

Assessment of Smart Phone Usage among Colleges Students at Al-Anbar University

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Abstract

Smart phone usage has been identified as one of the devices that negatively affect college students. The smartphone in college students affects both individual and organizational performance as well as health care. A descriptive study was conducted among college students at the University of Anbar to evaluate smartphone use. A non-probability sample (random) consisting of 2500 students from the faculties of the University of Anbar. Regarding students use a smartphone the results majority of students use a smartphone (97.8%).The majority of the study participants use the smartphone for a period of 3-4 hours during the day (53%). The results showed a statistically significant relationship between the use of smart phones among college students with regard to age, gender, marital status, phone use and income at (p -value ≤ 0.05).Motivational and educational programs (Poster, brochure and video) about smart phone usage, working on educational campaigns involving college students and civil society organizations to identify the problems of increasing the use of the smartphone.

Keywords: Smart Phone Usage, University of Anbar, Student.

1. Introduction

Cell phones are communication devices that were first introduced by Motorola in 1973 and have been commercially available since 1984 (Parasuraman S. et al., 2017). The harmful effects of smartphone use can lead to addiction problems (Ibrahim N. et al., 2018). The late investigation of mobile phone use and quality of rest has increasingly focused on the behavioral aspects of mobile phone use and less on openness to high-frequency electromagnetic fields: It was taken into account that "dangerous" mobile phone use (slavery) can influence rest time, quality of rest and can lead to rest

problems (De -Sola Gutierrez et al., 2016; Thomee, 2018).

The cell phone and now Personal Digital Assistant (PDA)] has become an integral part of young people's lives. The device is an essential central point for two-way correspondence (calls, messages, e-mails, etc.), online interpersonal interaction, entertainment, questions about social data and information relevant to the daily attitude to life. In this way, student the PDA during logically present it as cannot survive without (Pew Research, 2014). However study has created the recognition of various negative outcomes related to the extravagant and constant use of PDA. Negative results include poor school homework (Dietz and Henrich, 2014).

Advances in smartphone manufacturing and examples of difficulties overcome in a short space of time a decade ago, and this innovation has mainly driven the company (Boulos, et al. 2011). Smartphone data is overdue. Either way, over a billion people on earth use one of these devices (Alex Spektor 2012). An integral part of the cellphone space is the effective adoption of business and long distance messaging such as text, video, or other interactive media. Though alternatives to enjoy the many advantages of applications after downloading them from the Play Store or component pages for smartphones. For some, the smartphone has become an alternative to the computer. For others, it has become a powerful instrument of enjoyment, joy, and fun (Attamimi 2011). The change in previous developments is rapid. In addition, students are more likely to develop a habit in smartphone technologies (Smith, Rainie, and Zickuhr 2011). The advent of smartphones on the Internet and the exaggeration of video games are related to poor academic performance (Weaver et al. 2013).

Cell phones, especially smart phone usage, have been used gradually in developed and rural countries for a long time (Lian, You, Huang & Yang, 2016). Young people quickly connect to phones, seek proximity to cell phones, and find partition problems (Konok, Gigler, Bereczky & _Ad_am Mikl_osi, 2016). The majority Student become addicted to cell phone, especially young student (Yen et al., 2009).

2. Methodology

Design of the study:

A descriptive cross-sectional design study among college students at the University of Anbar, Iraq, to assess smart phone usage among university students. To find out the relationship between smartphone use and demographic factors

Ethical consideration:

Ethical approval has been granted from the Scientific Research Ethical Committee at the College of Nursing University of Baghdad prior to the initial conduct of the original study.

Sample and Setting of the study:

The study was conducted on college students at the University of Anbar (seventeen colleges), Iraq. A non-probability sample (purposive) consisting of 2500 students from different faculties at the university.

Instrument construction:

The questionnaire was developed by the researcher for this study primarily to assess smartphone use among college students at the University of Anbar

- 1- Smartphone Addiction Scale in Arabic - Short Version Scale (Sfendla et al. 2018).
- 2- Demographic data: This section contains details about the social and demographic characteristics of the sample (gender, age, smartphone use, marital status).

Data collection:

The data was collected using an electronic reporting tool as Google form. The form was distributed across the study groups by the deans of the faculties and each student's academic email was used in the data collection method. Most of the students (2,500) agreed to participate when they were informed of the objectives of this study and belong to 17 colleges. This will take 5-10 minutes if the process of collecting data was completed from February 2021 to March 2021.

