MARKETING | RESEARCH ARTICLE

Participating anonymous online student communities and university brand relationship outcomes

Tri D. Le¹,², Linh Le¹,², Quynh Phan¹,², Khoa T. Tran¹,² and Phuong Nguyen¹,²

Abstract: Besides official social pages of organizations, the anonymous online consumer communities are emerging phenomena. Participating these communities may affect the relationship between consumers and brands. Focusing on the higher education context, where consumers and brands have strong relationship, this work examines the impact of participating “Confessions pages”- the anonymous community on the brand relationship outcomes. Quantitative data were collected from 480 university students in Ho Chi Minh city who have followed Confessions pages. Findings indicate that online interaction propensity in university confessions page and attitude toward confessions page have no relationship with brand relational outcomes while higher education involvement has significant impact on satisfaction and image. The research explores the effect of anonymous online communities on brand and provide suggestions for universities to deal with this emerging phenomenon.

ABOUT THE AUTHORS

Tri D. Le has research interests in word-of-mouth, higher education marketing, online engagement. His works have been published in journals such as Journal of Consumer Behaviour, Studies in Higher Education, and Marketing Intelligence and Planning.

Linh Le and Quynh Phan are research assistants at International University, VNU-HCM, Vietnam. Their research interests are online communities and brand engagement.

Khoa T. Tran is the President of International University, a member of Vietnam National University at Ho Chi Minh city (VNU-HCM), Vietnam. He completed his doctorate degree in Marketing and International Business at Western Sydney University, Australia. His research interest includes corporate branding and behavioral studies on business management. His works have been published in journals such as Sustainability, Administrative Sciences, Entrepreneurship and Sustainability Issues.

Phuong Nguyen is a lecturer and researcher of International University, VNU-HCM. He earned his Ph.D in Development Administration at NIDA, Thailand. His major research focuses on public policy, sustainability, and corporate strategy.

PUBLIC INTEREST STATEMENT

Participating on social media is prevalent in our daily life. University students, of the young generation, actively communicate on the social pages and discuss about every aspect of their lives, including the university-related topics. In order to improve the service quality and maintain the brand image of the university, university managers need to understand what students discuss about and how this activity influences the relationship between the university and its students. This research focuses on the anonymous online student communities (the Confessions pages) and investigates the impacts of the community engagement on the brand relationship outcomes. The research explores the effect of anonymous online communities on brands and provides suggestions for universities to deal with this emerging phenomenon.
1. Introduction
Social media is currently a primary platform of human communication (Alves et al., 2016). People in a variety of ages use social media in daily basis and receive a wide range of information regarding their brands or consumption experience. Social media usage has transformed the nature of relationships among brands and their consumers, as the brands cannot control all information related to their images (Gensler et al., 2013). Besides the positive messages from online brand communities, consumers also participate negative discussions which possibly have negative impacts on the brand images (Dessart et al., 2020; Kristal et al., 2018). Much attention has been paid to social media engagement of consumers towards brands, from the two extremes, brand community (Brodie et al., 2013) and anti-brand community (Dessart et al., 2020), as brand love and brand hate. However, lack of research has been conducted to explore such online communities which lie in the middle of this continuum, as the community discussions with parody and pranks can be called “brand play” (Kristal et al., 2018). Focusing on the anonymous online student communities, this research explores such a “brand play” community, as the discussions on the communities are not clearly positive or negative about the brand and organization. This type of communities is especially popular for the credence-based services in which the consumers are highly involved with the brand and the consumers have lack ability to evaluate the quality of service (Girard & Dion, 2010). Because of the high involvement with the service, consumers are not clearly satisfied or dissatisfied with their experience. It depends on the particular cases, so that their communications on social media are also varied according to different situations.

Higher education is classified as a credence-based service, when most of consumers, as university students, have one-off decision to enter the university, and then spend a few years for their study (Le, Robinson et al., 2019; Moogan et al., 1999). Sometimes they are unhappy with their experience, but they are unlikely to quit. Social media is a channel for their chats and discussions regarding the student life (Fagerström & Ghinea, 2013; Le, Dobele et al., 2019). Besides the official social pages or groups established by universities, the anonymous online student communities are increasingly popular. In Vietnam, students are familiar with confessions pages of universities (Son et al., 2021). Confession pages are pages on social media sites like Facebook or standalone websites which are generally used for students to anonymously post their confessions, secrets or basically their thoughts, complaints about their universities without everyone knowing their identity by sending what they want to post to that page (Son et al., 2021). The content of these posts is easily accepted to be posted by the page administrators, who are also anonymous. Many posts would influence university stakeholders, including current and potential students, so that it has significant impacts on the brand and relationships of the universities. This research aims to explore the impact of such anonymous online student communities on the university brand, by examining the influence of engagement on such communities and higher education on the university brand relationship outcomes.

