IDENTIFYING THE DOMINANT FACTOR OF EDUCATIONAL SERVICE QUALITY FOR THE FACULTY OF ECONOMICS AT MALIKUSSALEH UNIVERSITY

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This study seeks to identify the dominant factor of educational service quality that influences the student satisfaction. This study was carried out at Faculty of Economics, Malikussaleh University in Indonesia involving five departments such as economics, management, business, accounting and secretarial. Only a total of 213 questionnaires were collected. The instruments were modified from Educational Service Quality (ESQ) model by Holdford and Patkar. SPSS (version 12.0) was used to run the data gathered. The exploratory factor analysis for students' response of educational service quality created five dimensions namely; facilities, faculty interpersonal behavior, faculty expertise, faculty communication and administration. The multiple regressions analysis showed that all dimensions simultaneously influenced students' satisfaction with a strong correlation. The t-test in the regression analysis indicated that the faculty communication dimension was the dominant dimension which influenced students' satisfaction whereas the interpersonal behavior dimension did not influence significantly the students' satisfaction. Thus, the Faculty needs to focus on employees' improvement because employees' satisfaction would influence students' satisfaction. Besides training to improve the knowledge and skills of employees, work motivation was also a key element that had to be considered by the Faculty of Economics.

Keywords: educational service quality and satisfaction
1. Introduction
The application of quality management practices by manufacturing and service providers have become increasingly widespread in competitive market. Recognition of the differences between manufactures and services through the dimensions of intangibility, inseparability, and heterogeneity of service products (Berry and Parasuraman, 1991) have enabled quality management practitioners to develop approaches that have proved effective in improving service quality to enhance competitiveness.

Service quality has emerged as an issue of paramount importance for several industries included the educational industry. It has been identified as one of the most effective factors in building a competitive position and improving organizational performance. Service quality can be a differentiating factor among educational establishments which provide identical services within the same industry. Establishing high service quality enhances customers' satisfaction, thus generating increases market share and profitability of industry. However, despite the importance of service quality in the education industry, most of managers in companies are not aware on how to measure it. Moreover, existing measurements of service quality are controversial in terms of generating reliable information for the companies (Hoffman and Bateson, 1997).

Zeitham et al. (1993) viewed satisfaction as arising from comparisons between perceived and predicted service levels. *Perceived service level* is the level of the customer's perception of the service received, while *predicted service level* is the level of service where customers' believe they are likely to get. Their research finding concluded that the higher perceived performance was associated with increased satisfaction, but the level of predicted service level was not associated with the level of customer's satisfaction.

Higher educational institution has grown up as a service industry and every moment it changes along with globalization process. On that ground, market and students oriented needs to be consistent with the importance of marketing in the educational industry. Attention to educational service quality emphasizes on satisfaction of students that appears during recruiting and servicing the students. To increase the educational service quality both academic and teaching quality, institutions of higher education must conduct the best effort in order to satisfy the students as educational customers. Higher education is facing pressure to improve value in its activities. The present tenet for enhancing educational value is to expand efforts on continuous improvement, to focus on stakeholder interests, and to increase student's satisfaction. Student's
satisfaction is often used to assess educational quality, where the ability to address strategic needs is becoming prime importance. Quality in education can be said to be determined by the extent to which students' needs and expectations can be satisfied (Tan and Kek, 2004). Nanggroe Aceh Darussalam is one of the special provinces located in Sumatra Island, Indonesia. Nanggroe Aceh Darussalam, also called NAD has five states universities/colleges and ten private universities/colleges. One of the visions of the NAD government is to improve educational quality because NAD still has low educational quality, as compared to other provinces in Indonesia. Hence, the government of NAD has seriously focused on the development in educational industry by allocating 30 percent of its development fund. Malikussaleh University (MU) is one of the state universities that focus on educational service quality in NAD. As the newest state university in NAD, has five faculties such as Economics, Law, Engineering, Agriculture, and Social and Political Science. The university has 288 lecturers in all faculties and 131 administrative personnel. Almost all of the university students are local.

The vision of Economics Faculty of Malikussaleh University is to become the developing centre of competitive and certifiable economics and also being based on ethics and moral. To achieve the vision, the faculty has to carry out five missions namely, (1) carrying out education, research, and devotion to society in economic area professionally with base on ethics and moral (2) yielding grade which have high integrity, self-supporting, creative and innovative, have soul of entrepreneurship, competence in its membership area, and science application and technology (3) making cooperation with education institutions, research institutions, government, business world, and society (4) catering opportunities for society to acquire benefit in carrying out higher education and (5) fostering faculty management transparently and accountability. This has become a big responsibility for the Faculty of Economics to achieve its vision and mission in the dynamic educational industry. It is also a great challenge for the newest state institutions. Therefore, one of Malikussaleh University's actions is to evaluate its performance by collecting student's feedbacks.

