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Factors affecting brand attachment in the social media channels: Case of university in Vietnam

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Abstract

Originated from the reason that Hanoi University of Industry (HaUI)'s current social media network is still limited, specifically HaUI's Fanpage has not yet been green-checked, thereby leading to weak brand attachment have little impact on university admissions. From collecting data from information sources such as newspapers, social networking sites, the author has inherited previous studies to propose a research model and conduct quantitative research analysis. Through designing a survey questionnaire and randomly sending it to individuals who are studying and working at HaUI, specifically lecturers, staff and especially the university students. The study obtained 338 valid responses that were coded and cleaned using SPSS and AMOS software. After the cleaning and coding step, reliability testing, exploratory factor analysis, confirmatory factor analysis and structural equation modelling were conducted. The research has made a significant theoretical contribution in terms of the important mediation role of brand awareness, perceived quality and university reputation in the relationship between social media communication and brand attachment. From there, it also provided the practical contribution to improve the association of the brand with students, to perfectionate the social networking sites, to share positive things, interesting, attractive and relevant lessons.

Keywords: Social media; Brand attachment; Brand reputation; Brand awareness; Quality

1. Introduction

The 4.0 industrial revolution has created a strong wave of technological development, and the media industry is no exception. In higher education, digital plays a key role in mobilizing information through interactive means, such as student engagement, faculty research awareness, and attracting other media channels to university recruitment, creating a competitive advantage.

In recent years, universities have turned to vehicles and social media more frequently to build and maintain high-quality relationships with these stakeholders (SMEDESCU, 2014). Vehicle social media It is especially important to consider how to connect with students, due to their high level of familiarity and use by this age group. Current research on social media in higher education has focused on how these platforms contribute to recruitment efforts and university brand awareness (SMEDESCU, 2014).

According to (Karamian et al., 2015) it has been shown that marketing communication activities through social networks have an impact on value effectiveness and these activities bring about perceived quality. From there, it affects brand awareness, brand image and brand value. In the same vein, (Lê & Trần, 2018) studied the impact of communication activities via social networks on three aspects of effective value from the user's perspective, which are:

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perceived quality, brand awareness and signal loyalty. Besides, according to (Karamian et al., 2015) only the role of perceived quality in the above relationship has been pointed out, but its role in the relationship between social media and attachment brands in the educational context.

According to (KHAN et al., 2022) it has been pointed out that marketing activities social media shows marketing activity positively affects brand attachment through perceived value and self-brand connection. According to (Abrar et al., 2017) discovered that social media interactions can have a significant impact on love and attachment to a brand.

In recent times, HaUI has strengthened communication measures, especially social media. However, up to now, the school's Pages have not been green-checked, the level of brand recognition on the social network environment is not high, students are not clearly aware of the school's brand as well as there is no awareness of the school's brand. Connect with the school's brand attachment on social media channels.

Based on the above arguments, our team chose the research topic: "Research on factors affecting attachment with the HaUI brand through social media channels". From there, this research makes new academic and practical contributions, providing valuable information for HAUI university on interaction strategies. Social media effectively, focusing on building relationship quality and brand effectiveness.

2. Theoretical basis and research development

2.1. Theory of brand equity

According to Philip Kotler: "Brand assets are the added value to products and services. This value is expressed through the way customers think, feel, and act positively toward the brand and through the ability to command high prices, gain market share, and profitability that the brand can bring for business". According to (Aaker, 1991) definition, "Brand assets are a set of intangible assets associated with the name and symbol of a brand, which contribute to increasing (or decreasing) the value of a product or service. a service for businesses and their customers. (Keller, 1993) argues that "brand equity is the differential influence of brand knowledge on consumer responses to brand marketing, and high brand knowledge increases ability to choose brands.

In the field of education, studies applying the brand equity model to the field of education have been conducted by researchers such as (Mourad et al., 2011) (Manafi et al., 2011) as well as Musa Pinar and colleagues (2014). In Vietnam, research has been conducted đã (Lý, 2014) and Phan Thi Thu Ha (2013) in the field of education on the use of brand equity model.

2.2. Social theory

Social presence theory was developed by (Short et al., 1976) in the 1970s to explain how media affects communication, as "the degree of salience of others in communication." interaction and the emergent consequences of interpersonal relationships" In the field of education, Whiteside emphasized the need for social presence in comprehension and learning to maximize learning in online and mixed environments. Additionally, according to (Whiteside et al., 2023), the social presence model "provides a framework for establishing increased social presence or connection between faculty and students to have richer educational experience" (page 22).

