

## Assess and Measure Retentions Rates Through Satisfaction

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#### ABSTRACT

The success of a college depends on how much retention is formed and student satisfaction is an important factor in achieving that retention. The purpose of this study was to examine the effect of institutional image, service quality, price perception, on student retention through student satisfaction. A total of 100 STIE Widya Gama Lumajang students participated as respondents in this study. Structural Equation Model based on SmartPls 3.0 is used to test the proposed hypothesis. The results showed that there was no direct effect of institutional image and price perception on student retention and price perception had no effect on student satisfaction. Based on its practical implications, student satisfaction has an important mediating role on the influence of institutional image and service quality which is assessed by students to encourage willingness to stay and complete their studies until graduation at STIE Widya Gama Lumajang and student satisfaction. does not have an important mediating role on the effect of price perception on student retention.

Keywords: Image, Service, Price, Satisfaction, Retention



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## INTRODUCTION

According to Kotler (1995), one way to increase competitiveness in the service industry is to improve service quality so as to satisfy customers, which will lead to increased retention. Customer retention is an area of interest not only in marketing for private businesses but also in academic practitioners. In the consumer behavior literature many scientists and practitioners are very interested in what can motivate customers to stay with a company (Aspinallet et al., 2001; Esmaeiler and Barjoei, 2016). Several companies have been identified as experiencing interesting events where customers are satisfied with the service or loyal to the company (Sickler, 2013).

In the context of educational institutions, the questions that arise are more or less the same, namely whether students stay in a college because they feel loyal, satisfied or just because they have found value in the services they have purchased and consumed (Archambault, 2008; Sickler, 2013).



Students are the main consumers as well as the main source of income for higher education institutions. One of the problems that arise is about student retention, related to students' decisions to stay and continue their studies and then finish their studies. The retention, resilience, and graduation rates of students are the main indicators of the success of higher education institutions (Polinsky, 2003). The rating level of success is defined in the literature as the percentage of students who complete one year of study at an institution and re-register for a second year at the same institution (Hagedorn, 2005). Kara and DeShields (2004) stated that recruiting new students has always been seen as an important activity for higher education institutions.

Surprising evidence has been provided previously by Tinto (1975 and 1993) where statistical results reported revealing that more than 40 percent of all college students who continue their studies leave higher education without obtaining a bachelor's degree. Another fact is that 75 (seventy five) percent of these students will drop out in the first two years of college (Tinto, 1993). For many higher education institutions, one can expect that around 56 (fifty six) percent of a typical class will not graduate for various reasons, but the most important of which is the low retention of students (Tinto, 1993).

Several factors that can affect student retention including satisfaction include Institutional Image, Service Quality, and Price Perception (Ilyas, 2013; Subagiyo, 2015; Noviasari, et al, 2015; Hanafiah, 2015; Rahman, 2015; Mulyono, 2016; Usman, 2015). et al, 2016; Ratnasari, 2016; Sulistyan, et al, 2017; Dwi K, et al, 2017; Sulastri, 2017; Weerasinghe and Dedunu, 2017; Saleem, et al, 2017; Ilhamuddin and Amri, 2018; Permana, et al. al, 2018; Chandra, et al, 2018; Azam, 2018; Bakrie, et al, 2019; Appuhamilage and Torii 2019; Hwang and Choi, 2019).

Image or image according to Kotler (2009) is a public perception of a company or product which is illustrated as an overall experience created in the minds of people about an organization. Dwi K et al., (2017) examined customer/student retention with its antecedents such as institutional image, service quality, and customer satisfaction. In the context of higher education, the image of the institution is seen to be in accordance with student assessments, and then affects loyalty and retention through the satisfaction shown. However, it is not appropriate to consider the quality of education only in the service category to make students feel more satisfied. Indeed, service quality in education has profound personal impacts such as perceptions of institutional image and price (education costs) which have significant social value and cannot be reduced only to commodity market relations.

Student perception of price is essentially a student's assessment process of the price (education costs) offered by tertiary institutions that are affordable or not (cheap or expensive) regarding the determination, on the other hand there are parents who do not object to the original price of the college being of good quality. of the process, curriculum and outputs that have a high reputation. In addition to price, higher education services are strongly influenced by the quality of the products offered. If the quality of the product is high, then potential customers will not hesitate to pay more, as long as it is within their affordability limits (Buchari Alma, 2004: 383). In line with the opinion of Lupiyoadi and Hamdani (2008:97) that "Price is the various benefits possessed by a service product must be compared with the various costs (sacrifices) incurred in consuming the service".

