

# Determinants Of Loyalty In A Private University

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**Abstract:** The study aimed to identify the determinants of loyalty in a private university. For which four variables have been considered, such as quality of service, image, educational rates, and student satisfaction that would influence loyalty. Since the enactment of Law 30220, universities have had to adapt their processes and improve the educational service, and once they have obtained licensing, they seek to position the brand in the market. The study was conducted under the quantitative, non-experimental, cross-sectional approach; the method was hypothetical deductive and analytical. The data were collected through the application of the survey with the respective questionnaires for each study variable, which were applied on the same date to the entire sample. The population consisted of 3518 students; the sampling technique applied was randomized, calculating the sample of 404, which was distributed proportionally by each professional career. Consequently, through the structural equations, we sought to ratify or not the model in reality with the support of SPSS 24 and AMOS software. The results showed that educational rates are related to satisfaction (0.83) and quality of service (0.85), while the latter is related to satisfaction (0.98). On the other hand, educational rates do not influence loyalty, but in the image (0.20), while satisfaction influences the image (0.19) and not loyalty. The quality of service influences loyalty (0.93) and image (0.61); however, it does not influence loyalty. In summary, loyalty is influenced by quality through educational rates and satisfaction. This result shows that students are loyal to the university for the academic and administrative quality they perceive in the classrooms. Therefore, once they finish their professional training, they will opt as the first option to the university under study. Likewise, the educational fees are commensurate with the market, despite being licensed by SUNEDU has not undergone any modification. Finally, a student satisfied by the quality of service and available rates will make the student loyal to the institution.

**Index Terms:** Loyalty, structural equations, university education, image, rates, satisfaction, university

## 1 INTRODUCTION

Universities worldwide are in constant competition to attract talent to their classrooms. In these times the competition is not only local, but also internationally, because the institutions continually offer courses, diplomas, specializations, masters in their university centers and social networks, allowing the interested party to have enough information on the educational offers [1] which is why it conducts an exhaustive search under the criteria of benefits and prestige. In Europe, since the 90s, higher education institutions are committed to building a knowledge society. The Bologna Declaration (1999) lays the foundations for a new university that contributes to economic development, social welfare, and dissemination through the three levels of university education, such as undergraduate, masters, and doctorate degrees, recognized in the member countries. The Berlin Declaration reiterates the importance of higher education in society and emphasizes the increase of the budget to achieve the objectives set [2]. In this regard, stakeholders continuously review the results of world rankings such as:

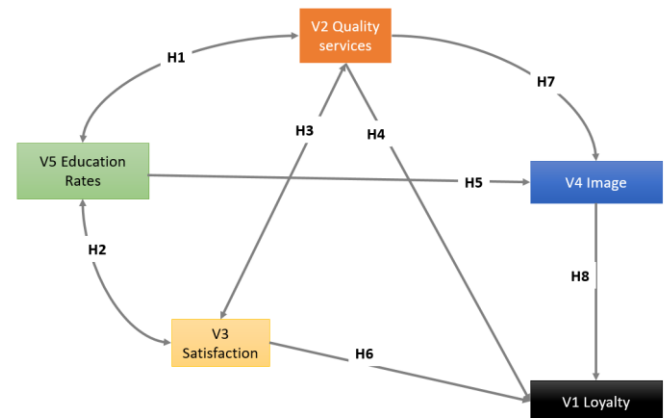
a) QS World University Rankings [3], b) Rankings of world universities prepared by Jiao Tong University of Shanghai (China); c) Webometrics Ranking; d) Which MBA? - The Economist; e) Annual Classification of Business Schools - The Wall Street Journal; to decide where to start their studies or move to an institution of greater prestige or academic position. University education in the United States responds to political, financial and social demands, which is why they invest in technology, training, and practice of relational marketing, the generation of commitment, security, guarantee of quality education, financing and research funds,