Social presence contributes to the level of intimacy resulting from social interaction, allowing consumers to convey non-verbal immediacy or non-immediacy (physical closeness, visual and facial expressions) as well as verbally ((Gunawardena, 1995) (Biocca & Harms, 2002) conceptualize social presence into three levels including: the level of awareness of co-presence with others, social presence is characterized by subjective judgment that builds accessibility The psycho-behavior of others and mutual social presence or inter-subjective social presence shed light on the dynamic interactions between participants.

2.3. The relationship between brand equity and brand engagement

Social media communication provides reliable, updated and rich information to consumers and that is a distinct competitive advantage over traditional media (Jang et al., 2008). In this sense, the social media communication provides high-quality information can have more appeal (Gorla et al., 2010). Information quality affects the level of brand awareness of individuals over time (Smith & Swinyard, 1982) and allows these individuals to recognize and recall the brand through the use of social media relate to.

H1: Social media communication positive influences on brand awareness

Brand awareness is the degree to which consumers recognize and remember a particular brand in different situations. Brand awareness is the first step in the process of building a relationship between customers and brands, creating the premise for the development of trust and brand loyalty (Keller, 1993). (Aaker, 1991)) analyzed how brand awareness contributes to overall brand value and how it affects customer attachment and loyalty. Aaker points out that brand awareness not only helps attract new customers but also strengthens their attachment to the brand.

H2: Brand awareness has a positive impact on brand attachment

Brand attachment is the degree to which customers feel attached and loyal to a brand. A study by (Keller, 1993) has shown the relationship between brand awareness and brand attachment. This study emphasizes that brand awareness is an important factor leading to customer attachment and loyalty to a brand. In another study by (Aaker, 1991) in "Managing Brand Equity", the author explored the influence of brand awareness on brand value and its relationship with brand attachment.

H3: Social media communication has a positive impact on brand attachment through brand awareness

In 2013, Schivinski & Dabrowski pointed out communication social media user-generated content has a positive impact on two consumer-based measures of brand equity, including brand loyalty and perceived brand quality. Krieken (2012) demonstrated that participants who liked a brand had more positive attitudes toward the brand in terms of brand attitude, brand image, visual aesthetics (cover photo), and communicability compared to those who dislike a brand.

H4: Social media communication positive impact on the perceived quality

The perceived quality of a brand is the customer's perception of the overall quality, of the superiority of the good or service compared to consumption intention and compared to competitors. Because perceived value can have an impact on the quality of the relationship with the business (Itaniet al., 2019; (Parasuraman & Grewal, 2000) (Van Tonder & Petzer, 2018); Vieira, 2013) and the quality of the relationship system has an impact on customer attachment (Itani et al., 2019; (Kumar et al., 2019; Liu & Jang, 2009); (Kumar & Pansari, 2016).. According to Brodie et al. (2011) for that perceived value increases customer engagement. In addition, Itani, Kassar, and Loureiro (2019) and Tonder and Petzer (2018) suggest that perceived value will impact relationship quality systems, thereby affecting their attachment to customers. Therefore, this study expects that perceived value will affect brand attachment.

H5: Perceived quality has a positive impact on brand attachment

Brand attachment is a mental state that is believed to include cognitive, affective, and behavioral aspects (Hollebeek et al., 2014). Studies show that consumers are more likely to respond to company messages that are important to them and strengthen their attitudes toward the company (Gómez et al., 2019). Through providing trending (trending) and interesting (entertainment) updated content, social media communication will attract consumers to pay attention to the brand, know about the brand, and recognize the brand among other brands (Cheung et al., 2020; Liu et al., 2019).

H6: Social media communication positive impact on brand attachment through perceived quality

Social media communication helps product/service messages reach a large number of users in almost instantaneous time. Thanks to that, it quickly attracts customer attention. Godey et al (2016) also confirmed that social media Not only is an effective way to reach customers, but it is also a quite effective tool in building a brand's image. Brand image refers to the brand association formed in consumers' memory, reflects how the brand is perceived by consumers, and contains the meaning of the brand to consumers (Keller, 1993) Meanwhile, (Jo Hatch & Schultz, 1997) argue that there is a relationship between an organization's image and reputation.

