

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2017 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

Summer 7-19-2017

FACTORS INFLUENCING SOCIAL NETWORKING SITES ADDICTION AMONG THE ADOLESCENTS IN ASIAN COUNTRIES

Yazriwati Yahya

University Teknologi Malaysia, yazriwati.kl@utm.my

Nor Zairah Ab. Rahim

Universiti Teknologi Malaysia, nzairah@utm.my

Follow this and additional works at: <http://aisel.aisnet.org/pacis2017>

Recommended Citation

Yahya, Yazriwati and Ab. Rahim, Nor Zairah, "FACTORS INFLUENCING SOCIAL NETWORKING SITES ADDICTION AMONG THE ADOLESCENTS IN ASIAN COUNTRIES" (2017). *PACIS 2017 Proceedings*. 241.

<http://aisel.aisnet.org/pacis2017/241>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2017 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

FACTORS INFLUENCING SOCIAL NETWORKING SITES ADDICTION AMONG THE ADOLESCENTS IN ASIAN COUNTRIES

Research-in-Progress

Yazriwati Yahya

Advanced Informatics School
University Teknologi Malaysia
Kuala Lumpur, Malaysia
yazriwati.kl@utm.my

Nor Zairah Ab Rahim

Advanced Informatics School
University Teknologi Malaysia
Kuala Lumpur, Malaysia
nzairah@utm.my

Abstract

Social Networking Sites (SNS) addiction among the adolescents has begun to getting attention among the scholars. Previous studies have focused on the factors influenced SNS addiction mostly among the adults compared to the adolescents. Furthermore, studies on SNS addiction that integrate different perspective from different theoretical foundation is very scarce. This study has taken a systematic literature approach to identify factors that contributes to SNS addiction among the adolescents in Asian countries. Based on the systematic literature approach, ten papers were found to be significantly highlighted factors that contributes to SNS addiction in Asian countries which is Malaysia, Singapore, Thailand, Hong Kong, Taiwan, South Korea and China. Subsequently, the factors were categorized into three different perspective which is Information System, Sociology and Psychology. These factors are hoped to be guidance for future research in SNS addiction context among adolescents in Asian countries.

Keywords: Social networking sites, addiction, adolescents, social networking sites usage

1 Introduction

Many researchers have identified diversity uses of Internet can lead risk of overuse and addictive symptoms. However, which Internet activities and pattern of use that associated with the symptoms of addiction is still vague (Gamito et al. 2016). According to Mak et al. (2014), Asia has the highest percentage of users addicted to internet. Internet addiction (IA) studies have shown that other online activities such as social networking sites (SNS) have potential for addictive use (Müller et al. 2016).. Recent study has estimated that 73% of adolescents, who go online, use SNS. Although older adolescents (ages 14–17) are more likely to use these sites than younger adolescents (ages 12–13), over half (55%) of young teens who go online use SNS (Espinoza & Juvonen 2011). SNS usage started to convey concerns on the society where their existence seems to bring some negative issues among the young adults and adolescents.

Some studies have highlighted the potential negative effect for being excessively use the SNS. Among the negative effects highlighted is low self-esteem when received negative feedback from peers about their SNS profile. The low self-esteem later then turns to low well-being (Valkenburg et al. 2006). Spending more time on the SNS also relates to poor academic performance which directly related to poor time management. Adolescents who spent time less studying when use SNS have lower grades compare to those who did not use the SNS (Ozer et al. 2014). SNS addiction also triggers negative behavior such as stealing information, cyber bullying, contacting strangers and also spread false information (Lee 2015). These negative effects if not to be aware could lead to more serious problems. Even though SNS addiction studies have started to get scholars attention at the beginning of its introduction, but most of them were focused on adult users. Previous studies on SNS addiction among the adolescents are very limited (Lee 2015) especially in Asian countries.

The objective of the paper is to address the factors that will lead to SNS addiction among the adolescents in Asian countries. Most of the SNS addiction studies were focused in United States and European countries even though research has proved that Asian countries have higher percentages of SNS addicts (Mak et al. 2014). By using systematic review approach, this study able to identify a set of three categories of useful factors for SNS addiction particularly for adolescents.

2 Literature Review

2.1 Definition and Theories Related To SNS Addiction

Xu and Tan (2012) have defined SNS addiction as a psychological state of maladaptive dependency on the use of SNS to such a degree that the following typical behavioural addiction symptoms arise which are salience, withdrawal, conflict, relapse and reinstatement, tolerance, and mood modification.

