



## Determinant Model of Student Loyalty (Student Loyalty Survey Faculty of Education, Universitas Negeri Semarang)

<sup>1</sup>Abdul Malik, <sup>2</sup>Imam Shofwan, <sup>3</sup>R.C. Achmad Rifai and <sup>4</sup>Ghanis Putra Wijayanto

<sup>1,2,3</sup>Departement of Nonformal Education, Faculty of Education,

<sup>4</sup>Department of Education, Faculty of Education, Universitas Negeri Semarang, Semarang, Indonesia

**Key words:** Determinant model, student loyalty, faculty of education, students, perceived value

**Abstract:** The average student has a very high loyalty to Faculty of Education. Students who have above average faculty loyalty are: majoring in Curriculum and Educational Technology, Counselling and Guidance and Education of Elementary School Teacher UPP Semarang, while students who are below faculty average are Non formal Education, Education of Elementary School Teacher UPP Tegal, Psychology and Education of Early Childhood School Teacher. The image of the faculty, student expectations, hardware quality and software quality together influence the perceived value built by students about the value of lecture benefits. Therefore, if the faculty image, student expectations, hardware quality and software quality are in good condition, jointly contribute to building student's perceptions about the value of lecture benefits. Student assessment of faculty image has a positive and significant effect on student loyalty; therefore if the image of the Faculty in the eyes of students is appropriately viewed, the higher the level of student loyalty. Student expectations affect student loyalty. Therefore, if the Faculty can meet student expectations well, the higher the level of student loyalty. Faculty image, student expectations, hardware quality, software quality and perceived value together influence student loyalty. Therefore, if the image of the Faculty, student expectations, the quality of hardware, the quality of software and the perception of values made by students are right, then the loyalty of students towards the Faculty is also higher.

### Corresponding Author:

Imam Shofwan

Department of Education, Faculty of Education, Universitas Negeri Semarang, Semarang, Indonesia

Page No.: 431-439

Volume: 14, Issue 12, 2019

ISSN: 1818-5800

The Social Sciences

Copy Right: Medwell Publications

## INTRODUCTION

Globalization and the digital revolution have created new demands for universities to develop various disciplines. The quality of the process and results of

education, the quality of services that must be provided by educational institutions. Besides, the demand of the community for education are some examples that must be met by universities. Advances in technology and globalization will make it easier for prospective new

students. These to obtain information about universities in offering services that will be proof so that universities that can provide quality services and satisfy students will be able to attract prospective new students in making decisions to continue their education.

Researchers examining student loyalty are related to the importance of tertiary institutions in dealing with budget constraints (Nesset and Helgesen, 2009), increased competition between tertiary institutions (Bergamo *et al.*, 2018) and the decline in prospective students enrolling in tertiary institutions (Tsai, 2006). Mendez *et al.* (2010) state that student loyalty is an essential factor in determining the success of a tertiary institution which aims to develop the ability of students to graduate and return to continuing their studies at their home college. Student loyalty can also be a marketing agent for tertiary institutions which in turn can attract the interest of the community to register at the university concerned (Henning-Thurau *et al.*, 2001).

The Faculty of Education as part of the Universitas Negeri Semarang should support the success of the realization of the university's vision. Therefore, in developing academic and non-academic programs, it must remain guided by the vision of the university and based on the real conditions that exist in the faculty. Also, the faculty academic community is required to have the same commitments as those of the university. With that in mind, the faculty is required to always improve the quality of management in providing services to stakeholders, both related to academic and non-academic services. Then to measure the quality of management applied by the faculty, one of them must be measured from the response of stakeholders who are users of management services. That is why, in order to strengthen the loyalty of stakeholders, especially students, faculties need to provide services optimally. The problem is whether FIP can provide services as expected by students, so that, they are loyal to the faculty? This study seeks to obtain data and information about student loyalty based on services provided by the faculty. Based on the data and information, it is expected that it can be used as a platform by the faculty in making continuous improvements.

**Literature review:** Research on student loyalty has been widely carried out by researchers in western countries (Martensen *et al.*, 2000; Hennig-Thurau *et al.*, 2001; Mendez *et al.*, 2009; Brown and Mazzarol, 2008; Thomas, 2011; Clemes *et al.*, 2008; Nesset and Helgesen, 2009; Schee, 2010; Ueda and Nojima, 2012) They stated that universities should have loyal students Hennig-Thurau *et al.* (2001) stated that progress Universities that have loyal customers are not limited to those who register but are also important for the success of the college concerned.

