

Competitiveness and Image of a Public Higher Education Institution - A Study of its Identity

Competitividade e Imagem de Instituição Pública de Ensino Superior - Um Estudo por meio de sua Identidade

Nadia Dessupoio¹, Paulo Roberto da Costa Vieira², Irene Raguene Troccoli³

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Abstract

The literature shows that building and maintaining a strong image by public higher education institutions (HEIs) may come from dimensions that form corporate identity: "communication and visual identity", "behavior" and "corporate culture". Using multiple linear regression, this study investigates the impact of these dimensions on corporate identity in the case of a public HEI in Brazil. A survey was conducted using a structured questionnaire answered by a sample of 203 teachers of a public HEI located in the state of Minas Gerais. The results showed that behavior was the construct that most strongly affected the identity of this institution. This contributes to the theory of corporate identity, since no empirical research exists relating the above-mentioned dimensions to identity, besides helping to strengthen the theoretical model that was used.

Keywords: Corporate identity. Public higher education institution. Multiple linear regression.

Resumo

A literatura indica que a construção e a manutenção de imagem forte de uma instituição de ensino superior (IES) pública no mercado educacional podem advir das dimensões "comunicação e identidade visual", "comportamento" e "cultura corporativa" enquanto formadoras da identidade corporativa. Utilizando regressão linear múltipla, o presente estudo verifica o impacto dessas dimensões sobre a identidade corporativa no caso de uma IES pública. Pesquisa de *survey*, utilizando questionário estruturado aplicado a amostra de conveniência constituída por 203 professores de uma IES pública localizada no estado de Minas Gerais, mostrou que o construto que impactou mais fortemente a identidade dessa instituição foi o comportamento. Esse resultado contribui às áreas dedicadas ao estudo da competitividade organizacional e da identidade corporativa já que, até sua elaboração, na literatura pesquisada inexistia trabalho empírico de natureza causal relacionando as aludidas dimensões à identidade, e também ao ajudar a tornar mais robusto o modelo teórico adotado.

Palavras-chave: Identidade Corporativa. Instituição de Ensino Superior Pública. Regression Linear Múltipla.

¹ Master's in Business Administration and Development from Estácio de Sá University. Administrator at Fluminense Federal University. Address: Rua Miguel de Frias, 9, 1º andar, 24220-900, Icaraí, Niterói, RJ, Brazil. E-mail: nadessupoio@yahoo.com.br

² Ph.D. in Administration from Rio de Janeiro Federal University. Adjunct professor of the Master's in Business Administration and Development Program (MADE) of Estácio de Sá University and professor at the National Insurance School (ESNS/Funenseg). E-mail: paulo.vieira@estacio.br

³ Ph.D. in Business Administration from Pontifical Catholic University of Rio de Janeiro. Professor of the Master's in Business Administration and Development Program (MADE) of Estácio de Sá University. E-mail: irene.troccoli@estacio.br

1 Introduction

The corporate identity, meaning the shared belief among the members about what is central, distinctive and lasting in the firm (Albert & Whetten, 1985; Cornelissen, Haslam, & Balmer, 2007), plays a strategic role and can be used to generate a competitive advantage (Suvatjjs, Chernatony, & Halikias, 2012). It should be managed so as to inspire trust in the company and satisfy the needs of its most important stakeholders, especially the internal members (Van Riel, 1995).

When projected outside the firm, the corporate identity contributes significantly to the construction of the corporate image (Abratt & Kleyn, 2012; Oliva & Prieto, 2015). This image is determined by recent impressions and opinions about a corporation, synthesizing a set of complex meanings that influence behaviors and decisions of the target publics (Vieira, 2003).

In this context, firms need to strengthen their corporate identity, because by disseminating their rare and positive characteristics, they can project a solid corporate image. The causal connection between corporate identity and image has been demonstrated empirically by evidence that indicates the influence of the former on the latter (Vieira, Freitas, & Dalto, 2014). Furthermore, besides economic rewards and better working climate, a positive corporate identity plays an important indirect role in the process of recruitment and retention of talents. Firms with higher prestige and more positive status – i.e., with a more solid corporate image – elicit stronger identification and dedication from their employees (Chunyan, Bagozzi, & Meland, 2015).