development of virtual education, in order to exceed the expectations of students [4]. In Colombia, higher education has acute problems; the administrative system is inefficient, operating costs are high, corruption is prevalent, there is low quality of services, investigations are expensive and lack social impact. The fundamental reason for students to move to other institutions internationally [5]. The Peruvian reality is very similar to those described above, university education from Law 30220 requires universities primary quality conditions since 2014 all public and private university institutions are in the process of evaluation, to date 73 universities have the category of graduates, 10 with license denied and another group under evaluation. The private university understudy was created in the 90s in the city of Lima. To date, it has two subsidiaries within the country, provides undergraduate professional training with health careers (Medicine, Nursing, Psychology, Stomatology, Medical technology), Law, Engineering (Computer and Systems Engineering, Civil, Agroindustrial), Communication and Administration Sciences (Administration, Accounting, Communication Sciences, Tourism); at the postgraduate level. The number of students has decreased in the 2019-I period concerning 2018 II. Administrative procedures are complex and bureaucratic; pensions are above the market, academic resources are scarce, software, computer rooms, time spaces are needed free, among others that generate discomfort in the student. The research will ratify or improve the proposed integral model regarding student loyalty in the university environment, recognizing the influence of service quality, image, satisfaction, and university rates. From the exploratory factor analysis and the modeling through structural equations, it is intended to explain the determinants of loyalty and understand how the model works in higher education. Veas, Sánchez and Pérez (2019) conducted the study in Chile, establishing that the image of the university and the perceived value influence satisfaction, word of mouth marketing influences satisfaction and loyalty; the results showed that the model explains satisfaction in 56.2% and loyalty in 44.7% [1]. Doña and Luque (2017) designed the model where the image of the university and the perceived value influence loyalty. It was also identified as intervening variables to vocation, career opportunities, and

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employment status. The results showed that the perceived image determines the satisfaction and loyalty of the graduates. On the other hand, the perceived value influences loyalty; consequently, satisfaction directly influences the loyalty of the graduate [6]. Punniyamorthy and Prasanna (2007) demonstrated that the model constituted by participation, value for use, price, the value of emotion, social value, brand trust, satisfaction, commitment, and repeated purchase influence in brand loyalty. Repeated purchase and functional value strongly influence loyalty, also trust in the brand, price, satisfaction, and social value influence loyalty, in short, these factors explain loyalty by 98.6% [7]. Likewise, investigations were examined at the level of Peru, De la Cruz (2017) stated that the regular level (27.6%) of the quality of service prevails at the Lima headquarters, was deficient (32.4%) at the headquarters of Juliaca, a difference that coincided with the levels of regular and good (23.3%) in Tarapoto. The common perception of the quality of service of the university was regular (24%), while it was delighted (25.8%) in Lima, dissatisfied (32.9%) in Tarapoto. Regarding loyalty, the passive level stood out (44.2%); that is, it is not a detractor or a promoter, a situation very similar in the locations mentioned above. The correlation between satisfaction and loyalty proved to be moderate ( $R$  Pearson = .535,  $p$  = .000), also with decisions and attitudes (Pearson = .497,  $p$  = .000; Pearson = .535,  $p$  = .000) [8]. Salvador (2016) demonstrated the low level of quality of service (63.29%), the absolute loyalty was false (84.54%), as well as cognitive (75.85%), affective (76.81%) and conative (64.73%) loyalty. Loyalty is affected by advertising communication, emotions, and quality of service between 58.5% and 98.3% [9]. The study is based on the Theory of self-determination, because people seek to grow continually, to dominate the spaces where they develop and integrate new experiences into their life, which is why they are considered motivational factors. The three types of motivation are: a) Extrinsic, involves the set of behaviors that lead to achieving something; b) Intrinsic, linked to activities that are carried out only for pleasure, there is no reward, no control c) Motivation, people who have no defined objectives or achievements [10,11]. The theory of goal content argues that students are loyal to the university basically because they link: a) Extrinsic motivation, referring to popularity, physical conditions, and economic success; b) Intrinsic motivation, which involves the satisfaction of human needs, psychological and emotional well-being. The same ones that lead to personal growth, affiliation, health, and contribution to the environment [10]. The investigation will be carried out concerning loyalty, understood as the recognition of a relationship between the person or client, and the company, product or service [12], generating a commitment to reiterate the purchase, to despite various factors that may influence. Loyalty is understood from three perspectives: a) Behavioral loyalty or affective or behavioral behavior referred to the repeated purchase of the product or service. B) Attitudinal loyalty, willingness to make a new purchase, influence by feelings and affection towards the product, service or organization, explains what the theory indicates, is deductive and presents a deterministic nature; c) integrative approach, includes the preferences and intention of purchase, that is to say, involves the behavioral and attitudinal perspective [13,14,15]. In the theoretical review, some models that explain customer loyalty have been identified. First, Swedish Customer Satisfaction Barometer - SCSB in the Spanish translation would be the Swedish Customer Satisfaction Barometer, where it is explained that the perceived