Student loyalty Oliver and DeSarbo (1988) states that loyalty is a commitment of consumers to buy back or become loyal customers on products or services, thereby causing them to buy the same product or service, even though certain situations can influence their behavior. In Oliver's mind, two concepts need to be considered taken, namely loyal customers and the same product or service. Loyal customers are interpreted as a commitment of consumers to continue to buy products or services in the future. The same product or service is interpreted as a product or service that directs consumer behavior to buy it even though certain situations are able to influence its behavior. Foster and Cadogan (2002) state that consumer loyalty will give birth to behaviors such as giving recommendations and inviting others to buy or use certain products or services; conducting transactions or using all forms of services offered by certain parties; make certain institutions the first choice in using products or services and discuss good things about the products of an institution with others.

Student loyalty is a combination of student interest in conveying positive things about the institution and recommending it to family, friends, employees or organizations in the community to attend college at the college they enter. Student loyalty is related to attitudinal and behavioral components (Henning-Thurau *et al.*, 2001; Marzo-Navarro *et al.*, 2005). The attitudinal component consists of cognitive, affective and conative elements. The behavioral component is related to decisions made by students. In this study, student loyalty is interpreted as student satisfaction with the services provided. by the faculty, so it is committed to continuing to use the services provided, commits to use products or services in the future is willing to participate in activities organized by the faculty actively and is willing to provide recommendations to others for services provided by the faculty.

**Institutional image:** The image is a mental image formed in the minds of consumers resulting from various stimuli that enter the five senses. Institutional image refers to the perception of stakeholders towards the organization, namely the perception of stakeholders external on the reputation of the organization (Chou, 2010). The image is essential for universities because it can influence people's behavior towards educational products. Gronroos (2001) identified four image roles in organizations, namely: telling expectations, namely giving hope to consumers in obtaining products or services as a filter that influences perceptions of organizational activities provide good experience for consumers and influence employee attitudes towards the organization. Another important role is that the image can be used to build the credibility of the institution to the community (Kotler, 1997).

Higher education is considered successful in building its image if it is successful in creating or building something that is fun and attracts the interest of the community as consumers. The community will come to or become part of the faculty if they already have a picture of what will be experienced and felt based on the experiences or information conveyed by alumni. This shows that information obtained from alumni can be used as an evaluation material for the image of the faculty for new consumers. The faculty image source can come from the name of the institution, the shape of the building, variations of products and services as well as an impression of the quality of lecturers and employees in establishing relationships with students.

**Student hope:** Student expectations can be interpreted as the benefits to be gained when deciding to use the product or service offered by the college. Assael defines hope as one's belief or belief in what should happen in certain situations. If a student decides to use a product or service, where the product or service that is intended to be used is assumed to be able to meet his expectations, then the student will devote all of his resources to the college.

Higher education is an institution providing services to students. If the faculty can provide excellent services to students, then they will give good grades. Likewise, before becoming a student at a faculty, prospective students generally have expectations for something that will be obtained from the services to be provided by the faculty. Therefore someone who chooses a faculty first makes a judgment about the expectations that the faculty will fulfill. Martensen *et al.* (2000) state that student's expectations of tertiary education include an assessment of study programs, lectures and support functions of the study program.

**Quality of hardware and software:** The perception of quality is a decision based on an assessment of a product or service that is considered good for a product or service. If the quality exceeds expectations, then the perception of quality will be high and vice versa. Quality indicators for consumers can change such as changes in technology, consumer tastes and availability of information. Therefore, the perception of quality depends on the terms of reference used by consumers in the supply of goods and services.

Conceptually perceived quality is divided into two elements, namely hardware and human ware or software. The hardware consists of quality attributes of products or services. The elements hardware include lectures and study programs provided and support functions such as classes, libraries, computer facilities, laboratories and offices for students. The element human ware reflects the interactive elements of consumers in services, namely

personal behavior and service environment. The elements of the software include learning, namely academic standards, educational methods and personal contact with learning staff and personal contact with administrative staff.

**Value perception:** Value perception comes from equity theory which takes into account the ratio of input/outcome of consumers to the input/outcome of service providers. The concept of equity refers to the evaluation of consumers about the reasonableness, truth or appropriateness of costs perceived by bidding. Perceived costs include costs in the form of money and struggles such as time spent, energy used stress experienced by consumers.

The value perceived by students is an assessment of the use of services based on perceptions of what is obtained and what is provided by tertiary institutions. The grades received by students are based on the comparison between profits and the struggle they have undertaken to achieve certain targets. In other words, the value perceived by students is a comparison between the benefits obtained while attending college in the university and the costs incurred. Tuan (2012) found that perceived value influences student satisfaction. Likewise, Carvalho and Mota (2010) found that the values perceived by students affected student loyalty.

