Anonymous online community, brand engagement

and word-of-mouth in the higher education context

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| **ARTICLE INFO** | **ABSTRACT** |
| **DOI:**10.46223/HCMCOUJS.econ.en.12.2.2151.2022  Received: January 11th, 2022  Revised: March 04th, 2022  Accepted: March 25th, 2022  *Keywords:*  student engagement; student’s word-of-mouth; university confessions pages | This study examines the influences of Online Interaction Propensity in university confessions pages, Attitude toward participating in university confessions pages, and Higher Education involvement on the engagement of students with their university. The relational outcomes comprising students’ word-of-mouth activity and praise are also investigated. The quantitative online and offline surveys were conducted on 509 participants targeting university students and graduates who follow or interact with posts on universities’ confession pages. The collected data was then processed and employed SEM path analysis to empirically examine the proposed conceptual model. The results determine that both online interaction propensity and higher education involvement have significant impacts on the engagement of students in their university while the attitude of students toward participating in university confessions pages has no impact on this engagement. In addition, the influence of students’ engagement on their word-of-mouth is proved. The study shows a deep understanding of the drivers relating to the confession pages’ participation in students’ engagement with their university, and another way to generate positive student-university relationship outcomes. The results suggest universities should not overlook the impact of students’ participation in university confession pages, then adopt feasible and practical approaches in managing their relationship with students to stimulate their word-of-mouth. The research provides insights that have not been studied previously in the Vietnam higher education context. Although it is practically observed that students’ engagement is impacted by their participation in university confession pages, there is a lack of intensive work on this issue. |

# 1. Introduction

Social media is a platform that has a rapidly increasing number of users. At the beginning of 2021, there are 72% of American use at least one social media site and most of them account for 84% of the respondents between the age of 18 to 29 (Pew Research Center, 2021). Online communities in social media become more familiar with customers since they enable interactions between large groups of individuals to be more frequent, faster, and richer (Sashi, 2012), which is identified as one of the critical media phenomena (Hennig-Thurau et al., 2010). Islam and Rahman (2016) mentioned that customers can choose to join their preferred online brand communities by contributing their opinions, comments, and experiences toward a thing via participating in conversations on social media sites. Besides, via online brand communities on social media the customers and the firm have been encouraged to share information at the same time with each other. The importance of online communities in social media has been recognized and focused on as a strategy to build and maintain good relationships with customers by most international brands such as Starbucks, Procter and Gamble, Pepsi, and others (Baldus, Voorhees, & Calantone, 2015). The impact of social media on the relationship between consumers and organizations has become an area of interest to both academics as well as strategists and marketers (Constantinides & Fountain, 2008; Fischer & Reuber, 2011). Consumer engagement has been the key concern for academics and practitioners alike which describes the interactive relationship between consumers and brands (Maria et al., 2017). Despite the practical need, there is still a lack of knowledge about customer engagement in social media platforms and online communities (Dessart, Veloutsou, & Morgan-Thomas, 2015; Fournier & Lee, 2009).

On the other hand, Word-Of-Mouth (WOM) is considered to have a critical role in terms of high-risk products in general and for services, as people are becoming less attentive to traditional promotional forms (Rotfeld, 2006). Customers often engage in WOM to gain more information about the product/service and to have a comparison among many product/service alternatives that can support their decision-making process (Bristor, 1990). WOM has been studied as an outcome of customer engagement in a variety of prior studies (Hollebeek & Chen, 2014; Islam & Rahman, 2016).

In the context of higher education in Vietnam, university students use social media sites (e.g., Facebook) with great frequency not only to keep in touch with existing acquaintances (Ellison, Steinfield, & Lampe, 2007), to make new friends, initiating relationships based on judgments made after exposure to individuals’ online personas (Donath & Boyd, 2004), relaxing but also searching for things and keeping themselves updated with the latest news from their university or college social media pages. Along with official social pages or online communities organized by universities, it witnesses the increasing popularity of anonymous online student communities in Vietnam called Confession pages. Confession pages are pages on social media sites like Facebook or standalone websites which students widely use to anonymously post their confessions, and secrets or share their thoughts and complaints about the universities. Due to its facilitation for anonymity, students can hide their identity on Confession pages. The content of posts on those kinds of pages is easily accepted to be published by the page administrators who are also anonymous. Usually, the common topics mentioned in Confession pages’ posts are about raising concern about something, asking, or complaining about some issues related to their university, which help schools reach their students’ insights, opinions, and problems and propose immediate and proper solutions. However, there are still many posts that comprise inappropriate content and comments about their school, especially about the lecturers, facilities, and academic issues. They can have substantial damage to students’ perceptions of the trustworthiness of the institution, then hurt the relationship between the university and its students. University administrators are forced to evaluate options for responding to problematic speech on anonymous social media sites (DuMont, 2016).

