Exploring The Relationships Among Social Benefits, Online Social Networks Dependency, Satisfaction and Youth's Habit Formation

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Abstract

Online social network is one of the biggest phenomenon of the Internet, which has attracted many marketers and psychologists to understand social network users' behavior. Recognizing lack of theoretical and empirical attention has been given to this field especially in Vietnam market, this study is conducted to examine the relationships among social benefits, online social network dependency, satisfaction and youth's habit formation in the context of Facebook. The findings of the study of 200 Facebook users indicate that the interrelationship among four factors of social benefits, online social network dependency, satisfaction and habit formation are affected each other. Indeed, online social network dependency among the youth whose age range from 16 to 24 years old is significantly affected by social benefits factor and also lead to the formation of habit. In addition, satisfaction plays a role in determining the habitual use of Facebook. This paper contains a discussion of theoretical and practical implication in marketing and psychology field.

Keywords: Social benefits; online social network dependencies; Satisfaction; Habit Formation;

1. Introduction

Social networking which is a practice of widening one's social or business contacts by making connections through individuals has long existed in our society. Firstly, this study would discuss another point of view on the social network dependency field. Despite the significant quantity of researches on the field of online social network, there are not much empirical researches focused on the formation of habits through the online social network usage. Understanding the relationship among social benefits, online social network dependency, satisfaction and habit formation is important for several reasons.

Vietnamese people are definitely addicted to Facebook which is now the biggest entertainment for them and the most effective marketing tools for enterprise. Despite the advantages of using Facebook, Cheung [11] said that the use of Facebook could lead to significant behavioral or psychological problems. For instance, some people have a compulsion to use Facebook to constantly check their friends' profiles or update status for hours on end. Moreover, Kuss & Griffiths [19] point out another negative side of Facebook is that some users start to prefer socializing with online friends over "real" friends ".

This study provides social media marketers with a better understanding of how social benefits that users gain in the social network could lead to OSN dependency and habit formation. Utilizing the result, the marketers can propose the right online marketing strategy to improve the productivity for particular brands. Indeed, the marketers know how to produce creative content and manage the distribution of this content in order to support the decision-making and attract target customers. We will focus on this relationship among social benefits, online social network dependency, satisfaction and youth's habit formation in Ho Chi Minh City.

The main goal of this study is to explore the relationship among social benefits, online social network dependency, satisfaction and habit formation among youth users. To accomplish this goal, the following research objectives are proposed:

1) To examine the relationship between social benefits and OSN dependency

2) To examine the relationship between social benefits and satisfaction
3) To examine the relationship between the level of satisfaction and habit among young people
4) To examine the relationship between OSN dependency and the youth's habit formation
5) To examine the relationship between OSN dependency and level of satisfaction for practical recommendations for psychologists and marketers

2. Literature Review

2.1. Social Benefits

Thadani and Cheung [11] define social benefits as something social network users could achieve from social networking sites. Through the online social network (OSN) usage, OSN users could gain several benefits such as advice, information or social support. Indeed, the rising of online social network sites allows users to freely exchange the information via messages and significantly increase the friends through online communication. Another advantage gained from social network sites is the increasing in life satisfaction. According to Wellman et al [9], a person's social networks are widened and provides access to valuable resources, information and social support. In addition, users who frequently use an SNS have more friends on the site and also more reactions activities on their profile like posting comments on their friend walls or pictures [28]. As a result, researchers conclude that having more positive activities on one's OSN profile is correlated with higher self –esteem and leads to higher satisfaction with life. However, social network sites do not always provide users with benefits. Survey conducted by Nyland, Marvez and Beck [30] found that heavy users of MySpace felt less socially involved in the community around them than light users.

Several methodological problems including the use of different samples and different purposes, may explain the contradictory findings of previous studies. Despite different ideas about the social benefits, it could be stated that social benefits is the main key factor to attract and keep users return to social network sites.

