

FACTORS AFFECTING PERCEIVED SATISFACTION WITH FACEBOOK IN EDUCATION

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ABSTRACT

The aim of this study is to explore the impact of perspectives on Facebook in education and relational commitment towards perceived satisfaction with Facebook. The sample included 157 students of two private universities in Bangkok and Pathum Thani province of Thailand during April to May of academic year 2015 to 2016 who use Facebook in their education. People around the world cannot live without Internet connections. Social networking sites (SNS) have become psychological needs for people's daily lives. People join SNS to create profiles, connect with existing friends, or maintain communication and interpersonal relationships. The top SNS around the world and in Thailand in 2015 was Facebook. If popular SNS such as Facebook play important roles in people's lives, how can they be used for higher education? Many universities around the world have used Facebook in their learning environment. While many researches have proven Facebook to be an effective tool for learning and sharing of knowledge, several studies pointed out lesser degrees use of Facebook for education. The results of this study confirmed that there was a positive impact of perspectives on Facebook in education and relational commitment towards perceived satisfaction with Facebook with a high total variance of 53.20%. The relative strength of the explanatory power of perspectives on Facebook in education is higher than relational commitment towards perceived satisfaction with Facebook. It is recommended that instructors, university administrators, or Facebook developers should implement the findings of this study into the learning environment. Limitations and future studies are proposed in this research.

KEYWORDS

Facebook, satisfaction, Facebook in education, relational commitment, Thailand

1. INTRODUCTION

More than 20 years ago, people used fewer technologies to facilitate their daily life activities. The majority of people around the world lived without online connections. In the last 10 years, a wide variety of technologies have guided how people live. Now, people around the globe not only need online connections, but also "must" connect to social networking sites (SNS), a giant variety of services aimed at diverse audiences all over the world. These widespread types of communication share similar target interests and viewpoints. People join a social networking site, they create profiles, connect with existing friends, maintain communication and interpersonal relationships, update various activities, share photos, archive events, get news about their friends, add new friends, or notify friends and family members about new developments (Čičević et al., 2016). The top SNS around the world in 2015 were Facebook (1,100 million users), YouTube (1,000 million users), Twitter (310 million users), and LinkedIn (255 million users) (eBizMBA, 2016). In Thailand, the top SNS in 2015 were Facebook (around 41 million users accounted for 60% of the population), LINE (33 million users), Instagram (7.8 million users), and Twitter (5.3 million users). The Thai people are top 8 in the world and the top 3 in Southeast Asia Facebook users (IT24Hrs.com, 2016).

If an SNS like Facebook has played significant roles in people's lives around the world, can it be utilized for higher education? If Facebook is where people live, can it be where people learn? University of Terbuka in Indonesia used Facebook as a secondary information exchange outlet. Students would cooperate learning mode with classmates that they invited in their space to complete group projects. The services offered through Facebook such as chatting, meeting new classmates, arranging for social/academic meetings could be attained without the risk of security breaches and other legal matters pervasive in SNS (Adhi, 2008). Wawasan Open University (WOU) in Malaysia, an open and distance learning (ODL) institution, implemented Facebook in study groups as supplements for learning management system (LMS) of WOU called WawasanLearn in adult ODL environments. Before using the system, the analysis of data from several semester showed the rate of student interaction on WawasanLearn is low with respect to the sharing of knowledge. The study was to identify whether and why students are drawn to participate more frequently in SNS such as Facebook. The results indicated that Facebook study groups could be effective tools for their learning and that Facebook and WawasanLearn should be integrated instead of being run as two separate platforms (Ishan Sudeera and Tham Choy, 2012).

However, there are many evidences that students use Facebook for leisure activities rather than educational purpose. Taiwanese students use Facebook for leisure time especially in virtual worlds (Kuo and Tang, 2014). Facebook on smartphones is used in lesser degree for educational purposes, and much more for just contacting friends. There is no direct link between the use of Facebook and students' academic performance (Hew, 2011; Janković et al., 2016). If students use Facebook too often, they can become Facebook addicts. Facebook addiction is defined as excessive involvement in Facebook that disrupts daily activities and manifests oneself in neglecting social life (Przepiorka and Blachnio, 2016). How can higher education administrators and teachers turn the use of Facebook to be beneficial to academic world? Therefore, the purpose of this study is to investigate the impact of perspectives on Facebook in education and relational commitment on perceived satisfaction with Facebook in private universities in Thailand.

