

Article

Explaining Loyalty in Higher Education: A Model and Comparative Analysis from the Policy of Gratuity, a Case Applied to Chile

Maritza Katherine Galindo-Illanes ^{1,*} , Juan Alejandro Gallegos-Mardones ² and Arturo Z. Vasquez-Parraga ³ 

¹ Faculty of Economics and Business, San Sebastián University, Concepción 4030000, Chile

² Department of Audit and Information Systems, Universidad Católica de la Santísima Concepción, Concepción 4090541, Chile; jgallegos@ucsc.cl

³ Department of Marketing, University of Texas Rio Grande Valley, Edinburg, TX 78539-2909, USA; arturo.vasquez@utrgv.edu

* Correspondence: maritza.galindo@uss.cl

Abstract: Since the 1980s, numerous transformations in higher education were experienced in Latin America, and especially in Chile, a country that allowed private entities to enter the education systems and develop a market. The opportunity triggered an increase of coverage and competition to capture and retain students, followed by marketing strategies delivering student satisfaction and pursuing student loyalty. Moreover, since 2012, higher education institutions in Chile have been allowed to adopt a policy of gratuity, giving families the co-responsibility of dealing with the cost of education. So, some institutions adopted gratuity and continued receiving funds from the state, but others did not, relying instead on family income. The split in the financial responsibility of higher education seems to have generated varied reactions from the students and their families, including their satisfaction with and loyalty to the institution. Despite the abundant literature on higher education, however, a few studies attempt to explain and compare student satisfaction and loyalty across types of institutions, such as those that opted for gratuity versus those that did not. This study examines a set of relevant attributes for understanding that phenomenon; attributes such as quality of service, satisfaction, trust, commitment, and loyalty. The results reveal a prevalence of trust and familiarity among the students attending an institution with gratuity. In contrast, the results demonstrate a preponderance of commitment and satisfaction among the students attending a non-gratuity institution that relies on family, private, and personal funds to support their education.

Keywords: student satisfaction; student loyalty; higher education; gratuity; Chile



Citation: Galindo-Illanes, M.K.; Gallegos-Mardones, J.A.; Vasquez-Parraga, A.Z. Explaining Loyalty in Higher Education: A Model and Comparative Analysis from the Policy of Gratuity, a Case Applied to Chile. *Sustainability* **2021**, *13*, 10781. <https://doi.org/10.3390/su131910781>

Academic Editor: Jordi Colomer Feliu

Received: 30 July 2021

Accepted: 7 September 2021

Published: 28 September 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Higher education plays a key role in a country's social, economic, and cultural development [1]. Above all, this is true in the context of a knowledge economy where citizens demand of universities the development of professionals that are at the level for these challenges [2]. These challenges have produced a strong expansion and diversification of the student population in higher education [3], producing significant changes [4] as well as growing competition between universities due to greater globalization and awareness of the use of rankings [5,6]. This greater competition has encouraged higher education institutions to adopt management practices and recognize that students are clients of a service [6–9], in addition to being more aware of the importance of student satisfaction [10] with the aim of capturing the best applicants [11,12].

The satisfaction of the student can be understood as the result of the evaluation of the student's educational experience with the higher education institution [13–15]. Studies have shown that the satisfaction of a student has a positive impact on her or his motivation, increases rates of retention and graduation, diminishes the efforts to capture enrolment, and

increases the provision of funding [16]. As a result of this, universities have demonstrated greater commitment to the satisfaction of their students, generating quality experiences that increase their loyalty [11,13]. The benefits of loyalty are not only observed while the student is enrolled in a program, but also once he or she has graduated [17], through the provision of resources and/or donations to higher education institutions [18,19].

It has also been observed that the benefits of loyalty promote the development of links of cooperation between universities and companies [20,21], favoring the development and belonging of academic programs and the promotion of an image and reputation for the university [17,22,23]. Additionally, it has been observed that students' trust is associated with loyalty to the higher education institution and positively affects the perceived value of this relationship [24–26] and thus, a greater shared value between the students and the higher education institution [27,28], allowing these institutions to fix the prices of their services [29–32].

Numerous studies have found that students decide to enroll and then remain in a higher education institution when the perceived value is greater than its cost [33,34]. In this vein, it has been observed that there is an important relationship between the price, the perceived quality of the service and the students' intention of remaining in the university [35]. For this reason, loyalty is a key indicator for institutions of higher education where their graduates must perceive that their university is a place to which they can return during their professional life to update knowledge and develop competencies [36,37].

Chile was the first country in Latin America to establish fees for higher education, moving from a free system to another where university education is paid. Currently, its offer in higher education is made up of state and private institutions, which may or may not be free. For non-free institutions, the cost of higher education is assumed by the student's family with private resources or through indebtedness.

It should be noted that, in September 2015, Chile adopted the 2030 agenda for sustainable development, which is to ensure the fulfilment of objective 4, quality education. This involves the administration of the Chilean educational system, which is administered by all the institutions that make up the quality assurance system to ensure the goals established for SDG 4. However, few studies consider loyalty as a result of the quality of the teaching–learning process in higher education and, especially, its effect on the determination of rates for the Chilean case, especially when we consider the characteristics of the market that have sought to establish themselves since the reform that began in 1980. This point is relevant, as the proportion of private spending in Chilean higher education is significantly greater than that of OECD member countries and the international community [38]. To identify and measure loyalty in higher education, we will follow the proposal of Vásquez-Parraga et al. [39] who explain loyalty through trust and commitment, as well as the use of moderators such as product familiarity, opportunism, and communication, and others associated with the socio-demographic characteristics of the students.

2. Framework of Reference

Due to greater competitive pressures among higher education institutions to attract and retain student enrolments, these institutions have developed marketing strategies based on a focus on the client [7,9,12], and for this reason these institutions must guarantee quality education, and with that, develop loyalty in their students in the long term [40–42]. In what follows, we present the concepts and definitions that will be key in the methodological approach of this research.

2.1. Customer Loyalty

We understand loyalty as a long-term relationship between an organization and its clients [11,43], sustained through an affective component [44,45], associated with a psychological experience with a product or service [29,30,45], and observed through the retention of the clients [36,43,45–47]. The attributes that define loyalty are quality, satisfaction, trust, and commitment to a product and/or service [48–50].

