

THE INFLUENCE OF PRICE, FACILITIES, AND SERVICE QUALITY ON PARENTAL SATISFACTION (AT NURUL HUDA ELEMENTARY SCHOOL IN SURABAYA CITY)

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Abstract:

This study aims further to examine the "Influence of Price, Facilities, and Service Quality on Parent Satisfaction" at MI Nurul Huda. The main issue addressed is the relationship between these three variables and the level of parent satisfaction. The background of this research is driven by parents' high expectations regarding educational quality and provided facilities, as well as the role of price, which is expected to align with service quality. The objectives are to analyze the individual impact of price, facilities, and service quality on customer satisfaction, as well as their combined (simultaneous) effect on overall parent satisfaction. A quantitative method with a survey approach was used, employing questionnaires distributed to parents of students from grades 1 to 6. The population consisted of all students at MI Nurul Huda, with a sample of 80 respondents selected using the Slovin formula. Data analysis involved multiple linear regression, and validity was tested using Spearman's Rank correlation. The results show that, in summary, neither price nor facilities significantly affect parent satisfaction, whereas service quality has a positive and significant impact. Additionally, the three variables together significantly influence the level of parent satisfaction. The conclusion is that service quality is the main factor affecting parent satisfaction. Although price and facilities do not have a significant effect individually, they contribute to overall satisfaction when combined.

Keywords: Price, Facilities, Service Quality, Parent Satisfaction

INTRODUCTION

Education plays a crucial role in shaping the personality and future of students. In this increasingly complex era, the quality of education is a determining factor in how well individuals adapt to change. Community participation is essential to support the creation of a generation that is not only intellectually intelligent but also imbued with noble morals and strong character. In urban areas like Surabaya, educational institutions, particularly Islamic Elementary Schools (MI), bear the essential responsibility of equipping students with the skills necessary to face future challenges, focusing not only on academics but also on character development from an early age.

MI Nurul Huda Surabaya, founded in 1995, has been committed to providing learning that balances academics and character development. Parental satisfaction is an important indicator of a school's success, as it reflects public trust in the quality of educational services provided. Parental satisfaction is a key factor in determining the success of an educational institution. Satisfied parents tend to be more willing to support school activities and place their full trust in the institution to educate their children. Therefore, it is important to examine the factors that influence parent satisfaction. This research specifically focuses on three main factors: price, facilities, and service quality at MI Nurul Huda, which interact and influence parents' perceptions.

Tuition fees are a crucial factor for parents when choosing a school. Transparency in cost information can foster trust and comfort in the educational investment process. Reasonable and affordable prices are a major attraction for educational institutions. Furthermore, the availability of



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facilities also influences the quality of the learning process. Adequate facilities and infrastructure, such as comfortable classrooms, complete teaching aids, and other supporting facilities, create a conducive learning environment, which in turn encourages optimal student learning.

Furthermore, the quality of services provided by the school also plays a significant role in fostering parent satisfaction. Good communication between the school (teachers and educational staff) and parents fosters trust, creates harmonious relationships, and fosters mutual support for children's educational success. High levels of parent satisfaction not only positively impact the educational institution but also significantly impact student development, as students who learn in an environment supported by satisfied parents tend to have higher learning motivation and achieve better academic performance.

To further understand this issue, researchers present data on the number of students and teachers at MI Nurul Huda over the past three years. This data provides an overview of the growth and development of MI Nurul Huda.

Table 1. Number of Students at MI Nurul Huda

No.	Student	2023	2024	2025
1	Class I	66	69	69
2	Class II	85	60	61
3	Class III	66	65	70
4	Class IV	83	73	75
5	Class V	74	60	60
6	Class VI	69	75	75
Total		443	402	410

Source: MI Nurul Huda Internal Data (2025)

The increase in student enrollment, despite a slight decline in 2024, reflects the level of public trust in the quality of educational services provided by the school. To support this learning process, MI Nurul Huda is supported by a number of teaching staff with appropriate qualifications.

Table 2. Number of Teachers at MI Nurul Huda

No.	Teacher	2023	2024	2025
1	Man	8	7	9
2	Woman	17	19	17
Total		25	26	26

Source: MI Nurul Huda Internal Data (2025)

As the number of students increases, MI Nurul Huda strives to maintain the quality of education by paying attention to the student-to-teacher ratio. The addition of qualified teaching staff is expected to improve interaction between teachers and students and ensure that each student receives adequate attention. However, despite the many positive factors in MI Nurul Huda's development, challenges remain. Some parents stated that the tuition fees they pay do not fully reflect the quality of the facilities and services they receive. This situation can lead to dissatisfaction, which impacts the level of trust in the educational institution.

