



# FACTORS AFFECTING PARENTS' SATISFACTION WITH THE QUALITY OF PRESCHOOL EDUCATIONAL SERVICES

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## ABSTRACT

### Article History

Received: 7 April 2022

Revised: 16 June 2022

Accepted: 30 June 2022

Published: 14 July 2022

### Keywords

Financial costs

Parents

Preschool

Quality of education

Satisfaction

Willingness to pay.

For many researchers, satisfaction is a perennially popular research topic, with satisfaction in education being one of the most prevalent aspects. There are a few previous studies that have looked into the satisfaction of parents and students with their high school and college experiences. However, research on parental satisfaction with preschool education is limited, particularly in Vietnam. The purpose of this study was to determine the factors that influenced parents' satisfaction with their children's preschool education. A total of 511 parents in Danang agreed to take part in the study. In this study, multi-regression analysis was carried out to find out relations between response to information, teachers, and educational programs; financial costs; facilities, equipment, and supplies; care and support; and parents' satisfaction. It was found that a majority of participants expressed satisfaction with the quality of preschool education and showed their willingness to pay for it. The most influential factor affecting parents' satisfaction was identified as facilities, including other factors such as response to information, teachers, and educational programs; financial costs; care and support discussed in detail. Future research may build on the findings of this study and investigate additional factors such as practical and convenience factors or a measure of average classroom learning gains that may have an impact on the satisfaction of parents.

**Contribution/Originality:** This study's findings contribute to the domain of parents' satisfaction with the quality of their children's early childhood education. This serves as the foundation for early childhood education leaders to build policies and action plans for enhancing the quality of early childhood education.

## 1. INTRODUCTION

The quality of education has become a big concern of society due to its importance. Improving education quality plays a pivotal role in the success, development, and competitiveness of educational organizations in the whole world. Nowadays, due to numerous external factors and the influence of the market economy, education is

considered as a kind of service that clients, including students and their parents, can decide which educational institutes are most suitable. Customers, especially learners, are directly involved in the educational process and are also "products". Therefore, their feedback on satisfaction with educational services such as the program, facilities, services, care, and education of the teacher etc., are highly valued. This is a critical and objective information channel, contributing to assessing the current quality of educational services and helping educational institutions make reasonable adjustments to meet the needs of learners and social needs. This is also the general policy of the Ministry of Education and Training to guide the organization to get feedback from learners about school educational services.

Parasuraman, Zeithaml, and Berry (1988) state that five main dimensions determine the customer perceptions of service quality: reliability, tangibles, responsiveness, assurance, and empathy. Fantuzzo, Perry, and Childs (2006) mention three factors: teacher contact experiences, classroom contact experiences and school contact experiences. According to Friedman, Bobrowski, and Geraci (2006), parents evaluate their child's school on many factors, including school safety, school budget, teacher effectiveness, administrators, quality of the curriculum, computer technology, facility, bus transportation, communication with parents, parental involvement, classroom support of learning, student achievement. These variables may affect a parent's satisfaction with their child's school. Some authors emphasize the structural quality and refer to measurable features that involve the characteristics of the program/setting, such as physical environments (buildings, surrounding, materials and equipment), teacher/child ratios, class size, qualifications and motivation of teachers and staff, use of a standard curriculum, level of public funding, and the availability of supplementary services (Mashburn et al., 2008; Protheroe, 2006).

On the other hand, some other authors, when referring to factors of educational service quality, emphasize upon real-world experiences that occur in the educational environment, such as interactions between teachers and children, child-peer interaction, parent-teacher interaction, or the types of activities in which children participate (Banga & Jaswal, 2001; Ishimine, Tayler, & Thorpe, 2009). Incesu and Asikgil (2012) based on the model of critical factors, determined by Parasuraman et al. (1988) introduced five factors affecting the service quality of primary education, including tangibility, reliability, responsiveness, assurance, and empathy. Rätty, Jaukka, and Kasanen (2004) presented elements of the service quality of early childhood education in Finland, including teaching quality, child assessment methods, children's achievement levels, school cooperation, and fairness in the treatment of children. In addition, most studies (Britner & Phillips, 1995; Griffith, 1996; Omar, Nazri, Abu, & Omar, 2009; Seng, 1994; Silva & Wise, 2006), agree that parental satisfaction can be measured with the quality of preschool education services on various aspects such as teacher response, facilities and learning materials, transportation services, nutrition, parental involvement, safety and security, student achievement.

