Increasing Student Satisfaction Through Improving Service Quality at Tourism Colleges in East Jakarta

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ABSTRACT

At private universities in East Jakarta, this study examines the impact of five service quality factors on student satisfaction. The research instrument consists of 28 questions arranged and structured based on variables, dimensions and indicators using the Likert scale. Data collection using questionnaires distributed via Google form to 30 people for validity and reliability testing and 300 people as research samples. The multiple linear regression method is used for data analysis with the help of SPSS software. The study's results partially show that three service quality dimensions, namely Reliability, Empathy and tangibles, significantly affect student satisfaction. Still, the dimensions of Responsiveness and assurance do not affect student satisfaction. Simultaneously, five dimensions of service quality have a significant effect on student satisfaction.

1. INTRODUCTION

Higher education in tourism as an educational institution strives to produce superior human resources that can compete globally. The profitability of tourism and hospitality businesses depends on how effectively they manage their people resources (Zhong et al., 2022). To produce qualified graduates, tourism education and training are crucial. However, majors in tourism in higher education continue to encounter significant obstacles, and low employment rates remain an issue (Zhong et al., 2022). For this reason, applying a quality management system (QMS) in education management aims to achieve student satisfaction, in this case, as customers. The quality of services that might boost student happiness and retention rate has received much attention due to intense competition in the higher education sector, particularly at private universities. (Leonnard, 2021). Private institutions must focus on providing real-world services and education of the highest caliber. Customer expectations or satisfaction are used to gauge how well the level of service provided meets those expectations (Saadoon et al., 2022).

Customer satisfaction measures a person’s enjoyment or unhappiness with a product based on how well it performed (results) compared to expectations (Kotler & Keller, 2016). Student happiness has proven to be an accurate indicator of how well the quality of service initiatives are performing in institutions (Keržič et al., 2021). Students’ perceptions of their academic success and their level of satisfaction with the caliber of college services have been linked in studies (Keržič et al., 2021).

Education management should be balanced with the provision of good services by following established academic regulations as a basis for guidelines for implementing activities by the academic community, including leaders, lecturers, staff, and students. Measuring the quality of education-related services is crucial in the higher education sector right now to support targeted development efforts primarily focused on students’ needs (Lupo & Buscarino, 2021). The implementation and evaluation of all relevant parties’ activities are required to execute academic regulations to enable the university to fulfill its mission and vision. The priority in the field of service provided to students in the field of academic service. All organizations now place a high value on service quality since it affects their ability to promote and make money. It now serves as a source for achieving competitive advantage through service differentiation and has evolved into a crucial component of competitiveness (Ramzi et al., 2022). Students who receive high-quality academic services should be able to satisfy their needs, and they can
evaluate the services they receive. To achieve the same level of enjoyment, both partners have a reciprocal relationship.

Many studies have addressed higher education service quality and student satisfaction (Leonnard, 2021; Li & Lee, 2023; Saadoon et al., 2022; X. Wang et al., 2022). Student questionnaires were utilized to collect a number of dimensions, which were then applied to various service contexts. In addition, the author has not found any research that discusses service quality and student satisfaction at tourism universities in East Jakarta. Previous research has stated that the quality of service affects student satisfaction (Leonnard, 2021; Li & Lee, 2023; Saadoon et al., 2022; Sitanggang et al., 2021; Torabi & Bélanger, 2021; X. Wang et al., 2022). However, research also shows that service quality does not affect student satisfaction (Alzahrani & Seth, 2021). Knowing how their students perceive the service is essential for service organizations such as Educational Institutions. Student satisfaction is associated with human activities to satisfy customer needs and desires through products and services (Twum & Peprah, 2020). Student satisfaction in an educational setting correlates with qualification quality.

Concerning the satisfaction aspect, evaluating all academic services in the internal and external environment is necessary. One of the internal environments of universities is that students as service users require special consideration since they will impact the exterior environment, specifically the general public, who will evaluate the effectiveness of education delivery.

