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# Antecedent of WOM and Its Implications on The Brand Image of The Higher Education Institution in Bali

## Ni Nyoman Kerti Yasa¹, I G. A. Ketut Giantari², Putu Laksmita Dewi Rahmayanti³, I Gusti Ayu Tirtayani⁴

Faculty of Economics and Business, Universitas Udayana, Bali, Indonesia<sup>1,2</sup>
Faculty of Economics, Business and Tourism, Hindu Indonesia University, Bali, Indonesia<sup>3</sup>
Faculty of Economics and Business, Universitas Pendidikan Nasional, Bali, Indonesia<sup>4</sup>

### Info Article

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#### Abstract

The purpose of this study is to explain the Antecedent of WOM and Its Implications on The Brand Image of The Higher Education Institution in Bali. The results showed that the variables tangible, responsiveness, and empathy had a positive and significant effect on satisfaction, while reliability and assurance had a positive and insignificant effect on satisfaction. Furthermore, satisfaction has a positive and significant effect on WOM and on brand image, and WOM has a positive and significant effect on brand image. In the future higher education institutions in Bali should increase reliability and assurance in order to increase satisfaction.

## Anteseden WOM dan Implikasinya terhadap Brand Image Perguruan Tinggi di Bali

### Abstrak

Tujuan dari penelitian ini adalah untuk menjelaskan Anteseden WOM dan Implikasinya terhadap Brand Image Perguruan Tinggi di Bali. Hasil penelitian menunjukkan bahwa variabel tangible, responsiveness, dan empati berpengaruh positif dan signifikan terhadap kepuasan, sedangkan reliability dan assurance berpengaruh positif dan tidak signifikan terhadap kepuasan. Selanjutnya kepuasan berpengaruh positif dan signifikan terhadap WOM dan citra merek, dan WOM berpengaruh positif dan signifikan terhadap citra merek. Kedepannya perguruan tinggi di Bali harus meningkatkan kehandalan dan jaminan guna meningkatkan kepuasan.

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### INTRODUCTION

Higher education institutions in Indonesia continue to develop rapidly. This phenomenon is a good thing for prospective students. More and more higher education institutions are providing opportunities for prospective students to determine their choice of choosing the best place to study. The conditions that occur in Indonesia are also similar to those of higher education institutions in Bali. The number of higher education institutions in Bali has also experienced rapid development and this also provides room for prospective students to make decisions about where to study.

The choice of prospective students or the market, of course, is determined by many things. One of the main determining factors is the brand image of the higher education institution which is formed from its experience (Nixon et al., 2018). All higher education institutions strive to enhance their brand image in order to win the competition and become the market's first choice (Nguyen et al., 2019). Brand image is able to provide an overview of the quality of service received (Watjatrakul, 2014; Garipagaoglu, 2016). Currently, the brand image of higher education institutions in Bali is not maximal. Based on data from Kompas.com, the order of universities in Bali is not in the top 10, but at number 42 for Udayana University. This is indicated by the large number of prospective students who wish to study outside Bali. So that Bali becomes worthy of research in order to find out the things that cause prospective students to choose universities outside Bali. Therefore, higher education institutions in Bali really need to pay attention to and maintain their brand image so that it becomes stronger and becomes the first choice for prospective students if they want to study. The brand image of the higher education institution determines its position compared to competitors. (Bennett & Ali-Choudhury, 2009; Syed Alwi & Kitchen, 2014). The brand image of higher education institutions has been widely studied by several previous researchers, such as: Johnson et al. (2001); Casidy (2013);

Sultan & Wong (2012, 2013). The brand image reflects what the institution looks like in the eyes of its consumers (Bravo et al., 2012).

Brand image can be formed from positive WOM communication (Reza et al., 2019). The more positive the WOM, the higher the brand image of a higher education institution. Several researchers have examined the relationship between WOM and brand image (Kamboj & Rahman (2017). The results shown are that the better WOM communication from an institution is able to strengthen its brand image (Tran et al., 2015; Yang & Mutum, 2015; and Raji et al. al., 2018).