This study begins with a literature review conceptualizing the social media engagement; its determinants and potential outcomes might have on the university—student relationship then focuses and reviews existing the relationship among factors. The next section presents the hypotheses that lead to a conceptual model for this research. The methodology shows the sample and methods of data collection and analysis. The most important of the study is the results, discussion and conclusion including the theoretical contribution, managerial implications and limitations and suggestions for future research.
2. Literature review

2.1. The determinants and relationship outcomes of community engagement

Online interaction propensity, attitude towards online community participation and product involvement are individual-related determinants of community engagement (Brodie et al., 2011; Dessart, 2017; Vivek et al., 2012). Online interaction propensity (OIP) is defined as the degree of a person's willingness to interact with others in either online platforms or offline meeting, and not all people perform the same level of propensities to communicate (Wiertz & De Ruyter, 2007). Although OIP is relatively under-researched, it is the focus of some previous studies. For instance, Blazevic et al. (2014) investigated the interactivity side of social media and promoted the concept of General Online Social Interaction Propensity (GOSIP). They defined GOSIP as a trait-based individual difference in the predisposition to join online discussions. GOSIP displays the probability that a person will intentionally participate in an online interaction. Thus, OIP is an individual-level factor that captures individual predisposition to interact with other people or join online discussions in online communities (Blazevic et al., 2014; Dessart, 2017).

Attitude towards online community participation reflects the level that a consumer does favor or does not favor participating in the online communities (Wu & Chen, 2005). This concept was proposed from the theory of planned behavior (TPB) of Ajzen (1991). The theory is a well-known approach in social psychology that has been used successfully in hundreds of contemporary applied studies (e.g., Armitage & Conner, 2010) and a foundation for many studies on the relationship between attitude toward behavior and behavioral intention, such as Bagazzi and Dholakia (2006), Krueger et al. (2000), and Pelling et al. (2009). TPB defined attitude toward the behavior as the degree to which one has a favorable or unfavorable assessment of the behavior in question, before truly form an intention to do the behavior. Because online community participation is a behavior, attitude toward online community participation is defined as the degree to which one has a positive or negative appraisal or evaluation of the participation on the online communities, aligning with the notion of Dessart (2017). Hence, attitude towards online community participation is an individual-level factor that displays individual evaluation of participating on the online communities.

When it comes to product involvement, this concept has been a primary center of interest in consumer research literature for the past 20 years. The construct of involvement is the “perceived relevance of the object based on inherent needs, values, and interests” (Zaichkowsky, 1985). While involvement is a cognitive, affective, or motivational construct indicating state of mind (Smith & Godbey, 1991), or perceived personal relevance, it is not viewed as a behavior (Bloch & Richins, 1986; Celsi & Olson, 1988; Zaichkowsky, 1985). Product involvement is considered as an important dimension of engagement (Vivek et al., 2012).

Community engagement has the influence on the consumer brand relationship outcomes including the brand trust, brand commitment, and brand loyalty (Algesheimer et al., 2005; Brodie et al., 2011). The three determinants comprising online interaction propensity, attitude toward participation and product involvement are proposed to have impacts on the outcomes of consumer brand relationships. Fernandes and Moreira (2019) validated that “the effects of consumer brand engagement on brand loyalty, directly or indirectly through satisfaction, are stronger for emotional relationships”. Nonetheless, brand image is an outcome of brand community participation (David et al., 2008; Keller, 1993). Thus, brand image and consumer satisfaction are outcomes of community participation. Hence, we proposed that those individual-related determinants of community engagement will have direct effects on the two relationship outcomes including customer satisfaction and brand image.

2.2. The proposed research model

In the context of this research in which investigating the anonymous online community, online interaction propensity and attitude towards online community participation can be transformed into online interaction propensity in university confessions page (OIPCP), attitude towards participating in university confessions pages (APCP). Nevertheless, as all business concepts and
theories can contemporarily be applied in higher education sector (Tuan, 2012). University can recently be seen as brand providing a product called higher education and students have become customers. Therefore, we adapt product involvement into higher education involvement. As a result, online interaction propensity in university confessions page, attitude towards online community participation in university confessions page and higher education involvement rationally impact student satisfaction and university image, which will be examined in our study as the following hypotheses:

H1: OIPCP has a direct influence on student satisfaction.

H2: OIPCP has a direct influence on institution image.

H3: APCP has a direct influence on student satisfaction.

H4: APCP has a direct influence on institution image.

H5: Higher education involvement has a positively direct influence on student satisfaction.

H6: Higher education involvement has a positively direct influence on institution image.

In the higher education aspect, student loyalty may refer to both the period when a student enrolls courses and the period after they graduate (Helgesen & Nesset, 2007). As pointed out by Schlesinger et al. (2016), loyalty is not restricted to the period during which students are formally enrolled in courses at their university. Former students can help the university to improve and promote the image and reputation (Nguyen & LeBlanc, 2001), the loyalty of former students can also be highly important for educational institutions (Helgesen & Nesset, 2007).

