Contents lists available at GrowingScience

Management Science Letters

homepage: www.GrowingScience.com/msl

University students' insight on brand equity

Khoa T. Tran^{a,b*}, Phuong V. Nguyen^{a,b}, Huynh Thi Sa Do^{a,b} and Lieu Thi Nguyen^{a,b}

^aCenter For Public Administration, International University, VNU-HCMC, Vietnam ^bVietnam National University, Ho Chi Minh City, Vietnam

CHRONICLE

ABSTRACT

Article history:
Received: October 16, 2019
Received in revised format:
January 30 2020
Accepted: February 8, 2020
Available online:
February 8, 2020
Keywords:

Keywords:
Brand equity
University
Higher education
Education
Marketing

The recognition of brand equity has been in a substantial amount of recent research. In this study, we investigated the indicators of brand equity, which include brand image, brand awareness, and brand loyalty, in the context of higher education in analyzing the students of 10 universities in Ho Chi Minh City, Vietnam. We collected a sample size of 340 people to conduct a path analysis using a Partial Least Square Structural Equation Modeling (PLS-SEM) approach. The results proved a significant relationship between brand awareness and brand loyalty and brand equity. We also verified the relationships between brand communication, brand trust, and brand image. These findings provide an example of one such implication, such as what universities should emphasize in their marketing efforts.

© 2020 by the authors; licensee Growing Science, Canada

1. Introduction

Brand is a significant motivation behind purchasing decisions, demonstrates product differentiation, and is thus considered the most important asset of any company. Thus, brand concept is a crucial feature of marketing and includes the tangible and intangible attributes expected to achieve consumer satisfaction (Aaker & Equity, 1991). It also enhances consumer trust and confidence in the decision-making process, which reduces issues related to experience and quality credibility (Aaker & Equity, 1991; Sasmita & Mohd Suki, 2015). According to Ansary and Hashim (2018), building strong brand equity is a key issue in the business world because consumers are generally committed to a limited number of brands. Sustainable branding is required to bring consumers special product experiences. Moreover, branding is not only limited to physical products, as many service firms have attempted to build stronger brands through their branding strategies. Meanwhile, Brand equity is described by Keller (1993) as "the differential effect of brand knowledge on consumer response to the marketing of the brand," which reflects brand health and the effectiveness of brand management. Similarly, universities have also started to put more branding efforts into developing their strategic brand (Pinar, Trapp, Girard, & Boyt, 2014). In fact, higher education institutions must build their business models to compete with fast-changing entrepreneurial university developments to gain customers (e.g., students) and revenue for their services (e.g., tuition fees). Furthermore, the processes of globalization lead to economic competitiveness (Rizov & Rizova, 2015), which can be fostered by investment in education (Kekeeva, Sardarova, & Ergalieva, 2015; Stanišić, Leković, & Stošić, 2019).

In this study, we adapted brand equity and its indicators to the context of higher education, which universities have been increasingly interested in developing their differentiated brands. We proposed consumer-based brand equity to maintain competitiveness. A brand equity model from Keller (1993) shows how consumer responses can build brand equity. However,

* Corresponding author.

E-mail address: ttkhoa@hcmiu.edu.vn (K.T. Tran)

brand equity can be severely damaged if it does not keep its promises. Some scholars have conducted studies on this topic (Faircloth, Capella, & Alford, 2001), though there remains the concern of inadequate understanding of consumer-based brand equity. Hence, we suggested its emphasis. Apart from brand equity, brand image is considered one critical dimension of branding that has considerable impact on consumers' purchasing decisions (Ansary & Hashim, 2018). Brand image is defined as "overall perception of the brand formed from information about the brand and past experience . . . the set of beliefs that forms a complete picture of the brand" (Assael, 1987). It is vital to expand market shares and increasing behavioral preferences that are tailored to match the needs of the target market. Scholars indicate that there is also a direct relationship between brand image and brand equity (Faircloth et al., 2001). Since a strong brand image may differentiate a certain brand from its competitors, which leads to favorable associations and evaluations in the consumers' minds, brand image is viewed as a substantial driver of brand equity (Ansary & Hashim, 2018). As a considerable number of loyal customers is considered a competitive asset for a brand (thus playing the role of brand equity determinant) (Chinomona, 2016), and given the fact that attracting new customers can cost six times higher than retaining current ones, brand loyalty becomes the ultimate key for sustaining a company's competitive advantage (Keller & Lehmann, 2006). In this current research, we took brand loyalty into account as one of the drivers of brand equity, along with brand image and brand communication, as well as examining the link between brand communication and brand loyalty.

