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#### ABSTRACT

This study intends to analyze the effect of service quality and institutional image on customer satisfaction, as well as the indirect effect on word of mouth through customer satisfaction at the learning institution of Dipa Learning Center Malang City. This research used the sampling technique of purposive sampling. The instrument for taking questionnaires was 74 respondents, namely parents of students from the learning institution of Dipa Learning Center who were actively studying for at least 6 months until March 2022. The research data were processed quantitatively descriptively by path analysis techniques applying the Smart PLS 3.3.9 application software. The results are supported by primary data using questionnaires. The results indicate that: (1) Service quality has a significant effect on customer satisfaction; (2) Institutional image has a significant effect on customer satisfaction; (3) Service quality has an effect but is insignificant on word of mouth; (4) Institutional image has an effect but insignificant on word of mouth; (5) Customer satisfaction has a significant effect on word of mouth; (6) Service quality and institutional image have a significant effect on customer satisfaction; (7) Service quality and institutional image have an effect but insignificant on word of mouth through customer satisfaction, and it is not proven that customer satisfaction is an intervening variable.

**KEYWORDS**: Service Quality, Institutional Image, Customer Satisfaction, Word Of Mouth, Intervening Variables



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### Introduction

The progress and growth of a country, especially Indonesia, depends on the educational advancement of its citizens. It can be concluded that the more advanced the citizens' education, the more developed their country will be. The Indonesian government's policy towards education is always changing to adapt to national and global needs.

And in the last 2 years, many adjustments in terms of education have been made due to the COVID-19 pandemic. Early in 2022, the government released the most recent instructions for the use of limited online learning during the COVID-19 epidemic. These guidelines were specified in a joint decree of four ministries; where face-to-face learning was limited and partly not done directly and the duration learning is shorter than conditions before the pandemic. This affects the ability of students in receiving material at school is decreasing.

Tutoring institutions as a form of solution for students to get additional enrichment material carried out outside school hours, which aim to be able to understand lessons at school more optimally, in addition to adding other skills outside of what is taught in formal schools. In Malang city there are 82 LKP (Course and Training Institutions) that have an NPSN (National School Identification Number) registered with the Malang city education and culture agency (Dapodik Malang City, 2022). And one of them is Dipa Learning Center. Dipa Learning Center is a tutoring institution that has been established in 2015, established in Malang city and focuses on learning for children aged 3 to 15 years, namely pre-kindergarten, kindergarten, elementary, and junior high schools. In the Dipa Learning Center, there are several tutorials taught, namely abacus, mathematics, English, reading, writing, arithmetic, art, and swimming. The concept being carried is in one location for all tutoring, where the tag line used is "One Stop Learning Course for Kids".

It can be explained, for the learning institution of Dipa Learning Center which caters to children aged 3 to 15 years, it has two target markets/customers that must be considered, namely students with an age range of 3 to 15 years as end users and the parents of students as decision-makers. In this research, data collection will be carried out on the parents of students as decision-makers, which on average belong to generation Y (born 1980-1996) and a few generations X (1965-1980). Citing the BBC (in Kompas.com) Alexis Abramson, an expert on generational grouping, says the disparity in years of birth characterizes different generations. Generation Y is characterized by digital knowledge so that they cannot live without technology and are more concerned with experience.

The data of Central Bureau of Statistics for 2022 shows that the number of kindergartens to junior high school students in Malang city is 151,414 students. The following is the figures per education level.

Figure 1 Data on the Number of Kindergarten - Junior High School Students in Malang City for 2022



From this figure can be seen that there is potential that opens up opportunities for learning institutions, whether officially licensed or not, on a professional scale or on a home scale, to develop in the education business. And this shows the existence of fierce competition between these learning institutions.

To win the competition, it is necessary to have a prominent advantage for the Dipa Learning Center to win the market, in this case by improving and maintaining the service quality and the institutional image. The foundation to revenue development and customer enjoyment is total quality (Kotler, 1997). This is also following the statement of John F, Welch Jr., former CEO of GE, "Quality is our first-rate warranty of purchaser allegiance, our most powerful protection in opposition to overseas competition, and the simplest route to sustained boom and earnings" (Business Week, 1982 in Kotler and Keller). Customer satisfaction, company revenue, and service quality are all strongly associated; the greater the quality level, the higher the customer satisfaction, which also supports high prices with low expenses (Buzzle & Gale, 1987 in Kotler and Keller).

According to Hidayati (2018), service users in the early stages decide to use services because of their perceived quality, which in turn will arrive at the evaluation stage which leads to a sense of satisfaction or dissatisfaction. Service users who are dissatisfied because the quality does not match the initial perception will feel disappointed. This incident leads to the possibility of choosing another service in the future. However, if the satisfaction obtained by service users is following initial perceptions, it will form a good service image and loyalty to the services provided, and in the end actively inform others such as friends, friends, and family.