The definition of trust has evolved over time (Schlesinger et al., 2016). Trust are relationship marketing constructs that are well acknowledged in the literature. It is a key variable for enhancing a relationship’s scope (Schlesinger et al., 2016). In service contexts, trust has been acknowledged as an important factor for developing customer loyalty (Ball et al., 2004; Chaudhuri & Holbrook, 2001; Garbarino & Johnson, 1999; Sirdeshmukh et al., 2002). Morgan and Hunt (1994) also defined trust as confidence of one party in the reliability and integrity of its exchange partner, which has been supported by a variety of contemporary studies from (Adidam et al., 2011; Ghosh et al., 2001; Helen & Ho, 2011; Hennig-Thura et al., 2001; Sampoio et al., 2012) Figure 1.

Satisfaction is widely acknowledged as a major driver of customer retention and loyalty (Fornell et al., 1996; Oliver et al., 1997). Satisfaction can be defined as the cumulative experience of the students with the university, which has been shaped over time and leads to students’ emotional evaluation of the brand (Ghorbanzadeh et al., 2020). Moreover, according to Schlesinger et al. (2016), the result revealed that satisfaction is one of the antecedents of the alumni loyalty in the context of higher education. In the meantime, Ganesan (1994) points out that satisfaction increases perceptions of credibility and benevolence of the other party, which is trust. Several previous papers indicated that satisfaction could lead to trust, namely Flavián et al. (2006) and Loureiro et al. (2014). In education, a research conducted by Rojas-Méndez et al. (2009) is unique in reporting such a relationship. Based on these theories, the hypothesis hold for student satisfaction is as below:

H7: Student satisfaction has a positive impact on student loyalty.

H8: Student satisfaction has a positive impact on student trust.
Institutional image is an important construct for university students (Nguyen & LeBlanc, 2001; Schlesinger et al., 2016). In prior studies, university image is the indirect antecedent of the loyalty, determined by the work of Schlesinger et al. (2016) and Alhaddad (2015). Similarly, Chiou and Droge (2006) validated that a trustworthy image can increase loyalty. Apart from that, Alhaddad (2015) also supports the notion that brand image has a positive effect on brand trust. In the meantime, Palacio et al. (2002) and Clemes et al. (2007) showed the finding to shade the light for the influence of overall image on satisfaction. Therefore, hypotheses regarding university image are proposed as in below:

H9: University image has a positive influence on student satisfaction.

H10: University image has a positive influence on student loyalty.

H11: University image has a positive influence on student trust.

3. Methods

3.1. Sample and data collection
A quantitative approach has been conducted to examine and analyze the data set collected from the respondents of a questionnaire survey. This survey is in the form of both pen-and-paper and web-based questionnaires, targeting university students who follow universities’ confession pages. Students who carried out the survey came from various universities. The chosen universities were among the most popular universities in Ho Chi Minh city and all universities are considered to have a large number of students experiencing confessions pages. The online survey was implemented via Google Form links shared on Facebook. The offline survey is hard-copy questionnaires collecting responses from random university students in four university campuses and an event in the Youth Culture House of Ho Chi Minh City. Before distributing printed questionnaires to get responses, the survey conductors asked respondents whether they follow their university’s confessions pages or interact with those pages. All the participants in the research were completely voluntary and all questionnaires, both online and offline, were returned with a total of 480 respondents used for data analysis. The sample characteristics are presented in Table 1. There are 298 females (62%) and 182 males (38%) respondents. All respondents are from large universities in Ho Chi Minh City. The major of study reflects the distribution of major in reality, in which half of the respondents are studying business and economics (45%).

3.2. Measures and pretest
There are seven measurement scales for constructs including OIPCP, APCP, Higher Education Involvement, Student Satisfaction, University Image, Student Loyalty, and Student Trust. The first
|                        | Units | Percent |
|------------------------|-------|---------|
| **GENDER**             |       |         |
| Male                   | 182   | 37.92%  |
| Female                 | 298   | 62.08%  |
| **AGE**                |       |         |
| 18                     | 94    | 19.58%  |
| 19                     | 107   | 22.29%  |
| 20                     | 99    | 20.63%  |
| 21                     | 141   | 29.38%  |
| 22                     | 27    | 5.63%   |
| 23 and above           | 12    | 2.50%   |
| **ACADEMIC STANDINGS** |       |         |
| Freshman               | 103   | 21.46%  |
| Sophomore              | 123   | 25.63%  |
| Junior                 | 85    | 17.71%  |
| Senior                 | 169   | 35.21%  |
| **GPA RANGE**          |       |         |
| Not yet                | 80    | 16.67%  |
| Lower than 2.0         | 6     | 1.25%   |
| From 2.0 to lower than 2.5 | 29 | 6.04% |
| From 2.5 to lower than 3.0 | 47 | 9.79% |
| From 3.0 to lower than 3.5 | 168 | 35.00% |
| From 3.5 to lower than 3.75 | 87 | 18.13% |
| From 3.75 to 4.0       | 28    | 5.83%   |
| Others                 | 35    | 7.29%   |
| **UNIVERSITY**         |       |         |
| Ho Chi Minh City University of Technology, VNUHCM | 41 | 8.54% |
| Hoa Sen University     | 63    | 13.13%  |
| International University, VNUHCM | 148 | 30.83% |
| Ho Chi Minh City University of Science, VNUHCM | 101 | 21.04% |
| University of Economics and Law, VNUHCM | 31 | 6.46% |
| Others                 | 96    | 20.00%  |
| **MAJOR OF STUDY**     |       |         |
| Business and Economic  | 215   | 44.79%  |
| Engineering            | 89    | 18.54%  |
| Natural Science        | 96    | 20.00%  |
| Social Science and Law | 30    | 6.25%   |
| Others                 | 50    | 10.42%  |
| **LIVING AREA**        |       |         |
| Ho Chi Minh City       | 436   | 90.83%  |
| Others                 | 44    | 9.17%   |
Table 2. Measurement model