According to Turel and Serenko (2012), the formations of SNS addiction are based on three theoretical perspectives: (1) the cognitive behavioural model (Davis 2001); (2) the social skill model (Caplan 2005); (3) socio-cognitive model (LaRose et al. 2003). The cognitive behavioural model suggests that some SNS users can develop maladaptive cognitions. These cognitions are amplified by various environmental factors. For example, social isolation or lack of peer support, which lead to the development of maladaptive obsessive use patterns. The social skill model emphasizes that people who prefer online communication rather than face to face interactions are lack of self-presentational skills. The socio-cognitive models suggest that compulsive behaviours are resulted from expectation of positives outcomes united with Internet self-efficacy and poor Internet self-regulation. Xu and Tan (2012) used this formation to suggest that people who use SNS to relieve stress, loneliness or depression are those who experience transition from normal SNS use to problematic SNS use.

2.2 SNS Usage Among Adolescents

SNS usages are varied among adolescents. Research on SNS usage among adolescents has shown that there are differences between SNS usage between genders. Females use SNS to communicate with their friends while males use SNS for learning, social compensation and social identity gratifications (Barker, 2009). Females are more alert not to reveal personal information on SNS compared to males (Jelicic et al. 2007). Muller et al.(2016) have found that intense SNS user was more related to females while males was more associated with addiction among intense SNS-user. This is contradicted with

the finding from Kuss and Griffiths (2011) that females are likely to be more prone to SNS addiction. In addition to this, Kuss and Griffiths also have found that males in general are more risky to be addicted to SNS games compared to females. Kujath (2011) has found that students used SNS to maintain offline relationship and some students prefer this medium to communicate rather than face to face interaction.

3 Methodology

This study followed guidelines provided by Denyer and Tranfield (2009) and conducted a detailed review by searching for relevant articles from the chosen electronic libraries. The steps in the guideline are as below:

i. Question Formulation

This step is to formulate the review question specifically for this study in order to provide the focus and direction to the study. The primary question for this paper is “What are the factors that contribute to SNS Addiction among the adolescents in Asian countries?”. The keywords that are used during searching the electronic databases are "addiction" OR "addictive" OR "addicted" OR "problem" OR "problematic" OR "high engagement" OR "habit" OR "habits" OR "habituated", AND "social media" OR "social network" OR "social networking sites" OR "social networking" OR "facebook" OR "twitter" OR "instagram" OR "blog" OR "blogging".

ii. Locating Studies

In order to find the relevant articles to be reviewed to answer the question, selected electronic databases were used for searching. This study has identified five relevant electronic databases which was subscribed by the researcher’s library to be used as the search locations. The databases that were used in are Science Direct, Wiley Online, Ebsco Host, Springer and Emerald.

iii. Study Selection and Evaluation

In this step, inclusion and exclusion criteria are identified and used to refine the search. The most common inclusion criteria are publications date range, language and types of paper. The articles chosen were screened to include only articles that met the criteria: a) focus on factors influences the SNS addiction only among adolescents in Asian countries b) only empirical studies were selected c) the articles are between the year of 2007 until January, 2017 and d) only articles written in English were selected. Then using a snowball approach, the references from included studies were scrutinized for further relevant articles. The study focuses on adolescents aged between 10 to 19 years. However, due to majority of the studies incorporated respondents from university or colleges that ranged between 18-24 years, the studies were included as well since specifically studies on adolescents between the definition age is very limited especially studies in Asian countries. Initially, 627 articles were retrieved by reading the title and abstract and organized using the inclusion criteria. After skimming the full paper and, finally only 10 articles met the criteria and were included in the review study (see Table 1).

Databases	After skimming Title/Abstract	After Excluded	Selected Papers
Wiley Online	170	3	1
Science Direct	188	23	6
Springer Link	20	5	1
Ebsco Host	222	18	0
Emerald	42	8	0
Others	39	4	2
TOTAL	637	57	10

Table 1: Number of related articles and database sources

iv. Analysis and Synthesis

The relevant studies will be identified based on the implementation from previous steps. The countries that involved in the review are Malaysia, Singapore, Thailand, Hong Kong, Taiwan, South Korea and China. Even though in IA studies include SNS usage as well, it was not included in this

review because the studies incorporated other resources of Internet addiction that may affect the accuracy the SNS addiction results.

v. Report

Finally, report will be produced to discuss the result and discussion.

4 Result and Discussion

Based on the systematic review undertaken particularly for this paper, a total number of 10 germane studies that focused on SNS addiction in Asian countries were identified. Table 2 shows the factors that influenced the SNS addiction among the adolescents. The adolescents involved are between ages 12 to 19 years. Studies that have respondents starting the age of 19 and above (most of them are respondents from university/colleges) are also included. These factors were grouped into three combinations of psychological, sociology and biology that contribute to the SNS addiction (Griffith 2013). However, factor under biology category was not to be found in any studies. In addition, one category factor which is technology usage was identified as part of the contribution in SNS addiction among the adolescents. This category was extracted from Rosen et al.(2013) study where it was proven that technology usage is one of the predictors for SNS addiction. Hence, this corresponding results is hoped to enable a further evaluation of these factors by the research community, for example through an empirical evaluation of the factors that influencing the SNS addiction specifically only for adolescents in Asian countries.