H7: Social media communication positive impact on brand reputation

Positive organizational reputation encourages expectations of better products and services, which leads to increased customer satisfaction (Chang, 2013). The influence of reputation on satisfaction is also clearly shown in the works of Helm et al., (2010. Based on the reputation - loyalty relationship, the influence of university reputation on behavior student support (Longstaff & Yang, 2008) adds to the argument that reputation is a factor that affects student loyalty. Therefore, from satisfying customers can attach brand relies on the reputation of that organization

H8: Brand reputation has a positive impact on brand attachment

Brand attachment is a mental state that greatly affects customer behavior. A customer will tend to develop a positive attitude towards the brand or organization, and the resulting perceived satisfaction forms customer loyalty (So et al., 2014). In the field of education, Faculty, T.T. (2013) said: "School brand includes both the image and reputation of the school, in which a good image and success of the school that is repeated over a long period of time will become reputation." On that basis, combined with the hypotheses of H7 and H8, the above hypothesis is proposed.

H9: Social media communication positive impact on brand attachment via university reputation.

2.4. Proposed research model

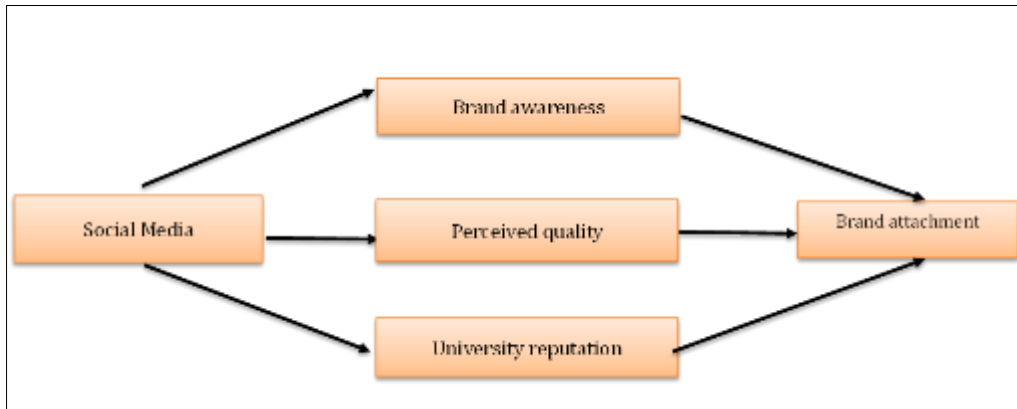


Figure 1 Proposed research model

3. Research methods

3.1. Questionnaire design

The survey method was used in this study to collect data via an empirical questionnaire for model testing purposes. The intended audience for the data collection process is required to be students studying at HaUI. From there, we can know whether the positions or opinions are consistent with reality or not, or are still vague and not exactly specific. The current study applies the scale from previous studies and is adjusted to fit brand values from a consumer perspective. All scales are in Likert-5 format, ranging from 1 strongly disagree to 5 strongly agree.

In particular, the proposed measurement scales are as follows: social media there are 4 observed variables, Responsive brand awareness has 5 observed variables, Perceived quality has 5 observed variables, University reputation has 4 observed variables, Brand attachment has 5 observed variables. This study was tested with 400 students of HaUI.

3.2. Data collection

The main purpose of this study is to study the influence of social media, Brand awareness, Perceived quality, University reputation, attachment brand. Therefore, the research subjects of this topic are students studying at HaUI. The authors applied a simple random sampling method through questionnaires in the field. The questionnaire includes 25 main questions, so the sample size is about 400 questionnaires.

This study was conducted for one month. Finally, a total of 338 valid questionnaires were collected after the survey. The demographics of the respondents are described as follows:

Table 1 Descriptive statistics

Factors	Ingredient	Quantity	%
Sex	Male	153	45.3%
	Female	124	36.7%
	Other	61	18.0%
Student year	First year	15	4.4%

	Second year	152	45.0%
	Three years	104	30.8%
	Fourth year	45	13.3%
	Other	22	6.5%
Academic ability	Medium	32	9.5%
	Rather	129	38.2%
	Good	128	37.9%
	Excellent	49	14.5%

4. Research results

4.1. Test the reliability of the scale

From an overview of the research, explaining the theoretical foundations and applying two background theories including: brand equity theory and social presence theory, the authors have built a research model that includes brand equity theory and social presence theory. includes 1 independent variable social media (SM) with 4 observations, 3 intermediate variables: Brand awareness (BA) has 5 observations, Perceived quality (PQ) has 5 observations and University reputation (UR) has 4 observations, finally there is 1 dependent variable, Brand Attachment (AB) which has 5 observations. From collecting raw data, the author conducts quantitative analysis through two main software, SPSS and Amos. After descriptive statistics, the first thing the authors need to do is test the scale to see if it is reliable enough or not?