Based on field observations, management does not always know exactly what customers want, both students as direct connoisseurs of services and parents as decision-makers. For example, the management of the Institute thinks that learning with full and solid material will be better for customers, in this case, students and also parents of students, because learning targets can be achieved maximally and quickly. However, some students want learning that is

interspersed with games so that it is not boring, as well as there are parents who do not want students to get more learning pressure but expect maximum results.

In addition, the service quality determination by management is not yet specific or standardized, and this creates a misunderstanding between communication and action in the field. An example is the handling of customer complaints, in this case, parents as decision-makers must be fast, but it is not specified how many minutes, hours or days. This can also lead to dissatisfaction that arises in the customer. Including the difference between the offers on brochures that are advertised either directly or through online media with customer perceptions of physical reality

Lupiyoadi (in Dharmawan and Hidayat, 2018) states that one way to ensure customer satisfaction in the service business is through improving the service quality. Service quality has a strong effect on customer satisfaction, where service quality can motivate consumers to make repeat transactions or be loyal to the company. In accordance with Kotler and Keller (2006), a person's sense of satisfaction or dissatisfaction results from contrasting their expectations of a good or outcome with the actual outcome. Customers will be disappointed if performance falls short of expectations. Customers will be satisfied if performance meets expectations. If performance meets or exceeds expectations, the client will be extremely delighted or satisfied.

Kotler (in Ratnasari, 2016) states that "Images are how the public perceives the company or its product. Image is the collection of beliefs, ideas, and impressions a person has about an object. People's attitudes and actions toward an object are highly conditioned by the object's image.". The public's perception of a corporation or its products is known as its image. An image is a collection of assumptions, notions, and perceptions that an individual has about something. People's attitudes and actions towards an object are largely determined by the image of the object. Consumers buy an item not because they just need the item, but because there is something else that they expect. Something else is following the image formed in him. Therefore, organizations need to provide information to the public to form a good image. Levitt (in Ratnasari, 2016) states that: "The marketing imagination is the starting point of success in marketing".

Facts in the field, the institution management is active in promoting the institution both directly with the media brochures that are distributed as well as through online media as the current trend is social media such as Instagram, TikTok, Youtube, and the Website. In which the content is displayed in the form of the latest information, activities carried out as well as testimonials or demos from students. In this case, the management of the Institute focuses only on promotion, not on the formation of the institutional image itself.

In the research of Dharmawan and Hidayat (2018), it is stated that if a product or service is not known by consumers, they are most likely not to buy it. WOM is among the most effective

informational media. Word of Mouth (WOM) is how a goods or services is spread. Word of mouth is not the same as informal communication, where the speaker tends to appear as a more persuasive friend. The effect of word of mouth of a person is very strong because their word of mouth information is reliable, and besides that, it can reduce risk when making purchasing decisions.

The phenomenon of this problem is a strong and interesting reason to be used as a research using scientific approaches. Several previous studies have been conducted regarding this phenomenon. The most strongly related works are elaborated to obtain a research gap and then serve as a guideline/support for conducting research.

Erni Setyowati and Wiyadi's (2016) prior study on the impact of service quality on customer satisfaction demonstrates a favorable and substantial relationship between the two variables. Customer satisfaction increases with improved service quality. Aprih Santoso, Sri Yuni Widowati, and Zakky Fahma Auliya (2021) all make similar claims; Abdiannur (2019).

Subsequent research related to the institutional image on customer satisfaction that has been carried out by Connie Chairunnisa (2018) shows that there is a positive effect on the image variable of institution/brand/ institute/company on customer satisfaction. Dian Lestari Ekawati (2019); Putu Yuke Prabandari Erawan, I G N Jaya Agung Widagda K (2020) state the same thing, namely the higher image of an institution/brand/ institute/company, the higher level of customer satisfaction.

In addition, research by Sugeng Lubar Prastowo (2019), shows that the service quality and the image of institution/brand/institute/company have a positive and significant effect either partially or simultaneously on word of mouth. Several studies have shown the same results, namely research by Heri Prabowo, Widji Astuti, and Harianto Respati (2020).

Research by Egy Dharmawan and Imam Hidayat (2018) suggests that there is a positive effect (indirectly) from the service quality variable on word of mouth through the mediation of customer satisfaction and there is a positive effect from the image variable of the institution/brand/institute/company (indirectly) directly) to word of mouth through the mediation of customer satisfaction. In addition, this research also states that customer satisfaction has a positive and significant effect on word of mouth. This is also found in the research of Ina Ratnasari (2016); Garnis Anggi Saktiani (2015); Komang Melastri, I.G.A.K. Giantari (2019).

However, the results of this research are not the same as the research by Mustikaningrum Hidayati (2018) regarding customer satisfaction having a positive but not significant effect on word of mouth, that it was found that customer satisfaction do not mediate the effect of service quality on word of mouth.

