PHASES OF RELATIONAL MARKETING FOR INTERNATIONALIZATION AT UNIVERSITIES

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ABSTRACT

Higher Education Institutions (HEIs) are very interested in knowing policies that aim student happiness and in turn let the service offered or one of its qualities, like the globalization of education, gain more added value. Therefore, this paper seeks to describe the student perception on the stages of relational marketing for internationalization of Universidad de la Costa using a quantitative epistemological approach, inferential scope, and field design, as well as to analyze relational marketing as a tool to promote the internationalization of higher education. Designed with Likert scale answers, the survey was the data collecting technique; expert assessment and a pilot test on 10% of the population were used to assess instrument reliability using the Cronbach coefficient, yielding a very high reliability (95%). The structural equations model (SEM) was the statistical approach used. The major findings revealed six factors accounting for 66.51% of the total variation of the object of investigation and indicated strength in the internationalization component of the curriculum.

1. INTRODUCTION

Relational marketing has become a powerful tool for drawing, keeping, and strengthening relationships with consumers; its application has grown in companies or organizations centered on customer satisfaction, through the linking of marketing, customer service and quality (Christopher, Payne and Ballantyne, 1994), and whose practices are adjusted around the needs of consumers and market demands, as is the case with higher education. Tirado (2017) claims that for anything to be of quality, the needs of students must be satisfied, and the standards of modern society must be handled with outstanding educational material and methods.

Among the advantages of relational marketing are those highlighted by Guadarrama and Rosales (2015), who find that relational marketing improves the firm's knowledge of its clients and changes the company, its services and appears to be an additional value. Institutions that feel the need to change their practices depending on the preferences of their consumers or users, that plan or help to create value and the improvement of the quality of the service offered, as in the case of education services, whose quality is constantly evaluated will find these advantages especially interesting.

Internationalization is one of the criteria to be assessed for certification in high quality by the National certification Council (NAC) in relation to higher education in Colombia. It has progressively gained significance. Therefore, Higher Education Institutions (HEIs) require appropriate tools that allow them to preserve a close relationship with their clients and not only to draw them, but to keep and strengthen ties with them, considering higher education as a service, students as client-users, and internationalization as one of the features of the service and possible added value. Similarly, student retention is a significant criterion for good quality certification as it reflects the social responsibility of higher education institutions to shape people.

In this regard, HEIs should aim to satisfy student demands and provide a good service that fulfills societal expectations. Thus, it is necessary to know techniques that indicate customer satisfaction and let the value contributed to the service offered rise, opportunely, the traits of its service like the globalization of education. Therefore, this study begins with the examination of relational marketing, namely from its phases as a tool to promote the internationalization of higher education, all oriented towards student happiness. Its significance, therefore, is in the fact that by means of the continual study of student satisfaction, one can identify the components or factors of relevance for customer-users in the traits of the internationalization service offered by the institution, and therefore be able to provide a guide to the managers of the processes of internationalization within the HEIs. Like the internationalization department, whose relationship approach would likewise enhance the qualities of its service.

Relational marketing, according to Palacio and Rondón (2018), is a basic component for the development of internationalization in HEIs. By means of the findings of their study, they show that relational marketing is a cross-cutting tool for the operations of the internationalization of HEIs, therefore supporting the social work done by higher education by means of the growth of academic cooperation activities, and where the parties concerned are in a profit-sharing situation, implying a long-term and stable relationship.

Fortes and Eça de Abreu (2015) claim that the better the perception of the relational marketing strategies created by the school, the better the perception of the quality of the service it offers. Variables including perceived quality, contentment, perceived value, trust, and commitment would mitigate the effect of this impression. Therefore, enhancing the perceived value of the institution's service to students depends on relational marketing strategies and perceived quality.

Conversely, Camargo (2017) investigates the application of Customer Relationship Management (CRM) in Colombian HEIs; one of their initial findings, based on Seeman and O'Hara (2006), is that in the area of services offered by HEIs to students, satisfaction with a university's programs and services is also a measure of critical performance. Given that students want not only a major learning process but also a university experience in terms of service, the CRM assumes a key role in this regard.