Include the above variables or scales in turn to test the reliability of the scale. The criteria for testing the reliability of the scale are as follows: Cronbach's Alpha coefficient (Ca) with general Ca is greater than 0.6, besides the total variable correlation coefficient must be greater than 0.3. In addition, we also pay attention to the criterion that the total variable correlation coefficient must be less than the total variable correlation coefficient if the variable is eliminated. Observations in the scale that do not meet the above criteria are considered trash variables and removed from the scale to analyze the next steps in the study. Thus, the results of testing the reliability of the measurement scales are shown in the Table 2

Table 2 Testing the reliability of the scale

Factors	Cronbach's Alpha (Ca)
Social media communication	0.855
Brand awareness	0.933
Perceived quality	0.899
University reputation	0.847
Brand attachment	0.914

Through the results table above, we can see that all scales have Cronbach's Alpha coefficient (Ca) > 0.6. Specifically, we can see that the scale with the lowest Ca coefficient is the University Reputation scale (UR)= 0.847 shows that all scales have high reliability coefficients. Besides, the total variable correlation coefficients of the five scales above are all greater than 0.3, specifically the smallest total variable correlation coefficient of the scales Social Network Communication, Brand Awareness, Perceived Quality, and Fame. University language, Brand attachments are 0.622 respectively; 0.784; 0.71; 0.641 and 0.741. Finally, the total variable correlation coefficients if the variable types are all smaller than the general Ca coefficient of each scale. Thus, after testing the reliability of the 5 scales, we see that no observed variable was eliminated because it did not meet the standards. Therefore, all observed variables of the 5 scales were subjected to EFA exploratory factor analysis.

4.2. EFA exploratory factor analysis

After testing the reliability of the scale, we see that the scales all meet reliability and continue to include 23 observations including: Brand awareness (BA) has 5 observations, Perceived quality (PQ) There are 5 observations and University Reputation (UP) has 4 observations, finally there is 1 dependent variable, Brand Attachment (AB), which has 5 observations and continues to analyze the EFA factor. The analysis results are shown in the Table 3:

Table 3 KMO coefficient

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.914
Bartlett's Test of Sphericity	Approx. Chi-Square	5207.174
	df	253
	Sig.	0.000
a. Rotation converged in 6 iterations.		

First, the coefficient KMO= 0.914 reaches a value of 0.5 or higher ($0.5 \leq \text{KMO} \leq 1$) which is an index used to consider the appropriateness of factor analysis. Second, the Bartlett test (sig Bartlett's Test= 0.00 < 0.05), proves that the observed variables are correlated with each other in the factor. Third, in terms of Eigenvalue, there are only factors with Eigenvalue= 1,421 > 1, so the factors are retained in the analytical model. Fourth, total variance extracted = 73,529% \geq 50% shows that the research model is consistent with actual data. Finally, the loading coefficients of all factors are greater than 0.5, the smallest is the loading coefficient of observation SC3 = 0.726, which satisfies the condition greater than 0.5 according to Hair et al. (2010). Besides, the higher the factor loading coefficient, means the greater the correlation between that observed variable and the factor and vice versa. Specifically, the load factors are shown in the rotation matrix table below:

Table 4 Rotated matrix table

Pattern Matrix ^a					
	Component				
	1	2	3	4	5
BA2	0.938				
BA5	0.907				
BA1	0.859				
BA4	0.827				
BA3	0.823				
AB5		0.890			
AB4		0.869			
AB2		0.864			
AB1		0.858			
AB3		0.815			
PQ4			0.845		
PA5			0.840		
PQ3			0.835		
PQ2			0.815		
PQ1			0.779		

SC4				0.874	
SC3				0.859	
SC2				0.832	
SC1				0.749	
UR3					0.873
UR4					0.843
UR2					0.827
UR1					0.726
Extraction Method: Principal Component Analysis.					
Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Thus, after analyzing the exploratory factor EFA, the author still kept the 23 observations for 5 variables without reducing or increasing any observations of the scale. Therefore, these 5 variables continue to be included in CFA exploratory factor analysis and test the hypotheses proposed by the authors.