2.2. Satisfaction and Loyalty in a University Context

Satisfaction is the result of experiencing and comparing the well-being generated by goods and services and of comparing it with associated expectations [51,52]. There exist different definitions for satisfaction. Oliver [51] defines it as an experience of finite duration that is directly related to a product or service, while Ali, Leifu, YasirRafiq and Hassan, [53] understand it as a mental state that arises from comparing the perceived performance of a product or service with its initial expectations, in a close relationship with the perceived value. In higher education, it has been observed that the satisfaction of the student depends on the quality of the academic and pedagogical teaching, the social environment, aesthetic aspects of the infrastructure, and the quality of the service [54], on achievement predictors in professionals after obtaining their first professional qualification [54], and on intentions to continue studies [55]. In addition, it has been shown that satisfaction is necessary to achieve important levels of loyalty [16,56,57].

We will understand loyalty as a long-term relational process between the higher education institution and its students through a set of cause-and-effect relationships that seek to recognize and satisfy the needs of the students [30,49]. The satisfaction of these needs is positively and significantly associated with the perception of quality of the higher education institution and is explained by the type of program offered, the characteristics of available facilities and associated services [58]. Prior studies show that the student's satisfaction has a positive and significant impact on her or his motivation, academic performance and, thus, increases the rates of academic retention as well as recruiting efforts and fundraising [59,60]. On the other hand, Fernandes et al. [58] confirm the results obtained by Kotler and Fox [61] and Helgesen and Nettet [17], who found a positive and significant relationship between the loyalty and satisfaction of the student, which facilitates increasing long-term benefits for the institution.

We will understand loyalty as the willingness of the student to recommend their university to other interest groups through the desire to tell positive things about it and to continue studying [20], due to a corporate image of prestige and quality [16,62–64]. For this reason, the loyalty of the student supposes a long-term relationship [43] that considers cognitive and affective aspects [44] connected with authentic experiences with the product or service [45] and extends beyond the retention of the student [46,47].

Even though there exists abundant literature that explains the relationship between satisfaction and loyalty, there are scarce studies carried out in higher education [10,15,65] that explain the perception of students' loyalty through a comparison of two higher education institutions that are differentiated mainly through the financing of their fees. At an international level, the closest evidence is in the comparison between public and private universities that shows significant differences in how students perceive quality and how it contributes to the satisfaction. In particular, the studies highlight aspects related to the role of academics, the study plan, and perspectives of future development in which students value public universities more highly than private ones [66,67].

One limitation of these studies is in their transactional focus, as student satisfaction is explained through a long-term relational focus that promotes the strengthening of the relationship between the parts [49]. To continue, a summary of the most recent and relevant loyalty studies is presented.

2.3. Higher Education and Its Context in Chile

The higher education system in Chile has undergone numerous transformations and, undoubtedly, one of the greatest reforms was carried out at the beginning of the 1980s when private players were allowed entry as providers of higher education. This has allowed for the transformation from an elitist higher education system to one of a diversified and massive nature, financed for the most part with private resources. In the 1970s, the higher education system consisted of only eight institutions, two of these public ones with 65% of total enrolments and a large number of regional campuses, and others of a private nature for which funding was assumed by the state [68]. Later, private players were allowed,

on a large scale, to create technical formation centers, professional institutes and private universities, which were added to the offering of those higher education institutions with public funding [69].

It is worth noting that in the 1980s, Chile was the first country in Latin America to establish fees for higher education, going from a free system to another, fee-based one. At an international level, the Chilean higher education system shows greater rates of coverage than countries of the OECD, which have levels of 50%. An example that catches the attention is that in the last 15 years Chile has gone from a rate of enrolment of 30% to 75%, while Norway experienced this level of growth over a lapse of 30 years, similar to what happened in Sweden and France [38].

This increase in enrolment has been accompanied by a diversity of financial instruments that have allowed students and their families to gain entry to higher education which, in turn, generated the need to regulate the growth in both the offering of academic programs as well as the value of their fees [70]. From 2012, the system for financing higher education was improved and a very important social demand was incorporated, which was gratuity in higher education, as a way of promoting greater equity in the system [38]. In 2017, the gratuity policy was extended to technical professional education under the same conditions that applied to universities, adding the condition that the institutions be non-profit, and in 2018 the benefit of gratuity was widened to students in the first six deciles [71]. As a product of these transformations, Chile is currently the undisputed leader in coverage of higher education in Latin America, with rates today above 75% in people between 18 and 24 years of age. This is mainly explained by the greater availability of financial aid for students in the form of scholarships and, since 2007, credit with the state as guarantee, CAE, [72].

2.4. Research Hypotheses

Thus, guided by the aforementioned and the challenges facing the management of loyalty in higher education in Chile, the following hypotheses are formulated:

H1: The loyalty of students attending a non-gratuity institution that relies on family, private, and personal funds to support their education is more influenced by student commitment and satisfaction than is the loyalty of students attending an institution with gratuity.

H2: The loyalty of students attending an institution with gratuity is more influenced by student trust and familiarity with the service than is the loyalty of students attending a non-gratuity institution that relies on family, private, and personal funds to support their education.

3. Methods

The research design, participants, and data collection are described.

3.1. Research Design

The research design used in this study is based on the model developed by Vásquez-Parraga and Alonso [73]. The proposed model has been used in prior research in relational marketing and considers the use of main and moderating variables, which is to say variables of a cognitive nature, which try to measure what people think, and of an affective nature, related to sentiments and emotions towards the brand [39,74]. The model considers that loyalty begins with satisfaction with the higher education service received, satisfaction established with the employees of the higher education institution, and involvement in service. A successful first experience is essential to begin the process of building student loyalty in higher education. However, this process does not immediately build loyalty but requires trust and commitment. The model recognizes two processes: cognitive and affective processes.

