

Students' perception of university communication

Percepción de estudiantes sobre la comunicación institucional universitaria

Percepção dos alunos sobre a comunicação universitária

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ABSTRACT | The aim of this research is to evaluate the organizational communication of 21 Ecuadorian universities, from the audience's perception. An online survey with internal consistency ($\omega=0.91$) was applied to 3,540 students. Their perception as potential and current students was valued, the data were analyzed using the Mann-Whitney U test and the Kendall's τ coefficient. It is evident that the factor that influenced the most the institution choice is cost, that private universities manage the relationship with students better, and that satisfaction with institutional communication is correlated with commitment that current students feel. It is essential that HEIs have their own communication departments and that they value online and offline channels, as well as the perception of parents, since they have a high influence on the decision of their children.

KEYWORDS: organizational communication; universities; higher education; student perception; marketing.

HOW TO CITE

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RESUMEN | *El objetivo de esta investigación es evaluar la comunicación institucional de 21 universidades ecuatorianas desde la percepción de los estudiantes. Se aplicó una encuesta en línea con consistencia interna ($\omega=0,91$) a 3540 alumnos y se valoró su percepción como estudiantes potenciales y actuales; los datos se analizaron mediante la prueba U de Mann-Whitney y el coeficiente τ de Kendall. Se destaca que el factor que más influyó para elegir la institución es el costo, que las universidades privadas gestionan mejor la relación con el alumnado y que la satisfacción sobre la comunicación está correlacionada con el compromiso que sienten los estudiantes actuales. Es indispensable que las instituciones de educación superior cuenten con equipos propios de comunicación y que valoren los canales en línea y offline, así como la percepción de padres/madres, ya que tienen una alta influencia en la decisión de sus hijos.*

PALABRAS CLAVE: *comunicación organizacional; universidad; educación superior; percepción estudiantil; marketing.*

RESUMO | O objetivo desta pesquisa é avaliar a comunicação organizacional de 21 universidades equatorianas, a partir da percepção dos alunos. Foi aplicada uma pesquisa on-line com consistência interna ($\omega = 0,91$) a 3.540 estudantes, e sua percepção foi avaliada como estudantes potenciais e atuais; os dados foram analisados pelo teste U de Mann-Whitney e pelo coeficiente de Kendall. Destaca-se que o fator que mais influenciou na escolha da instituição é o custo, que as universidades privadas melhor gerenciam o relacionamento com os alunos e que a satisfação com a comunicação está correlacionada com o comprometimento sentido pelos estudantes atuais. É essencial que as instituições de ensino superior tenham suas próprias equipes de comunicação e valorizem os canais online e offline, bem como a percepção dos pais e mães, pois têm grande influência na decisão dos filhos.

PALAVRAS-CHAVE: *comunicação organizacional; universidade; ensino superior; percepção dos estudantes; marketing.*

INTRODUCTION

There are several studies on the use of media for academic purposes, but in the institutional context there has been little research on the communication needs of students. North America and Europe lead the academic rankings; consequently, there are few publications on Latin American universities.

Interactive communication has made sectors such as higher education, which seemed safe, face competitive forces (Khanna et al., 2014) due to the pressure to respond with limited resources to a growing demand (Alves & Raposo, 2010). Online communication, being open access, constitutes an indispensable tool in a scenario full of uncertainties for current and potential students, who need to analyze the institution they are going to opt for, facing the possibility of being wrong in their decision.

The Internet promotes academic, scientific, and social competitiveness, contributes to improve positioning, to get more students, and to consolidate research teams (Ortega & Aguillo, 2009), provided that communication is strategic to, based on research, meet the information needs of its stakeholders and project an image consistent with its mission (Veas, 2015).

Stakeholders are mainly prospective and current students. To attract them and build their loyalty, universities need to know their expectations (García-García, 2018). Globally, 61% of Internet users are university students and they are the ones who connect the most every day, around four hours and 15 minutes (GlobalWebIndex, 2019). This has generated interest in conducting research on the student body, as potential and current students.

