



## POSTGRADUATE STUDENTS SELF-CONTROL AND ATTITUDE TOWARDS VIRTUAL NETWORKING WITHIN TWO SELECTED UNIVERSITIES IN NORTHEAST CHINA

**Nneoma Grace Larai Egbuonu,  
Zamzam Ibrahim Nyandara,  
Olayinka Olorunfemi Osiberu**  
Northeast Normal University,  
Changchun, Jilin, China

### **Abstract:**

The main purpose of this study was to assess post-graduate students' self-control and attitude toward virtual networking. One hundred and twelve (112) postgraduate students from two selected universities in northeast China were chosen to answer a 19-item questionnaire investigating their self-control level and attitudes toward virtual networking. The results from using a one-way between subjects ANOVA revealed that no significant difference existed between age groups and attitude to virtual networking while significant difference was found between age groups and self-control with regards to virtual networking. Next, using the independent-samples t-test no significant difference was found when attitude towards virtual networking and gender were compared. Also no significant difference existed when self-control and gender were compared. Finally, using Pearson Correlation no significant relationship was found between the amounts of time spent online for academics and self-control. Furthermore, there was no significant relationship between time spent online for academics and attitude towards virtual networking.

**Keywords:** virtual networking, self-control, attitude, post graduate students

### **1. Introduction**

With rapid technological advancement and globalization of higher education, there are many easily accessible and free resources online. Bearing the freedom and ease of accessibility to resources in mind, this study strived to find out postgraduate students' perceptions of self-control and attitudes towards virtual networking. It must be emphasized at this juncture that virtual networking instead of social networking was the focus of this study since non-social networking activities, such as academic, entertainment, and politics related activities, were also included. It was vital to look into self-control and attitudes toward virtual networking as previous research found that

regarding internet usage or virtual networking individuals sometimes exhibit traits similar to that of substance addiction. They had a decrease in real life socialization and academic achievement, in addition to relationship challenges, withdrawal, compulsion, control disorder, as well as lifestyle disturbance (Griffiths, 1997, 1998 cited by Auday, & Coleman, 2009; Kuss & Griffiths, 2011; Dlodlo, 2015). Kuss and Griffiths (2011) list Young's, "*five different types of internet addiction, these are computer addiction (i.e., computer game addiction), information overload (i.e., web surfing addiction), net compulsions (i.e., online gambling or online shopping addiction), cyber sexual addiction (i.e., online pornography or online sex addiction), and cyber-relationship addiction (i.e., an addiction to online relationships)*" (Kuss & Griffiths, 2011 p.3529). From random discuss the addiction that post graduate students revealed that they could relate to was information overload since a requirement of post graduate education is research. Hence, some post graduate students informed us of the need to always force themselves to focus and not get overwhelmed by the amounts of information out there.

Nowadays, many students have smart phones and gadgets for easier and faster access to the Internet for diverse purposes. Therefore, the researchers presumed that without adequate self-control and the right approach or attitude to Internet usage, productivity will be compromised to some extent. For instance, Abdelraheem (2013) reported that students used Social Networking (SN) for social matters more than they did for academic purposes and students with smart phones used SN more often than those without smart phones. Although he found no significant relationship between students' SN usage and their Grade point average (GPA) as well as no significant difference between genders in terms of SN usage, he still recorded that more than 50% of the participants spent 2 or more hours on SN every day. For this study, the researchers decided to use self-reported productivity in terms of their attitudes and self-control since many studies have already shown that GPA was not affected by SN.

Virtual networking is defined differently by researchers. Therefore, in the current study, a couple of definitions were adopted and adapted from different angles to properly depict the focus of the study. According to Bell (2008 p.2), the virtual world is "*a synchronous, persistent network of people, represented as avatars, facilitated by networked computers*" and this falls short since our study was not limited to the game world of avatars but encompassed online interactions between people as well as that between people and data. Boyd and Ellison (2008 p.211) propose social network sites to be, "*web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system*". This definition covers social networking sites (SNSs) adequately, however as mentioned earlier our study was not limited to SNSs. Hence, for the purpose of our study, virtual networking (VN) was defined as the process of carrying out online interactions and transactions with other online groups, individuals as well as data. In addition to Bell (2008) viewing the virtual world as synchronous, we viewed the virtual networking world as asynchronous since the interactions could have been done even in the absence of other online parties, though the transfer of data remains a constant. It must be

emphasized at this juncture that this study encompassed social networking, but was not limited to this, since non-social networking sites like academic, entertainment; political and other sites were also included.