However, despite the widespread and critical role of anonymous online communities like Confessions pages in the Higher Education context, there is a shortage of academic and empirical studies on them and student engagement in that communities, generating a research gap for study. Besides that, WOM is considered a service characterized by high risk and high involvement in the context of higher education. It can help the institution to gain a better image in their students’ minds and the public. However, the association between student engagement and WOM in the HE context has also not been studied intensively, which indicates another research gap.

Thus, the objectives of this present study are to examine the influence of the antecedent factors of social media engagement, especially Confession page participation, on the university brand engagement of students, as well as to investigate the role of university brand engagement in generating positive word-of-mouth for the institution.

This study will strengthen the academic domain of social media engagement, especially Confession page engagement, and WOM. In addition, it will state out some managerial recommendations on the way universities used to build and maintain a good relationship with their students which is considered one of the main problems of most universities.

# 2. Literature review

## 2.1. Antecedents of university brand engagement

### 2.1.1. Online interaction propensity

According to Statista Research Department (2020), there are more than 1.59 billion active users each month which makes Facebook the social media platform that has the highest number of users. In the higher education context, Confession pages on Facebook are the ideal places for students to share anonymously their experiences and opinions about that institution. Confession pages contribute to helping universities to create their own community on social media but it’s also difficult to control its impact on the university’s reputation and image if there was a post that had negative and inappropriate content related to that university.

The importance of the intrinsic traits in impacting engagement has been emphasized previously in a variety of related studies (Dessart, 2017; France, Merrilees, & Miller, 2016; Marbach, Lages, & Nunan, 2016; Solem & Pedersen, 2016; Vivek, Beatty, & Morgan, 2012). Based on the popular work of Dessart (2017), this research aims to investigate the influence of the antecedents of social media engagement including Attitude towards Community Participation, Online Interaction Propensity (OIP), and Higher Education Involvement due to its motivating role in the occurrence of the social media engagement in the context of higher education context (Brodie, Hollebeek, Juric´, & Ilic´, 2011).

In the study of the drivers of online engagement in general and online interaction preference, OIP has been overlooked and has not been paid much attention by the researchers. In the case of communication and psychological pattern, OIP is defined as a willingness to communicate with others and the different levels of propensities that people can show when interacting on online platforms (Wiertz & De Ruyter, 2007). It can be observed that, in online communities, individuals’ participation and interaction at a significantly different frequency (Hammond, 2000). According to the qualitative research of Hammond (2000), there are two different types of online group membership: communicative membership, in which members communicate regularly, express concerns, and reply to messages; and quiet membership, in which members read messages but seldom has the response or interaction.

In addition, the difference between offline and online communication was defined that individuals having varying predispositions showing their (un)willingness to communicate that may approach or avoid communication in general when it comes to communicating with others face-to-face. Likewise, many researchers conducting a study about the use of the Internet have overlooked the presence of individual preferences for online engagement (Wiertz & De Ruyter, 2007). In terms of online participation, it is significantly different from offline communication, and it seems that many people are willing to have online communication with strangers that they may never meet in person and postings on newsgroups, and discussion boards (Wiertz & De Ruyter, 2007). Furthermore, Blazevic, Wiertz, Cotte, De Ruyter, and Keeling (2014, p. 89) have indicated the contribution to the research of OIP is “its explanatory power for consumer engagement and online”. In this study, this theory can be applied in the higher education background in which most Vietnamese students use social media with great frequency and consider the Confession page of their university as a place to update the latest news about their university, which lead to the first hypothesis:

*H1: Online Interaction Propensity has a positive influence on University Brand Engagement*