In the case of prospective students, there is literature on the level of difficulty in choosing a university, on institutional, communication, and recommendation factors that have influenced their choice, among others, such as the importance they attach to institutional communication channels during the decision process. As for the current student body, the issues that are important to them are studied, and how they value the communication management that their universities deploy in the quest to strengthen their relationship with them.

Factors linked to university selection by prospective students

Knowing the prospective student body's perception of universities' organizational communication allows for personalized and effective media planning (Goodrich et al., 2018). Although some research has attempted to develop a definitive list of factors that influence students' decision on which university to choose, there are no homogeneous results, due to the obvious contrast between countries (Hemsley-Brown & Oplatka, 2015).

For example, in England, employment opportunities motivated the choice of the institution more than vocation (Maringe, 2006). Similarly, the factor that most influenced students at public universities in Valencia (Spain) was job expectations (Fayos et al., 2011). On the other hand, those enrolled in a Portuguese public university considered that the proximity between their home and the location of the institution was more important (Simões & Soares, 2010).

In other contexts, students at a Midwestern university in the United States valued academic advising and educational effectiveness the most, according to Elliott and Healy (2001), who suggested including prestige or price in further study. In this regard, Casidy and Wymer (2018) defined three student profiles in Australia, based on psychographic factors: strivers, modest achievers, and prestige-seeking innovators. The latter two demonstrated a more positive attitude towards their university, while the strivers, if they had a choice again, would choose a more prestigious institution.

Peruta and Shields (2016) note that universities use social networks to obtain information from potential students during the decision process, primarily Facebook. For Hayes and colleagues (2009), it was logical to assume that the use of networks would make HEIs interested in using them for recruitment. However, in the United States, online media have not replaced campus visits or website visits (Shields & Peruta, 2018). In the United Kingdom, the student body considers that the most important sources of information for deciding were the Universities & Colleges Admissions Service website and university portals. As for social media, they perceive them as fun and conversational channels, where they can find opinions, but recognize that they are not ideal for finding detailed content and deciding (Gibbs & Dean, 2015).

Similarly, for the student body in 12 provinces in the Netherlands, social media were the least used channels to inform themselves and decide on the program and institution; although 95.1% had confirmed to have an active account, recommendations from family/friends were more influential (Constantinides & Zinck Stagno, 2011). The media preferred by students at a U.S. university were campus visits, portals, and recommendations from family/friends (Goodrich et al., 2018). The medium most consulted by students at a Portuguese university was its website, followed by the recommendation of other students and professors (Simões & Soares, 2010).

On the other hand, more than 40% of students at a Greek university confirmed that they did not seek information from institutional channels, but rather consulted the opinion of reference groups (Menon et al., 2007). Welsh university students would have preferred a greater use of digital resources whose source was the students

themselves (Moogan, 2011). In England they have relied more on recommendations from friends/relatives or people they did not know, but for whom they felt an affinity, than on information provided by the university itself (Slack et al., 2014). Word-of-mouth has been important for prospective students in Turkey, as advice from friends/family was more effective than conventional channels. Özdemir and colleagues (2016) argue that satisfaction and transparent communication generate recommendation, so it is essential that the higher education services offered by universities meet the expectations that students have about them.

Effective communication of university social responsibility, understood as a policy of continuous improvement to fulfill its social mission (Vallaey, 2008) constitutes another factor of important influence on university choice (Erazo-Coronado et al., 2020).

Factors linked to the image of the university in the case of students

HEIs must investigate what is important to their student body, generate expectations and fulfill them, since the most effective means of communication arises from satisfied students (Elliott & Healy, 2001). Furthermore, higher education requires a participatory and interactive relationship on the part of universities and their students to avoid student dropout (Alves & Raposo, 2010; Helgesen, 2008).