Therefore, an in-depth study is needed to determine the extent to which price, facilities, and service quality influence parent satisfaction at MI Nurul Huda. This research is urgent for several reasons:



METHODS

This research adopted a quantitative approach using a survey method. The quantitative approach was chosen because it aimed to examine the interplay between variables through numerical data processing and statistical analysis, allowing for generalizability of findings and providing a clear picture of the magnitude of each variable's influence. The variables studied included price (X1), facilities (X2), and service quality (X3) as independent variables, and parent satisfaction (Y) as the dependent variable.

MI Nurul Huda was selected as the research location based on its reputation for providing quality education and its large and diverse parent population.

Population: The population of this study was all parents whose children were enrolled at MI Nurul Huda Surabaya, totaling 410 students.

Sample: Given the relatively small population and the characteristics of parents who had at least one year of experience at MI Nurul Huda, a census sampling technique was used. However, to ensure a representative sample size, the Slovin formula was applied with a 10% margin of error.

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

Where:

- (n) = Number of samples sought
- (N) = Population size
- (e) = Margin of error (in this case 10%)

Calculation:

Given:

$$N = 410$$

$$e = 0,10$$

So:

$$n = \frac{410}{1 + 410(0,10)^2}$$

$$n = \frac{410}{1 + 410 \times 0,01}$$

$$n = \frac{410}{1 + 4,1}$$

$$n = \frac{410}{5,1}$$

$$n = 80,3/80$$

Using the Slovin formula and a 10% error rate, a sample of 80 respondents was obtained from a total population of 410 students, which served as the data source for this study.

Quantitative data analysis was conducted after data were collected from all respondents. This process included grouping data, organizing it into tables, and systematically presenting the information. The data were analyzed to answer the research questions and test the hypotheses.

Validity Test: Conducted to ensure the instrument accurately measures the variables. Validity decisions are based on comparing the correlation coefficient (r-value) with the r-value at a significance level of 0.05. If the r-value is greater than the r-value, the questionnaire is considered valid.



With this large student body, MI Nurul Huda is supported by 26 professional and experienced teaching staff and administrative staff, ensuring an effective and efficient learning process.

Respondent identities are presented to illustrate the background and circumstances of the parents of the students sampled in this study. Respondents were classified based on gender, age, and their experience supporting their children's education at MI Nurul Huda. A total of 80 respondents were selected, all active parents with at least one year of experience at MI Nurul Huda. Given the limited number of parents at MI Nurul Huda, and all of them meeting these criteria, the researcher used a saturated sampling technique.

Validity Test. A validity test was conducted to ensure that the research instrument, the questionnaire, was able to measure the variables studied accurately and precisely. An instrument is considered valid if each item has a significant correlation with the total score. In this study, validity testing was conducted on all items in the variables of price, facilities, service quality, and parent satisfaction.

Table 3. Validity Test for Price Variable

Price Variable	R Count	R Table	Probability	Information
X1.1	0,885	0,195	0,000	Valid
X.1.2	0,907	0,195	0,000	Valid
X.1.3	0,891	0,195	0,000	Valid
X.1.4	0,852	0,195	0,000	Valid
X.1.5	0,870	0,195	0,000	Valid
X.1.6	0,828	0,195	0,000	Valid

Source: Processed by Researchers, 2025

Based on the data in the table, all items in the Price variable have calculated r values greater than the table r values. This indicates that each statement item in this variable meets the validity criteria and is suitable for use as a data collection instrument in this study.

Table 4. Validity Test of the Facilities Variable

Price Variable	R Count	R Table	Probability	Information
X2.1	0,730	0,195	0,000	Valid
X.2.2	0,851	0,195	0,000	Valid
X.2.3	0,868	0,195	0,000	Valid
X.2.4	0,818	0,195	0,000	Valid
X.2.5	0,849	0,195	0,000	Valid
X.2.6	0,850	0,195	0,000	Valid

Source: Processed by Researchers, 2025

Based on the data presented in the table, all items in the facilities variable have a calculated r value higher than the table r value. This indicates that each statement item in this variable meets the validity criteria and is suitable for use as a data collection instrument in this study.