Higher education institutions, which by their very nature have inclined to develop relationships with other colleges without any constraint other than finances or geopolitical circumstances, have used internationalization as a common method. Traditionally, it has been going to conferences, signing agreements or research mobility, increasing in recent decades to controlled mobility stays, strategic partnerships between institutions, or establishing research and teaching networks (Puertas and Moya, 2012). Knight (1994) defines "the internationalization of higher education" as "the process of integrating the international and intercultural dimension into the teaching, research and service functions of the institution".

De Zan, Galeano, and Moreno (2011) claim that internationalization may be seen from two specific

angles. The first of a commercial kind is aimed at profit; relational marketing could offer the required tools to enhance the internationalization of HEIs; the second of an academic-curriculum kind, seeks to combine the international dimension (the economic, social, political and cultural) with the substantive functions of university activities: teaching, research and social projection.

Botero and Bolívar (2015) underlines the significance that the internationalization of higher education in Colombia has gained because of the policies of economic and diplomatic openness, and also for its inclusion since 2013 as a criterion for high quality accreditation by the CNA. Strategic areas of internationalization are also seen as internationalization management, academic mobility, research internationalization, international collaboration, and the internationalization of the curriculum. Internationalization is more than agreements between higher education institutions and the movement of students, professors, researchers, administrative personnel. Sacasas-López (2014) views internationalization as a transversal process to all university activities, which has a horizontal character and must be controlled so that it can be included into Teaching, Research and Postgraduate and University Extension, therefore changing the management of internationalization.

2. METHODOLOGY

With strict order, the study used a quantitative epistemological method, which is regarded sequential and probative (Hernández, Fernández and Baptista, 2010). The survey was the chosen data collecting technique; five (5) alternative answers were specified using the Likert scale to assess service user satisfaction. According to the degree of satisfaction, each answer choice scores one (1) the lowest and five (5) the greatest. So, the rising choices are not at all happy, somewhat satisfied, neutral, quite pleased, and highly content.

The target population of the study is composed of Universidad de la Costa undergraduate students with main offices in Barranquilla, Atlántico, who by 2019 numbered 11,675 undergraduate students; this number matches what the HEIs reported via the SNIES. There were 372 students in the sample, 5% margin of error and 95% confidence level.

For the instrument's use, a population distribution—a Stratified Random Sampling (SRS- or its Spanish abbreviation MAE)—was created. Table 1 shows the sample segmentation.

A pilot test on 10% of the target study population—whose alpha value came out to be 0.953—was

conducted to determine the instrument's reliability to be used; an instrument was created to examine the factors of relationship marketing and internationalization. From the above, we may conclude that the instrument has good dependability (95%). The design of the instrument was based on the operationalization of the two study variables; for the first relational marketing variable, two dimensions were found: relational marketing phases and relational marketing strategies; for the second variable of study on the internationalization of higher education, five dimensions were found: HEIs internationalization actors, internationalization of teaching, internationalization of research, internationalization of the extension and internationalization of the curriculum. Altogether, the instrument comprises forty-six components.

The structural equation model technique, defined by evaluating the relations of dependency, both multiple and crossed, and by the degree to represent concepts not observed in these relations and to consider the error of measurement in the estimation process, is used to analyze the results (Escobedo et al., 2016).

3. RESULTS

The instrument's application included 47 items combined in the variables of research of relational marketing and internationalization of higher education. These things reflect activities and/or own resources of the higher education institution inherent to the relational strategy pointing to its internationalization.

The matrix of components rotated in the factor analysis evaluates the validity of the major components approach to account for the behavior of the variables included in the research, as shown by the findings in Table 2. This exploratory investigation using ACP led us to do a confirmatory analysis using SPSS Amos.

Table 2 reveals the first six elements account for 66.512% of the total variation of the object of research, that is, how these factors interact with the internationalization of higher education. It also shows that the first axis accounts for 16.653% of the overall variation; the second component is 15.212%, the third 14.522%, the fourth 7.252%, the fifth 6.523% and the sixth 6.350%.