2. LITERATURE STUDY

Student Satisfaction.

In psychology, satisfaction is a feeling brought on by fulfilling particular objectives; There are two definitions of satisfaction in education. One is that contentment is a feeling or state; The second is that fulfillment of a need or desire is referred to as contentment (Z. Wang & Gao, 2022). College students' psychological states of happiness or dissatisfaction with their effectiveness after receiving educational services are known as educational customer satisfaction (Z. Wang & Gao, 2022).

When a person compares their perceived performance or achievements to their expectations, they are said to be satisfied to a certain extent (Oliver, 1980). The discrepancy between actual performance and expected performance determines the degree of satisfaction. They will be disappointed if the performance exceeds the customer's expectations. If the performance matches their expectations, customers will be pleased. Customers will be pleased if the performance meets or surpasses expectations. The perception of a good or service meeting one's expectations is another definition of satisfaction (Irawan, 2002). According to Tjiptono (2019), customer satisfaction is a person's sensation of happiness or dissatisfaction that develops after comparing the impression of a product's performance (results) with its expectations. When a product or service meets a customer's requirements and expectations, the consumer feels emotionally satisfied with the product or service. Al-Sheeb et al. (2018) demonstrate how the four aspects of education determining student happiness are lecturer expertise, programs offered, setting, and classroom amenities. The Xie dan Guo (2010) satisfaction evaluation methodology analyzes the effects of five perceived value variables on student satisfaction: student loyalty, expectations, complaints, and overall value perception.

Based on the expert opinion above, the researcher concludes that satisfaction is a feeling of individual satisfaction because expectations and reality in using and providing services are fulfilled. When described, consumer satisfaction is the difference between what consumers expect (expected value) and the realization given by the company to meet consumer expectations (perceived value) if:

a. Expected value = perceived value of satisfied customers
b. Value expectancy > value perception customer is very satisfied
c. Expected value > perceived value of dissatisfied customers

For this reason, the indicators to measure student satisfaction the author uses customer satisfaction according to Tjiptono (2019), namely:

1. Performance
2. Hope
Service Quality

The success of any business is thought to depend on the quality of its services. Market competition pushes businesses to evaluate their market positions and consider customer-centric practices to gain a competitive edge (Scott & Guan, 2022). The higher education sector is today driven by the need to meet intense competition-related pressures on student recruitment, retention, and loyalty by improving the environment for learning and offering high-quality education-related services (Lupo & Buscarino, 2021). The uniqueness of the education sector necessitates additional specialized measurements to uncover determinants and give tools for education reform. However, many genetic service quality evaluation techniques (SERVQUAL, SERVPERF) are currently used in educational research. (Scott & Guan, 2022).

The gap between what consumers find and what they expect regarding the service they receive is how the quality of service is determined (Yılmaz & Temizkan, 2022). According to the American Society for Quality, quality refers to all of a product's or service's attributes that support its ability to satisfy both expressed and implicit needs (Kotler & Keller, 2012). A service is any action or performance that one party can carry out for another that is inherently immaterial and doesn't result in ownership (Kotler & Keller, 2012). The phrase "difference between reality and consumer expectations of the service they receive or obtain" can be used to characterize service quality (Parasuraman et al., 1985). Service quality is an entity that is closely related to customer satisfaction (Lupo & Buscarino, 2021). Service quality may uphold accountability and provide services that will improve the customer experience and happiness by meeting and exceeding specified service standards (Amzat et al., 2023).

According to Parasuraman, Zeithaml, dan Berry (1985), Competence, courtesy, credibility, and security are united into assurance. Meanwhile, access, communication, and the ability to understand customers are integrated into Empathy. As a result, five main aspects are listed in the following order of relative importance:

1. The capacity of a business to provide promised services accurately the first time around is referred to as Reliability.
2. The ability and willingness of the service provider to help clients and act quickly on their requests is referred to as Responsiveness.
3. Assurance in terms of the staff's expertise, politeness, and capacity to build client confidence and trust.
4. Empathy means believing the business pays attention to each customer individually, that it understands their difficulties, and that it works in their best interests.
5. Physical evidence (tangibles) pertaining to the outward look of service facilities, machinery, personnel, and corporate communication materials.

