Analysis of The Quality of Education Service in Training II and Training III Programs with Servqual Method on PIP Makassar

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Abstract. This study aims to determine the level of quality of education services for Seafarers Training II and III Programs in PIP Makassar. The research method used is quantitative descriptive survey research, with objects in students of the second semester of the XXIX Seafarers Training II and Seafarers III Training Programs. Total population of 208 people, then the sample taken is 25% of the total population or as many as 50 people. The sampling technique uses probability sampling, which is a simple random sample appearance using a random table method.

The results showed that the quality of education services in Seafarers Training II and Seafarers Training III Programs at class XXIX, especially in the aspects of learning about the expected education services and perceived services or in accordance with the reality in the field. Service Quality Method used consists of five dimensions of service (reliability, responsiveness, assurance, empathy and tangible). The dimension of service quality that is highly prioritized for improvement is the tangible service dimension or direct evidence related to facilities and infrastructure facilities to support the learning process. In accordance with the results of the interpretation of the percentage of service dimensions related to services received by respondents there are still four categories that are lacking in the attributes of the statement or not in accordance with the expectations of respondents namely the dimensions of tangible services such as class facilities and infrastructure, laboratories and simulators.

Keywords—Service Quality Method, Service Quality, Student Officer.

I. INTRODUCTION

Educational services are needed to form and improve the quality of human resources [5]. According to [8] to enter the current global competition, the need for quality education is increasingly felt by the community. At present most of the people are willing to sacrifice high costs as long as they get quality education and promises a better future.

The main role of the government towards its people is to provide services in order to meet the needs desired by the community. [3] claims the role of the government has indeed undergone changes in accordance with the demands and dynamics of the developing community. Even though the role of the government experienced various changes, but the main task of the government was to provide the best service to the community. The task of government service is very relevant to the achievement of national goals as stated in the fourth century of the Preamble of the 1945 Constitution, more specifically related to education namely; Enrich the life of a nation.

In order to be able to implement excellent service maximally, it is necessary to continually improve the quality of services that have been provided. To improve the quality of services, it is necessary to first measure the extent to which the quality of services provided to service users has been obtained, so that services will need to be improved, which services need to be maintained and which services need to be removed, and what services have a major impact to service user satisfaction. To find out the level of service quality, feedback is needed based on the views of service users as input in making service improvements.

In that effort, PIP Makassar as one of the Universities which is engaged in maritime and produces graduates of the Diploma IV Shipping Training program and is also given the authority to carry out the Seafarer Training and Seaman Skills Training Program in accordance with KM.No.46 of 2009. PIP Makassar in developing its mission will continue to strive to improve the quality of its services so as to give satisfaction to its customers (students). Customers can be divided into the output user community, student / student officers who immediately receive, enjoy, and feel the educational services of PIP Makassar Customers will voice their feelings towards the quality of the service they receive. Satisfaction and dissatisfaction with service can be a builder or destroyer of a system. Therefore, PIP Makassar in carrying out its mission is always trying to hear the voices of its customers.

As an illustration of the initial survey results in XXVIII and XXIX generations, there have been many complaints from student officers regarding the services provided by the Makassar PIP, for example the timeliness of teaching and learning with schedules, inconsistent lecture schedules related to lecturer busyness, classrooms which is not convenient, a separate lecture place (a new campus in Salodong) from the main campus in the Tentara Pelajar street so that it is difficult to contact certain lecturers to do teaching, lecturers are often outside service without replacement so it is difficult to guide the preparation of scientific works, so this can slow down the completion of the study of the officers of the Seafarer Training II and the Seafarer Training III programs. Therefore the problem in this
study is how the quality of education services in the aspect of learning in the XXIX class Seafarer III and Seafarers Training and Education Program in the PIP Makassar

II. LITERATURE REVIEW

[8] claims that education as a system consists of a number of interrelated components that together function to achieve goals. Good components support the formation of a good system. But a good component does not guarantee the achievement of optimal system goals, when the component is not functionally related to the other

A. Measurement of Service Quality

Essentially humans will basically not feel satisfied. In the context of measuring customer satisfaction, an absolute measure cannot be used but as a measurement parameter, some views can be used as inferred from literature and interviews that have been validated both personally and in groups.