For students at Ålesund University College in Norway, satisfaction and perception of institutional reputation influence their loyalty (Helgesen, 2008). In a very similar way, Portuguese public university students mentioned that the image, beliefs, and impressions that exist about their institution is what most influences their satisfaction and loyalty (Alves & Raposo, 2010). For students at a Chilean university, it is commitment that most influences their loyalty; however, as explained by Rojas Méndez and colleagues (2009), the quality of education that students perceive first influences their degree of satisfaction, which in turn influences trust and this, in turn, influences commitment. Gallegos and Vasquez (2019) confirm the validity of this sequence of satisfaction, trust, and commitment, which culminates in student loyalty. Two studies in Brazil argue that trust and loyalty are fundamental to achieve more student participation (Carvalho & de Oliveira Mota, 2010; Sampaio et al., 2012). In the field of communication analysis of private universities in Indonesia, Sumartias and Nuraryo (2017) empirically find the direct influence of high levels of satisfaction and a good university brand image on student loyalty, and the ability of this brand to generate positive communication. All these factors are critical predictors of the development of positive word-of-mouth transmission, to which they attach strategic importance in building student loyalty and ensuring that students remain at the university and pursue graduate studies (Rehman et al., 2020).

Indeed, academic quality, institutional reputation, and the higher education service offered by universities as a whole influence satisfaction and loyalty, on which there are numerous studies. However, little is known about the level of satisfaction that students have regarding how HEIs care for their relationship with them, i.e., how they manage institutional communication (Aitken, 1982; Rodríguez & Santamaría, 2012).

For example, for Portuguese students the quality of websites is not good, and they consider that their universities do not use websites as a communication tool to strengthen the relationship, gain their loyalty, and respond to their information needs (Vera Silva & Gouveia Rodrigues, 2012).

As for social networks, and according to the perception of students and alumni of management schools in India, these should improve their communication strategies, as they are channels where students and graduates can help disseminate information and improve brand value (Kahnna et al., 2014). The positive effects of Instagram in the digital communication strategy of Indonesian universities have been proven to strengthen their students' engagement (Kurniawan et al., 2020). The type of content of institutional posts on this social network is determinant in generating this engagement and encouraging student participation (Bonilla et al., 2020). Networks have been found to improve the quality of the relationship between a public university in the Eastern United States and its students (Clark et al., 2017). However, at the University of Sunshine Coast (Australia) students never or rarely use them to interact in the offline context with the university community; this influences them not to feel fully connected to it (Sutherland et al., 2018). The market orientation and branding strategy of universities have been identified as variables with positive and very significant impact on satisfaction rates, loyalty, and communication behavior of Australian students (Casidy, 2014).

Considering that there are few studies on how students perceive the institutional communication of universities, from their position as potential and current students, especially in Latin America, the objective of this paper is to evaluate university communication from the audience's perception and present the results of a methodology used in Ecuador, which is adaptable to the countries of the region. To this end, nine research questions were posed, based on a review of the literature.

Research questions for potential students (1-3):

RQ1. What level of difficulty did students have in choosing a university?

RQ2. What is the level of importance of institutional, marketing communications, and recommendation factors in choosing the university?

RQ3. How important would institutional communication channels have been during the decision process?

Research questions for students (4-9):

RQ4. How important is it for students to be informed about issues at their universities?

RQ5. How satisfactory is the communication that institutions direct to their students about university issues?

RQ6. How do they value the institutional communication channels?

RQ7. What level of satisfaction do they feel about the university communication deployed in the online channels?

RQ8. What level of commitment do they feel to their universities?

RQ9. Is there a correlation between the level of satisfaction with institutional communication and the level of commitment they feel with their universities?

RQ10. Methodology

Population and sample

Shields and Peruta (2018) suggest including private and public higher education institutions in studies on student perception so that the results are generalizable; therefore, we applied a stratified sampling. It is worth mentioning that, in Ecuador, the classification of higher education institutions is determined based on funding, in four types: private that receive State funds, private self-financed, national public ones, and public that operate in the country under international agreements and conventions.

The student population (621,210) for the year 2019 was consulted on the web portals of the 57 Ecuadorian universities that offer undergraduate degrees through the public information available in the universities' accountability. Subsequently, the sample was calculated with a confidence level of 97% and sampling error of 3%. A total of 1306 students were obtained (493 corresponding to private institutions and 813 to public institutions).

