

Table (5). regression coefficient of health symptoms on some variables.

Overall Health Symptoms Scale			
Variables	<u>B</u>	<u>Beta</u>	<u>t. Value</u>
Addiction Scale	.735	.380	11.37***
Social Isolation Scale	1.18	.277	8.27***
Adjusted R Square		.272	F=37.89***
Multiple R		.279	
Somatic Symptoms Scale			
Variables	<u>B</u>	<u>Beta</u>	<u>t. Value</u>
Addiction Scale	-.361	-.361	10.14***
Social Isolation Scale	-.473	-.216	-6.05*
Adjusted R Square		.212	F=26.49***
Multiple R		.220	
Psychological Symptoms Scale			
Variables	<u>B</u>	<u>Beta</u>	<u>t. Value</u>
Addiction Scale	-.411	-.393	11.72***
Social Isolation Scale	-.663	-.295	-8.74***
Years using smartphone	.003	.058	1.78*
Adjusted R Square		.297	F=41.22***
Multiple R		.305	

* $P < 0.05$; *** $P < 0.001$

Table (4). Differences between genders for the Addiction, Overall Health, Somatic Symptoms, and Psychological Symptoms Scales

Gender	SPAS		
	M	SD	t
Male	40.11	9.56	-.010
Female	40.41	10.37	
Gender	Overall Health Symptoms Scale		
	M	SD	t
Male	70.55	19.00	-2.49*
Female	73.22	19.35	
Gender	Somatic Symptoms Scale		
	M	SD	t
Male	23.24	10.13	-2.31*
Female	24.56	9.93	
Gender	Psychological Symptoms Scale		
	M	SD	t
Male	22.94	9.98	-2.21*
Female	24.22	10.24	

* $P < 0.05$

Follow Table (2) .

	Health Issues	Degree and strength of association
	<u>Somatic Health Symptoms:</u>	
1	Visual impairment.	.188**
2	Backache.	.330**
3	Pain in the neck.	.302**
4	Curvature in the neck.	.314**
5	Feeling dizzy.	.262**
6	Tingling in the hand.	.252**
7	Pain in the joints of the hand.	.282**
8	Double vision.	.222**
9	Idleness.	.360**
10	Hearing problems.	.244**
	<u>Psychological Health Symptoms:</u>	
1	Mental stress.	.348**
2	Lack of focus.	.397**
3	Impact on my mental health.	.330**
4	Low degree of memory.	.349**
5	Pee reflex.	.087**
6	Insomnia.	.280**
7	Difficulty sleeping.	.324**
8	Emotion.	.346**
9	Anger.	.336**
10	Social isolation.	.458**

** $P < 0.01$

Table (3). The degree and strength of relationships between degree of using social media on a smartphone and mobile addiction and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales

Degree of using social media in smartphone	Mobile addiction	Overall Health Scale	Somatic Symptoms Scale	Psychological Symptoms Scale
Degree of using twitter on smartphone	.174**	.086**	.088**	.086**
Degree of using Facebook on smartphone	.017	.025	.003	.026
Degree of using WhatsApp on smartphone	.308**	.158**	.163**	.139**
Degree of using YouTube on smartphone	.212**	.125**	.109**	.138**
Degree of using Snapchat on smartphone	.307**	.182**	.174**	.169**
Degree of using Instagram on smartphone	.173**	.095**	.110**	.082**

** $P < 0.01$

Table (1) Mean (M), standard deviation (SD), and rank of somatic and psychological health symptoms.