In addition, some studies are different from those mentioned in the previous paragraphs, namely research by Justine Roy Balinado, Yogi Tri Prasetyo, Michael Naayat Young, Satria Fadil Persada, Bobby Ardiansyah Miraja, Anak Agung Ngurah Perwira Redi (2021). The research concludes that three of the five indicators of service quality, namely tangibles, responsiveness, and assurance, do not affect customer satisfaction.

There is also a research by Connie Sondakh (2014) regarding the brand image variable that has no significant effect on the satisfaction variable. Based on the results of the research exposure, there are gaps in the problem/research (research gap).

Based on several existing theories and facts, it is necessary to conduct an in-depth study of the effect that can create the formation of word of mouth through customer satisfaction media, in this case, students at the Learning Institution of Dipa Learning Center in Malang, to increase the growth of the number of students in the future. On this basis, the researcher is interested in conducting research through a thesis entitled: "The Effect of Service Quality and Institutional Image on Word of Mouth with Customer Satisfaction as an Intervening Variable at the Learning Institution of Dipa Learning Center in Malang City."

The problem formulation of the research is as follows:

- 1. "Is there any effect of service quality on customer satisfaction"?
- 2. "Is there any effect of institutional image on customer satisfaction"?
- 3. "Is there any effect of service quality on word of mouth"?
- 4. "Is there any effect of institutional image on word of mouth"?
- 5. "Is there any effect of customer satisfaction on word of mouth"?
- 6. "Does the service quality indirectly affect the word of mouth through customer satisfaction"?
- 7. "Does the institutional image indirectly affect the word of mouth through customer satisfaction"?

#### **Empirical Studies**

#### Service Quality

According to Kotler and Keller (2006), service quality is everything owned by a product or service that can meet needs and can provide satisfaction to customers. Kotler, et.al (2006), define service as a strategy made by the company because a company's product is not only in the form of goods but can also be in the form of service. Based on these definitions, service quality is the various efforts made by the company to fulfill the needs and expectations of customers.

Parasuraman, Zeithaml, and Berry (in Kotler et al., 2006) develop a service quality measurement tool called SERVQUAL (Service Quality) which can be used to understand the

expectations of consumers' perceptions of service quality and divide service quality into five dimensions (and this is will also be an indicator of service quality) as follows:

a. Reliability

The company's ability to meet customer needs in terms of service quickly, precisely, and on time so that it will satisfy customers and very impressive.

b. Responsiveness

Initiatives that arise from employees in the service industry to provide fast and responsive service to customers.

c. Assurance

Employees' attitudes or traits that can create trust in customers, including being polite, knowledgeable, competent, and trustworthy, will help ensure that customers feel safe and comfortable with the services provided by the company.

d. Empathy

The company pays attention to its customers by understanding their needs and providing convenience in communicating with the company.

e. Tangibles

Physical evidence can take various forms, including the presence of competent employees, the availability of complete facilities, and the use of modern and sophisticated communication tools.

#### Institutional Image

According to Sopiah & Syihabudhin (in Prastowo, 2019), an image is a reflection or image in a person's mind that arises because of emotions and reactions to the environment.

Brand image is defined by Keller (in Setyowati and Wiyadi 2016), as assumptions or opinions about the brand in the minds of customers that must be maintained so that customers are loyal to the brand. Brand image is consumer beliefs about a brand of goods or services. Schiffman and Kanuk (in Setyowati and Wiyadi, 2016) argue that several factors form a brand image, namely:

- a. The service quality provided by the service provider company is of utmost importance.
- b. Trustworthy, the product is reliable and related to the assumptions of consumers who have consumed it.
- c. Usability refers the usefulness of the goods or service that may be experienced by the customer.
- d. Service is related to the things that must be done by the company in providing services to customers.
- e. Risk, in connection with various matters that concern customers, service providers are always trying to find new and better ways to serve them.
- f. Price is the relationship between the cost of the product and the amount of money that will be spent by consumers.
- g. The image of the brand itself relates to the brand of the product itself.

According to Kotler and Armstrong (in Sondakh, 2014), measurement of a brand's image may be carried out using the following factors:

a. Strength

Strength is the umbrella term for the multiple tangible benefits that the relevant brand possesses over competing ones. It is possible to think of this brand as having an advantage over other brands because of its benefits, which are connected to its physical attributes. The physical appearance of the product, the functionality of all product features, the product's pricing, and the visual appeal of the features that support the in-question product are all included in this strong group, without limitation.

b. Uniqueness

The capacity to set one brand apart from others is known as uniqueness. This unique impression arises from product attributes, which create differences between one product and another. This unique group includes service, price difference, and differentiation.

c. Favorable

Favorable is a brand's capacity to be quickly and easily recalled by consumers, which is crucial. The product brand's pronounceability ease, ability to stick in customers' thoughts, and consistency with the company's desired brand image all fall under the favorable category.