In the past, students' feelings were not considered too much by many universities, but nowadays, feelings are the main thing. The reason is, if you look at the source of students' feelings, every contact made during the educational process will leave an unforgettable impression, both a bad impression and a good impression. A bad impression will make students tell bad things to others, on the other hand a good impression will make students tell good things to others. A good impression will have a good impact on universities, one of which will increase enthusiasts to continue their studies at the university.



Another factor that is an important antecedent of customer retention is customer satisfaction. Customer satisfaction is a very important element in the formation of customer desires for future purchases (Gbadamosi and de Jager, 2009; Gremler et al., 2002). Bitner (1990) suggests that satisfaction has several positive impacts, including positive word of mouth, customer retention, and continuous use of services. Oliver (1993 and 1997) formulates customer satisfaction as a post-purchase evaluation, where the perception of the performance of the selected product meets or exceeds expectations before purchase.

Student satisfaction can be an intervening variable, both between institutional image and student retention and between service quality and student retention and price perception with student retention. It can be interpreted that the better the image of the institution and the quality of academic services provided, the higher the level of student satisfaction, so that it will have an impact on increasing student retention (Hanafiah, 2015).

The higher education sector in Lumajang is unique by considering the different impetus for change that exists in the Lumajang area. There is a growing concern about people in the local community about the importance of pursuing higher education. Keep in mind that higher education institutions are no different from for-profit corporations. Thus, this study focuses more specifically on student retention at STIE Widya Gama Lumajang, and examines what factors are most important to influence student retention, especially in the second and third years of studying at STIE Widya Gama Lumajang. In the last 5 (five) years, the interest of prospective students who want to study at STIE Widya Gama is very high, it is proven from year to year that prospective students who register continue to increase. But when students first enter college and are committed to completing their studies until they graduate, there is a significant difference in the number of those who enter and those who graduate, in other words, the input and output of students are not the same.

Tinto's Interactivity Theory (Tinto, 1993) focuses on the level of commitment of an institution to its students by academic and social group, which requires the institution to work to put the needs of students before those of the institution. Cabrera et al., (1993) combined Tinto's concept with other researchers regarding student commitment to study completion and then produced an external factor model of student friction. This will be used as the basis for building the concept of student retention later.

Barich and Kotler (1991) define institutional image as the overall impression about an organization that is made in the minds of people. An institution must create its personality independently as far as its brand, products and services are concerned. The image is built due to the perception that consumers have of the character and personality of the institution or organization. Nguyen and LeBlanc (2001) reviewed institutional image and reputation on retention decisions from a customer loyalty perspective, showing that loyalty levels tend to be higher when perceptions of institutional reputation and image are favorable. Based on the results of research from Noviasari (2015), Usman and Mokhtar (2016), Mulyono (2016), and Bakrie, et al (2019) which state that Institutional Image has a direct effect on Student Retention, the first hypothesis in this study can be formulated H1: Institutional image has a direct effect on student retention.

The increasing competition between universities and the expectations that students have have led to awareness of the importance of providing quality educational services in order to maintain a sufficient number of students with high abilities (Canic and McCarthy 2000). Changes in student expectations over time were analyzed, as well as the gap between expectations and perceived service quality performance (Hill, 1995). Gruber et al., (2010) suggest that service quality in higher education institutions can be recognized as a variance between student expectations of educational services and perceptions of educational services received. Based on research results from Hanafiah (2015), Usman and Mokhtar (2016), Sulistyan, et at (2017), Azham (2018), and Appuhamilage and Torii (2019) which state that Service Quality has a direct effect on Student



Retention, then the second hypothesis in this study H2: Service quality has a direct effect on student retention.

Prices are not only exchange rates for goods or services, but prices are used by consumers as reciprocity (Putri & Ferdinand, 2016). According to Nurhayati (2017) price is one of the variables that must be controlled properly. This is because the price greatly affects the company's activities, both aspects of services and aspects of profits that have been targeted by a company. Based on the theory and previous research proposed by Marconi (2002), Joko Riyadi (2004), Juan and Yan (2009), Sundari, 2010, Pupuani and Sulistyawati (2013), Ilyas (2013) and Hasan (2014) who stated that the perception of Price has a direct effect on student retention, so the third hypothesis in this study H3: Price perception has a direct effect on student retention.

Athiyaman (1997) states that a student enrolls in a class and finds his expectations confirmed either negatively or positively. Considering that satisfaction can be viewed as a specific attitude towards a transactional relationship, as a whole. Carey, et al (2002), defines student satisfaction as covering the problems of students' perceptions and experiences during their years of learning. Eakuru and Matt (2008) describe satisfaction as a process where aspects such as expectations, perceptions and emotions are part of the process. Based on research results from Ilyas (2013), Noviasari (2015), Mulyono (2016) Usman and Mokhtar (2016), Sulistyan, et al (2017), Ilhamuddin and Amri (2018), Candra, et al (2018), and Appuhamilage and Torii (2019) which states that student satisfaction has a direct effect on student retention, so the fourth hypothesis in this study is H5: student satisfaction has an effect on student retention.