4.3. CFA exploratory factor analysis

It is necessary to determine the conditions for measuring the model's fit with the data to ensure uni-dimensionality for the set of observed variables (Hu and Bentler 1999). To determine this suitability, this study uses the following indicators: CMIN, CMIN/d.f, CFI, GFI, RMSEA and PCLOSE index.

Results after CFA analysis, According to Hu & Bentler (1999), Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives, Structural Equation Modeling, the indicators considered to evaluate Model Fit include: CMIN/ df= 1.605 (CMIN/df ≤3); GFI= 0.918 (GFI≥0.9); CFI=0.947 (CFI≥0.9); RMSEA=0.042 (RMSEA≤0.6); PCLOSE= 0.940 (PCLOSE≥0.05). Because of the limitation of sample size, GFI = 0.896 is still acceptable according to Baumgartner and Homburg (1995) and Doll, Xia, and Torkzadeh (1994).

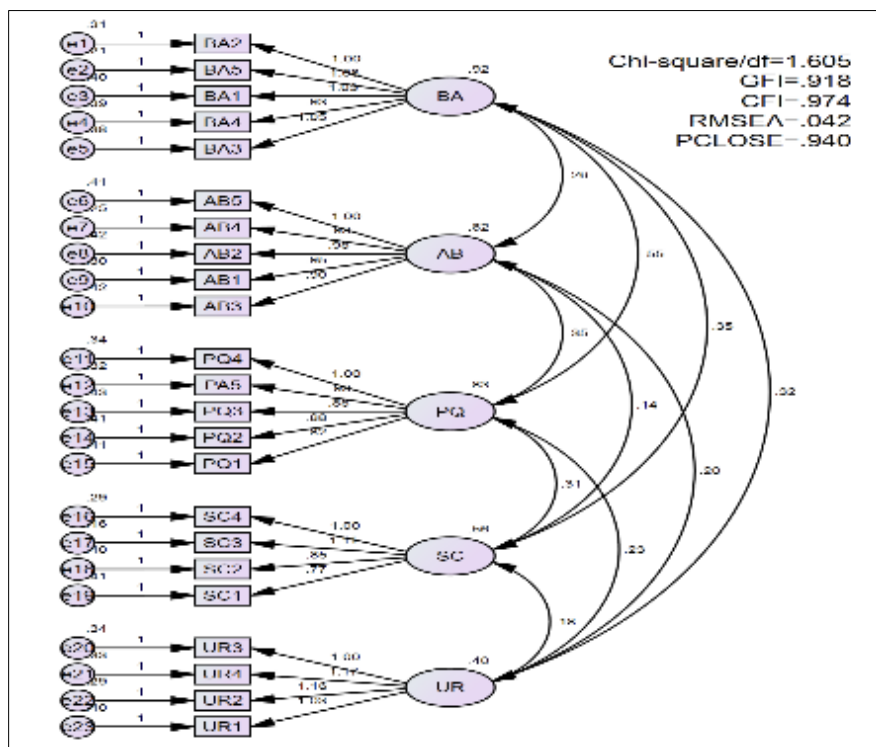


Figure 2 CFA analysis

Thus, after CFA analysis, the results show that the measurement model is consistent with the actual data collected, so we can conclude that the scale satisfies the evaluation conditions and achieves uni-dimensionality.

After testing the model's suitability with market data, we continue to test the reliability, convergence and scale value. First, looking at the table of standardized loading factors, we can see that the standardized loading factors are all ≥ 0.5 , specifically the smallest standardized loading factor is SC2=0.711. In addition, the CR composite reliability is greater than 0.7 ($CR \geq 0.7$), the smallest is still the social network variable with CR= 0.858. Thus, the study's measurement scales have achieved sufficient reliability.