Research Concept Framework

![Research Concept Framework](image)

**Fig. 1. Research Theory Framework**
Hypothesis

The study's hypotheses are:
H1: Reliability has a positive and significant effect on student satisfaction.
H2: Responsiveness has a positive and significant effect on student satisfaction.
H3: Assurance has a positive and significant effect on student satisfaction.
H4: Empathy has a positive and significant effect on student satisfaction.
H5: Tangible has a positive and significant effect on student satisfaction.
H6: The quality of service, which includes Reliability, Responsiveness, Assurance, and Empathy, has a positive and significant influence on student satisfaction.

3. METHOD

Explanatory research is combined with quantitative methodology in this work. Data processing and presentation, doing computations to describe data, and employing statistical tests to assess hypotheses are all part of the data analysis process in quantitative research (Siregar, 2013).

Population and sample

In this study, 1191 active students made up the population sampling using a 5% error tolerance and the Slovin formula.

\[ n = \frac{N}{1 + Ne^2} \]

where: \( n \) = sample size \( N \) = population size \( e \) = percentage of intolerable inaccuracy allowance

\[ n = \frac{1191}{1+(1191)(0.05)^2} \]

\[ n = \frac{1191}{3.97} = 300 \]

So that the sample to be used in this study is as many as 300 respondents. The sampling technique uses proportional sampling with the following sampling proportions:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Number of Students</th>
<th>Percent</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's degree program (S1)</td>
<td>800</td>
<td>67%</td>
<td>201</td>
</tr>
<tr>
<td>Diploma three program (D3)</td>
<td>391</td>
<td>33%</td>
<td>99</td>
</tr>
<tr>
<td>Sum</td>
<td>1191</td>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>

Source: Academic Administration in Processing, 2023

Data Collection Techniques

Data collection using questionnaires or questionnaires distributed through google forms. The scale used is the Likert scale with an interval of 1 – 5, i.e., 1 - very unsatisfactory; 2 - unsatisfactory; 3 - quite satisfactory; 4 - satisfactory; and five is very satisfying.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensions</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Tangibles</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Student Satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Hope</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Author, 2023
Data Processing Techniques

The questionnaire distributed must pass the reliability data quality test so that the instruments used are valid and reliable so that the research results are valid and reliable. The quality test of the data used is:

**Validity Test**

The Pearson Product Moment Correlation Technique Formula is used to determine the correlation between each item score statement’s (X) and total score’s (Y) values in order to conduct the validity test:

\[
 r = \frac{(n\sum x^2 - \sum xy)^2}{\sqrt{(n\sum x^2 - \sum x^2)^2} (n\sum y^2 - \sum y^2)^2}
\]

Where:
- \( r \): correlation coefficient
- \( X \): grain score
- \( Y \): Total grain score
- \( n \): Number of samples (respondents)

Furthermore, the \( r \)-value is compared with the value of the \( r \)-table using free degrees (\( n-2 \)). If the value calculated > \( r \)-table at a certain alpha, then it is significant to conclude that the question item is valid (Sugiyono, 2016a).

**Reliability Test**

Reliability tests are carried out to determine the consistency or regularity of the measurement results of an instrument if the instrument is used again for an object or respondent. The Reliability of measuring instruments in the form of scales can be found using the following alpha Cronbach technique:

\[
 r_{11} = \left( \frac{k}{k-1} \right) \left( 1 - \frac{\sum \sigma^2_b}{\sigma^2_b} \right)
\]

Where:
- \( r_{11} \): Instrument Reliability
- \( k \): Many Question Points
- \( \sum \sigma^2_b \): Number of grain variants
- \( \sigma^2_b \): Total Variance

Variant formulas used:

\[
 \sigma = \frac{\Sigma x^2 - (\Sigma x)^2 / n}{n}
\]

Where:
- \( n \): Number of respondents
- \( x \): selected score value

Furthermore, the Cronbach alpha value is compared with the \( r \)-table value using free degrees (\( n-2 \)). If the Cronbach alpha value > \( r \)-table at a given alpha, the reliability test is significant or reliable (Sugiyono, 2016b).

