



SATISFACTION AND LOYALTY IMPROVEMENT MODEL ON THE QUALITY OF HIGHER EDUCATION SERVICES

Musran Munizu, [✉] Nurdjanah Hamid [✉]

Faculty of Economics, Hasanuddin University, Tamalanrea, Makassar

Info Artikel

Sejarah Artikel:
Diterima Januari 2015
Disetujui Februari 2015
Dipublikasikan Maret 2015

Keywords:
*Quality of Higher Education
Services;*
Student Satisfaction;
Student Loyalty

Abstract

This study analyzes the influences of students' perceptions about the quality of higher education services to satisfaction; high quality of education services to the loyalty; and student satisfaction to the loyalty on private universities (PTS) in Makassar. The population used in this study was all students of economics faculty that have been studied over four semesters at big four PTS in Makassar. The sampling method used in this study was simple random sampling. The number of samples is 114 people. Both Descriptive Statistics and Structural Equation Modelling (SEM) were used as method of analysis. The data processed by using IBM SPSS and AMOS 20. The result shows that the quality of higher education services significantly influence student satisfaction, the quality of higher education services significantly influence student loyalty, and student satisfaction significantly influences student loyalty. Loyalty is more determined by student satisfaction rather than the quality of higher education services.

MODEL PENINGKATAN KEPUASAN DAN LOYALITAS KUALITAS JASA PENDIDIKAN TINGGI

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh persepsi mahasiswa tentang kualitas jasa pendidikan tinggi terhadap kepuasan, kualitas jasa pendidikan tinggi terhadap loyalitas, dan kepuasan terhadap loyalitas pada Perguruan Tinggi Swasta (PTS) di Kota Makassar. Populasi penelitian adalah seluruh mahasiswa fakultas ekonomi yang terdaftar dan telah menempuh studi di atas 4 semester pada 4 PTS terbesar di Kota Makassar. Metode penarikan sampel menggunakan teknik acak sederhana (simple random sampling). Jumlah sampel adalah 114 orang. Metode analisis yang digunakan adalah Analisis Statistik Deskriptif dan Structural Equation Modeling (SEM). Pengolahan data menggunakan bantuan Software IBM SPSS dan AMOS 20. Hasil penelitian menunjukkan bahwa kualitas jasa pendidikan tinggi berpengaruh signifikan terhadap kepuasan mahasiswa, kualitas jasa pendidikan tinggi berpengaruh signifikan terhadap loyalitas mahasiswa, dan kepuasan berpengaruh signifikan terhadap loyalitas mahasiswa. Loyalitas lebih besar ditentukan oleh kepuasan mahasiswa daripada kualitas jasa pendidikan tinggi.

JEL Classification: M3, M31

INTRODUCTION

A changing paradigm on the higher education from “social oriented” to “profit oriented” has caused competitions among universities, both private and public, tighter. On the other hand, the increasing demand from the society towards the quality of the university graduates have led the universities to improve their services quality and build the reputation among the society, otherwise, they will be left abandoned by the customers. A recent research has explained that the combination of high-quality services and high satisfaction created higher loyalty (Armayah & Munizu, 2010).

Kotler (2005) stated that excellent quality of services could lead to the customers' satisfaction. The quality of services also has a close relation to the customers' satisfaction. Quality stimulates customers to create a stronger connection with the company. In a longer period, this type of connection enables the company to comprehend the customers' expectations and needs thoroughly.

The company would be able to improve the customers' satisfaction by maximizing the customers' pleasant experiences and minimizing or eliminating the unpleasant ones. In turn, customers' satisfaction could create customers' loyalty to the company with satisfying quality (Tjiptono, 2008). Ohy (2010) says that the overall elements of the marketing mix of product, price, place / location and promotion simultaneously and partially significant effect on customer satisfaction. Customer satisfaction is also influenced by the quality of service and product quality (Permana, 2010).

The study Gaspersz (2006) underlined that every organization has to be in a consistent way in carrying improvement towards given the quality of services. Continuous improvement on services quality dimensions based on the customers' needs could improve the customers' satisfaction and loyalty. The study Zeithaml et al. (1993) explained that improvement on the quality level of services would increase the favorable behaviors and decrease the

unfavorable ones, and at the same time also the increasing loyalty. Customers' loyalty is the most important part of the repeating buying from the customers (Caruana, 2002). Customers' loyalty would not only increase the value in business but would also be able to attract new customers (Beerli et al., 2004). Customers are the main focus of the satisfaction of the perceived service quality. Consumer satisfaction is a dominant and decisive factor in maintaining the company. (Fatonah, 2010)

Private College (PTS) as one of the higher education service providers has long improved itself to satisfy its customers (students). One of the commitments has been realized through active participation in quality assurance to its study programs through BAN Dikti (National Accreditation Institution) and ISO 9001 certification. The phenomenon where people's interest to continue their study to the higher education while the space capacity provided by the State Universities is relatively restricted, and on the other hand also the availability of opportunities given by the government to the society to provide education, has given chances to the emergence of new private colleges (PTS).