In a broader view, these phenomena are not limited to businesses; they also apply to higher education institutions (HEIs). Even though HEIs do not sell tangible products, many of them have implemented corporate identity projects allied with their programs for growth and expansion (Melewar & Akel, 2005; Chapleo & Reader, 2014; Chapleo & Clark, 2016). The reason is that the ability to attract resources is directly influenced by the importance of the distinctive characteristics that compose their identity, and that influence their ability to promote positive associations with the most important stakeholders (Baker & Balmer, 1997; Chapleo, 2015; Duesterhaus & Duesterhaus, 2014).

Furthermore, since a solid corporate identity can have a positive impact on the corporate image, this is a relevant element for HEIs by increasing their funding. This aspect is more dramatic in moments of economic deterioration associated with severe fiscal adjustment, affecting the availability of resources throughout the economy, including the education market (Cury, 2014).

As a consequence, HEIs need to implement strategies to maintain their competitiveness (Mohamad et al., 2007; Ansoglenang, Awugah, & Thompson, 2018), among which are the commitment and loyalty of their faculty members. In other words, since attracting and retaining qualified people is vital for the survival of companies (Chunyan, Bagozzi, & Meland, 2015), by analogy the qualification of the teachers is fundamental for the quality of the results of the courses and other services rendered by HEIs (Veludo-De-Oliveira & Ikeda, 2006).

Since the stakeholders of HEIs can be individuals, companies or groups drawn from society at large (Kantanen, 2012), there are various aspects that influence the development of their corporate identity. The reason is that all agents expect distinct returns, both tangible (money, time, goods, legal rights) and intangible (trust, moral affirmations, prestige, emotions).

Therefore, public HEIs need to pay attention to the way they communicate and how they convey meaning to their stakeholders. This process involves the way their corporate identity is transmitted through various elements: culture, communication, structure, strategy, visual design and the campus setting, besides the behavior of the staff, teachers and administrators (Kantanen, 2012).

Since previous research has shown that the construction and maintenance of a strong image by public HEIs in the educational market is positively influenced by the dimensions “communication and visual identity”, “behavior” and “corporate culture”, acting to mold the corporate identity (Melewar & Jenkins, 2002), the question addressed here is: Which of these dimensions has the greatest impact on the corporate identity of a public HEI, and hence affects its competitiveness?

The objective of this article is to contribute to the literature on organizational competitiveness and corporate identity by means of analyzing a theoretical model whose robustness we want to strengthen, by seeking to disprove it by using an alternative causal tool to that used in a previous study of the same topic.

The article is organized in four more sections after this introduction: theoretical framework; methodological aspects; primary results; and discussion.

2 Theoretical Framework

2.1 Corporate identity

In the field of marketing, corporate identity is a strategic resource that can be used to generate a competitive advantage, and should be managed so as to satisfy the needs of the firm’s most important stakeholders (Melewar & Jenkins, 2002).

The identity of a corporation is expressed through the sum of elements, such as the varied communication channels, corporate strategy, structure, culture, business performance, and behavior of employees (Balmer, 2001). Each company has an identity that articulates its corporate essence, objectives and values, and that presents a sense of individuality that helps to distinguish it from rivals (Balmer & Gray, 2000).

Because of his multiplicity of aspects, management of the corporate identity should be based on an understanding of its complex and multidisciplinary character. This makes a deep analysis necessary to decipher the essence in its construction (Cornelissen & Elving, 2003), hence the multidisciplinary approach of this study (Van Riel, 1997; Alessandri, 2001; Balmer, 2001).

Although the literature presents various definitions of identity and image, there are points in common between these two constructs, such as the consensus that corporate identity consists of a set of representations that distinguish companies, while image refers to the overall impression made by the firm on its external publics (Vieira, 2003).

In this case, the interaction or experience with the corporate identity influences the construction of the corporate image in the public eye: the mission of a firm affects its identity, which affects its image, which in turn contributes to the establishment of the firm’s reputation over time (Alessandri, 2001).