### 2.1.2. Attitude toward online community participation

By measuring the attitude toward online participation of students, we will understand the degree of engagement with their university. In the study of Bagozzi and Dholakia (2006) about the Theory of Planned Behavior (TPB), this factor was defined as the precursor of the series in developing the attitude which is from desire, intention, and behavior toward community participation. The work of Wu and Chen (2005) indicated that the attitude toward online community participation is “the favorable or unfavorable assessment” which is created by customers throughout their participation in an online community. Furthermore, it was revealed that it is a high chance that the customers with a favorable attitude toward the new media platforms will get themselves involved and engaged with the new media brands compared with the ones who have an unfavorable attitude to accept and try to use the new media platforms (Hennig-Thurau et al., 2010). Based on these findings, the hypothesis below shows the impact of attitude toward online interaction on the engagement:

*H2: Attitude toward Online Community Participation has a positive influence on University Brand Engagement*

### 2.1.3. Higher - education involvement

The last antecedent of online engagement is involvement (Hollebeek, 2011b) but it was overlooked and has attracted little interest from researchers (Hollebeek & Chen, 2014). The brand involvement shows the degree of interest that the customers have with the brand by finding the relevance in their needs and the value that they seek (De Vries & Carlson, 2014). The study of customer involvement is significantly important since the level of customer involvement with the product regardless of high or low involvement can have a substantial impact on the way customers engage with the brand or product (Hollebeek, 2011a). In the university context, higher education is considered a high-involvement service that requires high engagement from students with their university. According to Loureiro, Gorgus, and Kaufmann (2017), brand involvement is considered a precursor of brand engagement. Also in this work, the customers would search for more information about the brand that they are highly involved. Moreover, Loureiro et al. (2017, p. 985) also proved “Involvement and Online Brand Experience (OBE) are important drivers of online brand engagement” which leads to the following hypothesis:

*H3: Higher Education Involvement has a positive influence on University Brand Engagement*

## 2.2. Students engagement and the word-of-mouth dimensions

According to Hollebeek (2011b),research about the concept of engagement has been conducted widely in various fields relating to academic and managerial issues such as organizational performance, academic study of politics, marketing, psychology, and sociology. In terms of social psychology, Achterberg, Pot, Kerkstra, Ooms, Muller, and Ribbe (2003) have conceptualized the term “social engagement” as a “sense of initiative, involvement and adequate response to social stimuli, participating in social activities and interacting with others”. In the field of organizational behavior, “employee engagement” was defined as the “amount of cognitive, emotional and physical resources an individual is prepared to devote in the performance of one’s work role” (Saks, 2006, p. 603). In education psychology, it was found that “student engagement” is vital in the way students get support from teachers (Skinner & Belmont, 1993) and the result gained (Bryson & Hand, 2007). Besides, in the marketing aspect, the impact of customer engagement was studied that has on enhancing customer-brand relationships (Brodie, Ilic, Juric, & Hollebeek, 2013; Hollebeek, 2011b) which may become the superior predictor of customer loyalty (Bowden, 2009). Besides, the impact of social media on the relationship between consumers and organizations has become an area of interest to both academics as well as strategists and marketers (Constantinides & Fountain, 2008; Fischer & Reuber, 2011). In this study, the impact of the antecedents of social media engagement on the university brand engagement of students and its further outcomes which is the WOM behaviors are examined.

Among various disciplines, in general, “engagement” was described that “represents an individual-specific, motivational, and context-dependent variable emerging from two-way interactions between relevant engagement subject(s) and object(s)” (Hollebeek, 2011a, p. 787). The engagement subjects can be employees (Saks, 2006), students (London, Downey, & Mace, 2007), or customers (Harrison-Walker, 2001) while the engagement objects can include university (Teo & Soutar, 2012), brand (Dessart et al., 2015), or schools (Norris, Lipps, & Pignal, 2003), and fellow students (Bryson & Hand, 2007). Based on these theories, the engagement subject in the higher education context are students who receive higher education as a transaction or service encounter (Athiyaman, 1997). Besides, the overall agreement on the concept of customer engagement from recent research by Hollebeek, Conduit, and Brodie (2016, p. 393) described engagement as a “psychologically based willingness to invest in the undertaking of focal interactions with particular engagement objects”.

