



The antecedents of Indonesian Soloraya Students Choosing Private Universities

Arif Julianto Sri Nugroho¹, Abdul Haris*¹, Agung Nugroho Jati¹, Dandang Setyawanti²,
Anis Marjukah¹, Anna Febrianty S¹, Tasari³

¹,Faculty of Economics and Psychology Universitas Widya Dharma Klaten Indonesia

²,Vocational Program Universitas Widya Dharma Klaten Indonesia

³,Faculty of Education Universitas Widya Dharma Klaten Indonesia

*Corresponding author: dzulhari@gmail.com

Abstract

This study aimed at examining the factors that influence students' decisions to choose private universities in the Soloraya region including image dimensions and accreditation status, costs and scholarships, human resource factor, physical evidence, motivation and group factors. The novelty of the research modifies the model on medium-sized private universities in Soloraya. The research population is all students at five private universities in the Soloraya region. Respondent objects as a sample consists of 120 students in the early and middle semesters of study. The research method was carried out using a survey through a quantitative approach to collect data from respondents through a closed questionnaire. The sampling technique used is non-probability sampling with accidental sampling type. Quantitative test used factor analysis. The test results provide the results of the dimensions of image and accreditation status, costs and scholarships, human resource factor, physical evidence, motivation and groups have a role in motivating students to choose study programs at private universities. Dimension tests of factor analysis in the form of image factors and accreditation status, fees and scholarships are the dominant factors as variables because they have initial eigenvalues and extraction sums of squared loading greater than the other dimensions

Keywords: Factor Analysis, Private University, Quality, Student selection





1. INTRODUCTION

The Covid -19 pandemic for two years has become an outbreak that has revolutionary changed the learning model on campus. In a short time, campuses were forced to carry out blended and online learning so that all campuses were required to provide digital learning infrastructure. Private universities that are late in updating their infrastructure will be left behind in terms of service quality, so that it is not attractive to prospective new students. Higher Education as an important part of the world of education as it can create a superior education system including healthy universities so that they are able to contribute to the competitiveness of the nation with quality characteristics, provide access and fairness to all people and have autonomy (Haniarti, Hakzah, & Primus, 2020). The community's demand from users of higher education graduates is the birth of competent scholars. Thus, competence is something that must be owned by university graduates to be able to carry out their professional duties in society in a good, responsible and dignified manner (Pardiyono & Puspita, 2021).

The gross enrollment rate of high school graduates continuing to higher education is still low. Indonesia's data in 2020 is 36.1%, ranking number 4 in ASEAN under Singapore, Thailand and Malaysia (Mutia, 2022). On the one hand there are still many citizens who experience economic difficulties so that they are constrained in sending their children to higher education, on the other hand there are still many private universities whose quality is below the minimum standard making it difficult to get new students to operation continuity (Pardiyono & Puspita, 2021).

The interest of prospective students to choose a university is strongly influenced by the image perception factor of the quality of universities (Widiastuti, 2022). The majority of prospective students choose universities that they are familiar with and have a good image. (Kotler, 2009) stated that a person's attitudes and actions towards an object are largely determined by their belief in the image of object. Image is a set of beliefs, ideas and influences that a person gets from an object.

Private universities face tough competition in seizing customers of prospective student. Not less than 2,650 private universities and 82 state universities compete to obtain applicants from 1,700,000 prospective students each year (Haniarti et al., 2020). Thus, private universities have entered into a market mechanism that is perfect competition or red ocean to gain a place in the hearts of prospective students. Efforts to spur Higher Education to continue to achieve quality excellence need to be continued. The application of a quality management system through a process approach places more emphasis on several criteria,





including a) fulfilling all the requirements of the need to always consider the process in generating added value, b) obtaining process performance results effectively through continuous improvement based on clear measures (Kinanti, Ritchi, & Handoyo, 2020).

Private universities are currently experiencing major challenges in providing quality higher education services. In the era of globalization, with the permitting of operational permits for foreign university branches to Indonesia through a combination of online and offline modern learning models, this is a real challenge that must be faced. Front line university service units, namely lecturers and education staff, are faced with a difficult choice. On the one hand, Higher Education institutions are required to provide quality, fair and equitable educational services, on the other hand a total adjustment is needed to blended and online learning models which really require infrastructure readiness with the need for large capital investment (Kholifah et al., 2023). Increasing the cost of education during the current post-pandemic recession coupled with stakeholder demands for overall improvement in the quality of Higher Education services for a university is a necessity.

