THE FACTORS AFFECTING THE BRAND EQUITY
OF DONG THAP UNIVERSITY - RESEARCH BASED ON STUDENTS

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Abstract

The research investigates the factors affecting Dong Thap University brand equity based on students' view through four factors, namely Brand awareness, Brand association, Perceived quality and Brand loyalty. The study uses primary data by surveying students studying at Dong Thap University and 300 responses collected by using questionnaire through convenience sampling (non-probability sampling). Data were analyzed to obtain descriptive statistics, Cronbach Alpha, and other analyses (i.e. exploratory Factor Analysis, estimation and regression testing). Result shows that the four factors in consideration affected the brand equity of Dong Thap University, followed by other factors. Thus, this brand equity is not only affected by student perceptions, but also by training services. Accordingly, the research highlights practical implications and suggestive direction for administrative staffs to build the brand equity of Dong Thap University.

Keywords: *Association, awareness, brand equity, loyalty, perceived quality, student - based brand equity, university branding.*

CÁC YẾU TỐ TÁC ĐỘNG ĐẾN TÀI SẢN THƯƠNG HIỆU
TRƯỜNG ĐẠI HỌC ĐỒNG THÁP - NGHIÊN CỨU DỰA TRÊN ĐÁNH GIÁ
CỦA SINH VIÊN

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Tóm tắt

Nghiên cứu khảo sát các yếu tố tác động đến tài sản thương hiệu Trường Đại học Đồng Tháp dựa trên đánh giá của sinh viên thông qua bốn yếu tố bao gồm Nhận biết thương hiệu, Liên tưởng thương hiệu, Chất lượng cảm nhận và Lòng trung thành thương hiệu. Nghiên cứu sử dụng dữ liệu sơ cấp bằng cách gửi phiếu khảo sát đối với sinh viên đang học tại Trường Đại học Đồng Tháp thông qua phương pháp chọn mẫu thuận tiện (chọn mẫu phi xác suất) và kết quả thu về có 300 phiếu khảo sát được chấp thuận. Nghiên cứu sử dụng phương pháp phân tích dữ liệu như: thống kê mô tả, Cronbach Alpha, các phân tích khác (phân tích nhân tố khám phá, ước lượng và kiểm định mô hình hồi quy). Kết quả nghiên cứu cho thấy 4 yếu tố được xem xét đều có tác động đến tài sản thương hiệu của Trường Đại học Đồng Tháp. Thêm vào đó, tài sản thương hiệu của Trường Đại học Đồng Tháp không chỉ bị ảnh hưởng bởi nhận thức của sinh viên, mà còn có thể dựa trên dịch vụ đào tạo. Bài báo này cũng nêu lên những ý nghĩa thực tiễn và hướng đi gợi mở cho các nhà quản lý trường đại học nhằm xây dựng giá trị thương hiệu Trường Đại học Đồng Tháp.

Từ khóa: *Chất lượng, lòng trung thành, nhận biết, liên tưởng, tài sản thương hiệu, tài sản thương hiệu dựa trên sinh viên, tài sản thương hiệu trường đại học.*

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1. Introduction

In recent years, education reform activities at all educational levels, especially the tertiary level, have had many remarkable results. Universities not only focus on innovating teaching and learning contents and methods, but also strengthening coordination and cooperation with agencies, enterprises and employers to meet workforce needs. Besides, in order to improve the quality of teaching and learning, universities have constantly invested in facilities, teaching and learning equipment, libraries, practice rooms, experiments, and so on. However, there is another factor, which is vital to the existence and development of a university, is the strength of its brand name. The university brand helps universities attract students' choice, investment and cooperation from employers for quality improvement. Although research on brand equity has been done extensively in the fields of conventional goods and services manufacturing, it has not been widely studied in the education sector. Therefore, this study is conducted to find out the extent to which each factor has an impact on brand equity based on the assessment of students' perceptions at Dong Thap University, thereby giving some directions helping leaders and managers effectively develop Dong Thap University's brand equity.