A few other studies show that research assessing customer satisfaction with the quality of educational services are quite diverse in many subjects. Most of these studies use measurement tools based on SERVQUAL models proposed by Parasuraman et al. (1988) or SERVPERF model proposed by Cronin and Taylor (1992) and higher education performance measurement model (HEDPERF) recommended by Abdullah (2005). In higher education, studies related to satisfaction with higher education service quality show that quality perceptions are precursors to student satisfaction (Browne, Kaldenberg, Browne, & Brown, 1998; Guolla, 1999). Athiyaman (1997) also points out that the most accessible approach to measuring student satisfaction is to survey their perceptions of the quality of the services they are receiving. In the field of high school education, studies show that the higher the satisfaction of the parents proves, the greater is the quality of the school's education, because satisfaction is based on client expectations and perceptions on service quality (Christou & Sigala, 2002; Cronin & Taylor, 1992; Ekinci, 2003).

In early childhood education, students' parents are directly involved in school choice for their children. The decision to choose a school and their behavior when finding a good school for children is driven by parental satisfaction. Teleki and Buck-Gomez (2002) conducted a study on 65 rural families with children over five years old in the US to assess parent satisfaction with preschool services. It was found that parents had a moderate to high

degree of satisfaction with the services provided in early childhood education programs. Rätty et al. (2004) surveyed 486 parents in Finland whose children had finished first grade in primary school. The results report showed that more than 90% of parents were satisfied with their children's education and achievement; 88% were satisfied with the child assessment method, and 87% with the (fair) treatment. Fantuzzo et al. (2006) surveyed 648 parents on parents' satisfaction and involvement with their children's early education programs. The multivariate results showed that parents of preschoolers were more satisfied with all three aspects of the quality of educational services (namely teacher experience contact, classroom experience contact and classroom experience contact) compared with parents of first-grade children. They believed this difference may be due to the greater emphasis on parental involvement in educational programs.

Howe, Jacobs, Vukelich, and Recchia (2013) surveyed parental choice criteria and satisfaction with daycare services in three cities in Canada. The researchers found that about a third of parents had no complaints about the daycare center. This implies that many parents were delighted with the care provided. Especially, parents reported solid priorities for the teacher's characteristics (warm-hearted), curriculum (activities for children), and aspects related to children (well-being). However, parents were dissatisfied with physical aspects such as group size and the difference between home and center practice. In the study of Raikes et al. (2005), among over 1325 parents in four states in the US, most parents (81%) rated the quality of their child's care very high. In particular, parents using childcare at home gave their providers the highest rating compared to other types of care. However, many other parents who had their newborn babies taken care of at a service center rated their providers as low. Interestingly, 77% of parents strongly agreed that they would re-choose their current provider rather than rate their quality as high. This indicated that parents were satisfied with the quality of educational services in childcare facilities.

Parental satisfaction with the quality of education is reported to vary according to different school types. Studies have shown that parents have transferred their children from public to private schools based on a poor perception of public education such as discipline, student care, facilities, teacher competence and study outcomes (Adebayo, 2009; Oketch, Mutisya, Ngware, Ezeh, & Epari, 2010; Palbusa Jr, 2021). Tooley and Dixon (2005) research shows that even when parents are impoverished, some still want to send their children to private school instead of public school because they believe their children will benefit more from educational services provided by private institutions. Liang (2001) conducted a study of 720 parents of children aged four to six attending kindergarten to explore parental perceptions of quality and satisfaction with preschool programs in public and private schools in Taiwan. The results showed that parents in public schools believed that education was better in terms of teacher qualifications. Charles (2011) found that parents of students in private schools were more satisfied than parents of public-school students in terms of curriculum quality, student learning support, school climate, the parent-school relationship. The study of Kathuri and Juma (2007) and Oketch, Mutisya, Ngware, Ezeh, and Epari (2008) showed similar results.

Nelliah (2012) conducted a study to evaluate parents' satisfaction with the quality of preschool education in Lang district, Kenia. Results showed that parents in private schools were more satisfied with all variables (curriculum, management, facilities, teaching and learning materials, teacher qualifications, and the rate of teacher-student) compared with parents in public schools. In contrast, Omodi (2013) found no significant difference in parents' level of satisfaction at public and private schools with the quality of preschool education.

