EXPLORING THE RELATIONSHIPS AMONG SOCIAL BENEFITS, ONLINE SOCIAL NETWORK DEPENDENCY, SATISFACTION, AND YOUTH'S HABIT FORMATION

Van-Dat Tran

Banking University of Hochiminh City
39 Ham Nghi street, District 1, Ho Chi Minh, Vietnam
dat2209@gmail.com

Ngoc Doan Trang Huynh

Vietnam National University International University
Quarter 6, Linh Trung Ward, Thu Duc District, Ho Chi Minh, Vietnam
tranghuynh2809.iuerd@gmail.com

ABSTRACT

Online social network is one of the biggest Internet phenomenon, which has attracted the interest of many marketers and psychologists who wanted to understand social network users' behavior. Recognizing the lack of theoretical and empirical attention that has been given to this field, especially in Vietnam market, this study was 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 indicated that the interrelationship among four factors of social benefits, online social network dependency, satisfaction, and habit formation affect each other. Indeed, dependency on online social network among the youth whose age ranged from 16 to 24 years old is significantly affected by social benefits factor and leads to the formation of habit. In addition, satisfaction plays a role in

determining habitual Facebook use. This paper discusses theoretical and practical implication in marketing and psychology field.

Keywords: Social Benefits, Online Social Network Dependency, Satisfaction, Habit Formation

INTRODUCTION

Social networking, which is a practice of widening one's social or business contacts by making connections with other individuals, has long existed in our society. First, this study would discuss another point of view on the social network dependency. Despite the significant quantity of studies on online social network, not many empirical studies have 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 addicted to Facebook, which is now the biggest entertainment for them and the most effective marketing tool for enterprise. Despite the advantages of using Facebook, Cheung (2010) 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 and Griffiths (2012) pointed out another negative side of Facebook, which 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 the ways in which social benefits that users gain in the social network could lead to OSN dependency and habit formation. Based on the results, the marketers could propose appropriate online marketing strategies to improve the productivity of 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. The main goal of this study is to explore the relationship among social benefits, online social network dependency, satisfaction, and youth's habit formation in Ho Chi Minh City.

To accomplish this goal, following research objectives are proposed:

- To examine the relationship between social benefits and OSN dependency
- To examine the relationship between social benefits and satisfaction
- To examine the relationship between level of satisfaction and habit among young people

- To examine the relationship between OSN dependency and the youth's habit formation
- To examine the relationship between OSN dependency and level of satisfaction with practical recommendations for psychologists and marketers.

LITERATURE REVIEW

Social Benefits

Thadani and Cheung (2010) defined 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 number of friends through online communication. Another advantage of social network sites is that they can increase life satisfaction. According to Wellman et al. (1996), a person's social networks are widened, providing access to valuable resources, information, and social support. In addition, users who frequently use an SNS have more friends on the site and participate more on the site by posting comments on their friend walls or pictures (Valkenburg et al., 2009). As a result, researchers conclude that a greater number of positive activities on one's OSN profile correlates 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 (2007) found that heavy users of MySpace felt less socially involved in the community around them compared to 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 that attracts and motivates users to return to social network sites.

Online Social Network Dependency

Grohol (2005) showed that the sociability of Internet was responsible for the excessive amount of time individuals spend interacting via forums, online games, and blogs. In fact, 93 percent of American young adults 18 to 29 years old go online (Amanda, 2009). Among them, 68 percent go online daily, 21 percent go online several times a week, and 10 percent go online less frequently. Chan et al. (2014) explored the role of urge in the

development of excessive use of SNSs. Besides, Kumar (2013) showed that Facebook was the most popular SNS.

In fact, the social network dependents tend to be younger and highly educated, be well exposed, have experience with Internet, and feel Internet affinity (Mafe & Blas, 2006). Besides, a social network addict is someone who spends excessive amount of time on OSN, such that it interferes with important activities of daily life (Walker, 2012). On social networking sites, Thadani (2011) redefined OSN dependency as deficiency in self-regulation with which an individual cannot regulate one's dependency. In general, it could be said that OSN dependency happens whenever individuals are unable to stop themselves from accessing OSN multiple times a day.