| Code   | Measures                                                                 | Factor loading |
|--------|---------------------------------------------------------------------------|----------------|
|        | **Online Interaction Propensity in University Confession Pages (OIPCP)**  |                |
| OIP1   | I am someone who enjoys interacting with like-minded people in online confession page(s) | 0.710          |
| OIP2   | I am someone who likes actively participating in online confession page(s)  | 0.799          |
| OIP3   | I thoroughly enjoy exchanging ideas with others via online confession page(s) | 0.760          |
| OIP4   | In general, I like to get involved in online confession page(s)            | 0.719          |
|        | **Attitude Toward Online Community Participation in University Confession Pages (APCP)** |                |
| ATTR2  | I think that participating in online confession page(s) is foolish*        | 0.798          |
| ATTR4  | I think that participating in online confession page(s) is harmful*        | 0.789          |
| ATTR5  | I think that participating in online confession page(s) is punishing*      | 0.740          |
|        | **Higher Education Involvement** (α = 0.810; AVE = 0.70; CR = 0.82)        |                |
| HEI1   | Higher education matters to me                                            | 0.728          |
| HEI2   | Higher education is very important to me                                  | 0.938          |
|        | **Student Satisfaction** (α = 0.894; AVE = 0.74; CR = 0.90)                |                |
| SAT1   | My decision to choose this university was correct                          | 0.868          |
| SAT2   | My experience in this university has satisfied my expectations            | 0.814          |
| SAT3   | In general, I am satisfied with my decision to attend this university    | 0.897          |
|        | **University Image** (α = 0.795; AVE = 0.51; CR = 0.75)                    |                |
| IMA1   | I have always had a good impression of this university                    | 0.801          |
| IMA2   | In my opinion, this university has a good image in the minds of consumers | 0.614          |

(Continued)
Overall, I have a positive image of this university

| IMA3       | Overall, I have a positive image of this university | 0.712 |
|------------|-----------------------------------------------------|-------|
| **Student Loyalty (α = 0.883; AVE = 0.67; CR = 0.89)** | | |
| LOY1       | If I were faced with the same choice again, I would still choose the same university | 0.861 |
| LOY2       | If I had to apply for advanced courses or postgraduate courses, this university would be my first choice | 0.704 |
| LOY3       | If somebody asked me, I would definitely recommend this university | 0.855 |
| LOY4       | If the opportunity arose, I would make positive comments of this university to family and friends | 0.853 |
| **Student Trust (α = 0.879; AVE = 0.66; CR = 0.85)** | | |
| TRU1       | I trust my university | 0.892 |
| TRU3       | My university is an honest university | 0.722 |
| TRU4       | My university is safe | 0.806 |

Model Fit indices: Chi-square = 400.831, df = 184, p = .000, Chi-square/df = 2.178, Goodness of Fit Index (GFI) = 0.929; Tucker Lewis Index (TLI) = 0.957, Normed Fit Index (NFI) = 0.939, Comparative Fit Index (CFI) = 0.966 and Root Mean Square Error of Approximation (RMSEA) = 0.050

N = 480; α = Cronbach's Alpha; AVE = Average Variance Extracted; CR = Composite Reliability.
three antecedents, student trust and student loyalty were measured using the scales adapted from Dessart (2017), while the measurement scale of university image was adapted from Schlesinger et al. (2016). Student satisfaction was measured by the scale developed by Fornell (1992) and supported by Palacio et al. (2002) and Schlesinger et al. (2016).

In the beginning of the questionnaire, screening questions ensure that only participants who follow confessions pages or interact with the post on these pages could carry out the questionnaires. Moreover, the definition for every concept were carefully described for respondents to fully

| Table 3. Results of path analysis |
|----------------------------------|
| **Casual Path**                  | **Std. Estimates** | **Significance** | **Support** |
| H1 Online Interaction Propensity → Student Satisfaction | 0.087 | 0.044 | Insig. | Not Supported |
| H2 Online Interaction Propensity → University Image | 0.062 | 0.257 | Insig. | Not Supported |
| H3 Attitude Toward Confessions → Student Satisfaction | 0.023 | 0.598 | Insig. | Not Supported |
| H4 Attitude Toward Confessions → University Image | 0.151 | ** | Sig. | Supported |
| H5 Higher Education Involvement → Student Satisfaction | 0.126 | ** | Sig. | Supported |
| H6 Higher Education Involvement → University Image | 0.341 | *** | Sig. | Supported |
| H7 Student Satisfaction → Student Loyalty | 0.811 | *** | Sig. | Supported |
| H8 Student Satisfaction → Student Trust | 0.586 | *** | Sig. | Supported |
| H9 University Image → Student Satisfaction | 0.671 | *** | Sig. | Supported |
| H10 University Image → Student Loyalty | 0.143 | ** | Sig. | Supported |
| H11 University Image → Student Trust | 0.374 | *** | Sig. | Supported |