	Health Issues	M	SD	Rank
	<u>Somatic Health Symptoms:</u>			
1	Visual impairment.	2.46	1.45	5
2	Backache.	2.43	1.44	6
3	Pain in the neck.	2.73	1.52	2
4	Curvature in the neck.	2.24	1.48	9
5	Feeling dizzy.	2.53	1.53	4
6	Tingling in the hand.	2.63	1.54	3
7	Pain in the joints of the hand.	2.31	1.47	8
8	Double vision.	2.35	1.46	7
9	Idleness.	2.95	1.60	1
10	Hearing problems.	1.63	1.12	10
	<u>Psychological Health Symptoms:</u>			
1	Mental stress.	2.86	1.58	1
2	Lack of focus.	2.82	1.55	2
3	Impact on my mental health.	2.36	1.54	7
4	Low degree of memory.	2.57	1.56	4
5	Pee reflex.	1.07	.443	10
6	Insomnia.	2.47	1.54	5
7	Difficulty sleeping.	2.74	1.56	3
8	Emotion.	2.32	1.49	8
9	Anger.	2.40	1.55	6
10	Social isolation.	2.25	1.46	9

Table (2). The degree and strength of the relationship between mobile addiction and health

	Health Issues	Degree and strength of association
	<u>Health Scales:</u>	
	Overall Health Scale	.461**
	Somatic Health Symptoms	.409**
	Psychological Health Symptoms	.479**

- **Darcin, A., Kose, S., Noyan, C., Nurmedov, S., Yılmaz, O., Dilbaz, N.** (2016). Smartphone addiction and its relationship with social anxiety and loneliness. *Behav Inf Technol.*; 35(7): 520-525.
- **Dean, D.** (1961) Alienation: Its meaning and measurement. *American Sociological Review* 26, 753-758.
- **Demirci, K., Akgonul, M., Akpınar, A.** (2015). Relationship of smartphone use severity with sleep quality, depression, and anxiety in university students. *J Behav Addict.*; 4(2): 85-92.
- **Deursen, A. J., Bolle, C. L., Hegnerd, S.M., & Kommers, P. M.** (2015). Modeling habitual and addictive smartphone behavior: the role of smartphone usage types, emotional intelligences, social stress, self-regulation, age, and gender. *Computers in Human Behavior*, 45, 411-420.
- **Ezoe, S., Toda, M., Yoshimura, K., et al** (2009). Relationships of personality and lifestyle with mobile phone dependence among female nursing students. *Soc Behav Pers Int J*, 37:231–238.
- **Frank, S., Dahler, L., Santurri, L.E., Knight, K.** (2010). Hyper-texting and hyper-networking: a new health risk for teens? Conference presentation from the American Public Health Association's Annual Meeting and Expo. [<http://case.edu/medicus/breakingnews/scottfrankhypertextingandteenrisks.html>]
- **Hassanzadeh, R., Rezaei, A.** (2011). Effect of sex, course and age on SMS addiction in students. *Middle-East Journal of Scientific Research*; 10(5): 619-5.
- **Jenaro, C., Flores, N., Gómez-Vela, M., et al.,** (2007). Problematic internet and cellphone use: Psychological, behavioral, and health correlates. *Addic Res & Theory*, 15:309–320.
- **Keefer, L. A., Landau, M. J., Rothschild, Z. K., and Sullivan, D.** (2012). Attachment to objects as compensation for close others' perceived unreliability. *Journal of Experimental Social Psychology*, 48, 912-917.
- **Khan, M.M.** (2008). Adverse effects of excessive mobile phone use. *Int J Occup Med Environ Health.*; 21(4):289-93.
