

International Research Journal of Management, IT & Social Sciences

Available online at https://sloap.org/journals/index.php/irjmis/

Vol. 6 No. 5, September 2019, pages: 40~52

ISSN: 2395-7492

https://doi.org/10.21744/irjmis.v6n5.692



Factors Affecting on Rational Choice of Students in Muslim Nusantara Al-Washliyah University



Hardi Mulyono ^a Arief Hadian ^b

Article history:

Received: 27 March 2019 Accepted: 31 May 2019 Published: 12 August 2019

Keywords:

facility; fee; rational choice; students; tuition;

Abstract

This research is quantitative research. This study aims to find out the factors that most influence the choice of students in choosing Muslim Nusantara Al-Washliyah University. The location of this study was conducted at Muslim Nusantara Al-Washliyah University conducted in August 2019 to December 2019. The results of this study produced six factors that influenced the choice of students in choosing Muslim Nusantara Al-Washliyah University, the most influencing factor or the first factor is the completeness factor of facilities and tuition fees, the second factor is the image of the campus, students activities, and scholarships, the third factor is academic factors and costs, fourth is the factor of study programs and future careers, the fifth factor is the internship and academic factors, the sixth factor of the alliance. This study is only able to analyze the existing factors of 63.134%, the remaining 36.866% are factors that have not been studied in this study, this study produced six factors that influence the first and main factors are the completeness of facilities and tuition fees.

2395-7492© Copyright 2019. The Author. This is an open-access article under the CC BY-SA license (https://creativecommons.org/licenses/by-sa/4.0/)
All rights reserved.

Author correspondence:

Hardi Mulyono,

Faculty of Economics, Muslim Nusantara Al-Washliyah University,

Medan, Sumatera Utara Indonesia

Email address: hardisurbakti@gmail.com

1. Introduction

This recent time, Universities must be a competitive institution, this is because of the high level of competition between higher education institutions in seizing existing student candidates. With intense competition forcing existing educational institutions to make a better strategy in order to be able to distinguish from offers which are offered by competitors of the educational institution (Thomas, 2011). That way educational institutions will increase investment in their marketing to be able to improve the image and quality of their educational institutions (Berbegal-Mirabent,

^a Muslim Nusantara Al-Washliyah University, Medan, Indonesia

^b Muslim Nusantara Al-Washliyah University, Medan, Indonesia

Llach *et al.*, 2016). According to Rogers *et al.*, (2006), by continuing to understand the behaviors of prospective students will make it easier for the university to enter prospective students into their university.

In order to understand the behavior of prospective students, it is necessary to know what factors rationally make students choose to enter a college. In choosing a college, prospective students will make that choice by choosing rationally. Rational choice is a choice made intentionally and consistently, where the decision is taken by thinking about what will be done and can provide reasonable reasons for the choice (Ulen, 1999). According to Diamond *et al.*, (2012), students must know the costs and benefits in their choice of higher education in a rational manner by choosing options that suit their interests and preferences. Meanwhile, according to Gausdal (2015), most students will have rational reasons for making decisions based on evidence from experience. Directly, both from the source of the first person or second person.

There are some previous studies that discuss rational choices such as Maniu & Maniu (2014), which state that students will make rational choices by considering cost factors for studies such as the value of tuition fees, scholarship opportunities, other financial assistance, material costs, accommodation costs (social costs) including rent value, other living costs, and family budget, Callender & Dougherty (2018), states that rational choice calculations weigh economic costs and benefits of higher education and the relative quality of institutions and programs. Whereas Angulo *et al.*, (2010), state that rational choices are academic and career opportunities, campus quality and standards, campus image, physical infrastructure and facilities, tuition fees, scholarships, selection, and distance from home.

Muslim Nusantara Al-Washliyah University, as a private tertiary institution, is required to improve, this is because the level of competition between private universities in North Sumatra is increasingly competitive, so the effective ways to improve the competence of Muslim Nusantara Al-Washliyah University must be conducted. Remembering this university is one of Private tertiary institutions in North Sumatra, especially in the city of Medan. To improve these competencies, efforts need to be made to understand the behavior of prospective student consumers in their efforts to choose the tertiary institutions they study especially at Muslim Nusantara Al-Washliyah University. Seeing this problem, research in the factors that influence the choice of students rationally at Muslim Nusantara Al-Washliyah University need to be done. This study also looks for the dominant factors of rational factors that influence student choice.