Sutojo (2004:1) states that the image of a company/institution is a reflection or reproduction of identity or the form of an individual, object or organization. The image of the company/organization is a reproduction of the identity of the organization as a whole which is an accumulation of the image of the company's performance as a whole, so it is not just an image of its products and services. Based on research results from Noviasari (2015), Subagiyo (2015) Rahman, (2015), Mulyono (2016), Sulistyan, et al (2017), Ilhamuddin and Amri (2018), Permana, et al (2018) and Bakrie, et al. al (2019) which states that Institutional Image affects Student Satisfaction, then the fifth hypothesis in this study H5: Institutional Image affects Student Satisfaction.

Companies engaged in services, as stated by Zeithaml and Bitner (1996), are very dependent on the quality of services provided by the company to its customers. The quality of services is much more difficult to define, describe, and measure when compared to the quality of goods. Lupiyoadi, (2001:158), said that companies must pay attention to service quality in determining the level of customer satisfaction. Customers will feel proud and have confidence that other people will be amazed by him when using a product with a certain brand which tends to have a higher level of satisfaction. Based on the results of research from Ilyas (2013), Hanafiah (2015), Rahman (2015), Sulastri (2017), Weerasinghe and Dedunu (2017), Sulistyan, et al (2017), Saleem, et al (2017), Permana, et al. al (2018), Azam (2018), Candra, et al (2018), Hwang and Choi (2019), and Bakrie, et al (2019) which state that service quality affects student satisfaction, so the sixth hypothesis in this study is H6: Service Quality Affects Student Satisfaction.

Price is the sum of all values provided by customers to benefit from owning or using a product or service (Kotler and Armstrong, 2008:345). The perception of the selling price of a good product or service will greatly affect customer satisfaction, the perception of the selling price of the product in accordance with customer expectations and the achievement of customer satisfaction will form customer loyalty. Based on the results of research from Ilyas (2013), Sulastri (2017), Ilhamuddin and Amri (2018), and Permana, et al (2018), which state that Price Perception affects Student Satisfaction, the seventh hypothesis in this study H7: Price Perception effect on Student Satisfaction.



There is a fact that educational institutions lack image building like other public institutions (Nguyen and LeBlanc, 2001). The image is built due to the perception that consumers have of the character and personality of the institution or organization. Sutanto (2009) found that to achieve customer satisfaction, service industry managers must pay attention to the company's image. Customers will feel proud and have confidence that other people will be amazed by him when using a product with a certain brand which tends to have a higher level of satisfaction. According to Tjiptono (2000: 125), customer loyalty is not created by itself, but rather a level of customer satisfaction that will encourage the growth of customer loyalty to the company. Based on research results from Sulistyan, et al (2017), Dwi K, et al (2017), and Appuhamilage and Torii (2019), and Bakrie, et al (2019) which state that Institutional Image affects Student Retention through Student Satisfaction, then the eighth hypothesis in this study H8: Institutional Image affects Student Retention through Student Retention through Student Satisfaction.

Companies engaged in services, as stated by Zeithaml and Bitner (1996), are very dependent on the quality of services provided by the company to its customers. According to Lupiyoadi, (2001:158), companies must pay attention to service quality in determining the level of customer satisfaction. Customers will feel satisfied and they will tend to reuse the company's services. Based on the results of research from Ilyas (2013), Hanafiah (2015) Noviasari (2016), Sulistyan, et al (2017), and Dwi K, et al (2017) which state that Service Quality affects Student Retention through Student Satisfaction, the hypothesis ninth in this study H9: Service Quality Affects Student Retention through Student Satisfaction.

Prices are not only exchange rates for goods or services, but prices are used by consumers as reciprocity (Putri & Ferdinand, 2016). If the student's perception meets the expectations that have been formed previously, this will encourage a higher level of satisfaction. If the service received does not meet their expectations, the community will feel less / dissatisfied and will likely not use the service again and vice versa. Based on the theory put forward by Marconi (2002), Joko Riyadi (2004), Juan and Yan (2009), Sundari, 2010, Pupuani and Sulistyawati (2013), and Hasan (2014) who suggested that price perception affects student retention through satisfaction Students, then the tenth hypothesis in this study H10: Price Perception has an effect on Student Retention through Student Satisfaction.