Studies also show that gender differences affect people's satisfaction with different educational aspects. Rätty et al. (2004) found that mothers were more satisfied with the function of their child's school than fathers. In addition, the parent's gender showed a significant effect related to problems in home cooperation, whereby mothers mentioned adverse events more often than fathers. This assessment model shows that mothers were more actively involved in their children's school attendance than fathers (Lewis & Lamb, 2003). In addition, studies were done in Kenya by Ndani (2007) and Koech (2010), which showed significant differences between men and women in the degree of participation in primary school activities. Specifically, men did not regularly participate in their children's

education. This predicted their degree of satisfaction with the quality of education because studies by [Jinnah and Walters \(2008\)](#); [Legg \(2009\)](#) and [Danner \(2012\)](#) revealed that parental involvement was the best predictor of parental satisfaction.

Parents' educational attainment has been shown to affect their satisfaction with the quality of the education provided to their children. [Badri, Mason, and El Mourad \(2010\)](#) found that parental education was a significant predictor of satisfaction with teaching the subject. Similarly, [Liang \(2001\)](#) found that parental education was significantly related to parental satisfaction with the quality of education. Likewise, parents' satisfaction with the quality of education provided to their children has been shown to vary with parental income. Research by [Lucile Packard Foundation for Children's Health \(2010\)](#) in Bay Area, USA, shows that high-income parents are more satisfied with the quality of education provided to children than low-income parents. However, one study by [Falbo et al. \(2003\)](#) investigated parental satisfaction with the quality of schools in Texas, USA, and found that low-income parents had satisfaction with their children education compared to high-income ones.

The relationship between service quality and customer satisfaction has also been confirmed through many studies. [Ham and Hayduk \(2003\)](#) found a positive correlation between perceptions of service quality and student satisfaction with higher education. This means that perceptions of service quality determine customer satisfaction. The higher the quality of educational service a customer perceives, the greater will increase the satisfaction. [Chua \(2004\)](#) studied and evaluated the quality of higher education from many different perspectives: that of students, parents, lecturers, and employers. The results show that, in most of the components of the SERVQUAL model (empathy, responsiveness, reliability, tangibles, assurance), students, parents and employers have higher expectations than what they receive. Studies also show that higher parental satisfaction demonstrates the high quality of the school's education because satisfaction is based on customer expectations and customer perceptions of service quality ([Christou & Sigala, 2002](#); [Cronin & Taylor, 1992](#); [Ekinci, 2003](#)).

[Omar et al. \(2009\)](#) found that perceptions of service quality are positively related to parental satisfaction and trust. In addition, parental satisfaction is considered the determining factor that most affects trust over the perceived quality of service. [Incesu and Asikgil \(2012\)](#) also found that four aspects of service quality, including tangibles, reliability, empathy, and assurance are essential factors in explaining parental satisfaction.

An interesting question is whether customer satisfaction also affects a customer's willingness to pay for a product or service. Satisfied customers with products and services are often willing to pay a premium ([Finkelmann, 1993](#); [Reichheld & Sasser Jr, 1990](#)). Customer satisfaction is paramount to maintaining the consumer's willingness to pay; when the consumer feels satisfied with the quality of the product or service provided by the company, the level of willingness to pay will be maintained ([Casidy & Wymer, 2016](#)). Although studying this issue is essential, previous research often overlooked the relationship between customer satisfaction and willingness to pay ([Anderson, 1996](#)). To the best of our knowledge, there are only a few studies related to this issue, typically: [Anderson \(1996\)](#); [Homburg, Koschate, and Hoyer \(2005\)](#); [Chaudhuri and Ligas \(2016\)](#); [Casidy and Wymer \(2016\)](#); [Setya and Soni \(2018\)](#). The results of these studies show that the more satisfied customers are with the product or service, the more willing they are to pay for it. However, [Koura \(2008\)](#) research shows no correlation between customer satisfaction and willingness to pay more.

In the field of education, [Raikes et al. \(2005\)](#), in their study on parental perceptions about childcare choices and quality in four US states, showed that only 30% of parents were willing to pay more for their children's care. Surprisingly, 14% of parents who rated their quality of care as C or lower said they were willing to pay more for their children to enjoy a better quality of education. A minority of 11% said cost was the factor that prevented them from getting the childcare they wanted. In addition, nearly half (45%) of the small group of parents who rated their child care quality as C or lower said that cost limited them from obtaining the child care they desired.