The data about the compatibility of the sample to the model is shown in Table 3. The KMO statistic, which shows the proportion of variance shared by the variables examined with a value of 0.961, coefficient above 0.5, allows us to confirm not only the sample adequacy to this analysis but also its good adequacy

to the data since this indicates a good fit of the data to a factor analysis model. The Bartlett sphericity test allows us to guarantee that if the critical level is greater than 0.05 then we cannot reject the null sphericity hypothesis. Therefore, we can confirm that the significance is ideal in our study as it gets the value 0.000; therefore, we may reject this null hypothesis given the variable modification using the suitable factor analysis. Of the six components identified, only four will be used in the analysis, according to the number of correlations, thus allowing the development of the structural equations model.

3.1. Confirmatory Analysis

The confirmatory suggests validating a hypothesis to evaluate a "law" or anything that generally explains the behavior of all the examined data.

Examining the variables' real explanation of the model when one considers the multivariate exploratory analysis of the key components in the students' survey. Should this be the case, doing factorial analysis again using these four models and producing a single component suggests convergence and confirms the one-dimensional assumption. Therefore, it is the variable that has to stay in the structural equation. Examining the first model, Table 4 displays the findings. Comprising six parts, the first model—also regarded by the authors as the curricular internationalization model—is: The university has worldwide bibliographic resources. In the worldwide setting, the curriculum is competitive. The curriculum mesh reflects the modifications required in the worldwide setting. The university encourages cross-cultural areas. The university offers degrees, seminars, or courses having worldwide relevance. The university permits dual degrees with another overseas equivalent. Every one of the things alludes to a strategic field for the internationalization of higher education, including the internationalization of the curriculum.

In this sense, the six items make up strategies aimed at a specific area of internationalization management, confirmed in the documentary review previously conducted where, punctually, the MNE (2015) establishes within its internationalization guidelines the relevance of the strengthening of the international component in the different curricular developments for HEIs, in which it points out some of the strategies, elements, actors and methods that could facilitate the strengthening of the international component in the different curricular developments, and within which the offer of subjects of international character stands out or expands the courses to have international contents and conform to a system of

world credits, among others. Thus, the correlation identified in the first model responds to the guidelines of the internationalization management guidelines provided by MNE.

However, the importance of the first model lies in the fact that the correlations identified have, as a support, that they comply with what the MNE (2015) stated by being part of the same strategic area of internationalization, and additionally, because of this research work, we can infer that students identify the importance of each of those items as a decisive factor for their satisfaction in terms of curricular internationalization. Specifically, the provision of bibliographic resources of international caliber, the competitiveness and adaptability of the curriculum in an international context, the promotion of intercultural spaces in the institution, the provision of international extension courses and dual degrees are important factors for the customer-users, this is, the students, and are closely linked to their satisfaction, in such a case, if the institution does not promote each of the items, the degree of satisfaction of the students on one of the strategic areas of internationalization would decline and, in addition, would not be meeting the perceived standards in this dimension or area of internationalization. For that reason, institutions that perceive the need to strengthen the international curriculum and keep or increase the degree of student satisfaction should bet on working on the items mentioned above, and on the availability of bibliographic resources easily accessible to international studies.

In this sense, we can point out that students expect the internationalization of the curriculum to address elements beyond the classroom, they expect to have resources, spaces, contents and offer of international character that give them competitiveness in the international field, and, in addition, they wish that it is adaptable to the trends of the same one. Among the results of this component, tem number 1 refers to international bibliographic resources, being the one that most contributes to the satisfaction of students with a 4,142, which can be explained by the fact that the university under examination considers this factor in its institutional model of internationalization and has increased its efforts in the research area in recent years, which has been reflected in its positioning as the second university in Barranquilla with higher quality of its scientific production, and ranked 17th nationally by October 2020 as published in the SC Imago Institutions Rankings (SIR).

The KMO test on Table 5 confirms the correlation between the variables and the total variance table explained. It shows a component that explains

69.041% to the model. Using the AMOS program of the SPSS software, we evaluate the measurements and the quality of the model fit, which aims to determine if the factorial model fits the data. The results obtained are listed below.