In addition, to strengthen or improve brand image it is also necessary to pay attention to customer satisfaction (Ngamkamollert & Ruangkanjanases, 2015). If the customer feels satisfied, the brand image of a company will also increase. Research from Ali et al. (2016); Bini & Masserini (2016); Kim & Lee (2015), who conducted research at higher education institutions, found that student satisfaction has a positive and significant effect on brand image, but there are still other researchers such as Andreassen & Lindestad (1998), who show inconsistent results, namely satisfaction. has not been able to build a brand image. In addition, there is also another study that examines the opposite relationship, namely, the effect of brand image on student satisfaction (Brown & Mazzarol, 2009).

Because there is still a reciprocal relationship and there is a research gap on the effect of satisfaction on brand image, it is necessary to supplement it with a mediating variable. The suitable mediating variable to use is the WOM variable. The reasons for entering the WOM variable are motivated by several considerations, including: 1) If only satisfaction is felt by the customer, then the customer keeps that feeling in his heart, It would be nice that customer satisfaction needs to be continued by releasing that feeling through positive communication to others. This is positive WOM that arises from a sense of satisfaction. This can be seen in the results of research by Rubio et al. (2015; 2020); 2) besides that, if positive WOM can emerge, it

will also be able to improve the brand image of the institution (Kuenzel & Halliday, 2010).

The explanation above illustrates that in order to build a strong brand image of higher education institutions, it is necessary to increase positive WOM and student satisfaction. Student satisfaction is also a very important determining variable in building a brand image. Therefore, higher education institutions must know strategies to increase student satisfaction. A strategy to increase student satisfaction that is commonly implemented is to develop the best service quality (Arokiasamy & Abdullah, 2012; Lupo, 2014; and Štimac & Šimic, 2012). The quality of service is what these higher education institutions can fulfill towards the expectations of their students. Service quality includes: tangible, reliability, assurance, responsiveness, and empathy (Kim et al., 2005). Tangible, such as the availability of ample parking, clean lecture halls, comfortable lecture halls, computer facilities, neat staff appearance, clean toilets, complete book collections, and availability of online learning media, can increase student satisfaction (Abdullah, 2006). Reliability, such as: fast staff service, timely staff service, clear staff service, and careful service, also have a positive and significant effect on student satisfaction. Likewise, responsiveness, assurance, and empathy can increase student satisfaction (Katircioglu et al., 2012). Based on the existing background, this study aims to determine the effect of service quality on student satisfaction, WOM, and the brand image of higher education institutions in Bali.

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### Hypothesis Development Tangible Influence on Student Satisfaction

According to the research results of Ryu & Han (2010), it shows that tangible variables have a positive and significant effect on student satisfaction. Furthermore, Ryu et al. (2012), also examined the effect of tangibles on student satisfaction, which showed that better physical evidence was able to increase student satisfaction. Tangible shown by: a large parking area, comfortable lecture rooms, clean toilets, a complete collection of books, the appearance of employees who are getting better is able to make students feel satisfied. This is also supported by several other researchers, such as Han & Ryu (2009); Ali et al. (2016); and Cham et al. (2016). Based on the results of empirical studies, the following hypothesis can be built:

H1: Tangible has a positive and significant effect on student satisfaction

### The effect of Reliability on satisfaction

Reliability possessed by education personnel in speed, accuracy, and clarity in serving students can increase student satisfaction. The effect of reliability on student satisfaction has been studied by Zeithaml et al. (2008). The results of his research show that the higher the level of reliability, the higher the student's satisfaction. The same thing is also shown by the

research results of Richardson (2005) and Katircioglu et al. (2012). Based on the results of empirical studies, the following hypotheses can be formulated:

H2: Reliability has a positive and significant effect on student satisfaction

## The effect of responsiveness on student satisfaction

Responsiveness which is shown by the responsiveness of the education staff is able to increase student satisfaction. The effect of responsiveness on satisfaction has been studied by several researchers, including: Abdullah (2006); Arokiasamy & Abdullah (2012); Katircioglu et al. (2012); Ali et al. (2016); The results of his research show that the higher the responsiveness, the higher the student's satisfaction. Based on the results of empirical studies, the following hypotheses can be formulated:

H3: Responsiveness has a positive and significant effect on student satisfaction

### The effect of assurance on student satisfaction

Assurance can also increase student satisfaction (Sultan & Wong, 2012). The results showed that assurance such as time assurance regarding the administrative process, guarantee of the best service can increase student satisfaction. Furthermore, the results of research by Sultan & Wong (2013) also show consistent results, namely assurance can increase student satisfaction. Sharifah et al. (2019), examining service quality, which includes the assurance variable, shows the results that assurance can lead to higher student satisfaction. Based on the results of empirical studies, the following hypothesis can be built:

H4: Assurance has a positive and significant effect on student satisfaction.

### The effect of empathy on student satisfaction

Empathy is usually indicated by an indication of special attention to customers or paying attention to students who have physical or non-physical weaknesses which can also increase student satisfaction (Arokiasamy & Abdullah,

2012). This was revealed in the results of research conducted by Bini & Masserini (2016), which stated that by giving empathy, higher attention from the heart to students would increase their satisfaction. Likewise, the research results of Voss et al. (2010) examining the influence of the empathy variable on student satisfaction stated that the results of their study showed empathy had a positive and significant effect on student satisfaction. Based on the results of empirical studies, the following hypothesis can be built:

H5: Empathy has a positive and significant effect on student satisfaction

### The effect of student satisfaction on WOM

Student satisfaction can also increase positive WOM (Rojas-Mendez et al., 2009). This is revealed in the results of research conducted by Paswan & Ganesh (2009), which state that student satisfaction can increase positive WOM. Furthermore, the research results of Harrison & Shaw (2004); Rubio et al. (2015; 2020), also showed consistent results, namely student satisfaction was able to increase positive WOM. Based on the results of existing empirical studies, the following hypothesis can be built:

H6: Student satisfaction has a positive and significant effect on WOM

### The effect of student satisfaction on brand image

Student satisfaction can also improve brand image (Palmer et al., 2016; Arambewela & Hall, 2009). This is revealed in the results of research conducted by Kuenzel & Halliday (2010), which states that student satisfaction improves the brand image of higher education institutions. Furthermore, the research results of Ali et al. (2016); Bini & Masserini (2016); and Sharifah et al. (2019), also showed consistent results, namely student satisfaction was able to improve brand image. Based on the results of empirical studies, the following hypothesis can be built:

H7: Student satisfaction has a positive and significant effect on brand image

### The effect of WOM on brand image

WOM can also improve brand image (Kuenzel & Halliday, 2010), which states that positive WOM can strengthen brand image. Likewise, the results of research that are consistent with examining the effect of WOM variables on brand image, such as: Yang & Mutum (2015); and Jalilvand & Samiei (2020), reinforce the results of research which show that WOM or e-WOM is able to improve the brand image of a product. Based on the results of empirical studies, the following hypothesis can be built:

H8: WOM has a positive and significant effect on brand image

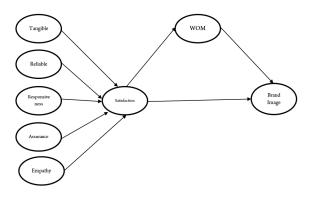


Figure 1. Research Framework

## The role of WOM in mediating student satisfaction variable with brand image

Research conducted by Garipagaoglu (2016) states that the image of higher education institutions is very important to note. Therefore, a brand image should be built with various efforts, including by providing satisfaction to students and building a positive WOM. Kim and Lee (2015) state that student satisfaction can improve the brand image of higher education institutions. Likewise, the increasingly positive WOM is able to improve the brand image of higher education institutions (Yang & Mutum (2015). So the position of WOM can be used as a mediating variable between student satisfaction and brand image. Based on the results of empirical studies, the following hypothesis can be formulated:

H9: WOM is able to significantly mediate student satisfaction with brand image

### **METHOD**

This research is classified into associative research, namely research that aims to determine the relationship between tangible variables, reliability, assurance, responsiveness, and empathy, student satisfaction, WOM, and the brand image of higher education institutions in Bali. Data was collected through an online questionnaire (Google Form), the respondents of this study were all prospective students in Bali. The number of respondent is 370 respondent.