2.2. Maintaining the Integrity of the Specifications

Alongside these statistics, research studies show that the sociability of Internet is held responsible for the excessive amount of time individuals spend having interactions via forums, online games and blogs [21]. In fact, 93 percent of American young adults whose age ranges from 18 to 29 years old go online. Amanda, 68 percent go online daily, 21 percent go online several times a week and 10 percent go online less often than that.

As a matter of fact, Mafe and Blas [9] points out that the social network dependents are mostly young, highly educated, well exposed and experienced with Internet and feel Internet affinity. Walker [22] defines a social network addict as someone who spends excessive time on OSN such that it interferes with important activities of his or her daily life. Whereas, Thadani [11] redefines OSN dependency as deficiency in self-regulation with which an individual is unable to effectively regulate one's dependency on social networking sites. In general, it could be said that OSN dependency happens whenever individuals are unable to stop themselves from accessing to OSN sites many times a day.

Echeburua & De Corral [13] claim that those people dependent on using OSN experience symptoms are similar to those experienced by those who suffer from addictions to substances or others. Indeed, OSN dependent users may experience symptoms such as intolerance or habituated behavior, social withdrawal, being online for longer periods of time than intended, impairment in social, occupational, or recreational activities because of Internet use. Furthermore, it has been hypothesized that vulnerable young people with narcissistic tendencies are particularly prone to being engaged with OSN in an addictive way [10]. Unfortunately, college students might be unaware of harmful symptoms of social network.

2.3. Satisfaction

Satisfaction generally is defined as the act of providing what is needed or desired. In other word, it is a happy or pleased feeling because of something that you did or something that happened to you. In the context of social network sites, satisfaction refers to one's feeling of pleasure with the use of OSN which then can lead to the formation of habit [11]. Indeed, according to various researchers like Limayem et al. [23] and Thadani [11], satisfaction plays a key role in the habit formations. Therefore, many marketers and CEOs of social network sites had

utilized "satisfaction" factor as the important key to gain continuous usage from users. This statement has also been claimed by Bhattacherjee [1]'s research in which showed that the higher user's satisfaction the higher their continuous OSN usage intention. Based on previous researches, the satisfaction is one of critical factors in exploring the area of online social network usage. Moreover, the satisfaction plays a key role in business management. According to Ross Beard [29], it is a leading indicator of customer loyalty and consumer intentions in repurchases. It also constitutes a point of differentiation, reduces negative word of mouth and increases customer lifetime value.

2.3. Habit Formation

Habit is conceptualized as "a tendency to repeat response given a stable support context [18]; whereas Limayem et al [23] defined habit as the extent to which using a particular information system has become automatic in response to certain situations. Habit formation could be developed through a certain amount or repetition or practice. However, old habits are hard to break and new habits are easy to form. That is because behavioral patterns repeated are mostly etched into human neural pathways. As a rule of thumb, Ouellette and Wood [18] has stated that the minimum of weekly repetition is required for habit formation. Therefore, it could be said that new habits could be born through repetition.

Once a habit is established, conscious attention diminished, then behavior is performed automatically [32]. Habit does not only explain people's behavior toward an action but also is a driving force of consumer's purchasing behavior. As a result, the importance of habit formation has been emphasized especially in the online marketing like Nir Eyal [25] who stated that many social marketers had utilized the habit formation through online social network dependency to position their product. The previous articles identify the importance of habits which affect the decision of psychologists and marketers. Therefore, studying of the habit formation through the lens of social network is very important research area.

3. Method

3.1. Hypotheses

Thadani [11] defines social benefits as the perceived social benefits that could be obtained from social networking sites. In more details, if an user is one member of a group with many resources such as sharing links, business acquaintances or a large number of net visitors every day, he or she can achieve financially, culturally or socially from having that access [34]. Ellison, Steinfield and Lampe [24] also agree with the result of Ying Liu's research since they find out that higher Facebook use is positively correlated with bridging and bonding social capital in a sample of college students. Previous researches showed that social network might also be helpful to connect younger teenagers to broader community and bring social benefits to users. As more benefits users gain through online social network, they would have the tendency of repeating the behavior to receive the benefits, which then lead to the OSN dependency. Therefore, this study will examine whether social benefits positively affect the OSN dependency or not.