3.1.1. Result 1 (Default Model)

Minimum was achieved
Chi-square = 37,468
Degrees of freedom = 5
Probability level = 0,162

Tables 6, 7, 8 and 9 collect all the data provided by the analysis. For the model to be adequate and for the hypothesis of average equality to be fulfilled, it is required that the population mean has a value greater than 0.05. In our case p-value=0.162 The absolute measures of fit must be analyzed; those determine the degree to which the model explains the observed data matrix, these measures are the probability of Chi-square likelihood and the mean quadratic approximation error (RMSEA). These p-values are appropriate if RMSEA is ≤ 0,05 o ≤ 0,08; this illustrates the distance between the data matrix of the observed data and the data matrix of the estimated p-values of the factorial model. If the p-value is greater than 0,05 it indicates that there are significant differences between the matrices, which is not optimal. Considering the second model, we have the internationalization actors, shown in Table 10.

The second model is composed of five items, which are: (1) The internationalization office is attentive to provide information to the student (2) The internationalization office is attentive to receive suggestions and proposals from students (3) The Superior Council issues administrative acts that support internationalization that benefits students (4) The Academic Council supports the definition and organization of extracurricular activities and events for the academic community oriented to internationalization (5) The Vice-Rectories promote the inclusion of new projects and policies associated with internationalization. Anew, the items are grouped according to their characteristics, in this case, the relationship is visible since the subjects are stakeholders or also called internationalization actors by the MNE (2015), that is, they are specific actions carried out by the internationalization actors inside the institution. According to what was stated by the MNE (2015), there are sundry internationalization actors within HEI beyond students and professors, among which are those previously exposed (Internationalization Office, Superior Council, Academic Council, Vice-rectories). Highlighting that internationalization must be reviewed from a holistic

perspective as a continuous process aimed at improving the educational processes, led by the directives and other actors of a specific HEI (MNE, 2015). It is important to point out that in the development of this article, the students stand out as internationalization leaders, while the "internationalization actors" are referred to in a general way, alluding to the rest of the actors within the institution. Consequently, we can establish that the model groups actions of internationalization actors within HEIs except for their leaders, and refers to the actions carried out by them aimed at strengthening Internationalization where item number 1 of the care provided by the internationalization office stands out as the one that contributes the most to this component, that is, students are more interested in being users of excellent service and therein lies their greatest degree of satisfaction. It should be noted that the students identify the internationalization office, the superior council, the academic council, and the vice-rectories as internationalization actors, and therefore, they expect actions on their part that go from the attention provided to activities and benefit spaces for the students associated with internationalization. For the above, supported by Sacasas-López (2014), we can consider internationalization as a transversal process to the set of university activities, which is horizontal and implies a change of focus in the management of internationalization. According to Jane Knight (2008), internationalization is "the process of integrating an international and intercultural dimension, within the purpose, functions and higher education delivery" (p. 30). Whereby, in order to strengthen internationalization, it is necessary to conceive it in the institutional approaches from an integral perspective that includes the active participation of each of the actors within the institution.

The KMO test, as shown in Table 11 confirms the correlation between the variables, and the explained chart of the total variance shows us a component that explains 69.911% of the model.

3.1.2. Result 2 (Default Model)

Result (Default model)
Minimum was achieved
Chi-square = 44,161
Degrees of freedom = 5
Probability level = ,052

3.1.2.1. Model Fit Summary

The analysis of the model fit indicators, shown in Tables 12, 13, 14, 15 and 16, demonstrates that the default model presents an excellent fit. The chi-square value is 4.161 with 5 degrees of freedom and a p-value

of .000, while the CMIN/DF ratio is 0.832, indicating a good fit. Goodness-of-fit indices further support this, with values above .90 for NFI (.958), RFI (.915), IFI (.962), TLI (.924), and CFI (.962). Additionally, the RMSEA value is .045, with a PCLOSE of .924, which confirms an excellent approximation of the model to the data. The parsimony indices (PNFI = .479, PCFI = .481) reflect an adequate balance between model complexity and explanatory capacity. In contrast, the independence model shows poor fit across all indicators. Finally, the exploration factor analysis of the third model, related to the substantive functions of higher education, reveals a strong unidimensional structure, with the first factor explaining 69.03% of the total variance, suggesting a high degree of internal consistency and construct validity.