No	Category Factors	Factors	Author
1	Psychological	Extraversion	Wang et al. (2014)
		Loneliness	Lee et al. (2017); Yu et al. (2016)
		Motivation	Lee et al. (2017)
		Self-esteem	Hong et al. (2014)
		Sense of inferiority	Hong et al. (2014)
		Depressive character	Hong et al. (2014)
		Neuroticism	Hong et al. (2014);Tang et al. (2016)
		Online psychology privacy	Hong and Chiu (2014)
		Optimism	Yu et al. (2016)
2	Sociology	Family Relationship	Lee et al. (2017); Balakrishnan et al. (2013)
		Online Interpersonal Relationship	Tang et al. (2016)
		Social Overload	Choi et al. (2016)
		Friends Relationship	Hong and Chiu (2014)
3	Technology Usage	Hours spent	Hong et al. (2014); Jafarkarimi et al. (2016); Khumsri et al. (2015)
		Online support	Tang et al. (2016)
		Information support	Tang et al. (2016);Hong and Chiu (2014)
		Technology Overload	Choi et al. (2016)
		Entertainment	Balakrishnan et al. (2013)
		Device for access	Khumsri et al. (2015)

Table 2: Factors that contributes to SNS addiction among adolescents in Asian countries

5 Conclusion

This study provides an overview about factors that contribute to SNS addiction among adolescents in Asian countries. Despite the fact that Asian countries have higher percentages of SNS addicts, only a few studies focused on the issue. Based on the identified articles within the literature review, factors were categorized based on two combinations of psychological and social factors that contribute to the etiology of addictions that may also hold true for SNS addiction as stated by Griffith (2013). In addition, another category factor was introduced which is technology usage that was categorized based on empirical evidence by Rosen et al. (2013).

This study has significantly provided the integration of factors from three different theoretical foundations and is hoped to be a guidance for researchers to further scrutinize the factors for future research in SNS addiction among adolescents in Asian countries. For future research, the factors can be part of the development of a framework on SNS usage among the adolescents in Asian countries which then can be potential to develop guidelines or policy for SNS addiction awareness among the society.

6 References

- Balakrishnan, V. and Shamim, A. 2013. "Malaysian Facebookers: Motives and addictive behaviours unraveled," *Computers in Human Behavior*, (29:4), pp.1342-1349.
- Baker, D.L. 2009. "Advancing E-Government performance in the United States through enhanced usability benchmark," *Government Information Quarterly* (26:1), pp.82-88.
- Boyd, D.M. and Ellison, N.B. 2007. "Social network sites: Definition, history, and scholarship," *Journal of Computer-Mediated Communication* (13), pp.210-230.
- Caplan, S.E. 2005. "A social skill account of problematic Internet use," *Journal of Communication*, (55:4), pp.721-736.
- Choi, S.B. and Lim, M.S. 2016. "Effects of social and technology overload on psychological well-being in young South Korean adults: The mediatory role of social network service addiction," *Computers in Human Behavior*, 61, pp.245-254.
- Davis, R.A. 2001. "Cognitive-behavioral model of pathological Internet use," *Computers in Human Behavior* (17:2), pp.187-195.
- Denyer, D., and Tranfield, D. 2009. "Producing a systematic review," in *The SAGE handbook of organizational research methods*, D. A. Buchanan & A. Bryman (eds.), London, Sage Publications Ltd, pp. 671-689.
- Espinoza, G. and Juvonen, J. 2011. "The pervasiveness, connectedness, and intrusiveness of social network site use among young adolescents," *Cyberpsychology, Behavior, and Social Networking* (14:12), pp.705-9.
- Gamito, P.S. et al. 2016. "Frequency is not enough: Patterns of use associated with risk of Internet addiction in Portuguese adolescents," *Computers in Human Behavior* (58), pp.471-478.
- Griffiths, M.D. 2013. "Social networking addiction: Emerging themes and issues," *Journal of Addiction Research & Therapy* (4:5), pp.4-5.
- Griffiths, M.D., Kuss, D.J. and Demetrovics, Z. 2014. "Social Networking Addiction: An Overview of Preliminary Findings," *Behavioral Addictions: Criteria, Evidence, and Treatment* (April 2016), pp.119-141.
- Hong, F.Y., Huang, D.H., Lin, H.Y. and Chiu, S.L. 2014. "Analysis of the psychological traits, Facebook usage, and Facebook addiction model of Taiwanese university students," *Telematics and Informatics*, (31:4), pp.597-606.
- Hong, F.Y. and Chiu, S.L. 2014. "Factors influencing Facebook usage and Facebook addictive tendency in university students: The role of online psychological privacy and Facebook usage motivation," *Stress and Health*.
- Jafarkarimi, H., Sim, A.T.H., Saadatdoost, R. and Hee, J.M. 2016. "Facebook addiction among Malaysian students," *International Journal of Information and Education Technology*, (6:6), p.465.
- Jelicic, H., Bobek, D. L., Phelps, E., Lerner, R. M., and Lerner, J. V. 2007. "Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development," *International Journal of Behavioral Development* (31) 263-273.