Literature Review

Rational Options

That rational decision making is an important thing because it can be used as an excuse to explain individual behavior in various contexts (DesJardins & Toutkoushian, 2005). According to Herrnstein (1990), that rational choice is a choice made by someone tends to maximize the existing total utility, where utility is identical to the concept of modern reinforcement in behavioral psychology. Rational behavior usually holds that individuals have a well-defined set of preferences, and when faced with a series of choices, they will choose options that maximize their satisfaction (or utility) (DesJardins & Toutkoushian, 2005). An individual who is choosing rationally will collect as much data as they need to make informed decisions (Solomon *et al.*, 2014). Whereas according to the flow of rational / thought, rational choice process will involve the stages of deciding about the relevance of each product attribute, gathering information about competing product attributes, evaluating the level of each attribute in competing products, and choosing the optimal product (Angulo *et al.*, 2010; Billaiya *et al.*, 2017).

Rational Choices of Students at Universities

In choosing a college, students will also make rational choices. The rational choice for higher education is also an economic model choice approach. Students will calculate the expected costs and benefits of each institution under consideration and then choose to enroll in the institution with the highest utility of the expected benefits of the internet (DesJardins & Toutkoushian, 2005). According to Fernandez (2010), students will choose certain institutions if the benefits of attending institutions outweigh the perceived benefits of registering at other institutions. And according to Iloh & Tierney (2014), a person who chooses rationally will gather some information before making choices such as collecting cost information, academic quality, program availability, and job prospects.

According to the point that has been explained in the introduction. Researches on rational factors in detail are examined by Angulo et al., (2010), such as strategic relationships undertaken by campus, campus standards and quality,

campus image, infrastructure, and physical reality, academic and career opportunities, and costs and tuition fees. So in this study, rational choice factors of students in higher education use rational choice research models (Angulo *et al.*, 2010).

Conceptual Framework

The conceptual framework of this study is:

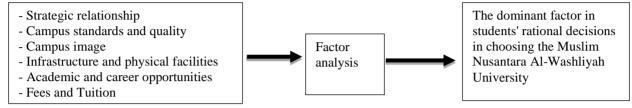


Figure 1. Conceptual Framework Source: (Angulo *et al.*, 2010)

2. Materials and Methods

The research methods which done in this study are:

Types of Research

This study aims to determine the dominant factors in the rational choice of students at Muslim Nusantara Al-Washliyah University. This research study uses survey research methods with the type of research used is quantitative research.

Time and Place of Research

The research was conducted at Muslim Nusantara Al-Washliyah University in Medan which was conducted in August 2018 to December 2018. Muslim Nusantara Al-Washliyah University is a private university located in Medan, Indonesia.

Population and Samples

The population in this study were students of the first semester of Muslim Nusantara Al-Washliyah University with a total of 1461 students. The research sample was obtained by using the calculator of margin error, with a confidence level of 95% and a margin of error of 5%, a sample of 315 students who were scattered based on the composition of each faculty was obtained.

Sampling Technique

In this study, sampling techniques were conducted using proportional random sampling. The use of this sampling technique was done because Muslim Nusantara Al-Washliyah University consisted of several faculties so it was necessary to take representative samples from faculties at Muslim Nusantara Al-Washliyah University.

The Technique of Data Collection

Data collection techniques conducted in this study by conducting questionnaires. There is also a measurement scale on the questionnaire using a Likert scale with a measurement level of 1 to 5 loaded with strongly disagree, disagree, disagree, agree and strongly agree. The data collection uses a questionnaire that contains questions that are conducted

transparently. Before the questionnaire was spread out the questionnaire with a number of statements validated by using a correlation coefficient of 0.3 and conduct the reliability using Cronbach alpha 0.6.