2. Literature review

2.1. Conceptual framework

2.1.1. Brand equity

During the past few decades, the concept of *brand equity* has increasingly concerned by marketing managers and researchers due to its major role as an important corporate intangible asset. There are many definitions of brand equity. Firstly, it has been defined by Aaker (1991, p. 4) as: a set of brand 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. On the other hand, Keller (1993) focusing on marketing described it as the differential effect of brand knowledge on consumer response to the marketing of the brand. From the above definitions, it is indicated that brand equity is a very broad and abstract concept and can be viewed from a number of different perspectives. There are at least four perspectives on brand equity, namely customer market/consumer-based, product market/firm-based,

financial market, and employee-based (Aaker, 1996; Ailawadi *et al.*, 2003; Keller, 1993; Kim *et al.*, 2003; Netemeyer *et al.*, 2004; Supornpraditchai *et al.*, 2007; Yoo and Donthu, 2001).

• Financial-based brand equity (FBBE): The key role of FBBE is to quantify the financial value that brand equity provides to the firm. Aaker (1991, 1996), Agarwal and Rao (1996) delineate the financial value of brand equity by defining it as the ability of a brand to charge a higher price than unbranded equivalent charges. Kapferer (2008, p.14) defines FBBE as the 'net cash flow attributable to the brand after paying the cost of capital invested to produce and run the business and the cost of marketing''.

• Consumer-based brand equity (CBBE): Keller (1993, p.2) views CBBE as "the differential effect of brand knowledge on consumer response to the marketing of the brand", and CBBE occurs "when the consumer is familiar with the brand and holds some favorable, strong, and unique brand associations in memory". He further elucidates that the "primary" associations with the brands result in brand beliefs and attitudes. The beliefs and attitudes can stem from the functionality, derived experiences, or symbolic values of the brand. Underlying this perspective is the notion that the power of a brand lies in what customers have learned, felt, seen, and heard about the brand.

• Product market/firm-based brand equity (MBBE): From a firm's point of view, brand equity represents attributes such as lower financial risk, incremental cash flow, higher rent, higher entry barriers, lower marketing, and distribution cost for extensions and protection from imitation via trade marking. The benefit of brand equity should ultimately be reflected in the brand's performance in the marketplace (Aaker 1991, 1996; Agarwal and Rao, 1996). Price premium is measured either by asking consumers how much more they would be willing to pay for a brand than for a private label or an unbranded product or by conducting conjoint studies in which brand name is an attribute.

• Employee based-brand equity (EBBE): is another brand equity dimension focusing on the employees' perception toward the organization brand. EBBE reflects "uniqueness of company brand associations, brand consistency, brand creditability and brand clarity" (Supornpraditchai *et al.*, 2007, p. 1728; Mourad *et al.*, 2011, p. 405).

2.1.2. University brand equity and measurement aspects

According to Law No. 34/2018/QH14 on amendments to the Law on higher education, the higher education institution is an educational institution of the national education system performing the training function of Higher education (university degree, master's degree and doctoral degree), science and technology activities, community service.

In recent years, higher education institutions have focused on university brand equity. To do this, universities have constantly improved the quality of training to meet the needs of learners, university training association with enterprises, investing in modern learning facilities and equipment. However, the most important issue is that higher education institutions need to take into consideration students' opinions on training quality and the university's image, thus evaluating their opinions (as consumers) to the university brand equity. From this assessment, university managers will identify the direction to promote the value of the university, thereby contributing to attracting students, attracting cooperation with employers. According to Chu Nguyen Mong Ngoc (2010), today's universities should consider students to be the service subjects to be provided with a special kind of service, especially training service (the concept of "training" here is much narrower than that with "education" on the humanity and concretized as professional training).

Some international and local researches inheriting from the brand equity model based on consumers (Aaker, 1991) have suggested a brand equity model that can be adapted and used in the training services sector such as Dennis *et al.* (2016), Dung (2019), Mourad *et al.* (2011), Pham Thi Minh Ly (2014), Vu Thi Thu Ha (2019). In the above-mentioned researches, four components of the university brand were mentioned, namely *Brand awareness, Brand associations, Perceived quality, Brand loyalty*. Therefore, in this study, the authors decide to apply these four brand equity components in the context of Dong Thap University.

• Brand awareness: Brand awareness refers to the ability of a customer to recognize or remember a brand of a certain product (Aaker, 1991). According to Keller (1993), brand awareness consists of two factors: brand recall and brand recognition. Brand awareness indicates the ability of a customer to identify and differentiate a brand's characteristics from other brands' in the market. Brand awareness is an important component of brand equity. In higher education services, the university brand awareness is reflected in the ability of learners to recognize outstanding features when referring to higher education institutions, helping to distinguish one university from another. Thus, in order to make a decision to choose a school, students should be able to first identify which school is suitable for their needs so that they can make a decision. Thus, brand awareness is an indispensable component of brand equity in higher education institutions.