H1: Social benefits in using OSN positively affect online social network dependency.

With the fast development of technology, individual can find joy in both reality and virtual life. Facebook in this case provides users with many benefits like expanding the relationships, receiving social support from friends or even gain higher social status. The research conducted by Collin, Rahilly, Richards [26] shows a significant number of benefits associated with OSN use including delivering educational outcomes, facilitating supportive relationships, identity formation and promoting a sense of belonging and self-esteem. These benefits somehow increase the satisfaction in life of users. These previous researches show that users gain social benefit from OSN could increase satisfaction especially for those low self-esteem and lack of confidence.

H2: Social benefits in using PSN positively affect the satisfaction.

According to Thadani & Cheung [12], OSN users are likely to repeat using OSN once he or she has accomplished successfully with his or her intended objectives. The relationship between habit formations and customer satisfaction is correlated since customer satisfaction is the key to form habits and delivering long-term engagement. This result is also supported by Aarts et al [15], in which satisfactory experience with a behavior is a key condition for habit development because they increase one's tendency to repeat the same behavior. On top of that, Limayem et al [23]

empirically showed that satisfaction had a direct positive impact on habit. Eventually, habit is formed with the aid of the habitual cue-satisfaction.

H3: Satisfaction in using OSN has a positive influence on the habit formation

As mentioned above in the Literature review, online social network dependency does have correlation with the habit formation. The researchers at Chicago University report that people may have harder time controlling their desire to participate in social networking than they do controlling desires in cigarettes and alcohol [22]. Therefore, the OSN dependency can be harder to resist compared to substance addiction such as smoking or alcohol. As people could not resist to the connection to social networks, it becomes their habit. In fact, most Facebook users provide above the mean responses to habit questions like "Facebook is part of my everyday activity" and "Facebook has become a part of my daily routine"[24]. Audrey, Gerald and Chin [3] proposed a model in which social network addiction is measured by social network dependency and mood modification. Hence, a hypothesis could be formed to examine whether online social network dependency has a positive effect on the formation of habits.

H4: Online social network (OSN) dependency has a positive effect on the habit formation

Mawhinney and Lederer [7] pointed out that social networking users that engage in maintaining relationships, gaming or meeting new people in a seamless manner will find that the usefulness of software will lead to a satisfying experiences. Such results have been proved through Ahn [17] in which he found interactions between Facebook use and life satisfaction. On the other hand, Laumer, Maier and Weinert [8] assumed that the higher users' social interaction overload, the lower their satisfaction. This hypothesis is based on Ito et al [4] and Maier etal's statement in which ONS might be perceived as useful or fulfill the purpose of please, because negative feelings are more heavily weighted in the brains compared to the positive outcome. Overall, previous researches have pointed out different ideas on the relationship between OSN dependency and satisfaction; however, none of these researches in the field were done in Vietnam market. Understanding the research gap, this study tries to explore the relationship between ONS dependency and users' satisfaction in the Vietnam context.

H5: Online social network (OSN) dependency has a positive effect on OSN user satisfaction

3.2. Measurement scale

Scale measures of construct in this study are borrowed mainly from existing scales that prior literature has shown to be reliable and valid. Moreover, all constructs are measured using multi-item perceptual scales in which are modified to fit the research context of Facebook. Seven-point Likert scales is adopted for the measurement items like Social benefit, Satisfaction, Habit formation and Online social network dependency. All of designed measurements are presented as below:

Table. 1. Measurement table

Factor	Encoded variable	Items	Source
Social benefits (SB)	SB1	I am treated better on Facebook than offline	Thadani and Cheung (2010)
	SB2	I feel safer relating to others on Facebook rather than Face – to face	
	SB3	I am more confident socializing on Facebook than offline	
	SB4	I am more comfortable with people on Facebook than people in face – to - face relationships	
Online social network dependen		**Mood alteration**	Thadani and Cheung (2011),
	OSD1	I use Facebook to talk with others when I feel isolated	
	OSD2	I use Facebook to make myself feel better when I	

cy (OSD)		am down	Caplan (2010)
	OSD3	I go on Facebook to make myself feel better when I am anxious	
		Compulsivity	
	OSD4	I am unable to reduce time on Facebook	
	OSD5	I feel guilty about the amount of time I spend on Facebook	
	OSD6	I have tried to stop using Facebook for long period of time	
	OSD7	I have made unsuccessful attempts to control my use of Facebook	
		Negative outcome	
	OSD8	I have gotten into trouble with my employers or school because of visiting Facebook	
	OSD9	I have missed classes or work because of visiting Facebook	
	OSD10	I have missed social engagements because of visiting Facebook	
Satisfaction (S)	S1	Using Facebook is absolutely delighted	Bhattacherjee (2001)
	S2	Using Facebook is very pleased	
	S3	Using Facebook is very contented	
	S4	Overall, I am satisfied with using Facebook	
Habit formation (HF)	HF1	I use Facebook as a matter of habit	Limayem et al (2003)
	HF2	Using Facebook has become automatic to me	
	HF3	I visit Facebook whenever I use Internet	
	HF4	When faced with a particular task, using Facebook is an obvious choice for me	

3.3. Sampling and Data Collection

Based on the literature review, we selected or constructed items to refer to social benefits, online social network dependency, satisfaction and youth's habit formation. This study measured the exploring the relationships among social benefits, online social network dependency, satisfaction and youth's habit formation. To ensure external validity and generalizability information was collected from real consumers. Two hundred fifty questionnaires were distributed to consumers via email addresses, Facebook and manually delivered to respondents and identify the level of online social network usage of users whose age ranges from 16 to 24 years old.However, there were 215 out of 250 returned and 200 out of 215 are in acceptable quality and qualified for the subject criteria of this study. As a result, the response rate is at 80 percent response rate, which is sufficient for a survey of this type. Data were analyzed using Amos 21 to investigate the effects of the entire model. The questionnaire items used a 7-point Likert-type scale, ranging from (1) strongly disagree to (7) strongly agree.

3.4. Data Analysis and Findings

Researchers also proposed that Cronbach's Alpha equal to 0.6 was acceptable. Overall, the lower limit for Cronbach's Alpha is 0.7 but it may decrease to 0.6 in the exploratory research [20]. Moreover, if the variable has Cronbach's Alpha larger than the overall Cronbach's Alpha and Corrected Item Total Correlation is smaller than 0.3, it will be deleted from variable list.

After reliability statistics, the item OSD4 and item OSD6 have the Corrected Item Total correlation less than 0.5 (0.43 for OSD4 and 0.318 for OSD6). Therefore, these items are deleted from the variables in order to increase the Cronbach's Alpha if item deleted and enhance the reliability statistics of online social network dependency factor. Additionally, the item HF4 is deleted from Habit formation variables because the "Cronbach's Alpha if Item deleted" is significantly higher than the Cronbach's Alpha value of this variable (0.914> <0.873). As a result, Cronbach's Alpha value and its stability in internal consistency of other items in Habit formation is increased. Overall, the four

factors of Social benefits, Online social network dependency, Satisfaction and Habit Formation have the good reliability value which indicate well designed scale with strong internal consistency among factors.

3.5. Confirmatory Factor Analysis (CFA)

In this study, Confirmatory Factor Analysis was used to determine the construct validity of the survey items. It means how well the construct explains variables under construct [20]. In other words, it is said to have the construct validity whenever the correlation of items within the same construct is relatively high. Overall, the Confirmatory Factor Analysis is analyzed by AMOS 21 software.