value depends on customer expectation and that both independently influence customer satisfaction, and this affects the claim someone could make as well as loyalty or loyalty [16]. There is also the Norway satisfaction index - NSCB, where it is very similar to the SCSB model, only that it includes the image as an element that influences customer satisfaction and loyalty [16]. The European Technical Commission developed the European Customer Satisfaction Index - ECSI methodology, where part of the company's image influences the expectation and these on the perceived quality of the products. The three elements together influence the perceived value, customer satisfaction, and loyalty, and these, in turn, are influenced by the perceived quality of services [17]. Galvao et. to the. (2017) presented the model where quality influences satisfaction, and this in loyalty, as well as quality, directly influences loyalty. In this sense, the model explains student satisfaction in 75.2%, the results show that perceive the quality as low, and therefore loyalty goes in that same order [17]. In this sense, for the study, the model based on Doña and Luque (2017) and Mazhar and Masood (2018) was designed where the quality of service or perceived value influences the image of the university, satisfaction, university rates, and the image influences student loyalty as seen in figure 1[6]. Therefore, quality refers to not making mistakes, providing the service as planned for the first time, meeting customer expectations [18]. The quality of service is perceived and measured through the client [19], has three fundamental characteristics that are: inseparable, viable, and perishable [20]. The perception of academic and administrative quality was done in a single moment; the whole was judged [21], that is, attention, resources, and the moment. In merit of the University Law, 30220 academic quality will be measured through the granting of professional degrees and degrees, curricula, academic information system, research, job placement, link of professional training with market demand; and administrative quality through infrastructure, equipment, teachers with administrative burden, complementary services, transparency of information and administrative information system [22].



**Figure 1.** The operational model proposed for research with the respective hypotheses

In the case of higher education, Unesco has defined as a multidimensional construct related to the educational model, the aims of the institution, the established quality standards, the program and resources available to provide the service [23],

the same ones that will be judged or appreciated by the educational community. There are some models to measure the quality of service such as Servqual, created by Parasuraman, Zeithaml and Berry (1985) where they established five dimensions such as reliability, empathy, responsiveness, security, and tangibility [24,25], although this model still in force, for the study a construct will be erected that includes the dimensions mentioned above. The brand image is understood as what people think or perceive of a particular brand, allowing them to build a concept and perceive it [26]. The types of image are: a) Functional image, corresponds to quality standards, or professional career, advantages, and fair price; b) Affective image, involves values, identity, brand satisfaction, innovation, and creativity; c) Image of reputation, involves the tangible aspects that involve the brand [27]. Satisfaction responds to a consumer experience (product or service), the assessment depends on previous experiences, if the student previously received excellent service, then he expects that in the next operation he will receive the same or better. Otherwise, he will show his dissatisfaction status [19], it is also understood as the comparison between expectation and experience, in summary, it is a subjective reflection of the condition [18,28,29]. In the educational field, satisfaction is understood as the attitude of the student in the short term, the product of the experience in the educational service [30,31]. The university rate refers to the economic compensation that the student makes for receiving the educational service, it is constituted by the costs and the benefit to the institution, we must understand that, given the economic situation of the countries, companies increasingly make an effort for reducing costs [32].