The purpose of this study is to identify the dominant factor of educational service quality that influences the student satisfaction at the Faculty of Economics, Malikussaleh University in Nanggroe Aceh Darussalam, Indonesia. More specifically, the objectives of this study are: (1) to identify the underlying dimensions of educational service quality (2) to determine the student satisfaction level and (3) to understand the contributions of each dimension of educational service quality toward student satisfaction.
2. Literature Review

Service Quality

All service organizations are concerned about costs, employee productivity, suppliers, and related customer service quality issues. Highly competitive service providers such as accounting firms, airlines, banks, import-export firms, insurance companies, telecommunications, as well as regulated service monopolies such as local governments, hospitals, schools and public utilities, must demonstrate at least minimum quality improvement understanding and application. In most cases, success is still defined as a better customers' satisfaction and improved results (Milakovich, 2006).

Dimension of service quality was firstly developed in ten dimensions (Parasuraman et al, 1985) that customer use to evaluate the service, and develop perceived service quality. The factors include the following attributes: access, communication, competence, courtesy, credibility, reliability, responsiveness, security, tangibles, and understanding. Therefore, if the customer's performance perceptions (based on the ten dimensions) exceed the customer expectations, then the service provider provides quality service. The difference in scores determines the level of service quality i.e. Service Quality = Perceived Service - Expected Service.

Subsequently, Parasuraman, et al (1988, 1991) developed SERVQUAL from a modification of ten dimensions proposed in 1985 to five dimensions in 1988. These are tangibles, reliability, responsiveness, assurance, and empathy. In their study, the data on the 22 attributes were the analyzed factor and resulted in five dimensions. In order to improve the SERVQUAL scale and to verify its applicability, Parasuraman and his colleagues followed several steps. First, eliminating the negative items; second, replacing two new items with two original items to be more fully captured the dimensions, and third, adding important weights to the measurement process. (Parasuraman, et. al, 1991).

Service quality has dimensions of facilitating good, tangible (explicit) service, and psychological (implicit) service. While the facilitating good quality can be measured using the dimensions of manufacturing, the tangible and psychological dimensions of service quality require different measurement (Schroeder, 2007). Measurement of service quality is called SERVQUAL. It is measured by a customer questionnaire, as explained above, based on five perceptual measures of service; tangibles, reliability, responsiveness, assurance, and empathy.
Educational Service Quality
During the last decade, quality initiatives have been the subject of an enormous amount of practitioner and academic discourse, and at various levels have found a gateway into higher education (Avdjieva & Wilson, 2002).

In terms of role of service quality in higher education, Shank et al. (1995) noted that higher education possesses the characteristics of a service industry. Educational services are intangible, heterogeneous and inseparable from the person delivering it, variable, perishable, and the customer (student) participates in the process. Additionally, colleges and universities are increasingly finding themselves in an environment that is conducive to understanding the role and importance of service quality; this environment is a fiercely competitive one. Within this context, the educational literature suggests how imperative it is for educational institutions to actively monitor the quality of the services they offer and to commit to continuous improvements in order to survive the increasingly fierce competition for highly desirable students and the revenue they generate (e.g. Brigham, 1994; Dorweiler and Yakhou, 1994). It has become high competitive environments, students have become more discriminating in their selection and more demanding of the colleges and universities they choose. It is important then for institutions to understand what incoming students desire (and increasingly expect) from the institution of their choice. Unfortunately for many institutions, competition for enrollment of an increasingly diverse, yet academically qualified student body has increased alongside the rise in awareness of these students about the programs and services offered at most universities. As a result, the issue of retention of these students has become an area of critical concern for most colleges and universities.

Service quality and student’s satisfaction are important factors in students' retention, it is important that educational institutions measure students' expectations about the quality of educational services. Oldfield and Baron (2000) emphasized that institutions should address the issues of quality, not only through the traditional routes of accreditation and course review, student feedback questionnaires on quality of course delivery and teaching, but also through evaluating what students themselves consider being elements in service quality.

Educational Service Quality (ESQ) is an educational service quality instrument from Holdford and Patkar (2003). Performance measurement similar with those in the SERVPERF service quality measurements developed by Cronin and Taylor (1992) were used. The
original 41 items in the ESQ instrument consist of items that assessed students' perceptions about learning resources in the college, faculty, school administration (i.e. deans, department chairs, and office personnel), and perceptions of their educational progress. Holdford and Patkar (2003) used administration, interpersonal behavior faculty, faculty communication, facilities, and faculty expertise to analyze educational service quality.