Table. 2. Criteria for measurement mode

Model – fit measures	Criteria
Chi-square/df (χ^2/df)	$\leq 2**; \leq 3*$
TLI (Tucker Lewis Index)	≥ 0.9
GFI(Goodness-of-Fit Index)	$\geq 0.90**; \geq 0.8*$
CFI (Comparative Fit Index)	$\geq 0.90**$
RMSEA (Root Mean Squared Error of Approximation)	$\leq 0.05**; \leq 0.08*$
Standardized Regression weight	$> 0.5, > 0.3$
Unstandardized Regression Weight	< 0.05
CR (Composite Reliability)	> 0.7 and $> AVE$
AVE (Average Variance Extracted)	>0.5

Source: Holmes – Smith (2000), Hair et al (2010)

According to the criteria for measurement model in Table 3, all the model fit measurement is quite good. In detail, CMIN / df = 2.233 (<3), GFI = 0.881 (> 0.8), TLI = 0.929 (> 0.9), CFI = 0.947 (> 0.9), RMSEA = 0.79 (<0.8). Therefore, this result is considered as satisfactory. In other words, the measurement model was fit the data. According to the table "Criteria for Measurement Model", it is significant if the Composite reliability (CR) of all factors should be greater than 0.7 and greater than AVE. Moreover, Average Variance Extracted (AVE) should be greater than 0.5. As can be seen in table 3 below, all the items meet the condition of Composite reliability (CR> 0.7) and its value is also larger than AVE value.Moreover, sinceAverage extracted variances of all items in this study are also greater than 0.5; therefore, all factors in the measurement model have sufficient reliability and convergent validity.

Table. 3. Confirmatory factor analysis (CFA) fitting indices

Factor	Factor loading	CR	AVE	Cronbach Alpha
Social benefits (SB)		0.729	0.528	0.788
I feel safer relating to others on Facebook rather than Face – to face	0.50			
I am more confident socializing on Facebook than offline	0.828			
I am more comfortable with people on Facebook than people in face – to - face relationships	0.888			
Online social network dependency (OSD)		0.929	0.544	0.908
Mood Alteration				
I use Facebook to talk with others when I feel isolated	0.772			
I use Facebook to make myself feel better when I am down	0.792			
I go on Facebook to make myself feel better when I am anxious	0.849			
Compulsivity	0.544			
I feel guilty about the amount of time I spend on Facebook	0.728			
I have made unsuccessful attempts to control my use of Facebook	0.636			
Negative outcome				
I have gotten into trouble with my employers or school because of visiting Facebook	0.728			
I have missed classes or work because of visiting Facebook	0.802			

I have missed social engagements because of visiting Facebook				
Satisfaction (S)		0.929	0.766	0.925
Using Facebook is absolutely delighted	0.790			
Using Facebook is very pleased	0.942			
Using Facebook is very contented	0.877			
Overall, I am satisfied with using Facebook	0.887			
Habit formation (HF)		0.914	0.780	0.914
I use Facebook as a matter of habit	0.893			
Using Facebook has become automatic to me	0.900			
I visit Facebook whenever I use Internet	0.856			

According to Hair et al., [20] construct validity is the extent to which a set of measured variables actually reflects the latent construct they are designed to measure. Construct validity is set in this study by establishing face validity, convergent validity, and discriminant validity.In addition, Adopting the measurement items used in the study from the existing literature and adapting them to the present research context established face validity.Morovers, Fornell and Larcker [6] suggested that examining the factor loadings assessed convergent validity and AVE of the constructs. All the indicators had significant loadings on the respective latent constructs ($p < 0.001$) with values varying between 0.50 and 0.942 (see Table 1). In addition, the AVE for each construct was greater than or equal to 0.50, which further supports the convergent validity of the constructs.

The next step is to consider whether the model has discriminant validity of construct(as can be seen in table 3 below). According to Fornell and Larcker [6], Average variance extracted (AVE) should be more than the correlation squared of two construct to support discriminant validity. Indeed, each AVE value above is found to be more than the correlation square. Therefore, it is concluded that there exists discriminant validity between remaining constructs.

Table. 4. Correlation and correlation square matrix among constructs

	Social benefits	Online social network dependency	Satisfaction	Habit formation
Social benefits	**0.528**			
Online social network dependency	0.385[**]	**0.544**		
Satisfaction	0.510[**]	0.394[**]	**0.766**	
Habit formation	0.311[**]	0.252[**]	0.496[**]	**0.780**

Note: All correlations are significant at the 0.01 level (2-tailed). The diagonals represent the average variance extracted. The AVEs were greater than the squared correlations between any pair of constructs.