The results of previous studies conducted in non-Asian countries are unlikely to be similarly implemented in Asian countries: in this instance, we look at the case of Vietnam. There exists little effort to discover the factors that affect brand equity in Vietnam, including brand awareness, brand image, and brand loyalty. Hence, this study focuses on discovering the influences of these three factors on brand equity, which contributes to narrowing the research gap and presenting useful empirical implications through the research model. Our study also attempts to discover the relationship between brand communication, brand image, and brand trust, which we expect to enrich the existing literature on marketing. Particularly, we investigate the factors that influence Vietnamese undergraduate students and their insights on university brand equity. There has been globally increasing investment in marketing practices among universities. For instance, according to the article from The Guardian on April 02, 2019¹, universities across the United Kingdom have accelerated their marketing campaigns and enrollments spending million pounds on marketing. It is estimated that 70–80 percent of the student population in Vietnam will be in higher education programs by 2020, which is a dramatic increase in higher education enrollment according to World Education News & Reviews (2017)². Therefore, the progression of higher education in Vietnam is becoming extensively competitive in recruiting students. This research serves to understand the perceptions of students toward university brand equity.

Our study is organized in the following structure. First, we provide a literature review of each construct, together with our hypotheses and research model. Second is the methodology of the study, including data collection and measurements. Then, we present the data analysis, as well as a discussion of the hypothetical testing results. Finally, we offer our findings with implications and suggestions for future research in the last section.

2. Literature review

2.1. Brand communication, brand image, and brand trust

A brand is defined as "a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors" (Kotler, Chandler, L., & Adam, 1994, p.269). Brand communication is the marketed idea or image of a product or service that creates consumer identification and recognition of the distinctiveness of that product or service (Chinomona, 2016). Moreover, advertising professionals undertake brand communication for not only brand recognition, but also positive reputations and a set of standards that companies should retain or exceed (Sahin, Zehir, & Kitapçı, 2011). Several studies have found that brand communication generates positive brand attitudes (Keller & Lehmann, 2006), such as brand trust and brand satisfaction, which are considered key factors in the relationship between brands and customers (Sahin et al., 2011). Brand communication is further divided into two types: one-way communication and two-way communication, or indirect or direct communication, respectively. In one-way communication, the main focus is enhancing brand awareness, brand attitudes (e.g., brand trust, brand satisfaction), and purchasing behavior (e.g., brand choice) (Zehir, Şahin, Kitapçı, & Özşahin, 2011).

Two-way communication is rather transaction-oriented and concentrates on the direct impact on current customers' buying behaviors (Sahin et al., 2011). It is noted that direct brand communication in particular has positive effects on brand satisfaction (Sahin et al., 2011). Brand image, meanwhile, is expressed as the total combination of brand associations in consumers' minds, leading to perceptions about the brand (Sääksjärvi & Samiee, 2011). It is addressed as an attachment of rational or emotional consumer perceptions to a brand. Brand image is emphasized when it comes to difficulties in differentiating products or services in terms of tangible quality features (Shankar, Azar, & Fuller, 2008). Furthermore, it is the basis for consumers' assessments of product or service quality (Cretu & Brodie, 2007), which is initially delivered to consumer to build belief in the products and eventually make purchase decisions. In other words, brand image can be inferred as consumer awareness

¹ https://www.theguardian.com/education/2019/apr/02/universities-spending-millions-on-marketing-to-attract-students