In this study, there are three types of variable data to be studied, these variables are: Exogenous variables: Tangible, Reliability, Responsiveness, Assurance, Empathy; Mediating variables: Satisfaction; WOM; and Endogenous Variable: Brand Image.

The variable indicators of the tangible variables, reliability, assurance, responsiveness, empathy, satisfaction, WOM, brand image were measured by the perceptions of active students from higher education institutions in Bali using a five-level Likert scale, namely from strongly disagree = 1, disagree = 2, quite agree = 3, agree = 4, and strongly agree = 5.

The instrument used was tested for validity and reliability in order to measure what you wanted to measure and to know the consistency of the responses given by the respondent. Testing the validity of the instrument using Pearson's Product Moment correlation technique with a minimum limit of r = 0.3. Instrument reliability testing is done by calculating the reliability coefficient of Cronbach's Alpha with the minimum alpha coefficient> 0.7. Both tests use the SPSS computer program. This analysis is used to describe the research variables, without drawing generalizations. The data that has been collected is then tabulated in a table and a descriptive discussion is carried out. The data analysis technique used in this research is path analysis using SEM - PLS. The use of two different Ni Nyoman Kerti Yasa, et al. / Antecedent of WOM and Its Implicatins on The Brand Image of The Higher...

analytical tool applications allows researchers to obtain unbiased results. So the researchers used SPSS to test the validity and reliability of the research instrument.

Each research variable or indicator is classified as follows:

 Table 1. Construction and Research Variable Indicators

Construct classification	Construct	Indicator
Exogenous	Tangible	1. Secure parking
		2. The lecture hall is clean
		3. Comfortable lecture hall
		4. Computer facilities
		5. The appearance of the staff is neat
		6. Toilets are clean
		7. Complete book collection
		8. There are online learning media
	Reliability	1. Fast service
		2. Service is right
		3. Service is clear
		4. Meticulous service
	Responsiveness	1. Responsive
		2. Complaint finished
		3. Quickly serve
		4. Ready to set
	Assurance	1.Skilled in serving
		2.Accuracy of serving
		3. Hospitality of serving
		4. Teaching competence
		5.Guiding students well
	Empathy	1. Easy to communicate
		2. Pay special attention
		<ul><li>3. Providing services as needed</li><li>4. Knowing the needs</li></ul>
Endogenous	Satisfaction	1. Satisfied with the study program service
Lindogenous	Satisfaction	2. Satisfied with the staff service
		3. Prodi is the right choice
		4. Happy with the study program
	WOM	1. Positive storytelling
	WON	2. Recommend
		3. Right choice
	Brand image	1. Good image
	Diana image	2. Graduates quickly work
		3. Best service
		4. Alumni are successful
		T. Mullilli are successful

### **RESULT AND DISCUSSION**

After doing the research, the results can be presented as follows. The characteristics of respondents according to demographic characteristics are presented in Table 2.

Table 2. explains that there were more female respondents than male respondents where female respondents were 62.7 percent while male respondents were 37.3 percent. When viewed by age, the majority of respondents aged 18-26 were 86.49 percent. Based on the field of student science, it can be seen that as many as 323 people with a percentage of 87.30 percent are students studying in the socio-cultural field and 47 people with a percentage of 12.7 percent

are students in the field of technology science. Furthermore, seen from the status of the tertiary institutions where they study, there were 272 people with a percentage of 73.5 percent from private universities and 98 people with a percentage of 26.5 percent from state university students.