The cognitive process influences trust and commitment and is manifested in familiarity with the product, perceived risk, and communication. In the same way, the affective

process influences trust and commitment and is manifested in opportunism behaviors and sharing values and norms with the institution of higher education. Finally, loyalty implies a set of attitude and behavior variables that influence a student to create a lasting relationship in the long term with a higher education institution, and that is affected by the level of competence of other institutions. Taking from Vasquez-Parrag and Alonso [73], the following constructs are examined in order to explain student loyalty in the two universities: commitment, trust, satisfaction with the service, satisfaction with the personnel, competitive satisfaction, opportunism, familiarity with the service, perceived risk, communication, involvement, shared personal values, and shared institutional values. These constructs are factor-analyzed in Table 1, and their relationships examined in Tables 2 and 3. Table 4 compares their values for the two universities, and Table 5 examines the effect of all independent variables on student loyalty, while Table 6 adds the moderated effects of all independent variables on the dependent variable, student loyalty.

3.2. Participants

This research considers two private higher-education institutions with national and international certification of quality. One of these is a private legal entity, affiliated with the Council of Rectors (CRUCH) and ascribed to gratuity, and will be called higher education institution A, while the second higher education institution, which we will call B, is also a private legal entity but is neither affiliated with the Council of Rectors nor ascribed to gratuity. For institution A, the population of interest are students from the business administration and accounting/auditing programs from the Faculty of Economic and Administrative Sciences, while for institution B, the population of interest are students of the business administration program from the Faculty of Economy and Business.

For the research, a random convenience sample from both universities was considered. The population was contacted during the second semester of the year 2019 in person, indicating the aim of the survey, the use of the data and their voluntary participation. For university A, the population was of 700 students and the sample was of 420 of them. The demographic analysis reveals that 53.6% of the sample population are women and 89.8% of the students have an age range between 21 and 24 years of age and 98% are unmarried. On the other hand, university B has a population of 400 students and the sample was of 241 of them. The demographic analysis is similar to that of the students of university A, as 52.5% of the sample population are women and 90% of the students have an age range between 21 and 24 years and 98% are unmarried.

3.3. Data Collection

The data were gathered through a structured questionnaire in which items had to be graded on a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree). Previously validated scales were adopted for the measurement of each construct following the work of Vásquez-Parraga et al. [39], who argue that all the constructs, as a whole, are necessary to explain the loyalty of the student and, therefore, must not be studied in isolation. The model put forward was developed to represent, in a concrete way, the interactions that allow us to understand the attributes that define students' loyalty.

4. Results

The use of moderators is proposed to explain the effects of commitment, trust, and satisfaction on students' loyalty. These moderators permit an evaluation from a cognitive perspective, that is, how people think or decide, as well as from the affective perspective of people's feelings [74,75]. The measures for the seven constructs were taken from the same sources, adapting them as necessary to the target population of university students. Item details are depicted in Table 1 and the factor loadings for each item for their respective construct, factor loading (FL), Cronbach's α (α), average variance extracted (AVE) for each construct are also summarized.

Table 1. Confirmatory factor analysis.

Constructs, Items, Alphas (α) & AVEs	Factor Loading (FL)
Behavioral loyalty ($\alpha = 0.701$, AVE = 50.11%)	
Despite of the existence of a wide range of universities, I always chose this one	0.656
I have frequented this university for a long time	0.467
I think I will continue with my current university for a long time	0.682
I say positive things about my university when I speak with others	0.835
I recommend this university to friends and family	0.833
Affective loyalty ($\alpha = 0.775$, AVE = 53.49%)	
Once I'm used to the university, I don't like to change to another	0.664
I feel great loyalty to my university	0.854
I have developed a kind of emotional attachment to my university	0.807
The fact that my university keeps functioning calms me	0.617
I would like my current university to be my only one	0.688
Cognitive loyalty ($\alpha = 0.839$, AVE = 61.14%)	
Once I get to know my university better, I will use its services more often	0.700
At the moment I am not looking for another university	0.756
When I decide to stick with a university, I make sure it is competent	0.811
I am loyal to my university because it offers what I need	0.850
The loyalty of the student to the university is based on good reasons	0.785
Commitment ($\alpha = 0.858$, AVE = 65.39%)	
I am proud to be a student of this university	0.826
I feel a sense of belonging to my university	0.868
As far as I know, I could not have chosen a better university	0.754
I trust fully in the success of my university	0.786
I feel I have a personal relationship with my university	0.805
Trust ($\alpha = 0.854$, AVE = 59.41%)	
I fully believe in the integrity of my university	0.806
I have complete trust that my university will always give me a fair deal	0.829
My university has been transparent in its dealings with me	0.832
My university never seeks advantage by cheating its students	0.768
My university is trustworthy	0.835
I am always sure that I will benefit from the education that I am going to receive	0.498
Selection of the service ($\alpha = 0.706$, AVE = 53.75%)	
Before choosing my current university, I knew of various other alternatives	0.640
I am almost always up to date with possible new alternatives to my current university	0.757
The service and fees of my university are competitive	0.750
More companies and institutions are opening in the area of education	0.778
Opportunism ($\alpha = 0.874$, AVE = 67.04%)	
To achieve my own objectives, my university may not be able to give me the best service there is	0.541
To achieve my objectives, my university sometimes promises things it does not fulfil	0.831
My university sometimes pretends that the service is a benefit for me, but really it is seeking its own benefit	0.878
I think that my university is not interested in me	0.833
For me, the university is only interested in the fees I pay	0.794

Table 1. Cont.