**Student satisfaction:** Satisfaction is a person's feelings after comparing performance or results with expectations. In other words, it is a function of the difference between performance and expectations, so that, the more appropriate between the performance or results obtained with expectations, the higher the level of one's satisfaction. Consumer satisfaction is based not only on their assessment of the reliability of service delivery but also on consumer's experience of the service delivery process (Dimitriades, 2006). Student satisfaction is an important element in fostering loyalty. Consumers will choose a university that is able to provide satisfaction, both service activities and product features offered.

Oliver and DeSarbo (1988) state that satisfaction refers to student's preferences in evaluating various products and experiences related to education. Student satisfaction is an individual's subjective experience during college and perceptions of the value of various aspects of the educational process such as how far students feel the educational environment meets their needs. From this thought, the level of student satisfaction will generate interest in completing studies or even dropping out (Kara and DeShields, 2004). This means that student satisfaction is an antecedent variable that drives loyalty (Thomas, 2011).

## MATERIALS AND METHODS

The study sample was taken as many as 346 students from 3,461 Faculty of Education students using a stratified proportional random sampling technique. This sample is sufficient to apply the Structural Equation Modeling analysis because the construct studied is not more than seven (Schumacker and Lomax, 2004). Exogenous variables include faculty image, student expectations, hardware quality, software quality while endogenous variables include perceived value, student satisfaction and student loyalty. Data collected using questionnaires. All questions in the questionnaire were measured using a 1-4 Likert scale. Data analysis using SPSS Version 20 and Lisrel Version 8.54.

## RESULTS AND DISCUSSION

**Student loyalty:** The average calculation results obtained information that the average student has a high loyalty to Faculty of Education. The calculation of the average score obtained by 19.9682 is in the interval score of 17-20 with high loyalty qualifications. Students who have loyalty above the faculty average are Curriculum and Educational Technology majors (20.44444), Counselling and Guidance majors (mean 23.1400) and Education Teacher of Elementary School UPP Semarang majors (20.4268). Meanwhile, the loyalty of students in other majors is below the faculty average.

ANOVA test results about student loyalty to the faculty indicate a significant difference. The calculation results obtained a Significance score of 0,000 which means smaller than the significance level of 5% or 0.05. Therefore it can be stated that there are differences in the level of student loyalty to the faculty (Table 1).

Post Hoc calculation results with Scheffe's analysis of the level of student loyalty to faculty (Table 2) obtained information that: the loyalty of students majoring in Curriculum and Educational Technology towards faculty did not show a higher level of loyalty compared to other majors; the loyalty of students majoring in Nonformal Education towards the faculty did not show a higher level of loyalty compared to other majors, even lower than the level of loyalty of students majoring in guidance and counselling; the loyalty of students majoring in ✓ towards the faculty shows a higher level of loyalty compared to the majors of Nonformal Education, Education Teacher of Elementary School UPP Tegal and students majoring in Education of Early Childhood School Teacher but not higher than the majors of Curriculum and Educational Technology, Psychology and Education Teacher of Elementary School UPP Semarang; the loyalty of UPP Semarang Department students at Education Teacher of

Table 1: ANOVA test results on student loyalty to the faculty

Sum of squares	df	Mean square	F	Sig.
Between groups	875.642	6	145,940	6,380.000
Within groups	7755.008	339	22,876	
A total of	8630.650	345		

Elementary School towards the faculty does not show a higher level of loyalty compared to other majors; the loyalty of UPP Tegal's Education Teacher of Elementary School majors to the faculties did not show a higher level of loyalty compared to other majors, even lower than the level of loyalty of students majoring in Counselling and Guidance; the loyalty of students majoring in Psychology to faculties does not show a higher level of loyalty compared to other majors and the loyalty of students majoring in Education of Early Childhood School Teacher towards faculty does not show a higher level of loyalty compared to other majors, even lower than the level of loyalty compared to Counselling and Guidance significant students.

The influence of faculty image, student expectations, hardware quality and software quality on perceptions about the value of lecture benefits: the results of the analysis of the influence of human resource variables, facilities and infrastructure and community participation on perceived value compared to lecture benefits are presented in Table 3. The path coefficient scale values presented in the table can be explained as follows: The magnitude of the path coefficient of the faculty image variable on the perception of the value of lecture benefits is 0.28 which means that the better the faculty image, the better the perception of the value of lecture benefits. The contribution of the faculty image variable to the perception of value is 7.84% which means changes in the faculty image directly cause changes that occur in the perception of the value of the benefits of college.