Table 5. Validity Test of Service Quality Variables

Price Variable	R Count	R Table	Probability	Information
X3.1	0,787	0,195	0,000	Valid



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X.3.2	0,930	0,195	0,000	Valid
X.3.3	0,924	0,195	0,000	Valid
X.3.4	0,890	0,195	0,000	Valid
X.3.5	0,899	0,195	0,000	Valid
X.3.6	0,883	0,195	0,000	Valid
X3.7	0,869	0,195	0,000	Valid
X3.8	0,914	0,195	0,000	Valid
X3.9	0,936	0,195	0,000	Valid
X3.10	0,927	0,195	0,000	Valid

Source: Processed by Researchers, 2025

Referring to the data presented in the table, all items in the service quality variable have a calculated r value greater than the table r value. This indicates that each statement item in the variable meets validity requirements and is suitable for use as a data collection instrument in this study.

Table 6. Validity Test of the Parent Satisfaction Variable

Price Variable	R Count	R Table	Probability	Information
Y1	0,870	0,195	0,000	Valid
Y2	0,831	0,195	0,000	Valid
Y3	0,852	0,195	0,000	Valid
Y4	0,849	0,195	0,000	Valid
Y5	0,716	0,195	0,000	Valid
Y6	0,606	0,195	0,000	Valid

Source: Processed by Researchers, 2025

Based on the data in the table, all items in the parent satisfaction variable show calculated r values greater than the table r values. This indicates that each item in the variable meets the validity criteria and is suitable for use as a data collection instrument in this study.

Reliability Test. The purpose of the reliability test is to measure the consistency or stability of the instrument in producing reliable data. An instrument is considered reliable if the measurement results show high consistency even when administered at different times. Reliability testing is conducted using Cronbach's Alpha, where a score greater than 0.60 indicates an adequate level of reliability.

Table 7. Reliability Test

Variable	Reliability Test	Item	Cronbach Alpha	Information
Price	0,637	6	0,60	Reliable
Facilities	0,871	6	0,60	Reliable
Service Quality	0,904	10	0,60	Reliable
Parent Satisfaction	0,889	6	0,60	Reliable

Source: Processed by Researchers, 2025

Referring to the results of the reliability test table, all variables in this study had Cronbach's Alpha values above 0.60. This indicates that the questionnaire instrument for the variables Price, Facilities, Service Quality, and Parental Satisfaction met reliability standards, making it reliable and suitable for use in research data collection.



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Classical Assumption Test; Normality Test. The normality test in this study aims to ensure that the residual data from the regression model are normally distributed. The test was conducted using the Kolmogorov-Smirnov test as an appropriate statistical method.

Table 8. Kolmogorov-Smirnov Normality Test

Sample	Kolmogorov-Smirnov value	Signification	Information
80	0,05	0,000	Abnormal

Source: Processed by Researchers, 2025

Referring to the results of the normality test using the Kolmogorov-Smirnov test, the significance value (Sig.) for all variables was less than 0.05 (Sig. = 0.000). This indicates that the data is not normally distributed. Therefore, the next analysis used the non-parametric correlation test, Spearman's Rho, which is suitable for examining relationships between variables without having to meet the assumption of normality. The results of the Spearman correlation test between the variables price, facilities, service quality, and parent satisfaction are presented in the following table:

Table 9. Spearman Correlation Test

Variables	Correlation Coefficient (r)	Sign.(p)	Information
Price	0,574	0,000	Significant
Facilities	0,799	0,000	Significant
Service Quality	0,850	0,000	Significant

Source: Processed by Researchers, 2025

Referring to the results in Table 3.13, we can conclude that:

- There is a positive and significant relationship between the Price variable (X1) and Parent Satisfaction (Y), indicated by a correlation coefficient of 0.574.
- The Facilities variable (X2) also has a positive and significant relationship with Parent Satisfaction (Y), with a correlation coefficient of 0.799.
- The strongest relationship is found between the Service Quality variable (X3) and Parent Satisfaction (Y), with a correlation coefficient of 0.850.
- Thus, although the data is not normally distributed, the three independent variables still show a significant relationship with the dependent variable based on the Spearman correlation test.