• Brand association: A brand association is anything that connects a consumer's mind with a brand. The related information helps to process and retrieve information, a source of differentiation and brand positioning, to know consumers' purchase intentions, and to create a positive attitude, as the foundation for the wide branding (Aaker, 1991). In the field of educational services, brand association shows that, when referring to universities, students associate specific attributes of the university such as good educational environment, diverse majors/chapters curriculum, good facilities, a team of experienced lecturers, and especially employment opportunity after graduation. This is the basis for learners to choose higher education institutions. Therefore, brand association is also an indispensable component in the field of education.

• Perceived quality is the overall opinion or assessment of a customer about the superiority or excellence of a product. Aaker (1991) defines perceived quality as the consumer's perception of the quality or superiority of a product brand. It is the difference between the total value a customer receives and the value they expect in a product or service when deciding to consume at a certain price. A brand is often accompanied by an overall perception of a customer about a product's quality. In fact, the actual quality of the brand that the business provides, and perceived quality do not often coincide, because the customer is not an expert in the field. However, the quality that customers perceive is the factor that customers use as a basis for implementing consumer behavior. Perceived quality in university is reflected in the learners' perceptions of the quality or

superiority of a university brand in terms of the quality of the faculty, the curriculum or the extra-curricular activities of higher education institution. It must reflect the university's capacity to meet the needs of students, creating confidence in the ability to deliver higher levels of education and helping learners make admission decisions. Only when students experience good service quality can they decide to choose and stick to the school's services. In order to improve the students' perception of the school quality, university administrators need to create a unique advantage of the school, thereby creating the school's reputation (Dung, 2019).

• Brand loyalty: A consumer loyalty to a brand shows a consumer's tendency to buy and use products or services of a brand and repeat this behavior (Chaudhuri and Holbrook, 1999). The company benefits greatly from loyal customers who are satisfied with the company's product or service that these customers will recommend and persuade their relatives and friends to use its products (by word of mouth). The core of brand equity is customer loyalty. Loyalty level higher means the number of customers of the company more and thus, the company will increase sales and save marketing costs. In higher education and training services, brand loyalty is reflected in the strong connection between learners and the university. Student loyalty is seen as the most valuable asset of the university because once students gain loyalty, they can stay with the university for a long time and ready to recommend to other people and especially, after graduation, they are willing return to university to share their experience and contribute financially to the university.

2.2. Research models and hypotheses

Aaker (1991) proposed the first comprehensive model of brand equity. He identified five aspects of brand equity, that is brand name perception, brand association, perceived quality, brand loyalty and other proprietary assets (for example: patent, trademark). Keller (1993) developed a consumer-based brand equity model that focused on familiarity and awareness, while at the same time facilitating strong and unique brand associations. He believed that brand equity is determined primarily by brand knowledge (including perception, attributes, interests, images, thoughts, feelings, attitudes and experiences). Then, these and other models were tested in many

different contexts. Yoo and Donthu (2001) developed a multi-dimensional consumer-based brand equity scale, adapting the Aaker and Keller model but specifically focusing on brand awareness, perceived quality, associations and loyalty.

Keller (1993), who named the brand equity as customer-based brand equity (CBBE), drew on cognitive psychology to define brand equity as "the differential effect of brand knowledge on consumer response to the marketing of the brand" (p.8). A brand with strong equity is easily recognizable and recalled, and importantly creating a distinction strong enough to generate favorable response towards the brand.

In response to global competitive challenges, universities recently started developing better strategies for branding. Branding has been used as a differentiation strategy for education institutions. As the number of universities (public and private) has increased, the competition for students has risen. Moreover, facing local and global competition, education administrators in general, Dong Thap University administrators have realized that external or traditional branding efforts are important to build strong university brands as most of these efforts applied recently seemed to be focused on promotion and identity. As a result, universities started developing better brand strategies in response to global competitive challenges (Whisman, 2007), and branding has been considered as a differentiation strategy not only for traditional education but also higher education institutions (Jevons, 2006).