The emergences of some new private colleges and the competition among PTS in Makassar city have caused a tighter rivalry, especially in attracting new students. This particular phenomenon apparently appears at every beginning of the new academic year where private college providers are busy in promoting their colleges to attract new students through the printed and electronic media, and most commonly brochures. Each of the colleges tries to promote their best quality from excellent facilities, lecturers qualification, payment system facilitation, lecturing system to job guarantee.

The study Parasuraman et al. (1998) has succeeded in identifying ten main factors/ dimensions that determine services quality, i.e. reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding, and tangible. Overlapping

exists in between the above dimensions has led Parasuraman, et al. to compile the ten dimensions into five, i.e. (1) reliability, which is the ability to provide immediate, accurate, and satisfying services being promised; (2) responsiveness, which is the staff's willingness to help customers and provide responsive services; (3) assurance, which covers staff's knowledge, ability, courtesy, and trusted, and also far from danger, risk, or doubt; (4) empathy, which includes facilitation in relationship, good communication, personal attention, and understanding customers' needs and (5) tangibles, which include physical facilities, equipment, lecturers qualification, and communication media. Those five dimensions of service quality (SERQUAL) elaborated by Parasuraman have been tested in measuring the service quality performance. Thus, this research also used SERQUAL as a measuring instrument of the service quality performance.

Kotler and Keller (2009) stated that to improve service quality in a company or service industry requires 5 (five) dimensions or attributes. They are: (1) Tangible: includes the physical appearances of facilities, equipments, staffs, and communication tools; (2) Reliability; the ability to carry out services which have been promised consistently and accurately; (3) Responsiveness; the willingness to assist customers and provide fast and accurate services; (4) Assurance (guarantee and security); covers staff's knowledge and courtesy and their ability to give confidence, trust, courtesy, and trusted, far from danger, risk and doubt and (5) Empathy; includes understanding to give individual attention to the customers, facilitation in good communication, and understanding customers' needs.

The study Lupiyoadi and Hamdani (2006) explained that in determining the satisfaction level, there are five main factors needs to be closely observed by a company. They are: (1) Product quality; the customers would feel very pleased when their evaluation reveals that they are using qualified products; (2) Service quality; mainly for the service industry, customers would certainly be pleased when

they can get good services or what are expected; (3) Emotional; the customers would feel very proud and confidence that other people would be amazed when they use a particular brand of a product that is classified as a highly satisfying product. The satisfaction is not only acquired from the quality of the product, but also from the social value or self-esteem that creates satisfying feeling from the customer towards a particular brand; (4) Price; a product with equal quality yet sets its price at a relatively lower rate compared to others would give a higher value to the customers and (5) Cost; customers who do not have to spend extra expense or waste more time to get a product or service would mostly tend to be satisfied with the product or service.

Customers' satisfaction or dissatisfaction would certainly affect the after-buying customers' behavior. Those who are satisfied would come and buy again and even would recommend the product or service to the other people. Meanwhile, those who are not would certainly move to the competitor. The effects could be observed by the time the customers do the next purchasing. Customers' behavior and how they express the product being used or service acquired and other behaviors that reflect their reactions on what they feel about the product and service (Lovelock & Lauren, 2005; Lupiyoadi & Hamdani, 2006).

The study Hanafiah (2003) elaborated that the main factors for a person to decide a choice of a type and kind of educational services are: (1) institution image/reputation; (2) offered study programs; (3) costs and expenses (4) campus physical and location; (5) personal performances who are involved in the service management and other factors outside the educational institution itself like social cultural, economy, work field, and not to mention referral groups dependent.

Customers' loyalty is the customers' behavior in maintaining a relationship with the institution through product and service purchasing (Singh & Sirdeshmukh, 2000). The study Martensen et al. (2000) presented customers' loyalty dimensions as follows:

(a) Customers' desirability to the next buying; (b) Willingness to recommend an institution or brand to other people; (c) Price changing tolerance and (d) Customers' desirability to buy other products from the institution (cross-sell).