Model Fit indices: Chi-square = 425.620, df = 191, p = .000, Chi-square/df = 2.228, Goodness of Fit Index (GFI) = 0.924; Tucker Lewis Index (TLI) = 0.955, Normed Fit Index (NFI) = 0.935, Comparative Fit Index (CFI) = 0.963 and Root Mean Square Error of Approximation (RMSEA) = 0.051

N = 480; *** significant at the 0.001 level, ** significant at the 0.01 level
understand the concepts and answer the question from the same perspective. The remaining part of the questionnaire was structured to follow the order of examined constructs. The final section was about to collect participants’ demographic information. Pilot test was conducted with one academic staff and ten Vietnamese university students to ensure the language, translation and the questions were well understood.

4. Data analysis and results
In the first stage of measurement validation, principal component factor analysis indicates that the eigenvalues of all factors are greater than one. All factor loadings are high, and there are no significant cross-loadings with the Varimax rotation method. Before conducting the path analyses to test the hypotheses, a confirmatory factor analysis (CFA) using AMOS 22 was performed to analyze the reliability and validity of constructs measured by multi-item scales. Maximum likelihood (ML) estimation was employed to estimate the parameters and the overall fit index of the measurement model. The measurement model consisted of OIPCP, APCP, Higher Education Involvement, Student Satisfaction, University Image, Student Loyalty, and Student Trust on University. All constructs’ Average Variance Extracted indices (AVE) were higher than 0.5. The overall fit indices of the measurement model, as reported in Table 2, indicating a good model fit (Fornell & Larcker, 1981; MacKenzie et al., 2011), and all of the factors satisfied the conditions for reliability and validity (Hair et al., 2006).

Table 3 shows the results of path analysis using structural equation modelling (SEM). CFI, NFI, GFI, TL1 were all greater than 0.9 and RMSEA was smaller than 0.06 (Hu & Bentler, 1999), which implies an appropriate fit for the model. Among the eleven direct hypothesised relationships, the SEM results indicated three non-significant relationships, as reported in Table 3. Three non-significant hypothesized relationships included the impact of OIPCP on University Image and Student Satisfaction and the impact of APCP on Student Satisfaction. Hence, the hypotheses H1, H2, H3 were not supported.

According to the results, APCP was reported to have a significantly positive influence on University Image (β = .151, p < .01). Thus, H4 is supported. Next, Higher Education Involvement was verified to have a significantly positive effect on Student Satisfaction (β = .126, p < .01), and on University Image (β = .341, p < .001), which supported H5 and H6. Likewise, Student Satisfaction also indicated positive significant influences on Student Loyalty (β = .811, p < .001), and Student Trust (β = .586, p < .001), confirming the hypothesis H7 and H8. These strong relationships show that Student Satisfaction is the key factor to build up a strong brand relationship. The influence Student Satisfaction has on Student Loyalty is stronger than that on Student Trust. Last, University Image was shown to have positive significant influences on Student Satisfaction (β = .671, p < .001), Student Loyalty (β = .143, p < .01), and Student Trust (β = .374, p < .01), verifying the hypothesis H9, H10 and H11. University Image has the greatest effect on Student Satisfaction, then on Student Trust and lastly on Student Loyalty.

5. Discussion
Online Interaction Propensity, Attitude Toward Online Community Participation, and Higher Education Involvement are three constructs that capture individual predispositions toward the online community (Dessart, 2017). Applying these constructs into the context of anonymous online community in higher education results indicates that participating confession pages would not impact the brand relationship outcomes. According to the empirical results, OIPCP has no influence on either Student Satisfaction or University Image. Although students expose and interact with the confession pages and anonymously discuss about experience with the universities, it is unlikely to change their satisfaction or their perceived image of university.

APCP influences University Image but not Student Satisfaction. This means both participation and attitude toward confession page would not increase or decrease the satisfaction of students. It is different from the anxiety of university managers that the confession pages would damage all
the efforts and quality they bring to students. One of the reasons should be because the posts and discussions on confessions pages are diversified, not only the negative feedbacks about universities (Son et al., 2021). Moreover, students who engage in the anonymous online communities might be also the groups who highly engage in the activities of their universities. Therefore, they are not easily influenced by the posts on these communities. This is also consistent with the significant effects of Higher Education Involvement. Higher Education Involvement has significantly positive influences on University Image and Student Satisfaction. These results are in line with the support of David et al. (2008) who proved the positive influence of product involvement on brand image.