Fundamental changes in service quality occur in not only how lecturers carry out the teaching and learning process, but also what lecturers teach and what students can learn. Lecturers and students must have the same idea in setting targets for achieving knowledge, skills and attitudes that must be developed. With limited time and intensity compared to full face-to-face learning, lecturers must sort out the main material that is a priority to be conveyed to students. Stakeholders must be able to rearrange the curriculum, learning achievement targets according to post-pandemic conditions. As a result, all parties must be able to adapt to the new normal era in the future (Kholifah et al., 2023).

Prospective students who are interested in entering lower secondary private universities have stagnated for eight years, therefore it is necessary to identify the problem why prospective students tend to stagnate. These problems can be broken down from internal factor, namely management that has not kept up with the dynamics of change or it is sourced from external factor, namely a decrease in public trust in the existence of private universities. In order to solve this problem, a study was carried out which sought to explore public perceptions (external stakeholders) of the image of private universities. This research is one of the input materials for private universities in developing a strategy of what to do to regain a high market segment from the available market segment in the Soloraya region.

In the Soloraya region, there are several private universities that have existed for a long time and have a pattern of very tight competition in obtaining prospective new students. These leading private universities include Muhammadiyah Surakarta University,





Batik Islamic University, Widya Dharma University, Slamet Riyadi University, Sukoharjo University, Tunas Pembangunan University and Surakarta University. Each private university has its own way and strategy to win the competition. Every university must be willing and able to compete with several competing private universities because the segmentation, target market, and product positioning services offered are very similar and uniform.

Identification of research problems includes: a) In the last eight years there has been a tendency for the number of secondary private university students in the Soloraya region to stagnate, b) The quality implementation of the three obligations in higher education has not been able to increase public confidence in the existence of private universities, c) Preferences for community attitudes (external stakeholders) in the Soloraya region to the private universities is still relatively minimal so it is necessary to carry out scientific studies d) several related researches still provide gaps for research. The aim to be achieved in this research is to explore the students' preferences as external stakeholders in the Soloraya region regarding the quality of private universities.

Based on the background of the problem, the formulation of the problem is "What factors influence prospective students to choose to study at private universities based on quality of service". The results of this study are useful for the new student admissions team at private universities. The results of this research can make a positive contribution to the complete database of community preferences (external stakeholders) in the Soloraya region. Thus, the new student admissions team can determine strategic steps that are right on target and on budget so that marketing activities are more effective and efficient.

2. LITERATURE REVIEW

(Sung & Yang, 2009) examined student confirmation of the quality of Higher Education services consisting of several aspects including: (a) learning structure, in the form of physical learning facilities, the ability of lecturers and educational staff involved, (b) process, including all academic administration activities, quality of midterm exam activities, quality of final exam activities, quality of practicum and education staff concern for problems that arise in students (c) learning outcomes, including student evaluation of the benefits of the learning model applied by lecturers to students to face future competition challenges .

In building and developing the image of a leading university, individuals must understand three factors that influence image which are the key to success in individual relationships and future career behavior. The three factors are the reputation of graduates,





the ability to predict graduate success, and individual competency in career prospects (Nursito & A.J.S., 2013). (Cronin, & Taylor, 2002) explained that Servqual is reliable and valid in educational settings. (Gronroos, 2004) identified two additional variables, namely communications and caring.

The application of modifying the Servqual model to the problem of the quality of higher education services is felt to be very relevant (Kinanti et al., 2020). The education sector is the leading sector in society in achieving the Millennium Development Goals. There are five relevant Servqual dimensions used to examine student selection factors at state universities. They are Tangibles, an emphasis on the quality of physical appearance, visible, such as the physical equipment of Higher Education, buildings, rooms and so on. Reliability, the ability to provide services in accordance with that was promised, such as the resolution of complaints against students that are fast, efficient as in brochures, banners whether the reality is fulfilled. Responsiveness, the desire to help students in providing the best possible service. When students experience difficulties, whether there is a desire for administrative staff and lecturers to be responsive in solving problems. Assurance, knowledge and courtesy of the administrative staff and lecturers and their ability to foster student trust in lecturers; and Empathy, namely genuine attention given to students.

According to (Kotler, 2009) if it is said that university products are science and education, then the customers are students. But if it is said that the university's products are undergraduate graduates, then the users are the business world. However, in this case the discussion regarding university customers is students and users of university graduates, as well as potential customers including parents, students and high school students.