² https://wenr.wes.org/2017/11/education-in-vietnam

or quality consciousness of the product or service. Products of which brand image is strong not only can decrease consumers' cognitive risks, but also increase their appraisal of products or services. In addition, ideal brand image can both develop market positions and preserve brands from competitors. Thus, companies have made enormous investments and efforts to maintain and develop brand image (Shankar et al., 2008), making it a primary topic for marketing businesses. Marketers communicate a brand's attributes and benefits to customers. The very first thing is to deliver inherent advantage, or the so-called *functionality aspect*, related to a brand's attributes. Hence, the relevance of a product's attributes can satisfy customer demand, which demonstrates the brand's role in solving customer demands or problems (Su & Rao, 2010). Additionally, the dissemination of the brand's external advantages can be served by brand communication, which can meet customers' inner needs (e.g., self-esteem or social identity). Marketers are also responsible for communicating the connection between the brand and customers' experiences, including customers' satisfaction experiences, happiness, or pleasure from the brand that triggers repurchase. In general, through marketers' brand communication activities, brand image can be established in customers' minds. Previous studies reveal that there is a positive relationship between brand communication and brand image, with Chinomona (2016) in particular indicating that "the higher the level of brand communication, the higher the expected level of brand image the customers will conceptualize." Therefore, we propose the following hypothesis:

H₁: Brand communication is positively related to brand image.

Trust is a consumer's belief in a specific brand to satisfy his or her desire and in which he or she has confidence to benefit from and is willing to rely on. Brand trust is thus "the willingness of the average consumer to rely on the ability of the brand to perform its stated function" (Chinomona, 2016). Brand trust further helps decrease uncertainty and one-sided information, as well as increase comfort with a brand. As customers purchase from the brands that most satisfy them, one objective of brand communication is to expose customers to the brand (Su & Rao, 2010), which helps enhance their awareness and generate higher recall. Additionally, evidence in prior studies found that positive brand attitude is the outcome of brand performance satisfaction (Shankar et al., 2008). Brand attitudes consist of the attachment between consumers and brands, which eventually leads to brand trust and brand loyalty (Low & Lamb Jr, 2000). As a result, marketers always strive to build and maintain positive attitudes toward brands. According to Su & Rao (2010), there is a positive link between brand communication and brand trust. Apart from brand communication, brand image has a positive impact on customers' confidence in brands, which also eventually results in brand trust (Chinomona, 2016; Keller, 1993). Brand image is derived from customers' perceptions of a brand and its associations, leading to favorable brand image that generates positive perceptions of a brand's product and its attributes (Bennett, Härtel, & McColl-Kennedy, 2005). Moreover, Chinomona (2016) posited that if customers have confidence in a brand, they will trust that brand. Hence, we present the following hypotheses:

H₂: Brand communication is positively related to brand trust.

H₃: Brand image is positively related to brand trust.

2.2. Brand equity

Brand equity is described by Keller (1993) as mentioned above. It reflects brand health and the effectiveness of brand management. It is also noted as greater consumer confidence in a brand rather than other competing brands that enrich consumer loyalty and willingness to pay a premium price for the brand. There is a tendency for higher market shares and premium price positioning that are usually acquired by brands with higher equity than others. Moreover, companies with high brand equity often have more competitive advantages, potential for successful flourishing, resilience against competitive pressure, and higher barriers to competitive entry, according to Sasmita and Mohd Suki (2015). Brand equity also has two approaches: financial-based, of which concentration is the company's brand value, and consumer-based, which focuses on brand equity measures based on consumer behavior (Keller, 1993). This study investigates brand equity from the latter approach. Furthermore, it is suggested that brand image significantly affects brand equity and vice versa. Brand image embraces a critical role in the process of decision-making and evaluating consumers in terms of brand (Faircloth et al., 2001), which may influence brand equity. In addition, brand equity is partially related to the nature of brand associations, which are considered factors in creating brand image. Thus, brand image may be positively influenced by brand equity (Pitta & Prevel Katsanis, 1995), and several scholars have already investigated the relationship between brand image and brand equity (Faircloth et al., 2001; Keller, 1993). Thus, we propose the following hypothesis:

H₄: Brand image is positively related to brand equity.

2.3. Brand awareness

A brand would never be a brand without brand awareness, which is significant in consumers' final decisions. According to Aaker and Equity (1991), brand awareness is "the ability for a buyer to recognize or recall that a brand is a member of a certain product category," while it is defined by Ansary and Hashim (2018) as "how well a brand identity (e.g., a brand name) comes to consumers' minds." Well-known brands that are popular among consumers are usually included in their consideration set. Indeed, brand awareness plays a critical role in the process of consumers' decision-making and ensures that when it comes to a particular category, consumers think about a certain brand. Therefore, brand awareness involves consumers' decision-making process and, further, enhances the possibility for a brand to be chosen. Additionally, brand awareness has an impact on brand choice and increases the chance of a particular brand being in a consumer's consideration set (Keller, 1993).