The goal was exceeded, as we obtained 3540 surveys, 620 from private universities and 2920 from public universities.

Process

Communications were sent up to three times to the 57 deans to inform them of the objective of the research and to request that the survey be shared with their students through the institutional online channels. It was made known that the

results of the research would be reflected in a scientific article, which would be shared with them once published. Likewise, there was a written commitment to maintain the anonymity of the participants and the non-disclosure of their personal data. Of the total number of universities, 42 authorities did not respond to the request, 14 responded positively and one gave a negative response. It is worth mentioning that although most of the deans did not answer and their reasons are unknown, 21 universities finally participated.

In Ecuador there are two academic periods per year: April-August and October-February. Responses were received in January 2020 to obtain answers to the satisfaction questions from first level students. Their participation was voluntary and when introducing the instrument, in addition to thanking them for their willingness to participate, the estimated response time was indicated (between 5 and 7 minutes), the objective of the research was made known, and it was stated that their identity would not be revealed. The contact details of the persons responsible for the study were also provided, including institutional email addresses.

Instrument

Central to the design of the questionnaire were inputs from similar studies (Casidy & Wymer, 2018; Constantinides & Zinck Stagno, 2011; Elliott & Healy, 2001; Helgesen, 2008; Maringe, 2006; Özdemir et al., 2016; Shields & Peruta, 2018). Details are provided below. The survey was developed in a Google Form.

To determine the level of understanding of the questions and which items could be added or eliminated, seven students who were not part of the sample were interviewed. After that, with the same purpose, 40 students –who were also not part of the sample– were surveyed, with the corresponding calculation of the instruments' reliability. It is important to mention that reliability was recalculated once the 3540 responses were reached, using the omega coefficient, optimal for social studies that include Likert-scale items (Deng & Chan, 2017; Viladrich et al., 2017), because it presents less risk than Cronbach's alpha of overestimating or underestimating reliability (Dunn et al., 2014). On average, $=0.91$ was obtained (table 1).

The instrument contains 73 items distributed in three main sections (table 1). Section 1 contains numerical, dichotomous, and polytomous variables about general data; sections 2 and 3 contain categorical Likert-type variables about perception before having entered university and about perception as current students, respectively. Of the items from other authors that have been adapted to the instrument, the works of Constantinides and Zinck Stagno (2011), Maringe (2006), Özdemir and colleagues, (2016) and Shields and Peruta (2018) were key for the second section; the contributions of Elliott and Healy (2001) and

Helgesen (2008) were so for the third. As for the study by Casidy and Wymer (2018), it was crucial for the second and third sections.

Six indexes were created. For the second section on prospective students: institutional factors index (IFI), marketing communications factors index (MCFI), and recommendation factors index (RFI). For the third section on current students: subject satisfaction index (SSI), institutional channels satisfaction index (ICSI), university engagement level index (UELI). The calculation to create each index was based on the proposal of Berganza and colleagues (2017), where $I = \frac{(x_1 + x_2 + \dots + x_n)}{n}$. That is, I=index, x=variables and n=number of variables.

1. General data		ω
Age		
Gender		
University/funding type–public or private		
Length of career in years		
Study year		
Career field of knowledge according to UNESCO		
2. Perception before entering university		
Level of difficulty in choosing a university		
Importance of institutional factors in choosing a university		Institutional factors index (IFI)
Institutional reputation		
Position in rankings		
Scholarships/Facility of payment		0.84
Study costs		
City/location		
Importance of marketing communications factors in choosing a university		Marketing communications factors index (MCFI)
Television advertising		
Press advertisements		
Radio spots		
Advertising on non-university websites		0.93
Social networks advertising		
Visit/s that the university made to your high school		
University fairs		

Importance of recommendation factors for university choice Recommendation factors index (RFI)

University students	
University graduates	
School or high school teachers	
Vocational counselors	
Friends/acquaintances	0.92
Internet forums or communities	
Family members	
Parents	