Since the corporate identity is associated with the perception of the various public groups and their interest regarding the way the firm presents itself, the starting point to solidify it can be by establishing an integrated visual identity, consisting of the use of a uniform name and visual system in all its interactions. This contributes to the transmission of the size and strength of the firm, and gives it greater visibility (Baker & Balmer, 1997).

Among the various conceptual models for the process of managing the corporate identity (Kennedy, 1977; Dowling, 1986; Abratt, 1989; Marwick & Fill, 1997; Stuart, 1998, 1999; Alessandri, 2001; Abratt & Kleyn, 2012), the underlying hypothesis is that if this identity is managed well, the resulting corporate image will tend to reflect the values, beliefs and strategic orientations of the firm.

In the specific case of the corporate identity of higher education institutions (HEIs), it works as a basis for favorable positioning in the short run and for growth in the long run

(Melewar & Akel, 2005; Baker & Balmer, 1997). In these circumstances, the importance of the corporate identity in attaining the main objectives of these institutions is evident.

2.2 Constituent dimensions of corporate identity

In theoretical terms, corporate identity can be determined by four subconstructs, also called dimensions: “communication and visual identity”; “behavior”; “corporate culture”; and “market conditions” (Melewar & Jenkins, 2002)ⁱ.

Corporate communication encompasses all the ways the firm communicates with its various publics, so that they perceive its identity (Balmer & Gray, 2000). Hence, all the messages from a company, everything it produces and the activities in which it is involved will act to mold the perceptions built by its stakeholders.

Communication is present in all corporate activities and plays a very important role in the performance of the teams, to preserve and strengthen the corporate identity, or to drive the firm in the direction of the desired transformations (Baldissera, 2000). Transmitting the corporate identity is equivalent to developing a relationship of exchange with the firm’s stakeholders (Suvatjis, Chernatony, & Halikias, 2012).

Visual identity, in turn, is the expression used to describe the large number of visual clues that are associated with a company, relating them with the physical and graphical dimensions of the corporate identity (Melewar & Karaosmanoglu, 2006). It includes the set of signs that graphically convey the corporate essence, which are applied according to a corporate identity standard that determines their uses and applications in various circumstances.

For this reason, the corporate identity is an important source to influence stakeholders, including employees, investors and consumers. It is often considered to be synonymous with visual identity, since it is connected to the firm’s symbols (Melewar & Saunders, 1998; Abratt & Kleyn, 2012).

Related to corporate visual identity, corporate design includes the physical location of a firm (Melewar & Jenkins, 2002; Zulhamri, Nordin, & Aziz, 2013), along with the architecture, since buildings can communicate the firm’s values and philosophy (Russell, 2001). Corporate design supports corporate communication, both internal and external, and is an important aspect influencing the perception of stakeholders about the firm’s values and philosophy (Melewar & Karaosmanoglu, 2006).

With regard to the behavior dimension, it is an intangible aspect of corporate identity, associating the forms of action of the firm and its members. It is composed of the attitudes and actions that occur both spontaneously and with planning. By influencing and molding the perception of suppliers, customers and employees, behavior impacts the perception of what the company is (Melewar & Karaosmanoglu, 2006).

It is important for the employees to have a positive perception of their company, so that they identify with it, and thus act to promote reliability and credibility of the firm in its various interactions. Therefore, employees’ behavior affects the company identity, and as a consequence, the corporate image, because it operates at the interface with customers, with the government, with shareholders and with the other stakeholders of the firm (Kitchen et al., 2013).

In turn, corporate culture is defined as the set of specific values and beliefs of a firm, expressed by habits, rites, myths, taboos, mentality, creations, management style, ruptures and recodifications, all of which are identity aspects that make a firm unique in relation to others (Baldissera, 2000). It is the most important constituent dimension of corporate identity (Baker & Balmer, 1997).

This implies that the identity is responsible for consolidating the corporate philosophy, which expresses the essential values of the company, generally reflected in its vision and mission. Therefore, understanding the corporate identity requires considering the scope of the

cultural influence, since values are strongly influenced by cultural elements (Zulhamri, Nordin, & Aziz, 2013).