- Khumsri, J., Yingyeun, R., Mereerat, M., Hanprathet, N. and Phanasathit, M. 2015. "Prevalence of Facebook Addiction and Related Factors Among Thai High School Students," *Journal of the Medical Association of Thailand*, 98, pp.51-60.
- Kujath, C.L. 2011. "Facebook and MySpace: Complement or substitute for face-to-face interaction?," *Cyberpsychology, Behavior, and Social Networking* (14:1-2), pp.75-78.
- Kuss, D.J. and Griffiths, M.D. 2011. "Online social networking and addiction-A review of the psychological literature," *International Journal of Environmental Research and Public Health* (8:9), pp.3528-3552.
- LaRose, R. and Eastin, M.S. 2004. "A Social Cognitive Theory of Internet Uses and Gratifications : Toward a New Model of Media Attendance," *Journal of Broadcasting & Electronic Media* (48:3), pp.358-377.
- LaRose, R., Lin, C. a. and Eastin, M.S. 2003. "Unregulated Internet Usage: Addiction, Habit, or Deficient Self-Regulation?," *Media Psychology* (5:3), pp.225-253.
- Lee, E. W. J., Ho, S. S., & Lwin, M. O. (2017). Extending the social cognitive model—Examining the external and personal antecedents of social network sites use among Singaporean adolescents. *Computers in Human Behavior*, 67, 240–251. <http://doi.org/10.1016/j.chb.2016.10.030>
- Yu, C.-C., & Wang, H.-I. (2009). Strategy mapping in the process of formulating digital divide strategies. *Electronic Government, an International Journal*, 6(2), 143–161. <http://doi.org/10.1504/EG.2009.024439>
- Lee, S. 2015. "Analyzing negative SNS behaviors of elementary and middle school students in Korea," *Computers in Human Behavior* (43) pp.15-27.
- Mak, K.-K. et al. 2014. "Epidemiology of internet behaviors and addiction among adolescents in six Asian countries," *Cyberpsychology, behavior and social networking* (17:11), pp.720-8.
- Marks, I. 1990. "Behavioural (non-chemical) addictions," *British Journal of Addiction* (85:11), pp.1389-1394.
- Marlatt, G.A., Baer, J.S., Donovan, D.M. and Kivlahan, D.R. 1988. "Addictive behaviors: Etiology and treatment," *Annual review of psychology* (39:1), pp.223-252.
- Müller, K.W. et al. 2016. "A hidden type of internet addiction? Intense and addictive use of social networking sites in adolescents," *Computers in Human Behavior* (55) , pp.172-177.
- Ozer, I., Karpinski, A.C. and Kirschner, P.A. 2014. "A Cross-cultural Qualitative Examination of Social-networking Sites and Academic Performance," *Procedia - Social and Behavioral Sciences* (112), pp.873-881.
- Rosen, L.D. et al. 2013. "The Media and Technology Usage and Attitudes Scale: An empirical investigation," *Computers in Human Behavior* (29:6), pp.2501-2511.
- Tang, J.H., Chen, M.C., Yang, C.Y., Chung, T.Y. and Lee, Y.A. 2016. "Personality traits, interpersonal relationships, online social support, and Facebook addiction," *Telematics and Informatics*, (33:1), pp.102-108.
- Valkenburg, P.M., Peter, J. and Schouten, A.P. 2006. "Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem," *CyberPsychology & Behavior* (9:5), pp.584-590.
- Wang, C.W., Ho, R.T., Chan, C.L. and Tse, S. 2015. "Exploring personality characteristics of Chinese adolescents with internet-related addictive behaviors: trait differences for gaming addiction and social networking addiction," *Addictive behaviors* (42), pp.32-35.
- Xu, H. and Tan, B. 2012. "Why do I Keep Checking Facebook : Effects of Message Characteristic on the Formation of Social Network Services Addiction," in *Thirty Third International Conference on Information Systems* pp.1-12.
- Yu, S., Wu, A. M. S., and Pesigan, I. J. A. 2016. "Cognitive and Psychosocial Health Risk Factors of Social Networking Addiction," *International Journal of Mental Health and Addiction*, (14:4), pp.550-564.