Testing the validity and reliability of the instrument was carried out with Pearson's correlation and Cronbach's Alpha coefficient. The results of testing the validity and reliability of the instrument for each variable can be presented in Table 3. The results of testing the validity and reliability of the instrument in Table 3 show that all variables are valid because the correlation value is above 0.30 and reliable because the Cronbach's Alpha value is above 0.6.

Table 2. Characteristics of Respondents

No	Variable	Classification	Total (people)	Percentage
1	Gender	Male	138	37.3
		Female	232	62.7
Total			370	100
2	Age	18 – 26	320	86.49
		27 – 35	26	7.03
		36 – 42	17	4.59
		43 – 51	7	1.89
Total			370	100
3	Major	Science Technology	47	12.7
		Socio-cultural	323	87.3
Total			370	100
4	College Status	Public University	98	26.5
		Private University	272	73.5
Total			370	100

Table 3. Results of Testing the Validity and Reliability of the Instrument

Variable	Item	R Correlation	Cronbach's Alpha α
Tangible	X1.1	.616	.838
	X1.2	.577	
	X1.3	.817	
	X1.4	.728	
	X1.5	.664	
	X1.6	.619	
	X1.7	.839	
	X1.8	.736	

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Reliability	X2.1	.767	.875
	X2.2	.912	
	X2.3	.850	
	X2.4	.899	
Responsivenes	X3.1	.847	.734
	X3.2	.812	
	X3.3	.577	
	X3.4	.816	
Assurance	X4.1	.715	.834
	X4.2	.843	
	X4.3	.834	
	X4.4	.807	
	X4.5	.683	
Empathy	X5.1	.875	.861
	X5.2	.900	
	X5.3	.893	
	X5.4	.685	
Satisfaction	Y1.1	.753	.898
	Y1.2	.875	
	Y1.3	.960	
	Y1.4	.911	
WOM	Y2.1	.909	.918
	Y2.2	.923	
	Y2.3	.949	
Brand Image	Y3.1	.838	.855
	Y3.2	.776	
	Y3.3	.896	
	Y3.4	.828	

Furthermore, the results of variable descriptive analysis explain the respondents' perceptions of tangible variables, reliability, assurance, responsiveness, empathy, satisfaction, WOM, and brand image obtained through distributing questionnaires using google form. Quantitative assessment uses an interval scale by integrating the average score according to the rating category.

### **PLS SEM Analysis Results**

This study uses a two-stage approach to measuring the model before it is used for hypothesis testing, which aims to verify the validity and reliability of a research model. First, by analysing convergent validity, followed by analysing discriminant validity.

## Outer Model Test Convergent Validity

The outer model test is carried out to ensure the research indicators are feasible to use as their role in measuring the research variables, so to see whether a model is valid to be the basis for research, there are three criteria that must be met, namely: (1) all loading indicators must be above 0.65; (2) composite reliability (CR) must be above 0.8, and (3) average variance extracted (AVE) for each construct must exceed 0.5.

Table 4. Model Size Results

Construct	Indicator	Outer Loading	Composite Reliability	Average Variance Extracted (AVE)
Tangible	X1.1	.771	.917	.583
C	X1.2	.831		
	X1.3	.871		
	X1.4	.693		
	X1.5	.757		
	X1.6	.671		
	X1.7	.745		
	X1.8	.747		
Reliability	X2.1	.888	.958	.849
,	X2.2	.935		
	X2.3	.934		
	X2.4	.928		
Responsiveness	X3.1	.890	.912	.721
1	X3.2	.868		
	X3.3	.850		
	X3.4	.786		
Assurance	X4.1	.835	.927	.717
	X4.2	.886		
	X4.3	.829		
	X4.4	.871		
	X4.5	.811		
Empathy	X5.1	.882	.937	.788
1 /	X5.2	.898		
	X5.3	.884		
	X5.4	.886		
Satisfaction	Y1.1	.877	.921	.746
	Y1.2	.871		
	Y1.3	.869		
	Y1.4	.837		
WOM	Y2.1	.899	.930	.817
	Y2.2	.900	., 00	.02,
	Y2.3	.912		
Brand Image	Y3.1	.903	.949	.822
	Y3.2	.905	-, 1,	
	Y3.3	.910		
	Y3.4	.910		