#### **The hypotheses of the study were:**

H1: Educational rates correlate with the quality of service in a private university - 2019;

H2: Educational rates correlate with satisfaction in a private university - 2019;

H3: The quality of service influences satisfaction in a private university - 2019;

H4: The quality of service influences loyalty in a private university - 2019;

H5: Educational rates influence the image of a private university - 2019;

H6: Satisfaction influences the loyalty of a private university

H7: The quality of service influences the image of a private university - 2019;

H8: The image influences the loyalty of a private university – 2019.

## **2 METHOD**

The approach to which the study corresponds was quantitative, characterized by being objective, confirmatory, systematic, empirical, and contrasts the hypotheses regarding the relationships and causality between the study variables, allowing inferences to be made [33]. The objective was to demonstrate through the structural equations that the proposed model involves loyalty, satisfaction, image, quality of service, and university fees explain the reality. Therefore, the systematic process will be followed, which includes the identification of the problem, the theoretical review, method design, data collection, description, and contrast of hypotheses. The research design was non-experimental; the variables were not manipulated; the problem was observed. It is transversal because the data collection was done in a single

moment, through the application of the questionnaires of the corresponding variables [34,35,36]. The method was hypothetical deductive, it was sought to accept or refute the hypotheses, and the subsequent formulation of the conclusions. The analytical method was also used because the loyalty variable in its dimensions has been decomposed; in addition, the variables that influenced the problem were identified [37]. For the investigation it was established to contrast the theoretical model of loyalty according to the students of the Faculty of Communication and Administrative Sciences, 3518 students constituted the population, the equivalent sample was 404 students (confidence level = .95; same error = .02; significance level = 0.05;  $Z = 1.96$ ). The group consisted of four professional careers, the value of  $k$  equal to 0.114837976 was calculated, allowing the sample to be calculated for each subgroup. The technique that was used to collect the data was the survey through closed questions [38,39], within the characteristics highlight the practicality, ease, and promptness of the data, it should be noted that the interviewer does not intervene or manipulate the data [40]. The instrument was the questionnaire that allowed to obtain answers to the items raised based on the variable that was established [41], the questions had Likert measurement scale. It should be noted that there is no right or lousy answer; all are valid for research [40]. The data analysis was performed with the technique of structural equations that involved observable variables (are measurable) and latent variables (not observable) [42]. It is characterized by structuring concepts not observed in relationships, in order to estimate multiple and cross-dependencies between the variables that make up the model [43,44], in addition to quantifying the causal and non-causal sources in the related statistics. The software that was used was SPSS 24 with AMOS, which allowed calculating the frequencies and percentages (descriptive statistics) of the levels of the variables and dimensions [45] and finally contrast the hypotheses (inferential statistics) [46].