Constructs, Items, Alphas (α) & AVEs	Factor Loading (FL)
Familiarity with the service ($\alpha = 0.886$, AVE = 68.90%)	
Compared to other people, I know a lot about universities	0.841
Compared to most of my friends, I know a lot about universities	0.869
I am familiar with almost all the possibilities that my university offers	0.825
I know quite a lot about how to select the best available options in universities	0.868
I have a clear idea about the characteristics of the educational service that are really important for me to reach my maximum satisfaction	0.741
Perceived risk ($\alpha = 0.729$, AVE = 70.61%) 1,2,3,4,5	
I am concerned about making a mistake when it comes to choosing a university	0.891
The decision to choose a university involves great risk	0.807
If I had to change university, I could lose some benefits already obtained	0.788
I believe if I were to incur hidden costs, I would change university	0.862
A change of university would generate a cost in terms of time and effort	0.702
Communication ($\alpha = 0.828$, AVE = 59.45%)	
My university always keeps me informed about its new services	0.744
My university clearly explains the characteristics of its services	0.801
When I make suggestions, the personnel that work in my university always take them into account	0.755
If I wanted to, I could enter into a detailed conversation about my accounts with the personnel of the university	0.770
As far as I know, the personnel of my university are concerned about receiving feedback from their students	0.784
Involvement ($\alpha = 0.836$, AVE = 60.75%)	
I have great interest in the issue of universities	0.768
I consider that the service offered by universities is fascinating	0.688
I have a compulsive need to know more about universities	0.831
I like to make comparisons between universities	0.804
I like to talk about universities with my friends and acquaintances	0.797
Shared personal values ($\alpha = 0.706$, AVE = 53.42%)	
In educational activity, unethical behavior must not be tolerated	0.686
In educational activity, unethical use of publicity is not justified	0.766
The way in which opportunistic universities try to obtain new students is unethical	0.768
It is not ethical to call students from the competition to convince them to change university	0.700
Shared institutional values ($\alpha = 0.735$, AVE = 50.73%)	
To be successful in this university it is not necessary to compromise personal ethics	0.483
In educational activity, unethical behavior must not be tolerated	0.708
In educational activity, unethical use of publicity is not justified	0.833
The way in which opportunistic universities try to obtain new students is unethical	0.753
It is not ethical to call students from the competition to convince them to change university	0.735

Table 1. Cont.

Constructs, Items, Alphas (α) & AVEs	Factor Loading (FL)
Satisfaction with the service ($\alpha = 0.904$, AVE = 78.04%)	
This is the best service I have ever received in a university	0.806
This service is just what I need	0.913
This service has functioned as well as I thought it would	0.921
This service has adequately satisfied my expectations	0.890
Satisfaction with the personnel ($\alpha = 0.799$, AVE = 62.85%)	
The personnel at my university give me personalized attention	0.838
The personnel at my university know what they are doing	0.859
The personnel at my university are never too busy to respond quickly to the concerns of their students	0.905
The personnel at my university are polite	0.780
Competitive satisfaction ($\alpha = 0.867$, AVE = 71.68%)	
Compared with other universities, mine offers the best service	0.838
In comparison with other universities, mine has the best reputation	0.859
Compared with other universities, mine offers the best global satisfaction for the student	0.905
I am satisfied with my decision to choose this university from among all the universities	0.780

α = Cronbach's Alpha; AVE = Average variance extracted.

We also showed the tri-dimensional nature of student loyalty, with a dominant trait reflected in each dimension, behavioral, cognitive or affective as conceptualized [75]. The satisfactory reliability of the indicators is suggested by values of Cronbach's α for all constructs that are above the threshold value of 0.70. We established convergent validity through the measurement of the AVE of all of the factors in the measurement model. Sufficient evidence of convergent validity comes from the fact that all construct AVEs in the model possess a score greater than 0.50, and most loadings were above 0.70 [11,76]. Each dimension is linked to a type of satisfaction relevant to the student experience: with the service, with the personnel, and in the light of offers from the competition. Trust and commitment, the two relational variables, are unidimensional constructs with all coefficients above the threshold. Finally, product familiarity, communication and student opportunism, the three moderating constructs used in this study, are all unidimensional and demonstrate all coefficients above the threshold [15].

Tables 2 and 3 show the correlations between all the constructs for universities A and B. The tri-dimensional constructs for satisfaction and loyalty are analyzed as second order constructs and are used for later analysis. The correlation coefficients for the constructs of loyalty, trust, commitment, and satisfaction are positive and significant at $p < 0.001$ and none is greater than the square root of the mean variance explained. Additionally, it is observed that age is one demographic characteristic that is negatively related with all the variables (except familiarity with the service). This means that, the younger the person, the less trace there is of loyalty in the analysis and that is also true of trust, commitment, and satisfaction with the institution.

Table 2. Correlation matrix—University A.

Details		Loyalty	Trust	Commitment	Satisfaction	Age
Loyalty	Pearson correlation	1	0.666 **	0.733 **	0.571 **	−0.148 **
	Sig. (2-tailed)		0.000	0.000	0.000	0.003
	N	413	407	408	398	396
Trust	Pearson correlation	0.666 **	1	0.740 **	0.615 **	−0.137 **
	Sig. (2-tailed)	0.000		0.000	0.000	0.006
	N	407	413	411	400	399
Commitment	Pearson correlation	0.733 **	0.740 **	1	0.638 **	−0.132 **
	Sig. (2-tailed)	0.000	0.000		0.000	0.008
	N	408	411	414	402	400
Satisfaction	Pearson correlation	0.571 **	0.615 **	0.638 **	1	−0.113 *
	Sig. (2-tailed)	0.000	0.000	0.000		0.026
	N	398	400	402	403	390
Age	Pearson correlation	−0.148 **	−0.137 **	−0.132 **	−0.113 *	1
	Sig. (2-tailed)	0.003	0.006	0.008	0.026	
	N	396	399	400	390	402

* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed).

Table 3. Correlation matrix—University B.

Details		Loyalty	Trust	Commitment	Satisfaction	Age
Loyalty	Pearson correlation	1	0.532 **	0.626 **	0.574 **	−0.037
	Sig. (2-tailed)		0.000	0.000	0.000	0.579
	N	229	225	225	215	225
Trust	Pearson correlation	0.532 **	1	0.613 **	0.628 **	−0.106
	Sig. (2-tailed)	0.000		0.000	0.000	0.107
	N	225	237	235	224	234
Commitment	Pearson correlation	0.626 **	0.613 **	1	0.575 **	−0.078
	Sig. (2-tailed)	0.000	0.000		0.000	0.236
	N	225	235	237	223	234
Satisfaction	Pearson correlation	0.574 **	0.628 **	0.575 **	1	−0.082
	Sig. (2-tailed)	0.000	0.000	0.000		0.220
	N	215	224	223	226	225
Age	Pearson correlation	−0.037	−0.106	−0.078	−0.082	1
	Sig. (2-tailed)	0.579	0.107	0.236	0.220	
	N	225	234	234	225	237

** Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the central variables that explain loyalty for students from universities A and B, respectively. It is observed that for students from university A, the three constructs that explain loyalty are positive and significant with a determination coefficient of 0.579. For their part, the students from university B show that the constructs of commitment and satisfaction are positive and significant with a determination coefficient of 0.579, but the trust construct is not significant. These results show us that, for both universities, the commitment construct prevails over trust and satisfaction. It is also observed that, for students from university B, the trust variable is not significant as it is for students from university A.