In terms of the multiple-dimension perspective, even though several combinations of cognitive, emotional, and/or behavioral facets were observed, the “customer engagement” in this present study is constituted by three dimensions: cognitive, affective, and behavioral components Brodie et al. (2013). In addition, Dessart et al. (2015), Dessart, Veloutsou, and Morgan-Thomas (2016) defined the cognitive dimension of engagement as similar to the overall mental activity focused on something, involving attention and absorption. The second dimension of engagement is affective engagement which was demonstrated that “affective engagement is composed of enthusiasm and enjoyment with regard to an engagement object” Dessart (2017, p. 377). And the last dimension is behavior engagement is the active expression in the way customers show their “sharing, learning and endorsing behaviors” with the product and the brand according to Dessart et al. (2015, 2016) which has a similar result to the engagement in the social media context

In terms of WOM, it was defined as “informal, person-to-person communication about a brand, product, organization or service that occurs between a non-commercial sender and a receiver” (Harrison-Walker, 2001, p. 70). This form of communication has a greater influence on customers’ choices than other forms of communication do (Murray, 1991), especially in service contexts (Bristor, 1990; Murray & Schlacter, 1990). In the work of Brown and Reingen (1987), it stated that WOM has an impact on shaping consumers’ attitudes and behaviors. Many past studies were using the experimental method and focuses on the favorableness of the communication (Harrison-Walker, 2001). Besides, Anderson (1998) conceptualized WOM as several individuals spoken to about recent experiences. Danaher and Rust (1996) measured WOM as the “likeliness to recommend”.

In addition, WOM is a two-dimensional construct; with WOM activity and WOM praise dimensions (Harrison-Walker, 2001; Teo & Soutar, 2012). In specific, WOM activity is the frequency with which a person engages in WOM and the number of people with whom the person engages (Harrison-Walker, 2001) while “WOM praise is the valence of the WOM comments a person makes about their experiences” (Teo & Soutar, 2012, p. 680). Some researchers argued that engagement generates customer advocacy toward the brand (Islam & Rahman, 2016; Vivek, Beatty, Dalela, & Morgan, 2014). Similarly, the work of Cheung, Lee, and Jin (2011) stated that the level of willingness of customers in engaging in the online community can be a good predictor of the possibility that a customer will say good things about the brand. The result of Islam and Rahman (2016) proved that the engagement of customers generates a good impact on customer trust and their word-of-mouth behaviors. Similarly, Hollebeek and Chen (2014) determined the customer’s WOM as an outcome of customer engagement.

Besides, according to Teo and Soutar (2012, p. 680), “affective commitment is a person’s emotional attachment to a brand or organization, which is based on a person’s identification with that brand or organization and is built through trust and creating an emotional connection”. This shows the similarity between the term “affective commitment” Teo and Soutar used in their study and the term “engagement” in the work of London et al. (2007) that was characterized it as a “connection,” “emotional involvement,” and “attachment”. From this comparison, the model from the work of Teo and Soutar (2012) can be applied to this study. The result of that study showed that the students with a higher level of affective commitment would engage in more WOM activity and WOM praise which is the same as the result of the study by Harrison-Walker (2001). Dick and Basu (1994) also signified that the potential consequence of commitment may include WOM communications. Moreover, the work of Chatterjee (2001) has proved the similarity between the behaviors of WOM in offline situations and in the social media context which leads to the hypotheses holding for university brand engagement and WOM dimensions:

*H4: University Brand Engagement has a positive influence on WOM Activity*

*H5: University Brand Engagement has a positive influence on WOM Praise*

WOM Praise

WOM Activities

University Brand Engagement

Attitude toward Online Community Participation

Higher-education Involvement

H3(+)

H4(+)

H2(+)

H5(+)

Online Interaction Propensity

H1(+)

**Figure 1.** Conceptual Framework Model

# 3. Methodology

In terms of questionnaire design, at the beginning of the questionnaire, screening questions help ensure that only participants who follow the Confession pages or interact with the post on these pages could carry out the questionnaire. The language is understandable, legible, and apparent with the concisely presented statements so the respondent to avoid being confused when doing the survey. Moreover, the concept and definition for every scale were carefully described for respondents to fully understand the concepts and answer the question from the same perspective. The remaining part of the questionnaire is structured to follow the order of the antecedents of social media engagement to the relational outcomes of student university relationships. The final section is about collecting participants’ demographic information.

According to Freiman, Chalmers, Smith, and Kuebler (1978), if the number size is more than 300 samples, it can generate good and accurate results. In this study, there are 509 responses collected and selected by online and offline surveys. The quantitative survey is in the form of pen-and-paper and web-based questionnaires, targeting university/college students or the graduated students in Ho Chi Minh City who follow or interact with posts on universities’ confession pages.

