ORGANIZATIONAL IMAGE IN A HIGHER EDUCATION INSTITUTION (HEI): AN ANALYSIS BASED ON THE UDESC UNDERGRADUATE STUDENTS' PERCEPTIONS

IMAGEM ORGANIZACIONAL EM INSTITUIÇÃO DE ENSINO SUPERIOR: UMA ANÁLISE A PARTIR DA PERCEPÇÃO DOS DISCENTES DE GRADUAÇÃO DA UDESC

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ABSTRACT

This research examined the perceptions of undergraduate students at the State University of Santa Catarina (UDESC) regarding the institution's organizational image. To this end, between 2019-2020, semi-structured interviews and a survey of the main variables related to the topic were carried out, which were used to construct an online questionnaire sent by email to UDESC undergraduate students, yielding 400 valid responses. The study utilized an exploratory, descriptive, and predominantly quantitative research approach. Descriptive statistics and exploratory factor analyses were applied to analyze the data. The findings indicated a positive organizational image from the student perspective, even during the challenging circumstances of the COVID-19 pandemic. Additionally, the study identified key influencers of the image in educational organizations, proposed new research ideas, and enabled the application of a plausible theoretical model for reapplication in other higher education institutions when remodeling existing theories, particularly Tran *et al.* (2015). The study concludes that a well-cultivated and strengthened image can serve as a foundation for navigating difficult external situations.

Keyword: Institutional Marketing. Organizational Image. Higher Education Institution.

RESUMO

A pesquisa analisou a imagem organizacional da Universidade do Estado de Santa Catarina (UDESC) na percepção de seus discentes de graduação. Para tanto, realizou-se, entre 2019-2020, entrevistas semiestruturadas e o levantamento das principais variáveis relacionadas ao tema que serviram para construção de um questionário online, encaminhado por *email aos* graduandos da UDESC, resultando 400 questionários válidos. O estudo utilizou *survey*, sendo caracterizado como exploratório-descritivo e predominantemente quantitativo. Para analisar os dados, recorreu-se a estatística descritiva e a análise fatorial exploratória. Os resultados demonstraram uma imagem organizacional positiva na perspectiva estudantil, mesmo no cenário desfavorável de pandemia do COVID-19. Ademais, foi possível identificar os principais influenciadores da imagem em organizações de ensino, gerar propostas de pesquisas e possibilitar o uso de um modelo teórico plausível de reaplicabilidade em outras instituições de ensino superior diante da remodelagem de teorias pré-existentes, especialmente Tran *et al.* (2015). Conclui-se que a imagem, quando bem cultivada e fortalecida, pode servir de alicerce para momentos externos conturbados.

Palavra-Chave: Marketing Institucional. Imagem Organizacional. Instituição de Ensino Superior.

1 INTRODUCTION

Humans form their actions based on the representations they hold of the world (Schuler; Toni, 2015). To comprehend these representations in marketing terms involves recognizing the images that individuals have of an organization and its products/services, in order to strategically position them in the market and influence interested parties (Schuler; Toni, 2015). In essence, the image of an organization, especially, is a unique intangible asset that can impact the esteem that individuals hold towards an organization and its products/services.

Despite the significance of the image, it is a challenging concept to measure as it is an abstract and intangible asset (Gomes; Sapiro, 1993). However, this difficulty does not absolve organizations, including Higher Education Institutions (HEIs), from striving to comprehend the perceptions of the target audience (Arpan *et al.*, 2003; Perez;Torres, 2017), particularly when these institutions are increasingly investing resources to improve their image among their stakeholders (Azoury *et al.*, 2014).

Therefore, this research aims to evaluate the perception of the organizational image of the State University of Santa Catarina (UDESC) among undergraduate students. While the study's primary focus is on a specific organization, its implications extend beyond the managerial realm and aim to contribute academically to the development of the field of organizational image. This is achieved through the proposal of a theoretical model that examines the antecedents and consequences of organizational image in the context of institutional education. Unlike other models that concentrate on the study of either antecedent or consequent elements of the organizational image, this research puts forward an attitudinal hierarchical scale that takes into account the institutional perception of a higher education institution (HEI).

To provide clarity on the structure of the article, it should be noted that a section on theoretical references will be included, followed by a description of the methodology employed to achieve the research objectives. Next, the results will be presented and discussed, and finally, some concluding remarks will be made.

2 ORGANIZATIONAL IMAGE & EDUCATIONAL INSTITUTIONS

The concept of image is the focus of study in different areas of knowledge (philosophy, psychology, sociology, arts, semiotics, geography, pedagogy, etc.). In marketing,

the image gains relevance because it allows the organization to understand the behavior of stakeholders (Mendes, 2008). In marketing, it is possible to analyze the image of the brand, price, product, point of sale, and organization, whether by physical, emotional, affective (feelings more elaborate than the emotional dimension), rational, symbolic, visionary, or axiomatic (refer to purposes and principles) (Schuler; Toni, 2015).

Thus, one of the reasons for managing an image is that it can interfere, directly or indirectly, in the institution's relationship with the public. Educational institutions influence the perception of the education offered, which can generate greater commitment (Valerio; Pizzinatto, 2003), loyalty (Nguyen; Leblanc, 2001), and student satisfaction (Duarte *et al.*, 2010).