**Classical Assumption Test**

In multiple linear regression analysis so that the certainty of the resulting regression model has accurate estimates, consistent and unbiased, it is necessary to test classical assumptions, namely:

**Data Normality**

The data normality test evaluates how normal the data are and determines whether they are normally distributed. (Sekaran, U., & Bougie, 2016). Because regularly distributed data are seen as
representative of the population, the degree of normalcy of the data is crucial. Because the data to be analyzed parametrically must be regularly distributed, data normality tests are the primary precondition in Pearson correlation parametric analysis, mean comparison tests, variance analysis, etc. Using SPSS and the Kolmogorov-Smirnov One Sample technique; the Test was conducted using the following test criteria:

It is regularly distributed if the significance value (Asym Sig 2-tailed) is greater than 0.05.
The data are not normally distributed if the significance value (Asym Sig 2-tailed) is less than 0.05.

**Heteroskedasticity**

Test heteroscedasticity: an important assumption of population regression models is homoscedastic, i.e., all disorders have the same variance. Heteroscedasticity is one of the violations of the classical linear assumption that the variance of the disorder is no longer constant (Sekaran, U., & Bougie, 2016).

**Multicollinearity**

The Multicollinearity Test determines whether the regression model detected tolerances between independent variables. There should be no room for error between the independent variables in a decent regression model. Examining the Inflation Factor (VIF) and Tolerance value in the regression model is a frequent test approach. The regression model is not multicollinear if the VIF value is less than ten and the tolerance is greater than 0.1 (Sekaran, U., & Bougie, 2016).

**Data Analysis Methods**

**Multiple Linear Regression Model**

Multiple linear regression analysis is a study that analyzes the effect/relationship between one or more independent variables/predictors with one non-free / fixed variable (dependent) / response, with the form:

\[ y = a + b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5 \]

Information:
- \( y \) = Student satisfaction
- \( a \) = Constant
- \( b_3 \) = Regression coefficient
- \( x_3 \) = assurance
- \( b_4 \) = Reliability regression coefficient
- \( b_4 \) = Koefisien regresi empathy
- \( x_4 \) = Reliability
- \( b_2 \) = Regression coefficient of Responsiveness
- \( b_5 \) = Regression coefficient tangibles
- \( x_5 \) = Responsiveness
- \( x_5 \) = Tangibles

**Partial Test with t-Test**

This Test aims to determine the significance of the independent variable's influence on the dependent variable independently or partially while accounting for the other independent constant. The importance of this influence can be ascertained by comparing the computed and t-table values. Assume that the t-count has a larger value than the t-table. The independent variable then has a direct effect on the dependent variable. In contrast, the independent variable does not directly affect the dependent variable if the value of t-count is less than t-table. Alternately, it might be concluded that the independent variable only has a limited effect on the dependent variable by looking at the significant value of t 0.05 (Sekaran, U., & Bougie, 2016).

Steps used:

Merumuskan hipotesa

\[ H_0: bi = 0 \text{, i.e., there is no significant effect on the independent variable partially on the non-free variable.} \]

\[ H_1: bi \neq 0 \text{, i.e., there is a significant influence on the independent variable partially on the non-free variable.} \]
Determining the real level
\[ \alpha = 5\% \text{ atau } 0.05 \]
\[ df = n - k \]

Find t count
\[ t_{hitung} = \frac{b_i}{s(b)_i} \]

Test criteria
- \[ t_{count} > t_{table} \] This means \( H_0 \) rejected and accepted \( H_1 \).
- \[ t_{count} < t_{table} \] This means \( H_0 \) accepted and rejected \( H_1 \).