Regarding the online survey, the questionnaire link was sent via messages and shared via Facebook groups and by friends’ networks. In terms of the offline survey, the survey was conducted in universities located in Ho Chi Minh City, Vietnam. The chosen universities are some of the most popular universities in Ho Chi Minh City. All of them are considered to have many students experiencing Confession pages.

The data collected for this study was the combination of 02 data collection methods which are primary data and secondary data. Primary data was collected in form of online and offline questionnaires as mentioned above.

In advance of the data collection phase, a pilot test was conducted to find the design and the instrument’s weaknesses and to ensure the questionnaire can provide accurate data from the sample selection. The pilot test was conducted with 01 lecturer and 10 Vietnamese university students who are the target population to check whether the message quality and the questions are well understood. The result showed that messages and sentences in the questionnaire were designed in clear and easy to understand without any misleading statements or messages. Therefore, the questionnaire was qualified, and the next step was proceeded to collect the desired amount of data. The pilot test also helps to confirm the translation for validity and readability. The tests for Reliability (Cronbach’s Alpha values) and validity (convergent and discriminant validity) were conducted to validate the measurement scale in advance of data analysis. EFA and CFA techniques were also applied to test the measurement model.

There are 06 measurement scales for each construct including Online Interaction Propensity, Attitude toward Online Community Participation, Higher Education Involvement, Institution Engagement, WOM activities, and WOM praise as being mentioned in chapter II - Literature Review. The first three antecedents were measured using the scales of Dessart (2017) and the relational outcomes which comprise WOM were adopted from Islam and Rahman (2016). The Likert scale is applied for each item’s evaluation in this study. It includes statements that indicate the favorable or unfavorable attitude toward objects. With every statement, the respondents would choose the degree of agree or disagree on a five-point scale including 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

# 4. Result

## 4.1. Reliability and validity

According to Tavakol, Mohagheghi, and Dennick (2008), validity is concerned with the extent to which an instrument measures what it is intended to measure and reliability is concerned with the ability of an instrument to measure consistently. Convergent validity reflects the extent to which the measures capture a common construct (Carlson & Herdman, 2012). Convergent validity is used to consider the elements belonging to a construct measurement and these elements should correlate or have a high ratio of similar variance (Hair, Black, Babin, & Anderson, 2010). Besides, discriminant validity is the degree to which the variables can be distinguished from other variables (Hair et al., 2010). Besides, Master Validity Tool, AMOS Plugin (Gaskin & Lim, 2016) was employed to carry out the calculation of the key indicators to generate the most accurate results. Here are some key indicators (Hair et al., 2010) with the corresponding conditions in the test of confirming the validity and reliability:

*Convergent Validity:*

* Average Variance Extracted (AVE) > 0.5 (Fornell & Larcker, 1981; Hair et al., 2010)
* Standardized Loading Estimates > 0.5 (Hair et al., 2010)

*Discriminant Validity:*

* Maximum Shared Variance (MSV) < AVE (Hair et al., 2010)
* Square root of AVE (SQRTAVE) greater than inter-construct correlations (r) (Fornell & Larcker, 1981)

*Reliability:*

* Composite Construct Reliability (CR) > 0.7 (Hair et al., 2010)

**Table 1**

Inter-construct correlations and Average Variance Extracted from each construct

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CR** | **AVE** | **MSV** | **MaxR(H)** | **WAC** | **OIP** | **HEI** | **ATT** | **WPR** | **WAC** |
| WAC | 0.875 | 0.540 | 0.881 | **0.735** |  |  |  |  |  |
| OIP | 0.842 | 0.572 | 0.847 | 0.432**\*\*\*** | **0.756** |  |  |  |  |
| HEI | 0.797 | 0.572 | 0.842 | 0.320**\*\*\*** | 0.136\* | **0.756** |  |  |  |
| ATT | 0.827 | 0.615 | 0.831 | 0.035 | 0.085 | 0.163\*\* | **0.784** |  |  |
| WPR | 0.776 | 0.536 | 0.778 | 0.731**\*\*\*** | 0.339**\*\*\*** | 0.385**\*\*\*** | 0.177\*\* | **0.732** |  |
| ENG | 0.818 | 0.607 | 0.865 | 0.771**\*\*\*** | 0.465**\*\*\*** | 0.485\*\*\* | 0.040 | 0.758**\*\*\*** | **0.779** |

Source: Developed by the researchers

It can be seen from the above figure that all Composite Construct Reliability (CR) is greater than 0.7 which ranges from 0.776 to 0.875. This result of CR meets the requirement that the value of CR must be greater than 0.7 (Hair et al., 2010). Thus, it **verifies the reliability of the scale**. Besides, all AVE values are qualified with all values greater than 0.5 and vary from 0.536 to 0.615 plus the results shown in Table 2 determine that all observed variables are significant in the scale since Standardized Loading Estimates are all greater than 0.5. Based on these things, **the convergent validity is ensured**.