Second, to test the convergence of the study, we evaluate based on whether the CR index is greater than 0.7. If it is greater, convergence is guaranteed. In addition, the AVE index is also a criterion for evaluation. If AVE is greater than 0.5, convergence is guaranteed. Especially if both indexes ensure the evaluation threshold, the condition of convergence is very strong. From here we can see that the CR indices of the variables SC, BA, AB, PQ and UR are 0.858, 0.918, 0.914, 0.899 and 0.848 respectively. In addition, its AVE is also: 0.604, 0.737, 0.681, 0.641, 0.583 > 0.5 , so it satisfies the set criteria. Thus, it can be confirmed that the study achieved convergence. Finally, to achieve discrimination, the MSV indexes must be smaller than the corresponding AVE index; At the same time, the SQRTAVE index must be greater than the Inter-Construct Correlations index

Table 5 Evaluation results of CR, AVE, MSV and SQRT AVE

	CR	AVE	MSV	MaxR(H)	SC	BA	AB	PQ	UR
SC	0.858	0.604	0.241	0.889	0.777				
BA	0.918	0.737	0.391	0.925	0.491	0.858			
AB	0.914	0.681	0.179	0.917	0.200	0.125	0.825		
PQ	0.899	0.641	0.391	0.903	0.457	0.625	0.423	0.800	
UR	0.848	0.583	0.280	0.852	0.388	0.529	0.345	0.397	0.763

4.4. Test the model and research hypotheses

The testing results show that the analytical criteria all meet the necessary standards, confirming that the research model is suitable for the collected data. Specifically: CMIN/df= 2.128 (CMIN/df ≤ 3); GFI= 0.892 (GFI ≥ 0.8); CFI=0.950 (CFI ≥ 0.9); RMSEA=0.058 (RMSEA ≤ 0.6); PCLOSE=0.037 (PCLOSE ≥ 0.01). Because of the limitation of sample size, GFI = 0.892 is still acceptable according to Baumgartner and Homburg (1995) and Doll, Xia, and Torkzadeh (1994). Thus, the above indicators all meet the requirements and standards, thereby confirming that the research model is appropriate.