- **Kim, D., Lee, Y., Lee, J., Nam, J., Chung, Y.** (2014). Development of Korean Smartphone addiction proneness scale for youth. *PLoS One*. 21; 9(5): e97920
- **Kim, M., Kim, H., Kim, K., Ju, S., Choi, J., Yu, M.** (2015). Smartphone Addiction: (Focused Depression, Aggression and Impulsion) among College Students. *Indian J Sci Technol.*; 8(25). <https://doi.org/10.17485/ijst/2015/v8i25/80215>
- **Kirkpatrick, L. A.,** (2005). *Attachment, evolution, and the psychology of religion*. New York: Guilford Press.
- **Kwon, M., Lee, J., Won, W., Park, J., Min, J., Hahn, C., et al.** (2013). Development and validation of a smartphone addiction scale (SAS). *PLoS One.*; 8(2): p. e56936.
- **Lemola, S., Perkinson-Gloor, N., Brand, S., Dewald-Kaufmann, J., Grob, A.** (2015). Adolescents' electronic media use at night, sleep disturbance, and depressive symptoms in the smartphone age. *J Youth Adolesc.*; 44(2): 405-418.
- **Lin, Y., Chang, L., Lee, Y., Tseng, H., Kuo, T., Chen, S.** (2014). Development and validation of the Smartphone Addiction Inventory (SPAI). *PLoS One*. Jun 4; 9(6): p. e98312.
- **Matar Boumosleh, J., Jaalouk, D.** (2017) Depression, anxiety, and smartphone addiction in university students- A cross sectional study. *PLoS ONE* 12(8): e0182239.
- **Meo, S.A., & Al-Drees, A.M.** (2005). Mobile phone related-hazards and subjective hearing and vision symptoms in the Saudi population. *Int J Occup Med Environ Health.*; 18(1):53-7.
- **Mild, K.H., Hardell, L., Carlberg, M.** (2007). Pooled analysis of two Swedish case-control studies on the use of mobile and cordless telephones and the risk of brain tumors diagnosed during 1997-2003. *Int J Occup Saf Ergon*; 13(1): 63-71.
- **Palfrey, J. & Gasser, U.** (2008). *Born Digital: Understanding the First Generation of Digital Natives*. New York (NY): Basic Books.
- **Rholes, W. S., & Simpson, J. A.** (2004). Attachment theory: basic concepts and contemporary questions. In Rholes, W. S., & Simpson, J. A. (Eds.), *Adult attachment: theory, research, and clinical implications* (3-14). New York, NY: The Guilford Press.
- **Rosenberg, D.E., Norman, G.J., Wagner, N., et al.** (2010). Reliability and validity of the Sedentary Behavior Questionnaire (SBQ) for adults. *J Phys Act Health*, 7:697–705.
- **Szyjkowska, A., Bortkiewicz, A., Szymczak, W., Makowiec-Dabrowska, T.** (2005). Subjective symptoms related to mobile phone use--a pilot study. *Pol Merkur Lekarski*, 19(112):529-32.
- **Takao, M., Takahashi, S., Kitamura, M.** (2009). Addictive personality and problematic mobile phone use. *CyberPsych & Beh*, 12:501–507.
- **Yuan-Sheng, Y., Ju-Yu, Y., Chih-Hung, K., et al.** (2010). The association between problematic cellular phone use and risky behaviors and low self-esteem among Taiwanese adolescents. *BMC Pub Health*, 10:217–224.
- **Zhao, T.Y., Zou, S.P., Knapp, P.E.** (2007). Exposure to cell phone radiation up-regulates apoptosis genes in primary cultures of neurons and astrocytes. *Neurosci Lett*; 412(1): 34-8.