Service attribute is a function of service utility for consumers. For universities usability can mean matching a course of study with societal needs for finding work or developing interests. Quality can be expressed in various ways, for example accreditation ratings. Prices are tuition fees, development donations or costs per student per year. Time is the period of completion of studies. In general, customers are not looking for the best of each, but a combination of all.

There are several perspectives that emerge from university customers, namely (Kinanti et al., 2020): Customer usefulness, the measure used for customer use is the number of enrolled students, the total number of students and market segment, quality offered, Measures used in quality university is Study Program Accreditation, student's grade-point average (GPA), university ranking, both nationally and internationally, ISO 9000 certification and others, the price offered, the price of university-related services including tuition per





credit, development donations and fees -average per student per year, time of providing services, In the context of university, time of providing services is generally reflected in the average time of completion of each faculty and study program, Impression and Reputation of the University, Impression and Reputation are invisible factors but is an attraction for customers. Customers often do not research the quality of the university they choose in advance, as long as the impression and reputation that emerges from the university is good. Even though what happens is not necessarily the quality of all the study programs offered are all good. Measures of impression and reputation are (Dennis, Papagiannidis, Alamanos, & Bournakis, 2016): brand identity, namely how far the university is popular among prospective customers, the total number of applicants and the ratio of the number received and Customer Relations, University customer relations are the level of student satisfaction, alumni satisfaction, satisfaction the business world that uses graduates, prospective student visits and the amount of advertising budget issued.

3. RESEARCH METHOD

The research method used is quantitative research with survey method. The survey method was focused on obtaining information/opinions from respondents (external stakeholders) in the Soloraya region regarding their preferences for the quality image of the seven private universities in the Soloraya region, while a quantitative approach was used to collect data from respondents with closed and open questionnaires.

The sampling technique used in this study was a non-probability sampling technique with the accidental sampling type, namely the sampling method based on coincidence, that is, any member of the population that the researcher meets and is willing to become a respondent can be used as a sample, if it is deemed that the person who is met by chance is suitable as a source (Hair, Black, Babin, & Anderson, 2019).

Measurement of research attributes, dimensions and indicators is explained (Kinanti et al., 2020) in table 1 below:

Table 1 Research Variable Items

No	Variables	Operational definition	Symbol	Measuring scale
1	Image and Accreditation Status	The reputation and achievements achieved by University Accreditation and addition of facilities	P1 P2	





		Accreditation rating Brochures, advertisements Reputation for achieving university products and services Product image improvement based on performance improvement Appreciation for University both domestically and abroad	P3 P4 P5 P6 P7	Likert 1 to 5
2	Fees and Scholarships	Tuition fee Cost details University rankings and tuition fees are relatively affordable Scholarship offer	P8 P9 P10 P11	Likert 1 to 5
3	Human Resources	Lecturers are experienced and linear in their fields Achievement of lecturers' and students' research and service community Updating the topic of research and dedication Productive lecturers make the campus more lively	P12 P13 P14 P15	Likert 1 to 5
4	Tangibles	Complete campus facilities Magnificent building and large study region The campus environment is comfortable and not noisy	P16 P17 P18	Likert 1 to 5
5	Motivation	Motivational scale ideals Motivation and place as well as facilities as supporting factors Motivation and environmental factors Self-motivation Distance and ease of access Alumni success	P19 P20 P21 P22 P23 P24 P25	Likert 1 to 5





		The offered study programs provide convenience for future professions University cooperation with outside parties	P26	
6	Group Factor	Family influence Influence of friends Information from the teacher Social media influence	P27 P28 P29 P30	Likert 1 to 5

Source: 2023 primary data

Data processing is done by multivariate analysis with the type of interdependence, namely using factor analysis. Factor analysis is one of the multivariate test methods used to analyze variables that are suspected of having a relationship with one another so that these linkages can be explained, mapped or grouped into the right factors. Factor analysis aims to reduce the dimensions of the data by declaring the original variable as a linear combination of a number of factors, so that these factors can explain as much as possible the diversity of data described by the original variable (Hair et al., 2019). Data processing used the SPSS 21 program tool (Santoso, 2007).