Empirically, several previous researches in measuring the relation between service quality and customers' satisfaction and loyalty have been found in the literature. The study Boulding et al. (1993) has two different researches on this topic. The first research is experimental/laboratory research where they used laboratory experimental data that involved two visits stimulated in a hotel towards 96 business professionals. The research found that (1) will expectation, should expectation, and delivered service affected individual's perceptions towards service quality; (2) that will expectation affected perception towards service quality positively and should expectation turned the other way and (3) the perception was next positively affected the behavioral intention.

On the second research, they used service quality data of higher education institutions acquired from questioners' responses distributed to 177 customers of higher education institutions. The results showed that (1) customers' perceptions of service quality of the company affected positively towards favorable behavior on the colleges' strategic interests (such as positive responses about the colleges, willingness to give donation after graduate, or desirability to invite the alumni as the new employee; (2) will expectation or customers' expectation to what the institution would give during service affected positively towards service quality perception and (3) should expectation or customers' expectation to what should the institution have given during the service affected negatively towards customers'/students' perception of service quality.

The study Aryani and Rosinta (2010) found that service quality gave effects towards customers' satisfaction, while service quality did not give significant effects towards loyalty, and customers' loyalty strongly affected the creation of loyalty among students of FISIP UI. Next,

Rinala et al. (2013) revealed that academic service quality could be explained through tangible, reliability, responsiveness, empathy gave strong effect, and assurance gave low effect. Academic service quality significantly affected students' loyalty through students' satisfaction, while academic service quality directly gave insignificant effect towards students' loyalty at STP Nusa Dua Bali. Furthermore, research done by Hariawan (2015) showed that service quality affected positively and significantly towards students' satisfaction and loyalty. Similarly, college reputation had also positively and significantly affected students' satisfaction and loyalty. And also, the students' satisfaction gave positive and significant effect towards students' loyalty.

Service quality has a strong relation with customers' satisfaction. Quality encourages the customer to create a strong connection with the company. At one point, customers' satisfaction could create customers' loyalty to a company with satisfying quality (Tjiptono, 2008).

Many studies or researches related with service quality have been found in literature, yet, those with specific theme dealing with concept or model that relating service quality and customers' satisfaction and loyalty are still rarely found. Thus, this study is very important to be conducted to measure the influence of students' perception of higher education service quality towards satisfaction; higher education service quality towards loyalty; and satisfaction towards loyalty at Colleges (PTS) in Makassar city.

Reviews of theories and empirical research results that have been previously mentioned were used by the researcher as bases in developing conceptual research framework. The framework can be observed in the following Figure 1.

Several empirical studies supported the idea that service quality affected the satisfaction (Caruana, 2002). The study Fullerton and Taylor (2002) have also proved the existence of a close connection between service quality and satisfaction. The next studies have also confirmed the strong relation between both

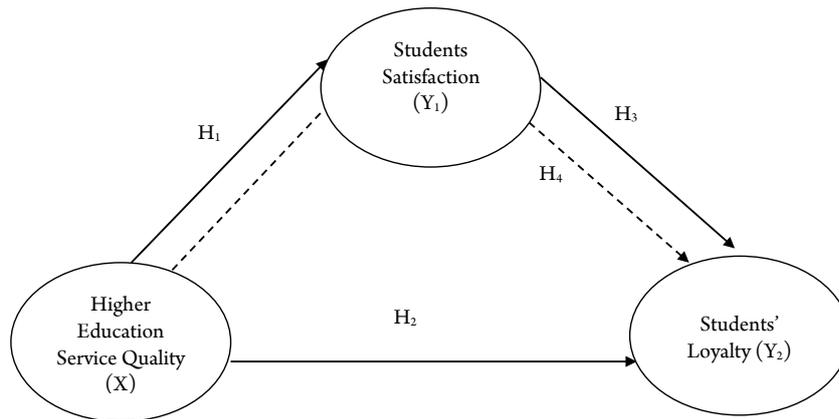


Figure 1. Research Model

service quality and satisfaction (Armayah & Munizu, 2010; Aryani & Rosinta, 2010). Further, Susanto (2012) and Hariawan (2015) found that academic service quality significantly affected students' satisfaction. Based on those empirical reviews, hypothesis 1 can be drawn as follows:

H1: when quality of higher education service is getting better, the students' satisfaction will be getting higher.

A research conducted by Zeithaml et al. (1996) underlined the important effect of service quality towards loyalty. Similar results have also been proved by the next following researchers (Hong & Prybutok, 2008; Armayah & Munizu, 2010; Rinala et al., 2013; Hariawan, 2015). That important role leads to an expectation that service quality would directly affect loyalty. Therefore, hypothesis 2 is drawn as below:

H2: when quality of higher education service is getting better, the students' loyalty will be getting higher.