## **METHOD**

This type of research is quantitative research by looking for associative relationships that are causal. The source of data used in this research is primary data in the form of the results of filling out questionnaires and interviews with respondents, namely STIE Widya Gama Lumajang. The population is all students of STIE Widya Gama Lumajang. While the target population determined is all STIE Widya Gama Lumajang students, both Accounting and Management Study Programs who have taken higher education for two and three years (class 2017 and 2018). The size of the population based on the criteria for the target population was set at 1,234 students consisting of 447 Accounting Study Programs and 787 Management Study Programs.

While the sampling technique used in this study is Probability Sampling (Random Sampling) which is a sampling technique, where everyone has the same opportunity as others to be selected as sample members (Ferdinand, 2006: 229). The sample calculation in this study used a model developed by Roscoe about the sample size for the study (Ferdinand, 2006: 225). The analysis used in this study is a multivariate analysis, namely multiple linear regression analysis consisting of 3 (three) independent variables, 1 (one) mediating variable, and 1 (one) dependent variable, then the sample size taken is at least 20 x 5 variables = 100 sample members. So the number of samples in this study were 100 students consisting of levels 2 (two) and 3 (three) Accounting and Management Study Programs.



The data collection technique in this study was carried out through a questionnaire distributed to STIE Widya Gama Lumajang students who were entering their second and third year studies. The results of the questionnaire will be given a score on each answer to each item of the statement or question. The scoring in this study was based on a 5-point Likert scale. The method of data analysis in this study was carried out using multiple linear regression analysis. Before performing multiple linear analysis, the data instrument test was conducted first, namely the validity test and reliability test, as well as the classical assumption test, namely the data normality test, the multicollinearity test, and the heteroscedasticity test.

Path analysis is part of the regression analysis used to analyze the relationship between variables, where each independent variable affects the dependent variable either directly or indirectly through one or more intermediate variables (Sarwono, 2006). The analysis tool uses smartPls 3.0 software. Hypothesis testing is carried out to test the existing hypotheses in the study, so that proper statistical testing is needed (Sanusi, 2011: 143). The test statistic used is the t statistic or t test. This t test is used to prove whether the independent variable individually affects the dependent variable (Widarjono, 2015: 22).

### RESULTS AND DISCUSSION

Results of the research the effect of institutional image, service quality, and price perception on student retention through student satisfaction, the number of respondents was 100 students who were selected 30 students or 30% of them were men and the remaining 70% were women. It can be concluded that more female students filled out and responded to my research questionnaire. The number of respondents based on majors / study programs was 45% students majoring / accounting study programs and 55% were students majoring / management study program. It can be concluded that more students majoring / management study programs filled out and responded to my research questionnaire. The number of respondents based on the class of 51% were students of class 2017 and 49% were students of class 2018. It can be concluded that more students of class 2017 filled out and responded to my research questionnaire.

The institutional image variable consists of 9 indicators, the highest score is the STIE Widya Gama Lumajang indicator, which has become a preference or a good choice for the surrounding community with an average of 3.99. This shows that STIE Widya Gama Lumajang provides a good image by being a preference or a good choice for the surrounding community. The service quality variable consists of 13 indicators, the highest score is the STIE Widya Gama Lumajang indicator, which has a building with a good physical appearance with an average of 4.07. So it is concluded that STIE Widya Gama Lumajang students as respondents in this study agree that STIE Widya Gama Lumajang has a building with a good physical appearance. The price perception variable consists of 4 indicators, the highest score is the DPP Cost indicator at STIE Widya Gama Lumajang in accordance with the physical facilities obtained with an average of 3.44. This shows that STIE Widya Gama Lumajang determines the DPP fee at STIE Widya Gama Lumajang in accordance with the physical facilities provided.

The student satisfaction variable consists of 3 indicators, the highest score is an indicator that they are happy to finish the study until the end at STIE Widya Gama Lumajang with an average of 4.15. This shows that STIE Widya Gama Lumajang is able to provide satisfaction to students, with a good level of respondent achievement with evidence that they are always happy to finish their studies until the end at STIE Widya Gama Lumajang. The student retention variable consists of 6 indicators, the highest score is the indicator they assess the degree that I will get at STIE Widya Gama Lumajang is very important with an average of 4.21. This shows that STIE Widya Gama Lumajang is able to provide retention to students, with a good level of respondent achievement with evidence that they assess that the bachelor's degree to be obtained at STIE Widya Gama Lumajang is very important.