**Table 2**

Standardized factor loading of each item

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | **Estimate** |
| AFF | <--- | ENG | 0.843 |
| BEH | <--- | ENG | 0.881 |
| COG  AFF4 | <---  <--- | ENG  AFF | 0.578  0.879 |
| AFF3 | <--- | AFF | 0.868 |
| AFF1 | <--- | AFF | 0.829 |
| AFF5 | <--- | AFF | 0.79 |
| AFF2 | <--- | AFF | 0.78 |
| AFF6 | <--- | AFF | 0.7 |
| WAC3 | <--- | WAC | 0.814 |
| WAC4 | <--- | WAC | 0.739 |
| WAC7 | <--- | WAC | 0.735 |
| WAC2 | <--- | WAC | 0.711 |
| WAC6 | <--- | WAC | 0.655 |
| WAC1 | <--- | WAC | 0.748 |
| COG5 | <--- | COG | 0.853 |
| COG3 | <--- | COG | 0.802 |
| COG6 | <--- | COG | 0.858 |
| COG4 | <--- | COG | 0.662 |
| OIP3 | <--- | OIP | 0.77 |
| OIP2 | <--- | OIP | 0.812 |
|  |  |  | **Estimate** |
| OIP4 | <--- | OIP | 0.722 |
| OIP1 | <--- | OIP | 0.717 |
| HEI2 | <--- | HEI | 0.878 |
| HEI1 | <--- | HEI | 0.762 |
| HEI3 | <--- | HEI | 0.603 |
| ATT4\_R | <--- | ATT | 0.802 |
| ATT2\_R | <--- | ATT | 0.809 |
| ATT5\_R | <--- | ATT | 0.741 |
| BEH9 | <--- | BEH | 0.688 |
| BEH10 | <--- | BEH | 0.677 |
| BEH8 | <--- | BEH | 0.748 |
| BEH7 | <--- | BEH | 0.766 |
| WPR4 | <--- | WPR | 0.757 |
| WPR1 | <--- | WPR | 0.747 |
| WPR2 | <--- | WPR | 0.69 |
| BEH4 | <--- | BEH | 0.523 |
| BEH1 | <--- | BEH | 0.62 |
| BEH3 | <--- | BEH | 0.654 |
| BEH6 | <--- | BEH | 0.671 |
| BEH5 | <--- | BEH | 0.654 |
| BEH2 | <--- | BEH | 0.725 |

Source: Developed by the researchers

In terms of discriminant validity, it can be seen from the Model Validity Measures Table, all variables have the MSV values lower than AVE values except for 02 variables including WAC and WPR. Besides, the Model Validity Measures Table also pointed out that the square root of the AVE for WAC is less than its correlation with ENG and the square root of the AVE for WPR is less than its correlation with ENG. This means that the result has passed this test and confirmed the discriminant validity of these remaining constructs. It can be explained that university brand engagement, WOM activity, and WOM praise are somewhat relatable to each other with the observed variables of one of these factors can explain for remaining factors.

## 4.2. Hypothesis testing

**Table 3**

Hypotheses testing result

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hypothesis** | **Path** | **Estimate** | **P-value** | **Standardize Regression Weight** | **Decision** |
| **H1** | OIP 🡪 ENG | 0.297 | \*\*\* | 0.425 | Supported |
| **H2** | ATT 🡪 ENG | -0.024 | 0.452 | -0.034 | Rejected |
| **H3** | HEI 🡪 ENG | 0.324 | \*\*\* | 0.414 | Supported |
| **H4** | ENG 🡪 WAC | 1.268 | \*\*\* | 0.81 | Supported |
| **H5** | ENG 🡪 WPR | 0.993 | \*\*\* | 0.797 | Supported |

Source: Developed by the researchers

According to Privitera (2011), if the p-value is lower than 0.05, the correlation between two factors is statistically significant, and the null hypothesis has to be rejected when the null hypothesis is true. In contrast, when the null hypothesis is true and the p-value is greater than 0.05 which means the relationship between factors has a weak correlation then the decision made is to retain that null hypothesis.