Furthermore, culture is constructed by the interaction of the members of the firm, who ideally share values, assumptions and beliefs, based on evidence, able to give a certain identity to the firm (Beltrão & Cardoso, 2009). This implies that corporate identity encompasses the perception of the members, involving shared values and distinctive traits that support the collective comprehension of the firm (Abratt & Kleyn, 2012).

2.3 Corporate identity of Higher Education Institutions (HEI)

Corporate identity acts as a lever for favorable positioning in the short run and growth in the long run of HEIs (Melewar & Akel, 2005; Baker & Balmer, 1997). In these circumstances, the importance of corporate identity to achieve the main objectives of these institutions is obvious.

The construction of a solid corporate identity contributes to the formation of a positive image, which in turn can make the HEI more attractive in the educational field (Vieira, Freitas, & Dalto, 2014; Oliva & Prieto, 2015). Since this process depends on how well an institution satisfies its basic responsibilities (teaching, research and extension), it is fundamental to determine what enables a HEI to be identified as unique and essential. In other words, it is vital for schools not only to have rare and positive characteristics that give them an edge over peers, but also to effectively communicate these distinctive traits to their stakeholders (Kantanen, 2012).

Examples of this phenomenon can be found in the specialized literature. For instance, according to Baker and Balmer (1997), in the 1990s the administrators of the University Strathclyde, located in the United Kingdom, identified that its low public recognition was in large part due to the fact that each of its units developed and used distinct visual identity elements, leading to difficulties of their association with the university as a whole.

This situation was resolved by the revision of its visual identity. By using one name and one visual system in all its interactions, it came to have a single central identity, without impairing the identity of each of its units. In other words, the stress was shifted to the university instead of the individual units.

Another example can be found in Melewar and Akel (2005), who applied the constituent dimensions of the model developed by Melewar and Jenkins (2002) to analyze the strategic intention behind the corporate identity program of the University of Warwick, also in the United Kingdom. Launched in 2002, this program was aimed at enhancing the university's visibility and establishing an immediate distinction between Warwick and its competitors, by projecting itself as being responsible, progressive, innovative, reliable, creative and accessible, with emphasis on its professional and business-oriented profile and high quality.

For this purpose some initiatives were taken, such as creation of a simplified logo of the university, to convey the feeling of being highly professional for simultaneously being clear and modern. The idea was to centralize and give consistency to the institution's visual identity.

Another initiative involved the appearance of its buildings, which were not always in harmony with the school's values, and for this reason did not manage to transmit the innovative, creative and professional character sought by the university.

A third point addressed by the University of Warwick in this process involved its corporate culture, since the behavior of its employees revealed an area of potential conflict, mainly that their reasons for working at the university differed between the administrative staff and the faculty members.

A similar situation occurred in Portugal, where until the end of the 1990s these institutions paid more attention to institutional publics, used one-way communication and relied

on traditional means of communication (Ruão, 2005). Portuguese universities became aware of the need to develop integrated communication policies, not only to improve internal communication, but also to reach out to potential students, going beyond the merely informative and bureaucratic character. Such measures were important at that moment, when academic institutions were passing from a predictable scenario of easy recruitment of students to an unstable climate, with the establishment of competition for students, teachers and funding.

The alteration of the communicational management, with reorientation of the form of communication and building meaning for internal and external stakeholders, managed to solidify the development of the identity and image of these HEIs. As the role of identity and image in the management of universities became more visible, this provided them with a source of differentiation, positioning and internal cohesion, able to sustain them better (Ruão, 2005).

In the case of the University of Utara Malaysia, located in Malaysia, Mohamad, Abu Bakar and Rahman (2007) found that all the components of corporate identity identified by Melewar and Jenkins (2002) – “communication and visual identity”, “corporate communication”, “corporate culture” and “market conditions” – played important roles in constructing its institutional reputation. They argued that Malaysian universities in general should concentrate more on their identity, to obtain better competitive advantages and strengthen their reputations.