Moreover, among the factors of the brand value chain, Keller and Lehmann (2003) posited that brand awareness is the most significant factor that positively enhances brand equity. Based on this prior literature, we suggest the following hypothesis:

H₅: Brand awareness is positively related to brand equity.

There have not been many studies that investigate the predictors of brand awareness, but those that have focused on the effect of brand awareness on brand image. Ansary and Hashim (2018) noted that brand image may influence consumer perceptions of brands and claimed that it is a component with an impact on brand awareness. Positive actions in terms of a brand—for instance, positive word of mouth—are likely to make consumers develop favorable associations with the brand, leading to increased brand awareness. Hence, brand image may have a positive relationship with brand awareness. Hence, we propose this hypothesis:

H₆: Brand image is positively related to brand awareness.

2.4. Brand loyalty

It has been at least three decades since the significance of brand loyalty was recognized in marketing literature, which indicates the many advantages of brand loyalty, including reducing marketing costs, enhancing trade leverage, acquiring new customers, and so on (Algesheimer, Dholakia, & Herrmann, 2005). Brand loyalty is also recognized as a prerequisite for a business's profitability and competitiveness; hence, companies attempt to achieve and maintain a high level of brand loyalty (Morrison & Crane, 2007). Companies further concentrate not only on attracting new customers, but also on preserving current customers' loyalty. Sheth and Park (1974) defined brand loyalty as "the users' repetitive buying behavior over time with a positively biased emotive, evaluative and/or behavioral tendency towards a branded, labelled or graded alternative or product choice." In addition, brand loyalty is conceptualized into two aspects: behavioral and attitudinal. Behavioral loyalty is the repetitive, consistent purchase of a preferred product or service from a brand, while attitudinal loyalty is customers' psychological commitments in their purchasing behavior, with repeated purchase intention and willingness to pay a premium price to acquire a specific brand (Morrison & Crane, 2007).

In this study, we follow the second brand loyalty aspect of attitudinal loyalty. When consumers feel vulnerable or uncertain, trust can help reduce these feelings thanks to a trusted brand on which they can rely. Bart, Shankar, Sultan, and Urban (2005) revealed that customers trust a brand as long as the brand continuously satisfies their needs or interests to an optimal level. It can be posited that brand trust is thus withdrawn from customers' thorough consideration of a brand. As a result, this could enhance the credibility and reliability of the brand, which leads to rebuying behavior and loyalty afterward. A brand that maintains its outstanding performance and consistently delivers its value to customers can be considered a trustworthy brand, which in turn preserves its customers' brand loyalty. Some research findings also support that brand trust positively affects brand loyalty (Chinomona, 2016). In addition, scholars have described that brand loyalty is built by generating positive output on brand equity, which brings about preference of a certain brand over others (Sasmita & Mohd Suki, 2015). Therefore, we propose the following hypotheses:

H₇: Brand trust is positively related to brand loyalty.H₈: Brand loyalty is positively related to brand equity.

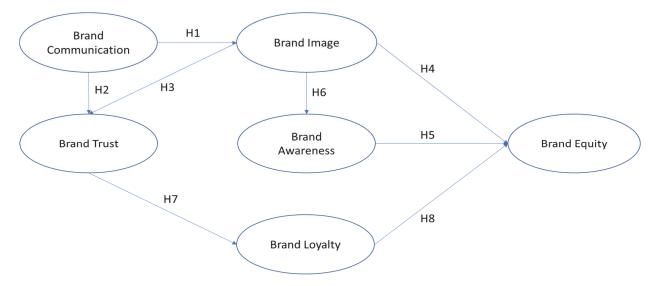


Fig. 1. Research model

3. Methods

3.1. Questionnaire design

In this quantitative research study, we implemented a questionnaire survey method with respondents who are students studying at universities in Ho Chi Minh City, Vietnam. Three questionnaire items obtained from Chinomona (2016) represented brand communication and brand trust. We adopted six items on brand image from Ansary and Hashim (2018) and Chinomona (2016), while four items on brand awareness were from Ansary and Hashim (2018). We assessed brand loyalty with four items using previous studies' scales (Chinomona, 2016; Kim & Kim, 2005; Sasmita & Mohd Suki, 2015). The four items that measured brand equity were from Chinomona (2016), Kim and Kim (2005), and Sasmita and Mohd Suki (2015). All items were measured on a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). According to Hair, Risher, Sarstedt, and Ringle (2019), the number of participants should be "ten times the largest number of formative indicators used to measure one construct." The largest numbers of items in this survey were six, so the minimum sample size was 60. Additionally, we made some adjustments to adapt the questionnaire to the Vietnamese context and make it more comprehensive.