Another important factor is the behavioral and perceptual change of society towards the university, which has demonstrated a weakening of current ties (Ruão, 2005), especially given the lack of university trust, due to (a) the curricular crisis, (b) research fraud, (c) costs related to education, and (d) the quality of teaching (BOK, 1992). Despite this, universities are still perceived positively, as they play an important role in economic (Nunes; Silva, 2011), social (Bertolin, 2017), and individual (Zulauf, 2006) development.

It is also worth highlighting some observations recorded in the systematic review study carried out by LaFuente-Ruiz-de-Sabando, Calvo and Sainz (2018) on organizational image in higher education. One of the authors' notes concerns the multidimensionality of the concept, which is composed of a large number of dimensions that form the organizational image. Another addendum concerns not only terminological differences (synonyms used to describe the concept), but also the variations in the definitions given to the concept of image in higher education, also presenting the diversity of studies that focus on different stakeholders (teachers, students, technicians, or other interested parties) and, consequently, on their interests (Lafuente-Ruiz-De-Sabando *et al.*, 2018).

The authors also note that the emotional component is not considered in most research on organizational image in educational institutions and that there are intercultural and geographic characteristics that can influence organizational image (Lafuente-Ruiz-De-Sabando *et al.*, 2018). Other reviews on the topic point out that many studies are interested in investigating (a) the reasons for choosing students for certain educational institutions in terms of gender, race, social class, and the influence of family and colleagues in choosing the HEI ; (b) student loyalty; and (c) student satisfaction (Pérez; Torres, 2017).

On the other hand, although there are many ways to assess organizational image (Grohmann *et al.*, 2007), there are still few models dedicated, especially to higher education institutions (Pérez; Torres, 2017). Thus, to contribute to the area, approaching other existing theoretical models and adapting them for use in educational institutions is necessary to expand the theoretical range. It is clarified that the objective below will not be to exhaust such models but to highlight the main factors that contributed to this research.

3 THEORETICAL MODELS ASSOCIATED WITH ORGANIZATIONAL IMAGE

The image can involve a large number of different factors (Keller; Machado, 2006) and to favor understanding and management of this, some theoretical models seek to synthesize through representations the main factors that affect the organizational image, among these are that of Barich and Kotler (1991), Gray and Balmer (1998) and Tran et al. (2015). It has been reported that the first two were chosen because of their theoretical importance and the number of citations (1,688 and 1,748 citations on Google Scholar, respectively), whereas that of Tran et al. (2015) was chosen for presenting few studies and for being able to bring new perspectives to the area of organizational image.

In this way, Barich and Kotler's (1991) model seeks to present image management and identify and establish an organization's position in a competitive system. In their original methodology, the authors focused on marketing image, differentiating it from corporate image (the former is related to the organization's marketing offer and mix aspects, and the latter is related to the way third parties perceive the goodwill of organizational actions to interested parties).

Despite the distinction, the creators of the model offer a broad and detailed theoretical framework of eleven factors that affect the organizational image – in total there are 54 attributes distributed across nine concepts, namely: (a) Corporate Social Conduct; (b) Business Conduct; (c) Conduct of Corporate Contributions – such as charity; (d) Sales Force; (e) Distribution Channels; (f) Service; (g) Support; (h) Price; (i) Communication; and (j) Product. The breakdown of such items helps identify and guide managers who want to operationalize the analysis of the organization's image.

Another important model is that of Gray and Balmer (1998). In this study, the authors distinguished images based on reputation, identity, and communication. However, given the

relationship between the concepts, interconnectivity is fundamental to the image management process and reputation.

Such elements, when well-managed, favor the development of activities and can therefore create a competitive advantage for the organization (Gray; Balmer, 1998). However, image is also subject to exogenous factors, but with adequate feedback from services/products, senior management can work to improve the image and, consequently, the organizational reputation (Gray; Balmer, 1998).

However, it is prudent that feedback be continuous and periodic, using informal and formal sources to collaborate in image management (Gray; Balmer, 1998). In short, the model has a pragmatic operational character, is easy to visually understand, and addresses the aspects that orbit the organizational image and interrelates it with concepts that can generate competitive advantages through recurring feedback.

The third model, Tran et al. (2015), presents a systemic framework built from an investigation of a qualitative method of interviews with employees at a communications agency in the United Kingdom. The study found the existence of both tangible and intangible variables in image management. Such variables, from the authors' perspective, can be grouped into seven dimensions that influence two others – communication and organizational personality – and these, in turn, are directly linked to the formation of the organizational image.

Over time, this gains depth and can be translated into reputation, which is capable of presenting five hierarchical levels. At the base is the awareness of the organization, followed by familiarity, favorability (for the organization and its services/products), trust, and defense (or advocacy). In the latter, there is maximum strengthening of the organization and user relationship, making it possible to affirm the existence of a strong mental image, which may even involve emotional connections.