Table 1. The Results of The Validity Test of Each Variable

Variable	Interval R	Cut Off	Information
Institutional Image (X <sub>1</sub> )	0,60 - 0,80	≥ 0,30	Valid
Quality of Service $(X_2)$	0,60 - 0,80	$\geq$ 0,30	Valid
Price Perception $(X_3)$	0,60 - 0,80	$\geq$ 0,30	Valid
Student Satisfaction (Z)	0,60 - 0,80	$\geq$ 0,30	Valid
Student Retention (Y)	0,60 - 0,80	≥ 0,30	Valid

Based on the results of the validity test in table 1 it is said to be valid if r count is at least 0.3 or r count is greater than r table, it can be concluded that all statements on the variables of Institutional Image, Service Quality, Price Perception, Student Satisfaction, and Student Retention are declared valid. Thus, all statement items in this research instrument can be declared feasible as a research instrument because they can extract the required data or information.

Table 2. The Results of the Reliability Test of Each Variable

Variable	Cronbach's Alpha	Interval Alpha Cronbach	Reliability Level
Institutional Image	0,785	0,601 - 0,80	Reliable
Quality of Service	0,769	0,601 - 0,80	Reliable
Price Perception	0,824	0,801 - 1,00	Very Reliable
Student Satisfaction	0,861	0,801 - 1,00	Very Reliable
Student Retention	0,782	0,601 - 0,80	Reliable

Based on the reliability test criteria in Yohanes Anton Nugroho (2011: 33), the results of the reliability test in table 2 for the variables in this study obtained the results of the questionnaire on Institutional Image, Service Quality, Price Perception, Student Satisfaction, and Student Retention. So it can be concluded that the questionnaire used to measure the variables of Institutional Image, Service Quality, Price Perception, Student Satisfaction, and Student Retention is a reliable questionnaire because it can provide no different results if re-measured on the same subject at different times. The data in this study has gone through the classical assumption test.

**Table 3. Path Analysis Results** 

Description	Relationship	Path Coefficient	В
	$X1 \rightarrow Y$	$\beta_1 X_1$	0,051
Influence pathways of Institutional Image,	$X2 \rightarrow Y$	$\beta_2 X_2$	0,368
Service Quality, Price Perception, and Student Satisfaction on Student Retention	$X3 \rightarrow Y$	$\beta_3 X_3$	0,074
Student Sausraction on Student Retention	$Z \rightarrow Y$	$eta_4 \mathbf{Z}$	0,447
Influence pathways for Institutional Image,	X1→Z	$\beta_1 X_1$	0,363
Service Quality, and Price Perception on	$X2\rightarrow Z$	$\beta_2 X_2$	0,436
Student Satisfaction	$X3 \rightarrow Z$	$\beta_3 X_3$	-0,032
The path of indirect influence on institutional image, service quality, price	$X1 \rightarrow Z \rightarrow Y$	$\beta yzx_1$	0,162
perception, and student satisfaction on	$X2 \rightarrow Z \rightarrow Y$	$\beta yzx_2$	0,195
student retention is through student satisfaction	$X3 \rightarrow Z \rightarrow Y$	$\beta yzx_3$	-0,014

Based on table 4 above shows the first structural equation path model as follows:  $Y = 0.051X_1 + 0.368X_2 + 0.074X_3 + 0.447Z + \epsilon_1...$  (Equation 1)



Based on table 4 above shows the third structural equation path model as follows:  $Y = 0.162X_1 + 0.195X_2 - 0.014X_3 + \underbrace{\epsilon_2}_{2}$ .....(Equation 2.3)

**Tabel 4. Hypothesis Test Results** 

Hypothesis	Relationship	t Table	t Statistics	Sig
H1	$X_1 \rightarrow Y$	1,9852	0,435	0,663
H2	$X_2 \rightarrow Y$	1,9852	3,355	0,001
Н3	$X_3 \rightarrow Y$	1,9852	0,958	0,338
H4	$Z \rightarrow Y$	1,9852	4,768	0,000
H5	$X_1 \rightarrow Z$	1,9852	2,084	0,038
Н6	$X_2 \rightarrow Z$	1,9852	2,862	0,004
H7	$X_3 \rightarrow Z$	1,9852	0,301	0,764
H8	$X_1 \rightarrow Z \rightarrow Y$	1,9852	2,168	0,031
H9	$X_2 \rightarrow Z \rightarrow Y$	1,9852	2,090	0,037
H10	$X_3 \rightarrow Z \rightarrow Y$	1,9852	0,294	0,769

Direct Effect of Service Quality on Student Retention. Based on the results of testing the second hypothesis states that the hypothesis is accepted, meaning that Service Quality has a significant effect on Student Retention or in other words Service Quality is an important determinant of Student Retention. Based on the results of the analysis using smartPLS Service Quality has a positive correlation with Student Retention, where if the Service Quality increases, Student Retention will increase and vice versa. This influence is significant or the sample taken can represent the characteristics of the respondent's answer, so for students the Quality of Service at STIE Widya Gama Lumajang affects Student Retention. The findings of this study support previous research conducted by Hanafiah (2015), Usman and Mokhtar (2016), Sulistyan, et al (2017), Azham (2018) and Appuhamilage and Torii (2019). The results of this study do not support previous research conducted by Dwi K, et al (2017), Candra, et al (2018), and Bakrie, et al (2019), which states that Service Quality is not an important determinant of Student Retention in maintaining students to complete their studies until graduation.