#### **Customer satisfaction**

According to Kotler (in Setyowati and Wiyadi, 2016) customer satisfuction is a state that someone experiences when what they experience matches their objectives. According to Tjiptono (in Setyowati and Wiyadi, 2016), there are several benefits of customer satisfaction, namely:

- a. Establish a good relationship between the company and customers.
- b. Can create customer loyalty.
- c. Can be an effective advertising medium through word of mouth.

Lovelock and Wirtz (in Prastowo, 2019) define satisfaction as an emotional state after purchase, and post-purchase reactions can result in anger, dissatisfaction, irritation, neutrality, excitement, or pleasure.

Elliot and Shin (in Ratnasari, 2016) define consumer satisfaction as a student's subjective evaluation of various outcomes and experiences related to education. Student satisfaction is formed continuously from everyday life in the university environment.

According to Ratnasari (2019), for a customer-centric company, customer satisfaction is both a goal and a means of marketing. Dissatisfaction will lead to disappointment and anger and can encourage protests from consumers. Meanwhile, satisfaction will increase the company's profitability and create loyalty. The creation of customer quality will benefit the company by satisfying the wants and needs of buyers, resulting in increased loyalty and word of mouth recommendations. To the general public, will offer this service and hope to provide the best

benefits for the company. High satisfaction or feeling very happy from customers is associated with a strong emotional relationship with the brand or service provider company.

According to Lupiyoadi (in Sondakh, 2014), five main factors need to be considered concerning customer satisfaction, namely:

a. Product quality

If the results of their evaluations reveal that the products they utilize are of great quality, customers will be satisfied.

b. Service quality

Good service or meeting expectations will satisfy customers.

c. Emotional

If someone utilizes a branded product and tends to have great satisfaction, customers will feel confident and proud that others will be surprised. The satisfaction obtained with a product is not based on its quality, but on the social value, it has for customers.

d. Price

Customers will receive more value from products with the same quality but at a cheaper cost.

e. Cost

Customers are typically delighted with a good or service when they do not need to pay extra or lose time in order to obtain it.

Kotler (in Ekawati, 2019) defines satisfaction as the intensity of a person's emotions following a performance or outcome comparison with goal. Indicators of customer satisfaction include:

- a. Conformity of expectations.
  Expectations are the ideal desires and demands of consumers for services provided by service providers
- b. Interested to visit again.Interest in becoming a loyal customer for the services received
- c. Willingness to recommend.
  Willingness to spread the good news and provide recommendations by word of mouth to surrounding friends to use these services and benefit the institution

#### Word of Mouth

Hawkins et al. (in Prastowo, 2019) suggest that word of mouth (WOM) is an activity of disseminating information from one person to another in the oral conversation, such as face-to-face, over the phone, or digitally.

Kotler et al (2006) state that word of mouth (WOM) can be a very effective way for small businesses to connect with their customers. WOM has become a major force in business-to-consumer marketing and business-to-business marketing. In the end, positive word of mouth will be the most effective promotional tool for the company.

According to Ratnasari (2016), word of mouth is informal communication about products or services, in contrast to formal communication, because in informal communication the speaker tends to act as a more persuasive friend. A person's effect on word of mouth is very strong because the information from oral sources is relatively reliable and reliable, and it can reduce risk in purchasing decisions.

According to Rosiana (in Ratnasari, 2016), the dimensions of word of mouth consist:

- a. Positive stories are the desire of consumers to share positive things about the products they consume with others.
- b. Recommendations are the desire of consumers to provide recommendations to others who require details about high-quality goods.

Invitations are the willingness of consumers to invite others to use the products they have consumed.

### Method

Independent variable (X) is a variable whose value determines another variable. An independent variable is one that influences or modifies how the dependent variable emerges. Independent variables that will be used are service quality and institutional image. Ideally, an intervening variable (Z) can change the direct link between the independent and dependent variables into an indirect one. Customer satisfaction is the independent variable in this study. A dependent variable (Y) is one that is impacted by or develops as a result of an independent variable. Word of mouth is the dependent variable in this study.



#### Figure 2 Research Concept Framework Sampling Method

The population were the parents of Dipa Learning Center students until the latest data in March 2022, which was 291. In determining the number of samples, if you look at the amount of recapitulation data, it is too much to be used as respondents. Therefore, the sample in a population can use the Slovin formulation to determine the minimum sample. This research used a 90% confidence level, with an error rate of 10%. In this regard, the researcher can

determine the minimum sample limit that can meet the 10% margin of error requirement. The trick is to enter the margin of error into the Slovin formulation.

n 
$$=\frac{291}{1+291 \times 0.1^2}$$

n = 74\_\_\_\_\_(1)

In this research, purposive sampling was used, namely by giving boundaries to respondents who meet the criteria, namely parents of students studying at Dipa Learning Center as of March 2022.