Based on Table 4, it shows that all outer loading indicators have a value above 0.65 with a range between 0.671 to 0.935 meaning that they are at the recommended limit, then the composite reliability (CR) value is in the range between 0.912 to 0.958, all of which are above 0.8 meaning that all constructs are formed to have good consistency as a research model, the third is the average variance extracted (AVE) value where all

values are above 0.5, namely with a range from 0.583 to 0.849 so it can be concluded that the research model in this study has good validity.

### **Discriminant Validity**

To evaluate discriminant validity, a research model is recommended to ensure that the root average variance extracted ( $\sqrt{\text{AVE}}$ ) value of a latent variable must be greater.

Table 5. Correlation Between Latent Variables

Construct	Tangible	Reliability	Respon- sivenes	Assurance	Empathy	Satis- faction	WOM	Brand Image
Tangible	1.000	.769	.775	.789	.712	.737	.640	.640
Reliability	.769	1.000	.729	.701	.643	.649	.555	.551
Responsiven	.775	.729	1.000	.815	.785	.754	.635	.633
Assurance	.789	.701	.815	1.000	.844	.837	.725	.723
Empathy	.712	.643	.785	.844	1.000	.825	.737	.719
Satisfaction	.737	.649	.754	.837	.825	1.000	.827	.802
WOM	.640	.555	.635	.725	.737	.827	1.000	.828
Brand Image	.640	.551	.633	.723	.719	.802	.828	1.000

Table 6. AVE Root Value

Construct	Average Variance Extracted (AVE)	AVE Square
Tangible	.583	.763
Reliability	.849	.922
Responsiveness	.721	.849
Assurance	.717	.847
Empathy	.788	.888
Satisfaction	.746	.864
WOM	.817	.904
Brand Image	.822	.907

Discriminant validity is considered good if the smallest AVE root value ( $\sqrt{\text{AVE}}$ ) in Table 6 is greater than the correlation value between the highest latent variables in Table 8. The research model proposed in this study can be considered good, where the smallest  $\sqrt{\text{AVE}}$  value is 0.763 more greater than the correlation value between the highest latent variables which is equal to 0.710.

### **Inner Model Test**

Structural models focus on the hypothesized relationships or pathways between latent variables. The results of the inner model test can be seen in Figure 2.

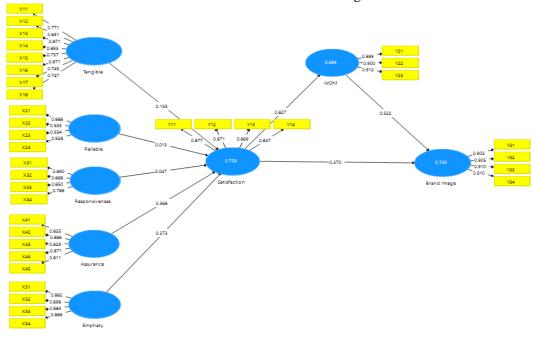


Figure 2. Structural Model

### Hypothesis testing

The significance of the estimated parameters provides very useful information about the relationship between the research variables. The basis used in testing the hypothesis is the value contained in the output path coefficients which are presented in Table 7.

Empathy towards student satisfaction has a t-statistic value of 6,129 with a p value of 0.000 <0.05, so the hypothesis is accepted. This means that the higher the empathy level, the higher student satisfaction. Student satisfaction with WOM has a t-statistic value of 33,673 with a p value of 0.000 <0.05, so the hypothesis is accepted. This means