3.6. Structural Equation Modelling (SEM)

SEM (Structural Equation Modeling) is used to test the hypothesized casual relationships in the research model. The standard of testing whether SEM fits with data is similar to the standard of examining CFA: Chi-square / df <3, CFI> 0.9, GFI> 0.9, RMSEA <0.08.

Overall, H1 through H5 were examined with structural equation modeling (SEM) using AMOS 21. Results of SEM indicate an adequate model fit with data (Chi square = 120.825; df = 55; at P = 0.000< 0.005; CMIN/Df = 2.191; GFI = 0.919; TLI = 0.948; CFI = 0.963andRMSEA = 0.78). The influence of social benefits of online social network dependency was significant (y = 0.406, p < 0.005); supporting H1 which states that social benefits in OSN usage significantly affects online social network dependency. Similarly, with the loading of 0.427 and p< 0.005; H2 which is social benefits in using OSN significantly affects satisfaction, is also supported. Thirdly, the model fit of measuring relationship between satisfaction and habit formation (H3) was found to be good (y = 0.376, p < 0.005). H4 issupported with y = 0.245and p < 0.005. Based on the result of loading and significant level of H3 and H4, it could said that satisfaction rather than online social network dependency was more significant to habit formation.Finally,

the testing of the model fit of the relationship between online social network dependency and satisfaction was good (y = 0.277p < 0.005), supporting H5.therefore, these values bring the Structural Equation Modeling to the final result.
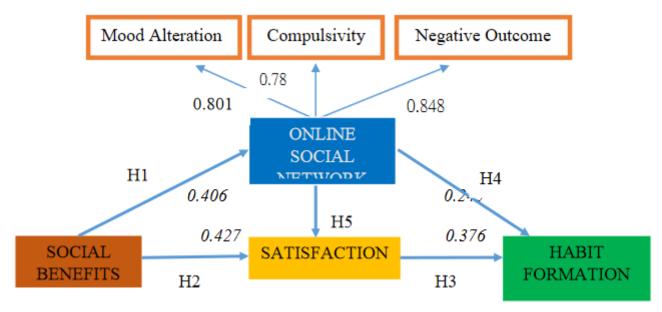

Figure. 1. Hypotheses testing result

4. Discussion and Implications

The empirical result provided strong support for the importance of relationships among social benefits, online social network dependency, and satisfaction and habit formation. While comparing the current results study with previous research like Limayem et al. [23] who proposed three antecedents of IS habit, including satisfaction, frequency of past usage and comprehensiveness of usage. It could say that our result provided empirical support to their study. Particularly, our results were consistent with Limayem's research in which satisfaction is found to be a significant factor of habit in the context of online social networking sites. However, this research does not examine factors like frequency of prior behavior, comprehensiveness of usage but adding online social network dependency factor due to research purposes. The result indicated that the formation of habit is also affected by online social network dependency, offering an alternative view to the issues.

Thirdly, despite the previously contradictory opinions on the relationship between online social network dependency and satisfaction, this model proves that OSN dependency positively and significantly affects the level of satisfaction. Finally, new concepts of social benefits are added in the research model to provide an overview on the habitual behavior process which starts from social benefits to online social network dependency and satisfaction, then habit formation. The results suggest that besides strong impact of satisfaction on habit formation, the online social network dependency behavior positively affect the users' social benefits and strongly influence the formation of habits as well.

4.1. Practical Implications

The results of this study provide researchers and practitioners with meaningful insights.

From the management point of view, firstly, the result suggests that keeping users satisfied should be a key to success. Indeed, the user satisfaction with Facebook use is found to exhibit strong impacts on the formation of habit. Therefore, when users have satisfactory experiences with Facebook, they will increase their tendency to repeat the same course of action continuously. In other fields, the same concept can be applied: when customers are satisfied with products or services, it will help to develop their loyalty to the brand and enhance their repurchase intentions.