These examples reflect the need for HEIs to communicate their unique characteristics effectively and consistently to all stakeholders. In these circumstances, positive corporate identity can be a powerful source of competitive advantage for universities.

3 Methodological Aspects

To obtain a response to the research question, we did not perform a field survey, instead using the database collected by Dessupoio (2015). In the second semester of 2015, given the impossibility of consulting all the members of the faculty of the public HEI selected (located in the state of Minas Gerais), the first author used a non-probabilistic sample, chosen by convenience and accessibility, composed of 203 professors. Among them, 65% were men and 60% were between the ages of 30 and 49 years, with very few of the teachers being 29 years old or younger.

Dessupoio (2015) applied a self-administered questionnaire to this sample, with a Likert scale of five response options, ranging from “totally disagree” to “totally agree”, based on the academic literature about the problem investigated, composed of 23 closed-ended questions. Of these, 20 referred to the four latent variables (“Communication and Visual Identity”; “Behavior”; “Corporate Culture”; and “Corporate Identity”), two were demographic questions and one (intended to represent the identity construct in a future state) elicited a score to measure the institution’s self-image.

The choice here to use that previous database was because in that study a model was applied influenced by the one that Batraga and Rutitis (2012) considered to be one of the broadest representations of corporate identity: the multidisciplinary model of Melewar and Jenkins (2002). It was re-specified in that earlier study (Dessupoio, 2015) (Figure 1) because of the singular characteristics of the respondents studied there, so that the model used here defines the observed variables that compose the dimensions that affect the corporate identity by identifying the subconstructs “Communication and Visual Identity”, “Behavior” and “Corporate Culture”.

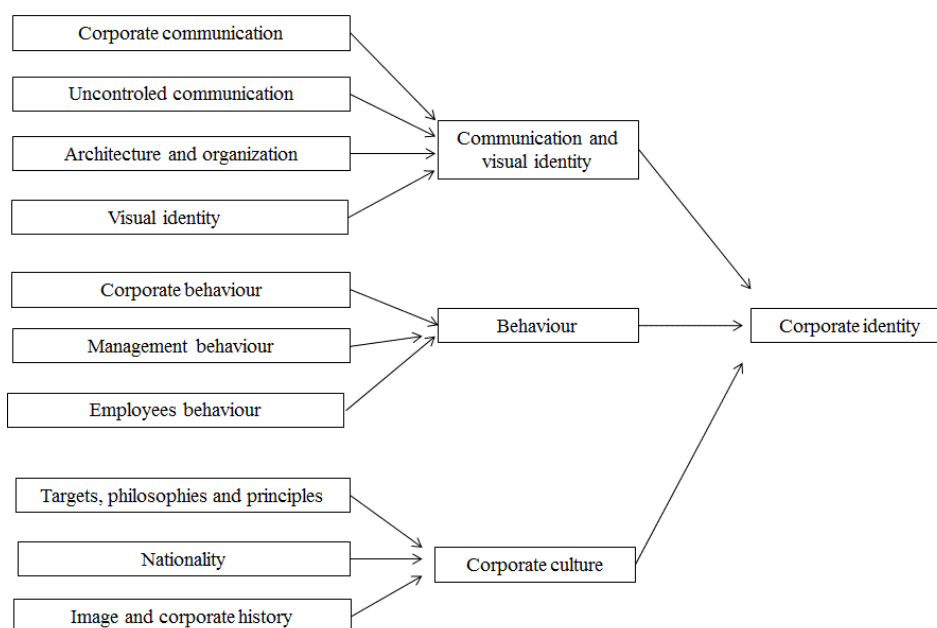


Figure 1 - Corporate identity model

Source: Prepared by the authors, adapted from Melewar and Jenkins (2002, p. 81).

Dessupoio (2015) used four latent variables in her structural equation model, which based on reflective measurement explained most of the variance of the associated observed variables: 1) CVI: a latent variable representing the institution’s “Communication and Visual Identity”; 2) BEH: a latent variable representing “Behavior”; 3) CULT: a latent variable representing “Corporate Culture”; and 4) CI: a latent variable representing “Corporate Identity”. The metric variable SCORE was employed as a proxy for the corporate identity construct, based on the hypothesis of using a statistical tool other than structural equation modeling, with an approach by means of partial least squares.