**Simultaneous Test with F test (ANOVA)**

The value of \( F_{calculate} \) with \( F_{table}(df \text{ numerator}, df \text{ denominator}) \) will be contrasted with the true rate of \( =5\% \) (0.05). \( H_0 \) is rejected, and \( H_1 \) is accepted if \( F_{calculate} > F_{table} \), indicating that all free variables collectively have a meaningful relationship with or influence on non-free variables; on the other hand, if \( F_{calculate} < F_{table} \), indicating that all free variables collectively have no meaningful relationship with or influence on the independent variable, or by examining the significant value of F 0.05, indicating that the independent variables collectively give rise to a significant result (Ghozali, 2018).

**Correlation Coefficient (R) and Determination Coefficient**

Determine whether independent and non-free variables have a linear connection by using the correlation coefficient (R). The correlation coefficient value shows the following category: If a positive R-value means that the relationship between X and Y is straight, it means that the greater the X, the greater Y. If the value of R negative means that the relationship between X and Y is reversed, then if X is more excellent, Y is smaller. According to Sugiyono (2016b), Guidelines for interpreting the results of the correlation coefficient are as follows:

- \((0.00-0.199)\) = very weak
- \((0.20-0.399)\) = weak
- \((0.40-0.599)\) = keep
- \((0.60-0.799)\) = strong
- \((0.80-1.000)\) = very strong

The Coefficient of Determination is a value that shows the ability of variable X to explain the diversity of Y, where the value of the Coefficient of Determination (KD) is formulated by:

\[ KD = R^2 \times 100\% \]

**4. RESULTS AND DISCUSSION**

**Result**

**Validity Test**

The validity test was carried out on 30 respondents to test 28 statement items which are a development of 2 research variables with seven indicators; the results of the validity test stated that all statement items obtained a calculated r value greater than the r table of 0.361 with a significance level of 0.05% so that it can be concluded that validity is fulfilled.

**Reliability Test**

**Table 3. Reliability Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indikator</th>
<th>Alpha</th>
<th>Hasil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>Reliability</td>
<td>.889</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Responsiveness</td>
<td>.868</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Assurance</td>
<td>.641</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Empathy</td>
<td>.835</td>
<td>Reliable</td>
</tr>
<tr>
<td></td>
<td>Tangibles</td>
<td>.777</td>
<td>Reliable</td>
</tr>
</tbody>
</table>
Setyo Widiarto (Increasing Student Satisfaction Through Improving Service Quality...)

Classical Assumption Test Results

Normality Test

<table>
<thead>
<tr>
<th>Normal Parameters</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Deviation</td>
<td>1.41906963</td>
</tr>
<tr>
<td>Absolute</td>
<td>0.077</td>
</tr>
<tr>
<td>Positive</td>
<td>0.077</td>
</tr>
<tr>
<td>Negative</td>
<td>-0.060</td>
</tr>
</tbody>
</table>

A significance value of 0.055 is greater than 0.050, which indicates that the data are normally distributed according to the Kolmogorov-Smirnov test.

Table 4. Multicollinearity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1Rea</td>
<td>.411</td>
<td>2.432</td>
<td>No-Mult.</td>
</tr>
<tr>
<td>X2Res</td>
<td>.347</td>
<td>2.884</td>
<td>No-Mult.</td>
</tr>
<tr>
<td>X3Asu</td>
<td>.250</td>
<td>4.005</td>
<td>No-Mult.</td>
</tr>
<tr>
<td>X4Emp</td>
<td>.290</td>
<td>3.442</td>
<td>No-Mult.</td>
</tr>
<tr>
<td>X5Tan</td>
<td>.450</td>
<td>2.223</td>
<td>No-Mult.</td>
</tr>
</tbody>
</table>

Multicollinearity Test

Because either the tolerance value or the VIF is more than 0.10, it may be said that multicollinearity does not exist.