The third model includes 5 items, which are: (1) The institution supports teacher mobility and receives foreign teachers (2) The institution has teachers with an international profile (3) The institution develops joint scientific research with international counterparts (4) Students have the capacity of carrying out joint research at the international level (5) The institution promotes advanced training for students abroad. Highlighting the allusiveness to teacher mobility with a 3,452. Each of the previous items is related to the study variable of internationalization of education, specifically in the dimension of internationalization of teaching, internationalization of research and internationalization of extension. Now, the model identifies a convergence between the dimensions, given that due to their characteristics or conditions they were grouped into a single component that refers to the internationalization of higher education in its substantive functions (teaching and research). In this way, the interest of students on the substantive functions of education revolves around the dimensions and, therefore, to maintain the degree of student satisfaction, it is imperative for the institution to promote teacher mobility, have teachers with an international profile, develop scientific research with foreign HEIs, promote student participation in international research and promote student training abroad.

The KMO test shown in Table 17 confirms the correlation between the variables and the explained total variance chart shows a component that explains 69.034% of the model.

3.1.3. Result 3 (Default Model)

Minimum was achieved
Chi-square = 61,988
Degrees of freedom = 5
Probability level = ,049

3.1.3.1. Model Fit Summary

The evaluation of the fourth model, collected in Tables 18, 19, 20, 21, 22 and 23, indicates an acceptable fit, though slightly less optimal compared to previous models. The chi-square value is 6.988 with 5 degrees of freedom and a p-value of .000, while the CMIN/DF ratio is 1.398, which is within the acceptable range (below 2). Parsimony-adjusted measures show moderate values for the default model, with PNFI = .470 and PCFI = .473, suggesting a reasonable balance between model simplicity and explanatory power. However, the RMSEA value of .075, with a PCLOSE of .000, reflects a marginal fit, as values under .05 are ideal and those between .05 and .08 are considered acceptable. The information criteria (AIC, BCC, BIC, CAIC) for the default model are considerably lower than those for the independence model, reinforcing that the default model provides a better approximation to the data. Lastly, the factor analysis of the variable "Institutional Philosophy" shows a strong unidimensional structure, with the first factor explaining 76.30% of the total variance, which confirms a high degree of internal consistency and construct clarity.

For the fourth model, there are 3 items: (1) The institution has a defined institutional mission and makes it known to its stakeholders (2) The institution has a defined institutional vision and makes it known to its stakeholders (3) The institution has defined institutional values and they are perceived in institutional philosophy. In this model, the correlation is visible with the second study variable, which is relational marketing, specifically in what is stated by Renart and Cabré (2005), who affirm that the key factor of good relational marketing is to follow a process in three steps, of which the first is to define the mission, values, and culture of the company. For the purposes of this research, in the first step, we refer to the clear definition of the institutional mission, vision, and values. Hence, the fourth model establishes a relationship between three study attributes: mission, vision and values, distinguishing itself as the institutional philosophy. The Mission stands out with 2.89 as the one that contributes the most to this component. Now, the previous models refer to the implementation of the institution's strategy and this last model is considered the first key step for the success of the relational strategy, which allows us to establish a relationship between the study attributes.

The KMO test shown in Table 24 confirms the correlation between the variables and the explained chart of total variance shows us a component that explains 76.301% of the model.