Importance of institutional communication channels as sources of information for prospective students

Chat on the website	
Contact form available on the website	
Chat on a university social network	
University email address	
Visits to the university's social networks	0.95
Telephone calls	
Website	
University WhatsApp	
Visits to the university	
Leaflets/brochures	

3. Perception as a university student

Importance of being informed about the following topics

Institutional: news/information about the university in general	
Of social interest or development, public holidays, commemorative days	
Academics: undergraduate, graduate, or continuing education news/information	0.93
Research and development	
Events: institutional, social, sporting	

Satisfaction about the communication that universities address to their students about the following topics

Subject satisfaction index (SSI)

Academics: undergraduate, graduate, or continuing education news/information	
Of social interest or development, public holidays, commemorative days	
Events: institutional, social, sporting	0.96
Institutional: news/information about the university in general	
Research and development	

Appropriateness of university communication channels as sources of information for current students

University academic platform	
Personal email	
Institutional email	
Website	
Institutional magazine/newsletter	0.88
Social networks	
Telephone call	
WhatsApp	

Frequency with which current students consult university online channels

YouTube	
Instagram	
Twitter	
Facebook	0.84
Website	
Institutional email	

Satisfaction about the communication that universities address to their students through online channels

Institutional channels satisfaction index (ICSI)

Instagram	
YouTube	
Twitter	
Facebook	0.91
Website	
Institutional email	

Level of commitment: level of agreement/disagreement with the following statements

University engagement level index (UELI)

I would recommend this university to others	
If I could choose again, I would choose the same university	
I would choose to study a postgraduate degree at the same university	
The university cares about making me feel part of the university community	0.92
The university sends me information in a timely manner	
I like to share information about the university in my social networks	
	M (ω)=0.91

Table 1. Instrument

Source: Own elaboration

RESULTS

General data

There are 57 universities offering undergraduate studies in Ecuador; 27 private and 30 public. Students from 21 institutions participated; 10 private and 11 public. Of the 3540 surveys, 620 came from private universities and 2920 from public universities. The data were analyzed in the SPSS statistical program.

Respondents are between 17 and 67 years old, the mean is 22 and the standard deviation, 4.29. 1658 (46.8%) men and 1882 (53.2%) women participated, enrolled in careers lasting between 3 and 5 years, students of all levels and from the 10 areas of knowledge, according to the UNESCO Institute for Statistics (Instituto de Estadística de la UNESCO, 2014).

Perception before entering university

In this section the variables are ordinal and were analyzed using the Mann-Whitney U test to compare the results according to strata. In a transition question, being 1 not difficult at all and 5 very difficult, it was detected that the difficulty in choosing a university was low, with a mean of 2.41 and standard deviation of 1.19. The level of difficulty differs significantly for students from private universities $M=1999.90$ and from public universities $M=1721.79$; $U=762974.000$, $z=-6.369$, $p=0.000$.

Factors influencing the university choice

The importance of 20 factors in the choice of university was analyzed. It was determined that there were significant differences according to the type of institution in seven of these factors, for which the average range is shown (table 2). Costs and scholarships/facility of payment had a greater influence on students at private institutions. On the other hand, the position in rankings, television, press, and radio advertisements had a greater influence on students from public HEIs. The most influential institutional factor was cost; the most influential marketing factor was advertising in social networks, and the most influential recommendation factor was the opinion of parents.

Based on the first three indexes created, we observed that during the decision process the institutional factors weigh more, then the recommendation factors, and then the marketing communications factors. Out of 5 points, $IFI=3.82$; $RFI=3.34$; $MCFI=2.97$, there are significant differences only in the IFI, for students from private universities $M=1846.96$ and from public universities $M=1754.27$; $U=857797$, $z=-2.057$, $p=0.039$.

Institutional communication channels for prospective students

We established how important it would have been to find information in ten institutional media during the decision process; table 3 shows the channels from most to least important. There are no significant differences according to strata, $p>0.05$.