Echeburua and De Corral (2010) claimed that people who are dependent on using OSN experience symptoms similar to those experienced by those who suffer from addictions to substances. Furthermore, it has been hypothesized that vulnerable young people with narcissistic tendencies are particularly prone to being engaged with OSN in an addictive way (La Barbera, La Paglia, & Valsavoia, 2009). Unfortunately, college students might be unaware of harmful symptoms of social network.

Satisfaction

Satisfaction is generally defined as the act of providing what is needed or desired. In other word, it is a happy feeling because of something that you did or something that happened to you. Thadani (2011) showed that satisfaction refers to feeling of pleasure with the use of OSN, which then can lead to formation of habit. Indeed, according to various researchers like Limayem et al. (2007) and Thadani (2011), 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 continual usage from users. Bhattacharjee (2001) supported this claim in their research in which higher user's satisfaction was associated with higher continuous OSN usage intention. Based on previous studies, satisfaction is one of the critical factors in exploring the area of online social network usage. Moreover, the satisfaction plays a key role in business management. According to Beard (2014), it is a leading indicator of customer loyalty and consumer intentions to repurchase. It also constitutes a point of differentiation, reduces negative word of mouth, and increases customer lifetime value.

Habit Formation

Ouellette and Wood (1998) showed that habit is a tendency to repeat response given a stable support. It is the extent to which using a particular information system has become automatic in response to certain situation (Limayem et al., 2007). Habit formation could be developed through a certain amount of repetition or practice. However, old habits are hard to break and new habits are easy to form. That is because repeated behavioral patterns are mostly etched into human neural pathways. As a rule of thumb, Ouellette and Wood (1998) stated that the minimum of weekly repetition is required to form a habit.

Once a habit is established, conscious attention diminishes; subsequently, behavior is performed automatically (Orbell et al., 2011). Habit does not only explain people's behavior toward an action, but also is a driving force of consumers' purchasing behavior. As a result, the importance of habit formation has been emphasized especially in the online marketing, like NirEyal (2014) who stated that many social marketers had utilized the habit formation through online social network dependency to position their product. The previous articles identified 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 a very important research area.

Hypotheses

Thadani (2011) defined social benefits as the perceived social benefits that could be obtained from social networking sites. In more details, if a user is a member of an active group that share many links, has numerous business acquaintances or large number of net visitors every day, he or she can benefit financially, culturally, or socially from having that access (Ying Liu, 2012). Ellison, Steinfield, and Lampe (2007) also agreed with the result of Ying Liu's research since they found 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 help connect younger teenagers with a broader community and bring social benefit to users. As users gain more benefits through online social network, they are likely to repeat the behavior to receive the benefits, which can then lead to the OSN dependency. Therefore, this study examines whether social benefits positively affect the OSN dependency.

H1: Social benefits of 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 gaining higher social status. The research conducted by Collin, Rahilly, & Richards (2011) showed a significant number of benefits associated with OSN use, including delivering educational outcomes, facilitating supportive relationships, supporting identity formation, and promoting a sense of belonging and self-esteem. These benefits somehow increase the life satisfaction among users. These previous studies showed that users gain social benefits from OSN, which could increase satisfaction especially among those with low self-esteem and lack of confidence.

H2: Social benefits of using OSN positively affect the satisfaction.

According to Thadani and Cheung (2011), OSN users repeatedly use OSN that they have got successfully with his or her intended objectives. The relationship between habit formations and customer satisfaction is correlated, since customer satisfaction is the key to forming habits and delivering long- term engagement. Aarts et al. (1997) also reported that satisfactory experience and behavior influence habit development through repeated behavior. Additionally, satisfaction directly influences habit formation (Limayem et al., 2007). Eventually, habit is formed with the aid of the habitual cue – satisfaction.

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

As mentioned above in the Literature review, online social network dependency correlates with habit formation. According to Walker (2012), the researchers at Chicago University report that people may have harder time controlling their desire to participate in social networking than they do controlling their desires to use cigarettes and alcohol. Therefore, it appears that it is harder to resist OSN compared to substance addiction, such as smoking or alcohol. As people could not resist the connection to social networks, it becomes their habit. In fact, most Facebook score above the mean when responding to habit questions, like “Facebook is part of my everyday activity” and “Facebook has become a part of my daily routine” (Ellison, Strinfield, Lamp, 2007). For instance, Audrey, Gerald, and Chin (2012) 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 habit formation.