The specific benefit of satisfaction is the emergence of positive connection with the customers (Caruana, 2002). Other studies found that customers' high satisfaction is in line with high loyalty (Boulding, et al., 1993; Armayah & Munizu, 2010; Ariyani & Rosinta, 2010; Hariawan, 2015). Thus, hypothesis 3 would be:

H3: when satisfaction is getting better, the students' loyalty will be getting higher.

When the quality of higher education service is getting better and the students' satisfaction is getting higher, then the students' loyalty is expected to improve time to time. Therefore, Hypothesis 4 could be formulated as:

H4: the quality of higher education service which is getting better will improve the students' loyalty through the students' satisfaction.

METHOD

This research is classified as an explanatory research that aims to elaborate causality relation among variables through hypothesis testing and of course give explanation (Hair et al., 2010; Sugiyono, 2012). The quantitative approach is applied in this research in which an approach that put its highlight on theories or concepts testing through variables measurement in the metrical/numerical way and analyzing the data through the statistical procedure and aiming to test the hypothesis (Indriantono & Supono, 2008).

Variables to be tested their cause and effect in this research include: (1) exogenous variable, i.e. quality of higher education service (X), (2) endogenous variable, i.e. students' satisfaction (Y1) and students' loyalty (Y2). Measurement on variable indicator used Likert Scale 1-5.

All students above semester four at the faculty of the economy from 4 biggest colleges in Makassar city became the population of this research. The colleges are Indonesia Muslim

University (UMI), Bosowa 45 University of Makassar, STIE AMKOP, and STIE Nusantara Makassar. In a total of 679 students were participating in this research (Data in June, 2013). The number of samples was determined by using Slovin formulation, with 10% precision, a minimum of 99 students acquired for the sample. Proportionate random sampling technique was utilized for the sampling selection. 114 complete questionnaires were used in analyzing the sample.

The data were gathered through observation, questionnaire, and documentation. In ensuring the questionnaire instrument utilized in this research was in a better level of precision, validity and reliability tests were then carried out. An indicator is classified as valid when $r > 0.30$ (Sugiyono, 2012). A variable is considered as reliable when Alpha Cronbach > 0.60 (Hair et al., 2010). The complete results of validity and reliability instrument tests could be seen in the Table 1.

Table 1. Validity and Reliability Instrument Test Results

Variable/ Indicator	Coefisien Corelation (r)	Alpha Cronbach (α)	Note
<i>Tangible</i> ($X_{1,1}$)		0,824	Reliable
$X_{1,1.1}$	0,620		Valid
$X_{1,1.2}$	0,599		Valid
<i>Reliability</i> ($X_{1,2}$)		0,772	Reliable
$X_{1,2.1}$	0,670		Valid
$X_{1,2.2}$	0,573		Valid
<i>Responsiveness</i> ($X_{1,3}$)		0,678	Reliable
$X_{1,3.1}$	0,700		Valid
$X_{1,3.2}$	0,607		Valid
<i>Assurance</i> ($X_{1,4}$)		0,814	Reliable
$X_{1,4.1}$	0,670		Valid
$X_{1,4.2}$	0,580		Valid
<i>Empathy</i> ($X_{1,5}$)		0,790	Reliable
$X_{1,5.1}$	0,466		Valid
$X_{1,5.2}$	0,577		Valid
Students' Satisfaction (Y_1)		0,785	Reliable
$Y_{1,1}$	0,437		Valid
$Y_{1,2}$	0,750		Valid
$Y_{1,3}$	0,555		Valid
$Y_{1,4}$	0,650		Valid
Loyalty (Y_2)		0,867	Reliable
$Y_{2,1}$	0,538		Valid
$Y_{2,2}$	0,666		Valid
$Y_{2,3}$	0,452		Valid
$Y_{2,4}$	0,522		Valid

Source: data processed (2014)

The Table 1 showed that (1) the correlation score for all indicator were bigger than 0.30 ($r > 0.30$), which means the indicator used to test variables in this research is valid, (2) Instrument used in the data collection is highly reliable for Alpha Cronbach (α) for each variable is higher than the required score ($\alpha > 0.60$).