The seven dimensions mentioned include the following: (a) visual expression – formed by elements such as the organization's name, logo, slogan, typography, and colors; (b) positive feelings – generated from increased trust and involvement in environmental and Corporate Social Responsibility (CSR) causes, but it is also possible to perceive other elements such as knowledge, brand prestige, feeling part of a group; (c) environments – architecture and interior design communicate the organization's purpose; (d) online appearance – the architecture and design related to the website gain importance; (e)

appearance of employees – attitude, behavior, and visual appearance are prestigious; (f) attitude and behavior – related to the organization as a whole, its way of acting and treating employees, consumers, and other interested parties; (g) external communication – subdivided into three parts. These are offline external communication (for example, the way of talking to the user via telephone, direct mail, mail, and traditional media), online communication, and communication as effective (if there is good effectiveness when communicating with the user and also in serving them).

In summary, by observing the models, there is a possibility of complementarity between them and that they can collaborate in the investigative methodology conducted in this research. In particular, for the first model, the detailed discrimination of attributes helped frame the variables raised in the HEI research carried out in the preliminary stage of this study. However, the limitation of the model is reduced to the antecedent elements of the organizational image, and given the extension of the archetype, assimilation of the model can become difficult to internalize and, consequently, to apply because it has 54 evaluative items.

The second model, on the contrary, is too concise; however, it offers the main concepts related to organizational image and also brings to light elements that the other two models presented here do not record feedback and exogenous factors. Finally, the model by Tran et al. (2015) contributes by being an intermediary in terms of the number of existing elements when compared to the first two models, and in addition, presents consequent subdivisions of the image from the user's perspective.

In any case, the ideal is to be aware that everything the organization accomplishes and represents will contribute to the formation of its organizational image before the public (Crzeszczeszyn *et al.*, 2009). In addition, the image can influence the sustainability of the organization (Blázquez; Peretti, 2012).

4 MEDOTOLOGICAL PROCEDURES

This research has an exploratory descriptive character, is predominantly quantitative, and uses mixed data collection procedures, namely, bibliographical and documentary research, surveys through in-depth interviews, and survey research using online questionnaires (Kinchescki, 2015; Silva, 2003; Gil, 2010).

The organization chosen as the object of study was the State University of Santa Catarina (UDESC). The institution was created by the State Decree in 1965 and is currently

composed of 12 teaching centers and 32 physical centers to support distance learning (partnership with the Open University of Brazil – UAB/MEC), covering the entire territory of Santa Catarina. The university's activities are based on the teaching, research, and extension tripod, offering 59 undergraduate courses, 48 postgraduate courses, and 168 study groups recognized by the National Council for Development and Technology (CNPq), which operate in all major areas of knowledge; in addition, it has more than 700 extension actions per year that benefit more than 600 thousand people. Thus, the university that is the focus of this research plays an important role within the state of Santa Catarina, characterized by being multifunctional, multicampi, and territorially ubiquitous.

Considering the scarcity of studies on image characterization in higher education institutions, it was necessary to construct a data collection instrument and scale suitable for research, following the procedures suggested by Hair *et al.* (2019). Thus, we began with bibliographical research on organizational images to identify variables related to this phenomenon. Initially, 159 variables were identified; after excluding duplicates and semantic equivalents, 41 variables remained. The results obtained were analyzed by 14 experts (student representatives from higher deliberative bodies at UDESC) who excluded three variables considered of little importance for the evaluation of the organizational image by students: (a) history of the university, (b) frequency of communication, and (c) physical size of the HEI. Therefore, 38 valid variables were obtained, which were included in the investigative instrument, 31 of which were predecessors of the image formation process and seven were consequences of the image.

The final instrument resulted in three main blocks: (a) general perceptions of the IES (the image that the student has of the university and how positive it is for him), how the student presents himself socially as a student, and the reasons for choosing that institution; (b) questions related to the antecedent and consequent dimensions of the image; and (c) sociodemographic data. After structuring the instrument, a pre-test was conducted with 27 undergraduate students (both face-to-face and distance-learning), which did not indicate the need for changes.

The image dimensions were divided into six groups (Table 1) containing five to nine statements each. The first five dimensions are related to the antecedent variables of the image, and the sixth dimension is related to the image's consequences. The perception scale used in the dimensions is a five-point Likert scale, ranging from "Totally disagree" (1) to "Totally

agree" (5). The scale is unforced, including the option "I don't know how to answer or I prefer not to answer." Table 1 presents the dimensions and assertions used in this study.