## **3 RESULTS**

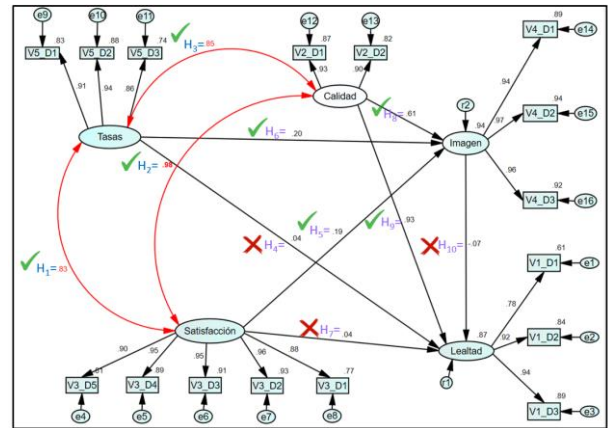
The study sample consisted of 655 students from the private university, of which 24.1% belonged to the headquarters of Chinchá, 10.1% to Chorrillos, 26% to Ica, and 39.8% to San Borja. Likewise, 61.7% belong to the Business Administration career, 5.3% to Communication Sciences, 27.2% to Accounting, and 5.8% to Tourism, hotel, and gastronomy. Regarding gender, 36.3% corresponded to men and 63.7% to women. Likewise, it was identified that according to the students, 84.6% are considered loyal, while 15.4% are not loyal, in this way regarding behavioral, attitudinal and integrative loyalty 91.3%, 77.7% and 60.6% are they consider loyal respectively. When reviewing the quality, academic and administrative quality, 78.6%, 82.9% and 73.4% consider it to be good. While, when analyzing satisfaction, reliability, responsiveness, security, empathy, and tangibility, 78.2%, 67.8%, 66.1%, 71.8%, 73.7% and 78.9% consider being satisfied. On the other hand, regarding the image, institutional, affective and reputational image, 76.9%, 85%, 70.7% and 75.4% consider it to be good, respectively. Finally, concerning educational fees, pensions, degree and degree procedures, and various procedures, consider 54.7%, 51.8%, 49.8% and 52.7%, which are respectively high.

**Pearson's correlations were then analyzed through three**

**hypotheses:**

- H1: University rates are related to satisfaction.
- H2: University rates are related to quality.
- H3: Quality is related to satisfaction.

Se demostró que existe correlación significativa entre las tasas y satisfacción ( $r=.834$ ,  $p<0.05$ ), al mismo tiempo se relaciona con la calidad ( $r=.853$ ,  $p<0.05$ ), y esta última se relaciona con la satisfacción ( $r=.981$ ,  $p<0.05$ ). Also, to accept the model, the following was raised: H0: the data does not come from the same population. When performing the contract with the Chi-square test = 475,797,  $p = .000$ ; it is concluded that the data comes from the same population, the model is accepted and is significant. In this sense, loyalty is explained in 87%, by the behavior of the variables rates, satisfaction, quality and image. The standardized Regression Weights are presented in Table 1, and Figure 1, where the direct effect of satisfaction concerning image was estimated to be 0.19 (H5), the rates with the image had an impact on 0.20 (H6), the quality with the image in 0.61 (H8), the quality in loyalty in 0.93 (H9); these values turn out to be significant because they exceeded 0.05. At the same time, the direct effect of the variables concerning the dimensions was calculated, where all the values exceeded 0.05, and it was acceptable, the minimum value was 0.78 and maximum of 0.97. However, there is no significant probability of the image with loyalty (-0.07; H10), of rates with loyalty (0.044; H4), satisfaction with loyalty (0.04; H7) because the values of the probabilities did not exceed 0.05.



**Fig. 2.** Graphical representation of the results obtained in the model of standardized structural equations

**Table 1**  
Standardized Regression Weights: (Group number 1 – Default model)

			Estimate	Decision
Image	<---	Satisfaction	.19	Acceptable
Image	<---	Rates	.20	Acceptable
Image	<---	Quality	.61	Acceptable
Loyalty	<---	Quality	.93	Acceptable
Loyalty	<---	Image	-.07	Not Acceptable
Loyalty	<---	Satisfaction	.04	Not Acceptable
Loyalty	<---	Rates	.04	Not Acceptable
Reliability	<---	Satisfaction	.88	Acceptable
Answer's capacity	<---	Satisfaction	.96	Acceptable
Security	<---	Satisfaction	.95	Acceptable
Empathy	<---	Satisfaction	.95	Acceptable
Tangibility	<---	Satisfaction	.90	Acceptable
Behavioral loyalty	<---	Loyalty	.78	Acceptable
Attitudinal loyalty	<---	Loyalty	.92	Acceptable
Integrative approach	<---	Loyalty	.94	Acceptable
Institutional image	<---	Image	.94	Acceptable
Affective image	<---	Image	.97	Acceptable
Reputation image	<---	Image	.96	Acceptable
Academic quality	<---	Quality	.93	Acceptable
Administrative quality	<---	Quality	.90	Acceptable
Pensions	<---	Rates	.91	Acceptable
Various procedures	<---	Rates	.94	Acceptable
Degrees and degrees	<---	Rates	.86	Acceptable