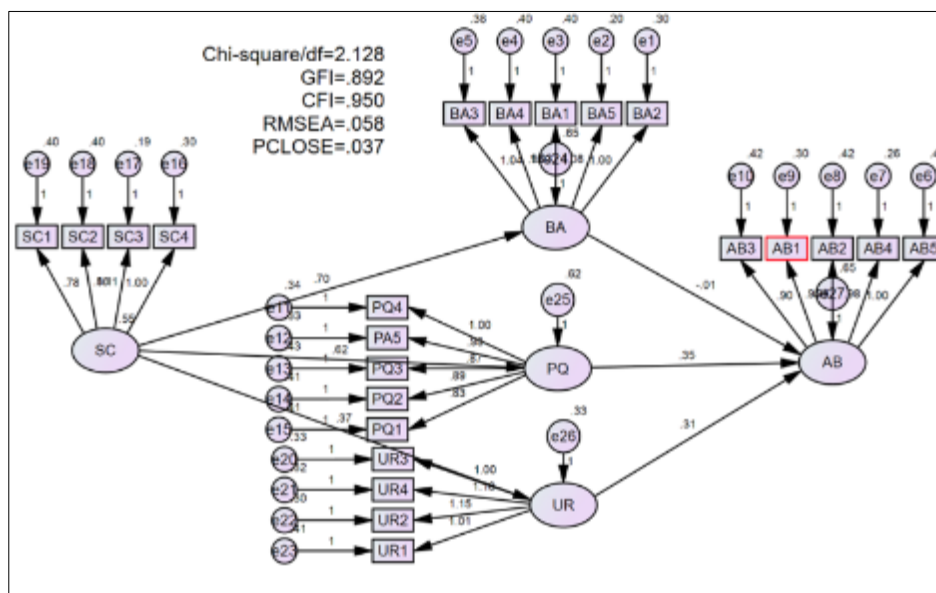


Figure 3 SEM linear model

Table 6 Regression coefficients

			Estimate	S.E.	C.R.	P	Label
BA	<---	SC	.704	0.076	9.243	***	
PQ	<---	SC	.622	0.074	8.362	***	
UR	<---	SC	.372	0.055	6.733	***	
AB	<---	BA	-.008	0.054	-.148	.882	
AB	<---	PQ	.345	0.060	5.745	***	
AB	<---	UR	.309	0.086	3.585	***	
BA2	<---	BA	1.000				
BA5	<---	BA	1.076	0.045	24.011	***	
BA1	<---	BA	1.029	0.050	20.457	***	
BA4	<---	BA	.926	0.048	19.275	***	
BA3	<---	BA	1.043	0.050	20.803	***	
AB5	<---	AB	1.000				
AB4	<---	AB	.979	0.052	18.697	***	
AB2	<---	AB	.977	0.058	16.835	***	
AB1	<---	AB	.946	0.053	17.918	***	
AB3	<---	AB	.899	0.056	16.188	***	
PQ4	<---	PQ	1.000				
PA5	<---	PQ	.976	0.053	18.456	***	
PQ3	<---	PQ	.872	0.054	16.242	***	
PQ2	<---	PQ	.886	0.053	16.672	***	
PQ1	<---	PQ	.825	0.052	15.977	***	
SC4	<---	SC	1.000				
SC3	<---	SC	1.107	0.064	17.286	***	
SC2	<---	SC	.859	0.063	13.565	***	
SC1	<---	SC	.784	0.061	12.787	***	
UR3	<---	UR	1.000				
UR4	<---	UR	1.180	0.087	13.536	***	
UR2	<---	UR	1.154	0.085	13.574	***	
UR1	<---	UR	1.009	0.083	12.102	***	

Through statistical indicators, the author tests the proposed research hypotheses. The results of SEM analysis of the impact relationship between AB<---BA are not significant ($p= 0.882 >0.05$), while the remaining relationships are significant. Exactly, the remaining hypotheses are all statistically significant with 95% confidence ($p<0.05$) and the relationships have a positive impact on each other because the estimated coefficient is positive.

From the table of results and conclusions about the meaning of the above values, the author proceeds to test the proposed research hypotheses. Specifically, the proposed hypothesis H4 is not accepted. Meanwhile, the remaining hypotheses H1, H2, H3, H5, H6 are accepted.

Table 7 Mediation relationships

Hypothesis	Relationship	Indirect		Mediated type
		S.ES	Sig.	
H7	AB<---BA<---SC	-0.005	0.912	No impact
H8	AB<---PQ<---SC	0.177**	0.001	Partly intermediate
H9	AB<---UR<---SC	0.095**	0.000	Partly intermediate

Through the table testing the intermediate relationship between factors, we see the intermediate relationship of AB<---PQ<---SC; AB<---UR<---SC all demonstrate a fully mediated relationship (because the sig value of the indirect relationship is less than 0.05, equal to 0.001 and 0.000<0.05, respectively). However, the relationship AB<---BA<---SC as coefficient Sig= 0.912>0.05 so it does not represent an intermediate relationship.

Thereby, the author tested the proposed research hypotheses. Specifically, the proposed hypotheses H8 and H9 are accepted, while hypothesis H7 is rejected. Therefore, testing the research model aims to confirm that the measurement scales in the research and the concepts of the research model achieve a certain theoretical value.

This research also tests the role of gender in the relationship between social media communication and brand attachment. By testing of homogeneity of variances, the results showed there is any differences by gender in this relationship because Levene's Sig test is equal to 0.272 > 0.05 as showed in the Table 8:

Table 8 Test of homogeneity of variances

Test of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
GB	Based on Mean	1.307	2	335	0.272
	Based on Median	1.800	2	335	0.167
	Based on Median and with adjusted d.f	1.800	2	321.801	0.167
	Based on trimmed mean	1.464	2	335	.233

We also use the F-test results in the ANOVA test to reconfirm this conclusion as showed in Table 9:

Table 9 ANOVA testing results

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.316	2	2.658	3.219	.041
Within Groups	276.634	335	0.826		
Total	281.950	337			

Sig F test is equal to 0.041 < 0.05, accepting the hypothesis H0, meaning that there is an average difference in cohesion between different genders. Thus, there is a difference in the gender of students in terms of brand attachment between men and women.