In this case, the quality of service felt by students can affect student retention so that students will always finish their studies until graduation. In general, it has been revealed that Service Quality can have an important impact on Student Retention, especially students studying at STIE Widya Gama Lumajang. So that the quality of service is a determining factor for students in completing their studies. Students in perceiving the quality of STIE Widya Gama Lumajang's services respond more to the STIE Widya Gama Lumajang building with a good physical appearance, that means there is still something that the institution needs to fix in improving service quality to be even better even though currently according to students the quality of service is appropriate. with the hope.

Direct Effect of Price Perception on Student Retention. Based on the results of testing the third hypothesis states that the hypothesis is rejected, meaning that price perception does not have a direct effect on student retention or in other words, price perception is not an important determinant of student retention. This is because when students assess price perceptions (cost of education and educational development) it does not make students decide to quit or move to another university. The findings of this study support previous research conducted by Ilyas (2013) and do not support the theory put forward by Marconi (2002), Joko Riyadi (2004), Juan and Yan (2009), Sundari, 2010, Pupuani and Sulistyawati (2013), and Hasan (2014) which states that price perception (cost of education and education development) is an important determinant of student retention in maintaining students to complete their studies until graduation.



These results provide empirical evidence that the perceived price perceived by students cannot affect Student Retention, so that how much money is incurred by students, they will continue to complete their studies until graduation because when students decide to study at STIE Widya Gama Lumajang, they already know how much it costs. will be issued while studying at STIE Widya Gama Lumajang until graduation. Students in perceiving prices (costs of education and educational development) tend to respond to educational development costs in accordance with the physical facilities obtained, that means how much the cost of education and educational development that has been paid will not make students stop studying, in other words students will remain committed to complete his studies at STIE Widya Gama Lumajang until graduation.

The Effect of Student Satisfaction on Student Retention. Based on the results of testing the fourth hypothesis states that the hypothesis is accepted, meaning that student satisfaction has a significant effect, or in other words, student satisfaction is an important determinant of student retention. In the analysis results using smartPLS Student Satisfaction has a positive correlation to Student Retention, where if Student Satisfaction increases, Student Retention will increase and vice versa. This influence is significant or the sample taken can represent the characteristics of the respondent's answer, so for students perceived satisfaction affects retention which forms their commitment to complete their studies until graduation. The results of this study support previous research conducted by Ilyas (2013), Noviasari (2015), Mulyono (2016), Usman and Mokhtar (2016), Sulistyan, et al (2017), Ilhamuddin and Amri (2018), Candra, et al. (2018), and Appuhamilage and Torii (2019). And it does not support previous research conducted by Bakrie, et al (2019), which states that student satisfaction is not an important determinant of student retention in maintaining students to complete their studies until graduation.

In this case Student Satisfaction felt by students must be recognized by the institution. The satisfaction that is expected and that is obtained must run straight and balanced, if necessary, the satisfaction obtained by students is greater than what they expect. If students feel more satisfaction than expected, then STIE Widya Gama Lumajang succeeded in creating satisfaction for them. This is why satisfaction has a significant effect on student retention.

Influence of Institutional Image on Student Satisfaction. Based on the results of testing the fifth hypothesis states that the hypothesis is accepted, meaning that institutional image has a significant effect on student satisfaction. In the analysis results using smartPLS Institutional Image has a positive correlation to Student Satisfaction, where if the Institutional Image increases, Student Satisfaction will increase and vice versa. This influence is significant or the sample taken can represent the characteristics of the respondent's answer, so for students the Institutional Image owned by STIE Widya Gama Lumajang affects Student Satisfaction. The findings of this study support previous research conducted by Noviasari (2015), Subagiyo (2015) Rahman, (2015), Mulyono (2016), Sulistyan, et al (2017), Ilhamuddin and Amri (2018), Permana, et al (2018) and Bakrie, et al (2019) which state that Institutional Image is an important determinant of Student Satisfaction.

Institutional image and student satisfaction are two things that need each other. The purpose of the image of the institution is to refer to a good reputation in order to have positive values in the eyes of students, while student satisfaction has a role to continue to create institutional performance and always provide good service to students in order to be able to give an impression that matches the expectations and feelings of pleasure of students for STIE Widya Gama Lumajang services in a sustainable manner. This may lead to a better understanding of educational needs, especially in tertiary institutions. Every college or university with a better institutional image in the surrounding community is seen as a special attraction that is able to attract prospective students who wish to continue their studies at the higher education level.