This study focused on postgraduate students' time management, self-control and attitude while virtual networking. In reference to time, management and educational productivity there can be many online activities considered as distractions to students, which may hinder their focused and rapid attention to issues of relevance. One of Young's five classifications of internet addictions which is information overload (i.e., web surfing addiction) can easily be referenced in this case since students while researching often come across important and relevant knowledge and information which is not needed at the time of discovery but may come in handy in future. Some of these end up been stored away in places where they are not easily retrievable when needed meaning that the initial time invested in retrieving and storage were wasted (Kuss & Griffiths, 2011). The issue of online distraction is also supported by findings from Tariq, Mehboob, Khan, and Ullah (2012) who reported that social networks *"grab the total attention and concentration of the students and diverts them towards non educational, unethical and inappropriate actions such as useless chatting, time killing by random searching and not doing their jobs. As social network has introduced many attractive tasks like gaming, advertisements etc. so that people can never get enough of these things. The social network addict becomes a useless node for parents, friends and other associated people. They cannot succeed because they have no sense of upcoming future and competitions in their careers"* (Tariq et al., 2012 p.409).

At this juncture, it is pertinent to note that previous research showed that females spent more time on SNS in comparison to males; who were reported to spend most of their time online playing games instead of using SN (Auday & Coleman, 2009; Tham & Ahmed, 2011). Auday and Coleman also found that the participants neglected other important aspects of their lives especially their academics. However, Tham and Ahmed reported a contradictory result, which indicated no significant correlation between times spent on SN and GPA. In addition, Tayseer, Zoghieb, Alcheikh and Awadallah (2014) surprisingly revealed that students who spent a lot of time on SN had higher GPA and they suggested it to be as a result of *"good time management"*. It ought to be noted that this same study stated that the students with high GPAs seldom use SNs for academic purposes but rather for entertainment purposes.

## **2. Statement of the Problem**

Access to numerous online resources has led to discourses around information overload, dissemination of false and/or inaccurate information. Since research is an inseparable aspect of post graduate education and to conduct research one had to do a lot of review of literatures. We wanted to find out whether virtual networking in this age rapid dissemination of information is a distraction to postgraduate students with regards to academic related issues. Previous studies showed conflicting results as some of those indicated that there were negative impacts of social networking on high school

students and undergraduates while a few others showed positive impacts of social networking and online networking in general with regards to older students (Auday, & Coleman, 2009; Kuss & Griffiths, 2011; Tariq et al., 2012; Abdelraheem, 2013; Dlodlo, 2015) . For instance, Luo (2011) reported that virtual networking is a powerful tool for gathering information and/or learning in the current era of rapid technological and communication advancement and evolution, as it supports, while also stimulating cooperative learning and productivity. On the contrary, Wang, Chen and Liang (2011) reported that students spent a vast amount of their time on SN during classes and while doing their homework and this reduced their concentration thereby affecting their educational performance. Also, they recorded that students spent 90% of their SN time on Facebook for entertainment instead of academic related activities that reduced their educational productivity. Moreover, Tham and Ahmed (2011) wrote that a greater number of their younger participants reported negative perception of the effects of SNSs on their academic performance, which leaves a gap as to the probability level of older students who have positive perceptions of the effects of SNSs, since the percentage of graduate students in their study was 0.7% and the categories were not emphasized.

Furthermore, there are very few studies that have investigated postgraduate students, so for our study, we focused on postgraduate students and tried to get a clear picture of the influence of virtual networking on them.

### **3. Objective of the Study**

This study focused primarily on accessing postgraduate students' self-control and attitude toward virtual networking. Below are the specific objectives:

1. To find out age and gender effects on attitude and self-control toward virtual networking for post graduate students.
2. To analyze the relationship between the amounts of time spent on virtual networking and post graduate students' self-control as well as their attitudes.

### **4. Research Questions**

The study was guided by the following questions:

1. What is the relationship between self-control and time spent on virtual networking?
2. What are the differences (if any) in age and gender in relation to attitudes towards virtual networking?
3. What are the differences (if any) in age and gender in relation to self-control?

## 5. Methods

### 5.1 Participants

This study focused on postgraduate students within two selected universities in northeast China. The participants covered different levels and fields of studies; they also encompassed self-financed and scholarship students.

The gathered data from the two universities revealed that the researchers covered a diversity of 38 fields of postgraduate students. One hundred and twelve postgraduate students were randomly selected (63 males and 49 females; aged 21 to 45; 2 post-doctoral candidates, 27 doctoral candidates and 83 master's degree candidates).

### 5.2 Materials

A 19-item questionnaire which was made up of a 6-item demographic section and a 13-item integrated section encompassing yes/no questions, Likert scale items (ranging from strongly agree to strongly disagree) and an open ended test item was used. For the self-control questions, smaller scores mean higher self-control levels.

## 6. Results

**Objective 1:** To find out age and gender effects on attitude and self-control toward virtual networking for post graduate students.

One-way ANOVA results showed that there was a significant difference among age groups in terms of self-control with regards to virtual networking [ $F(2, 109) = 4.526, p = 0.013$ ]. Post hoc comparisons showed that age group 31-45 ( $M=1.80, SD=0.73$ ) had significantly higher self-control levels (lower mean score) than age group 21-25 ( $M=2.30, SD=0.70$ ) ( $p=0.040$ ) and age group 26-30 ( $M=2.35, SD=0.73$ ) ( $p=0.012$ ). However, there was no significant difference between age group 21-25 and 26-30 ( $p=1.0$ ). Taken together, these results suggest that the older age group of 31-45 had greater self-control with regards to virtual networking. However, there was no significant difference in attitudes toward virtual networking among different age groups [ $F(2,109) = 0.051, p=0.951$ ].

