STATUS OF SMARTPHONE USING HABIT AND SMARTPHONE ADDICTION OF STUDENTS IN UNIVERSITIES IN VIETNAM

Quach Ha Linh

Undergraduate of Environmental and Occupational Health, Hanoi University of Public Health

Abstract: **As society develops everyday, smartphone is becoming one of the most essential technical devices and college students are the one who use it the most common. Smartphone is obviously a helpful device, providing easily and quick connection, internet access, entertainment and endless applications. However, there are not enough research conducted in the area of smartphone using habitat and the level of smartphone addiction for university students in Viet Nam. Facing these facts, this research aims to look into status of using smartphones and the level of smartphone addiction to students at universities in Vietnam.**

Keywords: **smartphone, behavior, addiction, university student.**

1.   INTRODUCTION AND RESEARCH'S AIMS

As society develops everyday, smartphone is becoming one of the most essential technical devices and college students are the one who use it the most common. In the USA, there was 85% of students reported using smartphones in 2015 [1]. Smartphone is obviously a helpful device, providing easily and quick connection, internet access, entertainment and endless applications. But besides the advantages that smartphone may bring, users tend to become addicted to it. A recent survey suggested the number of addicted people in a lot of countries, especially college students, are getting higher as the results was revealed: 18,8% in Japan, 25% in America, 27,4% in Hong Kong, 44% in India và 67% [2]. Many researchs have proved a close ralationship between the habit of using smartphones and the risk of smartphone addiction, focused mostly on college students as vulnerable subjects [3] [4] [5] However, there are not enough research conducted in the area of smartphone using habitat and the level of smartphone addiction for university students in Viet Nam. Facing these facts, this research aims to look into status of using smartphones and the level of smartphone addiction to students at 3 Universities in Vietnam in 2017.

2.   METHODOLOGY AND MATERIAL

This research applied analytical cross sectional study with quantitative method. Research team decided to conduct the survey on third year student at 3 different universities in Hanoi who owned a smartphone at the time of research. After calculated by using a minimum cross-sectional formula (50% ratio, 0.08 maximum incorrection), the sample size was suggested as 165 subjects. Because there were a total of 170 students enrolled in 3 school, so we decided to choose all of the available participants. A quantitative questionnaire constructed on science research with the purpose of describing the status of using Smartphones accompanied with 10 questions extracted from Smartphone Addiction Scale Short version (SAS-SV) [6] which indicate the level and risk of Smartphones addiction were applied. SAS-SV score is calculated based on the score of each question ranked on Likert scale from 1 (strongly disagree) to 6 (strongly agree). This tools are built in English and highly recommended as a suitable tools for adolescenses by some research [7]. This research applied the cut off value recommended by the SAS's author, which indicated SAS-SV score higher than 31 (male) and 33 (female) is addicted, and 22-31 (male) and 22-33 (female) are in high risk of addiction [6]. The result was processed by SPSS 16.0. Classified varities are analysed by descriptive stasstistics into ratio and frequency. Numeric varities are displayed into mean and standard deviation (standard distribution) and median and interquartile range (unstandard distribution). Statistical inference use T-test and Chi square tesst to analyse the single varity relation between independant factors and independant factors at 5% signigicance.

3. RESULTS

This research was conducted on 170 college students in 3 different universities in Vietnam, the number of female is triple the male students. The average age is 20.26.

3.1Smartphone using habit:

The majority of students use smartphone on everyday of the week, mostly at night (59.4%) and before bedtime (34.1%). The total avarage using time is 3 to 4 hours a day. Most students use smartphone from 6 – 11 to 11 – 20 times in a day (31.2% and 25.9%).More than half of the students in the survey use their smartphone first time in the morning within 5 minutes after waking up; what makes 35% student get up late. All of the students use their smartphone before sleep, while 15% student use smartphone for more than 1 hour before going to sleep, only 10% usually go to sleep late because of this. 15% students use their smartphone in 1 hour before going to sleep, most students (38%) use their smartphone in 6 to 30 minutes before sleep.
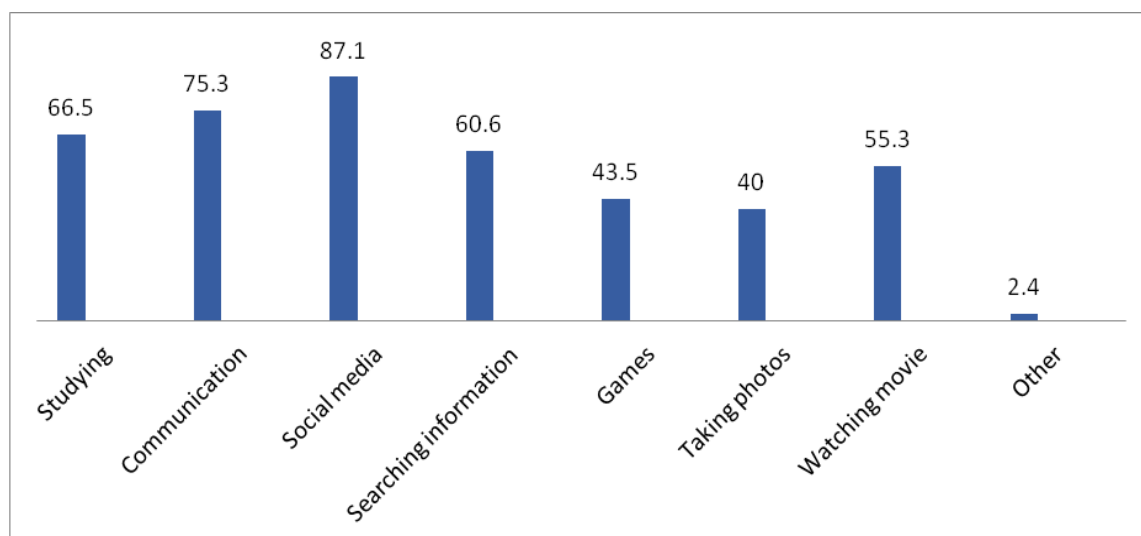

Chart 1: Smartphone using purposes in percentage

According to chart 1, social media is the most common use of smartphone, followed by means of communication (75.3%), study purpose (66.5%) and browsing information (60.6%). While female students prefer searching for news, photographing and watching online movies on smartphone, the majority of male students like to spend their time playing online games. Another supporting result is that most students usually get into contact with their peers (mostly through social media) and family (mostly through phone call) by their smartphone. (55.3% and 44.1% respectively).

All students reported using smartphone along with other activities (eating, studying, working…) and paralleled with other smart devices (laptop, PC, tablets); in which the percentage of students who use smartphone while studying is the highest (61.2%). This figure can refer to 80% students reported using smartphone during classes, event out of boredom and 55% of students usually open their smartphone only to check the time or notifications. 33.5% of the students said they have used smartphone while spending time with family and friends; coincidently 30% of the students also said they have used the smartphone to avoid contact with other people or not for any clear purpose. It is also notable that more than 10% of students reported using smartphone while driving. 61.2% students use smartphone while they study, 58.2% use their smartphone while eating and 33.5% uses smartphone while being with family, relatives and friends.

3.2 Smartphone addiction:

Table 1 : Smartphone Addiction Scale

Smartphone Addiction Scale	N (%)		
	Male	**Female**	**Sum**
Not addicted	5 (11,9%)	14 (10,9%)	19 (11,2%)
At risk of addiction	15 (35,7%)	70 (54,7%)	85 (50%)
Addicted	22 (52,4%)	44 (34,4%)	66 (38,8)

11.2% students were categorized as not addicted, 50% of students were predicted to be at risk of addiction and 38.8% were confirmed to be addicted to smartphone. The average SAS-SV score for male (31,81) with mostly male participants were addicted to smartphone is higher than the average SAS-SV score for female (30.86) with the majority of female students were in risk of addiction, there is no statistical differences between these two group (p = 0.188)