Table 4. Student loyalty models.

Variable	University A		University B	
	Coefficient	Standard Deviation	Coefficient	Standard Deviation
Constant	30.127 ***	2.828	40.470 ***	7.571
Commitment	1.237 ***	0.134	0.914 ***	0.173
Trust	0.649 ***	0.135	0.213 ***	0.200
Satisfaction	0.134 ***	0.053	0.291 ***	0.088
R ²		0.579 ***		0.457 **
F		178.638 ***		59.873 ***

** $p < 0.01$; *** $p < 0.0001$ (level of significance).

Table 5 shows the central variables that explain loyalty for students from universities A and B, controlled by the use of moderators for commitment, trust and satisfaction, respectively. Similar results to those shown in Table 4 are observed as it is seen that students from university A show a positive and significant relationship between commitment, trust and satisfaction and loyalty. Similar results are also observed for students from university B in relation to sign and significance. For their part, the use of moderators significantly increases the determination coefficient, R^2 , for students from university B, from 0.457 to 0.602. In addition, it is observed that the statistical differences for the commitment variable for students from both universities is no longer significant.

Table 5. Independent variables affecting student loyalty.

Variable	University A		University B	
	Coefficient	Standard Deviation	Coefficient	Standard Deviation
Constant	32.289 ***	4.851	42.308 ***	7.571
Commitment	1.100 ***	0.147	0.959 ***	0.173
Trust	0.534 ***	0.157	0.008 ***	0.200
Satisfaction	0.101 ***	0.062	0.349 ***	0.088
Opportunism	−0.060 ***	0.080	0.134 ***	0.120
Familiarity	0.426 ***	0.131	0.219 ***	0.153
Communication	−0.124 ***	0.138	−0.166 ***	0.179
Involvement	−0.126 ***	0.101	0.022 ***	0.135
Risk	0.113 ***	0.111	0.150 ***	0.128
Choice	0.039 ***	0.130	−0.215 ***	0.203
Shared personal values	0.155 ***	0.111	−0.165 ***	0.172
Shared institutional values	−0.016 ***	0.086	0.013 ***	0.147
Age	−1.109 ***	0.638	−0.655 ***	1.126
R ²		0.565 ***		0.602 ***
F		35.752 ***		15.399 ***

*** $p < 0.0001$ (level of significance).

In relation to the moderator constructs for loyalty, it is observed that only for the students from university A is the familiarity variable positive and significant. In relation to age, a negative relationship is observed for the students from both universities, but it shows statistical significance for students from university A. This result shows us that there is a negative relationship between age and loyalty, which is to say that the students' loyalty decreases with age.

Table 6 incorporates the use of interactive variables to the variables that explain loyalty and the moderators for students from universities A and B, observing an increase in the quality of the estimation of the proposed model based on the determination coefficient, R^2 , as this increases from 0.565 to 0.592 for the estimations of the university A and for university B, an increase in the determination coefficient from 0.602 to 0.616 is observed.

Furthermore, the positive and significant effects of the variables of trust and familiarity on the loyalty of the students from university A are observed. However, on considering interactions, the commitment variable is only significant for students from university B, which could be attributable to the fact that the students and their families take on the cost of their education.

Table 6. Independent variables with interaction effects affecting student loyalty.

Variable	University A		University B	
	Coefficient	Standard Deviation	Coefficient	Standard Deviation
Constant	5.243	23.422	37.686	39.595
Commitment	0.686	0.819	2.289 **	1.199
Trust	1.894 *	1.074	−1.066	1.527
Satisfaction	0.083	0.064	0.330 **	0.097
Opportunism	−0.527	0.518	0.671	0.758
Familiarity	1.001 *	0.599	−0.506	0.827
Communication	−0.066	0.675	0.700	0.975
Involvement	−0.416	0.535	0.196	0.739
Risk	0.080	0.111	0.172	0.144
Choice	1.220	0.881	−1.464	1.760
Shared personal values	0.085	0.584	1.104	1.225
Shared institutional values	0.361	0.437	−0.725	0.733
Age	−1.176 **	0.635	−0.815	1.181
Commitment × Familiarity	−0.020	0.022	0.027	0.030
Commitment × Communication	−0.040	0.032	−0.045	0.037
Commitment × Shared personal values	0.038 *	0.032	0.006	0.043
Commitment × Involvement	0.012	0.019	−0.005	0.026
Commitment × Shared institutional values	0.038	0.023	−0.031	0.039
Trust × Opportunism	0.016	0.017	−0.017	0.025
Trust × Communication	0.038	0.029	0.013	0.031
Trust × Choice	−0.041	0.029	0.038	0.057
Trust × Shared personal values	−0.034	0.031	−0.047	0.048
Trust × Shared personal values	−0.050 ***	0.021	0.055	0.036
R ²		0.592 ***		0.616 ***
F		179,455 ***		42,424 ***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.0001$ (level of significance).

In terms of the use of interactions between variables that define and affect the loyalty of the students in higher education, a positive and significant effect is observed between commitment and shared personal values, which indicates that students from university A are committed to the institution as they share certain personal values with it. On the other hand, a negative and significant effect is observed between loyalty with the interactive variable of trust and shared personal values, which indicates that in spite of the fact that the students from university A trust in their university, there are personal value aspects that are not shared and, as a whole, negatively affect the students' loyalty.

5. Conclusions

The sustained increase in the offering of higher education, in this case specifically in Chile, has obliged higher education institutions to recognize that students are a certain type of client and to develop management models that aim to serve and satisfy their needs. These new management models seek to develop students' loyalty to the higher education institution in order to maintain and capture new enrolments, ensuring the long-term sustainability of the institution. It is for this reason that this research seeks to measure and explain the attributes that determine students' loyalty through the use of principal and moderating variables that attempt to measure what people think and other variables

of an affective nature, related to sentiments and emotions toward the higher education institution.

