Customer Satisfaction Mediates Service Quality And Price Perception On Customer Loyalty

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Abstract.

The present study aims to analyse the effect of service quality and price perception on loyalty, as mediated by customer satisfaction, in the context of the selection of educational institutions by parents of students. The study adopts a quantitative approach, utilising a survey method, and involves 181 respondents who are parents of students. These respondents were selected through a purposive sampling technique. The data collection was conducted through a Google Form-based questionnaire, while data analysis employed the Structural Equation Modeling (SEM) method, utilising WarpPLS V.8 software. The results of the analysis demonstrate that service quality and price perception exert a substantial influence on parental satisfaction and loyalty. The study concluded that good service quality fosters trust and satisfaction, while reasonable price perception fosters long-term loyalty. The findings of this study corroborate the significance of service and pricing strategies in enhancing learner retention.

Keywords: Service quality, price perception, loyalty, education and satisfaction.

I.   INTRODUCTION

Education is widely regarded as being of fundamental importance in the development of a superior generation. Parents play a significant role in determining their child's school choice, which is not only based on academic aspects, but also on service quality and price perception. Parental loyalty has been identified as a significant predictor of a school's success in retaining and increasing its student body. Tunas Bangsa Green Ville Christian Primary School faces challenges in maintaining the continuity of internal learners due to high price perceptions, limited facilities, and declining service quality.

Table 1. Growth in the number of students at SDK TB Green Ville

Academic Year	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
SDK Tunas Bangsa	313	318	314	335	351	332

Data source: SDKTB Green Ville Learner Statistics Data, 2024

Table 2. Number of Internal Learners Sustainability

2021-2022			2022-2023			2023-2024			2024-2025		
K2	Sustain	%	K2	Sustain	%	K2	Sustain	%	K2	Sustain	%
28	21	75	28	21	75	28	21	75	45	20	44

Data source: Statistics on the Sustainability of Internal Learners from Kindergarten to Primary School, 2024
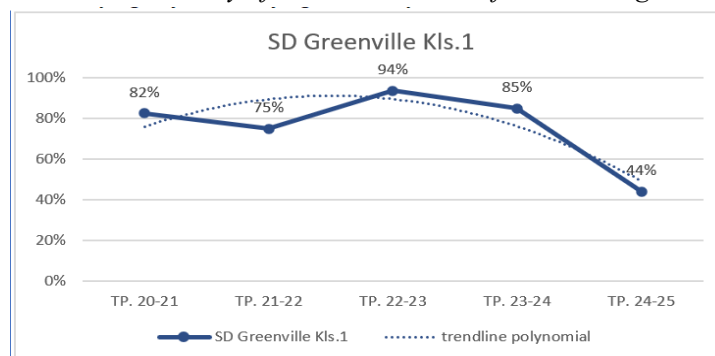

Fig 1. Graph of the continuity rate of internal kindergarten to primary school learners

Data source: Statistics on the Sustainability of Internal Learners from Kindergarten to Primary School, 2024

Positive relationships and interactions with parents have been shown to strengthen trust and attachment to the school (Sousa et al., 2024) and the need to apply the SERVQUAL concept (Mattah et al., 2018). Furthermore, it is imperative to examine the perception of the appropriate cost of education financing by assessing the benefits provided or received by parents (Thomas T. Nagle et al., 2023). The enhancement of service quality and the perception of the appropriate price are expected to exert a substantial influence on the sustainability of students, thereby prompting parents to continue selecting Tunas Bangsa Christian School and disseminating positive recommendations through word-of-mouth to other parents (Wang et al., 2018). Customer satisfaction is derived from the comparison between consumer expectations and the actual performance of a product or service, with high levels of satisfaction often resulting in the establishment of customer loyalty. Conversely, dissatisfaction can lead customers to seek alternative brands (Kotler et al., 2016).The present study aims to analyse how service quality, perceived price and parents' satisfaction affect their loyalty in continuing their children's education at this school. By understanding these factors, schools can formulate better strategies to retain customers.
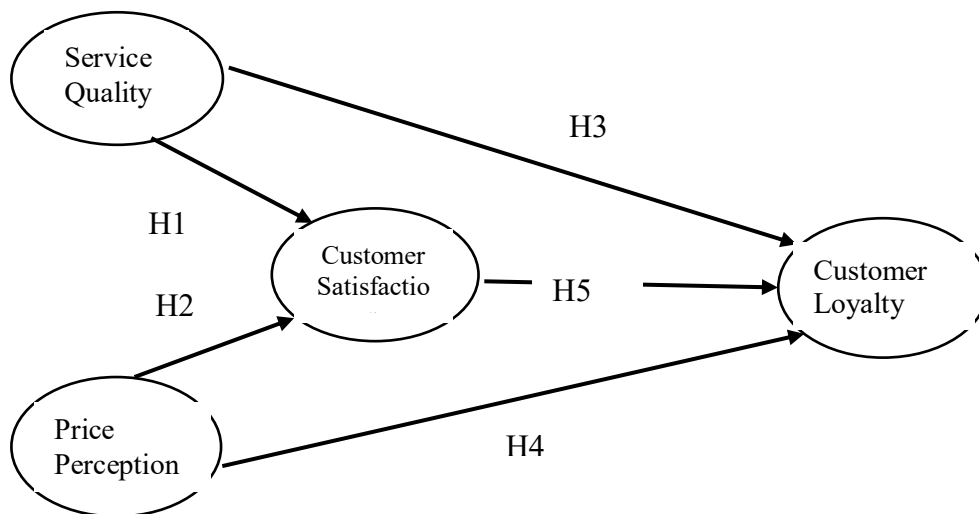