The Technique of Data Analysis

The data analysis technique in this study used factor analysis testing. The factor analysis testing process according to Ghozali (2018), are:

- 1) Test of Kaiser-Mayer-Olikin and Bartlett's Test In the Kaiser-Mayer-Olikin test Measure of Sampling Adequacy results obtained must be above 0.5 and a significant value below 0.05.
- 2) The anti-image correlation test results

 This step is done if the results of the Kaiser-Mayer-Olikin test results from Measure of Sampling Equity below
 0.05. So this step was done by removing the correlation value on the results obtained below 0.5 as seen in the
 anti-image correlation table.
- 3) Test Total Variance Explained
 Total Variance Explained describes the number of factors formed. To determine the factors formed, it must be seen that the eigenvalues must be ≥ 1. If it is already <1, then there are no factors formed.
- 4) Communalities Analysis of commonalities, this analysis is basically the amount of variance (can be in percentages) of an initial variable that can be explained by existing factors. In the communalities table, there are two parts, called the initial and extraction values. The initial value reflects the role or contribution if the individual variable constituent factors form the factor, while the extraction describes the percentage of the role or contribution of each dimension or sub-variable of the individual factors to the factor.
- 5) Component Matrix The next step is to determine the items that are dominant in each component. This is obtained by looking at the results from the Component Matrix table. In the component matrix table there is a component value of ≥ 0.5 , which means that the measurement factor dimension or sub-variable is a member of the formed factor, conversely if the component value of factor <0.5 means that the dimension of the measurement sub-variable is not a member of that factor.
- 6) Rotated Component Matrix
 If between the components of one factor and the other components of the factor there are values of factor components in one measurement variable which is pada 0.5 on both factors together, then factor analysis must be repeated in another way or factor rotation (factor rotation). Factor rotation is done by the method of varimax or equamax or the other until there is no shared component value in the sub-variable ≥ 0.5 in two or more factor components.

Research Operational Definition

The definition of research operational in this study are:

- 1) The strategic relationship fostered by the campus, that is the relationship carried out by Muslim Nusantara Al-Washliyah University with other parties. The indicators are:
 - a) Collaboration with other campuses in Indonesia
 - b) Connected with campuses abroad
 - c) Relations with the company
 - d) Job placement at the company
- 2) Standard and quality of the campus, that is the standards and quality that exist on the campus of the Muslim Nusantara Al-Washliyah University. The indicators are:
 - a) Good academic quality
 - b) qualified instructors
 - c) qualified teacher research
- 3) Campus image, namely image of the campus of the Muslim Nusantara Al-Washliyah University. The indicators are:
 - a) Good campus image
 - b) Easy entry requirements

44 🕮 ISSN: 2395-7492

- c) Active social life
- d) Participation in extracurricular activities
- 4) Infrastructure and facilities, that is infrastructure and facilities on the campus of the Muslim Nusantara Al-Washliyah University. The indicators are:
 - a) Complete study room
 - b) Complete library
 - c) Good sports facilities
 - d) Good health services
 - e) Complete laboratory
- 5) Academic and career opportunities, namely academic curriculum and career opportunities undertaken by the campus of the Muslim Nusantara Al-Washliyah University. The indicators are:
 - a) Popular chosen study program
 - b) Flexible study program
 - c) Study program in accordance with students
 - d) Recognized graduates
 - e) Career guidance and work placement
 - f) Job opportunities in the future
 - g) Title recognized nationally and internationally
- 6) Fees and tuition fees, that is college cost and tuition fees set by the campus of the Muslim Nusantara Al-Washliyah University. The indicators are:
 - a) Tuition is lower than other campuses
 - b) Cost of living on an affordable campus
 - c) Income of parents who support
 - d) Providing scholarships
 - e) Does not require administrative fees
 - f) the cost of living on this campus is affordable
 - g) Affordable transportation costs

3. Results and Discussions

The results of this study are:

Validity Test Results

Based on the validation test conducted in the questions in the questionnaire. It appears that the results obtained from 30 questions are valid. This was because the results of the Corrected Item-Total Correlation in the chest are greater than 0.3. It is concluded that all questions are valid and can be used in the study