For this, a structured questionnaire was used with items to be graded on a Likert scale to adequately establish each of the constructs used and thus verify the proposed hypotheses [15,39]. The proposed model begins with the satisfaction of the student, followed by trust and commitment, and finishing with the students' loyalty. For each of the proposed models, it is observed that the determination coefficient, R^2 , is robust and indicates that loyalty is closely related to each of the principal and moderating variables proposed. Therefore, students' loyalty does not rely only on satisfaction, but requires students to trust and commit themselves to the institution [39].

The results showed significant differences between the valuations of students of each of the universities under study. Students that attend university B, which is not ascribed to gratuity, show a greater commitment to the institution than students from university A. In the latter, it is the families of the students that take on the cost of higher education with private resources or debt, which could explain this. Furthermore, it is observed that students from university B show a greater level of satisfaction, which is consistent with the valuation of the price paid for a determined service [24–26].

In relation to students' satisfaction, it is observed that the students who attend university B, which is not ascribed to gratuity, show a greater satisfaction than their peers that attend university A, which is ascribed to gratuity. This agrees with what is proposed by Díaz-Méndez and Gummesson, [6] and Guilbault [9], as the greater competition in higher education has obligated these institutions to incorporate management practices that allow them to assure their economic sustainability over time, delivering quality services that are adequate for student needs [29–32]. It was observed that those students that show greater trust and familiarity attend the university ascribed to gratuity in relation to those that attend the university without gratuity.

Finally, we can mention that the quality objective of the educational system, promoted by greater competition and international agreements, will require higher education institutions to deliver a quality value proposition that allows them to ensure its sustainability over time.

Author Contributions: Author Contributions: Conceptualization, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; investigation, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; methodology, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; formal analysis, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; supervision, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; visualization, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; writing—original draft, M.K.G.-I., J.A.G.-M. and A.Z.V.-P.; writing—review and editing, M.K.G.-I., J.A.G.-M. and A.Z.V.-P. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Acknowledgments: We thank the editor and anonymous referees who read the paper and provided helpful comments for improvements.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Subrahmanyam, A. Relationship between service quality, satisfaction, motivation and loyalty. *Qual. Assur. Educ.* **2017**, *25*, 171–188. [[CrossRef](#)]
2. Levy, F.; Murnane, R. *The New Division of Labor: How Computers are Creating the Next Job Market*; Princeton University Press: Princeton, UK, 2004.
3. UNESCO. *Documento de Política Para el Cambio y el Desarrollo en la Educación Superior*; Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura: París, France, 1995.

4. Shavit, Y.; Arum, R.; Gamoran, A. *Stratification in Higher Education: A Comparative Study*; Stanford University Press: Palo Alto, CA, USA, 1997; pp. 220–239.
5. Chung, E.; McLarney, C. The Classroom as a Service Encounter: Suggestions for Value Creation. *J. Manag. Educ.* **2000**, *24*, 484–500. [[CrossRef](#)]
6. Díaz-Méndez, M.; Gummesson, E. Value co-creation and university teaching quality: Consequences for the European Higher Education Area (EHEA). *J. Serv. Manag.* **2012**, *23*, 571–592. [[CrossRef](#)]
7. Koris, R.; Nokelainen, P. The student-customer orientation questionnaire (SCOQ). *Int. J. Educ. Manag.* **2015**, *29*, 115–138. [[CrossRef](#)]
8. Koris, R.; Ortenblad, A.; Kerem, K.; Ojala, T. Student-customer orientation at a higher education institution: The perspective of undergraduate business students. *J. Mark. High. Educ.* **2014**, *25*, 29–44. [[CrossRef](#)]
9. Guilbault, M. Students as customers in higher education: Reframing the debate. *J. Mark. High. Educ.* **2016**, *26*, 132–142. [[CrossRef](#)]
10. Shahsavar, T.; Sudzina, F. Student satisfaction and loyalty in Denmark: Application of EPSI methodology. *PLoS ONE* **2017**, *12*, e0189576. [[CrossRef](#)]
11. Yousaf, A.; Mishra, A.; Bashir, M. Brand trust, institutional commitment, and their impact on student loyalty: Evidence for higher education in India. *Stud. High. Educ.* **2018**, *45*, 878–891. [[CrossRef](#)]
12. Wilkins, S.; Huisman, J. Factors affecting university image formation among prospective higher education students: The case of international branch campuses. *Stud. High. Educ.* **2014**, *40*, 1256–1272. [[CrossRef](#)]
13. Annamdevula, S.; Bellamkonda, R.S. The effects of service quality on student loyalty: The mediating role of student satisfaction. *J. Model. Manag.* **2016**, *11*, 446–462. [[CrossRef](#)]
14. Annamdevula, S.; Bellamkonda, R.S. Effect of student perceived service quality on student satisfaction, loyalty and motivation in Indian universities. *J. Model. Manag.* **2016**, *11*, 488–517. [[CrossRef](#)]
15. Gallegos, J.A.; Vasquez, A. Explaining university student loyalty: Theory, method, and empirical research in Chile. *Acad. Rev. Latinoam. Adm.* **2019**, *32*, 525–540. [[CrossRef](#)]
16. Schlesinger, W.; Cervera, A.; Pérez-Cabañero, C. Sticking with your university: The importance of satisfaction, trust, image, and shared values. *Stud. High. Educ.* **2016**, *42*, 2178–2194. [[CrossRef](#)]
17. Helgesen, Ø.; Nettet, E. What accounts for students' loyalty? Some field study evidence. *Int. J. Educ. Manag.* **2007**, *21*, 126–143. [[CrossRef](#)]
18. Hennig-Thurau, T.; Langer, M.F.; Hansen, U. Modeling and Managing Student Loyalty. *J. Serv. Res.* **2001**, *3*, 331–344. [[CrossRef](#)]
19. Freeland, R.E.; Spenner, K.I.; McCalmon, G. I Gave at the Campus. *Nonprofit Volunt. Sect. Q.* **2014**, *44*, 755–774. [[CrossRef](#)]
20. Giner, G.R.; Rillo, A.P. Structural equation modeling of co-creation and its influence on the student's satisfaction and loyalty towards university. *J. Comput. Appl. Math.* **2016**, *291*, 257–263. [[CrossRef](#)]
21. Frasquet, M.; Calderón, H.; Cervera-Taulet, A. University–industry collaboration from a relationship marketing perspective: An empirical analysis in a Spanish University. *High. Educ.* **2011**, *64*, 85–98. [[CrossRef](#)]
22. Nettet, E.; Helgesen, Ø. Modelling and Managing Student Loyalty: A Study of a Norwegian University College. *Scand. J. Educ. Res.* **2009**, *53*, 327–345. [[CrossRef](#)]
23. Thomas, S. What Drives Student Loyalty in Universities: An Empirical Model from India. *Int. Bus. Res.* **2011**, *4*, p183. [[CrossRef](#)]
24. Dlacic, J.; Arslanagic-Kalajdzic, M.; Kadić-Maglajlić, S.; Marković, S.; Raspor, S. Exploring perceived service quality, perceived value, and repurchase intention in higher education using structural equation modelling. *Total Qual. Manag. Bus. Excel.* **2013**, *25*, 141–157. [[CrossRef](#)]
25. Sampaio, C.H.; Perin, M.; Simões, C.; Kleinowski, H. Students' trust, value and loyalty: Evidence from higher education in Brazil. *J. Mark. High. Educ.* **2012**, *22*, 83–100. [[CrossRef](#)]
26. Sultan, P.; Wong, H.Y. Antecedents and consequences of service quality in a higher education context. *Qual. Assur. Educ.* **2013**, *21*, 70–95. [[CrossRef](#)]
27. Dollinger, M.; Lodge, J.; Coates, H. Co-creation in higher education: Towards a conceptual model. *J. Mark. High. Educ.* **2018**, *28*, 210–231. [[CrossRef](#)]
28. Heffernan, T.; Wilkins, S.; Butt, M.M. Transnational higher education. *Int. J. Educ. Manag.* **2018**, *32*, 227–240. [[CrossRef](#)]
29. Amir, A.M.; Md-Auzair, S.; Maelah, R.; Ahmad, A. Pricing for higher education institutions: A value-based approach. *Int. J. Educ. Manag.* **2016**, *30*, 929–940. [[CrossRef](#)]
30. Cavallone, M.; Manna, R.; Palumbo, R. Filling in the gaps in higher education quality. *Int. J. Educ. Manag.* **2019**, *34*, 203–216. [[CrossRef](#)]
31. Fullerton, G. The moderating effect of normative commitment on the service quality-customer retention relationship. *Eur. J. Mark.* **2014**, *48*, 657–673. [[CrossRef](#)]
32. Gail, B.T.; Swire, D.J. Customer value accounting for value based pricing. *J. Prof. Pricing* **2006**, *15*, 30–33.
33. Desjardins, S.L.; Toutkoushian, R.K. Are Students Really Rational? The Development of Rational Thought and its Application to Student Choice. In *Higher Education: Handbook of Theory and Research*; Springer: Dordrecht, Germany, 2005; pp. 191–240. [[CrossRef](#)]
34. Hemelt, S.W.; Marcotte, D.E. The Impact of Tuition Increases on Enrollment at Public Colleges and Universities. *Educ. Eval. Policy Anal.* **2011**, *33*, 435–457. [[CrossRef](#)]
35. Wardi, Y.; Abror, A.; Trinanda, O. The Marketing of Higher Education: Managing Student Loyalty Based on Tuition Fee Policy and Service Quality. *J. Bisnis dan Manaj.* **2018**, *19*, 101–108. [[CrossRef](#)]