4. RESULT

4.1 Characteristics of Respondents

The characteristics of the respondents are used to see the profile of the respondents in the study. From the research findings, it was obtained data that the majority of respondents were young adults aged 22-25 years, domiciled in Klaten City, Surakarta, the middle category of living costs is 3 million to 8 million per month. This can be interpreted that students of private universities in the Soloraya region are productive young people and have middle class living costs related to purchasing power.

4.2 Validity test

The validity test is used in research to measure the attributes in the questionnaire items capable of measuring what should be measured (Hair et al., 2019). Validity test measurements in research can show the amount of variance of the attributes extracted by the latent variables/constructs studied. The variance extract value according to the statistician's agreement is 0.50. The results of the validity test in the research obtained





information on the variance extract values for all research variables that met the required criteria. It can be concluded that the total variance of the attributes extracted by the latent construct can measure what is commonly measured.

4.3 Reliability Test

The reliability test is carried out to determine the extent to which a measuring instrument consistently takes measurements, meaning that measurement is reliable or consistent (Hair et al., 2019). In this study the reliability test used the value of the reliability construct. The minimum reliability value of the latent variable indicator that is accepted according to the statistician's agreement is 0.70. The results of the research reliability test obtained information on the reliability construct. Value for each latent variable is above 0.7. It is concluded that each question attribute in the questionnaire is trusted to be tested by the model in the next stage.

4.4 Factor Analysis Test

Factor analysis test used Barlett's Test of Sphericity and Keiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) (Sekaran & Bougie, 2016) is presented in table 2 as follows:

Table 2. Barlett's Test of Sphericity and Keiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.725
Bartlett's Test of Sphericity	Approx. Chi-Square	1495.388
	Df	561
	Sig.	0.000

Source: primary data processing 2023

Based on table 2, the Barlett's Test of Sphericity and Keiser-Meyer-Olkin Measure of Sampling Adequacy (KMO-MSA) values can be explained as follows:

a. *Bartlett's Test of Sphericity*

The results of the computer program processing show the value of Bartlett's Test of Sphericity of 1495.288 with a significance of 0.000. This shows that the variables significantly influence students' decisions to choose University products and study programs as many as 30 variables.





b. *Keiser-Meyer-Olkin*

The results of the computer program processing show the value of Keizer-Meyer-Olkin

Measure of Sampling Adequacy (KMO-MSA) of 0.725 which means the value of KMO-MSA ≥ 0.1 . It can be concluded that factor analysis is suitable for use and there is closeness between variables in the population and the MSA value of all variables has an MSA ≥ 0.5 which means that all variables can be used for further analysis.

Measurement of the six factors that influence student decisions in choosing University products and services in Soloraya based on Eigenvalue ≥ 1 is described in table 3:

Table 3. Eigenvalue ≥ 1

No	Eigenvalue	% of Variance	Cumulative %
1	6.755	22.505	22.505
2	4.555	15.150	37.655
3	1.988	6.622	44.277
4	1.749	5.795	50.046
5	1.585	5.219	55.265
6	1.522	5.067	60.332

Source: primary data processing 2023

Based on table 3, it can be concluded that there are six factors influencing students' decisions to choose universities and study programs in Soloraya based on eigenvalue ≥ 1 . These six factors can explain the variation (the cumulative percentage of variance) of all data used is 60,332% while the rest are influenced by other factors outside the study. Factor 1 has the highest eigenvalue of 6,755 with the largest percentage of variance of 22,505 % while factor 6 has the lowest eigenvalue of 1,522 with a percentage of variance of 5,067 %

4.5 Respondent Opinion

Dimensions of respondents' opinions based on 6 factors are described in table 4 as follows:





Table 4. Respondent's Wishes

No	Questions	Respondent's wishes	respondents
1	Image & Accreditation Status	Continuing study at universities that have a glorious reputation and achievements	60
		Advertising becomes an influence in determining the university and can make the university's name known among the public	5
		I choose a university that has a minimum accreditation of B	5
		I really consider all kinds of awards to the university in choosing a university	20
		I choose a university by looking for a lot of information about the quality of the university	10
		The university must improve its performance so that it is accredited A	20
2	Fees & Scholarships	Studying at universities that offer many scholarships so that costs do not become a barrier in studying and can ease the burden on parents	55
		Tuition fees are not a problem in my family, the most important thing is that the university I choose has a good reputation	5
		I hope the fees at university are not too expensive (cheap)	45
		For university entrance fees, if I don't have any money, I will continue my education by borrowing or working part time, considering that education is very important	5
		If you can, tuition is absolutely free	10
3	Human Resource Factor	The university has lecturers who are competent/qualified, professional, productive, experienced and can open my horizons	40
			40





