



SMARTPHONE OVERUSAGE AMONG MEDICAL STUDENTS-A CROSS SECTIONAL STUDY

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ABSTRACT

The over usage of smart phone has become an epidemic affecting the physical, mental, and social well-being of an individual. A cross sectional study was done to analyze the dependency of smart phone by using SAS-SV English version with a three point scale. With their consent, 186 medical students (94 females & 92 males) participated in the study and the results were scrutinized. It was observed that 78.4% of students "sometimes" missed their planned work due to smart phone use. Greater than half of the students replied that they "never" – had pain in the wrists or felt impatient when not using mobile or given up mobile when the daily life is interrupted or unable to stand without cell phone or thinking of smart phone when not in use. This is a positive sign. As high as 21.5% students reported that "often" they constantly check mobiles not to miss others conversation. Gender wise variation shows 79.7% females and 77.1% males for marked "sometimes" for missing their planned work due to smart phone use. Considering greater than 50% answers for the option "never", girls marked only four questions but boys reported six questions. 11.9% boys answered that they "often" think of smart phone when not in use but none of the girls chose this option. It can be concluded that more than half of the students were affected in their social well being by the excessive use of smart phone. Boys were more prone to excessive use of mobile when compared to girls. The analysis was discussed with the study group and advised to use the smart phone in a controlled manner to get rid of the adverse effects in future.

KEYWORDS : Gender variation, Medical students, Overuse, SAS-SV English version, Smart phone.

INTRODUCTION

Smart phone activity grab a major part of everyday routine of the present generation particularly the adolescent group. New technologies evolving day by day present the whole world before the eyes just by a tap on the screen. Students form the target group of this emerging epidemic of so-called smart phone addiction. They became so dependant that they fail to realize that smart phone addiction is actually a very real problem. Despite recognized safety concerns and legal regulations, some donot refrain from using the mobile which may be called as "addiction like behaviour"⁽¹⁾. Studies show the positive correlation between excessive smart phone use and conditions like impulsivity⁽²⁾, anxiety, depression^(3,4), loneliness, shyness⁽⁵⁾ etc. Apart from the deleterious effects on physical and mental health, excessive smart phone use adversely affects the social well being of the individual also. It may lead to "nomophobia" which means no mobile phobia that is the fear of being out of mobile phone contact⁽⁶⁾. Concentration, commitment, sincerity and hard work are the keywords to achieve success in any field. A medical student should cultivate these in double fold to master the noblest profession. The commitment and focus of the medical student should not be disturbed by the gadgets especially the smart phone. This study was done to assess the use of smart phone by medical students.

MATERIALS & METHODS

200 medical students were selected to conduct the study. They were explained about the deleterious effects of excessive smart phone use. The purpose of conducting the study was briefed. The students were given the printed forms of SAS-SV English version⁽⁷⁾ containing ten questions on a three point scale. The SAS-SV English version was a valid questionnaire⁽⁸⁾ which can be used for study purpose. Out of 200 students, 186 took part in the study. After obtaining an informed consent, they were asked to fill the questionnaire with an appropriate answer. The results were tabulated and represented graphically. Percentages were also calculated. Responses were also evaluated for the gender variation.

RESULTS

The following results were obtained from the study. Gender variations in the responses given were also collected.

Table 1: Responses given for each question

S No	Question	Never	Sometimes	Often
1.	Missing planned work due to smart phone use	16	146	24
2.	Having hard time concentrating in class, while doing assignments, or while working	40	119	27
3.	Feeling pain in wrists or back of neck	97	75	14
4.	Won't be able to stand not having a smart phone	130	50	6
5.	Feeling impatient and fretful when I am not holding my smart phone	125	51	10
6.	Having my smart phone in my mind even when I am not using it	109	66	11
7.	I will never give up using my smart phone even when my daily life is already greatly affected by it	100	75	11
8.	Constantly checking the mobile not to miss others conversations on twitter, facebook etc.,	53	93	40
9.	I use my mobile longer than I had intended	51	102	33
10.	People around me tell I use mobile a lot	85	84	17