5. Conclusion

From stating the context research and review domestic and foreign research documents on social networking platforms such as Google and Facebook to collect secondary data. At the same time, using that as a basis, combined with the background theory of brand equity and social theory, the author proceeds to build a research model. The author then proceeded to collect primary data through designing a questionnaire using the google form link to send to survey subjects. With 338 valid surveys. The author cleaned the data using SPSS through testing the reliability of the scale and analyzing the EFA exploratory factor. At this step, the 23 observations from 5 variables remain the same, including 1 independent variable, 3 intermediate variables and 1 dependent variable. Then the author continued to use CFA confirmatory factor analysis. Here, the author tests the model fit, testing unidirectionality, reliability and discrimination. All are at a good level. Finally, put the factors into SEM testing and evaluate the research hypotheses to show that the

model fit is consistent with market data. Besides, the hypotheses H1, H2, H3, H5, H6 are accepted because $p = 0.000 < 0.05$. Reject hypothesis H4 because the coefficient Sig. = $0.882 > 0.05$. Besides, evaluating the strength and weakness of the factors through the standardized beta coefficient shows that the factor with the strongest and positive influence on brand attachment is the perceived quality of students (PQ with $\beta = 0.349$), followed by brand reputation (BR with $\beta = 0.218$), then Brand awareness has no impact on brand attachment because $p = 0.882 > 0.05$. In addition, social media has the strongest and most positive impact on the Brand Awareness factor with beta coefficient = 0.542 , then perceived quality (PQ) with $\beta = 0.505$, and finally university reputation (BR) with $\beta = 0.434$. Besides, considering the mediating role of three factors: Brand awareness, Perceived quality and university reputation in the relationship between social network media and brand attachment, we can see the coefficient The sig. of the mediating factors in the relationship between social network communication and brand attachment are 0.912 , 0.001 and 0.00 , respectively. Therefore, we can understand and refute the intermediary relationship between social media and brand attachment through brand awareness. Besides, accepting the mediating relationship between social media and attachment brands through perceived quality and university reputation with standardized impact coefficients of 0.177 and 0.095 , respectively, with positive signs shows that both Two factors play a positive role in promoting the relationship between social media and brand attachment. HaUI and the mediating relationship between social media and attachment brands through perceived quality has a larger and more net boost than the intermediate college reputation margin because of its larger beta. In addition, after the one-way ANOVA test, it also shows that there are differences in attachment brands between male and female genders and other genders, specifically gender has the largest attachment brands, followed by female gender and lastly. The male gender is considered the gender with the lowest brand attachment of HaUI. From the above research discussions, the author can make new academic and practical contributions to propose management implications for Industrial Universities about attaching brands to students as students. of the components of brand equity include: Brand awareness, Perceived quality and Brand reputation

From here, the authors also make the following academic and practical contributions:

In this research, our team also has a new contribution, which is that in addition to fields such as fast food or real estate, in the more specific field of education at HaUI, network communication Society also has a very strong influence on students' brand awareness and perceived quality. In addition, in this study, the authors clearly identified the mediating role of perceived quality in attaching the HaUI brand. through social media. Besides, brand reputation is considered a new observed variable in brand assets. In this study, the author has clearly identified the mediating role of university reputation in the relationship between social media and brand attachment HaUI. In addition to acting as an intermediary, university reputation is also impacted in the same direction as social media and the attachment brand. Finally, based on the research gap, there have been no studies analyzing one-way ANOVA to determine the difference in brand attachment HaUI between descriptive statistics variables including gender, year of student and student's academic performance. The results show that there are differences in attachment brands between specific genders. The gender most different from the brand attachment HaUI, then the female gender and finally the male gender. Besides theoretical contributions, this research also makes practical contributions as follows:

At the HaUI, to enhance brand attachment through social media, the management of the University of Industry needs to improve the perceived quality of students. First, schools need to create engaging content on social media platforms. Sharing school events, activities, and achievements through articles, videos, and photos will help students feel prouder and more connected to the school. In addition, active interaction on social media platforms is also important. Responding quickly and positively to comments and messages from students helps create an open and close communication environment. Additionally, contests, online games, and polls can also stimulate student interaction and participation. At the same time, sharing diverse and useful information also plays an important role in creating cohesion. Students need to be provided with clear and detailed information about study programs, facilities, and career opportunities. This helps them feel trusted and supported by the university. Furthermore, creating opportunities for students to express themselves is also an effective way to increase engagement. By encouraging students to share their personal experiences, thoughts, and opinions on social media platforms, they can feel more valued and contribute to the campus community. Finally, building an online community also plays an important role in creating engagement. Create online groups, pages, and forums for student groups by program, department, or common interest to help them connect and share information easily. In summary, enhancing the quality of students' perception of HaUI through social media is an important step in building and developing the school's brand. By creating a positive and engaging communication environment, schools can increase attachment and support from students, thereby enhancing their reputation and appeal within the student community.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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