In accordance with the concept that education is a service, user satisfaction indicators can be seen from: tangibles, reliability, responsiveness, assurances and empathy [4].

The model used to measure service quality developed by Parasuraman, Zeithaml and Berry is known as the PZB model. PZB model or SERVQUAL model analysis is an analysis to measure five dimensions of service quality, namely [3]:

a. Reliability relates to the company's ability to provide accurate services from the first.

b. Responsiveness concerns the willingness and ability of service providers to assist customers and respond to their requests immediately.

c. Assurance regarding the knowledge and politeness of employees and their ability to foster a sense of trust and confidence in customers.

d. Empathy means the company understands the problems of its customers and acts in the interests of the customer, and gives personal attention to customers and has comfortable operating hours.

e. Tangibles relate to the attractiveness of physical facilities, equipment and materials used by the company, as well as employee performance.

B. Customer Satisfaction

According to [2], customer satisfaction is a level of customer feeling after the customer compares the perceived performance according to the expectations he wants. So the level of customer satisfaction is different from one another. The level of customer satisfaction is a function of the difference between perceived performance and expectations desired. If the performance is below the desired expectations, the customer will automatically feel disappointed, and if the performance is carried out in accordance with the expectations he wants, then the customer is satisfied, and if the performance is exceeded the expectations he wants then the customer is very satisfied.

Education services are services that cannot be seen and one of the most important factors for achieving success or failure of students in attending courses in educational institutions is the best educational services for their students. In addition, with the best education services and in accordance with good quality and performance will reduce the gap or gaps that often occur in every educational institution, where these gaps become very important and very influential problems in educational institutions.

III. RESEARCH METHOD

A. Method and Location of Research

This study uses a descriptive quantitative research method, which will systematically illustrate the quality of education services of student officers in the Seafarer training II and III programs in PIP Makassar. This type of research is survey research and data collection carried out field research using data collection tools in the form of questionnaires [9].

The location of this study was carried out at the PIP Makassar with the research object of the second semester student officer of XXII Seafarers Training II and Seafarers Training III Programs.

B. Operational Definition of Research Variables

The operational definition variables of this research are as follow:

1) Reliability relates to the company's ability to provide accurate services from the first.

2) Responsiveness concerns the willingness and ability of service providers to assist customers and respond to their requests immediately.

3) Assurance regarding the knowledge and politeness of employees and their ability to foster a sense of trust and confidence in customers.

4) Empathy means the company understands the problems of its customers and acts in the interests of the customer, and gives personal attention to customers and has comfortable operating hours.

5) Tangibles relate to the attractiveness of physical facilities, equipment and materials used by the company, as well as employee performance.

C. Data Collection Technique

In an effort to collect data that supports this research, researchers used several techniques, namely:

a) Observations are carried out with the intention to make direct observations regarding educational services provided by the PIP Makassar

b) The questionnaire is in the form of a list of written questions that have been designed by the researcher and then given to the respondents who enter the sample to be answered according to the research needs.

c) Interviews in the form of questions and answers to add and strengthen data obtained through questionnaires. Interviews were conducted with the pasis included in the study sample.
D. Sample Determination Technique

The population in this study were student officers of XXIX Seafarer Training and Education Program II and III (ANT II/ATT II & ANT III/ATT III) nautical and technical departments at the PIP Makassar. The total population of this study was 208 student officers, consisting of Nautical 108 majors and 100 technical majors.

The number of samples in this study were as many as 50 student officers the size of the sample taken in accordance with the explanation of [1] which argued that if the subject was more than 100, samples taken were around 20-25% or more than the total population. The sampling technique uses probability sampling, which is a simple random sampling using a random table method.