3.2. Data collection

As our study aimed to investigate the indicators determining university brand equity, the respondents were students pursuing undergraduate programs at 10 universities in Ho Chi Minh City, Vietnam. We implemented a self-administered questionnaire for data collection using a convenience sampling approach. The questionnaire included three main parts: introduction and purpose of the survey; measurement items; and demographic information. It took three months to collect the data (September to November 2019). We eventually collected 340 samples for data analysis.

4. Results

4.1. Demographic information

In general, we recorded three demographic aspects of the respondents (age, gender, and academic year). All respondents were aged 18–25. Among the respondents, 70% were female, while the male respondents accounted for only 30%. Regarding academic year, the highest proportion of students were sophomores at 30.3%, whereas the second highest proportion were freshman at approximately a quarter of the total respondents, at 23.2%. The percentage of junior and senior students were 15.9% and 27.6%, respectively. Table 1 shows the respondents' complete demographic information in terms of age, gender, and academic year.

Table 1 Demographic information.

Age	18-25	100
Gender	Male	30.0
Gender	Female	70.0
	1	23.2
	2	30.3
Academic Year	3	15.9
	4	27.6
	Other	2.9

4.2. Measurement model analysis

We implemented Partial Least Square Structural Equation Modeling (PLS-SEM) to test the proposed research model using SmartPLS 3.0 software. This approach is usually applied in complex models with many constructs and indicators or a relatively small sample size, as it demonstrates higher reliability than covariance-based SEM (Hair et al., 2019). Further, PLS-SEM provides a separate examination of measurements and structural models instead of simultaneous examination (Hair et al., 2019), and it proved scientifically reliable in Ringle and Sarstedt (2016). First, we assessed internal consistence reliability and the convergent validity of the constructs. Based on the results, the factor loadings of the constructs were acceptable at 0.725–0.901. During this step, we removed four items because their values were below the required level. We assessed the reliability of the constructs mainly using two measures: Cronbach's alpha and composite reliability (CR), of which the thresholds are suggested to be from 0.6 to 0.9, which are considered "acceptable" to "good" (Hair et al., 2019). In the results, the Cronbach's alpha values and CR of most constructs were above 0.7, which confirmed the reliability of the measurement model. For convergent validity, we examined the average variance extracted (AVE) value of the constructs, which also satisfied the minimum threshold of 0.5, indicating the construct is 50 or above of the variance of its items. Therefore, we ensured the reliability and convergent validity of the constructs. The results of the reliability and convergent validity analysis are demonstrated in Table 2. Next, we analyzed discriminant validity following Fornell and Larcker's (1981) metric in which the squared-root of AVE should be higher compared to the estimated correlation values. As shown in Table 3, the discriminant validity of the constructs satisfied the required levels.

Table 2 Reliability and convergent validity.

	Loadings	CA	CR	AVE
Brand Awareness (BA)		0.886	0.922	0.746
BA1	0.859			
BA2	0.901			
BA3	0.842			
BA4	0.853			
Brand Communication (BC)		0.796	0.880	0.709
BC1	0.838			
BC2	0.827			
BC3	0.861			
Brand Equity (BE)		0.638	0.806	0.580
BE1	0.727			
BE2	0.759			
BE3	0.797			
Brand Image (BI)		0.748	0.857	0.667
BI1	0.725			
BI5	0.865			
BI6	0.853			
Brand Loyalty (BL)		0.787	0.876	0.701
BL1	0.853			
BL2	0.836			
BL4	0.822			
Brand Trust (BT)		0.829	0.898	0.746
BT1	0.869			
BT2	0.868			
BT3	0.852			

Notes: CA is the Cronbach's alpha.