Tabel 1 Summary of Validity Test Results

Question	Corrected Item-Total Correlation	r tabel	Validity
Q1	0,449	0,3	Valid
Q2	0,472	0,3	Valid
Q3	0,452	0,3	Valid
Q4	0,503	0,3	Valid
Q5	0,417	0,3	Valid
Q6	0,610	0,3	Valid
Q7	0,567	0,3	Valid
Q8	0,539	0,3	Valid
Q9	0,359	0,3	Valid
Q10	0,582	0,3	Valid
Q11	0,408	0,3	Valid
	Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10	Q1 0,449 Q2 0,472 Q3 0,452 Q4 0,503 Q5 0,417 Q6 0,610 Q7 0,567 Q8 0,539 Q9 0,359 Q10 0,582	Q1 0,449 0,3 Q2 0,472 0,3 Q3 0,452 0,3 Q4 0,503 0,3 Q5 0,417 0,3 Q6 0,610 0,3 Q7 0,567 0,3 Q8 0,539 0,3 Q9 0,359 0,3 Q10 0,582 0,3

IIVIMII			133N. 2373-1472 🖼		
		Q12	0,604	0,3	Valid
		Q13	0,586	0,3	Valid
	F3	Q14	0,602	0,3	Valid
		Q15	0,450	0,3	Valid
		Q16	0,606	0,3	Valid
		Q17	0,651	0,3	Valid
		Q18	0,535	0,3	Valid
		Q19	0,418	0,3	Valid
	F4	Q20	0,670	0,3	Valid
		Q21	0,459	0,3	Valid
		Q22	0,499	0,3	Valid
		Q23	0,549	0,3	Valid
		Q24	0,593	0,3	Valid
	F5	Q25	0,613	0,3	Valid
		Q26	0,590	0,3	Valid
		Q27	0,488	0,3	Valid
		Q28	0,565	0,3	Valid
		Q29	0,522	0,3	Valid
		Q30	0,532	0,3	Valid

Results of Test Reliability

Based on the reliability test shown in the table above, all questions are above 0.6. Thus the questionnaire has been reliable and feasible to be distributed to respondents to be used as instruments in this study.

Table 2 Summary of Reliability Test Results

Factor	Question	Cronbach's Alpha if Item Deleted	Reliability
F1	Q1	0,926	Reliable
	Q2	0,926	Reliable
	Q3	0,927	Reliable
	Q4	0,925	Reliable
	Q5	0,926	Reliable
	Q6	0,924	Reliable
	Q7	0,924	Reliable
F1	Q8	0,925	Reliable
	Q9	0,927	Reliable
	Q10	0,924	Reliable
	Q11	0,926	Reliable
	Q12	0,924	Reliable
	Q13	0,924	Reliable
F3	Q14	0,924	Reliable
	Q15	0,926	Reliable
	Q16	0,924	Reliable
	Q17	0,923	Reliable
	Q18	0,925	Reliable
	Q19	0,926	Reliable
F4	Q20	0,923	Reliable
	Q21	0,926	Reliable
	Q22	0,925	Reliable
	Q23	0,924	Reliable
	Q24	0,924	Reliable
F5	Q25	0,924	Reliable

Mulyono, H., & Hadian, A. (2019). Factors affecting on rational choice of students in Muslim Nusantara Al-Washliyah University. International Research Journal of Management, IT and Social Sciences, 6(5), 40-52. https://doi.org/10.21744/irjmis.v6n5.692 46 🕮 ISSN: 2395-7492

Q26	0,924	Reliable
Q27	0,925	Reliable
Q28	0,924	Reliable
Q29	0,925	Reliable
Q30	0,925	Reliable

KMO Test Results (Kaiser Meyer Olkin)

Seeing from the KMO test in Table 1, it can be seen that the results obtained are 0.895, this result was above 0.5 where the result was a requirement to be continued the next stage. And so also the results of the signs were also seen to produce the number 0,000, the number was below 0.05 which is the requirement for the next step. So that all questions can be continued in the next step, which is to conduct an anti-image correlation test.

Table 3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Adequacy.	Measure of Sampling	,895
Bartlett's Test of Sphericity	Approx. Chi-Square	5155,797
Sphericity	Df	435
	Sig.	,000

Anti-Image Correlation Test Test Results

Seeing from the results of the anti-image correlation, the results obtained on all question items were above 0.5. These results have passed the number 0.5 which was a requirement that was above 0.5, thus all questions have passed the anti-image-correlation test, which means that all questions can be applied to the next test.

