

BRAND EQUITY OF A HIGHER EDUCATION INSTITUTION – A CASE STUDY OF EFOS

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Abstract

Purpose – Over recent decades, the Croatian higher education market has undergone significant change. Negative demographic trends, including long-term negative population growth and youth emigration, privatisation, and rising competition have pushed higher education institutions (HEIs) to adopt more active marketing strategies and tactics to preserve their market positions. Branding has emerged as a prominent strategy: many HEIs now view strong brands as strategic assets that can create competitive advantage. Our study explores higher education branding and how HEI brands are perceived in Croatia, focusing on current students and using Aaker's brand equity model to assess institutional brands and their most important attributes.

Methodology – A survey was conducted among students in Croatia using an instrument based on Aaker's brand equity model. Analysis was employed to examine the influence of the model's different dimensions on the perceived brand value of higher education institutions.

Findings – The study confirmed the applicability of Aaker's model of brand equity in the specific context of higher education. The most important elements contributing to a positive brand perception of an HEI were identified, and their relationship to brand awareness, perceived quality, and loyalty as elements of brand equity was explored.

Contribution – The study theoretical contribution is in enriching the literature on brand equity in the specific context of higher education. The empirical contribution lies in investigating the determinants of HEI brand equity from the perspective of students as the primary customers. It also offers practical value by providing insights into students' evaluation of core values that a specific HEI can use in its strategy development.

Keywords higher education, branding, brand equity, students, Croatia

INTRODUCTION

Dynamic changes in the higher education market in Croatia over recent decades, marked by negative demographic trends, declining government funding, sector privatisation, and increased local and international competition, have led higher education institutions (HEIs) to intensify the implementation of various marketing strategies to maintain their market position. Decreasing government funding is a major reason for institutions to adopt marketing strategies (Ivy, 2001), as they need to find alternative sources of income, which has made them more marketing-aware (Brookes, 2003; Adcroft, Teckman and Willis, 2010). Maringe (2010) identifies increased competition in the education market as one of the main drivers of higher education marketisation.

One of the strategies being used is the branding of HEIs. Brand management, according to Aaker (1991), is one of the key organisational competences. A successful brand results

in superior profitability and market performance (De Chernatony and McDonald, 2005). Although branding is widely known and applied in the business sector, its application in higher education is relatively new in Croatia. From an international perspective, many international HEIs have invested significant effort in their branding, and branding as a strategy is highly recommended (Anctil, 2008; Casidy, 2013). Not only universities such as Oxford and Harvard have built strong and long-standing brands, but, as a complex qualitative study in Great Britain (Mampaey and Huisman, 2016) shows, branding strategies exist in both higher and lower reputation HEIs. It confirms that in Great Britain branding is a widely adopted marketing strategy within higher education context. The same is visible in other developed countries.

As higher education market increasingly resembles those of high developed countries, Croatian HEIs recently recognise that strong brands are key resources for generating competitive advantage. However, as most HEIs, at least in Europe, are public, non-profit organisations, Chapleo (2015) highlights the ongoing debate on the desirability of branding in the higher education market, as well as the issue of quantifying the benefits of branding HEIs.

Given the issue of questionable measurement and benefits of HEI branding, this study aims to provide deeper insight into higher education branding and HEI brand perceptions in Croatia. The study focuses on current students and applies Aaker's brand equity model to evaluate HEI brands and their most important characteristics.

The paper is organised as follows: after the introduction to the topic, a literature overview and hypothesis development are presented. The methodological section explains the research methodology used, sample characteristics, and research results. This is followed by a discussion of the results and conclusions.

1. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Branding is defined in many different ways, but all of definitions emphasize name, reputation, perception, experience, positioning and association as the core dimensions of a brand (Amzat, 2016). As in business sector, all these dimensions can be found as important in higher education. It is equally important to build long-lasting relationships with customers – current students, that are often key informants and “influencers” in higher education market by sharing their experiences as well as former students who, if having positive previous experience with the HEI, often return for lifelong learning programs or partner in different HEI projects. The brand and image of a HEI can contribute to the HEI attractiveness to high quality students and academic staff. It can also attract financial support of alumni, donors and business environment. (Ivy, 2001; Belanger et al., 2002; Stensaker, 2005). Today, students are characterized by sophisticated lifestyles, expensive tastes, uniqueness and choosiness as well as high expectations and technology expertise. In this context branding of HEI is much more than supplying quality education; it encompasses HEI's reputation, employability of its alumni, the productivity of the alumni in the workplace, the irrefutable standing that the institution has among its customers, its experience and global image. (Amzat, 2016).