Sampling from each strata is as follows:
- Stratum I = 64/208 x 50 = 15
- Stratum II = 44/208 x 50 = 11
- Stratum III = 60/208 x 50 = 14
- Stratum IV = 40/208 x 50 = 10

The total sample is 50 peoples

E. Analysis Design

1. Data Processing Techniques

The data processing process begins by reviewing all data available from various sources. Data obtained from questionnaires were arranged in the form of lists/tables and percentage analysis was carried out using Likert Scale. Respondents’ answers related to statements and attitudes revealed by positive questions. The data obtained is processed in percentage form on the distribution frequency table with the following formula:

\[ P = \frac{F}{N} \times 100\% \]

Where \( P \) = percentage, \( F \) = frequency, \( N \) = number of Respondents

2. Data Analysis Techniques

Data analysis used in this study is descriptive analysis. This analysis is used to describe systematically, actual and accurate facts obtained. The data obtained which is presented in the form of frequency tables is carried out percentage analysis with criteria as follows:
- 0-25% = Not good
- 26% - 50% = Less
- 51% - 75% = Medium
- 76% - 100% = Good

The data obtained from the interview is used as a complement in describing the narrative to explain the research findings.

IV. RESULTS

A. Characteristics of Research Respondents

Respondents who were the subject of the study were students of class XXIX Sailor II and Diklat III Training and Education Program (ANT II / ATT II and ANT III / ATT III), majoring in Nautical and Engineering totaling 50 student officers to represent 208 student officers who were the total population which exists.

B. Overview of Research Results

The results of the study on the analysis of the quality of education services in the learning aspects of the Seafarer Training and Education Program II and III in PIP Makassar are that according to the research instrument (questionnaire) distributed to the sample in this case the officers of class XXIX in Makassar PIP majoring in Nautical and technical.

The instrument of the research is the researcher himself with the measuring instrument used in this research is in the form of a questionnaire to measure the quality of education services especially in the aspects of learning about the expected education services and perceived services or in accordance with the facts of the facts in the field.

The following is an illustration of the results of the measurement study carried out on respondents from officers of XXIX class of Nautical and Technical Department at the Seafarers' Training Program II and Seafarer III Training and Education as the main object of research.

C. Discussion of Research

Discussion of Research Results Value recapitulation percentage of service dimensions related to respondents’ expectations (student officers)

Table. 1 Recapitulation dimension of Services based to the expectation of respondents

| No | Service Attributes | STS + TS | N  | S +SS | % Categor y |
|----|--------------------|---------|----|------|------------|
| 1  | employees in providing educational services in the teaching and learning process are easy and fast | 16 | 2 | 32 | Fair |
| 2  | Employee speed in providing good and skilled services | 16 | 32% | 8 | 16% | Good |
| 3  | Lecturers teach according to the learning syllabus | 16 | 32% | 10% | 26% | Good |
| 4  | Lecturers always present on time in the class | 12 | 24% | 6% | 25% | Fair |
| 5  | Lecturer adviser always give the student an occasion to consult | 16 | 36% | 4% | 28% | Fair |
| 6  | Employees have the sincerity and seriousness in providing services to the student officer | 3 | 14% | 6% | 28% | (fair) |
| 7  | Employees are ready to help and explain all complaints and problems faced by student officer | 2 | 15% | 4% | 30% | (fair) |
| 8  | Material presented by the lecturers are easy to understand | 9 | 9% | 18% | 18% | (fair) |
| 9  | Lecturer adviser always give the officer student an opportunity to convey any complaints or problems | 5 | 7% | 10% | 14% | (good) |
| 10 | Lecturer adviser always give the student an occasion to consult | 4 | 7% | 8% | 14% | (good) |
### Service Attributes