Indicators of facility that Holdford and Patkar (2003) used in their research were: (1) up-to-date teaching tools & equipment, (2) physical facilities visually appealing & comfortable, (3) physical facilities convenient to students, (4) electronic access to drug & health science information, (5) computer laboratory an important asset, and (6) physical facilities readily available for use around-the-clock. While for indicators of interpersonal behavior of faculty were: (1) friendly & approachable, (2) willing to help you, (3) available outside of class, (4) keep their promises, (5) behavior instills confidence in students, (6) sensitive to student confidentiality, (7) honest with you, and (8) treat you with respect.

For the faculty expertise, the researchers stated three indicators, namely (1) have the knowledge to answer your questions, (2) are current with the developments in their area of expertise, and (3) know what topics are relevant to becoming a good Student. While the indicators of faculty communication: (1) consistent with their grading practices and what they tell, (2) explain things in a way that you can understand, (3) have your best interests at heart, (4) attempt to understand my specific needs, (5) make clear what they expect of you, and (6) usually give me adequate feedback about my performance.

The next indicators for administration were: (1) show sincere interest in solving student problems, (2) friendly & approachable, (3) dependable, (4) attempt to understand my specific needs, (5) act promptly, (6) willing to help you, (7) honest with you, (8) behavior instills confidence in students, (9) sensitive to student confidentiality, (10) sensitive to student safety, (11) keep students informed about issues that concern them, (12) treat you with respect, (13) have knowledge to answer your questions, and (14) responsive to student evaluations about the curriculum. While for indicators of satisfaction are: (1) satisfy with the Faculty's facilities, (2) satisfy with a high quality education, (3) satisfy with the quality of teaching, (4) satisfy with the extent of intellectual, (5) satisfy with the faculty of this university, (6) satisfy with the administration of this university, and finally satisfy with the university's curriculum (Holdford and Patkar, 2003).
Customer Satisfaction

The terms "quality" and "satisfaction" are sometimes used interchangeably. But some researchers believe that perceived service quality is just one component of customer satisfaction, which also reflects price/quality trade-offs, and personal and situational factors. Service quality is customers' long-term, cognitive evaluations of a firm's service delivery whereas customer satisfaction is a short-term emotional reaction to a specific service performance (Christopher and Lauser, 2006).

There are three areas regarding consumer satisfaction that need to be clarified: its definition, measurement focus, and measurement tool. In a comprehensive form, consumer satisfaction is defined as an outcome of customers' cognitive and affective judgment of product consumption-related fulfillment. A product provides a certain level of consumption-related fulfillment (Rust and Oliver, 1994; Oliver, 1997). From affective perspective, satisfaction is a consumer judgment of a product's ability to provide a pleasure fulfillment. The term pleasurable implies increased pleasure or reduction of pain and the term fulfillment implies the existence of a goal and comparison standard (Oliver, 1997).

While Helier et al. (2003) defined consumer satisfaction as "the degree of overall pleasure or contentment felt by the customer, resulting from the ability of the service to fulfill the customers' desires, expectations and needs in relation to the service. Storbakka et al. (1994) defined consumer satisfaction as "customer cognitive and affective evaluation based on the personal experience across all service episodes within the relationship." Satisfaction can be defined as an attitude-like judgment following a purchase action or a series of consumer product interactions. Most studies are based on the theory that the confirmation/disconfirmation of pre-consumption product standards is the essential determinant of satisfaction. This means that customers have certain service standards in mind prior to consumption (their expectations), observe service performance and compare it to their standards, and then form satisfaction judgments based upon this comparison. The resulting judgment is labeled negative disconfirmation if the service is worse than expected, positive disconfirmation if better than expected, and simple confirmation if as expected. When there is substantial positive disconfirmation, plus pleasure and an element of surprise, then customers are likely to be delighted. However, once customers have been delighted, their expectations are raised. They will be dissatisfied if service levels return to previous levels, and it will take more effort to "delight" them in the future (Parasuraman, et. al, 1988).

There is variety of theoretical approaches to explain customer satisfaction
and dissatisfaction, the most widely used model based on the expectation disconfirmation theory, which was developed by Richard Oliver (1997). In the expectancy disconfirmation model, disconfirmation refers to the customer's comparison of the service performance to an expectation. Satisfaction = f (Perception - Expectation). Customer expectation of service is set in two stages. First, the consumer develops expectation about the company during the customer's first encounter with the service firm, via advertising and customer word of mouth. Second, after a previous encounter with the firm, the consumer compares their expectations to the actual product performance.