Thus, HEI branding, due to its importance and relevance becomes a strategic managerial decision. Developing and maintaining the brand equity help HEIs management to create competitive market position. This is supported by Keller (2013) who noted that “brand equity can help marketers focus, giving them a way to interpret their past marketing performance and design their future marketing programs”.

Kotler and Fox (1985) emphasize that educational institutions can be branded in different ways: by a given name, term, sign, symbol, design, or some combination of these. All of them serve to identify HEI and differentiate it from competitors. This is important from the increasing competition in higher education market perspective.

The aim of branding is to create brand equity, i.e. the value that different stakeholders perceive about the brand. The concept of brand equity has been defined by Aaker (1991, p. 4) as “a set of assets such as name awareness, loyal customers, perceived quality, and associations that are linked to the brand and add value to the product or service being offered”. It can be analyzed from different perspectives: from consumers point of view, organizations’ point of view, employees’ point of view or as financial equity. From customers’, i.e. students’ point of view, which is in focus of this research, 'brand equity represents attributes such as better product performance, stronger risk reduction, lower information costs and a positive image of the product (Mourad, Ennew and Kortam, 2011). Academic and learning environment, campus life, reputation, and career prospects of graduates are the most salient brand positioning dimensions for higher education institutions (Pinar et al. 2011).

Strong brand equity is easily recognized. It creates a distinction that is strong enough to generate positive reactions to the brand (Keller, 2013). In the high competition situation, such is the higher education market, distinctiveness and positive response are crucial to retain existing and attract new customers, i.e. students.

Ng and Forbes (2009) apply service logic approach to HEI branding and identify core and supporting activities that add value to students’ experience. Core service of HEI is embodied in the learning experience, while typical supporting activities are application processes, payment of fees, campus facilities, staff helpfulness and student accommodation. They all play a role in facilitating the core service experience and need to be included in analysis of brand equity.

According to Gibby (2013), there are four key areas related to HEI branding: awareness, brand familiarity, image and strength of preference (loyalty). Awareness refers to the perceptions of different stakeholders towards the HEI – these stakeholders could be students, academic and non-academic staff, labor market, public. Familiarity is about the connection and promotion that the university has made with its stakeholders. Image defines the unique association that represents what is expected by HEI stakeholders, and strength of preference explains to what extent the prospective students, current students and alumni are loyal to their institutions.

Several studies have confirmed the importance of brand awareness as one of the key dimensions to create HEI brand (Pinar et al, 2014; Khoshtaria, Datuashvili and Matin,

2020). According to Aaker (1992), brand value is composed of five components. These components are perceived quality, brand awareness, brand associations, brand loyalty and other proprietary assets. Perceived quality is an important dimension of brand equity (Aaker, 1991, 1992). It shows how a customer recognizes the quality of a product (Zeithaml, 1988). It is closely related to brand association, which is the basis for customers' brand preference. As such, it reflects the meaning of a brand to the customer and helps shaping consumers' commitment to buy a brand (Lu and Xu, 2015). Customers having strong association with a brand often perceive positively its differentiation and tend to be loyal to the brand (Chun and Davies, 2006). Aaker (1991) states that the source from which a brand association is derived can vary, often due to organizations perception and brand personality. The next dimension of brand equity is brand awareness, which refers to the presence of the brand in the consumer's mind (Aaker, 1991; Keller, 1993). Brand loyalty represents the attachment that a customer has to a brand (Aaker, 1991). Obviously, all these elements are relevant in the higher education context. Quality of education is crucial to students since it impacts future employment possibilities. Positive brand associations contribute to the choice of HEI for starting and/or continuing education, as well as the brand awareness. Brand loyalty is important since students who are loyal to the HEI brand will contribute in terms of finance and other resources (Lai et al., 2019). They also play a significant role in recommending HEI to others and joining alumni.

Since the fifth dimension, other proprietary assets, consists of patents, trademarks, etc. is not too relevant in customer-based brand equity (Asare, 2013), it will not be considered in this analysis.

According to the literature review and research goals, the following hypothesis are proposed:

H1: Brand awareness has a direct positive effect on students' perception of EFOS brand value.

H2: Brand associations have a direct positive effect on students' perception of EFOS brand value.

H3: Perceived quality has a direct positive effect on students' perception of EFOS brand value.

H4: Brand loyalty has a direct positive effect on students' perception of EFOS brand value.

2. RESEARCH

This research uses Aaker's (1992) brand equity concept and is therefore based on consumers' perceptions i.e. a consumer-based brand equity approach. The aim is to identify key factors that contribute to EFOS brand value and provide deeper insight into strategies needed to support the brand. Descriptive statistical methods and regression analysis were employed to examine the influence of the model's different dimensions on the perceived brand value of the higher education institution.