wellbeing, as well as will cost governments high expenditures for providing physical therapy sessions, auditory and vision assessments, aid devices, and psycho-social therapists.

Furthermore, the current findings show significant associations between the obsessive use of smartphones for social media (twitter, WhatsApp, YouTube, Snapchat, and Instagram) and respondents' developing psycho-somatic symptoms due to the misuse of these devices. These findings are similar to previous studies' (Kwon et al., 2013; Babadi-Akashe et al., 2014) findings on the excessive use of smartphone devices for entertainment and social media rather than for making phone calls. This expansion of smartphone usage to an essential source of entertainment, education, and business marketing contributes to the obsessive and long duration use of smartphones, which consequently leads to the compulsive psych-somatic health impairment symptoms that the current study found. The current study also found gender differences in the negative impacts of excessive smartphone use on respondents' health and psycho-somatic symptoms. Females reported higher symptoms than did male respondents. This gender difference may be due to the longer duration of smartphone use among females. Also, females prefer to use social media for communication, product advertisements, cooking and makeup lessons, and following celebrities.

Finally, the current findings illustrate the influential negative impacts of smartphone misuse on the Kuwaiti respondents' social lives and daily interpersonal relationships with their families and friends. These findings are consistent with other studies' (Kim et al., 2013; Kwon et al., 2013; Lin et al., 2014) findings that there is a significant association between obsessive smartphone use and developing smartphone addiction symptoms, such as withdrawal, loneliness, tolerance, and social isolation. The presence of social withdrawal and isolation among university students highlights the urgent need to minimize the significant impact of smartphone misuse by encouraging other means of communication based on face-to-face interaction. Also, there is a need educational programs and lectures given by social workers and psychological therapy to clarify the mental health dysfunctions caused by smartphone misuse. According to the attachment theory, the current study findings demonstrates the negative impact of the excessive use of smartphones on Kuwaitis' youth somatic and psychological wellbeing that caused in long run development of several ill health symptoms. These outcomes can be explained according to the attachment theory, as smartphone users developed an internal working model and attachment style with their device due to the multitasks these object that are offering to the users. Gradually throughout users lifespan, an attachment to the smartphone itself and utility of smartphone will be developed progressively and will play a significant impact on the users' behavior patterns. Moreover, according to this theory, smartphone attachment styles might vary among users due the facilities and features these objects successfully meet users' mental and emotional needs, since these device became an essential object in the users, and became the ultimate means of multiple modes of communication in their life (Rholes & Simpson, 2004).

Conclusion:

The present study revealed how technology has become an essential part of university student' daily lives. Alongside communicating, individuals use smartphones for several functions, exceeding their original purpose. The current study demonstrates how the excessive use of smartphones negatively affects students' psychosomatic health, resulting in ill health symptoms that may influence their future interpersonal relationships, academic achievements, and job performance. Further longitudinal research is required to examine the prolonged effects of smartphone-related compulsive symptoms on youth's quality of life, cognitive and psychological health wellbeing, and physiological performance.

References:

- **Al-Kandari, Y. & Al-Qashan, H.** (2001). Relationship between using internet and social isolation among Kuwait University students (*In Arabic*). *Journal of Humanities and Social Sciences*, 17(1): 1-45.
- **Al-Kandari, Y.; Al-Sejari, M.; Al-Aslawi, H. & Al-Balool, D.** (2016). *Using social media and its importance and it relationship with some social variables: A study on youth sample from Kuwait society. (In Arabic). Annals of the Arts and Social Sciences*, 441: (36).
- **Al-Kandari, Yagoub** (2012). The effect of Internet use on teens and youth in Kuwaiti society. *Preston Journal of Social Sciences*, 3(1): 1-16.
- **Al-Khlaiwi, T., & Meo, S.A.** (2004). Association of mobile phone radiation with fatigue, headache, dizziness, tension and sleep disturbance in Saudi population. *Saudi Med J*. Jun; 25(6):732-6.
- **Al-Qahs, Kh. & Al-Kandari, Y.** (2015). *The information importance of using twitter: A study on faculty members sample in Kuwait. The Arab Journal of Humanities*, 132(33): 135-178.
- **Babadi-Akashe, Z., Zamani, B.E., Abedini, Y., Akbari, H., Hedayati, N.** (2014). The Relationship between Mental Health and Addiction to Mobile Phones among University Students of Shahrekord, Iran. *Addict Health*; 6(3-4): 93-9.
- **Balci, M., Devrim, E., Durak, I.** (2007). Effects of mobile phones on oxidant/antioxidant balance in cornea and lens of rats. *Curr Eye Res*; 32(1): 21-5.
- **Beranuy, M., Oberst, U., Carbonell, X., Chamarro, A** (2009). Problematic internet and mobile phone use and clinical symptoms in college students: The role of emotional intelligence. *Comput Hum Behav*, 25:1182–1187.
- **Bowlby, J.** (1982). Attachment and loss: Vol. 1 Attachment (2nd ed.). New York: Basic Books.
- **Cazzulino, F., Burke, R.V., Muller, V., Arbogast, H., Upperman, J.S.,** (2014). Cell phones and young drivers: a systematic review regarding the association between psychological factors and prevention. *Traffic Inj. Prev.* 15, 234–242.

Table (3) shows significant relationships between the degree of using social media (twitter, WhatsApp, YouTube, Snapchat, and Instagram) on a smartphone and mobile addiction and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales. The more use of these social media, the worse overall health and somatic and psychological symptoms among respondents. No significant relationships were found for the degree of using Facebook on a smartphone and mobile addiction and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales.