Table 4
The result of test anti-image-correlation

Question	Anti-image Correlation	Question	Anti-image Correlation	Question	Anti-image Correlation	Question	Anti-image Correlation
Q1	0,838	Q9	0,881	Q17	0,901	Q25	0,898
Q2	0,824	Q10	0,898	Q18	0,911	Q26	0,923
Q3	0,884	Q11	0,894	Q19	0,910	Q27	0,910
Q4	0,902	Q12	0,922	Q20	0,929	Q28	0,924
Q5	0,887	Q13	0,886	Q21	0,933	Q29	0,906
Q6	0,897	Q14	0,833	Q22	0,922	Q30	0,873
Q7	0,896	Q15	0,889	Q23	0,934		
Q8	0,877	Q16	0,829	Q24	0,944		

Comunalities Analysis Test Results

Seeing from the commonalities analysis test in Table 3 on the first question, Q1, it can be seen that the extraction value has a value of 0.720 which means that 72.0% of the first question (Q1) was only able to explain the formed factors. Likewise, the following questions can only be explained as much as the extraction value of the factors of formation, the greater the extraction value, the more closely the relationship between the items was there with the formation factor. In this test, the largest value was obtained in question Q16 and the smallest item above 0.5 was in question P28.

Table 5
The test result of test analysis *communalities*

Question	Initial	Extraction	question	Initial	Extraction
Q1	1	0,720	Q16	1	0,785
Q2	1	0,757	Q17	1	0,694
Q3	1	0,652	Q18	1	0,478
Q4	1	0,632	Q19	1	0,553
Q5	1	0,634	Q20	1	0,635
Q6	1	0,729	Q21	1	0,570
Q7	1	0,644	Q22	1	0,525
Q8	1	0,666	Q23	1	0,527
Q9	1	0,587	Q24	1	0,599
Q10	1	0,645	Q25	1	0,626
Q11	1	0,562	Q26	1	0,661
Q12	1	0,735	Q27	1	0,529
Q13	1	0,700	Q28	1	0,522
Q14	1	0,743	Q29	1	0,529
Q15	1	0,568	Q30	1	0,734

Test Results for Total Variance Explained Test

Seeing from the test total variance explained obtained, it can be seen in table 6 that the extraction results into 6 factors of formation. Where based on the results of eigenvalues which have a value of> 1 there are only 6 parts, where that factor 1 was only able to explain 33.274% variation, factor 2 was only able to explain 8.24% variation, factor 3 was only able to explain 2.301% variation, factor 4 was only ably explained by 1.533% variation, factor 5 was only able to explain as much as 1.366% variation, factor 6 was only able to explain 1.285% variation, or overall it was only able to explain 63.134% variation.

Table 6
The test result of total variance explained

	Initial Eigenvalues			Extra	Extraction Sums of Squared			Rotation Sums of Squared		
Component		ililiai Eigen	varues		Loadings			Loadings		
Component	Total	% of	Cumulative	Total	% of	Cumulative	T . 4 . 1	% of	Cumulative	
	Total	Variance	% Total	Variance	%	Total	Variance	%		
1	9,982	33,274	33,274	9,982	33,274	33,274	4,822	16,074	16,074	
2	2,472	8,242	41,516	2,472	8,242	41,516	3,357	11,191	27,265	
3	2,301	7,670	49,186	2,301	7,670	49,186	3,252	10,841	38,106	
4	1,533	5,110	54,296	1,533	5,110	54,296	2,830	9,433	47,539	
5	1,366	4,553	58,849	1,366	4,553	58,849	2,541	8,471	56,010	
6	1,285	4,285	63,134	1,285	4,285	63,134	2,137	7,124	63,134	

Test Results for Matrix Components

In the results of the component matrix test, several questions have been grouped into eight (6) factors. In this test, it was still difficult to do any of the parts that form members, while the results of the component matrix test can be seen in the table below:

48 ISSN: 2395-7492

Table 7
The Result of *Component Matrix*^a Test

0	Component							
Question	1	2	3	4	5	6		
Q1	,468	,078	,295	,544	,299	,147		
Q2	,482	,189	,361	,444	,112	,385		
Q3	,472	,134	,439	,321	-,042	,337		
Q4	,541	,094	,255	-,080	,196	-,470		
Q5	,448	,076	,375	,240	-,025	-,478		
Q6	,640	,051	,436	-,042	,087	-,342		
Q7	,606	-,004	,288	-,121	,164	-,390		
Q8	,567	,434	-,290	,128	-,227	-,064		
Q 9	,376	,518	-,259	,329	-,030	-,042		
Q10	,614	,391	-,245	-,037	-,210	-,100		
Q11	,450	,262	-,523	,044	-,125	-,020		
Q12	,671	-,466	-,213	,046	-,138	,022		
Q13	,654	-,452	-,208	,042	-,053	,145		
Q14	,664	-,434	-,186	,276	,054	,000		
Q15	,476	,447	-,274	,188	-,135	-,115		
Q16	,671	-,466	-,215	,259	,055	,025		
Q17	,686	-,030	,263	-,265	-,152	,245		
Q18	,579	,015	,150	-,306	,042	,157		
Q19	,465	,183	-,248	-,241	,413	,118		
Q20	,713	,074	-,145	-,234	,199	,078		
Q21	,501	,160	-,211	-,075	,491	,033		
Q22	,546	,117	-,171	-,295	,252	,184		
Q23	,595	,059	-,097	-,126	,375	,056		
Q24	,657	-,348	-,153	-,055	-,086	-,112		
Q25	,673	-,370	-,036	,017	-,140	-,122		
Q26	,653	-,447	-,090	,062	-,144	-,043		
Q27	,523	,285	-,217	-,021	-,355	-,021		
Q28	,599	,122	,244	-,172	-,223	,097		
Q29	,548	,232	,247	-,204	-,218	,155		
Q30	,566	,012	,474	-,285	-,282	,164		

Rotary Component Matrix Test Results

After the Test Matrix matrix test, the test rotated communication matrix was conducted. This test was conducted because the component matrix test of formation factors was still very difficult to do. In the column forming factor, every value below 0.5 was omitted, the results were obtained as shown in the table below:

Table 8
The Result of *Rotared Component Matrix*

Question	Component							
	F1	F2	F3	F4	F5	F6		
Q1						0,769		
Q2						0,769 0,804 0,680		
Q3						0,680		
Q4					0,718			
Q5					0,718 0,712			

IRJMIS			ISSN: 2395-74	.92 🔲		49
Q6					0,711	_
Q7					0,678	
Q8		0,760				
Q 9		0,691				
Q10		0,690				
Q11		0,658				
Q12	0,813					
Q13	0,777					
Q14	0,792					
Q15		0,711				
Q16	0,824					
Q17			0,708			
Q18			0,519			
Q19				0,705		
Q20				0,587		
Q21				0,684		
Q22				0,618		
Q23				0,611		
Q24	0,677					
Q25	0,689					
Q26	0,758					
Q27		0,621				
Q28			0,609			
Q29			0,634			
Q30			0,798			

Rotated Component Matrix Test Results

Based on table 8 can be explained below:

1) Factor 1 (Facilities and Tuition Factors)

The first factor was the highest factor chosen by Muslim Nusantara Al-Washliyah University students and also the main factor chosen in choosing lectures. This is obtained by looking at the highest eigenvalues of 9,982. The variance value was obtained at 33.274%, means that this factor can only explain the variance of existing variants of 33.274%. The supporting factors were a complete study room (Q12), a complete library (Q13), good sports facilities (14), a complete laboratory (Q16), lower tuition fees than other campuses (Q24), fees affordable campus living (Q25), income of parents who support (Q26).

2) Factor 2 (Campus Image Factors, Student Activities and Scholarships)

The second factor is the second highest factor chosen by Muslim Nusantara Al-Washliyah University students. This is obtained by looking at the eigenvalues of 2.472. The variance value was obtained at 8.22%, means that this factor can only explain the variability of existing variants of 8.24%. The supporting factors were good campus image (Q8), easy entry requirements (Q9), active social life (Q10), participation in extracurricular activities (Q11), good health services (Q15), providing scholarships (Q27).