It can be seen from the result of hypothesis testing that the p-value representing H1 is .452 and higher than .005 which aims to account for the impact of Attitude towards Online Confession Pages Participation in the University Brand Engagement. This result leads to the decision to reject H2. On the contrary, it is proved that the University Brand Engagement is impacted significantly and positively by the remaining antecedents of Confession page engagement of students including Online Interaction Propensity (β = 0.297, p < .001) and Higher Education Involvement (β = 0.324 p < .001) which verified H1 and H3. Besides, the result in the Standardized Regression Weights indicates that Online Confession Pages Participation (β = 0.425) has a stronger impact on University Brand Engagement than Higher Education Involvement (β = 0.414). Likewise, University Brand Engagement is determined as having a positive and significant impact on Word-of-mouth Activity (β = 1.268, p < .001) and Word-of-mouth Praise (β = 0.993, p < .001) confirms H4 and H5. It is also reported that there is an unremarkable gap in terms of the degree of influence between Word-of-mouth Activity and Word-of-mouth Praise in University Brand Engagement with β equals 0.81 and 0.797 respectively. Based on the result of Standardized Regression Weight, the model shown below summarizes the degree of impact of the independent variables on the dependent variable:

*Diagram

Description automatically generated*

**Figure 2.** The path estimates between the constructs in the proposed model

## 4.3. Model fit

**Table 4**

Model fit checking

|  |  |  |  |
| --- | --- | --- | --- |
| **Fit Indices** | **Authors** | **Thresholds** | **Current Indices** |
| Chi-square/df (CMIN/DF) | Hu and Bentler (1999) | Good | 2.960: Good result |
| 5: Acceptable |
| CFI (Comparative Fit Index) | Hair et al. (2010)  Hu and Bentler (1999) | 0.95: Great | 0.881: Acceptable result |
| 0.9: Good |
| 0.8: Acceptable |
| GFI (Goodness-of-Fit Index) | Hair et al. (2010)  Hu and Bentler (1999) | 0.95: Great | 0.803: Acceptable result |
| 0.9: Good |
|  | 0.8: Acceptable |
| RMSEA (Root Mean Squared Error of Approximation) | Hu and Bentler (1999) | ≤ 0.05: Close fit | 0.62: Fair fit |
| 0.05 - 0.08: Fair fit |
| 0.08 - 0.10: Mediocre fit |
| ≥ 0.10: Poor fit |

Source: Developed by the researchers

It can be seen from the figure of the structural equation model that all the necessary indicators used to assess the fit degree of the model including CMIN/DF, CFI, GFI, and RMSEA all meet the standards based on the previous studies mentioned already to present the acceptable support for the model fit of the proposed model with the data collected. All the results of the mode fit checking are shown in the table which is confronted with the corresponding criteria to give an accurate and valid assessment.

# 5. Discussion

The findings of the hypothesis testing allowed important insights to be uncovered regarding the drivers of engagement of students on social media with their university, as well as the relationship of that engagement to the primary objects of social media environments. The impact of Higher Education Involvement on University Brand Engagement was proved in this study and this direct link of such factors was also verified by Dessart (2017). However, the result of the significant impact of Online Interaction Propensity on University Brand Engagement was opposite to the findings of Dessart (2017) which determined this antecedent has no relationship with brand engagement. The findings of the present study also prove the notion that social media users display varying levels of participation based on their internal predispositions and this can lead to the different degrees of their engagement with the online community or brand.

Besides, the Online Interaction Propensity was found to that have a stronger impact on University Brand Engagement than on Higher Education Involvement. This result can be explained that due to the lack of involvement in institutional activities, students pay little attention and are interested in having engagement with their university (Teo & Soutar, 2012). This would be a challenge for the people at the management level of the institute to develop and enhance the engagement of their students with the university.

In terms of Attitude toward Online Community Participation, in the process of data analysis, after deleting 03 observed items in this construct in the EFA step, the remaining scale of this factor demonstrates a negative attitude as a foolish, harmful, and punishing activity toward online community participation which makes a negative impact to University Brand Engagement with the -0.034. According to the hypothesis testing result, students had negative attitudes toward community participation show no interest in engaging with the university on social media. Similarly, Dessart’s work also rejected the hypothesis regarding the influence of Attitude toward Online Community Participation in Brand Engagement. It can be implied that, these students, they might find it more comfortable and private to engage with their university in a private place when having problems or raising concerns. Besides, it can be explained that many people have difficulty with self-presentation issues (Hollenbeck & Kaikati, 2012) or they are too sensitive to what other people will think about them if they have very close interactions or participation with their organization (Patterson, 2012).