Table (4) shows differences between genders for addiction and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales.

The data show no significant differences between males and females on the addiction scale. However, the data show significant differences between males and females on overall health, somatic and psychological symptoms scales. Females have higher mean than male in overall health, somatic and psychological symptoms.

To predict the effect of some variables (age, economic status, addiction scale, social isolation, year using smartphone, and age at first using smartphone) on the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales. A multivariate regression model was used. Table (5) illustrates the results of the multivariate regression test. The regression analysis indicates that only addiction and social isolation were significantly associated with the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales. Years using a smartphone was also a predictive variable for psychological symptoms. Smartphone addiction is associated with the overall health symptoms, somatic and psychological symptoms. The more using smartphone, the more of having somatic and psychological symptoms. Moreover, the more using smartphone, the more of being socially isolated and reported health symptoms.

Discussion :

The current study findings reveal a negative impact of smartphone addiction on respondents' psycho-somatic health conditions, many young Kuwaiti reported a high prevalence of somatic symptoms such as being physically inactive, feeling pain in neck, sensing numbness in hands, and occasionally feeling dizzy. These study findings are comparable to those of Al-Khlaiwi and Meo (2004) and Meo and Al-Drees (2005). This study found a high prevalence of somatic symptoms among Saudi university students due to excessive use of smartphones. These unhealthy consequences of smartphone-related compulsive somatic symptoms at a younger age reflect the misuse of smartphones among youth, which correspondingly will impact their daily life behaviour to be more sedentary, less physically active, and have a lower rate of cardiorespiratory fitness, as Lepp et al. (2013) identified among U.S. college students.

Moreover, the current study illustrates that young Kuwaiti also report psychological health symptoms as a detrimental outcome of misusing smartphones, such as mental stress, impaired concentration, difficulty sleeping,

and low memory. These findings are comparable to other studies (Szyjkowska et al., 2005; Khan, 2008; Boumosleh & Jaalouk, 2017) that demonstrated a significant association between obsessive use of smartphones and negative psychological health symptoms. The majority of the Kuwaiti respondents in the current study reported experiencing daytime dysfunction and feeling stressful and tense in their daily life activities, such as when driving or when socializing with their family and friends. These findings illustrate the hazardous effects of obsessive smartphone use on users' mental and psychological health and wellbeing, which correspondingly will affect their present and future socially, academically, and in their careers.

In addition, the current study findings match Boumosleh and Jaalouk's (2017) study of Lebanese university students that showed that students who use smartphones late at night complained of difficulty sleeping and deterioration in sleep quality. The current study also has similarities to Khan's (2008) findings among Saudi University students, who also reported a low degree of memory due to prolonged use of smartphones. These findings show the significant impact of smartphone use on users' behaviours, including daytime activity, sleeping habits, cognitive behaviours, interpersonal relationships, and academic performance. The negative health consequences of using smartphones on individuals' daily behaviours indicate that misusing of this device can cause negative integrated associations between sleeping disturbance, physical idleness, lack of memory, and difficulty concentrating. These previous health hazards of the prolonged use of smartphones illustrates the negative impacts of smartphone misuse on quality of life, interpersonal relationships, and physical and mental health and wellbeing. Biotechnology, psychology, and social work experts should provide health educational orientations and workshops about the optimal use of smartphones and risk factors for users' mental, physical, and cognitive wellbeing to university students. Elder individuals should encourage traditional social networking, such as visiting and face-to-face relationships, to minimize the long duration use of smartphones as a means of communication.