Table 7. Path Coefficient

Correlation between variables	Path Coef	t-statistic	P Values	Keterangan
Tangible → Satisfaction	.135	2.273	.023	Accepted
Reliablity → Satisfaction	.013	.254	.800	Rejected
Assurance → Satisfaction	.368	5.323	.000	Accepted
Responsiveness → Satisfaction	.047	.888	.375	Rejected
Empathy → Satisfaction	.373	6.129	.000	Accepted
Satisfaction → WOM	.827	33.673	.000	Accepted
Satisfaction → Brand image	.370	5.163	.000	Accepted
WOM → Brand image	.522	7.759	.000	Accepted

Hypothesis testing is done using t-statistics and looking at the p-value. If the p-value <0.05, the hypothesis is accepted. Based on Table 7, it can be explained that tangible satisfaction has a t-statistic value of 2.273 with a p-value of 0.023 <0.05, so the hypothesis is accepted. This means that the better the tangible conditions, the higher student satisfaction. Reliability to student satisfaction has a t-statistic value of 0.254 with a p-value of 0.800> 0.05, so the hypothesis is rejected. This means that the higher the level of reliability, it is not able to increase student satisfaction. Responsiveness to student satisfaction has a tstatistic value of 0.888 with a p value of 0.375> 0.05, so the hypothesis is rejected. This means, the higher the level of responsiveness is not able to increase student satisfaction. Assurance on student satisfaction has a t-statistic value of 5,323 with a p value of 0.000 < 0.05, so the hypothesis is accepted. This means, the higher the level of assurance, the student satisfaction will increase.

that the higher the level of student satisfaction, the higher the positive WOM. Student satisfaction with brand image has a t-statistic value of 5,163 with a p value of 0.000 <0.05, so the hypothesis is accepted. This means that the higher the level of student satisfaction, the higher the brand image. Furthermore, WOM on brand image has a t-statistic value of 7,759 with a p value of 0.000 <0.05, so the hypothesis is accepted. This means that the higher the positive WOM, the higher the brand image.

### **Indirect Effect Testing (Mediation Test)**

Test the role of WOM mediation on the effect of satisfaction on brand image by examining the indirect effects which are the Smart PLS output as presented in Table 8. Based on Table 8, it can be explained that the t-statistic value is greater than the t-table value (7,750> 1.96), then WOM significantly mediates satisfaction with brand image.

Table 8. Indirect Effects

Correlation	Path coefficient	t-Statistic	p-Values	
Customer Satisfaction →→	.432	7.750	.000	Accepted
WOM →→ Brand Image				

### Discussions

Based on the results of the analysis of the tangible effect on student satisfaction, the beta coefficient value is 0.135 with a significance level of  $0.023 \le 0.05$ , which means that H1 is accepted. These results mean that the tangible variable has a positive and significant effect on student satisfaction. So, the better the tangible that educational institutions in Bali have, which is shown by the existence of clean lecture rooms, comfortable lecture rooms, large parking lots, clean toilets, neat appearance of educational staff, having online learning media, the student satisfaction will increase. The results of this study at the same time strengthen the results of previous studies conducted by Ali et al. (2016); and Cham et al. (2016), which states that tangible has a positive and significant effect on student satisfaction. Furthermore, the results of the analysis of the effect of reliability on student satisfaction obtained a beta coefficient of 0.013 with a significance level of 0.800> 0.05, which means that H2 is rejected. This result means that the variable reliability has a positive and insignificant effect on student satisfaction. So, the better the reliability of educational institutions in Bali, which is shown by the service of fast educational staff, fast academic services, clear services, and careful academic services, then it has not been able to increase student satisfaction. Based on the results of the analysis of the effect of assurance on student satisfaction, the beta coefficient value is 0.368 with a significance level of  $0.000 \le 0.05$ , which means that H4 is accepted. This result means that the assurance variable has a positive and significant effect on student satisfaction. So, the better the assurance that is owned by educational institutions in Bali which is shown by skill in serving, accuracy in serving, guarantee of friendliness of service, assurance of lecturer competence, and assurance of guiding well, the student satisfaction will increase. The results of the analysis of the effect of responsiveness on student satisfaction obtained a beta coefficient value of 0.047 with a significance level of 0.375> 0.05, which means that H3 is rejected. These results mean, the responsiveness variable has a positive and insignificant effect on student satisfaction. So, the better the responsiveness of educational institutions in Bali, which is shown to be responsive to student complaints, the less likely it is to increase student satisfaction. Based on the results of the analysis of the effect of empathy on student satisfaction, the beta coefficient value is 0.373 with a significance level of  $0.000 \le 0.05$ , which means that H5 is accepted. These results mean, the empathy variable has a positive and significant effect on student satisfaction. So, the better the empathy possessed by educational institutions in Bali which is shown special attention to students, the more student satisfaction increases.