The magnitude of the path coefficient of student expectations variable towards the perception of the value of college benefits is 0.15 which means that the better the expectations of students, the better the perception of the value of college benefits. The contribution of student expectation variables to the perception of the value of college benefits 2.25% which means changes that occur in the perception of the value of college are benefits.

The magnitude of the path coefficient of the hardware quality variable on the perception of the value of lecture benefits is 0.17 which means that the better the expectations of students, the better the perception of the value of lecture benefits. The contribution of hardware quality variables to the perception of the value of lecture benefits is 2.89% which means that changes occur in the perception of the value of lecture benefits caused by changes in hardware quality.

Table 2: Scheffe test results on student loyalty to the faculty

Department/Department	Mean difference (IJ)	Sig.	Department/Department	Mean difference (IJ)	Sig.
<b>Curriculum and educational technology</b>					
Nonformal education	0.857	1.76944	Education of early childhood school teacher		
	0.475	-2.56349	Curriculum and educational technology		
Counselling and guidance	-2.69556	0.357	Nonformal education	-0.79405	0.997
Psychology	0.62444	0.999	Counselling and guidance	-5.25905*	0.000
Education of early childhood school teacher	0.475	2.56349	Psychology	0.710	-1.93905
Education of elementary school teacher smg	0.01762	1.000	Education of elementary school teachersmg	-0.251	2.54588
Education of elementary school teacher tgl	0.775	1.92271	Education of elementary school teachertgl	-0.64079	0.999
<b>Nonformal education</b>					
Curriculum and educational technology	0.857	-1.76944	<b>PGSMG</b>		
Curriculum and educational technology	-0.1762	1000			
Counselling and guidance	-4.46500*	0.004	Nonformal education	0.729	1.75183
Psychology	0.973	-1.14500	Counselling and guidance		-2.71317
Education of early childhood school teacher	0.129 .997	79405	Psychology	0.998	0.60683
Education of elementary school teacher smg	0.729	-1.75183	Education of early childhood school teacher	0.251	2.54588
Education of elementary school teacher tgl	0.15326	1.000	Tgl education of elementary school teacher	0.587	1.90509
Counselling And Guidance			<b>PG TGL</b>		
Curriculum and educational technology	2.69556	0.357			
Curriculum and educational technology	.775	-1.92271	Nonformal education	-1.15326	1000
Nonformal education	4.46500*	0.004	Counselling and guidance	-4.61826*	0.001
Psychology	0.064	3.32000	Psychology	0.940	-1.29826
Education of early childhood school teacher	5.25905*	0.000	Education of early childhood school teacher	0.64079	0.999
Education of elementary school teacher smg	0.129	2.71317	Smg education of elementary school teacher	0.587	-1.90509
Education of elementary school teacher tgl	4.61826*	0.001			
<b>Psychology</b>					
Curriculum and educational technology	-.62444	0.999			
Nonformal education	1.14500	0.973			
Counselling and guidance-	3,32000	0.064			
Education of early childhood school teacher	1.93905	.0710			
Education of elementary school teacher smg-	0.60683	0.998			
Tgl education of elementary school teacher	0.940	1.29826			

The magnitude of the path coefficient of software quality variables on the perception of the value of college benefits is 0.47 which means that the better the quality of the software, the better the perception of the value of college benefits. The contribution of software means that quality variables to the perception of the value of 18.80%, which means changes that occur in the perception of the value of college benefits caused by changes in software quality. Scale score of  $R^2 = 0.64$ . This score means that faculty image, student expectations, hardware quality and software quality have a contribution to and perception of the value of college benefits of 64%. In comparison, the other 36% is influenced by other variables.

Effect of faculty image, student expectations, hardware quality, software quality and perceptions about the value of college benefits to student satisfaction on faculty services. The results of the analysis of the effects of faculty image variables, student expectations, hardware quality, software quality and perceptions about the value of college benefits to student satisfaction with faculty services are presented in Table 4. The path coefficient scores presented in the table can be explained as follows: a.the magnitude of the path coefficient of the faculty image variable on student satisfaction is 0.26 which means that the better the faculty image, the higher the student satisfaction. The contribution of faculty image variables to student satisfaction is 6.76% which means changes in faculty image cause changes that occur in student satisfaction. Then indirectly, the effect of faculty image on student satisfaction due to its relationship with

the perception of the value of college benefits 2.89%, while the total effect of faculty image on student satisfaction due to the high perception of the value of college benefits of 12.96%.