Mawhinney and Lederer (1990) pointed out that social network users who engage in maintaining relationships, gaming, or meeting new people in a seamless manner report satisfactory experiences. Ahn (2011) reported similar results, supporting positive interactions between Facebook use and life satisfaction. On the other hand, Laumer, Maier, and Weinert (2010) assumed that higher social interaction overload decreases users' satisfaction. This hypothesis was developed based on Ito et al. (1998) and Maier et al.'s belief that ONS might be perceived as useful or fulfill the pleasure, because negative feelings are more heavily weighted in the brains compared to the positive outcome. Overall, previous studies found different relationship between OSN dependency and satisfaction; however, none of these studies was conducted in Vietnam market. To address this lack of research, this study tried 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's satisfaction.

RESEARCH METHOD

Measurement Scale

Scale measures of construct in this study were borrowed mainly from the existing scales that have been shown to be reliable and valid. Moreover, all constructs were measured using multi-item perceptual scales modified to fit the research context of Facebook. Seven- point Likert scales were adopted to measure items like Social benefit, Satisfaction, Habit formation, and Online social network dependency. All 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 dependency (OSD)		Mood alteration	Thadani and Cheung (2011), Caplan (2010)
	OSD1	I use Facebook to talk with others when I feel isolated	
	OSD2	I use Facebook to make myself feel better when I am down	
	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	
Satisfaction (S)	S1	Using Facebook is absolutely delighted	Bhattacharjee (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	

Sampling and Data Collection

We selected or constructed items to refer to social benefits, online social network dependency, satisfaction, and youth's habit formation based on literature review. This study measured 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 or Facebook and manually delivered to respondents to identify the level of online social network usage among 16 to 24 years old consumers. However, 215 out of 250 participants completed the surveys, and 200 out of the 215 provided sufficient information to be included this study. As a result, the response rate was 80 percent, which is sufficient for a survey of this type.

Table 2 Demographics of Sample

		Frequency	Percent	Valid percent
Gender	Male	86	43	43
	Female	114	57	57
Age	15-20	29	14,5	14,5
	20-25	131	65,5	65,5
	25-30	40	20	20
Occupation	Student	170	85	85
	Employees	28	14	14
	Others	2	1	1

RESULTS

Reliability Test

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 (Hair et al., 2010). Moreover, if the variable had Cronbach's Alpha larger than the overall Cronbach's Alpha and Corrected Item's Total Correlation is smaller than 0.3, it will be deleted from variable list.

Following the reliability statistics, the item OSD4 and item OSD6 had the Corrected Item – Total correlation less than 0.5 (0.43 for OSD4 and 0.318 for OSD6). Therefore, these items were deleted to increase the Cronbach's Alpha and enhance the reliability statistics of online social network dependency factor. In addition, item HF4 was deleted

from Habit formation variables because the “Cronbach’s Alpha if Item deleted” was significantly higher compared to the Cronbach’s Alpha 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 increased. Overall, the four factors of Social benefits, online social network dependency, satisfaction, and habit formation had good reliabilities, which indicate well-designed scale with strong internal consistency.

Confirmatory Factor Analysis (CFA)

In this study, Confirmatory Factor Analysis was used to determine the construct validity of the survey items to determine how well items measure their underlying construct (Hair et al., 2010). In other words, a measure has good construct validity when the items within the same construct are highly correlated. Overall, the Confirmatory Factor Analysis was analyzed using AMOS 21 software.

Table 3 Criteria for Measurement Model

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: Hair et al (2010)

According to the criteria for measurement model in Table 3, all model fit indices are quite good, $CMIN/df = 2.233 (< 3)$, $GFI = 0.881 (> 0.8)$, $TLI = 0.929 (> 0.9)$, $CFI = 0.947 (> 0.9)$, and $RMSEA = 0.79 (< 0.8)$. Therefore, this result is considered satisfactory. In other words, the measurement model fit the data well.

Composite Reliability (CR) – Convergent Validity

According to “Criteria for Measurement Model” table, it is significant if Composite reliability (CR) of all factors is greater than 0.7 and greater than AVE. Average Variance Extracted (AVE) should be greater than 0.5. As can be seen in Table 3 below, all items met

the condition of Composite reliability ($CR > 0.7$), and its value was also larger than AVE value. Moreover, since Average extracted variances of all items in this study were also greater than 0.5, all factors in the measurement model had sufficient reliability and convergent validity.