The results of this study at the same time strengthen the results of previous research conducted by Bini & Masserini (2016), which states that empathy has a positive and significant effect on student satisfaction. Furthermore, the results of the analysis of the effect of satisfaction on WOM obtained a beta coefficient value of 0.827 with a significance level of  $0.000 \le$ 0.05, which means that H6is accepted. These results mean, the student satisfaction variable has a positive and significant effect on WOM. So, the higher the student's satisfaction which is indicated by the feeling of being happy to attend lectures and being satisfied with all the services available, the positive WOM will increase. The results of this study at the same time strengthen the results of previous studies conducted by Rubio et al. (2015), which states that student satisfaction has a positive and significant effect on WOM, this means that with increasing student satisfaction, it will increase positive WOM about higher education institutions in Bali. The results of the analysis of the effect of satisfaction on brand image obtained a beta coefficient value of 0.370 with a significance level of  $0.000 \le 0.05$ , which means that H7 is accepted.

These results mean, the student satisfaction variable has a positive and significant effect on brand image. So, the higher the student's satisfaction which is indicated by the feeling of being happy to attend lectures and being satisfied with all the services available, the brand

image will increase. The results of this study at the same time strengthen the results of previous studies conducted by Ali et al. (2016); Bini & Masserini (2016), which states that student satisfaction has a positive and significant effect on brand image.

This result means that the increasing student satisfaction will improve the brand image of higher education institutions in Bali.Furthermore, the results of the analysis of the influence of WOM on brand image obtained a beta coefficient value of 0.522 with a significance level of  $0.000 \le 0.05$ , which means that H8 is accepted. These results mean, the WOM variable has a positive and significant effect on brand image. So, the better WOM is shown by positive communication about the study program, recommending study programs to others, and the study program is the right choice for study, the brand image will increase. The results of this study at the same time strengthen the results of previous research conducted by Yang and Mutum (2015), which states that WOM has a positive and significant effect on brand image, this means that, with higher positive WOM, it will improve the brand image of higher education institutions in Bali. .Based on the analysis of the role of WOM mediation on the effect of student satisfaction on brand image, the beta coefficient value is 0.432 with a significance level of 0.000  $\leq$  0.05, which means that H9 is accepted. These results mean, the WOM variable is able to partially mediate the effect of student satisfaction on brand image. So, the effect of student satisfaction as indicated by the feeling of being happy to attend lectures, being satisfied with all the services received on the university's brand image is getting stronger with the positive WOM.

### Limitations

As stated in the analysis and discussion, this study can theoretically find a relationship between latent variables of service quality on student satisfaction and WOM and brand image. This research can contribute thoughts to leaders of higher education institutions in Bali that building the best service quality is the right

strategy to increase student satisfaction, positive WOM, and a strong brand image.

Various limitations were also found in this study mainly due to the following factors. 1) This study only uses respondents from a student perspective. 2). The mediating variable studied is the WOM variable which turns out that in this study the mediation variable is partially so that in the future it is necessary to think about adding the mediating variables such as student commitment and student confidence. 3) Apart from that, it can also be studied from a lecturer perspective.

### CONCLUSION AND RECOMMENDATION

Based on the research results, it can be concluded that two factors of service quality that are not able to increase student satisfaction, namely reliability and responsiveness, while tangible, assurance, and empathy are able to increase student satisfaction. Furthermore, student satisfaction can increase positive WOM satisfaction and brand image of higher education institutions in Bali.

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