Along with the above relationships, the inter-relationship of four relational outcome variables in the Higher Education context was tested. Those variables have been examined for years but without the presence of online communities. In our study, the online community was considered when examining Student Satisfaction, University Image, Student Loyalty, and Student Trust. The results are consistent with previous studies on the influences of Student Satisfaction on Student Loyalty and Student Trust (Schlesinger et al., 2016). The impacts of University Image on Student Satisfaction and Student Trust were also supported by the findings. Meanwhile, our results oppose previous studies that confirmed the influence of University Image on Student Loyalty.

6. Implications for theory and practice
Social media are currently the major platform of human communication. Besides the online brand or fan communities of normal products or services, online communities of students have been popular (Le, Dobele et al., 2019). University mangers are difficult to manage the discussions on these platforms, especially the anonymous online communities. This is among the first research to explore the impact of these phenomena on the university brand relationships. The findings of this research contribute to the literature of brand and social media engagement in two aspects. First, anonymous online community is a special type of online brand communities, with lack of attention in previous studies. Beside the brand communities (Brodie et al., 2013) and anti-brand communities (Dessart et al., 2020), this research explores another type of consumer community. Second, this research contributes to the literature of online community in higher education context. As higher education is a credence-based service (Moogan et al., 1999), a context with some special consumer and institution characteristics.

Considering the online communities and communication are recently important to the integrated marketing communication strategies of firms and organizations, this research provides insights for marketers to understand the impact of online engagement in the context of such a special online community. Since the results show that QIPC and APCP do not influence Student Satisfaction, University Image, interaction of students on these pages does not change the satisfaction of the students and the university image they perceive. Therefore, in terms of relationship marketing, the anonymous online communities of students would not decrease the evaluation of students on the university quality and image. University managers can consider the online anonymous communities like confessions pages as an external channel to observe and understand more about their consumers. Universities do not need to restrict students from creating, operating, and interacting with online communities such as confessions pages. Universities should invest in developing the involvement of students in the official and informal activities with the universities, as involvement was proved as an important factor to university brand relationship.

7. Limitations and future research directions
In our study, the confessions pages in Vietnamese higher education context are applied as the sample of anonymous online community, which might limit the generalization of research because the content of confessions pages may be unique and could not represent the phenomena of anonymous online communities. Thus, further studies on the same topic should investigate diversified forms of anonymous brand community. Data can be collected in different countries,
in order to capture how culture can influence the students in terms of participating such online anonymous communities.

Acknowledgements
This research is funded by International University - VNUHCM under grant number T2019-04-BA

Funding
This research is funded by International University - VNUHCM under grant number T2019-04-BA

Author details
Tri D. Le,1,2,5 E-mail: idmtridcmcu.edu.vn
Linh Le,2,5 Quynh Phan,2,5 Khoa T. Tran,2,5 Phuong Nguyen,1,2
1 School of Business, International University, Ho Chi Minh City, Vietnam.
2 Vietnam National University, Ho Chi Minh City, Vietnam.

Citation information
Cite this article as: Participating anonymous online student communities and university brand relationship outcomes, Tri D. Le, Linh Le, Quynh Phan, Khoa T. Tran & Phuong Nguyen, Cogent Business & Management (2021), 8: 1947558.