Table 1 Dimensions and Assertions

Dimension 1 – HEI's Attitude and Behavior
A1: "UDESC is transparent in its institutional actions"
A2: "UDESC encourages citizenship"
A3: "UDESC promotes student participation in university decisions and the free expression of thoughts"
A4: "UDESC has good management practices, avoiding unnecessary bureaucracy"
A5: "UDESC values the socio-environmental responsibility of the activities it carries out"
A6: "UDESC is concerned with regional socioeconomic development and, to this end, carries out specific actions to stimulate it"
A7: "UDESC stimulates culture"
A8: "UDESC encourages inclusive practices of plurality/diversity at the university"
A9: "The student support provided by UDESC meets students' demands (e.g.: housing, food, transportation, etc.)"
Dimension 2 - Employee Attitude and Behavior
A10: "The staff (UDESC teachers and technicians) provide quality service to students and the community"
A11: "Employees (UDESC teachers and technicians) behave ethically"
A12: "The employees (UDESC teachers and technicians) are efficient in carrying out their duties"
A13: "The employees (UDESC teachers and technicians) have good professional qualifications"
A14: "The employees (UDESC teachers and technicians) are assiduous"
Dimension 3 – Communication
A15: "UDESC is efficient when communicating with internal and external audiences"
A16: "UDESC carries out quality communication with internal and external audiences"
A17: "The systems and means used by UDESC favor good communication with the internal public (examples: academic systems such as SIGA and teaching support platforms such as Moodle)"
A18: "UDESC has good online interactivity with internal and external audiences through communication channels - examples: emails, newsletters, chats, institutional websites, social networks, others"
A19: "UDESC radio is a relevant channel for internal and external audiences"
Dimension 4 – Symbolic Elements
A20: "UDESC has good social prestige (example: the university's brand is valued by society)"
A21: "UDESC has a good reputation as an educational institution"
A22: "Having a diploma from UDESC represents greater chances of professional success than having a degree from other educational institutions in the same region"
A23: "UDESC is recognized as an innovative educational institution"
A24: "The UDESC brand has a differentiator when compared to other educational institutions"
A25: "Being a graduate from UDESC is synonymous with professional competence"
Dimension 5 – Teaching, Research and Extension
A26: "UDESC offers an adequate structure for teaching, research and extension activities"
A27: "UDESC has quality undergraduate and postgraduate courses."
A28: "UDESC research groups carry out relevant and outstanding research in the scientific world"
A29: "UDESC's extension actions generate a positive impact on society"
A30: "UDESC has a variety of undergraduate and postgraduate programs offered."

A31: "The academic mobility program (exchanges) offered by UDESC is attractive for its students"
Dimension 6 – Image Consequences
A32: "I know a lot about UDESC (history, values, centers, structure, etc.)"
A33: "I really like UDESC."
A34: "I identify a lot with UDESC's values and ideals"
A35: "I trust UDESC a lot and the way it is managed"
A36: "I would recommend and/or recommend UDESC to other people to study"
A37: "I have already defended, defended or would defend UDESC if other people spoke negatively about it"
A38: "In the future I would choose UDESC again, if I wanted to pursue another undergraduate or postgraduate degree"

Source: Created by authors (2019).

Once the instrument was completed, it was applied online to the target population. The link was sent via institutional email, WhatsApp, and the IES website with support from the UDESC communications sector and student leaders. After 20 days of collection, a sample of 400 valid responses was obtained, a quantity appropriate for the parameters of a margin of error not exceeding 5%, and a confidence interval of 95%. It is noteworthy that the research universe is made up of 11,759 undergraduate students enrolled in the first semester of 2020, 11,190 of whom came from face-to-face teaching and 569 from distance learning. Additionally, the sample achieved is higher than the minimum quantity necessary for sample quality in Exploratory Factor Analysis procedures. According to Figueiredo and Silva Júnior (2010), at least five observations are necessary for each analyzed item. Considering that the instrument has 38 items, at least 190 observations were necessary.

To analyze the data, a descriptive analysis of the first and last blocks of questions was carried out using content analysis for the open question about associations when mentioning the name UDESC. In the block of questions related to dimensions, descriptive and multivariate statistical analyses were used, applying Exploratory Factor Analysis (EFA). At this stage, STATA 15.0, and the R system were used to confirm the results.

5 RESULTS

The profile of the respondents consists primarily of young individuals, with the majority being below the age of 24 (83%), female (73.25%), having an IES of more than one year (75.75%), and being face-to-face teaching students (97.25%). When considering the reasons for choosing to study at UDESC, it is noteworthy that the respondents cited the institution being public (84%), of quality (77.50%), offering the desired course (64.30%), and

being a reference institution in the state (63%). These reasons indicate the existence of a positive image, particularly among those who mentioned "quality" and "reference."

5.1 PERCEIVED IMAGE – DESCRIPTIVE ANALYSIS

The results of the free association technique, in which individuals were asked to provide the first image or word that came to mind upon hearing the term "UDESC", revealed a predominance of the following terms: "quality" (25.25%), "university" (15.75%), "teaching" (14.75%), and "public" (9.25%). Based on the categorization established by Santos et al. (2019), 48.50% of the responses had a positive connotation, 44.25% were neutral, and 7.25% were negative, indicating that the majority of participants had positive associations with the image of UDESC. It is important to note that the terms quality, public, education, and university are crucial components of the institution's vision statement, which aims to provide free, high-quality public education. This finding supports Gray and Balmer's (1998) assertion that corporate communication plays a significant role in shaping an organization's image.

Additionally, the positive associations obtained from the open-ended question align with the results of the closed question inquiring about the students' perception of the positivity of UDESC's image. Participants were asked to rate their perception of the institution's image on a scale of 1 (very negative) to 5 (very positive), with an average score of 4.12 and a standard deviation of 0.78. Notably, 79.75% of students awarded grades 4 and 5, reflecting a predominantly favorable image of the university.