3.1.4. Result 4 (Default Model)

Minimum was achieved
Chi-square = ,120
Degrees of freedom = 4
Probability level = 0,02

3.1.4.1. Model Fit Summary

The analysis of the model fit reveals that the default model shows a perfect fit, with a chi-square value of 0.000, 0 degrees of freedom, and CMIN/DF of 0.000, indicating no discrepancy between the model and the observed data. Fit indices such as NFI, IFI, TLI, and CFI all score 1.000, confirming an excellent model fit. However, due to the saturated nature of the model (identical to the default), no parsimony-adjusted measures (PNFI, PCFI) are reported for either model, reflecting a limitation in assessing model simplicity. The independence model, by contrast, exhibits very poor fit across all indices, with a high RMSEA of .696 and an AIC of 547.557. The default and saturated models share the same lower AIC (12.000), further supporting the adequacy of the proposed model. Overall, the results confirm an ideal model specification with no improvement possible given the data.

4. CONCLUSION

The structural equation model allows us to establish four composite models with a series of correlations between the examined variables, and thus, support their theoretical relationship, showing their correlation through descriptive statistics. This allows us to characterize the perception of the students of the Universidad de la Costa about the implementation of the phases of relational marketing for strengthening its internationalization. In other words, the model identified four models (internationalization of the curriculum, internationalization actors, substantive functions of higher education and institutional philosophy) that constitute the models with the greatest influence on the degree of student satisfaction, which in turn are made up of items considered by students as the most relevant within a particular element of the educational service provided by the institution, as is the internationalization of education.

In this way, within the 46 items evaluated, only 18 of them grouped into four models explain 53.6% of the total variance where the first model of internationalization of the curriculum is related to international / intercultural integration in the curriculum plan and in the institutional guidelines themselves, which shows the growing interest of students for the international component integrated not only in their program of interest but also in their institution; the second model of internationalization actors highlights the need for the articulation of the different actors, and also the importance of the articulation of the functional areas of the HEIs, such as administrative, academic and organizational, remembering that internationalization is a commitment that involves the entire institution and not just a department, office or area; the third model of substantive functions of higher education shows us newly that internationalization is a process of integration of the international dimension to the functions of the university such as teaching, research, social projection, among others; finally, institutional philosophy stands out as the first step or key phase for the success of the relational strategy, since the key factor of good relational marketing is to follow a three-step process: define the company's mission, design the relational strategy and its activities, and enable the human and technical means to carry it out, and the Institutional philosophy is constituted as the first phase including mission, vision and values to adapt the contributions to a higher education institution.

It is also essential that the stakeholders or the interest group know this philosophy to involve them in it, and together achieve this goal. In short, internationalization by nature cannot be carried out in isolation, even less the substantive functions of education. Furthermore, the institution's relational strategies must be transversal to strengthen its internationalization and increase the level of satisfaction of the service users.

REFERENCES

Botero, L. H., and Bolívar, M. C. (2015). Guías para la internacionalización de la educación superior. *Gestión de la internacionalización*. Bogotá: Mineducación, 16-36. https://n9.cl/to6x0x

Camargo, L. G. C. (2017). Uso de sistemas de gestión de relaciones con clientes: evidencias de Instituciones de Educación Superior en Colombia. *Libre Empresa*, 14:1, 241-252. https://dialnet.unirioja.es/servlet/articulo?codigo=6467894

Christopher, M., Payne, A., and Ballantyne D. (1994). Marketing relacional: integrando la calidad, el servicio al cliente y el marketing. Ediciones Díaz de Santos. *Business & Economics*. https://n9.cl/e2bhr

De Zan, A., Galeano, L., and Moreno, C. (2011). Las competencias: base para la internacionalización de la educación superior. *Revista Educación en Ingeniería*, 6:11, 44-54. https://doi.org/10.26507/rei.v6n11.113

Escobedo, M. T., Hernández, J. A., Estebané, V., and Martínez, G. (2016). Modelos de ecuaciones estructurales: Características, fases, construcción, aplicación y resultados. *Ciencia y trabajo*, 18:55, 16-22. http://dx.doi.org/10.4067/S0718-24492016000100004.