36. Manzoor, U.; Baig, S.A.; Hashim, M.; Sami, A. Impact of Social Media Marketing on Consumer's Purchase Intentions: The Mediating role of Customer Trust. *Int. J. Entrep. Res.* **2020**, *3*, 41–48. [CrossRef]
37. Toledo, L.D.; Martínez, T.L. How loyal can a graduate ever be? The influence of motivation and employment on student loyalty. *Stud. High. Educ.* **2018**, *45*, 353–374. [CrossRef]
38. Espinoza, R.; Urzúa, S. Gratuidad de la Educación Superior en Chile en Contexto, Documento de Trabajo, CLAPES, PUC. 2014. Available online: <https://clapesuc.cl/investigacion/doc-trabajo-no4-gratuidad-de-la-educacion-superior-en-chile-en-contexto> (accessed on 16 July 2021).
39. Vásquez-Parraga, A.; Sahagun, M.; Escobedo, P. Customer store loyalty: Process, explanation chain, and moderating factors. In *Handbook of Research on Retailer-Consumer Relationship Development*; Musso, F., Druica, E., Eds.; IGI Global: Hershey, PA, USA, 2014; pp. 70–85.
40. Abdullah, A.H.; Wasiuzzaman, S.; Musa, R. University quality and emotional attachment of undergraduate students in a private higher education in Malaysia. *Int. J. Soc. Econ.* **2015**, *42*, 644–665. [CrossRef]
41. Chong, Y.S.; Ahmed, P.K. Student motivation and the 'feel good' factor: An empirical examination of motivational predictors of university service quality evaluation. *Stud. High. Educ.* **2013**, *40*, 158–177. [CrossRef]
42. Tan, A.H.T.; Muskat, B.; Zehrer, A. A systematic review of quality of student experience in higher education. *Int. J. Qual. Serv. Sci.* **2016**, *8*, 209–228. [CrossRef]
43. Edvardsson, B.; Johnson, M.D.; Gustafsson, A.; Strandvik, T. The effects of satisfaction and loyalty on profits and growth: Products versus services. *Total Qual. Manag.* **2000**, *11*, 917–927. [CrossRef]
44. Oh, H. Service quality, customer satisfaction, and customer value: A holistic perspective. *Int. J. Hosp. Manag.* **1999**, *18*, 67–82. [CrossRef]
45. Eshghi, A.; Haughton, D.; Topi, H. Determinants of customer loyalty in the wireless telecommunications industry. *Telecommun. Policy* **2007**, *31*, 93–106. [CrossRef]
46. Bowen, J.; Chen, S. The relationship between customer loyalty and customer satisfaction. *Int. J. Contemp. Hosp. Manag.* **2001**, *13*, 213–217. [CrossRef]
47. Firdaus, A.; Kanyan, A. Managing relationship marketing in the food service industry. *Mark. Intell. Plan.* **2014**, *32*, 293–310. [CrossRef]
48. Douglas, J.; Douglas, A.; Barnes, B. Measuring student satisfaction at a UK university. *Qual. Assur. Educ.* **2006**, *14*, 251–267. [CrossRef]
49. Rojas-Méndez, J.I.; Vasquez-Parraga, A.Z.; Kara, A.; Cerda, A. Determinants of Student Loyalty in Higher Education: A Tested Relationship Approach in Latin America. *Lat. Am. Bus. Rev.* **2009**, *10*, 21–39. [CrossRef]
50. Wilkins, S.; Butt, M.M.; Kratochvil, D.; Balakrishnan, M.S. The effects of social identification and organizational identification on student commitment, achievement and satisfaction in higher education. *Stud. High. Educ.* **2015**, *41*, 2232–2252. [CrossRef]
51. Oliver, R.L. A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *J. Mark. Res.* **1980**, *17*, 460. [CrossRef]
52. Ehigie, B.O.; Taylor, M. Managing students' loyalty to school after graduation through relationship marketing. *TQM J.* **2009**, *21*, 502–516. [CrossRef]
53. Ali, R.; Leifu, G.; YasirRafiq, M.; Hassan, M. Role of perceived value, customer expectation, corporate image and perceived service quality on the customer satisfaction. *J. Appl. Bus. Res. (JABR)* **2015**, *31*, 1425. [CrossRef]
54. Richardson, J.; Woodley, A. Another Look at the Role of Age, Gender and Subject as Predictors of Academic Attainment in Higher Education. *Stud. High. Educ.* **2003**, *28*, 475–493. [CrossRef]
55. Martínez, T.L.; Toledo, L.D. What do graduates think? An analysis of intention to repeat the same studies and university. *J. Mark. High. Educ.* **2013**, *23*, 62–89. [CrossRef]
56. Dick, A.S.; Basu, K. Customer Loyalty: Toward an Integrated Conceptual Framework. *J. Acad. Mark. Sci.* **1994**, *22*, 99–113. [CrossRef]
57. Kumar, V.; Pozza, I.D.; Ganesh, J. Revisiting the Satisfaction–Loyalty Relationship: Empirical Generalizations and Directions for Future Research. *J. Retail.* **2013**, *89*, 246–262. [CrossRef]
58. Fernandes, C.; Ross, K.; Meraj, M.A. Understanding student satisfaction and loyalty in the UAE HE sector. *Int. J. Educ. Manag.* **2013**, *27*, 613–630. [CrossRef]
59. Elliott, K.M.; Shin, D. Student Satisfaction: An alternative approach to assessing this important concept. *J. High. Educ. Policy Manag.* **2002**, *24*, 197–209. [CrossRef]
60. Hatch, D.K.; Garcia, C.E. Academic Advising and the Persistence Intentions of Community College Students in their First Weeks in College. *Rev. High. Educ.* **2017**, *40*, 353–390. [CrossRef]
61. Litten, L.; Kotler, P.; Fox, K.F.A. Strategic Marketing for Educational Institutions. *J. High. Educ.* **1987**, *58*, 479. [CrossRef]
62. Alves, H.; Raposo, M. La medición de la satisfacción en la enseñanza universitaria: El ejemplo de la Universidade da Beira Interior. *Rev. Int. Mark. Público Lucrat.* **2004**, *1*, 73–88.
63. Alves, H.; Raposo, M. The influence of university image on student behaviour. *Int. J. Educ. Manag.* **2010**, *24*, 73–85. [CrossRef]
64. Nguyen, N.; Leblanc, G. Image and reputation of higher education institutions in students' retention decisions. *Int. J. Educ. Manag.* **2001**, *15*, 303–311. [CrossRef]

