

Smartphone Addiction among Nursing College Students in Kirkuk University

إدمان الهواتف الذكية بين طلبة كلية التمريض جامعة كركوك

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الخلاصة

خلفية البحث: أصبحت الهواتف الذكية اليوم مثل ظل الشخص لا يستطيع الكثير منا التخلي عن استعماله أو تقليله على الرغم من الوعي بالآثار الجانبية المترتبة عليه.

الهدف: معرفة العلاقة بين إدمان الهواتف الذكية بين طلاب التمريض في كركوك وبين المتغيرات الأخرى للعينة الدراسية.

المنهجية: تم إجراء دراسة كمية – وصفية على طلاب المرحلة الجامعية في كلية التمريض بجامعة كركوك من جميع المراحل الدراسية الأربع ، وذلك خلال الفترة من (10 مارس 2017 حتى 1 أبريل 2018). لقياس متغيرات الدراسة الحالية، وقد تم أخذ العينات العنقودية (العينات الاحتمالية) لتحديد 204 طالب وطالبة. استخدم في هذه الدراسة استبيان لقياس الإدمان على الهواتف الذكية. تم تحليل البيانات من خلال الحزمة الإحصائية للعلوم الاجتماعية (SPSS) الإصدار 22 وشمل التحليل الوصفي (التكرارات والنسب المئوية) والإجراءات الاستنتاجية (الاختبار - تي و تحليل التباين الأحادي). **النتائج:** باستخدام اختبار تي أظهرت النتائج وجود فروق ذات دلالة معنوية إحصائية بين الجنس ونوع الدراسة في مقارنة مع إدمان الهواتف الذكية بالقيمة $p = (0.007)$ و $p = (0.001)$ بالتعاقب، وعلاقة غير معنوية إحصائية مع وجود مرض مزمن عند قيمة $p = (0.49)$. ومن ناحية أخرى ، وباستخدام تحليل التباين الأحادي أظهرت النتيجة أن العمر ذو دلالة إحصائية معنوية بالمقارنة مع إدمان الهواتف الذكية. اقرار الذاتي لإدمان الهواتف الذكية ذو دلالة إحصائية قوية بالمقارنة مع إدمان الهواتف الذكية. من ناحية أخرى، لا توجد دلالة إحصائية معنوية بالنسبة لحالة الاجتماعية وسنوات الدراسة والحالة الاقتصادية.

الاستنتاج: استنتجت الدراسة الحالية أن إدمان الهواتف الذكية في الطلاب الذكور كان أعلى مقارنة مع الطالبات، وكان طلبة الدراسة الصباحية أقل إدماناً على الهاتف الذكية. بالإضافة الى ذلك ، عمر الطالب والقرار الذاتي عن إدمان الهواتف الذكية ذو دلالة إحصائية معنوية.

التوصيات: تخصيص الحلقات الدراسية والمناقشات حول إدمان الهواتف الذكية للطلاب في الجامعات. و القيام بدراسات أخرى حول إدمان الهواتف الذكية المرتبطة بالمشاكل الجسدية و النفسية.

ABSTRACT

Background: Today's smartphones have become like the shadow of life. Many of us cannot give up or reduce their use despite awareness of side effects of it.

Aim of the study: To find out relationship of smartphone addiction among Kirkuk nursing undergraduate students with variables underlining in the study.

Methods: Quantitative study (descriptive design) was implemented on undergraduate students in University Kirkuk College of nursing from all four years of study, during the period from (10 March 2017 up to 1 April 2018).

To measure the variables underlying the present study, cluster sampling (probability sampling) is executed to select 204 students. The Smartphone Addiction Scale questionnaire had used in this study. The Data was analyzed through Statistical Package for Social Sciences (SPSS) version 22 and the analysis included descriptive (Frequencies and Percentages) and inferential procedures (t- test and ANOVA).

Results: by using t- test the finding shows highly significant differences between gender and type of the study in compare with Smartphone addiction at p value $(=0.007)$ and $(=0.001)$ consequently, and non-significant relationship with having chronic disease at p value $(= 0.49)$. On the other hand by using ANOVA, the result find-out that the age was significant in comparing with Smartphone addiction and Self-report of Smartphone addiction was highly significant in comparing with Smartphone addiction. On the other hand, marital status, Years of Study and Economic Status were statistically nonsignificant.

Conclusion: The present study figured out that Smartphone addiction in male students was higher in compare with female students, and Morning students were less addictive on smartphone. Moreover, Smartphone addictions showed significant relationship with Student age's and Self-report of Smartphone addiction.

Recommendations: Customizing seminars or debates about Smartphone addiction for students in universities. And performing other studies on Smartphone addiction in associated with the physical and psychological problems.

Keywords: Smartphone, Addiction, College Students.