**Table 2**  
Standardized Indirect Effects (Group number 1 - Default model)

	Quality	Satisfaction	Rates	Image	Loyalty
Image	.000	.000	.000	.000	.000
Loyalty	-.041	-.013	-.013	.000	.000
Administrative quality	.000	.000	.000	.000	.000
Academic quality	.000	.000	.000	.000	.000
Reputation image	.581	.185	.188	.000	.000
Affective image	.589	.188	.191	.000	.000
Institutional image	.571	.182	.185	.000	.000
Integrative approach	.835	.022	.029	-.064	.000
Attitudinal loyalty	.812	.021	.028	-.062	.000
Behavioral loyalty	.693	.018	.024	-.053	.000
Tangibility	.000	.000	.000	.000	.000
Empathy	.000	.000	.000	.000	.000
Security	.000	.000	.000	.000	.000
Answer's capacity	.000	.000	.000	.000	.000
Reliability	.000	.000	.000	.000	.000
Various procedures	.000	.000	.000	.000	.000
Degrees and degrees	.000	.000	.000	.000	.000
Pensions	.000	.000	.000	.000	.000

Also, Table 2 shows the values of Standardized Indirect Effects, where it was shown that quality influences 0.581 in the reputation image, in 0.589 in the affective image, in 0.571 in the institutional image, in 0.835 in the integrative approach, in .812 in attitudinal loyalty and 0.693 in behavioral loyalty. While satisfaction indirectly influences 0.185 in the reputation image, in 0.188 in the affective image, in 0.182 in the institutional

image, while the rates influence .188 in the reputation image, in 0.191 in the affective image and 0.185 in the institutional image.

#### 4 CONCLUSIONS

The hypotheses raised were tested in which the analysis shows intermediate and low influences individually of the exogenous variables: quality, satisfaction, identity in the endogenous variable loyalty, and significant influences together, except for the exogenous variable educational rates. That does not influence the explanation of the loyalty variable — differing with the model proposed by UNESCO, where the educational rate variable is an explanatory variable of the model. The structural equation model has an adequate quality of prediction because the measures of goodness adjust, so determine it, so it helps identify relationships that contribute to the influence of student loyalty. The correlations of the exogenous variables: quality, satisfaction, identity maintain high and positive correlations in the model, which allows to determine a better fit of the model, highlighting that, although the educational rates maintain high and positive correlations with the other exogenous variables, they are low compared to the correlations between the other variables where an almost perfect linearity can be observed. According to the results obtained, results obtained in previous studies are confirmed Aguilera, Ortiz & Palma (2006), Aksoy, Keiningham, Buoye & Lariviere (2015), Araiza, Zambrano, & Ramirez (2016), Bernabel (2016), Casidy (2014), Colmenares & Saavedra (2007), Córdoba & Moreno (2017). Exogenous variables: quality, satisfaction, and image influence the endogenous variable of loyalty on an intermediate basis individually, but they together have a strong influence on loyalty. The academic rate as a study variable maintains a strong correlation with the exogenous variables: quality, satisfaction and image, but does not influence the endogenous variable loyalty [33]. It is recommended to deepen studies with intermediate latent variables that manage to determine a better fit for the model. Since the educational rate does not influence student loyalty, it is necessary to carry out further studies to determine other exogenous variables that can explain loyalty and can help the university to carry out strategies that achieve student loyalty in a global strategy of variables duly quantified exogenous ones that contribute to a strategic vision of the university as a whole.

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