Fig 2. Analysis model

II.   METHODS

The approach adopted in this research is a quantitative method with survey techniques. The subsequent data analysis technique was carried out using Structural Equation Modeling (SEM) with the assistance of Wrap PLS v.8 software. The minimum sample size required for Structural Equation Modeling (SEM) analysis is 10 times the number of indicators in the research model. The data was collected using a Google Form-based questionnaire, which was disseminated via the WhatsApp platform. The questionnaire comprised 18 indicators, with the following details: 8 questions concerning service quality, 3 questions regarding price perception, 3 questions on satisfaction, and 4 questions on loyalty. The Likert scale was employed to measure the variables of service quality, price perception, satisfaction, and loyalty, with a rating range of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). The minimum sample size was determined to be 10 x number of indicators, resulting in a total of 180.Therefore, the minimum sample size utilised in this study is 180. The research respondents were parents of students of Tunas Bangsa Green Ville Christian Elementary School in the 2024/2025 academic year, with a total of 181 respondents out of 332 (Hair et al., 2019).

The outer model analysis incorporates construct validity and reliability, with the Average Variance Extracted (AVE) value > 0.5, Composite Reliability (CR) > 0.7, and Cronbach's Alpha > 0.7.
Inner model analysis includes a significance value (p-value) <0.05 and Coefficient Determination (R-Square) with R-Square criteria as follows (Jufrizen & Rahmadhani, 2020):

- If the value of R^2 (adjusted) = 0.75, then the model is substantial or strong.
- Conversely, if R^2 (adjusted) = 0.50, the model is considered moderate.
- Conversely, if R^2 (adjusted) = 0.25, the model is designated as weak or poor.

III.   RESULTS AND DISCUSSION
Outer Model

Figure 3 and Table 3, are the results of the analysis of service quality (X1), price perception (X2), customer satisfaction (Y1) and customer loyalty (Y2).
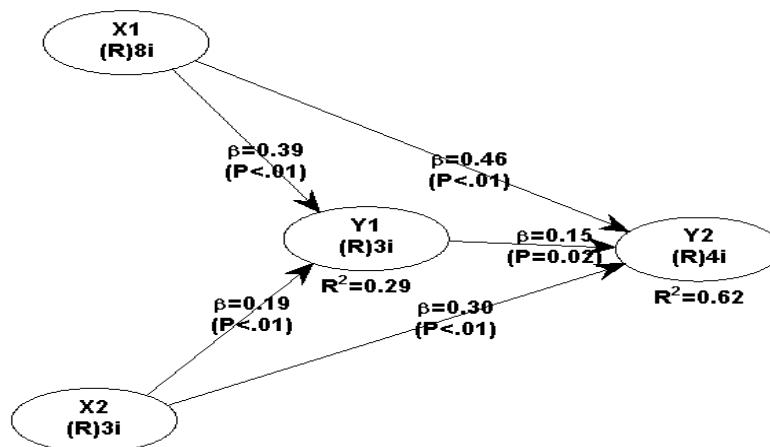

Fig 3. Model Analysis

Construct	AVE	Composite Reliability	Cronbach's Alpha
Service Quality	0,65	0,89	0,85
Price Perception	0,62	0,87	0,83
Customer Satisfaction	0,68	0,91	0,88
Customer Loyalty	0,70	0,92	0,89

Tabel 3. Cronbach's Alpha, Composite Reliability, and AVE

1.   Service Quality (X1)

The service quality indicator displays a loading factor value ranging from 0.631 to 0.836. The Average Variance Extracted (AVE) value was found to be 0.65, while the Composite Reliability was 0.89 and the Cronbach's Alpha 0.85. The findings indicate that service quality exerts a substantial influence on parental satisfaction. The provision of services that are conducive to a positive environment, characterised by competent teachers, affable demeanours, adequate facilities, and expeditious responses to parental needs, has been identified as a contributing factor. When parents feel their needs are met, they tend to have more trust in the school.