Methods used in the analysis were: (1) Descriptive Statistic and (2) Structural Equation Modeling (SEM). Descriptive statistic was used to display respondents' characteristics, and research variable adapted percentage value (%) and meant. SEM was next applied to test the hypotheses. The data processing was done by the help of IMB SPSS

Table 2. Goodness of Fit Index for Model Evaluation

Goodness of Fit Index	Cut off Value
1. Chi square	Expected to be small
2. Significance Probability	$\geq 0,05$
3. RMSEA	$\leq 0,08$
4. GFI	$\geq 0,90$
5. AGFI	$\geq 0,90$
6. CMIN/DF	$\leq 2,00$
7. TLI	$\geq 0,95$
8. CFI	$\geq 0,95$

Source: Hair et al. (2010) and Solimun (2011)

Table 3. General Characteristics of Respondents

No.	Description	Frequency (person)	Percentage(%)
1.	Sex :		
	a. Male	40	35,09
	b. Female	74	64,91
2.	Semester :		
	a. Four	22	19,30
	b. Six	15	13,16
	c. Eight	42	36,84
	d. >Eight	35	30,70
3.	Grade Point Average (GPA) :		
	a. 1.00 – 2.00	19	16,67
	b. 2.00 – 2.50	17	14,91
	c. 2.51 – 3.00	40	35,09
	d. 3.01 – 4.00	38	33,33
4.	College Origin :		
	a. Indonesia Muslim University	55	48,25
	b. Bosowa 45 University	37	32,45
	c. STIE AMKOP	11	9,65
	d. STIE Nusantara	11	9,65

Source: data processed (2014)

and AMOS 20 software. A model is classified as fit during SEM analysis application when it meets certain requirements as shown by the Table 2.

The hypothesis measurements in SEM analysis were done by comparing probability/significance score (p) with $\alpha = 0.05$. when the score is lower than α , then the hypothesis is confirmed. Contrary, when the probability/significance score (p) is higher, then the hypothesis is rejected.

RESULTS AND DISCUSSIONS

Students of colleges in Makassar City as the respondents of this research have quite diverse characteristics. The diversity can be observed from the respondent personal data of this research which covers sex, semester, Grade Point Average (GPA), and college origin. In general, the respondent characteristics could be briefly observed through the Table 3.

The respondents of this research were dominated by female with 64.91% while the male only 35.09%. Most of the respondents had already accomplished 8 semesters (36.84%)

and more than 8 (30.70%) of their study. The GPA score was dominated with 2.52-4.00 scale (68.42%). Most respondents came from the long established colleges (PTS), i.e. UMI (48.25%) and Bosowa 45 University (32.45%), while the remaining respondents were from STIE AMKOP and STIE Nusantara Makassar.

The table showed that the respondents' perceptions on the quality of college service were in the *fair* level (3.45). The quality of college service based on the dimensions of tangibles, reliability, responsiveness, assurance, and *empathy* were responded positively on their general implementation. Students' satisfaction variable was categorized as good (3.88). Similarly, the students' loyalty variable was also in the good category (3.78).

Structural Equation Modeling (SEM) analysis was utilized in testing hypothesis to produce a fit model. The calculation result on the *goodness-of-fit indices (GFI)* towards the complete model would be shown in Table 5. The result of fit model test showed that almost all of the model fitness index criteria had been accomplished. Thus, the model is considered as good and applicable in estimating the relation

Tabel 4. Mean variable of the research

No.	Variable	Mean	Note
1.	College service	3,45	Fair
2.	Students' satisfaction	3,88	Good
3.	Students' loyalty	3,78	Good

Source : data processed (2014)

Table 5. Test result on goodness of fit overall model

Criteria	Cut-off Value	Model Result	Note
1. Chi square	Expected to be small	25,777	Good
2. Sig. Probability	$\geq 0,05$	0,042	Marginal
3. RMSEA	$\leq 0,08$	0,075	Good
4. GFI	$\geq 0,90$	0,963	Good
5. AGFI	$\geq 0,90$	0,922	Good
6. CMIN/DF	$\leq 2,00$	1,924	Good
7. TLI	$\geq 0,95$	0,976	Good
8. CFI	$\geq 0,95$	0,974	Good

Source: data processed (2014)

among variables being tested in this study. The complete result on the hypotheses test is on the Table 6.

The data above showed that from the 4 hypotheses proposed, all of them received empirical support. The test result of the hypotheses research can be clearly explained as follows: (1) service quality of college based on the *tangibles, reliability, responsiveness, assurance, and empathy* dimensions significantly affect students' satisfaction, in which the *critical ratio/t-value* is higher than the required score 1.960 ($5.330 > 1.960$). Also, the probability score is lower than $\alpha = 0.05$ ($0.000 < 0.05$).