Numerous studies on the relationship between service quality and consumer satisfaction have been conducted with the conclusion of behavioral consequences. The most common finding has been that consumer satisfaction has a significant effect on behavioral intentions (Zhou, 2004). The empirical evidence generally shows that service quality precedes overall satisfaction, which in turn determines behavioral consequences including switching intentions. As such, consumer satisfaction is viewed as an intervening variable that mediates the relationship between service quality judgments and behavioral outcomes. Most importantly, consumer satisfaction is a distinct concept from service quality. According to Mittal and Lasser (1998), satisfaction is a rating of customer experience with the service outcome, whereas service quality is a judgment made about a firm's resources and skills.”

3. Research Methodology
Research Design
Descriptive study was employed in this study in order to identify the dominant factor of educational service quality that influenced the students' satisfaction and also to understand the influence of each dimension toward the satisfaction of students. Questionnaire survey was employed as the instrument of data collection by using a structured form. This study used purposive and convenient technique sampling. The purposive sampling selected the respondents based on specific characteristics. It means that the respondents were chosen according to the Faculty where there were studying presently. Convenient sampling means that the respondents were asked to fill up the questionnaire without any compulsion. The original version of the questionnaire was developed in English. The questionnaire was then transcribed into Bahasa Indonesia. In this study, researcher distributed 230 questionnaires to the respondents. The instrument used to collect the data in this study was a structured questionnaire. This
questionnaire was essential to obtain the required information on educational service quality and student's satisfaction. This questionnaire was adapted from Holford and Patkar (2003). They used 41 items in the ESQ instrument that consists of items for assessing students' perceptions about learning resources in the college, faculty, school administration (i.e., deans, department chairs, and office personnel), and perception of their educational progress. There are five dimensions namely; administration, interpersonal behavior faculty, faculty communication, facilities, and faculty expertise to analyze educational service quality.

In this study, researcher adapted 39 items from the ESQ instrument because only these items were appropriate with the educational service quality research. It consisted of five items of facilities dimension, seven items of interpersonal behavior of faculty, three items of faculty expertise, five items of faculty communication, and five items of administration dimension. Items of satisfaction factor were similar with Holdford and Patkar. These items measured the influence of service quality toward students' satisfaction in Faculty of Economics, Malikussaleh University.

4. Data Analysis
The technique analysis used in this research was quantitative by using statistical analysis. For the purpose of this study, a multidimensional model of service quality for the educational industry was developed to provide comprehensive conceptual framework and appropriate measurement scale to determine the perception of students toward service quality. The instrument used was the updated educational service quality (ESQ) instrument.

In the data preparation stage, the available data was systematically organized and prepared for statistical computation process. After the data was transcribed and checked for validity, relevant information in the questionnaires was typed on a computer spreadsheet application through data entry process. Only valid or usable questionnaires were input to SPSS data editor for further analysis. Finally, the data was ready to be processed through computational statistic application; SPSS 12.0 for Windows for statistic computation.

Factor analysis attempted to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Reliability test was used to prove or denote the level of difference on educational service quality's variables and
measurement of variables by assessing level of consistency among variables. Cronbach's alpha is commonly used to test reliability of internal consistency toward scale that has many variables. Measurement was used by coupling mean score on each variable with other variables in scale. According to Nunnally (1967), the reliability level of 0.50 and above is accepted. While according to Sekaran (2003), the reliability level less than 0.60 is weak, 0.70 is moderate and the reliability level of 0.80 above is good.

In the regression, five variables of educational service quality (32 items) in the questionnaire were constructed as the independent variables while satisfaction variable which included seven items were become dependable variable. The model of educational service quality regression is as follow;

\[
Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e
\]

Which;

\[
Y = \text{Student Satisfaction} \\
X_1 = \text{Facilities} \\
X_2 = \text{Interpersonal Behavior Faculty} \\
X_3 = \text{Faculty Expertise} \\
X_4 = \text{Faculty Communication} \\
X_5 = \text{Administration}
\]

a. Findings

Exploratory Factor Analysis

By using SPSS program Version 12, several steps were needed to achieve scores of analysis factor. Firstly, the score of anti-image matrices identified the proper variables to make factor analysis. Result of the analysis explained that with a total score of Measures of Sampling Adequacy (MSA) (0.893), it was shown that the score was more than 0.5, it meant that these variables was feasible to be analyzed.

Rotation step was used for reducing data to become several factors that have few factors if extraction step was used before. Score of extraction shown that great factor which was developed can explain variance of items/variables in the research. Item of physical facilities visually appealing & comfortable had score of 0.848, it meant that score of 84.8 percent of the item could be explained in the research.