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INTRODUCTION

progress in smartphones manufacturing and success stories in last decade in short time, this technology has imposed significantly into society⁽¹⁾. Recent statistics about Smartphone, more than 1 billion people in the world are using at least one of these devices⁽²⁾. Smartphone vital advantage is easily access to wireless, and exchange message in the form of text, video or other multimedia. In addition to the options of using many applications services after downloading from a Play store or from a Smartphone product sites. For some people the Smartphone has become as a substitute for computer. While for others, it has become an effective appliance of fun, amusement and entertainment⁽³⁾. Adaptation on Aforementioned technologies become in a very rapid way. Further to that University students are More likely to develop addiction on smartphone technologies⁽⁴⁾. Smartphone access to the Internet and over playing of videogame associated with poor academic performance⁽⁵⁾.

Halley Pontes and Mark Griffiths in 2000 they defined these type of addiction operationally "non-chemical (behavioral) addictions involving human-machine interactions, can be regarded as a sub-set of behavioral addictions^(6,7). Currently, developed an argument about that using smartphone has less advantages in comparing with disadvantages. While the way of using this technology determine the pros and cons of it used exclusively by adolescents⁽³⁾.

METHODOLOGY

Quantitative study (Descriptive design) was implemented on undergraduate students in University Kirkuk College of nursing from all four years of study, during the period from (10 March 2017 up to 1 April 2018) to find out the relationship of the Smartphone addiction among Kirkuk nursing undergraduate students with variables underlining in the study. Verbal consent was taken from participant students.

Sampling: Cluster sampling (probability) was executed to select sample from 1094 total number of students. A 240 printed copy of questionnaire distributed on students and only 204 were responded, that are from all the academic years of study by selecting eight groups of the study two groups for each stage one for morning time and another for night time students. The data collected during the period 21th of January 2018 up to 18th February 2018.

To measure the variables underlying present study, a questionnaire was used, that consisted of two parts: first part was developed by researchers "Socio-demographic characteristics" was consisted of 8 items (Gender, age, Marital Status, Years of study, Type of the study, have chronic disease, Economic status, and Self- report of addiction). Second part of the questionnaire was consisted of 33 items and six Likert scale was used to answer the items. The instrument adopted from standard questionnaire Smartphone Addiction Scale (SAS) after taking permission from the author of the instrument⁽⁸⁾. The sensitivity value of the instrument was 0.875. The data was collected through self-report method technique after translation of all the items into Arabic language. The Data was analyzed through Statistical Package for Social Sciences (SPSS) version 22 and the analysis included descriptive (Frequencies and Percentages) and inferential procedures (t- test and ANOVA).

RESULTS:

Table (1): Socio-demographic characteristics of study sample (students).

		Frequency	Percentage
Gender	Male	83	40.7
	Female	121	59.3
	Total	204	100.0
Age group	18-19 Years	56	27.5
	20-21 Years	79	38.7
	22-23 Years	46	22.5
	24 Years and more	23	11.3
	Total	204	100.0
	Mean/ S.D.	21.31/ $\pm$ 3.484	
Marital Status	Single	183	89.7
	Married	21	10.3
	Total	204	100.0
Years of study	First	61	29.9
	Second	46	22.5
	Third	47	23.0
	Fourth	50	24.5
	Total	204	100.0
Type of the study	Morning time	101	49.5
	Night time	103	50.5
	Total	204	100.0
Do you have any chronic disease	Yes	11	5.4
	No	193	94.6
	Total	204	100.0
Economic status	Insufficient	11	5.4
	Barely sufficient	49	24.0
	Sufficient	144	70.6
	Total	204	100.0
Self-report of smartphone addiction	Strongly disagree	25	12.3
	Disagree	49	24.0
	Unsure	49	24.0
	Agree	61	29.9
	Strongly agree	20	9.8
	Total	204	100.0

The table 1 shows that 59.3% of sample was female and the greatest percentages of the sample present among 20-21 years old which accounts (38.7%) with Mean and SD (21.31/ $\pm$

3.484). Concerning to the Marital Status 89.7% of the sample was single. The fourth variable was years of study shows that 29.9% of respondents from first year of the study while lowest respondents from 2nd year of study by 22.5%. The same table reveals that about fifty percent for each Morning time and night time respondents. Regarding to the having diseases 5.4% of the study samples were had chronic disease. Finally, 29.9% agree in when asking them about Self-report of addiction.

Table (2): Relation between Students' smartphone addiction and their Gender, type of the study, having chronic disease

Smartphone addiction Variable		N	Mean	SD	t-test	p value	Significances
Gender	Male	83	3.529	.903	.53	.007	H.S.
	Female	121	3.190	.850			
Type of the study	Morning time	101	3.114	.902	.35	.001	H.S.
	Night time	103	3.537	.821			
Having chronic disease	Yes	11	3.082	1.189	0.23	.49	NS
	No	193	3.342	.868			

Comparative Significance CS: Highly significant (HS) at <0.01 , Significant (S) at $p < 0.05$, Not significant (NS) at $p \geq 0.05$

An Independent sample t-test used to examine the relation between students' Smartphone addiction and gender, Type of the study, having chronic disease.

The results revealed highly significant differences for first and second variable in the table which were student's gender and type of the study in comparing with Smartphone addiction at p value ($=.007$) and ($=.001$) in sequence, and non-significant relationship with having chronic disease at p value ($=.49$).