### Result

#### Data Processing Results

This research used the path method or path analysis using Smart PLS 3.3.9. The first step is to make a specification of the path research model as shown in Figure 3

#### Figure 3 Research Model Specification



The inner and outer models are described in the model specification. The inner model demonstrates the relationships between the various constructs. The link between the indicators and the corresponding construct was assessed using the outer model. It is crucial to separate the locations of the constructs and the connections among them when building a path model like the one in Figure 3 It is decided if the constructions are exogenous or endogenous. Exogenous constructs (X1, X2 in Figure 3) behave as independent variables and do not have any arrows pointing at them, whereas endogenous constructs are characterized by other constructs (Z and Y in Figure 3). The endogenous construct can function as an independent variable when put between two constructs, despite frequently being regarded the dependent variable in a relationship (Z in Figure 3).

#### **Outer Model (Measurement Model)**

In this research, the indicator model is reflective. When assessing the outer reflective model, researchers must ensure the reliability and validity of the model are valid. The dependability of the construct's internal consistency is first tested using composite reliability and Cronbach's Alpha. Table 4.1 supports the conclusion that the construct of the outer model is trustworthy because Cronbach's Alpha is more than zero and composite reliability is greater than 0.6 (Hair et al., 2014).

#### **Table 1 Reliability Test Results**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0,958	0,961	0,962	0,601
X2	0,914	0,923	0,934	0,702
Y_	0,927	0,940	0,949	0,822
z	0,933	0,936	0,947	0,749

Testing the construct's validity is the next stage. Convergent and discriminant validity of a construct are key factors in determining validity. The degree to which a measure is positively linked with different measures of the same construct is known as convergent validity. A construct is declared convergently valid if the outer loading above 0.7 is tolerated up to 0.5 and AVE > 0.5 (Hair, et.al, 2014). And table 4.1 shows that this constructed model is valid because the AVE value is > 0.5. Determination of an AVE value of at least 0.50 or higher indicates that, on average, the construct explains more than half of the indicator variance. According to Hair et al. (2014), AVE is the same as a construct's commonality and is calculated as the average value of the squared loading of a group of indicators. Additionally, Figure 4.2 demonstrates that each indicator's outer loading value exceeds 0.5. (Hair, et.al, 2014). It follows that the construct of this model is convergently viable if the outer loading over 0.7 is accepted up to 0.5 and AVE > 0.5.

#### **Table 2 Convergent Validity Test Results**

FORNELL-LARCKER CRITERION					PATH COEFFICIENTS				
	X1	X2	Y_	Z		X1	X2	¥_	Z
X1	0,775				X1			0,101	0,408
X2	0,920	0,838			X2			0,267	0,532
¥	0,810	0,828	0,907		Υ_				
z	0,897	0.907	0.849	0,865	z			0,517	

The cross-loading factor and Fornell-discriminant Larcker's validity test come next. The degree to which a construct deviates fully from other constructs according to empirical standards is known as discriminant validity. As a result, proving discriminant validity suggests that a construct is distinctive and covers phenomena that may not be covered by other constructs in the model. Table 4.2 shows that the discriminant validity test with Fornell-Larcker is valid, where the value of AVE<sup>2</sup> > correlation of exogenous to endogenous variables, what is seen is the value of the path coefficients (Path Coefficients) from X to Y, because the research method

uses Path analysis. A construct and its related indicators share more variance than any other construct, according to the Fornell-Larcker method's rationale. The discriminant validity test with cross-loading is the next step. If the cross-loading indicator's value on a given variable is higher than that of other variables, the indicator is said to have discriminant validity. The cross-loading value for each indication is as follows:

	×1	×2	Y	Z
X111	0.746	0,691	0.550	0,627
×112	0,770	0,730	0,621	0,672
×113	0,597	0,531	0,468	0,486
X114	0.705	0,618	0,625	0,623
X115	0,793	0,734	0,656	0,715
X116	0.776	0,739	0,630	0.723
X121	0,809	0,695	0,638	0,678
X122	0,781	0,675	0,606	0,675
×123	0,795	0,661	0,588	0,659
X124	0,807	0,690	0,731	0.742
X131	0,808	0,748	0,666	0,706
X132	0,851	0,797	0,722	0,786
X141	0,831	0,754	0,551	0,739
×142	0,850	0,787	0,664	0,762
×143	0,653	0.612	0.514	0,503
X151	0,638	0,817	0,651	0,823
X152	0,798	0,776	0,788	0,791
X211	0,817	0,883	0,794	0,873
X212	0,832	0.873	0,739	0,817
X221	0,837	0,886	0.772	0,808
X222	0.613	0,709	0,623	0,624
X231	0.747	0.863	0,619	0,713
×232	0,752	0,800	0.577	0,686
Y211	0,795	0.802	0.945	0,834
Y212	0,819	0,839	0.929	0,824
Y221	0,713	0,706	0.925	0,764
Y231	0.682	0,634	0.824	0,635
Z111	0,766	0,745	0,670	0,885
Z112	0,687	0,753	0,737	0,855
2113	0,724	0,724	0.694	0,844
2121	0,812	0,781	0,768	0,893
2122	0,822	0,814	0.766	0,820
2131	0.828	0.871	0.838	0.892