Table 4 Confirmatory Factor Analysis (CFA) Fitting Indices

Factor	Encoded variable	Factor loading	CR	AVE	Cronbach Alpha
Social benefits (SB)	SB2	0.50	0.729	0.528	0.788
	SB3	0.828			
	SB4	0.888			
Online social network dependency (OSD)	Mood Alteration		0.929	0.544	0.908
	OSD1	0.772			
	OSD2	0.792			
	OSD3	0.849			
	Compulsivity				
	OSD5	0.544			
	OSD7	0.728			
	Negative outcome				
	OSD8	0.636			
	OSD9	0.728			
	OSD10	0.802			
Satisfaction (S)	S1	0.790	0.929	0.766	0.925
	S2	0.942			
	S3	0.877			
	S4	0.887			
Habit formation(HF)	HF1	0.893	0.914	0.780	0.914
	HF2	0.900			
	HF3	0.856			

Construct Validity

According to Hair et al. (2006), construct validity is set by establishing face validity, convergent validity, and discriminant validity. Fornell and Larcker (1981) suggested examining the factor loadings assessed convergent validity and AVE of the constructs. The indicators had significant loadings with $p < 0.001$ and values ranging from 0.50 to 0.942. Moreover, AVE for each construct was greater than or equal to 0.50. The convergent validity of the constructs was supported (see Table 5).

The next step is to consider whether the model has discriminant validity of construct. According to Fornell and Larcker (1981), Average variance extracted (AVE) should be more than the correlation squared of two construct to support discriminant validity. Indeed, each AVE value above was found to be greater than the correlation square. Therefore, discriminant validity of the remaining constructs was established.

Table 5 Correlation and correlation square matrix among construct

	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: The AVEs were greater than the squared correlations between any pair of constructs.

Structural Equation Modeling (SEM)

SEM (Structural Equation Modeling) is used to test the hypothesized casual relationships in research model. The standard of testing whether the model fits the data is similar to the standard of examining CFA: Chi – square/df < 3, CFI > 0.9, GFI > 0.9, RMSEA < 0.08. The results of SEM indicate an adequate model fit with the data (Chi square = 120.825; df = 55; at P = 0.000 < 0.005; CMIN/df = 2.191; GFI = 0.919; TLI = 0.948; CFI = 0.963 and RMSEA = 0.078). The influence of social benefits on online social network dependency was significant ($y = 0.406$, $p < 0.005$); supporting H1, which stated that social benefits in OSN usage significantly affect online social network dependency. Similarly, with the loading of 0.427 and $p < 0.005$, H2, which proposed that social benefits of using OSN significantly affect satisfaction, was also supported. Third, the model of the relationship between satisfaction and habit formation (H3) was found to fit the data well ($y = 0.376$, $p < 0.005$). H4 was supported with $y = 0.245$ and $p < 0.005$. 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 factor in habit formation. Moreover, the generated R^2 values were 0.165, 0.355, and 0.284 for online social network dependency, satisfaction, and habit formation. Finally, the model of the relationship between online social network dependency and satisfaction fit the data well ($y = 0.277$, $p < 0.005$), supporting H5.

CONCLUSION AND IMPLICATIONS

The empirical result provided strong support for the importance of the relationships among social benefits, online social network dependency, and satisfaction and habit formation. The current study's results are consistent with previous research, like Limayem et al. (2007) who proposed three antecedents of IS habit, including satisfaction, frequency of past usage, and comprehensiveness of usage. Particularly, our results were consistent with Limayem's research in which satisfaction was found to be significant factor of habit in the context of online social networking sites. However, this research did not examine factors like frequency of prior behavior and comprehensiveness of usage but added online social network dependency factor. The result indicated that online social network dependency affects the formation of habit, offering an alternative view to the issues.

Third, despite the previous 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 were added to the research model to provide an overview on the habitual behavior process, which starts from social benefits that lead to habit formation through online social network dependency and satisfaction. The results suggest that in addition to a strong effect of satisfaction on habit formation, the online social network dependency positively affects the users' social benefits and strongly influences the formation of habits as well.

Practical Implications

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

From the management point of view, first, 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 increase their loyalty to the brand and enhance their repurchase intentions.