References
Addadim, P. T., Bingi, R. P., & Sindhav, B. (2011). Building relationships between business schools and students: An empirical investigation into student retention. Journal of College Teaching & Learning (TLC), 1(1), 37–48. https://doi.org/10.19030/tlc.v1i1.2006
Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211. https://doi.org/10.1016/0749-5979(9190020-T
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. https://doi.org/10.1509/jmkg.69.3.16636
Alhadadd, A. (2015). Perceived quality, brand image and brand trust as determinants of brand loyalty. Journal of Research in Business and Management, 3(4), 01–08.
Alves, H., Fernandes, C., & Raposo, M. (2016). Social media marketing: A literature review and implications. Psychology & Marketing, 33(12), 1029–1038. https://doi.org/10.1002/mar.20936
Armstrong, C. J., & Conner, M. (2010, July). Efficacy of the theory of planned behaviour: A meta-analytic review. European journal of social psychology, 40(4), 471–489. https://doi.org/10.1002/030006000164939
Bagazzi, R. P., & Dholakia, U. M. (2006). Antecedents and purchase consequences of customer participation in small group brand communities. International Journal of Research in Marketing, 23(1), 45–61. https://doi.org/10.1016/j.ijresmar.2006.01.005
Ball, D., Simões Coelho, P., & Machado, A. (2004). The role of communication and trust in explaining customer loyalty. European Journal of Marketing, 38(9/10), 1272–1293. https://doi.org/10.1108/03090560410548979
Blazevic, V., Wiertz, C., Cotte, J., De Ruyter, K., & Keeling, D. I. (2011). GOSIP in cyberspace: Conceptualization and scale development for general online social interaction propensity. Journal of Interactive Marketing, 25(2), 87–100. https://doi.org/10.1016/j.intmar.2013.09.003
Bloch, P. H., & Richins, M. L. (1986). After the new wears off: The temporal context of product involvement. Journal of Consumer Research, 13(2), 280–285. https://doi.org/10.1515/jcr.1997.22.4.451
Brodie, R. J., Hollebeek, L. D., Juric’, B., & Ilic, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. Journal of Service Research, 14(3), 252–271. https://doi.org/10.1177/1094670511413703
Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. Journal of Business Research, 66(1), 105–114. https://doi.org/10.1016/j.jbusres.2011.07.029
Celsi, R. L., & Olson, J. C. (1988). The role of involvement in attention and comprehension processes. Journal of Consumer Research, 15(2), 210. https://doi.org/10.1086/209158
Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. Journal of Marketing, 65(2), 81–93. https://doi.org/10.1509/jmkg.65.2.8118255
Chiou, J. S., & Droge, C. (2006). Service quality, trust, specific asset investment, and expertise: Direct and indirect effects in a satisfaction-loyalty framework. Journal of the Academy of Marketing Science, 34(4), 613–627. https://doi.org/10.1177/0092070063893411
Clemes, M. D., Gan, C., & Kao, T. H. (2007). University student satisfaction: An empirical analysis. Journal of Marketing for Higher Education, 17(2), 292–325. https://doi.org/10.1080/8841260801912831
David, M. W., Hartleb, V., & Blut, M. (2008). How to make brand communities work: Antecedents and consequences of consumer participation. Journal of Relationship Marketing, 7(3), 237–256. https://doi.org/10.1080/15332660802409605
DeSart, L. (2017). Social media engagement: A model of antecedents and relational outcomes. Journal of Marketing Management, 31(5–6), 375–399. https://doi.org/10.1080/0267257X.2017.1302975
DeSart, L., Veloutsou, C., & Morgan-Thomas, A. (2020). Brand negativity: A relational perspective on anti-brand community participation. European Journal of Marketing, 54(7), 1761–1785. https://doi.org/10.1108/EJM-02-2018-0423
Fagerström, A., & Ghinea, G. (2013). Co-creation of value in higher education: Using social network marketing in the recruitment of students. Journal of Higher Education Policy and Management, 35(1), 45–53. https://doi.org/10.1080/1360080X.2013.748524
Fernandes, T., & Moreira, M. (2019). Consumer brand engagement, satisfaction and brand loyalty: A comparative study between functional and emotional brand relationships. Journal of Product & Brand Management, 28(2), 274–286. https://doi.org/10.1108/JPBMB-08-2017-1545
Flóvin, C., Guinot, M., & Guerre, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. Information and Management, 43(1), 1–14. https://doi.org/10.1016/j.im.2005.01.002
Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. Journal of Marketing, 56(1), 6–21. https://doi.org/10.1177/0022242992056000103
Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction: Nature, purpose, and findings. *Journal of Marketing*, 60(4), 7–18. https://doi.org/10.1177/002224936006000405

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/0022243781018000104

Garbarino, S. (1994). Determinants of Long-Term orientation in buyer-seller relationships. *Journal of Marketing*, 58(2), 1–19. https://doi.org/10.1177/0022249405800201

Garbarino, E., & Johnson, M. S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70–87. https://doi.org/10.1177/002224379906300205

Gensler, S., Völkner, F., Liu-Thompkins, Y., & Wiertz, C. (2013). Managing brands in the social media environment. *Journal of Interactive Marketing, 27*(4), 242–256. https://doi.org/10.1016/j.intmar.2013.09.004

Ghorbanzadeh, D., Rahheghi, A., & Botelho, D. (2020). The role of emotional structures in the relationship between satisfaction and brand loyalty. *Cogent Psychology, 7*(1), 1782098. https://doi.org/10.1080/23311908.2020.1782098

Ghosh, A. K., Whipple, T. W., & Bryan, G. A. (2001). Student trust and its antecedents in higher education. *Journal of Higher Education, 72*(3), 322–340. https://doi.org/10.1080/00222437.2001.11777097

Girard, T., & Dion, P. (2010). Validating the search, experience, and credence product classification framework. *Journal of Business Research, 63*(9–10), 1079–1087. https://doi.org/10.1016/j.jbusres.2008.12.011

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis. 6th ed. Pearson Prentice Hall Upper Saddle River.

Helen, W., & Ho, W. (2011). Building relationship between education institutions and students: Student loyalty in Self-Financed tertiary education. *IBIMA Business Review Journal, 1*, 2–22. https://doi.org/10.5171/2011.913652

Helgesen, Ø., & Nesset, E. (2007). What accounts for students’ loyalty? Some field study evidence. *International Journal of Educational Management, 21*(2), 126–143. https://doi.org/10.1108/09515210710795236

Hennig-Thurau, T., Langer, M. F., & Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. *Journal of Service Research, 3*(4), 331–344. https://doi.org/10.1177/109467050134006

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1–55. https://doi.org/10.1080/10705519909541018

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1–22. https://doi.org/10.2307/2392424

Kristof, S., Baumgart, C., & Henseler, J. (2018). “Brand play” versus “Brand attack”: The subversion of brand meaning in non-collaborative co-creation by professional artists and consumer activists. *Journal of Product & Brand Management, 27*(3), 334–347. https://doi.org/10.1108/JPBM-01-2017-1405