Thus, Hypothesis 1 (H1) proposed in this research is confirmed and supported with empirical facts; (2) service quality of college based on the *tangibles, reliability, responsiveness, assurance, and empathy* dimensions significantly affect students' loyalty, in which the *critical ratio/t-value* is higher than the required score 1.960 ($2.145 > 1.960$). Also, the probability score is lower than $\alpha = 0.05$ ($0.042 < 0.05$). Thus, Hypothesis 2 (H2) proposed in this research is confirmed and supported with empirical facts; (3) students' satisfaction significantly affect students' loyalty, in which the *critical ratio/t-value* is higher than the required score 1.960 ($4.662 > 1.960$). Also, the probability score is lower than $\alpha = 0.05$ ($0.000 < 0.05$).

Thus, Hypothesis 3 (H3) proposed in this research is confirmed and supported with empirical facts and (4) service quality of college based on the *tangibles, reliability, responsiveness, assurance, and empathy* dimensions significantly affect students' loyalty through students' satisfaction. Therefore, Hypothesis 4 (H4) proposed in this research is confirmed and supported with empirical facts.

Based on the results of the hypotheses test, the regression coefficient value (standardized) of the college service quality variable is positive and significant at 0.546 towards students' satisfaction. It means, the better service quality of the college run, the higher level of students' satisfaction. This result is in line with Caruana (2002) and Armayah and Munizu (2010) research findings where service quality affected satisfaction. Furthermore, the result also supports the previous researches which found that academic service quality affected significantly towards students' satisfaction (Aryani & Rosinta, 2010; Susanto, 2012; Hariawan, 2015).

Hence, service quality variable reflected by tangible, empathy, reliability, responsiveness, and assurance dimensions ought to be monitored, repaired, and improved by the colleges (PTS) management in Makassar. Service quality is the best weapon for the

Table 6. Research Hypotheses Test Result

Variable	Standardized Regression	Critical Ratio (CR)	Prob.	Note
<i>Direct Effect</i>				
Service Quality of the College → Students' Satisfaction	0,546	5,330	0,000	Significant (H ₁ accepted)
Service Quality of the College → Loyalty	0,188	2,145	0,042	Significant (H ₂ accepted)
Students' Satisfaction → Loyalty	0,420	4,662	0,000	Significant (H ₃ accepted)
<i>Indirect Effect</i>				
Service Quality of the College → Students' Loyalty through Students' Satisfaction		0.229		Significant (H ₄ accepted)

Source: data processed (2014)

company's excellence, especially for the service company. Service quality triggers the success of a company in all lines. To improve the service quality is an obligation to all company's organization, especially those which run their business in education service. To find out the satisfaction level of the students, alumni, and customers, one effort can be done by the management is by tracer study. This activity ought to be frequently done as an input for the management to improve the quality mainly on the curriculum and facility aspects.

Regression coefficient value (standardized) of college service quality variable is positive and significant at 0.188 towards students' loyalty. It means the better service quality of the college run, the higher level of the students' loyalty. This result highly confirmed Zeithaml et al. (1996) research finding in which service quality had a strong effect towards loyalty. A similar finding had also been elaborated in the other studies where service quality directly affected students' loyalty (Armayah & Munizu, 2010; Rinala et al., 2013; Hariawan, 2015).

The different results on their researchers in which they concluded that service quality insignificantly affected loyalty (Aryani & Rosinta, 2010; Rinala et al., 2013). The different result is caused by the different object and number of respondents as the subject of the research. The researcher involved four colleges (PTS) in Makassar city while Aryani and Rosinta (2010) and Rinala et al. (2013) only in one educational institution. Theoretically, Zeithaml and Bitner (1996) underlined that loyalty could be created by each organization by improving the service quality.

Students' satisfaction variable is positive and significant at 0.420 towards loyalty. It indicates that the more satisfied the students, the higher loyalty level they expose. The specific function of satisfaction is the existence of a positive connection with the customers' loyalty (Caruana, 2002). Some other studies revealed that the high level of customers' satisfaction was relevant to the loyalty (Boulding et al., 1993;

Hong & Prybutok, 2008; Armayah & Munizu, 2010; Aryani & Rosinta, 2010; Hariawan, 2015).

Customers' satisfaction on purchasing depends on the performance offered in fulfilling customers' expectation. If the performance is under the expectation will lead to dissatisfaction. Contrary, the fulfilling expectation will bring customers' satisfaction. Even more, the over expected performance will make the customers very pleased. In short, loyalty is significantly affected by how the company pleases the customers (Kotler, 2005).