The Effect of Service Quality on Student Satisfaction. Based on the results of testing the sixth hypothesis states that the hypothesis is accepted, meaning that Service Quality has a significant



effect on Student Satisfaction. Based on the results of the analysis using smartPLS Service Quality has a positive correlation to Student Satisfaction, where if the Service Quality increases, Student Satisfaction will increase and vice versa. This influence is significant or the sample taken can represent the characteristics of the respondent's answer, so for students, the service quality of STIE Widya Gama Lumajang affects student satisfaction. These findings support previous research conducted by Ilyas (2013), Hanafiah (2015), Rahman (2015), Sulastri (2017), Weerasinghe and Dedunu (2017), Sulistyan, et al (2017), Saleem, et al (2017). Permana, et al (2018), Azam (2018), Candra, et al (2018), Hwang and Choi (2019), and Bakrie, et al (2019) which state that Service Quality is an important determinant of Student Satisfaction.

Students are satisfied with their studies at STIE Widya Gama Lumajang, it can be seen from them that they are satisfied with the quality of services provided in the form of STIE Widya Gama Lumajang, having a building with a good physical appearance, STIE Widya Gama Lumajang staff is willing to help students who have difficulty in managing academic administration, and the competence of STIE Widya Gama Lumajang lecturers in accordance with student expectations. With this satisfaction, they will say positive things and will keep their commitment to complete their studies until they graduate. When viewed from the explanation that has been given, it is very clear that service quality greatly affects student satisfaction. Service quality and satisfaction are directly proportional so that if the quality of service received is good, then the satisfaction obtained by students will also be good and even increase. Tangible service quality is the main thing that is real and visible in front of students' eyes or eyes and is important to pay attention to.

The Effect of Price Perception on Student Satisfaction. Based on the results of testing the seventh hypothesis, it states that the hypothesis is rejected, meaning that price perceptions have no effect on student satisfaction. Based on the results of the analysis using smartPLS, the perception of price has a negative correlation with student satisfaction, where if the perception of price decreases, student satisfaction will increase and vice versa. This influence is not significant or the sample taken cannot represent the characteristics of the respondent's answer, so for students the perception of price, in this case the cost of education and educational development set by STIE Widya Gama Lumajang, does not affect student satisfaction. These findings support previous research conducted by Bakrie, et al (2019) and do not support previous research conducted by Ilyas (2013), Sulastri (2017), Ilhamuddin and Amri (2018), and Permana, et al (2018), which states that Price Perception is an important determinant of Student Satisfaction.

Perceptions of price are often associated with the perceived benefits of a good or service. If the perceived benefits increase, the perceptions of students will be good and create maximum student satisfaction. Although the perception of price, in this case the cost of education and educational development, is not very good among students or even good, it will not affect the level of student satisfaction. this is because students do not see how much the cost of education and educational development incurred makes them satisfied, because students consider many other factors that are more important and must be considered that can affect their satisfaction.

The Influence of Institutional Image on Student Retention through Student Satisfaction. The results of testing the eighth hypothesis on the effect of institutional image on student retention through student satisfaction show that there is a significant effect on student retention through student satisfaction or in other words student satisfaction as a mediating variable between the influence of institutional image and student retention. Based on the results of the analysis using smartPLS, the image of the institution has a positive influence on student retention through student satisfaction, where the higher the image of the institution owned by STIE Widya Gama Lumajang, the higher the level of student satisfaction so that it has an impact on increasing student retention which leads to student commitment to complete their studies until graduated at STIE Widya Gama Lumajang. The results of this study support previous research conducted by Sulistyan, et al (2017), Dwi K, et al (2017), Appuhamilage and Torii (2019), and Bakrie, et al (2019) which stated that Student Satisfaction is a mediating variable between Institutional Image with Student Retention.



In the context of marketing student retention services, it is a response from students related to their promise to uphold their commitment to complete their studies until graduation. According to Suratno et al (2016), the image of an institution is an impression in a person's mind that comes from a collection of feelings, attitudes, ideas, and experiences about the institution. Widya Gama Lumajang STIE student has given a positive attitude and impression, and gives confidence, meaning that students feel satisfied and in accordance with their expectations. So that students will hold firm to be committed to completing their studies until graduation. In perceiving the Institutional Image variable, respondents tend to think that STIE Widya Gama Lumajang has become a preference or a good choice for the surrounding community. This shows that STIE Widya Gama Lumajang has a place in the hearts of the Lumajang community. Based on the research results, it can be emphasized that the mediation effect is more important on the image of the institution on student retention. This relationship assumes that students feel satisfied first with the image of the institution owned by STIE Widya Gama Lumajang then forms retention and leads to a commitment to complete their studies until graduation.