		The factors of productive and outstanding lecturers and active students are my considerations in choosing a university	10
		My hope is to have lecturers who always give the best for their students	10
		I hope every lecturer is serious in teaching	10
		All human resource factors must be competent	10
		Lecturers' researches involve a lot of students so that lecturers can work with all parties	
		Number of respondents	120
4	Tangibles	I really consider a comfortable and safe campus environment and atmosphere in choosing a university because this greatly affects my level of concentration while studying.	70
		I don't favor the facilities, but the overall quality of Higher Education, both input, output and outcome processes	20
		The completeness of Higher Education Facilities becomes my main factor in choosing university	30
		Number of respondents	120
5	Motivation Factor	I really consider the success of alumni of a university in choosing a university and study program	10
		Self-motivation will influence us in achieving success in the world of work in the future	10
		Study in universities and study programs that have good prospects in the future	60
		I want to study in study program of university according to my interests and talents	30
		The university has many collaborations with other institutions	10
		Number of respondents	120
6	Group Factor	Family factor greatly influences me in determining the choice of University and study program	50
		I really need factors from the reference group	5





	I prefer the advice of parents	20
	I will consider the input of my family, teachers and information I get from social media	10
	When I graduated from high school, I instilled self-confidence so that my friends would not influence me in choosing university and Study Program	5
	My family fully supports and believes in the university and study program that I have chosen because success depends on myself	30
	Number of respondents	120

Source: 2023 primary data

The results of the image dimension test and accreditation status for the respondent scored the highest on attributes P2, P6 and P7 namely accreditation and additional facilities, improvement of image products based on achievement improvement and awards for private universities both domestically and abroad. This means that for respondents the variable above is felt to be dominant in influencing the desire to study.

The dimensions of costs and scholarships, attributes P 11 and P10 in the form of scholarship offers and university rankings with relatively affordable tuition fees are felt to be more dominant in influencing students to study. Dimensions of human resource factor, attributes P13 and P15 in the form of research achievements in the dedication of student lecturers and more productive lecturers so as to make the campus livelier and more dominant are felt to influence students to study. The dimensions of the physical factor attribute P18 in the form of a comfortable campus environment that is not noisy is the dominant factor.

The dimensions of the motivation factor attribute P25 are the study programs offered to provide convenience for future professions and P 23 in the form of distance and ease of access are the dominant factors in the selection of prospective students to choose the study program. Finally, the P27 attribute reference dimension in the form of family influence is the dominant factor influencing students to choose study programs.





5. DISCUSSION

The research findings make a theoretical contribution to the concept of service quality, which is still the main influence on students in choosing higher education services. Building the reputation of higher education starts from the beginning through integrated quality improvement process activities to achieve competitive advantage in private universities. (Nursito & A.J.S., 2013). Blaming state universities for opening the faucet for student admissions on a large scale is a melancholy and unproductive attitude (Marwata, 2009). In the midst of various threats and fierce competition for new students, the reality in society is that there are still private universities which are still able to develop well and excel in quality. The progress, professionalism and existence of superior private universities is not a coincidence but an effort from the start to build a process of quality-based activities and a good image for the future progress of the institution.

The results of this research test are in accordance with the findings (Kinanti et al., 2020) where the dimensions of the quality of higher education services related to reliability, assurance, tangible, responsiveness, academic and access, reputation and service performance will continue to play an increasingly major role in attracting prospective new students for private universities in future. private universities that ignore service quality will increasingly be abandoned by customers which leads to a downturn.

6. CONCLUSION

Based on the analysis and discussion, the following conclusions are drawn: Image and accreditation status variable, fees and scholarships, human resource factor, physical evidence factor, motivation factor and group factor have a role in motivating students to choose excellent study programs and private universities in the Soloraya region. Test dimensions of factor analysis, image factor and accreditation status, fees and scholarships are the dominant factors as variables because they have initial eigenvalues and extraction sums of squared loading greater than the other dimensions.

Advice given from research results:

Universities must continue to pay attention to the dimensions that motivate students to choose private universities. Research must continue to be carried out periodically due to changes in competitive environmental factors between universities in the future that are disruptive and experience VUCA. The development of the governance for opening Study Programs is adjusted to the era of the Industrial Revolution 5.0 in the future.





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