Next, the hypotheses test result indicated that coefficient regression (standardized) value of college service quality variable is positive and significant at 0.299 towards loyalty through the improving satisfaction. It means when the quality of college service implementation is improving and the more satisfied the students then the loyalty level will be higher. Therefore, students' loyalty is influenced by the quality of service and students' satisfaction.

The study Zeithaml et al. (1993) explained that service quality is different to customers' satisfaction, and service quality is only one determinant variable of the customers' satisfaction. Conceptually, service quality begins with customers' need and ends with customers' perception. Customers' perception towards service quality is a thorough appraisal towards the excellence of a service (Kotler, 2005; Kotler & Keller, 2009). Service quality is very crucial for it affects the excellence level to fulfill customers' expectation and service quality is created to compare idealist and perception from the dimension service performance.

Perception on service quality influence the favorable behavior of the strategic interest of the college in which the loyal students will give positive comments about the institution (Boulding et al., 1993). Customers' satisfaction is a function of service quality while students' loyalty is a function of college service quality (Lovelock & Lauren, 2005; Tjiptono, 2008). The study Salazar et al. (2004) highlighted

that to improve customers' satisfaction from time to time is an obligation for the company and one effort could be done is by improving service quality. The satisfied customers will certainly recommend the institution to the other customers.

The result of this research firmly showed that students' satisfaction could mediate the relation between college service qualities with students' loyalty. Hence, the management needs efforts to maintain their service quality to bring students' satisfaction on their college. The efforts will create students satisfaction that at the end raise their loyalty.

CONCLUSION

The quality of the higher education service gives by Colleges (PTS) in South Sulawesi has succeeded directly in improving students' satisfaction and loyalty. The more satisfied the students towards the service given, the more loyal they are to the college. Thus, students' loyalty can be improved by creating the better satisfaction gradually.

The quality of higher education service give by Colleges (PTS) in South Sulawesi can indirectly improve students' loyalty through satisfaction. Their loyalty is triggered by their satisfaction towards campus facility, staffs' and educators' service, lecturers' materials, curriculum, and policy created by the college administrators. The loyalty can be observed through how they recommend their colleges to the other customers.

The result of this research can give a beneficial contribution towards the development of service quality, customers' satisfaction, and loyalty theories. The improvement on service quality elements has to be an important part for the leaders/managements of the colleges in South Sulawesi. The improvement program needs to be carried out continuously, planned, and measured. Strong understanding on the three variables by the management is very crucial for the variables can become the basis in formulating strategy, policy, and action plans to

win the market within higher education service industry, locally, regionally, or even globally.

To make this result be able to be generalized in a broader scope, the future research is suggested to elaborate other concepts/variables that affect students' satisfaction and loyalty with the wider scope of location.

REFERENCES

- Armayah, H & Munizu, M. 2010. Model Hubungan Antara Kualitas Jasa Pendidikan Tinggi, Kepuasan dan Loyalitas Mahasiswa Perguruan Tinggi Swasta di Kota Makassar. *Laporan Hibah Bersaing*. DIKTI. 2010.
- Aryani, D & Rosinta, F. 2010. Pengaruh Kualitas Layanan Terhadap Kepuasan Pelanggan dalam Membentuk Loyalitas Pelanggan. *Bisnis & Birokrasi, Jurnal Ilmu Administrasi dan Organisasi*. 17 (2): 114-126.
- Beerli, A., Martin, J. D & Quintana, A. 2004. A Model of Customer Loyalty in The Retail Banking Market. *European Journal of Marketing*. 1 (2): 38-45.
- Boulding, W., Kalra, A., Staelen, R & Zeithaml, V. A. 1993. A dynamic Process Model of Service Quality Prom Expectation to Behavioral Intentions. *Journal of Marketing Research*. 30 (1): 7-27.
- Caruana, A. 2002. Service Loyalty The Effects of Service Quality and The Mediating Role of Customer Satisfaction. *European Journal of Marketing*. (1): 36-42.
- Fatonah, S. 2010. Kualitas Jasa Yang Mempengaruhi Loyalitas Dan Relevansinya Terhadap Kepuasan. *Jurnal Dinamika Manajemen*. 1 (1).
- Fullerton, G & Taylor, S. 2002. Mediating, Interactive, and Non Linear Effects in Service Quality and Satisfaction with Services Research. *Canadian Journal of Administrative Sciences*. 19 (1): 22-29.
- Gaspersz, V. 2006. *Manajemen Kualitas dalam Industri Jasa*. Jakarta: Gramedia Pustaka Utama.
- Hair, J. F., Black, W. C., Barrys, J. B & Anderson, R. E. 2010. *Multivariate Data Analysis: A Global Perspective*. Seventh Edition, Singapura: Pearson Education Inc.