	Mean	SD	U	Z	p-value	University type	Average
Importance of institutional factors in choosing a university							
Institutional factors index (IFI)							
Study costs	4.07	1.12	839671.5	-3.037	0.002	Private	1876.19
						Public	1748.06
City/location	3.95	1.21					
Institutional reputation	3.82	1.15					
Scholarships/facility of payment	3.64	1.29	696272.5	-9.366	0.000	Private	2107.48
						Public	1698.95
Ranking position	3.60	1.25	855619	-2.231	0.026	Private	1690.53
						Public	1787.48
Importance of marketing communications factors for university choice							
Marketing communications factors index (MCFI)							
Social network advertising	3.39	1.31					
University fairs	3.27	1.42					
Advertising on non-university websites	3.19	1.35					
Visit/s that the university made to your high school	2.95	1.46					
Television advertising	2.76	1.35	813148	-4.078	0.000	Private	1622.03
						Public	1802.02
Press advertisements	2.71	1.34	805403	-4.424	0.000	Private	1609.54
						Public	1804.68
Radio spots	2.51	1.33	849252.5	-2.492	0.013	Private	1680.26
						Public	1789.66
Importance of recommendation factors in choosing a university							
Recommendation factors index (RFI)							
Parents	3.98	1.22					
Family members	3.54	1.28					
University students	3.39	1.35					
University graduates	3.38	1.40					
Friends/acquaintances	3.25	1.25					
School or high school teachers	3.23	1.34	828507	-3.404	0.001	Privada	1646.8
						Pública	1796.76
Internet forums or communities	3.01	1.37					
Vocational counselors	2.93	1.38					

Note: the items in each group of factors are ordered from highest to lowest, according to the mean.

Table 2. Factors influencing the university choice

Source: Own elaboration.

Channel	Mean	SD
Website	3.98	1.061
University visits	3.97	1.124
Social network visits	3.86	1.145
Contact form on the website	3.78	1.134
University email address	3.71	1.188
Chat on the website	3.58	1.231
Leaflets/brochures	3.55	1.226
Chat on a university social network	3.52	1.251
Telephone calls	3.46	1.262
University WhatsApp	3.37	1.349

Table 3. Importance of institutional channels for prospective students

Source: Own elaboration.

Perception as a university student

In this section the analyses were performed using the Mann-Whitney U test and, in the last part, using Kendall's τ coefficient. For the current student body, it is a priority to keep informed about research, academic, institutional, and social interest subjects, and events, in that order. There are no significant differences between types of universities, $p > 0.05$ (table 4). Regarding these topics, they expressed how satisfactory is the communication that the universities conduct. From highest to lowest, the order is: research, social interest, events, academic, and institutional. There are significant differences in 4 of the 5 topics. It should be noted that in function of the SSI there are significant differences; for students from private universities $M=1886.80$ and from public universities $M=1745.81$, $U=833091.000$, $z=-3.157$, $p=0.002$.

We established the extent to which they consider eight institutional media to be convenient. There are significant differences in two: institutional email address and personal email address. They expressed how often they consult six university online channels –it was necessary to verify in 57 portals that the HEIs use them. Table 4 shows that email is consulted most frequently. There are significant differences in the use of four channels: mail, the website, and Instagram are consulted more frequently by students from private HEIs, and Facebook by students from public HEIs. About the channels, they expressed how satisfactory is the universities' use of them. The order is the same as that of frequency. There are significant differences

in satisfaction with the use of four channels; students from private HEIs are more satisfied than those from public HEIs with their use of email, website, Instagram, and Twitter (table 4). This is consistent with there being significant differences as a function of ICSI; for students from private universities $M=1921.66$ and from public universities $M=1738.40$, $U=811478.000$, $z=-4.065$, $p=0.000$.

The students expressed their level of agreement with six statements. According to the index of the level of university commitment, the level was found to be high, above 5 points $U\text{ELI}=3.85$. There are no differences between the UELI according to the strata, $p>0.05$, but when testing each statement, differences were observed in four of them. Thus, students from private universities express more agreement that these send information in a timely manner and that they are concerned about making them feel part of the university community. Students from public universities express more agreement that they would choose it again and that they would study a postgraduate degree at the same institution (table 4).