In Vietnam, the satisfaction domain has been explored by various researchers, especially during the last two decades. Typically, the research funded by the [Ministry of Home Affairs \(2016\)](#) on the Satisfaction Index of Public

Administration Services (SIPAS) pointed out five elements contributing to the quality of public administrative services : (1) Access to public administrative services of state administrative agencies, (2) Administrative procedures, (3) Civil servants directly handling work, (4) Results of public administrative service delivery and (5) Receiving and resolving suggestions, feedback and recommendations. [Nguyen et al. \(2003\)](#) examined the quality of outdoor entertainment services in Ho Chi Minh City. Research results showed that responsiveness and tangible means were the two top priority factors to create customer satisfaction. [Le \(2007\)](#) researched customer satisfaction about hotel services of An Giang Service Joint Stock Company. This study used the SERVQUAL scale as the theoretical basis to measure customer satisfaction with hotel services. [Hoang-Xuan \(2008\)](#) investigated customer satisfaction on the Bank for Investment and Development services of Vietnam - Ho Chi Minh City branch. The author explored the determinants of customer satisfaction, including service quality (superiority, product characteristics, supply, demand satisfaction, value creation), service pricing and customer retention. [Phan \(2015\)](#) study on domestic tourist satisfaction in some eco-tourism destinations in the Mekong Delta also analyzed the factors affecting visitors' satisfaction.

In education, the study of [Nguyen-Thi et al. \(2014\)](#) is one of the essential large-scale studies on developing a toolkit for assessing people's satisfaction with education services. The study has generalized the models of assessing the satisfaction of people with public education services through analyzing the relationship between the quality of educational services and the satisfaction of the people; factors affecting the quality of educational services (including six primary groups: (1) the human resources of the training institutions, (2) the facilities and equipment used in training institutions, (3) training costs, (4) access to facilities and equipment, (5) curriculum, (6) class size and length of study); factors affecting people's satisfaction with public education services (including personal characteristics and content elements); and people's satisfaction assessment model.

Some studies on learners' satisfaction have also been published, but they only focus on higher education. For example, [Nguyen \(2006\)](#) used the SERVPERF scale to evaluate the quality of training of An Giang University. The research results show that lecturers, facilities, and trust in schools are the three most important factors of training quality, among which lecturers are the primary factor affecting student satisfaction. [Pham \(2016\)](#) research on Training Service Quality and Student Satisfaction: the case of the University of Economics - Hanoi National University, is also based on world's popular service quality measurement models (SERVQUAL SERVPERF). The author finds that the components of training quality have a positive correlation with student satisfaction. The factors that affect student satisfaction in descending order are training programs, attitudes of school staff and facilities. [Vu \(2012\)](#) measured parent satisfaction with the quality of preschool education, conducting a survey in Ho Chi Minh City using the SERVQUAL scale of [Parasuraman et al. \(1988\)](#) as a theoretical basis.

It is essential to notice that satisfaction studies in Vietnam have gradually inherited and approached international standards and criteria. However, studies on people's satisfaction in the educational field mainly focus on learners and higher education levels. Therefore, there is a lack of studies conducted on parent satisfaction and other levels of education, especially the preschool education level. Preschool education is the first level of education in the national education system, forming the solid foundations for children's physical, cognitive, social, and aesthetic development. Taking good care of children from a young age will create a solid foundation for their future development. Today, there is a high demand for sending children to preschool so that parents can be assured when they go to work, especially in big cities. Parents inevitably worry about the quality of education in both public and private preschool institutions.

Danang city is a significant economic, cultural, educational and medical center of Central Vietnam. According to the Department of Education and Training of Danang City, the total number of kindergartens in the whole area is 205 schools with 69 public schools and 136 private schools. The type of non-public school accounts for 65.3%; the number of private independent class groups, ranging in size from 8 to 50 children, has been licensed to establish with 705 groups; 407 groups with less than seven children. Compared to the population in the age group, the

campaign encouraging children to go to school in the 2016–2017 school year has seen many good changes: the rate of kindergartens kids is 57.3%, the rate of preschool children reaches 96%; rate of children aged five years reaches 99.8%. All 136 private preschools and more than 105 groups and private preschools have a camera system in classrooms and kitchens to connect and interact with parents regularly. Many schools and class groups organize training programs and field trips to get experience from many good quality establishments in major cities across the country, contributing to improving the quality of education and enforcing faith for parents. However, at present, in Danang, some facilities are still in poor condition, failing to meet the needs of playing ground and taking care of children's health. In addition, there is a shortage of human resources for these schools; only a few teachers have a long-term commitment, which affects the quality of education for children.