Based on the results of factor analysis, 32 items were developed into five dimensions namely; facilities, interpersonal behavior of faculty, faculty expertise, faculty communication and administration with a variance cumulative of 71.493 percent and score of eigenvalue of more than 1.0 refer to table 4.2. Then, Kaiser-Meyer-Olkin (KMO) and Barlett of Sphericity's
test were used. Based on table 1, KMO showed a score of 89.3 percent with significance of 0.05. It explained that the analysis process could continue to the next step because the items indicated high correlation (Leech, Barrett and Morgan, 2005).

<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Factor Loading</th>
<th>Variance (%)</th>
<th>Cumulative Variance (%)</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physical facilities visually appealing &amp; comfortable</td>
<td>0.849</td>
<td>51.381</td>
<td>51.381</td>
<td>16.404</td>
</tr>
<tr>
<td>2</td>
<td>Modern teaching equipment</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Computer laboratory an important asset</td>
<td>0.760</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Physical facilities convenient to students</td>
<td>0.751</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Physical facilities readily available for use every time</td>
<td>0.669</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sensitive to student's desirability</td>
<td>0.831</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Treat you with respect</td>
<td>0.821</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Available outside of class/office</td>
<td>0.735</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Honest with you</td>
<td>0.729</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Keep their promises</td>
<td>0.723</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Willing to help you</td>
<td>0.716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Friendly &amp; approachable</td>
<td>0.665</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Know what topics are relevant to becoming a good student</td>
<td>0.752</td>
<td>5.179</td>
<td>57.895</td>
<td>2.122</td>
</tr>
<tr>
<td>14</td>
<td>Are current with the developments in their area of expertise</td>
<td>0.728</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Have the knowledge to answer your questions</td>
<td>0.631</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Explain things in a way that you can understand</td>
<td>0.815</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Usually give me adequate feedback about my performance</td>
<td>0.778</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Attempt to understand my specific needs</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Consistent with their grading practices and what they tell you</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Make clear what they expect of you</td>
<td>0.677</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Responsive to student evaluations about the curriculum</td>
<td>0.843</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Honest with you</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Attempt to understand my specific needs</td>
<td>0.805</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Dependable</td>
<td>0.792</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Keep students informed about issues that concern them</td>
<td>0.774</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Treat you with respect</td>
<td>0.766</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Friendly &amp; approachable</td>
<td>0.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Sensitive to student confidentiality</td>
<td>0.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Have knowledge to answer your questions</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Act promptly</td>
<td>0.720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Willing to help you</td>
<td>0.702</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Show sincere interest in solving student problems</td>
<td>0.649</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.893; Bartlett of Sphericity: 7030.384, (p<0.000), Principal component analysis with a varimax rotation.
Bartlett test was used to identify the level of acceptance and the value was 7030.384 (p < 0.000) with significance (0.000). The significant value of Bartlett test was less than 0.05, it explained that each items of variable had high correlation to each variable and these variables were feasible in each factor analysis.

Table 4.2 performed that the score of factor loading for all items indicated that it was more than 0.40. According to Leech, Barrett and Morgan (2005), factor loading score of more than 0.40 or specifically explained high level of consideration, in contrast, factor loading which was less than 0.40 indicated low level of consideration and need to be deleted to increase the level of consideration.

Generally, item “physical facilities visually appealing & comfortable” is one of factors that show the highest loading score among other item in the research, while item “have the knowledge to answer your questions” included in faculty expertise factor indicates the lowest loading score among others.

Reliability Analysis
Reliability test was used to prove or denote the level of difference on educational service quality variables and measurement of variables by assessing level of consistency among variables. Cronbach's alpha commonly was used to test reliability of internal consistency toward scale with many variables.

<table>
<thead>
<tr>
<th>No.</th>
<th>Factors</th>
<th>Number of items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administration</td>
<td>12</td>
<td>0.923</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal behavior of faculty</td>
<td>7</td>
<td>0.900</td>
</tr>
<tr>
<td>3</td>
<td>Faculty communication</td>
<td>5</td>
<td>0.850</td>
</tr>
<tr>
<td>4</td>
<td>Facilities</td>
<td>5</td>
<td>0.761</td>
</tr>
<tr>
<td>5</td>
<td>Faculty expertise</td>
<td>3</td>
<td>0.748</td>
</tr>
</tbody>
</table>

Based on table 2, the results of reliability test for all factors showed that the score of Cronbach's alpha was more than 0.50. Factor of administration also showed the highest score of alpha among the other factors, the reliability score was 0.923. The next will be followed by interpersonal behavior factor
with the score of alpha was 0.90. Score of reliability for faculty communication factor was good with the reliability level was 0.850. Facilities factor and faculty expertise had reliability level of 0.761 and 0.748 respectively which indicated facilities and expertise were included as the moderate level.

