with program issues are described as follows: diversity and completeness concentration program choice for students and easy procedure for switching concentration. Based "Quality Assurance in Education" journal written by Joseph (1997) entitled "Service Quality in Education: A Student Perspective" there are several determinants of service quality in universities, such as program issues, academic reputation, physical aspects, cost/time dimensions, career opportunities, and location. Location refers to the institution geographic location.
Variety of concentration program, as well as easy switching concentration procedures, are deliberately created to differentiate between similar service providers, therefore, they are expected to be superior to competitors. These two variables are called program issues. Based on regression analysis, the program dimension possesses no significant effect on student satisfaction, with significance level at 0.278. In the absence of significant influence, it can be said that STIE YAPAN Management Master Degree Program students considered program issue does not generate satisfaction.

Location. Variables that have a high correlation with the location, is easy to access campus. To gain a positive perception, college organizers must facilitate the availability of educational products. According to Kotler and Fox (1995), the location and educational programs schedules can determine the success of a higher education institution. It further states that prospective students typically avoid dangerous urban areas, unpleasant and unsafe environments or isolated and boring areas. Therefore, the accessibility variable of the campus is called the location dimension.

Based on regression analysis, the location dimension has no significant effect on student satisfaction, with significance level at 0.312. In the absence of a significant influence, it can be said that students consider the location dimension does not generate satisfaction. Based on the characteristics of college services, according to Lupiyoadi (2006) customers who come to the institution to get the desired services. Thus, the location of the institution is a consequence of the student as the recipient.

CONCLUSION

Based on multiple linear regression analysis tests, from 5 quality dimension (reputation, physical aspect, study factor, program issue, and location), only 2 dimensions that positively and significantly influence the variant of the dependent variable, which is reputation dimension and study factor with significance levels at 0.041 and 0.010 respectively. The significance level of these two dimensions is smaller than 0.05. On the other hand, physical aspects, program issues, and location dimension’s significance level are greater than 0.05, which is at 0.232, 0.278, and 0.312 respectively. Physical aspect, program issue, and location dimension do possess significant influence on student satisfaction in STIE YAPAN Management Master Degree Program.

Based on multiple linear regression tests, first hypothesis can be concluded that "student perception on education service quality has positive and significant effect to student satisfaction of STIE YAPAN Management Master Degree Program". This is exhibited in the coefficients regression analysis results table. In the table, the significance of each reputation dimension and study factor is less than 0.05.

Based on simple linear regression test, second hypothesis can be concluded that "student satisfaction on education services quality has a positive and significant effect on student lotalty on STIE YAPAN Management Master Degree Program". This is exhibited in coefficients regression analysis results table. In the table, visible satisfaction significance is less than 0.05.

STIE YAPAN Management Master Degree Program is suggested to improve reputation dimension, which involves ease of administrative procedures for new students, degree reputation, competence and quality of instructors and lecturers, punctuality of study completion, the suitability of expenses incurred during the course of education, and the availability of opportunities or job vacancies. Services have intangible nature, in order to increase the number of students and increase satisfaction level, according to Tjiptono (2006) to respond to these problems, service providers can apply by encouraging satisfied customers to recommend their company's services to their colleagues.

STIE YAPAN Management Master Degree Program is suggested to improve study factor dimensions which involve flexible course structure, curriculum, and balance of practice components. In educational services, services recipients is a person which is considered as high contact system. Customers and service providers continue to interact during the service delivery process (Lupiyoadi, 2006). At high contact services, interpersonal skills of service
provider staff is a crucial aspect, as service employees carry out a strategic function called "service trinity" (Bowen and Schneider, 1988): those who operate services, market services, and equate consumers as services.

In this study, the perception of education services quality is based only on the student's point of view. It is expected that future research on educational services quality can be extended not only from students perception but from all existing stakeholders such as employees, parents, and employers who employ graduates from higher education institution.

REFERENCES