 Table 3

 Discriminant validity (Fornell-Larcker criterion)

Discriminant variatty	(1 officii-Latekei ei	iterion).				
Fornell-Larcker Crit	erion					
	1	2	3	4	5	6
1 BA	0.86					
2 BC	0.30	0.84				
3 BE	0.36	0.30	0.76			
4 BI	0.39	0.37	0.42	0.82		
5 BL	0.40	0.31	0.60	0.56	0.84	
6 BT	0.43	0.38	0.51	0.65	0.65	0.86

Apart from the Fornell-Larcker Criterion, we evaluated the heterotrait-monotrait ratio (HTMT), which is a tool proposed by Henseler, Ringle, and Sarstedt (2015) for assessing constructs' discriminant validity. It is suggested that HTMT values should be 0.85–0.9. Based on the results as demonstrated in Table 4, discriminant validity was well established, with all values meeting the criterion of at least 0.85 (Henseler et al., 2015).\

 Table 4

 Discriminant validity (heterotrait-monotrait ratio).

Biserininant variety (necessary monotrate ratio).						
	1	2	3	4	5	6
BA	Criteria < 0.	85				
BC	0.363					
BE	0.473	0.418				
BI	0.476	0.473	0.615			
BL	0.477	0.388	0.842	0.730		
BT	0.506	0.464	0.703	0.822	0.803	

Notes: Numbers on the diagonal illustrate the AVE square; numbers below the diagonal illustrate construct correlations.

4.3. Structural model analysis

In the data analysis, the R² values varied from 0.134 to 0.445, indicating sufficient model explanatory power based on Hair et al. (2019). Moreover, Table 5 and Fig. 2 indicate that all our hypotheses were accepted except H4 because its p-value was smaller than 0.05. More specifically, the relationship between brand trust and brand loyalty had the highest coefficient of

0.650, whereas the effect of brand awareness on brand equity had the weakest relationship at 0.127. Brand loyalty was a substantial indicator of brand equity, of which the coefficients equaled 0.495. We also found that brand image had a large influence on both brand trust and brand awareness, with coefficients of 0.590 and 0.394, respectively. Finally, the impact of brand communication on brand image was larger than that on brand trust and had the coefficients of 0.367 and 0.162, respectively.

Table 5 Estimated results.

Hypothe	eses	Estimates	P values	Result	
H1	BC → BI	0.367	0.000	Accepted	
H2	$BC \rightarrow BT$	0.162	0.001	Accepted	
Н3	BI → BT	0.590	0.000	Accepted	
H4	BI → BE	0.096	0.114	Rejected	
H5	BA→ BE	0.127	0.015	Accepted	
Н6	BI → BA	0.394	0.000	Accepted	
H7	BT → BL	0.650	0.000	Accepted	
H8	BL → BE	0.495	0.000	Accepted	

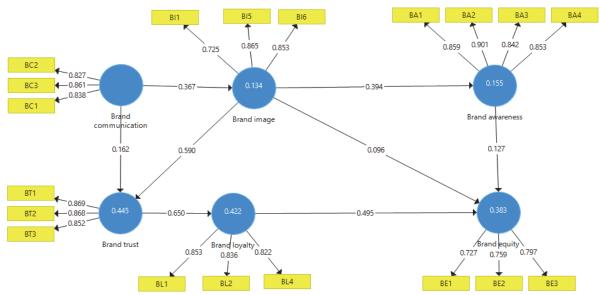


Fig. 2. Structural path model.

5. Discussion and conclusions

Similar to the findings of Chinomona's (2016), this paper also finds that the positive effect of brand communication on brand image (0.367) was stronger than that on brand trust (0.162). Additionally, brand image was a significant indicator of brand trust (0.590), and brand trust positively influenced brand loyalty (0.650). In contrast to the results of Ansary and Hashim (2018), the relationship between brand image and brand equity was insignificant, implying that brand image does not directly foster brand equity. Perhaps this can be explained by how positive image is insufficient to build brand value in the higher education context. However, finding a positive relationship between brand image and brand awareness strengthens the additional results of Ansary and Hashim (2018).

Brand awareness has an influence on brand equity, indicating that promoting brand awareness can generate brand equity, which aligns with Keller's (1993) results; however, this further contradicts Ansary and Hashim (2018). Indeed, students may make decisions based on their knowledge of a university brand, so it is worth noting that marketing activities that enhance brand awareness are important to increase university brand equity, which is one of the most significant factors in maintaining competitive advantage. In addition, our results support prior research showing that brand awareness and brand loyalty jointly affect brand equity (Sasmita & Mohd Suki, 2015). Specifically, brand loyalty has the strongest impact on brand equity, implying that students prioritize a familiar brand and are willing to recommend the brand to others, which eventually builds stronger brand equity. In general, this paper examined the relationship between brand equity and its indicators in the context of Vietnamese higher education.