Multiple Regression Analysis
Multiple regressions were performed between satisfaction variable as the dependent variable to five educational service quality dimensions as independent variable. Table 3 is the result of regression to five educational service quality dimensions.

<table>
<thead>
<tr>
<th>Educational Service Quality Dimensions</th>
<th>Standardized Beta Coefficients</th>
<th>t-Value</th>
<th>Sig. (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities</td>
<td>0.240</td>
<td>4.710</td>
<td>0.000</td>
</tr>
<tr>
<td>Interpersonal behavior of faculty</td>
<td>-0.173</td>
<td>-1.860</td>
<td>0.064</td>
</tr>
<tr>
<td>Faculty expertise</td>
<td>0.153</td>
<td>2.665</td>
<td>0.008</td>
</tr>
<tr>
<td>Faculty communication</td>
<td>0.494</td>
<td>5.902</td>
<td>0.000</td>
</tr>
<tr>
<td>Administration</td>
<td>0.241</td>
<td>2.557</td>
<td>0.011</td>
</tr>
</tbody>
</table>

R = 0.877  
R Square = 0.770  
F (ANOVA) = 138.263  
Sig. F = 0.000

Sig. (2-tailed) with probability < 0.05

Table 3 indicated that overall, the regression equation was significant at 0.05 level (F = 138.263, p-value of F = 0.000). Four of five educational service quality dimensions, facilities, faculty expertise, faculty communication and administration contribute significantly to the student satisfaction dimension. With \( \beta = 0.240 \), t-value = 4.710 and p-value = 0.000, facilities dimension positively related to satisfaction dimension. Faculty expertise dimension positively related to satisfaction dimension with \( \beta = 0.153 \), t-value = 2.665 and p-value = 0.008.

Faculty communication dimension was positively related to satisfaction dimension with \( \beta = 0.494 \), t-value = 5.902 and p-value = 0.000 and last dimension, administration also positively related to satisfaction with \( \beta =0.241 \), t-value = 2.557 and p-value = 0.011. Beside that overall the relationship between satisfaction and educational service quality dimensions was strong with R = 0.877. With R square = 0.770, it meant that
this regression model was feasible for this study. Regression model in this study was:
\[ Y = -0.400 + 0.290X_1 + 0.177X_2 + 0.165X_3 + 0.526X_4 + 0.267X_5 + e \]
From the model, for facilities dimension (0.290), if other coefficients were constant, it meant that facilities increase 29.0 percent toward satisfaction dimension. Interpersonal behavior of faculty (-0.177), if other coefficients were constant, it meant that interpersonal behavior decreases 17.7 percent toward satisfaction. For faculty expertise (0.165), if other coefficients were constant, it means that expertise increased 16.5 percent toward satisfaction.

Faculty communication dimension (0.526) increased 52.6 percent toward student satisfaction dimension if other coefficients were constant. Similarly for administration dimension (0.267), if other coefficients also were constant, it meant that administration dimension increased 26.7 percent toward satisfaction dimension. Additionally, error term (e) was any other dimensions which researcher did not analyze/use in this study.

**Students' Satisfaction**

There were seven items for assessing student's satisfaction at Faculty of Economics, Malikussaleh University. These related to facilities, the quality of education, the quality of teaching, the intellectual development, the faculty of this school, administration and curriculum. Using analysis of descriptive statistic, the results were indicated in several tables in term of statistic mean, standard error and standard deviation.

**Table 4: Students satisfaction**

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>Standard Error</th>
<th>Standard Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied with the school’s facilities</td>
<td>3.80</td>
<td>0.070</td>
<td>1.027</td>
<td>1.055</td>
</tr>
<tr>
<td>Satisfied with the quality of education</td>
<td>3.75</td>
<td>0.068</td>
<td>0.990</td>
<td>0.980</td>
</tr>
<tr>
<td>Satisfied with the quality of teaching</td>
<td>3.69</td>
<td>0.060</td>
<td>0.878</td>
<td>0.771</td>
</tr>
<tr>
<td>Satisfied with the extent of intellectual development since enrolling in this faculty</td>
<td>3.81</td>
<td>0.058</td>
<td>0.990</td>
<td>0.710</td>
</tr>
<tr>
<td>Satisfied with the faculty of this University</td>
<td>3.71</td>
<td>0.058</td>
<td>0.851</td>
<td>0.724</td>
</tr>
<tr>
<td>Satisfied with the administration of this Faculty</td>
<td>3.71</td>
<td>0.061</td>
<td>0.894</td>
<td>0.800</td>
</tr>
<tr>
<td>Satisfied with the curriculum of this Faculty</td>
<td>3.71</td>
<td>0.061</td>
<td>0.894</td>
<td>0.800</td>
</tr>
</tbody>
</table>
Overall the mean score of student's satisfaction at Faculty of Economics, Malikussaleh University, was 3.74. Overall standard error was 0.061 and the standard deviation was 0.900. However, students were satisfied with the facilities, quality of education, quality of teaching, intellectual development, faculty of this university, administration and curriculum at Faculty of Economics.