- Hanafiah, Y. 2003. *Pengelolaan Mutu Pendidikan Tinggi*. Jakarta: BKS PTN Barat RI.
- Hariawan, A. 2015. Pengaruh Kualitas Pelayanan, Kepuasan Mahasiswa dan reputasi terhadap Loyalitas Mahasiswa di STMIK AMIKOM Purwokerto. *Jurnal Probisnis*. 8 (1): 64-81.
- Hong, Q & Prybutok, V. R. 2008. Determinants of Customer-Perceived Service Quality in Fast Food Restaurants and Their Relationship to Customer Satisfaction and Behavioral Intentions. *The Quality Management Journal*. 15 (2).
- Indriantoro, N & Supomo, B. 2008. *Metodologi Penelitian Bisnis untuk Akuntansi dan Manajemen*. Yogyakarta: BPFE.
- Kotler, P. 2005. *Manajemen Pemasaran Jilid 1 & 2* (1 1th ed.) (Benyamin Molan, Penerjemah). Jakarta: PT. Indeks.
- Kotler, P & Keller, K. L. 2009. *Manajemen Pemasaran Jilid 1 dan 2 (Terjemahan)*. Jakarta: PT. Indeks.
- Lovelock, C. H & Lauren, K. W. 2005. *Manajemen Pemasaran Jasa, Terjemahan Agus Widyantoro*. Jakarta: PT. Indeks.
- Lupiyoadi, R & Hamdani, A. 2006. *Manajemen Pemasaran Jasa*. Jakarta: Salemba Empat.
- Martensen, A., Lars, G., Eskilden, & Kai, K. 2000. Benchmarking Student satisfaction in Higher Education Base in The ECSI Methodology. *Sinergie*. 9 (18): 385-402.
- Ohy, J. 2010. Masih Relevankah Strategi Marketing Mix Meningkatkan Kepuasan Pelanggan. *Jurnal Dinamika Manajemen*. 1 (2).
- Parasuraman A., Zeithaml, V. A & Berry, L. L. 1988. SERVQUAL A Multi Item Scale for Marketing Consumer Perceptions of Service Quality. *Journal of Retailing*. 64 (1): 12-40.
- Permana, M. V. 2013. Peningkatan Kepuasan Pelanggan Melalui Kualitas Produk Dan Kualitas Layanan. *Jurnal Dinamika Manajemen*. 4 (2)
- Rinala, I. N., Yudana, I M & Natajaya, I N. 2013. Pengaruh Kualitas Pelayanan Akademik Terhadap Kepuasan dan Loyalitas Mahasiswa Pada Sekolah Tinggi Pariwisata Nusa Dua Bali. *E-Journal Program Pascasarjana Universitas Pendidikan Ganesha*. 4. Tahun 2013.
- Rintar. 2011. Analisis Hubungan Kualitas Jasa Terhadap Kepuasan Konsumen Pada Lembaga Pendidikan Kejuruan Di Analisis Hubungan Kualitas Jasa Terhadap Kepuasan Konsumen Pada Lembaga Pendidikan Kejuruan. *Jurnal Dinamika Manajemen*. 2 (1).
- Salazar, A., Paulo, R & Jorge, C. 2004. Relationship between service quality, customer satisfaction and behavioral interntions: A study of hospitality sector, *International Business Research*. 5 (2): 223-230.
- Singh, J & Sirdeshmukh, D. 2000. Agency and Trust Mechanisms in Consumer Satisfaction and Loyalty Judgments. *Journal of the Academy of Marketing Science*. 28 (1): 150-159.
- Solimun. 2011. Modul Metode Kuantitatif untuk Manajemen. *Materi Program Doktor Manajemen*. Malang: Pascasarjana Universitas Brawijaya Press.
- Sugiyono. 2012. *Statistika Untuk Penelitian*. Revisi Terbaru. Bandung: CV. Alfabeta.
- Susanto, P. 2012. Pengaruh Kualitas Pelayanan Akademik dan Citra Merek Lembaga terhadap Kepuasan Mahasiswa Universitas Negeri Padang. *TINGKAP*. 8 (1): 65-78.
- Tjiptono, F. 2008. *Quality, Service, and Satisfaction*. Yogyakarta: Penerbit Andi.
- Zeithaml, V. A & Bitner, M. J. 1996. *Service Marketing*. New York: McGraw-Hill Companies Inc.
- Zeithaml, V. A., Berry, L. L & Parasuraman, A. 1996. The Behavioral Consequences of Service Quality. *Journal of Marketing*. (1): 60-68.