The results supported most of our hypotheses through several findings. First, brand communication is an indicator of brand image and brand trust, so universities' marketing activities are important in creating a positive image and reputation and should be consistent and well-maintained. Second, brand image can significantly sharpen brand awareness and brand trust.

Students as consumers might be educated about a university's brand through its image, so universities that create a distinguished image may achieve a competitive advantage in the higher education market. Trust can be established at the same time, which benefits universities in terms of reputation, as the students who directly experience its service will generate a reliable reference source for others. Another finding is that brand communication indirectly affects brand awareness and brand trust through brand image. Third, brand trust has an impact on brand loyalty in the strongest relationship in this study. Indeed, consumers tend to repurchase or suggest a product or service to others when trust is established. It also appears that brand communication and brand image have an indirect effect on brand loyalty through brand trust. This implies that universities should focus on developing their communication and image to build brand trust and eventually create brand loyalty. Fourth, brand awareness and brand loyalty are indicators of brand equity. This infers an increase in the value of university brand equity by building awareness through, for instance, marketing via billboards, websites, newspapers, etc. Moreover, recommendations from students who pursue their studies at a specific university are beneficial to that university's brand equity. Fifth, we found no significant relationship between brand image and brand equity, which can be explained by the fact that brand image is only an indirect influence on brand equity through brand awareness.

6. Implications

Apart from its theoretical contributions, this study also provides some recommendations for universities regarding their marketing activities and services. First, universities should maintain their positive image and continuous communication, especially when it comes to annual university enrollment. Several channels can be utilized in this regard, such as university websites, social media, connecting with international universities for exchange programs and research, collaboration with corporations for working opportunities, etc.

It is important to note that a university's image should be tailored as well to precisely deliver its core value, mission, vision, and contribution to society. Hence, a university's brand can be widely spread with specific information so trust in it can be built accordingly. Another suggestion to build a sustainable brand is for universities to develop their digital media. Furthermore, experiences and recommendations from students currently pursuing their studies at universities may effectively establish both awareness and trust for potential consumers. For example, some promotional activities periodically organized for a university can encourage its students to present on the university and share their opinions such as through campus tours, workshops, enrollment consultancy, recruiting at high schools, and so on. Once the students' evaluations are positive, universities' branding strategies can succeed.

Another suggestion is to emphasize loyalty, which can be significantly created by attaining consumer trust. For example, students pursuing a program at a university may recommend it to those looking for a similar higher education program. Additionally, parents may introduce their children's universities to others or even send their children's siblings to the same university. Eventually, to enhance the value of university brand, brand awareness and brand loyalty should be strongly focused and developed throughout universities' marketing activities because they are direct indicators of brand equity. It is worth noting that educational qualifications, management, execution, and networking with other educational institutions for collaboration and research are exceptionally crucial to maintaining and enhancing a university's quality and service.

Implementing these recommendations can improve universities' marketing; thus, we expect the successful development of university brand equity to flourish in the higher education market. Although this study contributes useful findings, it does present some limitations. First, the sample size of the research included 340 students studying at 10 universities in one city in Vietnam, which is inadequate in generalizing for the whole Vietnamese population. We thus suggest further research to expand the sample size, as well as the number of universities, to improve the model's generalizability. This study was also conducted among undergraduate students only, so it could be expanded to include high school students, alumni, and other consumers. Lastly, this model should be tested in other countries or cultures, which could generate many interesting findings.

Acknowledgement

This research is supported by a grant from Vietnam National University Ho Chi Minh City (VNU-HCMC) under grant number C2019-28-01. The authors would like to thank the anonymous referees for constructive comments on earlier version of this paper.

References

Aaker, D. A., & Equity, M. B. (1991). Capitalizing on the Value of a Brand Name. New York, 28(1), 35-37.

Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, 69(3), 19–34.

Ansary, A., & Hashim, N. M. H. N. (2018). Brand image and equity: The mediating role of brand equity drivers and moderating effects of product type and word of mouth. *Review of Managerial Science*, 12(4), 969–1002.

Assael, H. (1987). Consumer behavior and marketing (3rd ed.). Boston, MA: PWS-Kent.