Table 2: The relation between SAS-SV score and some factors

Factors		N (%)	SAV – SV	P
Attitude while using smartphone	Inconvenient	10 (5,9)	28,6 ± 5,19	0,309
	Relaxing	160 (94,1)	31,25 ± 8,103	
	Disturbing	39 (22,9)	33,08 ± 7,648	0,077
	Connecting	131 (77,1)	30,5 ± 8,003	
	Annoying	9 (5,3)	35,67 ± 6,344	0,077
	Beneficial	161 (94,7)	30,84 ± 7,995	
	Costly	37 (21,8)	31,57 ± 9,269	0,684
	Reasonable price	133 (78,2)	30,96 ± 7,61	
Attitude towards using habit	Always have to have smartphone	37 (21,8)	37,27 ± 7,647	0,00*
	Willing to put away if concentration needed	63 (37,1)	30,67 ± 7,060	
	Willing to put away for hours	47 (27,6)	28,45 ± 6,887	
	Willing to put away for days	17 (10)	28,53 ± 8,479	
	Willing to put away entirely	6 (3,5)	25,50 ± 5,822	
Attitude towards addiction issue	I think I am addicted	34 (20)	38,21 ± 6,089	0,00*
	I think I am not addicted	95 (55,9)	27,43 ± 6,898	
	I don't know	41 (24,1)	33,68 ± 6,676	
Attitude towards effect on social life	I think smartphone has positive effect on social life	87 (51,2)	30,71 ± 7,744	0,810
	I think smartphone has negative effect on social life	44 (25,9)	31,39 ± 7,381	
	I don't know	39 (22,9)	31,62 ± 9,207	
Attitude towards effect on direct communication	I think smartphone has positive effect on direct communication	43 (25,3)	31,3 ± 8,331	0,919
	I think smartphone has negative effect on social life	89 (52,4)	31,19 ± 7,882	
	I don't know	38 (22,4)	30,63 ± 7,978	
Attitude towards effect on study result	I completely disagree that smartphone affects study result	15 (8,8)	27,8 ± 7,618	0,00*
	I disagree that smartphone affects study result	91 (53,5)	29,03 ± 7,051	
	I do not know whether that smartphone affects study result	46 (27,1)	34,89 ± 7,640	
	I agree that smartphone affects study result	16 (9,4)	35,81 ± 8,432	
	I completely agree that smartphone affects study result	2 (1,2)	24,5 ± 10,607	

Stastically significance (p<0,05)

Students who use their smartphone to watch online movies have the highest SAS-SV score (32.92 points), followed by other purposes such as taking/editing pictures, playing games and browsing information. The following variables were significant predictors of smartphone addiction: means of communication, social media, information browsing, photo editing/taking, movies watching (p=0.05)

114 out of 170 students (67.1%) said they do not need to have their smartphone with them at all time, there is significant statistical differences between the average SAS-SV score of students who agreed with the statement above and the average SAS-SV score of students who did not (p = 0.00). However, there are 21.8% students saying they always have to use smartphone and 37.1% could only staying away from smartphone at highly focused time. In sum, the higher the demand for smartphone availability gets associated with the higher SAS-SV score gets (p = 0.00). The majority of students have positive views towards smartphone such as "comfortable", "connecting", "helpful" and "reasonable price"

55.9% students indicated themselves not addicted to smartphone, 20% indicated themselves as addicted and 24.1% said they did not know. Students who rated themselves as addicted scored significantly higher than other groups; a slight difference was observed among these groups' SAS-SV score (p < 0.05)

An overwhelming 53.5% of respondents believed smartphone negatively affects study, and only 1.2% did not. Only 7% of respondents neither agreed nor disagreed. More than half students agreed that smartphone inflicted damage on face-to-face communication but 51% saw smartphone as a helpful part in social life.