Furthermore, the current study showed mutual relationships between smartphone addiction and respondents' somatic and psychological ill health symptoms, such as visual impairment, hearing problems, feeling dizzy, backache, insomnia, anger, and social isolation. These reported smartphone obsessive use risk factors among Kuwaiti respondents resemble previous studies (Balci et al., 2007; Mild et al., 2007; Zhao et al., 2007) that demonstrated significant associations between the duration of using smartphones and developing smartphone-related compulsive behaviour symptoms. These findings highlight the negative effects of obsessive use and misuse of smartphones on respondents' biological functions and how these devices negatively affect the olfactory and optical systems. These findings reveal that the use of smartphones exceeds their original purpose as a means of communication; they have become an essential part of individuals' daily lives, alongside their need for food, drink, and sleep. The unhealthy attachment of smartphone users for their devices will eventually impact their

among young people. The overall scale contained fifteen sentences, to which the participants responded using a five-point scale: from strongly agree (5) to strongly disagree (1). Examples of these items: "I cannot give up my smartphone"; "The first thing I do when waking up is use a smartphone"; "Before bedtime I have to check my smartphone"; "My use of the smartphone takes a great amount of my daily time"; "Life is nothing without a smartphone."

Health Symptoms Scale (HSS): This scale contains two dimensions: Somatic Symptoms Scale (SSS) and Psychological Symptoms Scale (PSS). Each subscale contains 10 items. This scale was also developed by the researcher after reviewing the literature and other health scales. For the SSS, respondents were asked if they suffer from somatic symptoms because of their smartphones. The symptoms included visual impairment, backache, pain in the neck, curvature in the neck, feeling dizzy, tingling in the hand, pain in the joints of the hand, double vision, idleness, and hearing problems. For the PSS, respondents were asked if they suffer from some psychological symptoms. The symptoms included mental stress, lack of focus, impact on my mental health, low degree of memory, pee reflex, insomnia, difficulty sleeping, emotion, anger, and social isolation. In these two scales, participants responded using a five-point scale: from strongly suffering (5) to strongly did not suffer (1). Also, six faculty members from the College of Social Sciences reviewed the scales for content validity.

Degree of using Social media: This includes six items in one single self-rating scale of degree about using social media: twitter, WhatsApp, Facebook, YouTube, Snapchat, and Instagram, which are the most social media used by young people in Kuwait. The self-rating scale of social media elements were measured by the following question for each social media item: "What is the degree of your use of?" A seven-point scale was used. The respondents were asked to circle a number to describe their degree of using each item of social media. The lowest score (1) was "never use it at all," and the highest score (7) was "use it at a very high rate".

Social Isolation Scale (SIS): This consists of nine sentences. The scale developed by Dean (1969) was used for this study. It has also been used in another study in Kuwait of a different population (Al-Kandari & Al-Sejari, in press). A five-point scale from Strongly agree = (5) to Strongly disagree = (1) was used. The scale includes sentences like: "Sometimes I feel all alone in the world"; "I don't get invited out by friends as often as I'd really like"; "Most people today seldom feel lonely"; "Real friends are as easy as ever to find"; "One can always find friends if one shows himself to be friendly"; "The world in which we live is basically a friendly place".

The validity and reliability of these scales were examined. Six faculty members from the College of Social Sciences reviewed the scales to obtain content validity. For reliability, SPAS was shown to have high internal consistency overall (alpha coefficient of .88). The health scale and subscales were shown to have high internal consistency overall (alpha coefficient of .93 for the overall scale, .87 for SSS, and .88 for PSS). SIS was also shown to

have high internal consistency overall in this study (alpha coefficient of 0.82).

Statistical Procedures: SPSS (version 23) was used for data entry and analysis. Descriptive and inferential statistics were used. Mean, standard deviation, and ranking were used to describe somatic and psychological health symptoms. Pearson correlation was used to examine the relationship between smartphone addiction and health symptoms, as well as to examine the relationship between the degree of using social media on a smartphone and SPAS, HSS, SSS, and PSS. T-test was also used to examine the difference between males and females in SPAS, HSS, SSS, and PSS. For prediction purposes for some variables and HSS, SSS, and PSS, a multivariate regression model was used.

Results:

Descriptive statistics were run to show mean, standard deviation, and rank of somatic and psychological health symptoms among the sample. Table (1) shows this information.

For the somatic health symptoms, Table (1) shows that idleness, pain in the neck, tingling in the hand, and feeling dizzy (respectively) were the most-reported somatic symptoms respondents suffered from because of misusing smartphones. In contrast, mental stress, lack of focus, difficulty sleeping, and a low degree of memory (respectively) were the most-reported psychological health symptoms among the sample.