The Effect of Service Quality on Student Retention through Student Satisfaction. The results of testing the ninth hypothesis on the effect of service quality on student retention through student satisfaction indicate a significant effect, or in other words, student satisfaction can mediate between service quality and student retention. Based on the results of the analysis using smartPLS service quality has a positive and significant effect on student retention through student satisfaction, where if the quality of service increases, student satisfaction increases which has an impact on retention then forms student commitment to complete their studies at STIE Widya Gama Lumajang until graduation. The results of this study support previous research conducted by Ilyas (2013), Hanafiah (2016), Noviasari (2016), Sulistyan, et al (2017), and Dwi K, et al (2017), which states that student satisfaction is able to mediate variables. quality of service with student retention.

STIE Widya Gama Lumajang has done a lot to meet the needs of students whose main purpose is to provide satisfaction and shape their retention. Their satisfaction is the main factor determining the retention rate. At STIE Widya Gama Lumajang, the high level of satisfaction is largely influenced by feelings of pride in being a student and the attention of leaders, lecturers, and staff in dealing with complaints. This is in line with existing theories that good service quality will have an impact on satisfaction, but there are also theories or opinions which state that service quality is an antecedent to student retention, meaning that students will feel satisfied because they have experienced good service quality and vice versa. students feel disappointed and dissatisfied and less likely to form retention. The good quality of service will have a direct or indirect impact on the attitude and behavior of commitment to completing studies until graduation.

The Effect of Price Perception on Student Retention through Student Satisfaction. The results of testing the tenth hypothesis on the effect of price perceptions on student retention through student satisfaction showed no effect or in other words, student satisfaction did not mediate between perceived price and student retention. Based on the results of the analysis using smartPLS price perception has no effect on student retention through student satisfaction, where if the perceived price perception decreases, student satisfaction increases which has an impact on retention and forms student commitment to complete his studies at STIE Widya Gama Lumajang until graduation. The results of this study support previous research conducted by Ilyas (2013) and the results of this study do not support the theory put forward by Marconi (2002), Joko Riyadi (2004), Juan and Yan (2009), Sundari, 2010, Pupuani and Sulistyawati (2013), and Hasan (2014) which states that Student Satisfaction is a mediating variable between Price Perception and Student Retention.

The reason why perceived prices (costs of education and educational development) have no effect on retention through student satisfaction is because they judge that the perceived price (costs of



education and education development) does not lead to deep satisfaction and does not increase retention, is because students assume that no matter how big the cost of education is and educational development that has been issued, they will continue to complete their studies until graduation. Another reason is that they think that the perception of price in this case the cost of education and education development does not reduce their level of satisfaction which then forms retention to commit to completing their studies until graduation, because they assess the perception of price in this case the cost of education and educational development set by STIE Widya Gama Lumajang does not reduce their level of satisfaction and also does not reduce their retention to continue their studies at STIE Widya Gama Lumajang until graduation.

## CONCLUSION

Currently, competition in higher education services continues to increase. A successful college is a university that not only produces research and has international awards, but is also a university that is loved by its students. By increasing student satisfaction, it is hoped that students will not be distracted by things that can divert their focus from study and research. Demonstrations of poor service and other upheavals that hinder the provision of services to students should be suppressed by providing services and facilities that satisfy students. Thus, STIE Widya Gama Lumajang is expected to be able to produce quality alumni, who are in accordance with the vision and mission of higher education, and benefit the nation and state.

The search for what can encourage student retention should always be the focus of all competent authorities at STIE Widya Gama Lumajang. Considering that each educational institution is different, identification of students who are satisfied must be done so that the STIE Widya Gama Lumajang can find out how high the level of student satisfaction is to STIE Widya Gama Lumajang. Once identified, some of the most prominent attributes can be promoted and perhaps improved for the better. Thus, policy makers at STIE Widya Gama Lumajang can identify what kind of characteristics or standardization of students accessing the education services provided, and afterward modify and add or reduce certain aspects of these services to match the expectations of students.

The relationship between institutional image, service quality, price perception, satisfaction, and student retention can also be related to the cost consequences in case of erosion or withdrawal from STIE Widya Gama Lumajang, by deciding to leave STIE Widya Gama Lumajang, a student will be faced with a high transfer costs due to building a new relationship between students and other universities (such as relationships between customers and institutions). This represents a significant set of investments in effort, time, and energy and materials. Therefore, to build a strong and sustainable long-term relationship, STIE Widya Gama Lumajang must be able to guarantee that students as their main customers are very satisfied with the educational processes, features, and services provided

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