2.1. Research design

The data were collected using a structured questionnaire administered by e-mail survey with closed questions (multiple-choice answers). The questionnaire was created according to Aaker's model of brand equity and previous research (Ostojić and Leko Šimić, 2021), and distributed to current EFOS students between February and April 2025. A total of 224 complete responses were received, representing 15.95% of the total student population at EFOS in the 2024/2025 academic year. Participants from all programmes and years of study were included.

2.2. Sample description

Table 1. shows the major characteristics of the sample.

Table 1: **Sample characteristics**

	n	%
Total	224	100
Gender		
Male	71	31.7
Female	153	68.3
Age group		
18 – 25	209	93.3
26-32	4	1.8
33 and above	11	4.9
Level of study		
Undergraduate	161	71.9
Graduate	63	28.1
Year of study		
1	3	1.3
2	116	51.8
3	51	22.8
4	22	9.8
5	32	14.3

Source: Authors

2.3. Reliability analysis of the constructs

The reliability of the constructs was assessed using Cronbach's Alpha. Table 2. depicts reliability of the constructs used in the multiple regression analysis.

Table 2: Reliability analysis

Measurement scale	Number of items	Cronbach's Alpha
Perceived brand value	4	0.818
Brand awareness	2	0.639
Brand association	4	0.768
Brand loyalty	4	0.784
Perceived quality	12	0.902

Source: Authors

The perceived quality construct demonstrated the highest reliability ($\alpha = 0.902$), followed by brand loyalty ($\alpha = 0.784$), brand association ($\alpha = 0.768$), and perceived brand value ($\alpha = 0.818$). The brand awareness construct showed the lowest, but acceptable reliability ($\alpha = 0.639$).

2.4. Research results

The aim of this research was to examine the key dimensions of brand equity and their influence on the perceived brand value of a higher education institution, using the case of EFOS. The study applied Aaker's (1992) consumer-based brand equity model, focusing on four dimensions: brand awareness, brand associations, perceived quality, and brand loyalty. Results of multiple regression analysis are depicted in Tables 3 and 4.

Table 3: Multiple regression model summary

Model	R	r2	Adjusted r2	Std. Error of the estimate	Change Statistics	
					R square change	Sig. F Change
1	0.807	0.651	0.645	0.44	0.738	0.000

a. Predictors: (Constant), Brand loyalty, Brand awareness, Brand association, Perceive quality

Source: Authors

The model summary (Table 3) indicated a strong relationship between the independent variables and the dependent variable. The model explained 65.1% of the variance in perceived brand value ($R^2 = 0.651$; adjusted $R^2 = 0.645$). The model was statistically significant ($p < 0.001$).

Table 4: **Regression coefficients of the model**

Model		Unstand. coeff.		Stand. coeff.	t	Sig.	Coll. Tol.	VIF
		B	Std. Error	Beta				
1	(Constant)	0.199	0.247		0.807	0.421		
	Brand awareness	0.096	0.058	0.076	1.653	0.100	0.773	1.294
	Brand association	0.239	0.058	0.232	4.089	0.000	0.496	2.016
	Brand loyalty	0.486	0.052	0.555	9.286	0.000	0.452	2.214
	Perceived quality	0.074	0.078	0.066	0.944	0.346	0.349	2.868

Source: Authors

The regression analysis (Table 4) showed that two predictors — brand loyalty ($\beta = 0.555$, $p < 0.001$) and brand associations ($\beta = 0.232$, $p < 0.001$) — had a statistically significant positive impact on perceived brand value, with brand loyalty emerging as the most influential factor. The effects of brand awareness ($\beta = 0.076$, $p = 0.100$) and perceived quality ($\beta = 0.066$, $p = 0.346$) were not statistically significant in this model. The results of the analysis support the acceptance of hypotheses H2 and H4, while hypotheses H1 and H3 are not supported by the data and are therefore rejected.

3. DISCUSSION

This research has confirmed that the perceived university brand value is a multidimensional concept, where its simple association with value for money and functionality as in traditional products branding is not enough and needs to be expanded within higher education context.

Research results indicate that brand loyalty and brand associations have a significant positive impact on the perceived brand value of the HEI. Similar findings regarding the importance of brand associations were reported in other studies (Pinar, Girard and Basfirinci, 2020). This highlights the importance of creating and maintaining strong brand associations based on numerous positive student experiences. University brands are influenced by students' perceptions, which are shaped by how universities manage their relationships with students (Dennis et al., 2016). The importance of brand loyalty as the most significant university brand equity dimension was confirmed in a Georgian study (Khoshtaria, Datuashvili, and Matin, 2020).