Students who experienced such symptoms in SAS-SV scored higher than ones who did not, and a significant difference was observed between SAS-SV scores of these groups. The most prevalent symptoms are "cyberspace oriented" (60.6%) and "daily life disturbance" (55.3%).

4. DISCUSSION

According to the research, the majority of students use their smartphone at night and before bedtime, this figure is similar to the research in Vietnam, 2014 on smartphone using behavior (using time from 6pm-10pm everyday) [8] and the US 2016 research (using time from 2pm-10pm everyday) [9]. This can be explained that apart from studying/working daytime, evening and bedtime are the only suitable time for students to update news or entertain. Using time from 3 to 4 hours a day is also have similarity with research on Spanish, Swiss and Canadian (average time using is 3.5 hours a day) [10] [11] [12].

The number of students reported using smartphone within 5 minutes after waking up is higher than the figure in Haug S.'s research in 2015 [12]. This result can be explained by the feeling "fear of missing out" making user constantly checking their smartphone right after waking up for new notifications from applications or social network. Moreover, all students in the research reported checking their smartphone before going to sleep, this result can also be found in Sakari Lemonla's 2015 research on US adolescences [13]. The long smartphone using time before sleep was explained by Sakari (2015) that smartphone is designed with news and notifications that always attract people extend their engagement.

Only 10% students usually stay up late because of smartphone, which is not similar to the figure in researchs of Sakari L. et al., [13] and Shigekazu H. et al., [14] showing close relation between smartphone using and late sleep time.

According to the result, social networking is the most common purpose of smartphone. This result can also be found in 2 research in 2015 in US [15] and Switzerland [12]. In addition, Kwon M. et al., stated in his research in 2013 that adolescences regular use social media on smartphone for multiple aims at once: communication (free call and messenger) and gaming. Smartphone is also very easy to access internet and update news everywhere, everytime, a function that attract users to use it more often [6].

The differences between male and female's preferent purpose of using smartphone in the research can be explained by characteristic, needs and interest between two sexes in S. Lard (2012) and Osman M.A. (2012) research [16].

For most students using smartphone without any real purpose such as avoid boredom, contact with others…, Pew Research Center in 2015 also had a similar results and stated this is a prove for an arising engagement between notifications on smartphone and unhealthy smartphone using pattern [15].

Results showed that 55.3% students using smartphone to contact their friends and 44.1% contact their family by this device. These figure are similar to the research conducted on students at Elon University (2015). The author of the research stated that this was the prove for effect of smartphone on quality and quanity of direct, face-to-face contact [17].

The smartphone addiction result in this research shows great differences with similar research (using SAS-SV tool) in Spain, Belgium [10]; Switzerland [12] and Germany [20].

This research also showed similarity to Switzerland's 2015 research [12] on relation of SAS-SV scores between different purposes of using smartphone such as for social media, looking up information, watching online movie and taking pictures.

The relation of SAS-SV score between the group indicated themselves as addicted with the other group that don't or don't know is also similar to Kwon M. (2013)'s research [6]; which he concluded the realization of self-addiction problem state the higher the SAS-SV scores.

5. CONCLUSION AND RECOMMENDATION

5.1 Conclusion:

In conclusion, the present study showed the relationship and correlation between some certain purposes of smartphone (social media, communication, watching movies, taking/editing photos), self-assessed level of smartphone addiction, the demand of smartphone availability with the level and risk of smartphone addiction, especially when the most prevalent symptoms are "cyberspace oriented" and "daily life disturbance". Besides, student's time management is not organized appropriately as they usually use smartphone right after wake up, long time before go to sleep, along with other activities and even with no purpose

5.2 Recommendation:

All these activities are suggested to be deeply affected students' life style and probably lead to smartphone addiction if not adjusted correctly and soon. In general, although students knew about the benefits of smartphone, many are able to realize the significant drawback on face to face communication and study result, but still struggle to find the balance in daily life usage of smartphone. Future studies should extend this knowledge in order to draw clearer conclusions regarding this ever-increasing behavior with appropriate interventions.

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