Heteroskedasticity Test

Table 5. Heteroskedasticity Test

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized</th>
<th>Standardized</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.806</td>
<td>.342</td>
</tr>
<tr>
<td>X1Rea</td>
<td>.016</td>
<td>.026</td>
</tr>
<tr>
<td>X2Res</td>
<td>.008</td>
<td>.026</td>
</tr>
<tr>
<td>X3Asu</td>
<td>.027</td>
<td>.033</td>
</tr>
<tr>
<td>X4Emp</td>
<td>-.009</td>
<td>.028</td>
</tr>
<tr>
<td>X5Tan</td>
<td>-.033</td>
<td>.021</td>
</tr>
</tbody>
</table>

Based on the findings of the heteroskedasticity test using the Glejser test and a significance value more than 0.05, it may be assumed that the regression model has no evidence of heteroskedasticity.
Model Regresi Linier Berganda

\[ y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 \]

\[ Y = 0.397 + 0.124 X1 + 0.055 X2 + 0.011 X3 + 0.186 X4 + 0.187 X5 \]

The obtained multiple linear regression equation explains that the constant (a) value of 0.397 indicates a positive value, indicating a unidirectional influence between the independent and dependent variables. This means that if all independent variables (Reliability, Responsiveness, Assurance, Empathy, and Tangibles) are 0 or remain constant, the value of aggressiveness of satisfaction is 0.397.

Test t

<table>
<thead>
<tr>
<th>Variable</th>
<th>t</th>
<th>Sig</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>3.274</td>
<td>.001</td>
<td>Sig.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>1.466</td>
<td>.144</td>
<td>No Sign.</td>
</tr>
<tr>
<td>Assurance</td>
<td>.222</td>
<td>.824</td>
<td>No Sign.</td>
</tr>
<tr>
<td>Empathy</td>
<td>4.658</td>
<td>.000</td>
<td>Sig.</td>
</tr>
<tr>
<td>Tangibles</td>
<td>6.151</td>
<td>.000</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

Source: Data processing results, 2023

Reliability's Impact on Students' Satisfaction

Based on Table 6, the calculated t value = 3.274 with a significance value of 0.001, using the real level of alpha = 5% and the degree of freedom df = n - k (300-6) = 294 to obtain the table t value is = 1.968, meaning that the first hypothesis is accepted. Student satisfaction is significantly impacted by Reliability.

Responsiveness Impact on Students' Satisfaction

Based on Table 6, the calculated t value = 1.466 with the significance value = 0.144, so the comparison of the calculated t value is 1.466 < 1.968 table t values; significance values of 0.144 > 0.05, the meaning of which the second hypothesis is rejected. Responsiveness does not have a significant effect on student satisfaction.

The Effect of Assurance on Student Satisfaction

The ratio is the calculated t value of 0.222 1.968 table t value; significance value 0.824 > 0.05, implying the third hypothesis is rejected. This is based on Table 6, where the calculated t value = 0.222 and the significance value = 0.824. Student satisfaction is not significantly impacted by assurance.

The Effect of Empathy on Student Satisfaction

Based on Table 6, the comparison is calculated with a t-value of 4.658 and a significance value of 0.000; this means that the fourth hypothesis is accepted. The comparison is computed with a t-value of 4.658 and a significance value 0.000. Empathy significantly influences student satisfaction.