Kendall's τ coefficient showed that the UELI is correlated with the SSI; $\tau=0.497$, $p=0.000$. Likewise, the UELI is correlated with the ICSI; $\tau=0.459$, $p=0.000$. When analyzing according to the year of study, it was observed that although $p<0.05$, the correlations are very low or close to zero (p -value between 0.000 and 0.190), therefore, it should not be taken for granted. The same happens when analyzing by age using Spearman's correlation.

	Mean	SD	U	z	p-value	Type	Average range
Importance of being informed about the following topics							
Research and development	4.46	0.79					
Academics: undergraduate, graduate, or continuing education news/information	4.43	0.81					
Institutional: general university news/information	4.31	0.87					
Of social interest or development, public holidays, commemorative days	4.16	0.94					
Events: institutional, social, sporting	4.14	0.97					

Satisfaction about the communication that universities address to their students about the following topics

Subject satisfaction index (SSI)

Research and development	3.89	1.08					
Of social interest or development, public holidays, commemorative days	3.85	1.03	849447.5	-2.539	0.011	Private	1860.42
						Public	1751.41
Events: institutional, social, sporting	3.82	1.07	848443.5	-2.58	0.01	Private	1862.04
						Public	1751.06
Academics: undergraduate, graduate, or continuing education news/information	3.81	1.06	825966.5	-3.598	0.000	Private	1898.3
						Public	1743.37
Institutional: general university news/ information	3.79	1.06	821235	-3.815	0.000	Private	1905.93
						Public	1741.74

Appropriateness of university communication channels as sources of information for current students

Social networks	4.32	0.91					
University academic platform	4.26	0.95					
Institutional email address	4.20	0.99	855696.5	-2.324	0.02	Private	1850.34
						Public	1753.55
Personal email address	4.17	1.04	852824	-2.454	0.014	Private	1854.98
						Public	1752.56
Website	4.14	1.01					
WhatsApp	4.00	1.14					
Institutional magazine/ newsletter	3.69	1.20					
Telephone call	3.50	1.30					

Frequency with which current students consult university online channels

Institutional email address	3.96	1.06	814623.5	-4.124	0.000	Private	1916.59
						Public	1739.48
Website	3.77	1.04	833295.5	-3.247	0.001	Private	1886.48
						Public	1745.88
Facebook	3.66	1.19	842649	-2.802	0.005	Private	1669.61
						Public	1791.92
Instagram	2.90	1.46	752486.5	-6.756	0.000	Private	2016.81
						Public	1718.2
YouTube	2.74	1.43					
Twitter	2.21	1.33					

Satisfaction with the communication that universities address to their students through online channels

Institutional channels satisfaction index (ICSI)

Institutional email address	3.98	1.05	821300	-3.837	0.000	Private	1905.82
						Public	1741.77
Website	3.76	1.07	815804.5	-4.056	0.000	Private	1914.69
						Public	1739.89
Facebook	3.62	1.19					
Instagram	3.03	1.36	723103	-8.068	0.000	Private	2064.2
						Public	1708.14
YouTube	2.94	1.37	888275.5	-0.749	0.454		
Twitter	2.70	1.34	842119	-2.802	0.005	Private	1872.24
						Public	1748.9

Level of commitment: level of agreement/disagreement with the following statements

University engagement level index (UELI)

I would recommend this university to others	4.19	1.01					
If I could choose again, I would choose the same university	4.04	1.12	843453.5	-2.846	0.004	Private	1670.91
						Public	1791.65
The university sends me information in a timely manner	3.86	1.04	836623.5	-3.137	0.002	Private	1881.11
						Public	1747.01
I would choose to study a postgraduate degree at the same university	3.83	1.20	849755.5	-2.509	0.012	Private	1681.07
						Public	1789.49
The university cares about making me feel part of the university community	3.72	1.13	840134.5	-2.941	0.003	Private	1875.44
						Public	1748.22
I like to share information about the university in my social networks	3.45	1.15					

Note: the items in each group of data are ordered from highest to lowest, based on the mean.