#### **Table 3 Discriminant Validity Test Results**

Table 3 shows that the discriminant validity test with cross loading is valid. From the results of the Outer model test (Measurement Model) that has been used on both reliability and validity tests, it can be stated that this research model is reliable and valid.

#### Inner Model (Structural Model)

Therefore, the assessment criterion or the inner model test (structural model) is performed to ascertain the model's viability after the reliability and validity have been established. This is done by determining the size and importance of the path coefficient as well as the coefficient of determination (R<sup>2</sup> value).

The effect size  $f^2$ , predictive relevance ( $Q^2$ ), and Goodness of Fit provide additional insight into the quality of path model estimates.

#### Figure 4 PLS Algorithm



R Square (R<sup>2</sup>) indicates how many percent of endogenous constructs are explained by exogenous constructs, based on the criteria (Chin, 1998 in Hair, et.al) namely 0.67 (strong), 0.33 (moderate), 0.19 (weak). In Figure 5.3 the results of the structural model show that customer satisfaction (Z) has the strongest effect on word of mouth (Y) of 0.517, followed by Institutional image (X2) which has a weak effect of 0.267, and service quality (X1) has a very weak effect of 0.101. In addition, the three constructs explained 74.1% of the variance of the endogenous word of mouth construct Y (R<sup>2</sup> = 0.741), as indicated by the value in the circle. X1 (service quality) and X2 (institutional image) also together explain 84.9% of the variance of Z (customer satisfaction).

Followed by the effect size  $(f^2)$  showing how strong the effect of exogenous constructs on endogenous constructs, based on the criteria (Hair, et.al, 2014) is 0.02 (weak effect); 0.15 (fair effect); 0.35 (strong effect).

#### Table 4 Effect Size (f<sup>2</sup>)

	X1	X2	Y	Z	
X1	1		0,005	0,169	
X2			0,033	0,288	
¥_			1000 - 1		
z			0,156		

Table 4.4 shows how strong the effect of exogenous constructs on endogenous constructs. X1 (service quality) has a very weak effect (0.005) on Y (word of mouth) or it can be said to have no effect, but X1 (service quality) has quite an effect (0.169) on Z (customer satisfaction). X2 (institutional image) has a weak effect (0.033) on Y (word of mouth), but it has quite an effect (0.288) on Z (customer satisfaction). Meanwhile, Z (customer satisfaction) has a fair effect (0.156) on Y (word of mouth).

To test the feasibility of the model based on the Stone-Geisser Q Square test, the calculations are as follows:

$Q^2 = 1 - (1 - R_1^2) (1 - R_2^2) \dots (1 - R_2^2)$	$(R_n^2)$	(2)
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From the R square data table in table 4.5, the Q2 value is 0.961 (> 0), so the conclusion is that this model has predictive relevance.

For the feasibility test based on Goodness of Fit (GoF), based on the formula, =

 $GoF = \sqrt{AVExR^2}$ (3)

#### Table 5 Goodness of Fit

	R Square	R Square Adjusted	AVE	R Square x AVE	GoF	
Y_ Z	0,741	0,730	0,822	0,609	0,780	
z	0,849	0,844	0,749	0,636	0,797	

The GoF value of the customer satisfaction variable (Z) is 0.79 > 0.38, and the word of mouth variable (Y) 0.78 > 0.38; then this model is said to be good or feasible.

### Discussion

#### Hypothesis Testing (Bootstrapping)

For the hypothesis testing, it can be seen from the p-value data and t statistics (> 1.96; with = 0.05), shown in table 4.6, there are 2 significant direct effects, namely X1 (service quality) on Z (customer satisfaction), X2 (institutional image) to Z (customer satisfaction) and Z (customer satisfaction) to Y (word of mouth). Meanwhile, for X1 (service quality) on Y (word of mouth) and X2 (institutional image) on Y (word of mouth), the direct effect is not significant. Based on the description of the hypothesis then the proving is:

#### Hypothesis 1, It is expected that service quality (X1) affects customer satisfaction (Z)

Based on table 4.6 shows that there is a direct and significant effect between service quality (X1) on customer satisfaction (Z), it can be seen in the T statistic 2.935 > 1.96 ( $\alpha$  = 0.05) and p-value of 0.003 indicated in green.