To examine the relationship between the mobile addiction scale and health issues (Overall Health Scale, Somatic Health Symptoms, Psychological Health Symptoms), Table (2) shows the degree and strength of this association.

Table (2) shows positive significant relationships between mobile addiction and all health scales (over health scale, somatic health symptoms, and psychological health symptoms). The more mobile addiction among respondents, the more somatic and psychological symptoms. Also, there are positive significant relationships between mobile addiction and all dimensions of somatic and psychological symptoms. The more mobile addiction among respondents, the more visual impairment, backache, pain in the neck, curvature in the neck, feeling dizzy, tingling in the hand, pain in the joints of the hand, double vision, idleness, and hearing problems. In addition, the more mobile addiction among respondents, the more feeling in mental stress, lack of focus, impact on my mental health, low degree of memory, pee reflex, insomnia, difficulty sleeping, emotion, anger and social isolation. The level of significance for these association was $P < 0.01$.

Table (3) shows these associations and degree and strength of relationships between the degree of using social media (twitter, Facebook, WhatsApp, YouTube, Snapchat, and Instagram) on a smartphone and mobile addiction and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales.

Instagram and, to a lesser extent, Facebook (Al-Kandari et al., 2016; Al-Qehas & Al-Kandari, 2016). Use of Snapchat is increasing. Most access social media with a smartphone rather than a personal computer or laptop (Al-Qehas & Al-Kandari, 2016).

Attachment theory:

According to attachment theory, individuals' relationships with others and themselves are developed and maintained through the life based on the mutual relationship between them and their mothers (Rholes & Simpson, 2004). Bowlby (1982) described the internal working models of this attachments based on the development needs of the infants attachment to his/her mother who starts in infancy stage to fulfill the need of survival. This attachment switches later to youth and adulthood to the need of emotional and intellectual stability status. This exclusive attachment behavior to the mother changed throughout Individuals' lifespan to includes further attachments to objects and figures such as family member, and device, and impacted relatively individuals' cognitive, health, and emotional behaviors. This is what some studies (Beranuy et al., 2009; Kirkpatrick, 2005; Deursen et al., 2015; Keefer et al., 2012) findings show. It was strong association between smartphone users' behavior and attachment to the smartphone and the utilization of the device. Kirkpatrick (2005) findings, for example, demonstrated that smartphone users with anxious attachment style, tend to find other objects or relationships to solve interior anxiety and fear, and to boost their sensation of identity and safety. This study adopt this theory.

Objectives of the Study:

The current study objectives are to find a relationship between smartphone addiction and health symptoms, both somatic and psychological. It also examined if there is any difference between males and females in these health symptoms. The current study aims to answer the following research questions:

Research Question 1: what are the most frequent somatic and psychological health symptoms that are associated with smartphone addiction?

Research Question 2: Is there a significant relationship between smartphone addiction and health symptoms?

Research Question 3: Is there a significant relationship between the mobile addiction scale and health issues (Overall Health Scale, Somatic Health Symptoms, Psychological Health Symptoms) among sample?

Research Question 4: Is there a significant differences between the degree of using social media (twitter, WhatsApp, YouTube, Snapchat, and Instagram) in smartphone and mobile addiction ?

Research Question 5: Are there significant relationship between the degree of using social media (twitter, WhatsApp, YouTube, Snapchat, and Instagram) in a smartphone and the Overall Health, Somatic Symptoms, and Psychological Symptoms Scales?

Research Question 6: Is there significant differences between gender (male/female) in addiction and the Overall

Health, Somatic Symptoms, and Psychological Symptoms Scales?