2.   Price Perception

The price perception indicator demonstrated a remarkably elevated loading factor, with a value greater than 0.893. The Average Variance Extracted (AVE) value was found to be 0.62, while the Composite Reliability was 0.87 and the Cronbach's Alpha 0.83. It is evident that perceived prices, which are considered reasonable and in accordance with the quality of services provided by the school, also contribute to parental satisfaction. Transparent and competitive pricing strategies have been shown to encourage parents to continue their children's education at the institution in question.

3.   Customer Satisfication (Y1)

The customer satisfaction indicator displays a loading factor value that exceeds 0.918. The Average Variance Extracted (AVE) value was found to be 0.68, the Composite Reliability value was 0.91, and the Cronbach's Alpha value was 0.88. The findings of this study demonstrate that parental satisfaction functions as a significant mediator between service quality and loyalty. Parents who are satisfied with the services provided by the school are more likely to recommend it to others and to continue their children's education at the next level.

4.   Customer Loyalty (Y2)

The customer loyalty indicator has a loading factor ranging from 0.795 to 0.960. The Average Variance Extracted (AVE) value was found to be 0.70, while the Composite Reliability was 0.92 and the Cronbach's Alpha 0.89. The formation of parental loyalty is predicated on the satisfaction of parents with the quality of service and their perception of the appropriate price in relation to the benefits obtained.

Inner Model

Relationship between constructs	Path Coefficient (β)	p-Value
Service Quality → Customer Satisfaction	0,39	<0,01
Price Perception → Customer Satisfaction	0,19	<0,01
Service Quality → Customer Loyalty	0,46	<0,01
Price Perception → Customer Loyalty	0,30	<0,01
Customer Satisfaction → Customer Loyalty	0,15	0,02

Table 4. Table Path Coefficient Jalur dan P-Value

Dependent Variable	R²	Description
Customer Satisfaction	0.29	Enough
Customer Loyalty	0.62	Good

Table 5. *Coefficient determinition (R-Square)*

The findings of the analysis presented in tables 4 and 5 indicate a direct and significant impact of service quality and price perception on customer satisfaction and loyalty. Furthermore, the analysis suggests that customer satisfaction can act as a strong mediator in the relationship between service quality and price perception, thereby contributing to the development of customer loyalty.

The results of the data processing above are used as a basis for hypothesis testing. The following are the results of the hypothesis test:

1.   H1: The Effect of Service Quality on Parent Satisfaction

In the statistical test displayed in table 4 above, the results show that the path coefficient with a value of 0.39 and p-values <0.01, so it can be stated that service quality is significant and has a positive impact on customer satisfaction.

2.   H2: The Effect of Price Perception on Parent Satisfaction

In the statistical test displayed in table 4 above, the results show that the path coefficient with a value of 0.19 and p-values <0.01, so it can be stated that price perception is significant and has a positive impact on customer satisfaction.

3.   H3: The Effect of Service Quality on Parent Loyalty

In the statistical test displayed in table 4 above, the results show that the path coefficient with a value of 0.46 and p-values <0.01, so it can be stated that service quality is significant and has a positive impact on customer loyalty.

4.   H4: The Effect of Price Perception on Parent Loyalty

In the statistical test displayed in table 4 above, the results show that the path coefficient with a value of 0.30 and p-values <0.01, so it can be stated that price perception is significant and has a positive impact on customer loyalty.

5.   H5: The Effect of Parent Satisfaction on the Mediating Role of Service Quality and Price Perception in the Context of Parent Loyalty

In the statistical test displayed in table 4 above, the results show that the path coefficient with a value of 0.15 and the p-values of service quality and price perception mediated by customer satisfaction on customer loyalty = 0.02. This indicates that customer satisfaction plays a mediating role in the relationship between service quality and price perception, significantly impacting parent loyalty.

IV.   CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this study is that there is a significant relationship between service quality and price perceptions in shaping parental loyalty to SDK Tunas Bangsa Green Ville. Furthermore, it is posited that parental satisfaction can act as a mediator that greatly affects parental loyalty. This suggests that enhancing service quality and aligning the perception of price with the benefits offered by the institution will lead to an increase in parental satisfaction and, consequently, foster parental loyalty. The development of a more comprehensive model by considering other variables, such as school image or social influence, is recommended for future research. Furthermore, the research can be expanded to encompass other levels of education in order to provide a more comprehensive overview.

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