These results are following the theory of Kotler and Keller (2006), service quality is everything that is owned by a product or service that can meet needs and can provide satisfaction to customers.

This has similarities with the research by Erni Setyowati and Wiyadi (2016) showing that there is a positive and significant effect on the service quality variable on customer satisfaction. The higher the service quality, the higher the customer satisfaction. The same thing was also stated by Aprih Santoso, Sri Yuni Widowati, Zakky Fahma Auliya (2021); Abdiannur (2019).

### Hypothesis 2, It is expected that the institutional image (X2) affects customer satisfaction (Z).

Based on table 4.6 shows that there is a direct and significant effect between the image of the institution (X2) on customer satisfaction (Z), it can be seen in the T statistic 4.031 > 1.96 ( $\alpha = 0.05$ ) and p-value 0.00006 indicated in green.

This result is following Lupiyoadi's theory (in Sondakh, 2014) which is one of the five main factors that need to be considered concerning customer satisfaction, namely emotional, where customers will feel proud and have confidence that other people will be amazed if someone uses branded products and tends to have high satisfaction. The satisfaction obtained with a product is not based on its quality, but on the social value, it has for customers.

This has similarities with the research by Connie Chairunnisa (2018) which shows that there is a positive effect on the image variable of institution/brand/institute/company on customer satisfaction. Dian Lestari Ekawati (2019); Erni Setyowati and Wiyadi (2016) find the same thing, namely the higher the image of an institution/brand/institute/company, the higher the level of customer satisfaction.

#### Hypothesis 3, it is expected that service quality (X1) affects word of mouth (Y).

Based on table 4.6 shows that there is a direct and insignificant effect between service quality (X1) on word of mouth (Y), it can be seen in the T statistic 0.362 < 1.96 ( $\alpha = 0.05$ ) and the p-value 0.718 which is indicated by red.

These results have similarities with the research by Mustikaningrum Hidayati (2018) regarding customer satisfaction having a positive but not significant effect on word of mouth, besides that it was found that customer satisfaction did not mediate the effect of service quality on word of mouth. However, the results differ from the research by Sugeng Lubar Prastowo (2019), which shows that service quality has a positive and significant effect either partially or simultaneously on word of mouth. This difference can occur due to different target respondents, namely students (end users), the number of respondents (100 respondents), and also the research location (University in Jakarta).

#### Hypothesis 4, It is expected that the institutional image (X2) affects word of mouth (Y).

Based on table 4.6 shows that there is a direct and insignificant effect between the institutional image (X2) on word of mouth (Y), it can be seen in the T statistic of 0.953 < 1.96 ( $\alpha = 0.05$ ) and the p-value of 0.341 which is indicated by red.

The difference in results with previous research, namely by Heri Prabowo, Widji Astuti, and Harianto Respati (2020) shows that the image of the Institute has a positive and significant effect, both partially and simultaneously on word of mouth. This can be due to differences in the object of research (Airy hotel customers), the number of respondents (191), and the year of research (2019).

#### Hypothesis 5, it is expected that customer satisfaction (Z) affects word of mouth (Y).

Table 4.6 shows that there is a direct and significant effect between customer satisfaction (Z) on word of mouth (Y), it can be seen in the T statistic of 2.233 > 1.96 ( $\alpha$  = 0.05) and the p-value of 0.026 which is indicated by the color green.

This is following the theory by Tjiptono (in Setyowati and Wiyadi, 2016) that there are several benefits of customer satisfaction, namely the establishment of a good relationship between the company and the customer; can create customer loyalty; can be an effective advertising medium through word of mouth.

These results have similarities with previous research, namely by Ina Ratnasari (2016), it is stated that customer satisfaction has a positive and significant effect on word of mouth. This was also found in the research of Garnis Anggi Saktiani (2015).

### Hypothesis 6, it is expected that service quality (X1) has an indirect effect on word of mouth (Y) through customer satisfaction (Z)

Based on table 4.7 shows that there is an indirect and insignificant effect between service quality (X1) on word of mouth (Y) through customer satisfaction (Z), it can be seen in the T statistic 1.898 < 1.96 ( $\alpha$  = 0.05) and p-value 0.058 which is indicated in red. Because it is not significant, it can be concluded that customer satisfaction (Z) cannot mediate service quality (X1) to word of mouth (Y), so it is not proven that customer satisfaction (Z) is an intervening variable.

This finding is the same as previous research by Mustikaningrum Hidayati (2018) regarding customer satisfaction. Customer satisfaction does not mediate the effect of service quality on word of mouth. However, it is different from other previous studies, namely Egy Dharmawan and Imam Hidayat (2018) suggesting that there is a positive (indirect) effect of service quality variables on word of mouth through the mediation of customer satisfaction. This difference can occur because the object of research is different, namely the customers of the AHASS motorcycle repair shop in Sidoarjo, totaling 98 people.