A study by Yuan *et al.* (2016) explored the concepts of brand identity and image associations of brand extensions in higher education and found that the identity-image linkage is influenced by consumers' perceived congruence and legitimacy of the brand extension. Based on extensive review of brand equity and university branding literature, Pinar et al. (2014) identified and validated the CBBE dimensions for reliable measurements of university brand equity. Hence, in this current research, a university brand equity assessment model is designed based on existing models of consumers-based brand equity and adapted for use in the training service sector because universities around the world and in Vietnam in particular operate more and more like service providers, and students are becoming more and more "consumers" (Mazzarol and Soutar, 2008).

As mentioned in conceptual framework, the current study opted to follow the model proposed by Dennis (2016), Dung (2019), Mourad *et al.* (2011), Pham Thi Minh Ly (2014), Vu Thi Thu Ha (2019) with four components: Brand awareness, Brand association, Perceived quality, Brand loyalty (Figure 1).
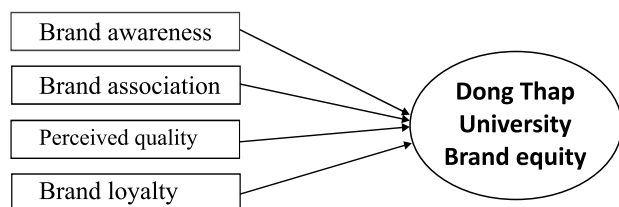

Figure 1. Proposed research model

This model is used to measure four components of brand equity based on consumers (students), which is also used to measure brand equity of Dong Thap University with 17 observed variables (14 measurable observational variables for brand equity components, and 03 measurable observational variables for brand equity). This study uses a 5-point Likert scale from 1 - Totally disagree to 5 - Totally agree. After testing the reliability of the scale by analyzing Cronbach's Alpha with SPSS software. The results show that all 17 observed variables to measure the concepts are satisfactory (total variable correlation coefficient > 0.3), presented in Table 2. So, these variables are used for exploratory factor analysis (EFA).

This research model demonstrates the relationship between the factors affecting the brand equity of Dong Thap University based on students. To do this research, the hypotheses are set up as follows:

Brand awareness has a positive influence on the brand equity of the University, this relationship has been tested in studies Aaker (2011), Dung (2019) and Vu Thi Thu Ha (2019). Accordingly, when learners have a positive awareness of a university brand, it will increase the value of the university's brand equity. Therefore, hypothesis H_1 is proposed:

H_1: The brand awareness has a positive impact on the brand equity of the university.

Brand association plays a particularly important role because once students have strong associations and think well about the brand they will love the brand. Moreover, a brand association will increase the value of the university brand (Dung, 2019; Vu Thi Thu Ha, 2019). A favorite brand becomes more competitive within a set of brands, so the tendency to engage and choose will increase. Therefore, hypothesis H_2 is proposed:

H_2: The brand association has a positive impact on the brand equity of the university.

In the education field, students' choice of schools is carefully considered. Therefore, only when students perceive the quality of relevant services as a good service before, during and after the delivery of the service can they decide to choose and stick with their services. In addition, previous studies (Dung, 2019; Vu Thi Thu Ha, 2019) have also shown a positive relation between perceived quality and brand equity of the University. Therefore, hypothesis H_3 is proposed:

H_3: The perceived quality has a positive impact on the brand equity of the university.

Establishing a close link between students and the school for a long time is considered an important foundation for building the brand equity of the university (Dung, 2019; Pham Thi Minh Ly, 2014; Vu Thi Thu Ha, 2019). Student loyalty is considered as the most valuable asset of the school because once students gain loyalty, they can stay with the school for a long time. Therefore, hypothesis H_4 is proposed:

H_4: The brand loyalty has a positive impact on the brand equity of the university.

3. Data and research methods

3.1. Data collection and sampling

Research data was collected by surveying junior and senior students studying at Dong Thap University. The sample was collected through two steps: (1) selected the norm samples by majors (75% of pedagogical students and 25% of non-pedagogical students; this rate is taken in proportion to the proportion of students currently enrolled at Dong Thap University); (2) convenience sampling (non-probability sampling) with sample sizes from 135 - 270 and more (Costello and Osborne, 2005; Nguyen Dinh Tho, 2011). To achieve the expected number of samplings, the research team distributed 80 questionnaires to non-pedagogical students and 250 questionnaires to pedagogical students. After collecting and checking, 30 questionnaires were rejected. Thus, after collecting the 300 responses, these questionnaires were implicit and entered into SPSS software for further analysis.