Multicollinearity Test. The multicollinearity test was conducted to detect high correlations between independent variables in the regression model, to ensure the stability and reliability of the regression coefficient estimates. According to applicable criteria, the Variance Inflation Factor (VIF) value should be less than 10, and the tolerance value should be more than 0.1.

Table 10. Multicollinearity Test

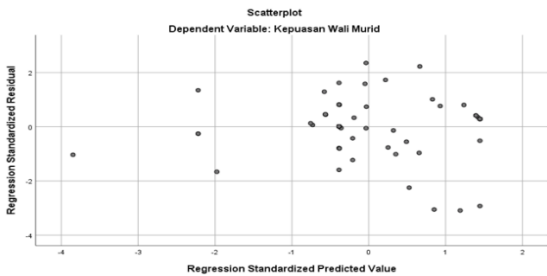
Model	VIF
(Constant)	
Price	1,816
Facilities	4,344
Service Quality	3,734

Source: Processed by Researchers, 2025



In this study, the results of the multicollinearity test shown in the table show that the Variance Inflation Factor (VIF) value for each variable is below the threshold of 10, and the tolerance value also exceeds 0.1. Thus, the regression model used does not show any indication of multicollinearity.

Heteroscedasticity Test. The heteroscedasticity test is conducted to evaluate whether the residual variance in the regression model is constant or exhibits a specific pattern. The test is performed through a scatterplot analysis of the residuals and predicted values. If the points on the scatterplot are randomly distributed and do not form a specific pattern, the model is considered free of heteroscedasticity.



Source: Processed by Researchers, 2025

Figure 2. Scatterplot Heteroscedasticity Test

Based on Figure 2, the results of the scatterplot analysis show that the data points are randomly distributed without forming any particular pattern, either a straight line or a wavy pattern. This condition indicates that the residual variance is constant; thus, the assumption of homoscedasticity is met. Therefore, the regression model used in this study does not experience heteroscedasticity.

Autocorrelation Test. The autocorrelation test aims to detect a relationship or correlation between the residuals of one observation and the residuals of other observations. This test is important, especially in regression analysis using time series data. In this study, the autocorrelation test was conducted using the Durbin-Watson (DW) statistic. A DW value approaching 2 indicates that there is no autocorrelation in the analyzed regression model.

Table 11. Autocorrelation Test

Sample	Durbin Watson Values
80	2,269

Source: Processed by Researchers, 2025

Based on the autocorrelation test results shown in the table, the Durbin-Watson (DW) value obtained was 2.269. With a sample size of 80 (n) and 3 independent variables (Price, Facilities, and Service Quality), at the 5% significance level, the lower limit (dL) value was 1.600 and the upper limit (dU) value was 1.690 (this value needs to be reconfirmed using the Durbin-Watson table corresponding to N=80 and k=3). Based on the decision-making criteria, if $dU < DW < 4 - dU$, there is no autocorrelation in the model. In this case, the DW value of 2.269 falls between 1.690 and 2.310 ($4 - dU$), thus concluding that the regression model used does not experience autocorrelation issues.

Multiple Linear Regression Test. The multiple linear regression test was used to measure the extent to which the independent variables, namely Price, Facilities, and Service Quality, influence the dependent variable, namely Parent Satisfaction. Furthermore, this test also aims to determine the direction of the relationship between the variables, whether it is positive or negative, as indicated by the regression coefficient values generated from the analysis model.



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Table 12. Multiple Linear Regression Test

Variable	B	Std. Error	Beta	t	Sig. (p)
(Constant)	0,994	1,010	-	0,984	0,328
Price	0,040	0,067	0,034	0,604	0,548
Facilities	-0,014	0,092	-0,013	-0,148	0,882
Service Quality	0,550	0,049	0,920	11,291	0,000

Source: Processed by Researchers, 2025

Based on the data presented in the table above, the resulting multiple linear regression equation is as follows:

Y = 0.0994 + 0.040X1 + 0.014X2 + 0.550X3 + e

Based on the results of the multiple linear regression analysis, the explanation for each variable in the regression model is as follows:

1. The constant value (Y) of 0.0994 indicates that if all independent variables—namely Price, Facilities, and Service Quality—are considered to have no effect (zero), then the level of parent satisfaction remains at the baseline value of 0.0994. This indicates an inherent initial level of satisfaction, even without the contribution of these three variables.
2. The regression coefficient for the price variable of 0.040 indicates that every one-unit increase in perception of price will increase parent satisfaction by 0.040 units. However, a significance value of 0.548 (>0.05) indicates that the effect of the price variable on parent satisfaction is not statistically significant. Therefore, price perception has not been proven to have a significant influence on parent satisfaction.
3. The regression coefficient for the Facilities variable of 0.014 indicates that a one-unit increase in perception of facilities is followed by a 0.014-unit increase in parent satisfaction. However, a significance value of 0.882 (>0.05) indicates that this effect is not significant. This means that perception of facilities is not a determining factor in directly influencing parent satisfaction.
4. The regression coefficient for the Service Quality variable of 0.550 indicates that every one-unit increase in perception of service quality increases parent satisfaction by 0.550 units. With a significance value of 0.000 (<0.05), the effect of this variable is statistically significant. Therefore, service quality is the most dominant factor influencing parent satisfaction at MI Nurul Huda.

Hypothesis Testing; T-Test (Partial). The t-test is used to examine the partial effect of each independent variable on the dependent variable. This test is performed by comparing the significance value (p-value) of each variable to the predetermined significance level (α = 0.05).

Table 13. T-Test (Partial)

Variabel	Signification	α	Information
Price	0,548	0,05	No effect
Facility	0,882	0,05	No effect
Quality of Service	0,000	0,05	Influential

Source: Processed by Researchers, 2025

Based on the results in the table, the significance value for the Price variable is 0.548, and for Facilities, it is 0.882, both greater than the 0.05 level of significance. This indicates that these two variables do not have a significant partial effect on parent satisfaction. Conversely, the Service



Quality variable has a significance value of 0.000, which is less than 0.05. Therefore, only the service quality variable has a significant influence on parent satisfaction at MI Nurul Huda, Surabaya City.

F Test (Simultaneous). The F test is used to determine whether the independent variables, namely Price, Facilities, and Service Quality, simultaneously have a significant effect on the dependent variable, Parent Satisfaction. This test aims to ensure that the three independent variables, when viewed as a whole, contribute significantly to variations in parent satisfaction levels.

Table 14. F Test (Simultaneous)

Variabel	Signification	α	Information
Price	0,548	0,05	No effect
Facility	0,882	0,05	No effect
Quality of Service	0,000	0,05	Influential

Source: Processed by Researchers, 2025

Based on the results in the table, the significance value for the Price variable is 0.548, and for Facilities, it is 0.882, both greater than the 0.05 significance level. This indicates that these two variables do not have a significant partial effect on parent satisfaction. Conversely, the Service Quality variable has a significance value of 0.000, which is less than 0.05. Therefore, only the service quality variable has a significant influence on parent satisfaction at MI Nurul Huda, Surabaya City.

Determination Test (R²). The coefficient of determination (R²) test is used to assess how much of the variation in the dependent variable can be explained by the independent variables in the regression model. The higher the R² value and the closer it is to 1, the better the model is at explaining the influence of the independent variables on the dependent variable.

Table 15. Determination Test

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
0,930	0,865	0,859	1,245	2,269

Source: Processed by Researchers, 2025

Based on the data in the table, the coefficient of determination (R²) of 0.865 indicates that 86.5% of the variation in the dependent variable, namely parent satisfaction level, can be explained by the independent variables: price, facilities, and service quality. Therefore, it can be concluded that these three independent variables contribute significantly to parent satisfaction, while other variables outside this research model explain the remaining 13.5%.

Discussion of Results: The Effect of Price on Parent Satisfaction. Partial test results indicate that the price variable does not significantly influence parent satisfaction at MI Nurul Huda (Sig. = 0.548 > 0.05). This finding indicates that although price is a factor considered by parents, it is not the primary determinant of their satisfaction. This could occur if parents have higher expectations for other aspects, such as the quality of education or services, or if they perceive the fees as being in line with general standards at similar educational institutions. These results are consistent with research by Hadyarti and Kurniawan (2022) and Nazarudin and Nurtleli (2020), which also found that price is not always a significant factor in customer satisfaction in certain contexts.

The Influence of Facilities on Parental Satisfaction. The Facilities variable also did not show a significant partial effect on parent satisfaction (Sig. = 0.882 > 0.05). This suggests that parents may already consider the facilities available at MI Nurul Huda adequate or standard, and therefore are no longer a differentiating factor that directly increases or decreases their satisfaction. Parents may be more focused on the non-physical aspects of education. This finding aligns with research by