2. RELATED WORK

Social media is determined as a group of Internet-based applications that create the ideological and technical foundations of Web 2.0 allowing the creation and exchange of user generated content (Kaplan and Haenlein, 2010). Social networking sites (SNS) introduce a platform for users to continuously produce terabytes of information consisting of textual status about emotions, opinions, and experiences, photos, videos, music, and other highly personal content (Hofstra et al., 2016).

Today, the most popular communication channel is Facebook, a SNS founded on February 4th 2004 and intended only for students at Harvard University (Janković et al., 2016). The number of users has grown every year and reached around 1,100 million users in 2015 (eBizMBA, 2016). While several researches have reported positive perspectives of Facebook for teaching and learning (Adhi, 2008; Ishan Sudeera and Tham Choy, 2012; Horzum, 2016), many researches pointed out negative perspective if Facebook among university students (Moreno et al., 2016; Hew, 2011; Przepiorka and Blachnio, 2016). On one hand, in a Turkish university, while males use Facebook to express themselves, meet new people, store, and organize things more; females use Facebook for educational purposes (Horzum, 2016). On the other hand, the researchers in the USA pointed out that students were more likely to display alcoholic beverages on Facebook; thus, showing alcohol references to audience friends who were likely to see them soon after posting (Moreno et al., 2016). Moreover, Facebook used to face backlash when its Beacon service broadcasted its user purchases without first explicitly asking the users' consent (Rainer and Watson, 2012; Kanthawongs and Kanthawongs, 2013).

How can university administrators and teachers make use of Facebook for academic world? Universities should be sources of a well-established trend toward adoption of new technologies through research and development. Facebook educational usage should include communication, collaboration, and resource/material sharing. According to students, collaboration through academic groups (communities) represented the most important value of Facebook implementation in academic activities (Manasijević et al., 2016). Facebook pages enhanced students' knowledge and understanding of unit content, as well as their ability to critically analyze unit materials. Students also indicated that they found the Facebook pages better than the university's central learning management system across range of areas. It was particularly useful for

facilitating unit-related discussions (Zoe Renee and Mark, 2013). In New Zealand, a group of researchers developed students' professional digital identity by leveraging a community of practice network. The network was the global educators modeling the educational and critical use of mobile social media like Facebook (Cochrane and Antonczak, 2015). Moreover in the technical side, several researchers in Germany presented results from a user study showing that 3D visualizations of social graphs can be utilized more effectively and are preferred by users compared to traditional text-based interfaces. A social graph application for Facebook was also demonstrated how WebGL and HTML5/X3D could be used to implement rich social applications based on upcoming web standards (Mattar and Pfeiffer, 2010). In Slovakia, researchers concluded that the combination of internal and external analytical methods should be used to analyze social networks like Facebook. Internal analytical methods of the operators of the web pages provided information about activities on the page and demographic information. External analytical methods could focus on search of the keywords and information (Fabus et al., 2012). Students are much more likely than faculty members to use Facebook and are significantly more open to the possibility of using Facebook and similar technologies to support classroom work (Roblyer et al., 2010). Then, perspectives on Facebook in education involves perceptions of students in using Facebook for educational purposes for their convenience, welcome the opportunity to connect with faculty/ students, no privacy intrusion feelings, and interests in using it for learning environment (Roblyer et al., 2010).

Relational commitment is based on social capital theory. Chiu et al. indicated that a professional virtual community participants' communications and interaction would generate specific domain knowledge that enabled the participants to learn from, contribute to, could collectively build upon that knowledge in everyday lives through posting and reading messages on the discuss forum (Chiu et al., 2006). Like knowledge contribution, pass-along chat contents in the context of Facebook in education can be viewed as a kind of knowledge sharing mainly centers on two-way information sharing and exchanging the messages to others using the SNS. The term "social capital" can be referred as the networks of strong personal relationships that are developed over time and provided the basis for trust, cooperation, and collective action in communities (Jacobs, 1965; Huang et al., 2009). Relational commitment is the one related to the particular relationships which can influence people's behavior, such as prospect and friendship (Nahapiet and Ghoshal, 1998). Then, students' perception of relational commitment involves commitment to maintain their relationship with others, feelings attached to their relationship with others, feelings strongly linked to others, orientation toward the long-term future of their relationship with others, and enticement of their relationship with others (Huang et al., 2009; Čičević et al., 2016).