Table 4. Perception as a university student

Source: Own elaboration.

DISCUSSION AND CONCLUSIONS

Higher education institutions in Ecuador, by knowing the perception of university communication that students have before and after entering the university, will be able to develop more strategic media plans to strengthen the relationship with them.

The results of the study applied in this country show that the students' difficulty in choosing a university was low, especially for those who decided to study in public institutions. During the decision process, institutional, recommendation, and marketing factors all played a role, in this order. Specifically, the first three of the 20 factors that had an influence were the cost of studies (institutional factor), the parents' recommendation (recommendation factor) and the city/location of the university (institutional factor). The latter two are consistent with the results found by Menon and colleagues (2007) and by Simões and Soares (2010). Although costs are dimensions of an institutional and especially administrative nature, the recommendation of parents shows that higher education institutions should value them and include them in their communication plans, as part of their priority audiences.

The top two most influential marketing communications factors were social media advertisements and university fairs. During the decision process, they valued information from institutional websites, as had also been mentioned by Gibbs and Dean (2015), and on visits (Goodrich et al., 2018). This shows that to help make the right decision, university communication –rather than exclusive to the online or offline environment– must be comprehensive, and it matters to have in-house, multidisciplinary communication departments.

For current students, it is important that their universities keep them informed about different topics, in the following order: research, academic, institutional, social interest, and events. However, except for research, the level of importance they attach to each topic differs from the level of satisfaction they feel about how the institution handles those topics. This could indicate that internal communication needs improvement.

Current students value online channels more. They consider that the most convenient means of receiving timely information are social networks and university academic platforms. On the other hand, the frequency with which they consult six online channels of their universities coincides with the level of satisfaction they feel about how HEIs use them to address them. In this case, those leading the list are institutional email address and the website.

Considering that Ecuadorian universities use social networks mainly to promote study programs to external audiences (Segura Mariño et al., 2020), the results suggest that HEIs should include communication aimed at their internal students through this medium and include institutional communication topics in academic platforms.

As suggested by Helgesen (2008), satisfaction influences student loyalty and can prevent student dropout. This study analyzed the commitment that students feel with their universities, through the university engagement level index (UELI) and how this commitment could lead to loyalty, but to reach this conclusion it would be necessary to conduct another study. In this case, it was detected that satisfaction with institutional topics and channels are correlated with the level of commitment that students feel with their universities. That is to say, the higher the satisfaction, the more predisposition there will be, for example, to recommend studying at their universities, to feel that they would choose the same institution again, to consider studying a postgraduate degree at the same institution, to feel part of the university community, and to share information on their social networks. It should be noted that the level of engagement does not differ according to the types of universities, but the satisfaction index of topics and institutional channels does, so that private universities manage organizational communication better than public ones.

There were no major limitations in conducting this research. In terms of participation, there was more willingness than expected on the part of the student body to respond to the survey, but it is not known whether the same response will be achieved in subsequent years with new cohorts of students. Therefore, it would be advisable to reach collaboration agreements between higher education institutions, which could also lead to greater participation of university authorities in research. In the case of this study, it has turned out to be significantly lower than expected (participation of at least 60% was intended). The scope of this study has been limited to the analysis of Ecuadorian universities, although similar studies in other geographical contexts are suggested, due to the clear differences that exist between countries (Hemsley-Brown & Oplatka, 2015).

One of the aspects in which higher education systems differ is in the type of funding. Therefore, it is advisable to simplify in public and private institutions so that they can be compared with results from other studies, as far as possible (Saraite-Sariene et al., 2018). There are even differences in the details that characterize such typology: in Spain, the United States, and England public universities demand a payment, unlike countries such as Argentina, Finland, or Ecuador, among others, where they are free.

Finally, it is recommended to investigate the information needs and perceptions of parents, as well as to evaluate how informed they are about the offer of higher education, since, as demonstrated in this study, they exert a vast influence on one of the most important decisions in their children's lives.

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