b. Discussion Of Findings
The rapidly changing environment has caused the education to pay greater attention to their students and the role of marketing has become more important. Educations are complex organizations and the traditions and practice of a regulated industry are not easily overcome.

Discussion of finding in this chapter was performed by explaining the overall research results based on data interpretation in the previous chapter. Data analysis was about the educational service quality dimensions that were offered for students and assessing level of satisfaction toward services offered by the Faculty.

Educational Service Quality Dimensions
By using exploratory factor analysis, dimensions of educational service quality were achieved based on Educational Service Quality (ESQ) model. Results of the research had identified five dimensions as measurements of educational service quality namely; facility dimension, interpersonal behavior, faculty expertise, faculty communication and administration dimension. Research result of factor analysis indicated that the educational service quality for Faculty of Economics at Malikussaleh University could be explained by all dimensions namely; facilities, interpersonal behavior, faculty expertise, faculty communication and administration. Facilities dimension included several items were like modern teaching equipment, physical facilities visually appealing & comfortable, physical facilities convenient to students and computer laboratory an important asset. Beside that the item “physical facilities readily available for use every time” had the lowest value explaining facility dimension to measure service quality. Facility dimension was the most important dimension in this research because it had the ability of the Faculty to offer the service quality appropriate with student's desirability. It meant that it could increase level of student satisfaction. It is supported by the highest reliability score toward facility dimension comparing with other dimensions in measuring educational service quality for Faculty of Economics at Malikussaleh
University. Although interpersonal behavior of faculty's dimension is an important dimension in measuring educational service quality but this dimension is needed to realize the student trust and indirectly increase level of satisfaction toward service quality. The items of the dimension are such as friendly & approachable, willing to help, available outside of class/office, keep promises, sensitive to student's desirability, honest and treat student with respect. Similarly, faculty expertise dimension is also an important dimension in this research. Expertise of the Faculty that is appropriate with students' wish is needed to attract student's heart so that they perceived satisfaction and happy when using services.

Faculty communication dimension can be explained by several items such as consistent which explains things in a way that can be understood, attempt to understand student specific needs, make clear what student expectation and give student adequate feedback about their performances. This dimension is as important as other dimensions because this is the faculty's tool for evaluating student performance and the faculty communication offer is proper for student for measuring level of satisfaction. Finally, administration dimension is the lowest dimension in analyzing factor. It is also needed for supporting learning process at the Faculty. The Faculty has carried out properly administration process so that creating student satisfaction.

Influence of Educational Service Quality to Satisfaction
The regression analysis showed that facilities, faculty expertise, faculty communication and administration have influenced significantly the student satisfaction dimension, while the interpersonal behavior dimension has not significantly influenced the satisfaction dimension.

Faculty communication was also one of educational service quality dimensions that students perceive the highest level of satisfaction. It because the Faculty was usually consistent with their grading practices, explaining things in a way that could understand, attempting to understand student specific needs, making clear what they expected of students and usually gave students adequate feedback about performance. Students at Faculty of Economics enjoyed this communication.

Items of facilities that students perceived the most satisfaction is the availability of computer laboratory for use, while students perceived the lowest satisfaction level of facilities dimension in term of convenience of facility. For examples; faculty's library has less compatible condition, were used fans to make cool rooms and the learning rooms use some of the wood
chairs, even though the students were satisfied with the conditions at the Faculty.

For faculty expertise, the students were satisfied with the faculty because they have knowledge to communicate with students, development in related areas of expertise, and knowing what the topics are relevant to becoming a good student. It also shows one of the professional services in educational industry. The last dimension that student perceive satisfaction is administration. The student is highly satisfied with curriculum at the Faculty besides honest, friendly and approachable, dependable, treat with respect, and so on. In contrary interpersonal behavior of faculty dimension, the student does not perceive satisfaction significantly. It shows that the Faculty is less attention to help to student and also keep their promises.

Simultaneously, all dimensions which influenced the satisfaction variables had strong correlation. This meant that educational service quality had a direct influence to satisfaction. From the educational service quality, faculty communication was the most dominant factor that influenced student satisfaction significantly.