5.2 PERCEIVED IMAGE – ANALYSIS OF ASSERTIONS

For descriptive analysis of the dimensions, the mean, standard deviation, and percentage of the statements were calculated. Among the statements with the highest averages are A36 "I would recommend and/or recommend UDESC for other people to study" (average 4.49; standard deviation 0.69); A21"UDESC has a good reputation as an educational institution" (4.43; 0.72); A37 "I have already defended, defended or would defend UDESC if other people spoke negatively about it" (4.39; 089); A27 "UDESC has quality undergraduate and postgraduate courses" (4.37; 0.71); and A33 "I really like UDESC" (4.37; 0.75). In other words, of the five highest averages, three belong to the dimension resulting from the image (A33, A36, A37) which suggests a positive attitude resulting from the positive image, expressed by liking, recommending, and defending the HEI.

The following statements have the lowest averages: A4 "UDESC has good management practices, avoiding unnecessary bureaucracy" (2.88; 1.3); A32 "I know a lot about UDESC (history, values of the institution, centers, structure, etc.)" (3.15; 1.23); A16 "UDESC carries out quality communication with the internal and external public" (3.25; 1.11); A15 "UDESC is efficient when communicating with internal and external audiences" (3.28; 1.16); and A3 "UDESC promotes student participation in university decisions and the free expression of thoughts" (3.4; 1.23). Of these five statements with the lowest averages, four are related to the antecedents of the image, two linked to the communication dimension, and two to the attitude and behavior of the HEI.

Concerning the metadimension "Image Background," the averages were calculated separately for each dimension. Specifically, in (a) D1, the highest average was A7 - "UDESC stimulates culture" (4.15), and the lowest average was A4 - "UDESC has good management practices, avoiding unnecessary bureaucracy" (2.88). In (b) D2, the highest average was A13 - "The employees (teachers and technicians from UDESC) have good professional qualifications" (4.34), and the lowest was A12 - "The employees (teachers and technicians from UDESC) are efficient in the performance of their functions" (3.8). In (c) D3, the highest average was A19 - "UDESC radio is a relevant channel for internal and external public" (3.65), and the lowest was A16 - "UDESC carries out quality communication with the internal and external" (3.25). In (d) D4, the highest average was A21 - "UDESC has a good reputation as an educational institution" (4.43), and the lowest average was A25 - "Being a graduate from UDESC is synonymous with professional competence" (3.79). In (e) D5, the highest average was A27 - "UDESC has quality undergraduate and postgraduate courses" (4.37), and the lowest was A26 - "UDESC offers an adequate structure for teaching and research activities and extension" (3.5). As for the consequential dimension of the image (D6), the highest and lowest values were A36 - "I would recommend and/or recommend UDESC for other people to study" (4.49) and A32 - "I know UDESC a lot (history, values of the institution, centers, structure, etc.)" (3.15).

In assessing the highest concentration of responses, percentage by dimension, the following emerges: (a) D1, statement A5 – "UDESC values the socio-environmental responsibility of the activities it carries out" (49.75%); (b) D2 to A10 – "Staff (UDESC teachers and technicians) provide quality service to students and the community" (52.25%); (c) D3 to A17 – "The systems and means used by UDESC favor good communication with

the internal public (examples: academic systems such as SIGA and teaching support platforms such as Moodle)" (46.50%); (d) D4 to A21 – "UDESC has a good reputation as an educational institution" (49.75%); (e) D5 to A27 – "UDESC has quality undergraduate and postgraduate courses" (52.25%); and (f) D6 to A36 – "I would recommend and/or recommend UDESC to other people to study" (54.50%). It should be noted that these statements have a high concentration of responses in "Agree" and "Completely Agree."

It is evident that, in percentage terms, almost all 38 statements have a concentration of answers in agreement with what is stated in the items. The only exceptions are for A4 and A32, which have a concentration of responses in "Disagree." Subsequently the assertions' analysis, we proceeded to explore the factor analysis.

5.3 PERCEIVED IMAGE – EXPLORATORY FACTOR ANALYSIS

The purpose of conducting Exploratory Factor Analysis (EFA) is to observe the relationships between variables and structuring factors (HAIR JR. et al., 2007). In this research, it was possible to adjust the reference model and verify whether the constructs related to the antecedents and consequences of organizational image, as evaluated in the students' perception, corresponded to what was instrumented.

The two main procedures used in EFA were adopted: the Kaiser-Meyer-Olkin (KMO) criterion and the Bartlett Sphericity Test (Dziuban; Shirkey, 1974; Damásio, 2012). The first analyzed the adequacy of the sample, while the second analyzed the significance of the correlations in the data matrix (Damásio, 2012).

The collection instrument used consisted of items with an ordinal scale and three categories. Paiva et al. (2010) used a polychoric correlation matrix to extract the main components during the EFA process and then applied a Varimax orthogonal rotation to adjust the factor loadings. STATA 15.0 software was used to confirm the results obtained using R.