Table (3): ANOVA to Compare Students' Smartphone addiction and their (Age, Marital status, Years of Study, primary use of phone, Economic Status, Self-report of addiction)

Smartphone addiction Variables	F	Sig.	CS
Age	1.805	.033	S
Marital status	2.435	.120	NS
Years of Study	2.435	.120	NS
Economic Status	1.625	.199	NS
Self-report of addiction	16.492	.000	HS

Comparative Significance CS: Highly significant (HS) at <0.01 , Significant (S) at $p < 0.05$, Not significant (NS) at $p \geq 0.05$

The results indicate that age is significant in comparing with Smartphone addiction and Self-report of are highly significant in comparing with Smartphone addiction. On the other hand, marital status, years of study and economic Status are statistically non-significant.

DISCUSSION

The result of the study sample shows that 59.3% of the samples were female which is a reflection of the plan drawn by the Iraqi Ministry of Health and WHO in the year 2003 "Strategy and Action Plan for the Development of Nursing and Midwifery in Iraq Education Improve nursing and midwifery care in Iraq" for morning time study⁽⁹⁾. The findings show more than one third of students aged between (20-21) years old. The addiction to Smartphone is high likelihood to cause physical and psychosocial problems⁽¹⁰⁾. Regarding to the economic status about two out three of the students were reported having sufficient economic status. This result is in line with a survey done on youth aged (15-29) years in Iraq, in which Kirkuk was ranked among the top five best economic conditions of those governorates⁽¹¹⁾.

Concerning on the inferential data analysis shows that significant differences between Smartphone addictions in Students with the Gender, Male students had higher mean score at 3.529. This result incompatible with the results of Billieux, Linden, & Rochat⁽¹²⁾; Aljomaa et al,⁽¹³⁾. Their studies revealed that females are more dependent on the smartphone than males. This finding may be due to deference's in the cultures, another cause of deference's may be from current sample of the study included night time and morning-time students while other studies don't have this character. Students of night-time study had higher mean score than morning-time students regarding to smartphone and the distribution of the gender 75% of morning-time students are female and another 25% female and exactly on the contrary for night-time students only quarter of the students are female.

Independent sample t-test was used to find out the relationship between types of the study and Smartphone addiction that revealed highly significant differences. The mean score for night time was 3.537, while the mean = 3.114 for morning time students this goes with the study conducted in the southwest Germany which indicated that the tendency toward night is related to a higher problematic smartphone usage in addition to that night students had higher The Smartphone Addiction Proneness Scale (SAPS) scores than other morning students do⁽¹⁴⁾⁽¹⁵⁾.

The third and last variable in the table 2 shows non-significant relationship between Smartphone Addiction with having chronic disease. That may be related to the small number of the students who having chronic diseases (5.4%).

By using ANOVA in comparing Smartphone addiction with the age, the results was indicated significant at p value = .033 that goes with the result of the studies conducted by Kwon et al. at (2015) at p value = .001⁽¹⁶⁾ and Duke et al. (2017) $p < 0.01$ ⁽¹⁴⁾

Self-report of samples were highly significant in comparing with Smartphone addiction at p value = .000. This result agrees with finding of the study done by Duke et al. (2017)⁽¹⁴⁾. This means score reveal that students are realizing there is overusing of Smartphone. While marital status, years of study and Economic Status were statistically nonsignificant.

For marital status our finding goes with result conducted at university students King Saud University (KSU) College of medicine⁽¹⁷⁾. On the other hand, the relationship between years of study and Smartphone addiction incongruent with last mentioned study result. They found p value = .054. for same variable study carried on Lebanese 688 undergraduate students from Notre Dame

University the p value was = .000. That result may be due to Iraqi students basically using smartphone more than average that the rate of using of Smartphone in American (64%) whilst in Iraq is higher than (79%) ⁽¹⁸⁾.

There are non-significant differences between economic status and Smartphone addiction in this study, are similar to finding of studies about Smartphone addiction were applied for similar purposes ^{(13),(19)&(20)}. Finally, Self-report of addiction on Smartphone of students had statistically highly significant relationship with Smartphone addiction, which mean the participant students with smartphone overuse had right estimation for their range of addiction. Work-related and non-work- related productivity may be negatively affected from Smartphone use and one's could perceive the negative effect of spending a lot of time on the smartphone ⁽¹⁴⁾. Markowetz, (2015) carried out a study shows that users every 18 min checking their smartphon⁽²¹⁾. In addition to other research indicate that large portion users of smartphone doing a check of their devices in the last five minutes before sleeping and the first five minutes after waking ⁽²²⁾.

CONCLUSIONS

In conclusion, the present study found out that the Smartphone addiction in Male students was higher in comparing with female students and Morning students less addicted on Smartphone. Furthermore Smartphone addiction shows significant relationship with Student age's and Self-report of Smartphone addiction.

RECOMMENDATIONS:

1. Customizing seminars or debates about Smartphone addiction for students in universities.
2. Performing other studies on Smartphone addiction in associated with the physical and psychological problems.

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