Secondly, in the new information world, bad rumors on the quality of a product / service may be spread at the vertiginous speed and negatively impact on the reputation of any firms. Also, marketers should pay attention to what makes users dependent on particular social media apps or brands in order to increase marketing activities and enhance users' returning chances and sales. Finally, social benefits have positive impacts on user satisfaction and

level of social media usage, thus marketers should place themselves on this standpoint when developing social media products in order to enhance the user satisfaction as well as returning intentions.

4.2.   Academic Implications

Besides managerial implication, this study has important academic implications. Firstly, this study offers an alternative view for researchers to the problem whether it exists a positive relationship between online social network dependency and satisfaction. The result found out that the higher level of OSN dependency is, the higher satisfaction level of social network users is. Moreover, this research adapted an online social network model to the context of Vietnam market which can be used as reference for future researchers.

4.3.   Limitations and Further researches

This paper tries to reverse properly all the aspects of the problem. However, it may not be comprehensive due to limitations of time, labor force, cost and geographical issues. Firstly, the sample size is relatively small in this current study due to limitations of labor force and time. Therefore, researchers have to be cautious about the generalizability of the results. Besides, financial and geographical barriers also prevent the author to obtain the data in other significant markets of social networks in Vietnam such as Hanoi, Hue or Can Tho city. Note that these cities have the highest percentage of social media users among other provinces in Vietnam although Ho Chi Minh City can be considered as a represented city given its second ranking countrywide. Secondly, considerations should be taken before generalizing the results to other social technologies such as Twitter. Since Twitter is a growing trend of Vietnamese users, thus factors like social benefits or satisfaction might have different impacts on Twitter users than Facebook.

In this study, the sample size is not large enough to well represent Vietnamese users. Therefore, a larger sample is recommended for future studies. Moreover, future reasons of relationships among social benefits, satisfaction, online social network dependency and youth's habit formation. From a practical standpoint, researchers can emphasize on the Habit formation of social media users since it is the latest essential element that both marketers and psychologists want to understand in the formation of social media users' behaviors.

References

[1]   A. Bhattacherjee, An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance, Decision Support Systems (32: 2), 201-214, 2001.

[2]   A. Lenhart, K. Purcell, A. Smith and K. Zickuhr, Social Media & Mobile Internet use among teens and young adults, 2, 2010.

[3]   A. Poh Choo Cheak, G. Guan Gan Goh, T. Chin, Online social networking addiction: Exploring its relationship with social networking dependency and mood modification among undergraduates in Malaysia. Journal of International conference on management, 2012.

[4]   A. T. Ito, J.T. Larsen., N. K. Smith and J.T. Cacioppo, Negative information weighs more heavily on the brain: "Journal of Personality and Social Psychology (75: 4), pp. 887–900, 1998.

[5]   B. Wellman., J. Salaff, D. Dimitrova., L. Garton and M. Gulia, Computer networks as social networks: Collaborative work, telework, and virtual community. Annual Review of Sociology, 22, 213–238, 1996.

[6]   C. Fornell, D. F. Larcker, Evaluating structural equation models with unobservable and measurement error. Journal of Marketing Research, 18 (1), 39-50, 1981.

[7]   C. H. Mawhinney and A. L. Lederer, A study of personnel computer utilization by managers, Information & Management, vol. 18, no. 2,243-253, 1990.

[8]   C. Maier., S. Laumer., A. Eckhardt., And T. Weitzel, T When social networking turns to social overload: Explaining the stress, emotional exhaustion, and quitting behavior from social network sites' users, ECIS 2012 Proceedings. 71.

[9]   C. R. Mafe, S. S. Blas, Explaining Internet dependency: An exploratory study of future purchase intention of Spanish Internet users. Internet Research, 16 (4), 380-397, 2006.

[10] D. La Barbera., F. La Paglia, R. Valsavoia, Social Network and Addiction. Cyberpsychology & Behavior, 12, 628-629, 2009.

[11] D. R. Thadani And C.M.K. Cheung, Online Social Network Dependency: Theoretical Development and Testing of Competing Models, in Proceedings of Hawaii International Conference on System Sciences, Kauai, Hawaii, USA, 2010.