Figure 1 Eigenvalue x Component
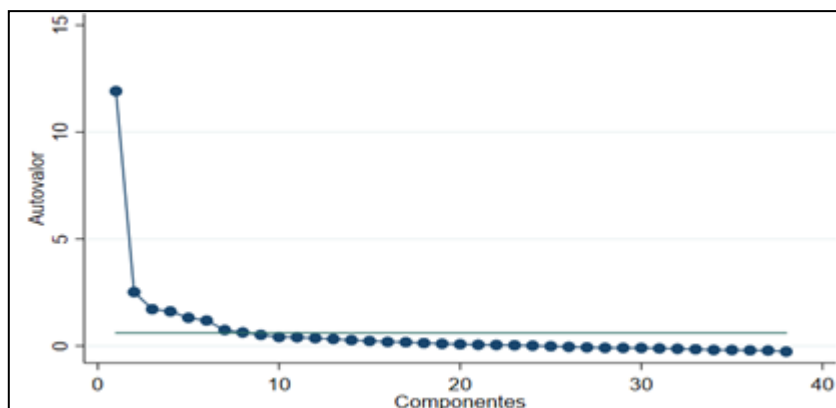
Source: Primary data (2020).

The Exploratory Factor Analysis revealed the presence of six dimensions, which were determined based on the KMO criterion, specifically eigenvalues greater than 1.0 (Hair *et al.*, 2009). This finding was further supported by the graph that revealed the existence of six dimensions. Moreover, the accumulated percentage of dimension variation was approximately 61%, which is generally considered acceptable in social sciences (Hair *et al.*, 2009).

The criteria for removing items from the analysis were established as follows: (1) loads below 0.3; (2) communality above 0.4, as suggested by the literature (Schawb, 2007 *apud* Figueiredo Filho; Silva Jr., 2010); and (3) cross loading, which is a difference of less than 0.1 of the highest loadings, making the use of such items unfeasible. The loading of items refers to the degree of correlation between them and others in the dimension.

According to Hair Jr. *et al.* (2009), a minimum acceptable value of 0.3 is typically considered for factor analysis. However, three items were found to have values below this threshold: (a) A19 - UDESC radio as a relevant channel for both internal and external audiences; (b) A31 - UDESC's academic mobility program (exchanges) being attractive to its students; and (c) A32 - having a lot of knowledge about UDESC, including its history, values, institutional structure, and other aspects. As these items did not materialize in the research context, they were removed by using factor analysis. Further research is suggested to explore the reasons behind the lower grades received by these variables compared with others.

Additionally, the Kaiser-Meyer-Olkin test was performed to assess the degree of adjustment of the data to factor analysis. The test yielded a coefficient of 0.86, which,

according to Hair *et al.* (2009), indicates a good adjustment of the data to the factor analysis.

Bartlett's sphericity test showed a significance level lower than 0.001, indicating that the matrix was factorable (Tabachnick; Fidell, 2007). This was supported by the fact that each dimension obtained a Cronbach's alpha greater than 0.7, indicating that each dimension extracted from the EFA was considered reliable (Field, 2009). Based on these findings, it can be concluded that KMO obtained a value equal to 0.8635, and the Bartlett Test yielded a p-value <0.001.

Table 2 Table of results of variables and dimensions

Items	Dimensions and Factor Loadings					
	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6
var1			0.4322			
var2	0.5735					
var3	0.5041					
var4			0.3773			
var5	0.6372					
var6	0.6609					
Var7	0.6923					
Var8	0.7049					
Var9	0.3581					
var10		0.7584				
var11		0.6523				
var12		0.7544				
var13		0.5613				
var14		0.4658				
var15			0.8337			
var16			0.8506			
var17			0.5499			
var18			0.5548			
var20				0.7981		
var21				0.8174		
var22				0.6396		
var23				0.5452		
var24				0.7175		
var25						0.4474
var26						0.3152
var27					0.5564	
var28					0.6554	
var29					0.7151	
var30					0.5680	
var33						0.7007
var34						0.6190
var35						0.4529
var36						0.7308

Items	Dimensions and Factor Loadings					
	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6
var37						0.7663
var38						0.7188
Cronbach's Alpha	0.7991	0.7491	0.7929	0.7971	0.7421	0.7984

Source: Primary data (2020).

Based on the outcomes observed, the dependable dimensions, as indicated by the Cronbach's alpha indices, were ranked in the following order from highest to lowest: (a) D1; (b) D6; (c) D4; (d) D3; (e) D2; and (f) D5. It is worth noting that the four items did not fit within their designated dimensions: (a) A1, which belongs to D1 and also falls under D3; (b) A4, which belongs to D1 and also falls under D3; (c) A25, which belongs to D4 and also falls under D1; and (d) A26, which belongs to D5 and also falls under D1.

Evaluating the four referenced items specifically, it is stated that A1 ("UDESC is transparent in its institutional actions") was moved to D3 (Communication). This suggests that "transparency presupposes effective communication, which in turn presupposes adequate language and access to information" (Corbari, 2004, p. 102). Therefore, transparency, in addition to being an institutional (Kunsch, 2007) and political (Michener; Bersch, 2013) attitude, is a visceral form of communication. On the other hand, for statement A4 ("UDESC has good management practices, avoiding unnecessary bureaucracy"), which was also moved to D3 (Communication), it can be explained using scientific literature that places communication as an influence (Kunsch, 2007) that permeates the entire organization and its management activities. This includes not only basic functions (planning, organization, direction, and control) but also communication (Davis, 1972). Therefore, it can be inferred that management practices are communicative.