Hypothesis 7, It is expected that the institutional image (X2) has an indirect effect on word of mouth (Y) through customer satisfaction (Z)

Based on table 4.7 shows that there is an indirect and insignificant effect between the institutional image (X2) on word of mouth (Y) through customer satisfaction (Z), it can be seen in the T statistic 1.728 < 1.96 (a = 0.05) and p-value 0.085 indicated in red. Because it is not significant, it can be concluded that customer satisfaction (Z) cannot mediate the institutional image (X2) on word of mouth (Y), so it is not proven that customer satisfaction (Z) is an intervening variable.

There are differences in the findings with previous researchers, namely Komang Melastri, I.G.A.K. Giantari (2019) suggests that there is a positive (indirect) effect of the institutional image variable on word of mouth through the mediation of customer satisfaction. Which can happen because of differences in the objects of previous research, namely adult EF Learning Institute students (end users) and taking a sample of 155 respondents.

**Table 6 Direct Effect Hypothesis Testing Between Variables** 

	Original Bample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( OISTDEV )	P Values
Xt = T_	0,101	0,110	0,279	0,362	0,718
X1 → Z	0,406	0,391	0,139	2,935	8.003
X2-> Y_	0,267	0,272	0,280	0.953	0.341
12 - Z	0,532	0,548	0,132	4,031	9,900
Z -> Y_	0.517	0.507	0,231	2.235	0.026

#### **Table 7 Indirect Effects Hypothesis Testing Between Variables**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ([CISTDEV])	P Values
X2 -> Z -> Y	0.275	0.284	0.150	1,729	0,085
#1 @ Z @ Y_	8,211	0.189	0,111	1.898	0.008

#### Figure 5 Bootstrapping



### Conclusion

Based on the results of the discussion, the following conclusions can be drawn:

- 1. There is a direct and significant effect between service quality (X1) on customer satisfaction (Z), so the higher the service quality, the higher the customer satisfaction.
- 2. There is a direct and significant effect between the institutional image (X2) on customer satisfaction (Z), so the higher the institutional image, the higher the customer satisfaction.
- 3. There is a direct and insignificant effect between service quality (X1) on word of mouth (Y), so the level of service quality does not have a significant effect on word of mouth (Y).

- 4. There is a direct and insignificant effect between the institutional image (X2) on word of mouth (Y), so the high and low institutional image does not have a significant effect on word of mouth (Y).
- There is a direct and significant effect between customer satisfaction (Z) on word of mouth (Y), therefore the higher the customer satisfaction obtained, the higher the word of mouth (Y) by customers.
- 6. There is an indirect and insignificant effect between service quality (X1) on word of mouth (Y) through customer satisfaction (Z). Because it is not significant, it can be concluded that customer satisfaction (Z) cannot mediate service quality (X1) on word of mouth (Y), so it is not proven that customer satisfaction (Z) is an intervening variable.
- 7. There is an indirect and insignificant effect between the institutional image (X2) on word of mouth (Y) through customer satisfaction (Z). Because it is not significant, it can be concluded that customer satisfaction (Z) cannot mediate the institutional image (X2) on word of mouth (Y), so it is not proven that customer satisfaction (Z) is an intervening variable.

#### Limitations

There are some limitations to this research. This research only focuses on using 5 dimensions/indicators of service quality (SERVQUAL), namely tangibles, reliability, responsiveness, assurance, and empathy. There are still several other service quality factors that can be considered for use in further research. In addition, try other dependent variables that can have a significant effect on word of mouth, apart from the service quality and the institutional image.

#### Suggestions

Institution Management of Dipa Learning Center

From the conclusions obtained, it is clear that the service quality and the institutional image have an effect and significant on customer satisfaction. And customer satisfaction also has a strong effect on word of mouth. So the advice that can be given to the management is to focus on strengthening the results or goals on customer satisfaction, namely by:

- 1. Improving service quality, focusing on 5 dimensions of SERVQUAL, namely reliability, responsiveness, empathy, assurance, and tangibles. One thing that needs to be considered again is that the cost of the course must be commensurate with what is received by the customer or following customer expectations to be improved because based on the results of the research, it was found that the outer loading value is lower compared to others.
- 2. Improving the institutional image, by increasing the number of activities that trigger brand awareness, either through online or other media.
- 3. Conducting regular reviews from student parents regarding the benefits of researching at the institution and also asking for feedback or input for upgrading to a better institution, can be done once a month when reporting results to parents.

#### Further research

There are limitations in this research both in terms of the number of samples and also the respondents' selection, so for further research, it is hoped that at the time of sampling more data can be obtained from respondents who have more than 1 year of experience because the average program offered by the Dipa Learning Center is for each the level is 4-6 months, and also add a suggestion or comment column on the questionnaire. And adding other dependent variables that can support word of mouth, as well as adding service quality indicators other than those that already exist to expand the findings of the research.

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