The magnitude of the path coefficient of student expectations variable towards student satisfaction is 0.31 which means that the better the expectations of students, the better the satisfaction of students. The contribution of student expectation variables indirectly affecting student satisfaction was 9.61% which means changes in student expectations directly caused changes that occurred in student satisfaction. Then indirectly, student expectations related to student satisfaction contribute by 4% while the total contribution of the influence of student expectations on student satisfaction by 16.81%.

The magnitude of the variable path coefficient of hardware quality on student satisfaction is 0.41 which means that the better the quality of hardware, the better the satisfaction of students. The contribution of the influence of hardware quality directly on student satisfaction is 16.81% which means changes in hardware quality directly cause changes that occur to student satisfaction. Then the indirect contribution of the influence of hardware quality on student satisfaction because of its relationship with student satisfaction is 7.29% and the total contribution of hardware quality on student satisfaction is 20.25%.

The magnitude of the path coefficient of software quality variables on student satisfaction is 0.23 which means that the better the quality of the software, the better

Table 3: Results of analysis of effects of faculty image, student expectations, quality hardware and software quality on value perceptions

Exogenous construct	Endogenous construct (Perceived value)	t-values	Description
Faculty image	0.28	2.89	Significant
Student expectations	0.15	2.49	Significant
Quality hardware	0.17	2.54	Significant
Quality software	0.47	3.04	Significant

R<sup>2</sup> = 0.64; The significance level of 5% for t test = 1.96

Table 4: Results of analysis of effects of faculty image, student expectations, hardware quality, software quality and value perception on student satisfaction

Exogenous construct	Endogenous construct (Head of hardware)	t-values	Indirect effects	Total effect	Information about
Department of faculty image	0.26	3.31	0.17	0.36	Significant
Student hope	0.31	2.68	0.20	0.41	Significant
Hardware quality	0.41	3.01	0.27	0.45	Significant
Software quality	0.23	2.40	0.15	0.55	Significant
Perceived value	0.67	3.15	-	-	Significant

R<sup>2</sup> = 0.83; T-test score at the 5% significance level of 1.96

Table 5: Analysis results structural equations influence faculty image, student expectations, hardware quality, software quality, value perception and student satisfaction on student loyalty

Exogenous construct	Endogenous construct (Student loyalty)	t-values	Indirect effects	Total effect	Information
Faculty image	0.12	3.22	0.18	0.29	Significant
Hope student	0.33	4.93	0.12	0.41	Significant
Hardware quality	0.38	5.11	0.27	0.51	Significant
Software quality	0.48	2.53	0.30	0.78	Significant
Perceived value	0.40	3.55	0.26	0.66	Significant
Satisfaction student	0.39		4.65	to 0.39	Significant

R<sup>2</sup> = 0.61; The significance level of 5% for t-test scores = 1.96

the student satisfaction. The contribution of the influence of software quality directly on student satisfaction is 5.29% which means changes in software quality directly cause changes that occur on student satisfaction. Then the indirect effect of software quality on student satisfaction because of its relationship with the perception of the value of college benefits by 2.25 and the total effect of software quality on student satisfaction by 30.25%.

The magnitude of the path coefficient of variable perception of the value of college benefits to student satisfaction is 0.67 which means that the better the perception of the value of college benefits, the better the student satisfaction. The contribution of the influence of the perception of the value of college benefits directly to student satisfaction by 44.89% which means changes that occur on student satisfaction are directly caused by changes in the perception of value compared to the benefits of college. Scale score of R<sup>2</sup> = 0.83 means that the image of the faculty, student expectations, quality hardware, software quality and perceived value have contributed to student satisfaction by 83%. The influence of faculty image, student expectations, hardware quality, software quality and perceptions about the value of college benefits to student loyalty.

The results of the analysis of the influence of variables faculty image, student expectations, hardware quality, software quality and perceptions about the value of lecture benefits at the faculty on student loyalty are presented in Table 5. The path coefficient scores presented in the table can be explained as follows.

The magnitude of the path coefficient of the faculty image variable on student loyalty is 0.12 which means that the better the faculty image, the higher the student loyalty. The contribution of the influence of the faculty image on student loyalty is 0.0144. Thus it can be seen that changes in the faculty image cause 1.44 % of the changes that occur in student loyalty. The indirect effect of the faculty image on student loyalty is due to its relationship with the perception of the value of college benefits by 3.24% and the total effect of the faculty image on student loyalty due to the high perception of the value of college benefits by 8.41%.