| No | Service Attributes | STS + TS | N | S +SS | % Categories |
|----|--------------------|----------|---|------|-------------|
| 11 | Lecturers can accept criticism suggestion and opinions in teaching-learning process in class | 2 | 0 | 48 | (good) |
| 12 | Lecturers easy to communicate and cooperate with the officer student | 10 | 9 | 31 | (fair) |
| 13 | Lecturers’ appearance are neat and attractive | 7 | 6 | 37 | (good) |
| 14 | Employee/staff is always groomed | 3 | 11 | 36 | (fair) |
| 15 | The attitude and behavior of the employees in providing service at the department is responsive and courteous | 3 | 6 | 41 | (good) |
| 16 | The attitude and behavior of the employees at the academic administration is responsive and courteous | 12 | 10 | 28 | (fair) |
| 17 | The attitude and behavior of the employees at the character development of cadet (PKT) is responsive and courteous | 3 | 14 | 33 | (fair) |
| 18 | The attitude and behavior of employees in providing services at the Seafarers proficiency Exam (UKP) is responsive and courteous | 13 | 9 | 28 | (fair) |
| 19 | The cleanliness of campus environment | 10 | 1 | 39 | (good) |
| 20 | Classroom clean, tidy and comfortable | 11 | 5 | 34 | (fair) |
| 21 | Classroom facilities (AC, LCD, whiteboard, desk, and chair) is in its function properly/can be used | 8 | 4 | 38 | (good) |
| 22 | The simulator facilities/the completeness of laboratory and functioning properly are good/can be used | 8 | 4 | 38 | (good) |
| 23 | Library facilities are complete and clean | 5 | 6 | 39 | (good) |
| 24 | The parking lot is spacious and safe | 10 | 9 | 31 | (fair) |
| 25 | There are the clean toilets | 7 | 4 | 39 | (good) |

Source: data processed in 2016

Criteria of interpretation percentage value based on the option: strongly agree or agree. The answer of the respondents is as follows:

- 0% – 25% = bad
- 26% - 50% = poor
- 51% - 75% = fair
- 76% - 100% = good

From the results of the identification of service attributes on the explanation above, the dimension of service quality of the results if the data questionnaire included services need to be maintained and service attributes that need to be improved based on the dimensions quality services are:

#### Reliability

For service reliability dimensions the services included in the excellence category include, namely

- a. Employees in providing education services in the learning process easy and fast
- b. Fast respond of the employees in providing good service and skilled
- c. Lecturers teach according to the syllabus of learning in learning process

While the service attributes which are included as the categories that need to enhance that some of the lecturers are difficult/ rarely take the time to consult and lecturers not present in time when entry in the classroom for teaching

#### Responsiveness

For the dimensions of responsiveness, service attributes are included as good service categories, among others namely:

- a. Employees are ready to help and give explanation for all complaints and problems faced by (student officers/collegers)
- b. Employees have the sincerity and seriousness in providing services to the (student officers/ collegers)
- c. Material presented by the lecturers are easy to understand and understandable
- d. Lecturer always give a spare time for sharing about complaints to (student officer/collegers)

While in case attributes including services that needs to be improved in this dimension is a lecturer always give spare time for (student officers/collegers) to submit any of their complaints, this statement describe the result of interview with student officers/collegers) who not included as the sample of this research, where as quisioner result they say that sometimes lecturers are too bussy or have a “job outside”

#### Assurance

For the assurance dimension, service attributes which are categorized as good in the percentage of service dimensions related to reality, among others
a. Lecturers of Merchant Marine Politechnik of makassar as good example in behaviors including disciplines
b. Lecturers can accept criticism suggestions and opinions from officer students/collegers in the learning process
c. Lecturers are easily communicate and built cooperation with (student officers/collegers)
d. Lecturers shows up in neatness and attractive style

While the marine attributes that include as service attributes that need to be improved for guarantee dimension is an employee or groomed staff and faculty staff shows up in neatness style and lecturers can accept criticism suggestions and opinions from (officer students/collegers) in the teaching and learning process in the classroom