Statistical Data Analysis:

The statistical analysis of the data of the study is done by using Microsoft office excel 2010 and SPSS package ver. 20, Descriptive Statistical Tests (Frequency, Percentage, Mean of Score and Standard Deviation). Inferential Statistical Tests (Cronbach Alpha (α) and Chi-square test).

3. Discussion of the Results

Discussing the socio-demographic characteristics of the study sample (Table: 1):

Study showed that the majority of the students were female (66.76%). The Kwon & Wu., (2020) showed that a high proportion of women (65.3%) and in this study (Kwon et al., 2020) a high proportion of women (62.9%) were present. and (Huang et al., 2019) the study showed that the high

percentage of women (86.8%). The percentage of women is the highest because of the majority of Anbar University's female students.

Study showed that the group included more than the age of the students Mean Score 21.85, and that was a percentage (65.48%). Ibrahim and et al (2018) agreement with study in mean score was (21.60± 2); Sahin and et al (2013) mean score for they study was 20.83 ± 1.90 .The high percentages of ages between (20-29 years old) is due to the age period of university studies.

The study sample showed that the majority of students are not married (85.08%); these results are supported by Lima and et al (2019) which showed that the highest proportion (95.2%) of students is unmarried. University students in Iraq are completely dependent on the family for financial matters, and they are not independent and not eligible for marriage during their undergraduate studies.

Regarding students use a smartphone the results majority of (97.8%) students use a smartphone .This findings studies done by Zhang and Wu (2020) was percentage99.3%; Ozkaya et al., (2020)were uses smart phone for high percentage 100%;Wang and et al., (2019) this presenting of 94.9% .The reason for the increase in smart phone users among university students is aware of the large number of applications that can be used in the field of communication, study and research, as well as in and education during the closing period of universities due to the spread of the Corona virus.

Discussing related to the smart phone use among the students :(Table :2)

Smartphone use among students show that the majority of study participants changed their smartphones within a period of less than a year at a rate of (35%). Ghosh and et al (2021) discovered in a study conducted among students of the College of Nursing in India that the majority of Students own the phone for a period of between one year and one year and a half, at a rate of (76.92%). speed of development in smart phones and an increase in applications made it an attractive need for many college students, which led to an increase in the possession of modern phones in one year or less.

Smartphone use among students showed that the majority of the study participants use the smartphone for a period of 3-4 hours during the day (53%). Our study agrees with Huang and et al (2020) where he conducted a study on Chinese college students and it were found that most students use smartphones during the day at a lower rate with 5 hours per day,and Ibrahim and et al (2018) were found in Medical Students at King Abdulaziz University, Jeddah, Saudi Arabia which present 73.4% used it >5 h/day and Mobile applications have become video games, music, and the Internet, which made its users last longer than.

Discussing of the Smart phone usage levels among students (Table: 3)

Smart phone usage levels among students showed that the majority of study participants use a smartphone with a (1-4 hrs) of use, with a percentage of (58.6%). Kwon and et al (2020) they said in a study conducted on college students in Korea that the majority of students use the smartphone in general, which is the least used in the classification, and the percentage of respondents was (88,44%). Nowreen and Ahad (2018) agreed with our study in a study conducted on medical student college, Srinagar, Jammu and Kashmir, India, and the majority of students use smartphones with a low level of usage (65.5%).

Discussion of the association between smart phone usage and students' Socio-demographic data (Table: 4)

The results showed a statistically significant relationship between the use of smart phones among college students with regard to age, gender, marital status and phone use at ($p\text{-value} \leq 0.05$). Rohini and et al (2021) said in a study of him in India that supports the results of our study, but that there is no relationship between smartphone use and gender.

In a similar study, Zhai and et al (2019) showed on Chinese college students there was a strong relationship between smartphone use, age, gender, stress level and sleep quality, and these results are also supported by Ibrahim and et al (2018) study regarding age, gender, and financial problems. There was a clear relationship between medical students in King Abdulaziz University in Jeddah, Saudi Arabia. The researcher believes that there are some studies that do not have a relationship between smartphone use and sex. This is due to the difference in peoples' cultures and customs.