The magnitude of the path coefficient of student expectations variable towards student loyalty is 0.33, which means that the better the expectations of students, the better the loyalty of students. The contribution of the direct influence of student expectations on student loyalty is 10.89% which means changes in student expectations directly cause changes that occur in student loyalty. The indirect contribution of student expectations concerning student loyalty was 1.44% and the effect of total student expectations on student loyalty was 16.81%.

The magnitude of the path coefficient of the hardware quality variable to student loyalty is 0.38, which means that the better the quality of the hardware, the better the student loyalty. The contribution of the direct influence of hardware quality on student loyalty is 14.44% which means changes that occur to student loyalty are directly caused by changes in hardware quality. Then the contribution of hardware quality in

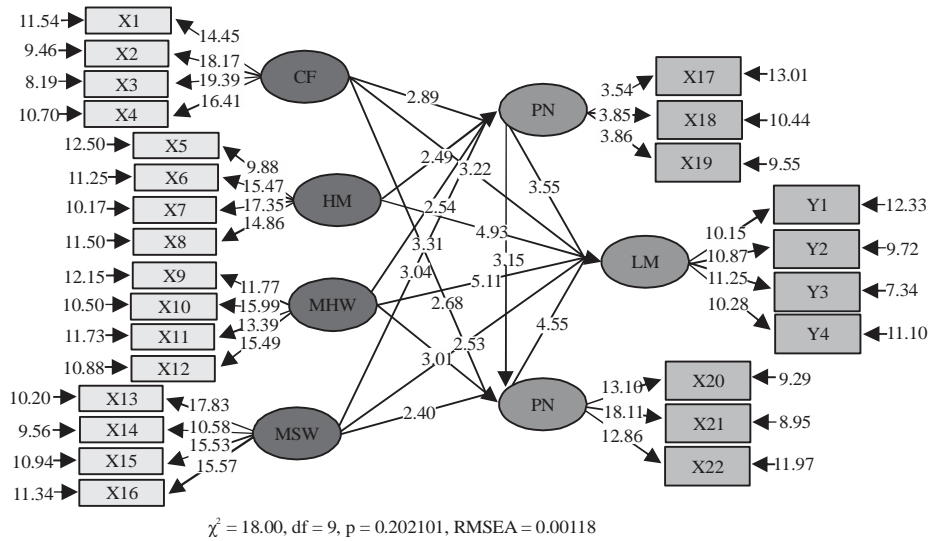


Fig. 1: Structural equation modeling for student loyalty model

influencing student loyalty is due to its relationship with student satisfaction by 7.29% and the effect of total hardware quality on student loyalty by 26.01%.

The magnitude of the path coefficient of software quality variables on student loyalty is 0.48 which means that the better the quality of the software, the better the student loyalty. The magnitude of the contribution of software quality indirectly affecting student loyalty is 23.04% which means changes in software quality directly cause changes that occur in student loyalty. Then the contribution of software quality in influencing student loyalty indirectly because there is a relationship with student satisfaction by 9% and the total effect of software quality on student loyalty by 60.84%.

The magnitude of the path coefficient variable perception of the value of college benefits to student loyalty is 0.40 which means that the better the perception of value compared to the benefits of college, the better the loyalty of students. The magnitude of the contribution of the perception of the value of college benefits directly affecting student loyalty by 16% which means 16% of the changes that occur in student loyalty are directly caused by changes in the perception of the value of college benefits. Then the contribution of the perception of the value of the benefits of college indirectly affecting student loyalty because there is a relationship with student satisfaction by 6.76% and the total effect of software quality on student loyalty by 43.56%.

Scale score of  $R^2 = 0.61$  which means that the image of the faculty, student expectations, quality hardware, software quality, perceived value and satisfaction of students have contributed to the student loyalty by 61%. The results of the structural equation model test are then the student loyalty models are presented in the Fig. 1.

## CONCLUSION

This study obtained several findings as follows: The average student has a very high loyalty to Faculty of Education. Students who have above average faculty loyalty are: majoring in Curriculum and Educational Technology, Counselling and Guidance and Education of Elementary School Teacher UPP Semarang while students who are below faculty average are Nonformal Education, Education of Elementary School Teacher UPP Tegal, Psychology and Education of Early Childhood School Teacher.

Student assessment of faculty image affects the perception of the value of the benefits of attending lectures. Therefore, if the image of the faculty in the eyes of students is considered good, then the student's perceptions about the value of attending lectures will also increase.

Student expectations influence the perception of the benefits of attending lectures. Therefore, if students 'expectations of the services provided by the faculty are correctly met, the better the student's perceptions about the value of the benefits of attending lectures.