Bouhnik and Marcus indicated that students' e-learning dissatisfaction was originated from lack of a firm framework to encourage students to learn, a high level of self-discipline or self-direct is required, and absence of a learning atmosphere in e-learning systems (Bouhnik and Marcus, 2006; Liaw, 2008). Students' satisfaction toward e-learning environment include clarity of design, interaction with instructors, and active discussion in the context of the course (Swan, 2001). Therefore, Liaw's and Novo-Corti et al.'s concepts of perceived satisfaction of e-learning courses had been adjusted to perceived satisfaction of Facebook in education for this study. The students' perceived satisfaction include whether they are satisfied with using Facebook as a learning assisted tool, Facebook's functions, Facebook' learning contents, Facebook's multimedia instructions (Liaw, 2008; Novo-Corti et al., 2013). Therefore, the authors of this study propose that perspectives on Facebook in education and relational commitment affect perceived satisfaction with Facebook in education.

3. RESEARCH METHOD

The target population was undergraduate students, who use Facebook in their education, studying in private universities in Thailand during April to May of 2016. The sample included 157 students of two private universities in Bangkok and Pathum Thani province of Thailand. A survey questionnaire assessing the constructs in the current study was developed from published scales of previous research as stated in the literature review. All questions in the instrument are measured using five-point Likert scales anchored from "strongly disagree" (1) to "strongly agree" (5). The internal consistency of each factor was assessed by computing the Cronbach's alpha. A total of 157 questionnaires were collected and analyzed with multiple regression analysis. Construct validity was assessed by principal component analysis.

4. RESEARCH RESULTS

As shown in Table 1, the lowest value of Cronbach's alpha is 0.712 for perspectives on Facebook in education, all well exceeding Nunnally's criterion of 0.70 (Nunnally, 1978). More common magnitudes in the social sciences for factor loading are low to moderate communalities of .40 to .70. All items have communalities of above .40; therefore, they are related to the other items (Costello and Osborne, 2005).

Table 1. Summary of Measurement Scales (Total n = 157)

Measure	Mean	Std. Dev.	Loading
PERSPECTIVES ON FACEBOOK IN EDUCATION (Roblyer et al., 2010) CRONBACH'S ALPHA = 0.712			
Using Facebook for educational purposes is convenient.	3.9045	0.85322	0.806
I would welcome the opportunity to connect with faculty/students on Facebook.	3.9873	0.86222	0.794
My privacy would not be invaded on Facebook.	3.5732	0.86383	0.452
I am interested in using Facebook for my learning environment.	3.4904	1.02293	0.460
RELATIONAL COMMITMENT (Huang et al., 2009; Čičević et al., 2016) CRONBACH'S ALPHA = 0.911			
I am committed to maintaining my relationship with others on Facebook.	3.6369	0.87817	0.696
I feel much attached to my relationship to others on Facebook.	3.4076	0.98029	0.855
I feel very strongly linked to others on Facebook.	3.5350	0.94414	0.802
I am oriented toward the long-term future of my relationship with others on Facebook.	3.3376	1.07747	0.819
Enticing my relationship with others on Facebook is an important thing for me.	3.2675	1.04625	0.827
PERCEIVED SATISFACTION (Liaw, 2008; Novo-Corti et al., 2013) CRONBACH'S ALPHA = 0.872			
I am satisfied with using Facebook as a learning assistant tool	3.5924	1.01246	0.806
I am satisfied with using Facebook's functions.	3.6815	0.92707	0.748
I am satisfied with Facebook' learning contents.	3.4331	0.98237	0.795
I am satisfied with Facebook's multimedia instructions.	3.5541	0.88719	0.765

The results showed that the respondents mostly were males (57.3%), at the age of 19 years old (31.2%), in sophomore year (51%) as undergraduate students studying in the two private universities. The hypothesis testing results revealed that perspectives on Facebook in education with standardized beta coefficient of 0.445 along with relational commitment with beta coefficient of 0.388 showed the effect on perceived satisfaction with Facebook at .01 level of significance. All results and multiple regression analysis are reported in the Table 2.