Conclusion

The study sample was be two third from female, most then age group 20-29 years, with a mean age of (21.85) years. More than three quarters are single and they use a smartphone (97.8%) of the students. They study shown there are statically significant relationship between students age and gender show smartphone use, and stage of study smartphone use and students.

Recommendations

Motivational and educational programs (Poster, brochure and video) about misuse smart phone usage and Schedules for e-learning lechers of morning to reduce smartphone use in night, Provide counseling services to promotion psychological support students to prevent smartphone addiction among students.

Table (1): Distribution the Socio-demographic data of the study sample (n=2500)

No	Socio-demographic data	Groups	F.	%
1	Gender	Male	831	33.24
		Female	1669	66.76
Total			2500	100
2	Age/ year Mean Score=21.85 SD=2.637	less than 20	832	33.28
		20-29	1637	65.48
		30 and above	31	1.24
Total			2500	100
3	Marital status	Single	2127	85.08
		Married	362	14.48
		Divorced	11	0.44
Total			2500	100
4	Smart Phone Use	Yes	2445	97.8
		No	55	2.2
Total			2500	100

f: Frequency, %: Percentage, M: Mean Score, SD: Standard deviation

Table (2): Distribution of studied group according Information related to Use smart phone (n=2500)

No	Information related to Use smartphone	Groups	F.	%
1	Replace your smartphone every/ Month Mean score=12.76 SD=16.228	less than 1year	883	35
		1-2year	677	27
		2-3year	657	26
		More than 3 year	283	12
Total			2500	100
2	Smartphone use during the day / Hours	No use	55	2.2
		1-2	651	26
		3-4	1336	53
		More than 4	458	18.2
Total			2500	100

Table (3) Distribution Smart phone usage levels among students (n=2500).

No	Smart phone usage levels	Frequency	Percent	Mean Score	SD
1	Non user (0 hrs)	432	17.3	20.47	3.997
2	Using with1-4 hrs	1466	58.6		
3	More than 5	602	24.1		
	<i>Total</i>	<i>2500</i>	<i>100</i>		

Non user =10-16, lower=17-23, High user =24-30

Table (4) Determining the relationship between smart phone usage and Socio-demographic data

		smart phone usage						Chi-Square			
		No user		low user		High user		Value	df	P. Value	Sig
		F	%	F	%	F	%				
Gender	Male	107	4.28	508	20.32	216	8.64	16.973 ^a	2	0.001	H.S
	Female	325	13	958	38.32	386	15.44				
	Total	432	17.28	1466	58.64	602	24.08				
Age	20 and less	180	7.2	462	18.48	190	7.6	20.157 ^a	4	.001	H.S
	20-29	247	9.88	981	39.24	409	16.36				
	30 and more	5	0.2	23	0.92	3	0.12				
	Total	432	17.28	1466	58.64	602	24.08				
Marital status	Single	370	14.8	1227	49.08	530	21.2	11.431 ^a	4	0.02	S
	Marred	60	2.4	233	9.32	69	2.76				
	Divorce	2	0.08	6	0.24	3	0.12				
	Total	432	17.28	1466	58.64	602	24.08				
using phone	Yes	419	16.76	1435	57.4	591	23.64	7.144 ^a	2	.028	S
	No	13	0.52	31	1.24	11	0.44				
	Total	432	17.28	1466	58.64	602	24.08				