Independent-samples t-test results showed that there was no significant difference between males and females in terms of their attitude ( $t = -.037, D.C.=110, p = .971$ ) and self-control ( $t = -1.524, do=110, p = .130$ ) toward virtual networking.

**Objective 2:** To analyze the relationship between the amounts of time spent on virtual networking and post graduate students' self-control and attitudes.

Pearson Correlation results showed that there was no significant relationship between time spent online for academics and self-control ( $r = -.008, n=112, p = .936$ ) and attitude ( $r = .024, n=112, p = .800$ ) toward virtual networking. So, having a high level of self-control does not mean that one will spend more or less time online for academics. Moreover, having a positive or negative attitude does not mean that one will spend more or less time online for academics.

## 7. Discussion

This study focused on students' self-control and attitude towards virtual networking within two selected universities in northeast China. We only found that the older age group had greater self-control with regards to virtual networking, but no age difference in terms of attitudes toward virtual networking, which, to some extent, opposes Tham and Ahmed's (2011) findings. They found that a greater number of their younger research participants reported negative perceptions in terms of the effects of SNSs on their academic performance while our study showed that age was not a significant factor in terms of attitudes toward virtual networking.

Additionally, gender was also not a significant factor. This implies that our study, which focused on a postgraduate student sample, showed a different result in comparison to studies that used different populations, such as one without a representation of the postgraduate student population (Auday and Coleman, 2009) and another (Tham and Ahmed, 2011) with a 0.7% representation, which reported a significant difference between genders regarding SN.

Hence, based on above findings, we proposed that at the post-graduate level of education, there is no significant difference between genders in terms of the post graduate students' attitude and self-control toward virtual networking. This is assumed to be as a result of the consideration that at the post graduate level of education most students are presumed to be self-motivated and driven to acquire more in-depth knowledge in their chosen research areas. Going by this assumption our study shows that distractions from virtual networking are not gender related at the post graduate education level.

Moreover, in agreement with Abdelraheem (2013) and in opposition to one of the objectives of our study, we found no significant relationship between time spent online for academics and self-control implying that having a high level of self-control does not mean that one will spend more or less time online for academics, or vice versa. Besides, the researchers also found no significant relationship between time spent online for academics and attitude towards virtual networking.

## References

1. Abdelraheem, A. Y. (2013). University Students' Use of Social Networks Sites and Their Relation with some Variables. WEI International Academic Conference Proceedings January 14-16, Antalya, Turkey, The West East Institute 31.
2. Auday, B. C. & Coleman, S. W. (2009). Pulling off the Mask: The Impact of Social Networking Activities on Evangelical Christian College Students *A Self-Reported Study*.
3. Bell, M. W. (2008). Toward a Definition of "Virtual Worlds". *Journal of Virtual Worlds Research*, Vol. 1. No. 1.p.1-5.

4. Boyd, D. M. & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship *Journal of Computer-Mediated Communication*, 13, p. 210–230.
5. Dlodlo, N. (2015). Salient indicators of mobile instant messaging addiction with selected socio-demographic attributes among tertiary students in South Africa. *South African Journal of Psychology*, Vol. 45(2) 207– 222.
6. Kuss, D. J. & Griffiths, M. D. (2011). Online Social Networking and Addiction - A Review of the Psychological Literature. *International Journal of Environmental Research and Public Health*, 8, 3528-3552.
7. Luo, L. (2010). Social Networking Websites: An Exploratory Study of Student Peer Socializing in an Online LIS Program. *Journal of Education for Library and Information Science*, Vol. 51, No. 2.
8. Tariq, W., Mehboob, M., Khan, M. A. & Ullah, F. (2012). The Impact of Social Media and Social Networks on Education and Students of Pakistan. *International Journal of Computer Science Issues*. Vol. 9, Issue 4, No 3.
9. Tayseer, M., Zoghieb, F., Alcheikh, I. & Awadallah, M. N. S. (2014). Social Network: Academic and Social Impact on College Students. ASEE 2014 Conference Paper, University of Bridgeport, Bridgeport, CT, USA.
10. Tham, J. & Ahmed, N. (2011). The Usage and Implications of Social Networking Sites: A Survey of College Students. *Journal of Interpersonal, Intercultural and Mass Communication*. Vol. 2, Issue 1.
11. Wang, Q., Chen, W. & Liang, Y. (2011). The Effects of Social Media on College Students. *MBA Student Scholarship*. Paper 5. [http://scholarsarchive.jwu.edu/mba\\_student/5](http://scholarsarchive.jwu.edu/mba_student/5)

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](#).