Bart, Y., Shankar, V., Sultan, F., & Urban, G. L. (2003). Are the Drivers and Role of Online Trust the Same for All Web Sites

- and Consumers?: A Large-Scale Exploratory Empirical Study. Ssrn, 69(October), 133–152. https://doi.org/10.2139/ssrn.380404
- Bennett, R., Härtel, C. E. J., & McColl-Kennedy, J. R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial Marketing Management*, 34(1), 97–107.
- Chinomona, R. (2016). Brand communication, brand image and brand trust as antecedents of brand loyalty in Gauteng Province of South Africa. *African Journal of Economic and Management Studies*, 7(1), 124–139.
- Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial Marketing Management*, 36(2), 230–240.
- Faircloth, J. B., Capella, L. M., & Alford, B. L. (2001). The effect of brand attitude and brand image on brand equity. *Journal of Marketing Theory and Practice*, 9(3), 61–75.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurements error. *Journal of Marketing Research*, 18(4), 39–50.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Kekeeva, Z., Sardarova, Z., & Ergalieva, G. (2015). The preparation of a specialist in networking cultural-educational space of University. *International Journal of Cognitive Research in Science, Engineering and Education*, 3(2).
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1–22.
- Keller, K. L., & Lehmann, D. R. (2003). How do brands create value? Marketing Management, 12(3), 26.
- Keller, K. L., & Lehmann, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science*, 25(6), 740–759.
- Kim, H., & Kim, W. G. (2005). The relationship between brand equity and firms' performance in luxury hotels and chain restaurants. *Tourism Management*, 26(4), 549–560.
- Kotler, P., Chandler, P. C., L., B., & Adam, S. (1994). Marketing: Australia and New Zealand. New York: Prentice Hall.
- Low, G. S., & Lamb Jr, C. W. (2000). The measurement and dimensionality of brand associations. *Journal of Product & Brand Management*, 9(6), 350–370.
- Morrison, S., & Crane, F. G. (2007). Building the service brand by creating and managing an emotional brand experience. *Journal of Brand Management*, 14(5), 410–421.
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2014). University brand equity: an empirical investigation of its dimensions. *International Journal of Educational Management*.
- Pitta, D. A., & Prevel Katsanis, L. (1995). Understanding brand equity for successful brand extension. *Journal of Consumer Marketing*, 12(4), 51–64.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management & Data Systems*, 116(9), 1865–1886.
- Rizov, T., & Rizova, E. D. (2015). Augmented reality as a teaching tool in higher education. *International Journal of Cognitive Research in Science, Engineering and Education: (IJCRSEE)*, 3(1), 7–15.
- Sääksjärvi, M., & Samiee, S. (2011). Relationships among brand identity, brand image and brand preference: differences between cyber and extension retail brands over time. *Journal of Interactive Marketing*, 25(3), 169–177.
- Sahin, A., Zehir, C., & Kitapçı, H. (2011). The effects of brand experiences, trust and satisfaction on building brand loyalty; an empirical research on global brands. *Procedia-Social and Behavioral Sciences*, 24, 1288–1301.
- Sasmita, J., & Mohd Suki, N. (2015). Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International Journal of Retail & Distribution Management*, 43(3), 276–292.
- Shankar, V., Azar, P., & Fuller, M. (2008). Practice Prize Paper—BRAN* EQT: A Multicategory Brand Equity Model and Its Application at Allstate. *Marketing Science*, 27(4), 567–584.
- Sheth, J. N., & Park, C. W. (1974). A theory of multidimensional brand loyalty. ACR North American Advances.
- Stanišić, T., Leković, M., & Stošić, L. (2019). Relationship between the quality of higher education and Balkan countries' competitiveness. *International Journal of Cognitive Research in Science, Engineering and Education/IJCRSEE*, 7(3), 49–59.
- Su, M., & Rao, V. R. (2010). New product preannouncement as a signaling strategy: An audience-specific review and analysis. *Journal of Product Innovation Management*, 27(5), 658–672.
- Zehir, C., Şahin, A., Kitapçı, H., & Özşahin, M. (2011). The effects of brand communication and service quality in building brand loyalty through brand trust; the empirical research on global brands. *Procedia-Social and Behavioral Sciences*, 24, 1218–1231.



© 2020 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).