Krueger, N. F., Reilly, M. D., & Carusaud, A. L. (2000). COMPETING MODELS OF ENTREPRENEURIAL INTENTIONS. *Journal of Business Venturing, 15*(5–6), 411–432. https://doi.org/10.1016/S0888-9206(98)00033-0

Le, T. D., Dobele, A. R., & Robinson, L. J. (2019). Information sought by prospective students from social media: electronic word-of-mouth during the university choice process. *Journal of Higher Education Policy and Management, 41*(1), 18–34. https://doi.org/10.1080/13600080.2018.1538595

Le, T. D., Robinson, L. J., & Dobele, A. R. (2019). Understanding high school students use of choice factors and word-of-mouth information sources in university selection. *Studies In Higher Education, 45*(4), 1–11. https://doi.org/10.1080/03075798.2018.1564259

Loureiro, S. M. C., Miranda, F. J., & Breazeale, M. (2014). What needs delight?: The greater impact of value, trust and satisfaction in utilization, frequent-use retail. *Journal of Service Management, 25*(1), 101–124. https://doi.org/10.1108/09564231411478618

MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly, 35*(2), 293–334. https://doi.org/10.2307/23040465

Mooga, G., Sánchez-Fernández, P., & Hall, S. (2008). Decision-making behaviour of potential higher education students. *Higher Education Quarterly, 53*(3), 211–228. https://doi.org/10.1111/j.1468-2273.2009.00127

Morgan, R. M., & Hunt, S. D. (1994, July). The Commitment–Trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20–38. https://doi.org/10.1177/0022243794058000403

Nguyen, N., & LeBlanc, G. (2001). Image and reputation of higher education institutions in students’ retention decisions. *International Journal of Educational Management, 15*(6), 303–311. https://doi.org/10.1108/09515210110409590

Oliver, R. L., Varki, S., & Rust, R. T. (1997). Customer delight: Foundations, findings, and managerial insight. *Journal of Retailing, 73*(3), 311–336. https://doi.org/10.1016/S0022-4359(97)00021-X

Palacio, A. B., Meneses, G. D., & Pérez, P. J. P. (2002). The configuration of the university image and its relationship with the satisfaction of students. *Journal of Educational Administration, 40*(5), 486–505. https://doi.org/10.1108/09578230120440311

Pelling, E. L., Sc, B. B., White, K. M., & Ph, D. (2009). The theory of planned behavior applied to young people’s use of social networking web sites. *Cyberpsychology & Behavior, 12*(6). https://doi.org/10.1089/cpb.2009.0109

Rojas-Méndez, J., Vasquez-Parraga, A. Z., Kara, A., & Cerda-Urrutia, A. (2009). Determinants of student loyalty in higher education: A tested relationship approach in Latin America. *Latin American Business Review, 10*(1), 21–39. https://doi.org/10.1007/s11305-009-0220-8

Sampaio, C. H., Perin, M. G., Simões, C., & Kleinowski, H. (2012). Students’ trust, value and loyalty: Evidence from higher education in Brazil. *Journal of Marketing for Higher Education, 22*(1), 83–100. https://doi.org/10.1080/08841241.2012.705796

Schlesinger, W., Cervera, A., & Pérez-Coboñero, C. (2016). Sticking with your university: The importance of satisfaction, trust, image, and shared values. *Studies in Higher Education, 42*(12), 2178–2194. https://doi.org/10.1080/0307579X.2015.1136613

Sideshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty. *Journal of Marketing, 66*(1), 15–37. https://doi.org/10.1509/jmkg.66.1.15.18449

Smith, S. L. J., & Godbee, G. C. (1991). Leisure, recreation and tourism. *Annals Of Tourism Research*, 18(1), 85–100. https://doi.org/10.1016/0306-7383(91)90041-9
Son, H. H., Lan, D. T. N., Hoang, N. T., Tam, D. M., Phuc, P. T., & Huong, T. T. (2021). Mining Students’ topics of interest and innermost feelings through confession pages. International Conference on Intelligent Human Systems Integration, Springer, 279–285.

Tuan, N. M. (2012). Effects of Service Quality and Price Fairness on Student Satisfaction. International Journal of Business and Social Science, 3(19), 132–150.

Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer Engagement: Exploring Customer Relationships Beyond Purchase. Journal of Marketing Theory and Practice, 20(2), 127–145. https://doi.org/10.2753/MTP1069-667920020201

Wiertz, C., & De Ruyter, K. (2007). Beyond the call of duty: Why customers contribute to firm-hosted commercial online communities. Organization Studies, 28(3), 347–376. https://doi.org/10.1177/0170840607076003

Wu, I. L., & Chen, J. L. (2005). An extension of Trust and TAM model with TPB in the initial adoption of on-line tax: An empirical study. International Journal of Human Computer Studies, 62(6), 784–808. https://doi.org/10.1016/j.ijhcs.2005.03.003

Zaichkowsky, J. L. (1985). Measuring the involvement construct. Journal of Consumer Research, 12(3), 341–352. https://doi.org/10.1086/208520

© 2021 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.