Since the evaluation of these four latent variables was carried out indirectly using the structural equation modeling technique (SEM) based on partial least squares (PLS), Dessupoio (2015) validated the scale and found statistical significance for all the items of the questionnaire referring to the observed variables associated with each of the constructs.

The observed variables included in the study of Dessupoio (2015), along with the corresponding construct and questionnaire items used there, are identified in Figure 2.

Item no.	Items of the questionnaire	Construct	Observed variable
1	The university has an efficient communication with its external public.	Communication and Visual Identity of the Institution (CVI)	CVI1
2	A variety of channels exist that facilitate the internal communication process.		CVI2
3	The university is concerned with informing its internal members about the occurrences associated with it.		CVI3
4	The university’s actions reflect its essence.	Behavior (BEH)	BEH1
5	The behavior of the faculty members reflects the university’s mission.		BEH2
6	The decisions of the senior administrators regarding the teaching and research activities influence the perception of the faculty regarding the university’s essence.		BEH3
7	The faculty members identify with the proposals related to teaching and research of the university.		BEH4

8	The faculty members consider the university's mission to be fundamental.	Corporate Culture (CULT)	CULT1
9	The faculty members share the values observed by the university.		CULT3
10	The university's most important objectives are considered relevant by the faculty.		CULT4
11	The university's principles are shared by the professors.		CULT5
12	The university has specific characteristic that set it apart from others.	Corporate Identity (CI)	CI1
13	The university presents itself as integrated to the external public.		CI2
14	A consensus exists regarding the relevance of the university among the faculty members.		CI3
15	Attribute a score from 0 to 10 to the self-image you have of the institution, where 10 is the highest score.	Corporate Identity	SCORE

Figure 2 - Items of the questionnaire and respective construct and observed variables

Source: Prepared by the authors.

In this study, the data treatment technique was multiple linear regression (MLR). This choice of a different method that employed by Dessupoio (2015) was motivated by the principle of seeking to disprove theoretical models by repeated attempts with different cause-effect tools, to establish greater robustness of the results with statistical significance.

The selection of the substitute variable for each construct (or factor) used in the structural equation model of Dessupoio (2015) followed the orientation of Hair et al. (2005), who postulated that the variable with the highest factor loading in each factor can act as its representative variable. To represent the constructs "Communication and Visual Identity", "Behavior" and "Corporate Culture", we considered the observed variables CVI6, BEH2 and CULT3, respectively.

Since in this study MLR was used instead of SEM, the variable SCORE was employed as a proxy for corporate identity.

MLR is a technique to confirm dependence, with the aim of evaluating the relationship between a dependent metric variable and one or more independent variables. It can be summarized by the following equation:

$$Y_i = \alpha + \beta_i X_i + \mu_i, \text{ where } Y \text{ is the dependent variable representing the phenomenon under investigation (here corporate identity); } \alpha \text{ is the linear coefficient; } \beta_i \text{ (} i = 1, 2, \dots, n \text{) represent the angular coefficients; and } \mu_i \text{ is the error or residual term.}$$

The model's goodness of fit is indicated by the coefficient of determination (R^2), which measures to what extent the dependent variable is explained by the model. R^2 varies from 0 to 1, and it never declines when independent variables are added to the model. In most cases, R^2 increases when independent variables are added to the regression equation. To overcome this limitation, the natural solution is to employ variance instead of variation, eliminating the dependence of the goodness of fit on the number of independent variables in the model.

In this context, the adjusted coefficient of determination (adjusted R^2) is defined. It is considered to be a more suitable goodness of fit measure, since when new variables are added to the model, that coefficient can increase or decrease, eliminating the incentive to include numerous variables in the model without careful examination of their relevance.

The processing of the linear regression produces angular coefficients of the variables representing the construct, whose absolute values enable classification of the independent variables (here exogenous constructs represented by the variables CVI6, BEH2 and CULT 3)

by order of relevance, indicating those that have greater impact on the dependent variable corporate identity (denoted by the variable SCORE).