Df: degree of freedom, sig: significant, S: significant ,H.S: high-significant

Reference

1. Ibrahim, N. K., Baharoon, B. S., Banjar, W. F., Jar, A. A., Ashor, R. M., Aman, A. A., & Al-Ahmadi, J. R. (2018). Mobile phone addiction and its relationship to sleep quality and academic achievement of medical students at King Abdulaziz University, Jeddah, Saudi Arabia. *Journal of research in health sciences*, 18(3), e00420.
2. Thomée, S. (2018). Mobile phone use and mental health. A review of the research that takes a psychological perspective on exposure. *International journal of environmental research and public health*, 15(12), 2692.
3. Park, W. K. (2005). Mobile phone addiction. In *Mobile communications* (pp. 253-272). Springer, London.
4. APA. *Diagnostic and statistical manual of mental disorders (DSM-5®)*: American Psychiatric Pub; 2013.
5. Subramani Parasuraman, A. T. S., Yee, S. W. K., Chuon, B. L. C., & Ren, L. Y. (2017). Smartphone usage and increased risk of mobile phone addiction: A concurrent study. *International journal of pharmaceutical investigation*, 7(3), 125.
6. Dietz, S., & Henrich, C. (2014). Texting as a distraction to learning in college students. *Computers in Human behavior*, 36, 163-167.
7. Boulos, M. N. K., Wheeler, S., Tavares, C., & Jones, R. (2011). How smartphones are changing the face of mobile and participatory healthcare: an overview, with example from eCAALYX. *Biomedical engineering online*, 10(1), 1-14.
8. Spektor, A. (2012). Family Romances in *The Noise of Time: Mandelstam's Autobiography as an Allegory for Literary Activity*. *The Russian Review*, 71(1), 79-99.
9. Attamimi, A. (2011). The reasons for the prevalence of BlackBerry cellphones and the resulting educational effects from the perspective of secondary school students in Abo-Dhabi. In A paper presented at the conference on the negative effects of cellphones on secondary school students, UAE (pp. 105e130) (In Arabic).
10. Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011). *Teens, Kindness and Cruelty on Social Network Sites: How American Teens Navigate the New World of "Digital Citizenship"*. Pew Internet & American Life Project.

11. Lian, L., You, X., Huang, J., & Yang, R. (2016). Who overuses smartphones? Roles of virtues and parenting style in smartphone addiction among Chinese college students. *Computers in Human Behavior*, 65, 92–99..
12. Konok, V., Gigler, D., Bereczky, B. M., & Ádám Miklósi. (2016). Humans' attachment to their mobile phones and its relationship with interpersonal attachment style. *Computers in Human Behavior*, 61, 537–547
13. Yen, C. F., Tang, T. C., Yen, J. Y., Lin, H. C., Huang, C. F., & Liu, S. C., et al. (2009). Symptoms of problematic cellular phone use, functional impairment and its association with depression among adolescents in southern taiwan. *Journal of Adolescence*, 32(4), 863–873.
14. Weaver, R. M. (2013). *Ideas Have Consequences: Expanded Edition*. University of Chicago Press.
15. Sfindla, A., Laita, M., Nejjar, B., Souirti, Z., Touhami, A. A. O., & Senhaji, M. (2018). Reliability of the Arabic smartphone addiction scale and smartphone addiction scale-short version in two different Moroccan samples. *Cyberpsychology, Behavior, and Social Networking*, 21(5), 325-332.
16. Sahin, S., Ozdemir, K., Unsal, A., & Temiz, N. (2013). Evaluation of mobile phone addiction level and sleep quality in university students. *Pakistan journal of medical sciences*, 29(4), 913.
17. Zhang, M. X., & Wu, A. M. (2020). Effects of smartphone addiction on sleep quality among Chinese university students: The mediating role of self-regulation and bedtime procrastination. *Addictive Behaviors*, 111, 106552.
18. Zhai, X., Ye, M., Wang, C., Gu, Q., Huang, T., Wang, K., ... & Fan, X. (2020). Associations among physical activity and smartphone use with perceived stress and sleep quality of Chinese college students. *Mental Health and Physical Activity*, 18, 100323.
19. Ghosh, T., Sarkar, D., Sarkar, K., Dalai, C. K., & Ghosal, A. (2021). A study on smartphone addiction and its effects on sleep quality among nursing students in a municipality town of West Bengal. *Journal of Family Medicine and Primary Care*, 10(1), 378.
20. Stanković, M., Nešić, M., Čičević, S., & Shi, Z. (2021). Association of smartphone use with depression, anxiety, stress, sleep quality, and internet addiction. Empirical evidence from a smartphone application. *Personality and Individual Differences*, 168, 110342.
21. Ibrahim, N. K., Baharoon, B. S., Banjar, W. F., Jar, A. A., Ashor, R. M., Aman, A. A., & Al-Ahmadi, J. R. (2018). Mobile phone addiction and its relationship to sleep quality and academic achievement of medical students at King Abdulaziz University, Jeddah, Saudi Arabia. *Journal of research in health sciences*, 18(3), e00420.

22.Rohini, T., & Gopal, C. R. (2021). Effects of Excessive Smartphone Usage on Emotional Regulation and Sleep Quality among Young Adults. *Annals of the Romanian Society for Cell Biology*, 3682-3688.