Fortes, N., and de Abreu, M. E. (2015). Marketing relacional nas instituições de ensino superior público: estudo de caso da ESTeSC. Casos de marketing público y no lucrativo-Casos de Marketing Público e Não Lucrativo, 2, 113-122. https://casos-aimpn.org/index.php/casos/article/view/159

Guadarrama, E., and Rosales, E. (2015). Marketing relacional: valor, satisfacción, lealtad y retención del cliente. Análisis y reflexión teórica. *Ciencia y Sociedad*: República Dominicana, 40:2, 307-340. https://dialnet.unirioja.es/servlet/articulo?codigo=7403716

Hernández, R., Fernández, C., and Baptista, P. (2006). *Metodología de la Investigación*. Editorial McGraw Hill Interamericana. https://n9.cl/iw51c

Knight, J. (2008). Higher Education in Turmoil. The Changing World of lnternationalization. *Sense Publishers*, 16-36. https://n9.cl/rn8gz

Palacio, S., and Rondón, C. (2018). Marketing relacional para la internacionalización en instituciones de educación superior. *Revista Espacios* 39:23. http://ww.revistaespacios.com/a18v39n23/18392306.html

Puertas, J., and Moya, G. (2012). La internacionalización de la Educación Superior: El caso del Espacio Europeo de Educación Superior. REDU: *Revista de Docencia Universitaria*, 10:1, 389-414. https://doi.org/10.4995/redu.2012.6137

Renart, L. G., and Cabré, C. (2005). Las claves del marketing relacional bien hecho. Harvard Deusto Marketing y Ventas, 70. http://wpyme.es/parts/CRM.pdf

Sacasas-López, M. (2014). Estudio de modelos de control de gestión para la internacionalización universitaria en Cuba. *Ingeniería Industrial*, 35:3, 312-321. https://n9.cl/dyjfp

Seeman, E. D., & O'Hara, M. (2006). Customer relationship management in higher education: using information systems to improve the student-school relationships. Campus-wide information systems, 23:1, 24-34. https://doi.org/10.1108/10650740610639714

Tirado-Urbano, M. C. (2017). Aporte de los exámenes de estado, saber pro, al desarrollo curricular y la calidad en dos programas de psicología de Bogotá, DC. Trabajo de grado de Maestría en Psicología. Universidad Católica de Colombia. Obtained from: http://hdl.handle.net/10983/15028

TABLES AND FIGURES

Table 1: Proportional Affixation of The Sample.

Social stratum	Faculty	N° of students per social stratum	Proportion	Stratum sample
1	Faculty of Architecture	711	6.1%	23
2	Faculty of Law	1037	8.9%	33
3	Faculty of Humanities	1485	12.7%	47
4	Faculty of Economic Sciences	2949	25.3%	94
5	Faculty of Engineering	5493	47.0%	175

Table 2: Total Variance Explained.

Total variance explained								
Components	Initial values	Squared load extraction sums	Rotation sums of loads squared					
	Total	% Variance	% Accumulated	Total	%Variance	%Accumulated	Total	%Variance	%Accumulated
1	22,157	48,168	48,168	22,157	48,168	48,168	7,661	16,653	16,653
2	2,560	5,566	53,735	2,560	5,566	53,735	6,998	15,212	31,866
3	1,906	4,144	57,879	1,906	4,144	57,879	6,680	14,522	46,388
4	1,536	3,339	61,218	1,536	3,339	61,218	3,336	7,252	53,640
5	1,294	2,814	64,032	1,294	2,814	64,032	3,000	6,523	60,163
6	1,141	2,480	66,512	1,141	2,480	66,512	2,921	6,350	66,512
Extraction method: main components analysis.								

Table 3: KMO And Bartlett Test.

KMO and Bartlett Test			
Kaiser-Meyer-Olkin sampling adequacy measure			,961
Bartlett sphericity test		Approx. Chi-squared	1389,092
		GI	1035
		Sig.	,000

Table 4: Curriculum Internationalization Model.

Total variance explained						
Items	Initial values			Squared load extraction sums		
	Total	%Variance	% Accumulated	Total	% Variance	%Accumulated
1	4,142	69,041	69,041	4,142	69,041	69,041
2	,526	8,772	77,841			
3	,432	7,203	85,017			
4	,388	6,466	91,483			
5	,334	5,568	97,051			
6	,177	2,949	100,00			

Table 5: KMO And Bartlett Test.