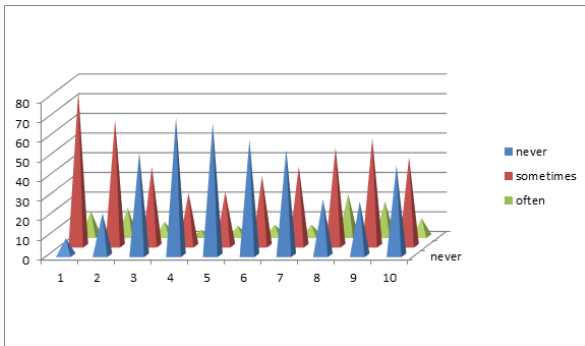
Table 2: Gender wise variation in the responses given by the students

Q no.	Option	Female students	Male students
1.	Never	4	12
	Sometimes	75	71
	Often	15	9
2.	Never	31	9
	Sometimes	49	70
	Often	14	13
3.	Never	43	54
	Sometimes	45	30
	Often	6	8
4.	Never	75	55

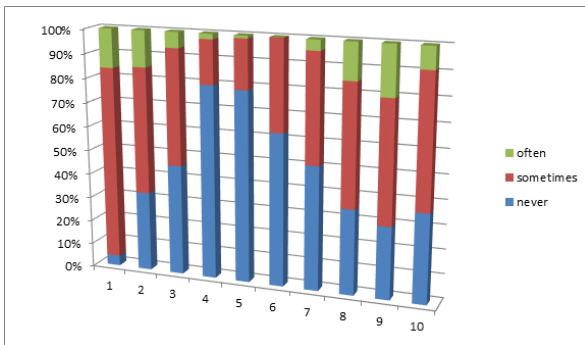
	Sometimes	17	33
	Often	2	4
5.	Never	74	51
	Sometimes	19	32
6.	Often	1	9
	Never	59	50
	Sometimes	35	31
7.	Often	0	11
	Never	48	52
	Sometimes	42	33
8.	Often	4	7
	Never	33	20
	Sometimes	47	46
9.	Often	14	26
	Never	28	23
	Sometimes	47	55
10.	Often	19	14
	Never	37	48
	Sometimes	49	35
	Often	8	9

Percentages were calculated and illustrated graphically as follows:

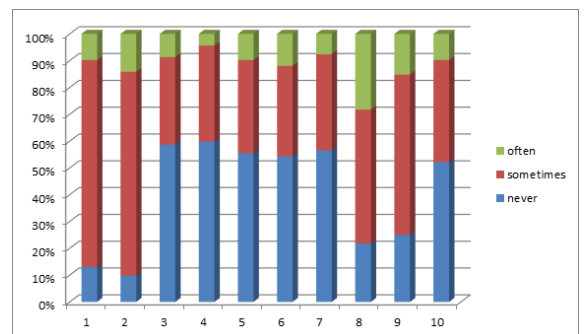
Graph 1: Compound bar chart showing the percentage of responses given by the students



Graph 2: % of female students answering the questions



Graph 3: % of male students who gave their responses



DISCUSSION

Smart phones have become an essential part of human life of the present era. New trends usually begin with adolescents where smartphone use is not an exception. Smart phone usage is a double edged sword which has more of disadvantages when used in excess. Studies show the excessive use of smart phone leads to dependency- the darker side of smart phone trend^[9]. Over use of mobiles adversely affect physical, mental and social well being of the individual. An analysis^[10] projected the excessive use of smart phone as a growing public health issue and demands public health solutions. Students, in particular form the target group to follow the evolving trends. A survey^[11] shows how students use and abuse cell phones and perform text messaging in the classroom, depicting the extent of distraction and academic dishonesty. Depression, one of the common side effects of mobile phone over usage was highlighted in a study and explains that face-to-face communication can solve the problem^[12]. The present study was conducted to assess the use of smart phone use by the medical students. It was also analyzed to see for the gender variation in the response obtained. Some studies depict the gender variation^[13,14] in using the smart phones. Excessive use of smart phone should be treated as a serious health problem due to its multiple damages it does to the individual- both short term and long term.