An Egyptian study on HEI branding (Mourad, Ennew, and Kortam, 2011) confirms that brand significantly influences the selection of an HEI. It found that image-related dimensions (service, symbol, and provider attributes) which all relate to quality are much more important as drivers of brand equity than awareness-related dimensions (advertising activities and word of mouth). This suggests that more effort should be invested in delivering high service quality in terms of service, provider, and symbolic attributes, which will lead to the development of a strong brand image and, consequently, brand equity, rather than focusing primarily on promotional activities. This partly supports our findings, where brand awareness was not identified as a significant predictor of brand value.

Perceived service quality is supported by several studies as the most important determinant of HEI brand equity (Cheng and Tam 1997; Davies and Ellison 1997; Sharma, Rao, and Popli 2013), which was not observed in this study. This may be because it is difficult to define it normatively, as it is predominantly related to beliefs, thoughts, feelings, and experiences. Different components of the educational product can be assessed—from administrative services to fairness in student evaluation (Valentinova and Valkov, 2020). It is possible that the elements used to measure service quality in this study did not fully capture what students perceive as impactful in brand formation.

Vukasović (2015) used consumer attributes, brand image, and brand awareness to measure HEI brand equity. Her study indicated that image-related determinants (service, symbolic, and finance attributes) were the main drivers of brand equity. Consumer attributes (experience and socio-economic factors) had no significant impact on brand equity ratings, while promotional activities had a smaller impact on brand equity.

A study by Girard and Pinar (2021) found, contrary to our results, that perceived quality had the highest importance in students' perception of brand equity, followed by learning environment, brand trust, emotional environment, university reputation, brand loyalty, brand awareness, and brand associations.

This study indicates that, although brand awareness and perceived quality were both positively correlated with perceived brand value, their effects were not statistically significant when all predictors were included in the regression model. This is likely due to multicollinearity, meaning these variables share much of the same variance with stronger predictors—in particular, brand loyalty and brand association. As a result, when all factors are considered together, brand loyalty and brand association contribute most uniquely to explaining students' perceptions of EFOS's brand, while the contributions of brand awareness and perceived quality are largely absorbed by the other variables.

These results offer several managerial implications for EFOS. Brand loyalty and brand associations, as the strongest predictors of students' brand value perception, indicate the need to focus more on these elements. As students' loyalty is predominantly determined by satisfaction (Alves & Raposo, 2007; Chandra et al., 2018), this area can be improved by deeper analysis of students' satisfaction and elements that create it, which provides opportunities for further research. Brand associations were very positive, with an average rating of 4.01 on a 5-point scale. The highest evaluation scores were given for students'

opportunities to actively participate in various EFOS activities, i.e. engagement possibilities, the location of EFOS, and the social and professional opportunities provided by EFOS (all above 4). This suggests that this aspect of the EFOS branding strategy is being implemented effectively. As for service quality, an average grade was 3.83 and for brand awareness it was 4.35. Although research results indicate no significant impact of these two elements, it is possible to identify key issues to work on: within service quality the critical element was lectures and teaching quality, and within brand awareness students did not see differentiating elements from other HEIs in similar field.

CONCLUSION

This study examined the determinants of brand equity in higher education, using EFOS as a case study and applying Aaker's consumer-based brand equity model. The holistic complexity of the HEI experience and its impact on brand equity (Pinar et al., 2014) was confirmed. The results indicate that brand loyalty and brand associations are the most significant contributors to students' perception of institutional brand value, while brand awareness and perceived quality did not show a statistically significant influence in the tested model. Among the predictors, brand loyalty emerged as the most influential factor, suggesting that students' emotional attachment and commitment to the institution play a key role in shaping brand equity.

This research provides an empirical contribution by selecting an HEI as an example of a service and investigating the determinants of brand equity from the students' perspective. As with any social science study, there are some limitations. The main limitation is that only students from one HEI in one country were included in the sample. Another limitation is the focus solely on students' perceptions, while other stakeholders (such as secondary school graduates, their parents, alumni, and HEI employees) were not considered.

There are several areas for future research that extend beyond the scope of this study. Future research should expand the sample to include multiple institutions across different regions and ownership models (public vs private) and incorporate the perspectives of additional stakeholder groups (alumni, employers, etc.). Future studies could also adopt a longitudinal design to examine how brand equity evolves over time and how students' perceptions change during and after their studies.

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