**Student Satisfaction**
There is a strong positive correlation between educational service quality and students' satisfaction. Educational service quality increases together with the level of students' satisfaction, otherwise if educational service quality decreases with that level of student satisfaction decreases also. It has proved that level of students' satisfaction is influenced by educational service quality that offered for students. Research shows that student at Faculty of Economics perceived satisfaction toward all educational services that offered for them. Although research did not show high level of satisfaction but it proved that Faculty of Economics at Malikussaleh University offered good qualified services according to students.

**Implications**
Research implication aims to identify impressions based on the research results. There are two sides involved directly in giving impression toward new students specifically outside Nanggrooe Aceh Darussalam. Although to attract new outside students is the responsibility of the education institutions, but the role of government under Directorate General of Higher Education (DIKTI) has direct influence to increase new outside students for Malikussaleh University, Indonesia.
Directorate General of Higher Education

Government is very careful toward development of new students. It is proved that various strategies have been carried out to attract new students to enroll at universities in Indonesia. The objective of government will be achieved if all elements can cooperate in offering qualified services. Government under Directorate General of Higher Education, besides carry out promotion of state universities also provides scholarships for new students to get DIKTI's scholarship in Indonesia as the area study. Overall, educational service quality offered by Faculty of Economics at Malikussaleh University can be accepted for well through student's response in this research. Nevertheless, the Faculty needs to give attention to human resource service quality of the available because students have low responses in terms of interpersonal behavior. Therefore, DIKTI as the first mover needs to carry out several programs for improving employee's skill on each university. The university’s employees are the key of service quality at university education. There are several steps that can be conducted by DIKTI; determining a standardized measurement for employees who works at higher educational institutions, making process of selection effectively to permit an employee that be able working as deliverer of service for students.

Additionally, DIKTI needs to carry out training programs and seminars for employees so that they can deliver service quality for students. The qualified employee will be able to assist student responses during their learning process at higher educational institutions in Indonesia and can help government to achieve the country's objectives.

Faculty of Economics at Malikussaleh University

As a whole, students at Faculty of Economics have perceived satisfaction toward service quality offered by the Faculty. Because students have showed good feedback toward all services then the Faculty needs to increase their service quality in the dimension of interpersonal behavior. Interpersonal behavior dimension closely related to employee as representative of the institution in delivering service for student. It because the students gave low feedback toward interpersonal behavior dimension compared to other dimensions.

Satisfaction of employee is also one of key elements that have to be highlighted in organization. It because employee's satisfaction will be able to influence students' satisfaction and also service quality dimensions are influenced by employee's behavior. On that account, in the first instance the Faculty needs to ascertain their employee's satisfaction before trying to
increase students' satisfaction because student will give assessment toward educational service quality through employee behavior at the Faculty.

Performance quality can be increased if employees are able to deliver qualified service for students. The first step need be conducted by the Faculty, by carrying out the process of selecting employee effectively in various services. Student will give responses negatively toward the Faculty if employees deliver services improperly to the students.

Besides that, the Faculty of Economics at Malikussaleh University needs to ascertain that employees have knowledge and skillfulness in each area so that students feel comfortable during accepting services offered by employee. It is real if employees provide by attending training and have motivation in carrying out their responsibility.

5. Conclusion
This study discussed educational service quality and students' satisfaction that was conducted to provide knowledge about services for educational industry and the influence to students' satisfaction.

The result of this study showed the implication that Faculty of Economics at Malukussaleh University could take by identifying the influences between service quality and level of students' satisfaction. The concept of Educational Service Quality (ESQ) in the context of higher educational institutions in Indonesia was explained based on the scales of ESQ, as by Holdford and Patkar (2003). This study showed that ESQ can be developed by five dimensions namely facilities, interpersonal behavior of faculty, faculty expertise, faculty communication, and administration. Faculty communication dimension was the most important dimension that needs to be underlined in this study but the Faculty also needs to focus on student responses toward other dimensions.

Results that did not influence significantly indicated that the management of Faculty needs to conduct quality control and increase existing resources by giving proper services to student's desire. It showed how important the Faculty could understand the student's desire because it would increase students' satisfaction. Therefore, management of the Faculty needed to ascertain that employees had adequate training to understand level of service needed as well as have motivation in giving services for students. The excess of trainings and attentions toward critical factors that were given for employees would increase costs of the institution but it would increase service quality for students. Also, it would give positive impression toward increasing of students' satisfaction. If students perceive better satisfaction with services offered by the Faculty, it would increase the
number of student enrollment to Faculty of Economics, Malikussaleh University.

References


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