65. Eurico, S.T.; da Silva, J.A.M.; Valle, P.O.D. A model of graduates' satisfaction and loyalty in tourism higher education: The role of employability. *J. Hosp. Leis. Sport Tour. Educ.* **2015**, *16*, 30–42. [[CrossRef](#)]
66. Bekhet, H.A.; Al Alak, B.A.; El Refae, G. Developing student satisfaction perception model for public and private universities in Malaysia. *Int. J. Econ. Bus. Res.* **2014**, *7*, 404. [[CrossRef](#)]
67. Van Deuren, R.; Lhaden, K. Student satisfaction in higher education: A comparative study of a public and a private college. *Bhutan J. Res. Dev.* **2017**, *1*, 40–52. [[CrossRef](#)]
68. Herrera, C.D. Educación superior en Chile como proceso de modernización. *Rev. Pedagog. Univ. Didact. Derecho* **2017**, *4*, 64–86. [[CrossRef](#)]
69. Mendes Catani, A.; Campbell Esquivel, J.C.; Porto Gilioli, R. La educación superior en Chile: Continuidades y desafíos. *Fundam. Hum.* **2005**, *6*, 9–20.
70. González, Ó.; Schmal, R. Descripción del sistema universitario de Colombia y de Chile: Una relación comparativa. *Cuad. Adm.* **2005**, *18*, 221–240.
71. Flores, R.; Iglesias, C.; Paredes, R.; Valdés, N. Política de gratuidad y desempeño académico en educación superior técnica profesional. Lecciones partir caso Duoc UC. *Calid. en la Educ.* **2020**, *52*, 239–262. [[CrossRef](#)]
72. Bernasconi, A. *Desafíos Del Futuro De La Educación Superior Chilena*; Temas de la Agenda Pública 96; Centro de Políticas Públicas UC: Santiago, Chile, 2017.
73. Vásquez-Parraga, A.; Alonso, S. Antecedents of Customer Loyalty for Strategic Intent. In *Marketing Theory and Applications*; Workman, J., Perrault, W., Eds.; American Marketing Association: Chicago, IL, USA, 2000; pp. 82–83.
74. Amine, A. Consumers' true brand loyalty: The central role of commitment. *J. Strat. Mark.* **1998**, *6*, 305–319. [[CrossRef](#)]
75. Oliver, R.L. Whence Consumer Loyalty? *J. Mark.* **1999**, *63*, 33. [[CrossRef](#)]
76. Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39. [[CrossRef](#)]