3) Factor 3 (Academic Factors and Costs)

The third factor is the third-highest factor chosen by Muslim Nusantara Al-Washliyah University students. This was obtained by looking at the eigenvalues of 2.301. The variance value was obtained at 7.670%, means that this factor can only explain the variance of the existing variants of 7.670%. The supporting factors are popular chosen study programs (Q17), flexible study programs (Q18), not demanding administrative fees (Q28), affordable living costs on this campus (Q29), affordable transportation costs (Q30).

4) Factor 4 (Study Program Factors and Future Careers)

The fourth factor is the fourth highest factor chosen by Muslim Nusantara Al-Washliyah University students. This was obtained by looking at the eigenvalues of 3.107. The variance value obtained was 5.110%, means that this factor can only explain the variance of the existing variants of 5.110%. The supporting factors are study programs

50 ISSN: 2395-7492

in accordance with students (Q19), recognized graduates (Q20), career guidance and work placement (Q21), future employment opportunities (Q22), nationally and internationally recognized degrees (Q23).

5) Factor 5 (Internship and Academic Factors)

The fifth factor is the fifth-highest factor chosen by Muslim Nusantara Al-Washliyah University students. This was obtained by looking at the eigenvalues of 1.366. The variance value obtained was 4.533%, means that this factor can only explain the variance of the existing variants of 4.533%. The supporting factors are the placement of internships in the company (Q4), good academic quality (Q5), qualified teachers (Q6), qualified teacher research (Q7).

6) Factor 6 (Alliance Factor)

The sixth factor is the sixth-highest factor chosen by Muslim Nusantara Al-Washliyah University students. This was obtained by looking at the eigenvalues of 1,285. The variance value obtained was 4.285%, means that this factor can only explain the variance of the existing variants of 4.285%. The supporting factors were cooperation with other campuses in Indonesia (Q1), connected with overseas campuses (Q2), relations with companies (Q3).

The results obtained in this study found that the factors that influence students rationally choosing Muslim Nusantara Al-Washliyah University are factors 1 (facilities and tuition factors), factor 2 (campus image factors, student activities and scholarships), factor 3 (academic factors and costs), factor 4 (future career factors), factor 5 (academic), factor 6 (alliance factors). It shows that students in choosing rationally at Muslim Nusantara Al-Washliyah University in Medan prioritized choices based on the complete facilities and low tuition fees offered by Muslim Nusantara Al-Washliyah University. Seen from market segmentation that students choose Muslim Nusantara Al-Washliyah University is still dominated by the category of students who choose colleges with complete facilities with low tuition fees. Cost factors are a major factor in choosing a college. This is supported by Kusumawati (2013), stated that students will make rational decisions by considering economic factors, as well as Heller (1997), research stated that the cost of education is an important point that must be considered.

4. Conclusion

From the results of this study the following results are obtained:

- 1) The results obtained from this study that the test of the total variance explained test was 63.134% variation. The intention was this study only able to analyze the existing factors as much as 63.134%, the remaining 36.866% were factors that have not been studied in this study.
- 2) In this research there are six factors that influence students to choose Muslim Nusantara Al-Washliyah University they are:
 - a) The first factor is a complete study room, a complete library, good sports facilities, a complete laboratory, lower tuition fees from other campuses, affordable living expenses on campus, income of parents who support.
 - b) The second factor is a good campus image, easy entry requirements, active social life, participation in extracurricular activities, good health services, providing scholarships.
 - c) The third factor is the popular chosen study program, flexible study program, does not require administrative fees, the cost of living on this campus is affordable, affordable transportation costs.
 - d) The fourth factor is the suitable study program for the students, recognized graduates, career guidance and work placements, future employment opportunities, titles recognized nationally and internationally.
 - e) The fifth factor is the placement of internships in the company, good academic quality, qualified instructors, qualified teacher research.
 - f) The sixth factor is the collaboration with other campuses in Indonesia, connected with campuses abroad, relationships with companies.