3.2. Research methods

We deployed the research in two stages:

Stage 1: Qualitative research to adjust and supplement the observed variable for the scale of research concepts to suit the research space of Dong Thap University. To do this, we conducted a target group discussion for students of Dong Thap University with a sample size of n = 10.

The use of interview, as the first phase data collection method in this study, is indicated by the need for face-to-face, in-depth exploration of issues, raised by respondents to the quantitative survey, which help to support more detailed investigation in the hope of gaining new insights into recurring problems. The initial intention in choosing 10 candidates of sample in this first stage had been to control and rejudge the relevance of the observed variables used in previous studies, whether they were completely consistent with this research space or not. The results showed that there was not much change in the sentences for the questions. Therefore, 17 observed variables are continued to be used for stage 2.

Stage 2: Quantitative research to test the reliability of the scale, as well as measure the impact of factors on the brand equity of Dong Thap University. To achieve this, we used analytical methods including: (1) Descriptive statistical methods to statistic relevant information about the research sample such as gender, specialty, school year, etc.; (2) Cronbach's Alpha reliability test method is used to consider the reliability of observed variables measuring component concepts of brand equity, as well as the concept of brand equity; (3) Exploratory Factor Analysis (EFA) is used to again evaluate the reliability of observed variables measuring component concepts of brand equity, as well as the concept of brand equity through value convergence and differentiation; (4) Correlation analysis is used to examine the relationship between the four components of analysis (brand awareness, brand association, perceived quality and brand loyalty) to brand equity university. In addition, in this study, the authors also used multiple regression analysis to measure the impact of these components (X) on the brand equity of the university (Y).

4. Results and Discussion

4.1. Sample Description Statistics

After interviewing 80 non-pedagogical students and 250 pedagogical students using convenient sampling method, 300 valid survey samples meeting the requirements were included in the official study (Table 1).

Table 1. Survey sample information

Characteristics		Samples size n = 300	
		Frequency	Percent %
Gender	Male	197	65.7
	Female	103	34.3
Majors	Pedagogical students	226	75.3
	Non-pedagogical students	74	24.7
School year	Junior	126	42.0
	Senior	174	58.0

4.2. Testing Scale Reliability

Table 2. The official scales of components of the brand equity based on consumers

Encode	Variable description
	Brand awareness
BAw1	I can easily distinguish Dong Thap University from others
BAw2	I could quickly remember the characteristics of Dong Thap University
BAw3	I can remember and recognize Dong Thap University's logo quickly
	Brand association
BAs1	When talking about Dong Thap University, I think of a very good education
BAs2	Dong Thap University has many diverse disciplines
BAs3	Dong Thap University has many achievements in teaching and social activities
BAs4	Modern facilities of Dong Thap University ensure a good learning and researching

	Perceived quality
PQ1	Lecturers of Dong Thap University are capable and teach well
PQ2	The facilities of Dong Thap University meet the needs of students
PQ3	Information exchange between Dong Thap University and students is very well done
PQ4	The staff of Dong Thap University can handle very well all the students' questions
	Brand loyalty
BL1	I choose Dong Thap University because of its brand
BL2	I will not transfer schools during the school period
BL3	I will introduce Dong Thap University to my acquaintances
CBBE1	Although the universities have the same educational environment, I still prefer to study at Dong Thap University instead of studying at another universities.
CBBE2	Although other universities have the same learning conditions as Dong Thap University, I still choose to study at Dong Thap University.
CBBE3	Although other universities have strengths such as Dong Thap University, I still prefer studying at Dong Thap University.

The test of scale reliability of Student - based brand equity of Dong Thap University is done through Cronbach's Alpha's reliability coefficient. After analyzing Cronbach's Alpha, all 14 observable variables of the four factor groups met the criteria (Cronbach's Alpha coefficient ≥ 0.6 and correlation variable coefficient - total correction ≥ 0.3), that is, the suitability of the model with the data is accepted (Table 3). Therefore, they are used to analyze the EFA.