Regarding statements A25 ("Being trained by UDESC is synonymous with professional competence") and A26 ("UDESC offers an adequate structure for teaching, research, and extension activities"), it can be justified to revise both to D6 (consequent to the image) based on the theory of Tran et al. (2015) and other authors. A25, which pertains to competence, is defined by Fleury and Fleury (2001) as a set of knowledge, skills, and attitudes. In this sense, D6 encompasses the student's knowledge, attitudes, and behavior, making it an appropriate location for this statement. Additionally, A26 pertains to the development of educational activities that depend on the structure of the institution

(UNESCO, 2019). As D6 is based on the image of the HEI (POLAT, 2011), it is reasonable to assume that the statement regarding the adequacy of the structure for teaching, research, and extension activities may have been relocated to D6 because of the knowledge and understanding of the structure for the development of these activities.

6 DISCUSSION OF RESULTS

The discussion of the results from the study of image formation and its consequences reveals distinct variables. The research instrument utilized took into account existing theories, research on organizational image in HEIs, and the perceptions of UDESC students.

In total, 38 variables comprising organizational image were identified. Among these, 31 variables form the "Image Background" meta-dimension, which consists of five dimensions that contribute to image formation. These dimensions include (a) the Attitude and Behavior of the Higher Education Institution, (b) Employee Attitude and Behavior, (c) Communication, (d) Symbolic Elements, and (e) Teaching, Research, and Extension. The remaining seven variables make up the "Knowledge, Attitudes, and Behaviors Consequent to the Image" dimension, also known as "Consequent to the Image."

The research conducted by Tran et al. (2015) initially proposed seven antecedent dimensions, which were later adapted and reduced to five in this study. Unlike the consequent dimension, no adjustments were necessary in the dimensions of the image. However, it is vital to note that the dimension referred to as "Family" by Tran *et al.* (2015) was divided into two statements, A33 ("I really like UDESC") and A34 ("I really identify with the values and ideals of UDESC").

It is essential to acknowledge that the model by Tran *et al.* (2015) faced limitations, including the exclusion of the "environments" dimension, the merging of "external communication" and "online appearance" into the "communication" dimension, and the condensation of "visual expression" and "positive feelings" into "symbolic elements." Additionally, there was a change from the "appearance of employees" dimension to "attitude and behavior of employees," and from "attitude and behavior" to "attitude and behavior of the HEI." Lastly, the addition of the "teaching, research, and extension" dimension, linked to the organization's core activity, was made.

In addition, all aspects of the study showed a preponderance of responses in the alternatives "I agree" and "I completely agree" (24 statements achieved values above 70%

when these options were combined, and all others also generally agreed with the statements). Only two dimensions, D1 and D6, presented negative responses, specifically in statements A4 and A32, which further underscored the positive perception in the face of the approval statements from the IES.

Moreover, the theoretical model used in this study maintained high average values and low standard deviations. This result aligns with the findings of Grohmann, Alvarenga, and Venturini (2007), who discovered homogeneity in group responses regarding institutional image. This suggests that, although institutional image is an individual process, it can be influenced by social relationships, leading to an institutional evaluative consensus.

6.1 PROPOSED THEORETICAL MODEL

Based on the findings and the theoretical-empirical relationship, a theoretical model for organizational image in educational institutions was proposed (Figure 2). This proposal seeks to encourage the verification of the model in other educational institutions to contribute to future studies in this area.

Figure 2 Theoretical model adapted for HEI
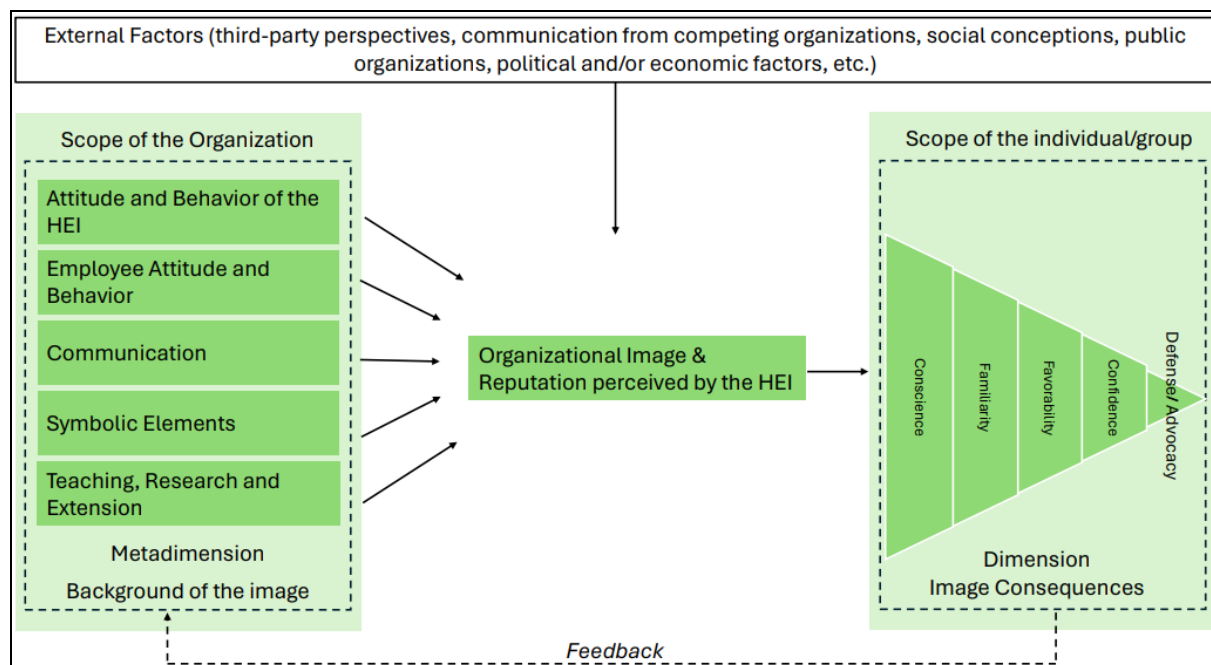
Source: Created by authors (2020)