[12] D.R, Thadani and C.M.K. Cheung, Exploring the role of online social network dependency in habit formation, in Thirty second international conference on information systems, Shanghai, 2011.

[13] E. Echeburua, P. De Corral, Addiction to new technologies and to online social networking in young people: A new challenge. Addiction 22, 91 -95, 2010.

[14] E. S. Caplan, Problematic Internet Use and Psychosocial Well-being: Development of a Theory-Based Cognitive-Behavioral Measurement Instrument, Computers in Human Behavior (18: 5), 553-575, 2002.

[15] H. Aarts., T. Paulussen andH. Schaalma, Physical Exercise Habit: On the Conceptualization Formation of Habitual Health Behaviors, Health Education Research (12: 3), 363-374,1997.

[16] M.K. Cheung and K. O. Lee, A Theoretical Model of Intentional Social Action in Online Social Networks, Decision Support Systems, 49 (1), 24-30, 2010.

[17] J. Ahn, The effect of social network sites on adolescents' social and academic development: Current theories, Journal of the American Society for Information Science, 62 (8), 1435-1445, 2011.

[18] J. A. Ouellette and W. Wood, Habit and Intention in Everyday Life: The Multiple Processes by Which Past Behavior Predicts Future Behavior. Psychological Bulletin. 124 (1), 54-74, 1998.

[19] J. D. Kuss, G.W Shorter, A. J. van Rooij, M. D. Griffiths and T. Schoenmakers, Assessing Internet addiction using the parsimonious Internet addiction components model. A preliminary study. International Journal of Mental Health and Addiction, 11 (5), online first, 2013.

[20] J. F. Hair., W. C. Black., B. J. Babin and R.E. Anderson, Multivariate Data Analysis. Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey, 2010.

[21] J. M. Grohol, Internet addiction guide. Retrieved from http://psychcentral.com/netaddictionhttp://psychcentral.com/netaddiction

[22] L. Walker, What Is Social Networking Addiction? About.com Guide, 2012.

[23] M. Limayem., S. Hirt, and M.K. Cheung, How habit limits the predictive power of intentions: the case of IS continuance, MIS Quarterly (31: 4), 705-737, 2007.

[24] N. Ellison, C. Steinfield, C. Lamp, The Benefits of Facebook "Friends": Social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication, 12 (4), 1143-1168, 2007.

[25] N. Eyal, Hooked: How to build habit –forming products, 79 –81, 2014.

[26] P. Collin, K. Rahilly, I. Richardson AND A. Third, The Benefits of Social Networking Services: A literature review. Cooperative Research Center for Young People, Technology and Wellbeing. Melbourne, 2011.

[27] P. Holmes – Smith, Introduction to Structural Equation Modeling, ACSPRI, 143, 2000.

[28] P. M. Valkenburg and J. Peter, Social consequences of the internet for adolescents. Current Directions in Psychological Science, 18 (1), 1–5, 2009.

[29] R. Beard, 6reasons why customer satisfaction is important, 2012.

[30] R, Nyland., R. Marvez., And J. Beck, MySpace: Social networking or social isolation? Paper presented at the midwinter conference of the Association for Education in Journalism and Mass Communication, Reno, NV. 2007.

[31] R. N. L. Bolton, A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction, Journal of Marketing and Research, vol. 36, no. 1, 1-10, 1999.

[32] S. Orbell, C. Blair., K. Sherlock and M. Conner, The Theory of Planned Behavior and Ecstasy Use: Roles for Habit and Perceived Control over Taking Versus Obtaining Substances, Journal of Applied Social Psychology (31: 1), 31-47, 2001.

[33] W.Y. Lee., M.K. Cheung and D. R Thadani, An investigation into the problematic use of Facebook. Proceedings of the 45th Hawaii International conference on System Sciences. 2012: 1768–1776, 2012.

[34] Y. Liu and Y. R. Tsai, The impact of social networking services (SNS) on college students' social relationships and private life. International Journal of Arts and Commerce. Volume 1 No. 4. 2012.