CONCLUSION

A considerable percentage of the responses from the medical students from the study depicts that they use the smart phone in excess definitely affecting their social well being, though the physical and mental well being remain unaffected at this stage. Boy students were more addicted when compared to girls. The results were discussed with the study group and advised to refrain from using the smart phone in excess.

REFERENCES

1. Takao M, Takahashi S, Kitamura M (2009) Addictive personality and problematic mobile phone use. *Cyber Psychology & Behavior* 12(5): 501–507.
2. Billieux J, Van der Linden M, d’Acromont M, Ceschi G, Zermatten A (2007) Does impulsivity relate to perceived dependence on and actual use of the mobile phone? *Applied Cognitive Psychology* 21(4): 527–537.
3. Matar Boumosleh J, Jaalouk D (2017) Depression, anxiety, and smartphone addiction in university students- A cross sectional study. *PLoS ONE* 12(8): e0182239. <https://doi.org/10.1371/journal.pone.0182239>
4. Lee J, Cho B, Kim Y, Noh J. Smartphone addiction in university students and its implication for learning. In: Chen G et al., editors. *Emerging Issues in Smart Learning, Lecture Notes in Educational Technology*. Berlin: Springer-Verlag; 2015. p. 297–305.
5. Bian M, Leung L. Linking Loneliness, Shyness, Smartphone Addiction Symptoms, and Patterns of Smartphone Use to Social Capital. *Soc Sci Comput Rev*. 2015; 33(1): p. 61–79.
6. Dixit S, Shukla H, Bhagwat A, Bindal A, Goyal A, Zaidi AK, et al. A study to evaluate mobile phone dependence among students of a medical college and associated hospital of central India. *Indian J Community Med*. 2010;35:339–41.
7. Kwon M, Kim D-J, Cho H, Yang S (2013) The Smartphone Addiction Scale: Development and Validation of a Short Version for Adolescents. *PLoS ONE* 8(12): e83558. <https://doi.org/10.1371/journal.pone.0083558>
8. Lin Y, Chang L, Lee Y, Tseng H, Kuo T, Chen S. Development and validation of the Smartphone Addiction Inventory (SPAII). *PLoS One*. 2014 Jun 4; 9(6): p. e98312. [pmid:24896252](https://doi.org/10.1371/journal.pone.0102452)
9. Lee, Y., Chang, C., Lin, Y., & Cheng, Z. (2014). The dark side of smartphone usage: Psychological traits, compulsive behavior and technostress. *Computers in Human Behavior*, 31, 373-383.
10. Ding D, Li J (2017) Smartphone Overuse – A Growing Public Health Issue. *J Psychother* 7:289. [doi:10.4172/2161-0487.1000289](https://doi.org/10.4172/2161-0487.1000289)
11. Tindell, D. R., & Bohlander, R. W. (2012). The use and abuse of cell phones and text messaging in the classroom: A survey of college students. *College Teaching*, 60, 1-9.
12. Bisen S, Deshpande Y (2016). An Analytical Study of Smartphone Addiction among Engineering Students: A Gender Differences, *International Journal of Indian Psychology*, Volume 4, Issue 1, No. 81, ISSN:2348-5396 (e), ISSN:2349-3429 (p), [DIP:18.01.128/20160401](https://doi.org/10.1186/20160401), ISBN:978-1-365-59365-9
13. Baifeng Chen. Gender differences in factors associated with smartphone addiction: a cross-sectional study among medical college students. *Chen et al. BMC Psychiatry* (2017) 17:341 [DOI10.1186/s12888-017-1503-z](https://doi.org/10.1186/s12888-017-1503-z)
14. Kim J, Seo M, David P. Alleviating depression only to become problematic mobile phone users: can face-to-face communication be the antidote? *Comput Hum Behav*. 2015;51(PA):440–447. [doi:10.1016/j.chb.2015.05.030](https://doi.org/10.1016/j.chb.2015.05.030). [Cross Ref]