This study surveyed parents' satisfaction and their willingness to pay for the quality of education at preschool institutions in Danang city. It also aimed to assess scientifically and objectively the quality of preschool institutions' services through investigating the parents' feelings and opinions. At the same time, the parents' willingness to pay for the quality of educational services was also assessed, a factor that exerted massive influence in ensuring and improving the quality of education in preschool institutions. The research results, which had a high theoretical and practical significance, could prove the basis for the authorities and educational institutions to identify the needs and expectations of the residents to improve the quality of service and ensure their satisfaction with the quality of preschool educational services. Hence, the main objectives of this research were to (a) identify the aspects of educational services affecting the satisfaction of parents with preschool institutions in Danang city, (b) evaluate the satisfaction and willingness of parents to spend on the quality of educational services at preschool institutions in Danang city, and (c) propose clear recommendations to enhance the satisfaction of preschoolers' parents in Danang city.

## 2. METHOD

### 2.1. Participants

By convenience and random sampling methods, 600 survey questionnaires were distributed directly to parents. After coding and testing, 511 valid questionnaires were used for analysis in this study. There were 118 (23.1%) males and 393 (76.9%) females, of which 145 (28.4%) participants were under the age of 30; 299 (58.5%) participants were aged between 31–40; 56 (11%) participants were aged 41 to 50; and 11 (2.2%) participants were above 50 years old. Regarding education, 30 (5.9%) graduated from high school, 27 (5.3%) from vocational school, 125 (24.5%) from college, 242 (47.4%) from university, and 87 (17%) were postgraduates. Relating to income, 57 (11.2%) participants earned less than 5 million VND, 295 (57.7%) earned between 5 and 10 million VND, 127 (24.9%) earn between 11 and 20 million VND, 19 (3.7%) earned between 21 and 30 million VND, and 13 (2.5%) earned more than 30 million VND. Out of 511 participants, 232 (45.4%) were civil servants, 161 (31.5%) officers, 53 (10.4%) businessman, 14 (2.7%) workers, and 51 (10%) freelancers. Table 1 shows the information about participants.

Table 1. An overview of participants (n=511).

Items	n	%
<b>Gender</b>		
Male	118	23.1
Female	393	76.9
<b>Age</b>		
Under 30 years old	145	28.4
31 - 40 years old	299	58.5
41 - 50 years old	56	11.0
Above 50 years old	11	2.2
<b>Education</b>		
High school	30	5.9

Items	n	%
Vocational school	27	5.3
College	125	24.5
University	242	47.4
Postgraduate	87	17.0
<b>Salary</b>		
Under 5 million VND	57	11.2
5 - 10 million VND	295	57.7
11 - 20 million VND	127	24.9
21 - 30 million VND	19	3.7
Above 30 million VND	13	2.5
<b>Current job</b>		
Civil servant	232	45.4
Officer	161	31.5
Businessman	53	10.4
Worker	14	2.7
Freelancer	51	10.0

Note: n: Number of the participant; %: Percentage.

## 2.2. Measure

A survey questionnaire was designed to elicit information about the factors that influenced parents' satisfaction with the educational services they received. The model consisted of four independent variables and forty-two items: (1) Response to information, teachers, and educational programs: 21 items ( $\alpha = 0.976$ ); (2) Financial costs: 7 items ( $\alpha = 0.957$ ); (3) Facilities, equipment, and supplies: 9 items ( $\alpha = 0.951$ ); and (4) Care and support: 4 items ( $\alpha = 0.802$ ). The dependent variable representing parents' satisfaction, Satisfaction and Willingness to pay had 9 items ( $\alpha = 0.977$ ).

The Cronbach's Alpha coefficient test indicated that all coefficients were more significant than 0.7. The correlation coefficient between observed variables and the total variable was more significant than 0.3 Nunnally and Bernstein (1994) recommend that these findings are appropriate and reliable.