Emphaty
For emphaty dimension that include medium categories as the percentage result of marines dimension connect with fact namely:

a. Attitudes and behavior of major employees in providing responsive and courteous service
b. Attitudes and behavior of employees in the character development of cadets in case of providing services that responsive and courteous

While attributes that include category that needs to be improved in accordance with the result percentage, less category is the attitude and behavior of employees in academic major and on the examination committee for sailors ship ability test, based on the results of questionnaires data which is had been proceed and distributed to respondents, there are still some of respondents considered that the services provided for officers students in the academic major was sometimes less responsive, as well as interviews with officers of students which is outside of the study sample said that it could become as the good starter if the provided service is in registration and academy major, but sometimes there still some of employees or staff providing services that less well to us.

Tangible
For tangible attributes of services dimensional which is include both good and medium categories based on results of the percentage of recapitulation of services dimentional associated with the fact where only two, namely are a campus environment that is clean and the facilities for reading room of the library that also clean, while the service attributes belonging to the category of less or service attributes that should be improved, namely:

a. The classrooms are clean but not comfortable
b. Classroom facilities that sometimes can be used, but also more often does not work well such as LCD and AC
c. Simulator and complete laboratory facilities but unfunctionable properly, based on the interview said most of the existing simulator in makassar campus appliance is damaged or cannot be used except for the simulator nacelle and even the only thing can be used is the sea maps
d. Vehicle parking area large enough and the toilets are sometimes dirty and in the campus neighbourhood with the massive number of learners, both cadets and student officers and the participant of “training of seafarer skills”, so sometimes a queue with other training participants.

Based on the description above, from the fifth dimension of service quality, the service dimension of tangible or direct proof of service which is highly prioritized for improvement, as they relate to infrastructure facilities such as facilities, simulator facilities, laboratory facilities, parking and restrooms. from these facilities that highly affecting the educational services provided to the customer in this case is the student officer learners so that when all of these met the expectations of learners can also be fulfilled in terms of educational learning services aspect.

V. CONCLUSION

Based on the results of the research and the description that has been conveyed above, it can be concluded that the picture of the quality of education services in the Seafarer Training II and III programs in Makassar PIP are as follows:

1. Attributes that belong to the good and medium categories that must be maintained by the performance of educational service facilities in Makassar PIP in the aspect of learning based on service quality dimensions include:

a. The dimensions of reliability include: responsive employee service, the supervisor always gives a consultation time to the students of the teaching lecturer according to the syllabus
b. The responsiveness dimensions include material presented by the lecturer that is easy to understand and understand, employees are ready to help and explain all complaints and problems faced by the student officer, the lecturer always gives free time for student officers to convey all their complaints
c. An assurance dimension, among others, is that lecturers can be good examples, lecturers can accept suggestion criticism, build good communication and establish collaboration with student officers
d. The dimensions of empathy include, among others, the attitudes and behavior of employees in the department, the development of cadet characters in providing polite and responsive services
e. Tangible dimensions include a clean campus environment and clean library/reading room facilities.

2. Attributes that are included in the less category and must be improved the performance of educational service facilities in aspects of learning include:

a. The reliability dimension of the presence of the lecturer on time to enter the class
b. The dimensions of responsiveness include the sincerity of employees in providing services to student officers
c. The assurance dimension is neat-looking employee/staff
d. The four dimensions include attitudes and behavior of employees in the Academic and PUKP departments who are polite and responsive
e. Tangible dimensions include neat and comfortable classrooms/lectures, classrooms can be used
properly, complete and well functioning simulator/laboratory facilities, a spacious and safe vehicle parking area and a clean toilet

Of the five dimensions of service quality, the most prioritized dimensions that greatly affect the success of an education service in terms of learning aspects are tangibles or physical evidence of availability of class facilities, laboratory facilities and simulators as well as parking facilities and toilets

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