It should be noted that the Feedback element was incorporated into the model because of its importance in managing corporate identity and realigning the organization's actions with

its target audience (Gray; Balmer, 1998). The External Factors element, also derived from the Gray and Balmer (1998) model, demonstrates its influence on reputation and image, as these are not constructed individually, but also result from a collective. (Fombrun; Van Riel, 1997)

Thus, in summary, it suggests that the theoretical model previously derived from Tran *et al.* (2015), which is structured in a linear manner, is redesigned into a cyclical model, providing the possibility for information to be continuous and periodic, driving organizational improvements, as seen by Gray and Balmer (1998). Furthermore, it is important to consider that image and reputation are influenced by external factors beyond the scope of the organization (Gray; Balmer, 1998). el, demonstrates its influence on reputation and image, as these are not constructed individually but also result from a collective. (Fombrun; Van Riel, 1997)

7 CONCLUSION

The present study enabled a comprehensive analysis of the organizational image of UDESC, as perceived by its undergraduate student audience, thereby fulfilling the primary objective of the research. In relation to the specific objectives, the primary associations linked to the HEI's organizational image were identified, with the most frequently cited terms being "University," "Teaching," "Public," and "Quality," which accounted for 65% of the overall responses. Three of the four terms have a neutral connotation, while one has a positive connotation, according to the Santos *et al.* (2019) classification.

With regard to the overall perception of UDESC's image as positive, negative, or neutral, the results indicate that positive words were mentioned 6.68 times more frequently than negative words. Furthermore, when the participants were asked to rate the positivity of the image on a scale of 1 to 5, nearly 80% of the responses indicated a favorable perception. Overall, the findings demonstrate that UDESC's image is predominantly perceived as hegemonically positive.

Good results were obtained with regard to the constructs related to the antecedents and consequences of organizational image. The numbers show that the statements evaluated by the students mostly concentrated on responses to the options I agree and completely agree, with the result being favorable to the organizational image, highlighting the dimensions of image consequences, symbolic elements, teaching, research, and extension.

As for the statements that had less expressive averages, four statements were highlighted that were related to management practices, the student's knowledge about UDESC (history, values, structure, etc.), the quality of communication, and communicational efficiency. The dimensions that had less expressive evaluation were D3 (communication) and D1 (HEI's attitude and behavior).

As a future research suggestion, more aimed at the HEI investigated, there is a need to (a) explore the relevance of the most highlighted items; (b) verify the reasons why some assertions performed poorly, especially those related to communication, attitude, and behavior of the HEI; (c) analyze why the assertions related to transparency and good management practices were related to communication; and (d) research UDESC's organizational image before other stakeholders.

Regarding possible research that can be explored in other HEI contexts, it is suggested that (a) the relationship between student trust and university management; (b) the relationship between satisfaction, retention, and image; (c) how unfavorable scenarios, such as the Covid-19 pandemic, can affect university image given the need to adapt services; (d) whether there is a difference between the elements that influence the image of public and private HEIs; and (e) whether the theoretical model resulting from this research has scale validation to be applied in other educational institutions and/or to other subjects in the educational environment.

Thus, in view of what was presented, it is reported that the general objective of this research, which was to analyze the general perception of undergraduate students, regardless of the teaching modality, can be considered as achieved, leaving behind a contribution to research that is plausible to be replicated in different contexts of higher education institutions. Furthermore, it also enables the redesign of a theoretical model that could be improved by future research and could serve as a basis for further studies in this area.

Furthermore, given the work carried out, it can be concluded that the theme of organizational image analysis can be perceived with a certain complexity, which involves not only general conceptions of different individuals but also the influence of external factors that can affect the subjects' perception. in relation to the institution. However, when the image is well crafted and its positive perception among the public is greater, it becomes a pillar of support in negative moments.

Finally, the study of images can serve as a reference for improving the university-student relationship and the provision of services offered. In short, it would be an attempt to adjust needs, desires, and actions.

However, to achieve this adjustment, one must be aware that the student and educational institution relationship constituting a system, which should be kept favorable, must first be aware of the other's thoughts and, subsequently, of oneself, taking into account endogenous and exogenous organizational factors. According to Morin (1999, p. 8), it is necessary to "understand not only others but yourself", and one way to do this is possibly by analyzing one's own image.

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