Second, in the new information world, bad rumors on the quality of a product/service may spread at the vertiginous speed and negatively affect the reputation of any firm. Additionally, 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 effects on user satisfaction and the level of social media usage; thus, marketers should consider this information when developing social media products in order to enhance the user satisfaction as well as returning intentions.

Academic Implications

Besides managerial implication, this study has important academic implications. First, this study offers an alternative view on the relationship between online social network dependency and satisfaction. The result indicated that higher level of OSN dependency is associated with higher satisfaction level of social network users. Moreover, this research adapted an online social network model to the context of Vietnam market, which can be used as reference for future researchers.

Limitations and Further Researches

This paper attempted to cover all the aspects of the problem. Financial and geographical barriers also prevent the author to obtain the data in other significant markets of social network in Vietnam like Hanoi, Hue or Can Tho city. However, it may not be comprehensive due to limitations of time, labor force, cost, and geographical issues. First effects on Twitter users than on Facebook users.

In this study, the sample size habit formation of social media users since it is the latest essential element in the formation of social media users' behaviors that both marketers and psychologist want to understand.

REFERENCES

- Aarts, H., Paulussen, T., & Schaalma, H. (1997). Physical exercise habit: On the conceptualization and formation of habitual health behaviours. *Health Education Research*, 12(3), 363-374. <http://dx.doi.org/10.1093/her/12.3.363>.
- Ahn, J. (2011). 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.
- Bhattacharjee, A. (2001). An empirical analysis of the antecedents of electronic commerce service continuance. *Decision Support Systems*, 32(2), 201-214. [http://dx.doi.org/10.1016/S0167-9236\(01\)00111-7](http://dx.doi.org/10.1016/S0167-9236(01)00111-7).

- Bolton, R.N.L. (1999). A dynamic model of customers' usage of services: Usage as an antecedent and consequence of satisfaction. *Journal of Marketing and Research*, 36(1), 1-10.
- Caplan, S.E. (2002). Problematic Internet use and psychosocial well-being: Development of a theory-based cognitive-behavioral measurement instrument. *Computers in Human Behavior*, 18(5), 553-575. [http://dx.doi.org/10.1016/S0747-5632\(02\)00004-3](http://dx.doi.org/10.1016/S0747-5632(02)00004-3).
- Chan, Tommy K.H., Cheung, Christy M.K, Lee, Zach W.Y. Mr, & Neben, Tillmann (2014, June). *The urge to check social networking sites: Antecedents and consequences*. Paper presented at the 19th Pacific Asia Conference on Information Systems (PACIS 2014), Chengdu, China.
- Cheak, A.P.C., Goh, G.G.G., & Chin, T.S. (2012, October). *Online social networking addiction: exploring its relationship with social networking dependency and mood modification among undergraduates in Malaysia*. Paper presented at the International Conference on Management, Economics and Finance, Sarawak, Malaysia.
- Cheung, M.K., & Lee, K.O. (2010). A theoretical model of intentional social action in online social networks. *Decision Support Systems*, 49(1), 24-30. <http://dx.doi.org/10.1016/j.dss.2009.12.006>.
- Collin, P., Metcalf, A., Stephens-Reicher, J., Blanchard, M., Herrman, H., Rahilly, K., & Burns, J. (2011). ReachOut.com: The role of an online service for promoting help-seeking in young people. *Advances in Mental Health*, 10(1) 36-48.
- Echeburua, E., & de Corral, P. (2010). Addiction to new technologies and to online social networking in young people: A new challenge. *Addictions*, 22(2), 91-95.
- Ellison, N., Steinfield, C., & Lamp, C. (2007). 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. <http://dx.doi.org/10.1111/j.1083-6101.2007.00367.x>.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <http://dx.doi.org/10.2307/3151312>.
- Grohol, M.J. (2003, November 20). *Internet addiction guide*. Retrieved from <http://psychcentral.com/netaddiction><http://psychcentral.com/netaddiction>.

- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.D. (2010). *Multivariate Data Analysis (7th Ed.)*. Upper Saddle River, New Jersey: Prentice Hall.
- Ito, T.A., Larsen, J.T., Smith, N.K., & Cacioppo, J.T. (1998). Negative information weighs more heavily on the brain: The negativity bias in evaluative categorizations. *Journal of personality and social psychology*, 75(4), 887-900. <http://dx.doi.org/10.1037/0022-3514.75.4.887>.
- Kumar Anil & Kumar Rajinder (2013, July 7). Use of social networking sites (SNSs): A study of Maharishi Dayanand University, Rohtak, India. Library Philosophy and Practice. Retrieved from <http://digitalcommons.unl.edu/libphilprac/1000>.
- Kuss, D.J., Shorter, G.W., van Rooij, A.J., Griffiths, M.D., & Schoenmakers, T. (2013). Assessing Internet addiction using the parsimonious Internet addiction components model. A preliminary study. *International Journal of Mental Health and Addiction*, 12(3), 351-366. <http://dx.doi.org/10.1007/s11469-013-9459-9>.
- La Barbera, D., La Paglia, F. & Valsavoia, R. (2009). Social Network and Addiction. *Cyberpsychology & Behavior*, 12(5), 628-629.
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media & mobile internet use among teens and young adults. Washington, DC: Pew Internet & American Life Project.
- Lee Z. W. Y. Cheung C. M. K. Thadani D. R. (2012, January). *An investigation into the problematic use of Facebook*. Paper presented at the 45th Hawaii International conference on System Sciences (HICSS), Maui, Hawaii.
- Limayem, M., Hirt, S., & Cheung, C.M.K. (2007). How habit limits the predictive power of intentions: The case of IS continuance. *MIS Quarterly*, 31(4), 705-737.
- Liu, Y., & Tsai, Y.R. (2012). The impact of social networking services (SNS) on college students' social relationship and private life. *International Journal of Arts and Commerce*, 1(4), 1-10.
- Mafe, C. R., & Blas, S. S. (2006). Explaining Internet dependency: An exploratory study of future purchase intention of Spanish Internet users. *Internet Research*, 16(4), 380-397. <http://dx.doi.org/10.1108/10662240610690016>.
- Maier, C., Laumer, S., Eckhardt, A., & Weitzel, T. (2012, June). *When social networking turns to social overload: Explaining the stress, emotional exhaustion, and quitting behavior from social network sites' users*. Paper presented at the 20th European Conference on Information Systems (ECIS), Barcelona, Spain.
- Mawhinney, C.H., & Lederer, A.L. (1990). A study of personnel computer utilization by

- managers. *Information & Management*, 18(2), 243-253.
[http://dx.doi.org/10.1016/0378-7206\(90\)90026-E](http://dx.doi.org/10.1016/0378-7206(90)90026-E).
- Nir Eyal. (2014). *Hooked: How to build habit - forming products*. CreateSpace Independent Publishing Platform.
- Nyland, R., Marvez, R., & Beck, J. (2007, February). *MySpace: Social networking or social isolation*. Paper presented at the AEJMC Midwinter Conference, Reno, Nevada.
- Orbell, S., Blair, C., Sherlock, K., & Conner, M. (2001). 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.
<http://dx.doi.org/10.1111/j.1559-1816.2001.tb02480.x>.
- Ouellette, J.A., & Wood, W. (1998). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, 124(1), 54-74. <http://dx.doi.org/10.1037//0033-2909.124.1.54>.
- Beard, R.. (2014, April 28) Why customer satisfaction is important (6 Reasons). Retrieved from <http://blog.clientheartbeat.com/why-customer-satisfaction-is-important/>.
- Thadani, D.R., & Cheung, C.M.K. (2011, January). *Online social network dependency: Theoretical development and testing of competing models*. Paper presented at the 44th Hawaii International Conference on System Sciences, Kauai, Hawaii.
- Thadani, D.R., & Cheung, C.M.K. (2011). *Exploring the role of online social network dependency in habit formation*. Paper presented at 32th International Conference on Information Systems, Shanghai, China.
- Walker, L. (2012, December 2). *What is social networking addiction? About.com guide*. Retrieved from <http://personalweb.about.com/od/socialmediaaddiction/a/Social-Networking-Addiction.htm>.
- Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M., & Haythornthwaite, C. (1996). Computer networks as social networks: Collaborative work, telework, and virtual community. *Annual Review of Sociology*, 22(1), 213-238.
- Valkenburg, P.M., & Peter, J. (2009a). Social consequences of the internet for adolescents. *Current Directions in Psychological Science*, 18(1), 1-5.
<http://dx.doi.org/10.1111/j.1467-8721.2009.01595.x>.