## 2.3. Analysis

All items were measured on a 5-point Likert scale used to arrange from small to large: 1 - Strongly disagree; 2 - Disagree; 3 - Undecided; 4 - Agree; 5 - Strongly agree. Malhotra, Nunan, and Birks (2017) recommend that the distance value should be calculated according to the following formula:  $(\text{Maximum} - \text{Minimum})/n = (5-1)/5 = 0.8$ . Subsequently, the discrete values are transformed into ranks, as follow:

- 1.00 - 1.80: Strongly disagree / Not at all satisfied / Not at all important.
- 1.81 - 2.60: Disagree / Slightly satisfied / Slightly important.
- 2.61 - 3.40: Undecided / Moderately satisfied / Moderately important.
- 3.41 - 4.20: Agree / Very satisfied / Very important.
- 4.21 - 5.00: Strongly agree / Completely satisfied / Extremely important.

## 2.4. Procedure

In this study, multi-regression analysis was used. Following that, the four dimensions of parents' satisfaction were regressed against the stay mean scores to determine which dimension explained the most variance. The model was applied to Response to information, teachers, and educational programs; Financial costs; Facilities, equipment, and supplies; and Care and support.

$$Y = b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \text{Constant}$$

Y: Parents' satisfaction (dependent variable).

X<sub>1</sub>: Response to information, teachers, and educational programs.

X<sub>2</sub>: Financial costs.

X<sub>3</sub>: Facilities, equipment, and supplies.

X<sub>4</sub>: Care and support.

The respective regression coefficients are represented by symbols b<sub>1</sub>, b<sub>2</sub>, b<sub>3</sub>, and b<sub>4</sub>.

### 3. FINDINGS

Table 2 shows the mean and standard deviation scores of five variables. Four independent variables rank from the highest to the lowest are Response to information, teachers, and educational programs ( $M = 4.11$ ,  $SD = 0.74$ ); Financial costs ( $M = 4.11$ ,  $SD = 0.78$ ); Facilities, equipment, and supplies ( $M = 3.99$ ,  $SD = 0.81$ ); Care and support ( $M = 3.95$ ,  $SD = 0.79$ ). The dependent variable, Satisfaction and willingness to pay, also have a high score ( $M = 4.08$ ,  $SD = 0.79$ ).

Table 2. Descriptive statistics of five variables.

Variable	$\alpha$	M	SD
Response to information, teachers, and educational programs	0.976	4.11	0.74
Financial costs	0.957	4.11	0.78
Facilities, equipment, and supplies	0.951	3.99	0.81
Care and support	0.802	3.95	0.79
Satisfaction and willingness to pay	0.977	4.08	0.79

Note:  $\alpha$ : Cronbach's Alpha; M: Mean; SD: Standard Deviation.

Pearson correlation analysis reveals a correlation between all four independent variables and parents' satisfaction.

Facilities, equipment, and supplies have the strongest correlation with parents' satisfaction ( $r = 0.883$ ,  $p < 0.001$ ), followed by Response to information, teachers, and educational programs ( $r = 0.881$ ,  $p < 0.001$ ); Financial costs ( $r = 0.870$ ,  $p < 0.001$ ); and Care and support ( $r = 0.678$ ,  $p < 0.001$ ). (Refer to Table 3).

Table 3. The correlation between four independent variables and one dependent variable.

	[1]	[2]	[3]	[4]	[5]
[1] Satisfaction and willingness to pay	1	0.881**	0.870**	0.883**	0.678**
[2] Response to information, teachers, and educational programs	-	1	-	-	-
[3] Financial costs	-	-	1	-	-
[4] Facilities, equipment, and supplies	-	-	-	1	-
[5] Care and support	-	-	-	-	1

Note: \*\*: Correlation is significant at the .01 level (2-tailed).

According to the results in Table 4, the corrected coefficient Adjusted  $R^2$  was 0.851, indicating that a one-unit change in the independent variables caused nearly 85.1 per cent variation in the dependent variable (parents' satisfaction).

The Durbin-Watson value was 1.762, indicating that the difference was statistically significant. This indicated that the regression model did not violate the assumption of the independence of the error.

Table 4. Model summary <sup>a</sup>.

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Durbin-Watson
1	0.923 <sup>b</sup>	0.853	0.851	0.302	1.762

Note: a. Dependent Variable: Satisfaction and willingness to pay (parents' satisfaction).

b. Predictors: (Constant), Response to information, teachers, and educational programs, Financial costs, Facilities, equipment, and supplies, Care and support.

The results in Table 5 indicate that the  $F$ -test had a Sig value of 0.001 ( $p < 0.05$ ), suggesting that the linear regression model was appropriate for the entire dataset.



A significant regression equation was established ( $F(4, 506) = 732.076, p < 0.01$ ).