Table 3. Results of the reliability calculation of the scale

Observable variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Brand awareness (BAw), Cronbach's Alpha = 0.873				
BAw1	7.4533	2.416	0.856	0.727
BAw2	7.3133	2.871	0.633	0.931
BAw3	7.4133	2.625	0.794	0.788
Brand association (BAs), Cronbach's Alpha = 0.812				
BAs1	10.3533	4.296	0.620	0.769
BAs2	9.6400	4.138	0.674	0.743
BAs3	10.0567	4.174	0.613	0.773
BAs4	10.3000	4.458	0.617	0.771
Perceptible quality (PQ), Cronbach's Alpha = 0.851				
PQ1	11.2367	4.623	0.713	0.801
PQ2	10.7633	5.439	0.589	0.851
PQ3	11.6367	4.419	0.716	0.800
PQ4	11.4233	4.539	0.754	0.783
Brand loyalty (BL), Cronbach's Alpha = 0.758				
BL1	7.1733	1.916	0.642	0.611
BL2	6.7667	2.179	0.590	0.675
BL3	7.2933	2.128	0.536	0.735
Consumer-based brand equity (CBBE), Cronbach's Alpha = 0.807				
CBBE1	7.5500	1.419	0.821	0.556
CBBE2	7.5633	1.484	0.719	0.665
CBBE3	7.5133	1.863	0.456	0.928

4.3. Exploratory Factor Analysis (EFA)

Our research team conducted an EFA analysis on the four brand equity components (14 observed variables), the analysis results showed that all 14 observed variables were satisfactory (with Factor loading > 0.5) and extracted into the four factors as proposed model.

Using extraction method as Principal Component Analysis and Varimax with Kaiser Normalization as rotation method, the EFA for the independent variables shows the KMO coefficient = 0.761 > 0.5 with Sig = 0.000 < 0.05, indicating that the observed variables are close to the same factor correlating. Also, the total extracted variance of 71.157% > 50% shows that these four factors explain 71.157% the variation of the dataset. Using extraction method as Principal Axis Factoring and Promax with Kaiser Normalization as rotation method, the EFA of the dependent variable group showed that KMO and Bartlett's in the analysis of factors have sig. = 0.000 and KMO = 0.574 > 0.5. Therefore, the extracted scales are acceptable. All three observed variables have factor loadings greater than 0.5. Thus, the scale satisfies the convergence value and reliability.

Table 4. Results of EFA of components impacting university brand equity

Observable variables	Factor loading			
	1	2	3	4
PQ4	0.871			
PQ3	0.854			
PQ1	0.843			
PQ2	0.751			
BAs1		0.814		
BAs4		0.810		
BAs2		0.762		
BAs3		0.695		
BAw1			0.929	
BAw3			0.922	
BAw2			0.723	
BL2				0.841
BL1				0.811
BL3				0.691
Post EFA testing				
Eigenvalue	4.126	2.789	1.726	1.322
Extraction Sums of Squared Loadings (Cumulative%)	29.471	49.391	61.716	71.157
Cronbach's Alpha	0.851	0.812	0.873	0.758

At the same time, the authors also performed an EFA analysis for the brand equity scale (03 observed variables), the analysis results showed that all three observed variables were satisfactory (with Factor loading > 0.5) and extracted into 01 factor; 0.5 < KMO = 0.574 <1, so the EFA analysis was appropriate. In addition, the total extracted variance was 73.149%, which means that the extraction factor explained 73.149% of the variation of the data set.

4.4. Multiple Regression Analysis

Multiple Regression Analysis shows that the adjusted R^2 is 0.423, ie 42.3% the variation of CBBE explained by variation of 4 independent variables BAs, BAw, PQ, BL. Durbin - Watson d = 1.680 (1 < d < 3) showed no correlation between residuals. The sig. value of F (= 55.906) equals to 0.000, ie the linear regression model given is consistent with the collected data.