Table 2. Multiple Regression Analysis' Results

Dependent Variable: Perceived Satisfaction with Facebook (mean = 3.5911, S.D. = 0.8101, C.A. = 0.872, $r = 0.729$, $R^2 = 0.532$)					
Independent Variables	Mean	S.D.	β	Sig.	VIF
Perspectives on Facebook in education	3.7583	0.6604	0.445**	0.000	1.386
Relational commitment	3.4543	0.8441	0.388**	0.000	1.386

**Significance Level .01, N = 157

Perspectives on Facebook in education and relational commitment were found to be significant determinant of perceived satisfaction with Facebook on education, explaining 53.20% of the total variance. The relative strength of their explanatory power; however, was different, perspectives on Facebook in education ($\beta = 0.445$) and relational commitment ($\beta = 0.388$) were significant predictors of perceived satisfaction with Facebook. One group of researchers indicates that the multicollinearity problem becomes too serious when a VIF value is equal to or higher than four (Miles and Shevlin, 2001). For this study, VIF values are acceptable for all items studied. There was a positive influence of perspectives on Facebook in education and relational commitment towards perceived satisfaction with Facebook. Hence, the hypothesis was supported. The regression analysis for identifying the influence of the independent toward the dependent variables was illustrated in figure 1 below.

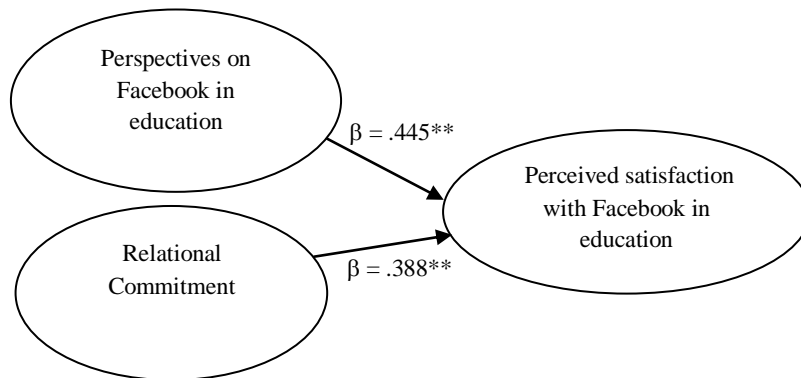


Figure 1. The conceptual model of the factors affecting perceived satisfaction with Facebook on education
Significant paths ($p < .01$) between constructs were reported with standardized beta weights

5. CONCLUSION

In the last decade, people around the world cannot live without Internet connections. The top social networking sites (SNS) around the world and in Thailand in 2015 had been Facebook. If a popular SNS like Facebook has played important roles in people's lives, how can it be used for higher education? The results of this study illustrated that there was a positive impact of perspectives on Facebook in education and relational commitment towards perceived satisfaction with Facebook with a high total variance of 53.20%. The relative strength of the explanatory power of perspectives on Facebook in education is higher than relational commitment towards perceived satisfaction with Facebook. Instructors, university administrators, or Facebook developers should emphasize on perspectives on Facebook in education such as perceptions of students in using Facebook for educational purposes for their convenience, opportunity to connect with faculty or other students, no privacy intrusion feelings, and interests in using it in a learning environment (Horzum, 2016; Roblyer et al., 2010; Zoe Renee and Mark, 2013). Additionally, teachers or professors, university administrators, or Facebook developers should aim to build relational commitment like commitment to maintain their relationship with others, feelings attached to their relationship with others, feelings strongly linked to others, orientation toward the long-term future of their relationship with others, and enticement of their relationship with others (Huang et al., 2009; Čičević et al., 2016). Then, the students are likely to perceive satisfaction in using Facebook for education. The limitation of this study is that there is a limited number of universities and respondents to generalize the results. Longer and larger sample size is suggested for further studies. Cultural dimensions can also be included in the future studies. Moderating and mediating factors may also be explored.

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