Table 5. ANOVA<sup>a</sup>.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	267.845	4	66.961	732.076	0.001 <sup>b</sup>
	Residual	46.283	506	0.091		
	Total	314.128	510			

Note: a. Dependent Variable: Satisfaction and willingness to pay (parents' satisfaction).

b. Predictors: (Constant), Response to information, teachers, and educational programs, Financial costs, Facilities, equipment, and supplies, Care and support.

Table 6 considers p-values less than 0.05 to be statistically significant. According to the analysis of the Beta standard regression coefficients in Table 6, the independent variables had the following degree of influence on the dependent variable: Response to information, teachers, and educational programs ( $\beta = 0.256, p < 0.01$ ); Financial costs ( $\beta = 0.298, p < 0.01$ ); Facilities, equipment, and supplies ( $\beta = 0.376, p < 0.01$ ); Care and support ( $\beta = 0.052, p < 0.05$ ). The research discovered that the factor Facilities, equipment, and supplies had the greatest impact on parents' satisfaction, while the factor Care and support had the least impact on parents' satisfaction. As a result,  $X_1, X_2, X_3,$  and  $X_4$  are all acceptable. Additionally, the VIF coefficients for the variables in Table 6 are seen less than 10, indicating that no multi-line phenomenon occurred. Thus, the regression equation is as follows:  $Y = 0.256 * \text{Response to information, teachers, and educational programs} + 0.298 * \text{Financial costs} + 0.376 * \text{Facilities, equipment, and supplies} + 0.052 * \text{Care and support}$ .

Table 6. Coefficients<sup>a</sup>.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.082	0.078		1.039	0.299		
	Response to information, teachers, and educational programs	0.270	0.046	0.256	5.859	0.001	0.152	6.564
	Financial costs	0.298	0.036	0.298	8.186	0.001	0.220	4.548
	Facilities, equipment, and supplies	0.364	0.036	0.376	10.103	0.001	0.210	4.766
	Care and support	0.052	0.025	0.052	2.078	0.038	0.462	2.165

Note: a. Dependent Variable: Satisfaction and willingness to pay (parents' satisfaction).

#### 4. DISCUSSION

This research was conducted to determine the factors that influence parents' satisfaction and willingness to pay for the quality of education provided by preschool institutions in Danang, Vietnam. Parent satisfaction appeared to be significantly correlated with the following factors: Response to information, teachers, and educational programs, Financial costs, Facilities, equipment, and supplies, and Care and support. In the study, it was discovered that the Facilities, equipment, and supplies had the greatest impact on Parents' satisfaction ( $\beta = 0.376, p < 0.01$ ). As a result, preschools should place a greater emphasis on this aspect in order to increase Parents' satisfaction with their programs. According to previous research, parents are satisfied with the quality of education provided by preschool institutions, and this finding is consistent with that (Omar et al., 2009; Seng, 1994; Silva & Wise, 2006).

Pham (2016) regression model reveals the same findings as this study: satisfaction is influenced by a variety of factors, including Facilities, educational programs, and services. While this study's findings differ from those of Pham (2016) and Nelliah (2012), both of whom found that school educational programs have a more significant impact on parent satisfaction than school facilities, the findings of this study are consistent with previous research.

The sample size, the literature, and the use of self-reported measurements were the most significant limitations of this study. However, even though the sample size was large, the participants in this current study came from only Danang City in Vietnam, which might not be sufficient to represent the entire preschool education system in Vietnam, let alone the socio-cultural influences from different parts of the country. Self-reports have well-documented limitations, which can raise questions about the psychometric properties of existing self-report well-being measures, particularly when combined with other data sources. As a result, it is particularly important to take into account the evidence that exists regarding the reliability and validity of satisfaction assessments. It is necessary to address these limitations in future research, and the fear of missing out among college students should be investigated further.

## 5. CONCLUSION

Parents are satisfied with and willing to pay for the educational quality provided by preschool educational institutions, according to the findings of this study. In addition, the quality of facilities, educational programs, financial costs, and support are all factors that influence parental satisfaction. Preschool educational institutions will benefit from this study because it adds to the body of knowledge and evidence available to them to help them improve and enhance their quality in order to increase parent satisfaction. Future research should take into account and go into greater depth about the factors that may influence parental satisfaction.

**Funding:** This research is supported by The University of Danang - University of Science and Education (Vietnam) (Grant number: T2020-TĐ-04.).

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** All authors contributed equally to the conception and design of the study.

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