Finally, the relationships between University Brand Engagement and the WOM dimensions are not only proved by the hypothesis testing of this study but are also verified by the result of many previous studies (Cheung et al., 2011; Islam & Rahman, 2016; Teo & Soutar, 2012). Based on the result of Standardized Regression Weight, the relationships between University Brand Engagement and WOM Activity as well as WOM Praise have the highest and second-highest coefficients which indicated the strong impact of the engagement with the university of students on their WOM behaviors. This implies that it is a high chance that there will be the stimulation of the WOM behaviors of students when they have a good experience and affection with their university. Additionally, the findings achieved were similar to research conducted in other service businesses (Harrison-Walker, 2001), which presented the effects of affective commitment on WOM praise and activity.

# 6. Conclusions & implications

The result of this research has determined that antecedents of social media which are Online Interactive Propensity and Higher Education Involvement both play an important role in impacting Student Engagement with their university. Moreover, this study also proved a strong influence on Student Engagement in the word-of-mouth behaviors of students including Word-of-mouth Praise and Word-of-mouth Activities.

## 6.1. Theoretical contributions

From our understanding, this is the first study to investigate whether there is a link between drivers and outcomes of social media engagement: Online Interaction Propensity, Attitude Toward Online Community Participation, and Higher Education Involvement to University Brand Engagement in a case study of Confession pages in Vietnam which is very popular both university and high school students as this is a relatively new area of study.

This study contributes to the discovery and confirmation of social media engagement's antecedents and its relational results, especially in the higher education context. A causal model was built and evaluated which explains the effect of the intrinsic traits and the propensity to generate social media engagement as well as enhance the relationship with the students, thereby responding to the call for the empirical study on this concern (Hollebeek et al., 2016).

Social media engagement was considered in this study and Confession pages which is the most popular online platform with students in Vietnam was chosen to be examined its impact on university brand engagement with their university and its relational consequences in terms of marketing aspects that can potentially affect university image on the internet and in public. This brings a unique particularity and applicable practice to this study. This study can be the foundation for future research on similar topics and concerns.

## 6.2. Managerial implications

It seems that education institutions often make little effort into improving students’ experiences (Morgan & Rao, 2003). In addition, university students tend to share their experience, which relates to their university as the form of giving feedback or review when considering higher education as a service, on the Confession page with other members. It is suggested that commercial education service providers should make student satisfaction one of the primary objectives in developing affective commitment and stimulating positive WOM which can be applied in the context of this study (Teo & Soutar, 2012). In terms of the managerial standpoints, below are the applicable implications based on the findings:

First, to improve the experience of students and increase student satisfaction, educational managers should make an effort in improving academic issues like teaching quality and other nonacademic issues such as service quality, financial issues, or facilities. Besides, adopting feasible and win-win solutions for the complaints, concerns, or problems raised by students can contribute to increasing student satisfaction. All these actions can contribute to creating a continuously good experience for students, and increase student satisfaction, which in turn, increases the affection and engagement of students with their university. Based on the findings, the increase in student engagement can generate WOM behavior. Likewise, this can also help decrease the probability of the negative posts of dissatisfied students who have unsolved problems relating to the university on the Confession pages, followed by the negative consequences as mentioned in the proceeding part.

Second, it is better to actively prevent negative posts by creating a page whose function and purpose are similar to Confession pages. This will be a university-hosted page and students with unsolved problems, or it cannot be raised directly and verbally relating to their university now have a safe place to post anonymously to let the university managers know and have a suitable solution instead of posting it on Confession pages. This can help students avoid any “social media crisis” in their student community.

The findings of this study also emphasize the importance of individual traits that educational managers should consider with the aim of building an effective branding strategy for their official page and enhancing engagement with students. The official pages of universities often focus on posting highly informative and educational posts such as announcements, and academic news, … and this type of content is appropriate for students having a high level of higher education involvement. In contrast, the students with a higher propensity for online interactivity will find themselves more suitable for the interesting and socially stimulating content.

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