Student assessment of hardware quality affects student perceptions about the value of the benefits of attending college. Therefore, if the quality of hardware provided by the faculty is well managed, the better the student's perception of the value of the benefits of attending lectures.

Student assessment of the quality of the software affects the perception of the value of the benefits of attending college. Therefore, if the quality of the software owned by the faculty is well managed, the better the student's perception of the value of the benefits of attending lectures.

The image of the faculty, student expectations, hardware quality and software quality together influence the perceived value built by students about the value of lecture benefits. Therefore, if the faculty image, student expectations, hardware quality and software quality are in good condition, jointly contribute to building student's perceptions about the value of lecture benefits. Student assessment of faculty image influences student satisfaction. Therefore, if the image of the Faculty in the eyes of students or the public is considered good, the higher the student satisfaction. Student expectations affect student satisfaction. Therefore, if the Faculty satisfies student expectations well, the higher the student satisfaction will be. Perceptions about hardware quality affect student satisfaction. Therefore, if the facilities and infrastructure owned by the Faculty and ways of managing it are done well, the higher the student satisfaction.

The perception of software quality has a positive and significant effect on student satisfaction. Therefore, if the academic and administrative staff of the Faculty in providing services to students are done well, the higher the student satisfaction. The perceived value built by students compared to the benefits obtained while studying at the Faculty of Education have a positive and significant effect on student satisfaction. Therefore, if the perceived value built by students regarding the benefits of studying at the Faculty of Education is good, student satisfaction will be even higher.

Faculty image, student expectations, hardware quality, software quality and perceived value built by students about the value of the benefits of studying at the Faculty of Education together influence student satisfaction. Therefore, if the faculty image, student expectations, hardware quality, software quality are in good condition and the perceived value of the benefits of studying at the Faculty of Education is well managed, then jointly contribute to building student satisfaction.

Student assessment of faculty image has a positive and significant effect on student loyalty; therefore, if the image of the Faculty in the eyes of students is appropriately viewed, the higher the level of student loyalty. Student expectations affect student loyalty. Therefore, if the Faculty can meet student expectations well, the higher the level of student loyalty. Student assessment of hardware quality affects student loyalty; therefore, if the quality of hardware provided by the Faculty is well managed, the higher the level of student loyalty. Student assessment of software quality has a positive and significant effect on student loyalty. Therefore, if the quality of the software provided by the Faculty is well managed, the higher the level of student loyalty. The perceived value built by students towards faculty influences student loyalty. Therefore, the better the student's perception of the value of the benefits of

college, the higher the level of student loyalty. Student satisfaction affects student loyalty. Therefore, the higher the student satisfaction with the services provided by the Faculty, the higher the student loyalty. Faculty image, student expectations, hardware quality, software quality and perceived value together influence student loyalty. Therefore, if the image of the Faculty, student expectations, the quality of hardware, the quality of software and the perception of values made by students are right, then the loyalty of students towards the Faculty is also higher.

## **RECOMMENDATIONS**

Some of the findings generated in this study subsequently gave rise to various thoughts in the form of recommendations as follows: The image of the Faculty has a good influence on perceptions about the value of college benefits, student satisfaction and student loyalty. In this case, the Faculty of Education must understand that image is essential for institutions. That image is built based on the reputation, trust and benefits of programs designed and implemented. Therefore, in order for students to have perceptions about the value of benefits, satisfaction and high loyalty, the Faculty needs to develop programs. These can provide benefits for students and the community through research activities and community service professionals and the dissemination of information based on assessment and research in the field of educational innovation.

Student expectations have an influence on perceptions about the value of benefits, satisfaction and student loyalty. In this case, the Faculty must understand the expectations of students so they can provide professional services. Also, the Faculty may not provide expectations that most likely cannot be filled because this will lead to wrong perceptions, which in turn will have an impact on reducing the level of student satisfaction and loyalty.

Hardware quality has an influence on perceptions about the value of benefits, satisfaction and student loyalty. In this case, all the facilities and infrastructure of lectures or those used for administrative activities must receive serious attention. The provision of comfortable lecture rooms and the ease of students interacting with lecturers and between students are the main demands for the formation of perceptions about the value of lecture benefits to students which in turn is able to provide student satisfaction and loyalty. Likewise, supporting facilities and infrastructure such as laboratories and library majors need to be improved in quality and services.