The Impact of Tangibles on Students' Satisfaction

Based on Table 6, the calculated t value = 6.151 with the significance value = 0.000, so the comparison is the calculated t value of 6.151 > 1.968 table t values; The significance value is 0.000 < 0.05, the meaning of which the fifth hypothesis is accepted. Tangibles have a significant effect on student satisfaction.
Test F

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1048.885</td>
<td>5</td>
<td>209.777</td>
<td>102.430</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>602.114</td>
<td>294</td>
<td>2.048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1651.000</td>
<td>299</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Ykp
b. Predictors: (Constant), X1Tan, X1Rea, X2Res, X4Emp, X3Asu

**Fig. 3.** F Test Results
Source: Data processing results, 2023

Based on Figure 3, the F value is determined to be 102.430 with a significance level of 0.000, using the actual level alpha of 5% and the DF1 = k - 1 (6 - 1) = 5 and DF2 = n-k (300-6) = 294 to produce the F value of the table, which is = 2.245. Therefore, the comparison of F values is determined to be > F table = 102.430 > 2.245; significant values of 0.000 0.05, indicating acceptance of the sixth hypothesis. Student happiness is impacted by the quality of the service, which includes dependability, Responsiveness, Assurance, Empathy, and concrete aspects.

**Coefficient of Determination**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. The error in the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.797a</td>
<td>.635</td>
<td>.629</td>
<td>1.43109</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), X1Tan, X1Rea, X2Res, X4Emp, X3Asu
b. Dependent Variable: Ykp

**Fig. 4.** Coefficient of Determination
Source: Data processing results, 2023

Based on Figure 4, the value of the correlation coefficient = 0.797 and the coefficient of determination or R Square = 0.635 so that it can be interpreted simultaneously that there is a positive relationship with a strong category in the independent variable to student satisfaction. Together contributed 63.5% to student satisfaction, with other factors that were not evaluated impacting the remaining 25%.

**Discussion**

Academic service is a factor that needs to be considered by management because the results of the study show that the quality of service has a positive and significant effect on guest satisfaction; the results of this study support previous research, which states that service quality has a positive effect on student satisfaction (Leonnard, 2021; Li & Lee, 2023; Saadoon et al., 2022; Sitanggang et al., 2021; Torabi & Bélanger, 2021; X. Wang et al., 2022). By improving the quality of service, student satisfaction with academic services can be achieved (Elahinia & Karami, 2019). One of the main demands on organizers is the happiness of the students. Universities are under pressure to perform better and create plans for superior instruction, academic research, leadership, and management (Amzat et al., 2023).

This study resulted that five dimensions of service quality had a positive relationship with strong categories of student satisfaction; the results of regression analysis showed that the dimensions of Reliability, Empathy and tangibles were predictor variables that had a significant effect on satisfaction, while the dimensions of Responsiveness and assurance did not affect student satisfaction. This study's results align with previous research that the Reliability and tangibles dimensions are independent variables that significantly affect student satisfaction, and the assurance dimension does not. Still, the empathy and responsiveness variables provide different regression results (Ojo & Ifeoma, 2018). This demonstrates that the five aspects of service quality should be enhanced because they simultaneously benefit satisfaction. According to reports, total quality management will help university leadership and
management accomplish the targeted objectives for ongoing quality improvement in higher education, which center on student happiness (Amzat et al., 2023).

5. CONCLUSION

Based on the findings of the research, the researcher can draw the following conclusions: (1) tangibles have a significant impact on student satisfaction; (2) tangibles have a significant impact on student satisfaction; (3) responsiveness has no significant impact on student satisfaction; and (4) assurance has no significant impact on student satisfaction. Five aspects of service quality simultaneously have a substantial impact on student satisfaction.

Based on the results of research, student satisfaction with the quality of academic services generally gets an assessment in the good category; even so, university management should be able to maintain and even improve on service indicators that have met student expectations, including lecturer competence (Reliability), lecturer concern for students (Empathy), comfortable lecture rooms (tangibles), academic guidance (Responsiveness), assignment information (assurance). While the service indicator that needs attention is the availability of canteens (tangibles); although this is not directly related to student academic activities, by the theory of the hierarchy of needs, food is a physiological need so that it is felt to be one of the factors that support the smooth running of student academic activities because students who are healthy and fulfilled nutrition are expected to be motivated in learning. For this reason, it is recommended that management improve canteen services by providing a variety of main foods and snacks that are nutritious, healthy and safe so that students can choose and consume food according to their tastes.

REFERENCES


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