An important hypothesis of MLR is that the error terms have constant variance – i.e., homoscedasticity – besides not being auto correlated, and also of not being correlated with the independent variables. To evaluate the existence of autocorrelation between two subsequent error terms, the Durbin-Watson test can be used, whose desired value is in the neighborhood of 2.

Another basic hypothesis of MLR is the absence of a linear relationship between the independent variables (no multicollinearity). A way to diagnose multicollinearity in multiple linear regression models is by applying tolerance statistics and the variance inflation factor (VIF), whose expressions are as follows:

$$\text{Tolerance} = 1 - R_k^2$$

$$\text{VIF} = 1/\text{Tolerance}$$

Where R_k^2 is the coefficient of fit of the regression of a determined independent variable k with the other independent variables.

Thus, the tolerance indicates the proportion of the variation of an independent variable that does not depend on the other independent variables. The VIF statistic, on the other hand, measures to what extent each regression coefficient increases due to multicollinearity.

In practice, tolerance values below 20% or above 5 reflect multicollinearity problems.

To obtain the results, we used the SPSS software (version 21), employing the Stepwise procedure with the Forward criterion, whose main characteristic is sequential inclusion of the variables that exhibit relevance at the desired significance level. This procedure also allows eliminating problems of multicollinearity, since it assesses the significance of each independent variable and considers as relevant only those without multicollinearity.

4 Results

The three independent variables together explained 22.7% of the variance of Y, which can be considered adequate for exploratory studies. It should be noted that as additional variables were inserted, the adjusted R^2 value increased, meaning to say that the variables inserted at each step were relevant, because they explained rising portions of the variance.

Furthermore, there is no problem of multicollinearity of the residuals, since the Durbin-Watson statistic is near 2 (Table 1).

Table 1 – Summary of the Hypothetical Model^d

Model	R	R ²	Adjusted R ²	Standard Error of Estimate	Durbin-Watson
1	0.401 ^a	0.161	0.156	0.938	
2	0.456 ^b	0.208	0.200	0.913	
3	0.488 ^c	0.239	0.227	0.898	2.123

Source: Prepared by the authors.

a. Predictors (Constant), BEH2

b. Predictors (Constant), BEH2, CULT3

c. Predictors (Constant), BEH2, CULT3, CVI6

d. Dependent variable: SCORE

It can be seen that the model investigated is statistically significant to explain the behavior of Y (Table 2).

The information in Table 2 is corroborated by the results in Table 3, which show the model's coefficients, i.e., the estimates of the linear coefficient and the angular coefficients of the model's independent variables, with the respective statistical significance levels. All the explanatory variables are significant, because $p < 0.05$.

Table 2 – Significance of the Hypothetical Model^a

Model	Sum of Squares	df	Mean Squared	F	Sig.
1 Regression	33.844	1	33.844	38.467	0.000 ^b
1 Residual	176.843	201	0.880		
Total	210.687	202			
2 Regression	43.887	2	21.944	26.311	0.000 ^c
2 Residual	166.800	200	0.834		
Total	210.687	202			
3 Regression	50.260	3	16.753	20.781	0.000 ^d
3 Residual	160.428	199	0.806		
Total	210.687	202			

Source: Prepared by the authors.

a. Dependent variable: SCORE

b. Predictors (Constant), BEH2

c. Predictors (Constant), BEH2, CULT3

d. Predictors (Constant), BEH2, CULT3, CVI6

Table 3 - Coefficients^a

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		B	Standard error	Beta		
1	(Constant)	6.456	0.297		21.755	0.000
	BEH2	0.481	0.078	0.401	6.202	0.000
2	(Constant)	5.858	0.336		17.410	0.000
	BEH2	0.361	0.083	0.300	4.336	0.000
	CULT3	0.288	0.083	0.240	3.470	0.001
3	(Constant)	5.599	0.343		16.302	0.000
	BEH2	0.289	0.086	0.241	3.372	0.001
	CULT3	0.262	0.082	0.219	3.191	0.002
	CVI6	0.191	0.068	0.188	2.811	0.005

Source: Prepared by the authors.

a. Dependent variable: SCORE

Furthermore, the tolerance values are high, implying VIF values lower than 5, attesting to the absence of multicollinearity of the independent variables (Table 4).