Software quality has an influence on perceptions about the value of benefits, satisfaction and student loyalty. In this case, lecturers and administrative staff



must really pay attention to the interests of students. The quality of lecturers in delivering lectures and in providing academic and non-academic guidance needs to be improved. Likewise the ability and professionalism of administrative staff in providing administrative services to students needs to be improved. This state because the two components of human resources determine the formation of student's perceptions about the value of college benefits as well as student satisfaction and loyalty to the Faculty. Also, it is essential to note the importance of the Faculty in organizing postgraduate education programs which are advanced levels for undergraduate students. Through the establishment of the postgraduate education program, it will have an impact on students' interest to always attend lectures at the Faculty of Education with the six study programs in it.

### REFERENCES

- Bergamo, F.V.D.M., A.C. Giuliani, F. Zambaldi and M.C. Ponchio, 2018. Student loyalty based on relationship quality: An analysis on higher education institutions. *Braz. Bus. Rev.*, 9: 26-46.
- Brown, R.M. and T.W. Mazzarol, 2008. The importance of institutional image to student satisfaction and loyalty within higher education. *Higher Educ.*, 58: 81-95.
- Carvalho, S.W. and M.D.O. Mota, 2010. The role of trust in creating value and student loyalty in relational exchanges between higher education institutions and their students. *J. Marketing Higher Edu.*, 20: 145-165.
- Chou, C.M., 2010. Analysis of college students' satisfaction with educational functions and teaching patterns of technological and vocational education In Taiwan. *World Trans. Eng. Technol. Educ.*, 8: 262-267.
- Clemes, M.D., C.E. Gan and T.H. Kao, 2008. University student satisfaction: An empirical analysis. *J. Marketing Higher Educ.*, 17: 292-325.
- Dimitriades, Z.S., 2006. Customer satisfaction, loyalty and commitment in service organizations: Some evidence from Greece. *Manage. Res. News*, 29: 782-800.
- Foster, B.D. and J.W. Cadogan, 2002. Relationship selling and customer loyalty: An empirical investigation. *Marketing Intell. Plann.*, 18: 185-199.
- Gronroos, C., 2001. The perceived service quality concept-a mistake? *Manag. Ser. Quality*, 11: 150-152.
- Hennig-Thurau, T., M.F. Langer and U. Hansen, 2001. Modelling and managing student loyalty: An approach based on the concept of relationship quality. *J. Serv. Res.*, 3: 331-344.
- Kara, A. and O.W. DeShields, 2004. Business student satisfaction, intentions and retention in higher education: An empirical investigation. *Marketing Educ. Q.*, 3: 1-25.
- Kotler, P., 1997. *Marketing Management, Analysis, Planning, Implementation and Control*. 9th Edn., Prentice Hall, Englewood Cliffs, New Jersey Pages: 789.
- Martensen, A., L. Gronholdt, J.K. Eskildsen and K. Kristensen, 2000. Measuring student oriented quality in higher education: Application of the ECSI methodology. *Synergies Res. Rep.*, 9: 371-383.
- Marzo-Navarro, M., M. Pedraja-Iglesias and M.P. Rivera-Torres, 2005. Measuring customer satisfaction in summer courses. *Qual. Assur. Edu.*, 13: 53-65.
- Mendez, J.I.R., A.Z.P. Parraga, A.L.I. Kara and A.C. Urrutia, 2009. Determinants of student loyalty in higher education: A tested relationship approach in Latin America. *Lat. Am. Bus. Rev.*, 10: 21-39.
- Nesset, E. and O. Helgesen, 2009. Modelling and managing student loyalty: A study of a Norwegian University College. *Scand. J. Educ. Res.*, 53: 327-345.
- Oliver, R.L. and W.S. DeSarbo, 1988. Response determinants in satisfaction judgments. *J. Custom. Res.*, 14: 495-507.
- Schee, B.A.V., 2010. Students as consumers: Programming for brand loyalty. *Serv. Marketing Q.*, 32: 32-43.
- Schumacker, R.E. and R.G. Lomax, 2004. *A Beginner's Guide to Structural Equation Modeling*. 2nd Edn., Lawrence Erlbaum Associates, New Jersey, ISBN: 0-8058-4017-6.
- Thomas, S., 2011. What drives student loyalty in universities: An empirical model from India. *Intl. Bus. Res.*, 4: 183-192.
- Tsai, Y.H., 2006. Modeling educational quality and student loyalty: A quantitative approach based on the theory of information cascades. *Qual. Quantity*, 42: 397-415.
- Tuan, N.M., 2012. Effects of service quality and price fairness on student satisfaction. *Int. J. Bus. Soc. Sci.*, 3: 132-150.
- Ueda, Y. and M. Nojima, 2012. Effect of student attitudes on university loyalty and university cooperation: An empirical study in Japan. *Int. J. Manage.*, 29: 133-142.