Suggestions

The suggestions for this study are:

It is necessary to conduct further research in the form of other factors that have not been examined in this study which are factors that can increase the choice of students at Muslim Nusantara Al-Washliyah University. With the results obtained by the first factor or the main factor in the form of complete facilities and tuition fees, it is necessary

to increase and renew the existing facilities of Muslim Nusantara Al-Washliyah University as well as in the determination of tuition fees. Determined by other universities so that students do not feel paying too much tuition fees at Muslim Al-Washliyah University. By not ignoring other factors besides the main factors, that are the completeness of facilities and tuition fees, it is also necessary to increase other factors besides these factors which can increase the choice of students at Muslim Nusantara Al-Washliyah University.

Conflict of interest statement and funding sources

The authors declared that they have no competing interest.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

Acknowledgments

The authors would like to thank the Editor of IRJMIS for their valuable time, support, and advice in completing the current study.

52 ISSN: 2395-7492

References

Angulo, F., Pergelova, A., & Rialp, J. (2010). A market segmentation approach for higher education based on rational and emotional factors. *Journal of Marketing for Higher Education*, 20(1), 1-17. https://doi.org/10.1080/08841241003788029

- Berbegal-Mirabent, J., Llach, J., Marimon, F., & Mas-Machuca, M. (2016). Analysing the determinants of students' loyalty in the higher education context: the Catalan University system case. *Investigaciones de Economía de la Educación volume 11, 11, 45-58.*
- Billaiya, R., Malaiya, S., & Parihar, K. S. (2017). Impact of socio economic trends on students in quality education system. *International Journal of Social Sciences and Humanities*, 1(1), 16-20. https://doi.org/10.29332/ijssh.v1n1.10
- Callender, C., & Dougherty, K. (2018). Student choice in higher education—reducing or reproducing social inequalities?. *Social Sciences*, 7(10), 189. https://doi.org/10.3390/socsci7100189
- DesJardins, S. L., & Toutkoushian, R. K. (2005). Are students really rational? The development of rational thought and its application to student choice. In *Higher education: Handbook of theory and research* (pp. 191-240). Springer, Dordrecht.
- Diamond, A., Vorley, T., Roberts, J., & Jones, S. (2012). Behavioural approaches to understanding student choice. *The National Union of Students and the Higher Education Academy, York, available at: www. heacademy. ac. uk/assets/documents/research/Student_Choice. pdf.*
- Fernandez, J. L. (2010). An exploratory study of factors influencing the decision of students to study at universiti sains malaysia. *Kajian Malaysia: Journal of Malaysian Studies*, 28(2).
- Gausdal, L. (2015). Degrees of choice?. New Vistas, 1(1), 10-14.
- Ghozali, I. (2018). Aplikasi analisis multivariete dengan program IBM SPSS 23.
- Heller, D. E. (1997). Student price response in higher education: An update to Leslie and Brinkman. *The Journal of Higher Education*, 68(6), 624-659. https://doi.org/10.1080/00221546.1997.11779004
- Herrnstein, R. J. (1990). Rational choice theory: Necessary but not sufficient. *American Psychologist*, 45(3), 356. https://psycnet.apa.org/doi/10.1037/0003-066X.45.3.356
- Iloh, C., & Tierney, W. G. (2014). Understanding for-profit college and community college choice through rational choice. *Teachers College Record*, 116(8), 1-34.
- Kusumawati, A. (2013). A qualitative study of the factors influencing student choice: The case of public university in Indonesia. *Journal of Basic and applied scientific research*, *3*(1), 314-327.
- Maniu, I., & Maniu, G. C. (2014). Educational marketing: factors influencing the selection of a university. *sea: Practical Application of Science*, 2(3).
- Rogers, G., Finley, D. S., & Patterson, M. (2006). Transformation in higher education: a learner—needs segmentation leads to improved learner satisfaction. *Teaching in higher education*, 11(4), 401-411. https://doi.org/10.1080/13562510600874110
- Solomon, M. R., Dahl, D. W., White, K., Zaichkowsky, J. L., & Polegato, R. (2014). *Consumer behavior: Buying, having, and being* (Vol. 10). Toronto, Canada: Pearson.
- Thomas, S. (2011). What drives student loyalty in universities: An empirical model from India. *International Business Research*, 4(2), 183. https://doi.org/10.5539/ibr.v4n2p183
- Ulen, T. S. (1999). Rational choice theory in law and economics. *Encyclopedia of law and economics*, 1, 790-818.