Table 4 – Analysis of Collinearity^a

Model	Beta In	t	Sig.	Partial correlation	Collinearity statistic	Collinearity statistic	
					Tolerance	VIF	
1	CVI6	0.212 ^b	3.120	0.002	0.215	0.866	1.155
	CULT3	0.240 ^b	3.470	0.001	0.238	0.825	1.212
2	CVI6	0.188 ^c	2.811	0.005	0.195	0.855	1.170

Source: Prepared by the authors.

a. Dependent variable: SCORE

b. Predictors in the model: (Constant), BEH2

c. Predictors in the model: (Constant), BEH2, CULT3

5 Discussion

All organizations can be said to have a corporate identity, which consists of the collective self-image that their members have of them. This identity, when projected to the external public, helps to form the corporate image, which has inestimable value to the organization, because it cannot be copied by other organizations. It is thus relevant to examine corporate identity.

Considering the model of Melewar and Jenkins (2002), Dessupoio (2015) showed by using structural equation modeling that the constructs CVI, BEH and CULT had a positive impact on the corporate identity of the HEI analyzed, a finding corroborated by the present study via the use of multiple linear regression.

In response to the research question proposed here, the “Behavior” construct is the one that has the strongest impact on the identity of the public HEI investigated. The other constructs – “Corporate Culture” and “Communication and Visual Identity”, in that order of importance – also attain positive impact coefficients for the institution’s identity. This means to say that with the use of MLR there was full convergence with the result of the hypothetical model applied by Dessupoio (2015), which reinforces the adequacy of this model to explain the corporate identity of public HEIs.

With regard to the “Behavior” construct, denoting the behavior of the faculty, this should reflect the university’s mission, and reveal that the institution’s actions to project its characteristics to its members are of great importance in determining the corporate identity. This means that when identifying with the organization’s actions, which should be in line with the institutional values and mission, the members project a consistent self-image to the external environment.

The variable representing the “Corporate Culture” construct, had the second strongest impact on the identity of the public HEI studied. This variable is related to the sharing among the faculty members of the observed values and principles of the university. Once again the identification of the faculty with the university’s values and mission appears. This identification is fundamental to construct the identity, resulting in the projection of an integrated and harmonious identity to the external environment. It also contributes inestimably to the establishment of a solid corporate image to the most important members of the external public.

Finally, regarding the “Communication and Visual Identity” construct, its representative variable had the least impact, although it was equally significant. In this context, the communication of the university to its external public is very important. The institution should be transparent regarding the results obtained from its actions, notably the achievements in the areas of research and faculty qualification, along with its contribution to improve the welfare of the public at large.

The integrated efforts of the university in these three dimensions of corporate identity should result in a solid image, enabling better positioning in the education market, and resulting in obtaining more funds to pursue its institutional mission. It also can help retain existing talents and attract new ones, which is important to the school’s long-term development. These actions can strengthen the projection of a positive corporate image to the external stakeholders, as indicated in the theoretical discussion.

This study contributes to the theory regarding corporate identity, since the literature search, mainly involving HEIs in Brazil, revealed a lack of empirical studies about the topic, especially using cause-effect statistical tools. The literature review also indicated the absence of empirical studies of a causal nature relating the alluded dimensions with the identity of HEIs.

As is the case of any study, this one has several limitations, among them the impossibility of generalization, since the sample was not probabilistic (instead obtained by convenience) and was drawn from a single HEI. However, this does not prevent this study from

servicing as a model for quantitative studies to verify the identity of other public HEIs. We also recommend conducting qualitative research to refine the questionnaire, for use in future investigations of this important theme.

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ⁱ It includes the sub-construct “Market Conditions”, which we did not evaluate because of the focus on a public HEI, which has different goals than its private counterparts with respect to attracting students.