This regression model shows that the independent variables (Brand Awareness, Brand Association, Perceived Quality, Brand Loyalty) have a positive impact on the brand value of Dong

Table 5. Results of the regression analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	0.681	0.226		3.011	0.003		
BAw	0.332	0.037	0.435	8.935	0.000	0.813	1.230
PQ	0.243	0.037	0.287	6.510	0.000	0.994	1.006
BL	0.142	0.045	0.160	3.186	0.002	0.762	1.312
BAs	0.133	0.045	0.147	2.972	0.003	0.785	1.273
Adjusted R Square = 0.423							
Durbin-Watson = 1.680							
Anova (F = 55.906; Sig. = 0.000)							

Thap University. The results completely agree with those of Vu Thi Thu Ha (2019). However, in terms of the impact level, there is a heterogeneity between this study and the study of Vu Thi Thu Ha (2019), specifically in the author's study, the impact level of the brand equity factors of universities in order: brand awareness, perceived quality, brand loyalty and brand association, while Vu Thi Thu Ha's (2019) study shows sequential impact: brand awareness, brand association, brand loyalty and perceived quality. This difference could be due to the different research space. In addition, brand loyalty is proven to have an impact on the brand equity of Dong Thap University. This finding is in agreement with research results of Pham Thi Minh Ly (2014). However, there is also a difference in the study and Pham Thi Minh Ly (2014) is that the authors' study found the impact of three components: brand awareness, brand association and perceived quality of university's brand equity. This may be because Pham Thi Minh Ly's research is a joint study for universities in Ho Chi Minh City, not specific to any particular university, so the difference in the results of the study. Therefore, the results of authors' study are completely acceptable.

As presented in Table 3, all of the T-Statistics are larger than 1.96, so it can say that the outer model loadings are highly significant. So H_1, H_2, H_3 and H_4 are adopted.

5. Discussion and Recommendation

5.1. Discussion

From the results of regression analysis, it shows that four factors in the model made up Student - based brand equity of Dong Thap University. Branding is not only for firms but also for the education sector. The empirical data and the statistical tests in this study support the existence of causal relationship between the four components - brand awareness, brand associations, Perceived quality and brand loyalty and Student - based brand equity of Dong Thap University, which is consistent with the research hypothesis and the results of previous relevant studies. According to Aaker (1991), perceived quality acts as a differentiation tool, brand awareness builds the familiarity-liking sight and is a signal of substance. The research results actually show that the student's assessment contributes greatly to the brand equity of Dong Thap University, in which brand awareness is the most influential factor to the brand equity of Dong Thap University and perceived quality in the second place. The image and identity of the university is the key determinant in which students consider reputation as important. The quality in education with other related services provided by the university develop satisfaction which resultantly enhance the image of the university. Therefore, Office of Information and Communication of Dong Thap University is established as a perfectly right decision, in line with today's trend, when students/learners are the main decision-maker in choosing a major school.

One question may come up at this point "Is the research model really suitable when the four factors in the research model only explain 42.3% for the dependent variable - brand equity of Dong Thap University based on consumers?". The previous studies on this issue using Aaker's brand equity scale also show similar research results, with three or four factors as in the authors' study. However, maybe due to the characteristics of the education sector in general and Dong Thap University in particular, the brand equity of Dong Thap University is not only based on the student's perceptions but also strongly

influenced by the student's family (parents tend to orient or choose a major for their childen), or based on the services of training at the university (degree of acceptance by the employer to the student after graduation). Therefore, it is necessary to have a follow-up study expanding the research model to more fully evaluate the factors that make up brand equity of Dong Thap University.

5.2. Recommendation

Creating a brand in the field of higher education requires a lot of time and effort. For Dong Thap University (a university with strengths in the pedagogical field has switched to multi-disciplinary and multi-field training in recent years), building brand assets is a necessary, important and vital task, creating momentum for sustainable development in the future. From there, it is possible to create a competitive advantage over other universities in the region.

The research results have shown that among factors affecting brand equity of Dong Thap University, brand awareness is the most influential factor, followed by perceived quality, brand loyalty, and brand association. Therefore, the School Board should assign tasks to each subordinate unit, especially Office of Information and Communication of Dong Thap University roles in promoting brand awareness features, brand image of Dong Thap University. From the view of this research findings, it has been recommended that Dong Thap University should focus on advertisement to attract more attention fromof potential students in their university selection. In order to build the brand equity of Dong Thap University, some solutions are proposed by the research team such as: to promote the building of characteristics of Dong Thap University to distinguish it from other universities: color, logo, student uniform, etc.; to continue to improve the quality of the teaching staffs, the quality of scientific research, the ability to communicate, answer questions, and advise students. Other solutions to be considered is investing in building facilities, building a friendly learning environment to help students promote their abilities and creativity. Thereby, students will likely feel satisfied when studying at the school, improving student loyalty.

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