KMO and Bartlett Test			
Kaiser-Meyer-Olkin sampling adequacy measure			,890
Bartlett sphericity test		Approx. Chi-squared	1411,777
		Df	15
		Sig.	,000

Table 6. Model Fit Summary Cmin

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	15	7,468	5	,000	1,494
Saturated model	20	,000	0		
Independence model	10	1182,988	10	,000	118,299

Table 7: Baseline Comparisons.

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,968	,937	,972	,945	,972
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Table 8: RMSEA.

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,000	,095	,173	,000
Independence model	,000	,000	,000	,000

Table 9: Parsimony-Adjusted Measures.

Model	PRATIO	PNFI	PCFI
Default model	,900	,484	,906
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

Table 10: Internationalization Actors.

	Total variance explained					
Items	Initial eigenvalues	Squared load extraction sums				
	Total	%Variance	% Accumulated	Total	% Variance	%Accumulated
1	3,496	69,911	69,911	3,496	69,911	6911
2	,529	10,575	80,486			
3	,397	7,941	88,427			
4	,324	6,472	94,899			
5	,255	5,101	100,000			
	Extraction method: main components analysis.					

Table 11: KMO And Bartlett Test.

KMO and Bartlett Test			
Kaiser-Meyer-Olkin sampling adequacy measure			,861
Bartlett sphericity test		Approx. Chi-squared	1033,255
		Df	10
		Sig.	,000

Table 12: CMIN.

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	15	4,161	5	,000	0,832
Saturated model	20	,000	0		
Independence model	10	1040,265	0	,000	104,027

Table 13: Baseline Comparisons.

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,958	,915	,962	,924	0,962
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Table 14: Parsimony-Adjusted Measures.

Model	PRATIO	PNFI	PCFI
Default model	,500	,479	,481
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

Table 15: RMSEA.

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,045	,108	,186	,924
Independence model	,527	,500	,554	,000

Table 16. Substantive Functions of Higher Education.

	Total variance explained					
Items	Initial eigenvalues	Squared load extraction sums				
	Total	%Variance	%Accumulated	Total	% Variance	%Accumulated
1	3,452	69,034	69,034	3,452	69,034	69,034
2	,592	11,831	80,865			
3	,426	8,512	89,377			
4	,310	6,205	95,581			
5	,221	4,419	100,000			
	Extraction method: main components analysis.					

Table 17: KMO And Bartlett Test.

KMO and Bartlett Test			
Kaiser-Meyer-Olkin sampling adequacy measure			,845
Bartlett sphericity test		Approx. Chi-squared	1039,4
		Df	10
		Sig.	,000

Table 18: CMIN.

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	10	6,988	5	,000	1,398
Saturated model	15	,000	0		
Independence model	5	1046,491	10	,000	104,649

Table 19: Baseline Comparisons.

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	10	6,988	5	,000	1,398
Saturated model	15	,000	0		
Independence model	5	1046,491	10	,000	104,649

Table 20: Parsimony-Adjusted Measures.

Model	PRATIO	PNFI	PCFI
Default model	,500	,470	,473
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

Table 21: RMSEA.

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,075	,138	,216	,000
Independence model	,529	,502	,556	,000

Table 22: AIC.

Model	AIC	BCC	BIC	CAIC
Default model	81,988	82,316	121,177	131,177
Saturated model	30,000	30,493	88,783	103,783
Independence model	1056,491	1056,655	1076,085	1081,085

Table 23: Institutional Philosophy.

Items	Initial eigenvalues	Squared load extraction sums				
Total variance explained						
	Total	%Variance	%Accumulated	Total	%Variance	%Accumulated
1	2,289	76,301	76,301	2,28 9	76,301	76,301
2	,513	17,108	93,409			
3	,198	6,591	100,000			
Extraction method: main components analysis.						

Table 24: KMO And Bartlett Test.

Kaiser-Meyer-Olkin measure of sampling adequacy	672		
Bartlett's test of sphericity	Approx squared	Chi-	538,881
	Df		3
	Sig.		,000