Study problem and Significance:

Some previous cross-cultural studies verified the significant association between frequency and duration of smartphone usage and the development of complaints and symptoms of ill health among users. Their findings illustrated that the excessive use of smartphones will impact negatively user's interpersonal relationships, cognitive behaviours, daytime activity, sleeping habits, and academic performance (Frank et al., 2010; Hassanzadeh & Rezaei, 2011; Cazzulino et al., 2014). However, as to the researcher knowledge, there is no study has been conducted among Kuwaiti that examine the relationship between the smartphone, with its many social and technological characteristics, and health issues. Thus the current study considered as a pioneer research that conducted among young Kuwaiti to detect the association between the misuse of smartphones and development of somatic and psychological health symptoms. The current study will help also the social and health policy makers to plan programs that aim to increase youth and parents' awareness of the risk factors of smartphone addiction.

Method:

Sample: A total of 1431 young Kuwaitis were selected by using a non-random opportunistic voluntary sample. All participants were Kuwaiti students aged 17 to 26 years old ($M = 22.15$; $SD = 2.55$). Participants came from Kuwait University (Male = 485; female = 946). This almost matches the distribution of male and female students at Kuwait University. Kuwait University, in general, well represents the whole population in Kuwait. It reflects all social and economic groups in Kuwait, since it is the only State University in Kuwait. The sample represents almost 3.9% of the whole population (36,704 students in 2018). The sample also well represents the six governorates in Kuwait (Capital = 19.7; Hawalli = 16.4; Ahmadi = 15.1; Farwaniyyah = 19.4; Jahra = 18.3; Mubarak Al-Kabeer = 11.2). This reflects the entire Kuwait population. Although of the large sample size, generalization of results to the entire Kuwaiti population should be made with caution. The data show a good indicator of the study's aim. All respondents involved in this study were volunteers who answered a questionnaire during 2017-2018. Note that the method of sample selection and some of the study tools and variables were used in a larger project.

Variables: A questionnaire was the major tool of this study. It included some demographic information: age, gender, governorates, and family economic status were obtained. Other variables related to using social media via smartphone were asked, such as: years using a smartphone and age of first using a smartphone. The self-rating scale of economic status was measured by the following question: "What is your family's economic status in general?" A ten-point scale was used from 1 to 10. The lowest score (1) was "very poor," and the highest score (10) was "very high". Some scales were used in this study. They were:

Smartphone Addiction Scale (SPAS): The researcher developed SPAS for this study. After reviewing some literature and internet and mobile usage addiction scales, items were developed related to the misuse of smartphones

Introduction:

Due to recent improvements in digital technology and mobile phone manufacturing, mobile phones are no longer used only for phone calls, as smartphone functions have extended to include many of the functions of a computer that is adjustable to individuals' daily essential tasks, such as online business, writing, presenting projects, recording live events, etc. (Rosenberg et al., 2010). The integration of the mobile phone within the daily lives of youth has become a cultural norm (Palfrey & Gasser, 2008). Several researchers (Beranuy et al., 2009; Takao et al., 2009; Kim et al., 2015; Demirci et al., 2015; Lemola et al., 2015; Darcin et al., 2016) have examined the associations between the frequency of smartphone usage, sedentary behaviors, and health comorbidity. Their findings reveal that the excessive use of smartphones might contribute to an addiction-like behavior called "problematic" smartphone use and cause health problems such as tension, headaches, fatigue, dizziness, sleep disturbance, impaired concentration, and memory and hearing problems.

Several other studies (Jenaro et al., 2007; Ezoë et al., 2009; Takao et al., 2009; Beranuy et al., 2009; Yuan-Sheng et al., 2010; Frank et al., 2010; Hassanzadeh & Rezaei, 2011) have revealed that problematic smartphone usage is associated with health hazards, such as texting while driving, contributing to injury and death (Cazzulino et al., 2014), types of psychopathology, low self-esteem, anxiety, and unhealthy lifestyle behaviors such as irregular sleep patterns, skipping meals, smoking, insomnia, and digestive problems. Several cross-sectional studies have investigated the health outcomes of excessive smartphone use and mobile addiction, such as Meo & Al-Drees' (2005) study that aimed to investigate the association between smartphone use and health problems among 873 Saudi individuals. They found an association between the duration of calls and hearing and vision complaints, with the most common hearing problems, reported by 34.59% of the participants, being a warm feeling in the ear and decreased hearing or aches in both ears. Vision problems due to high usage of mobile and/or blurred vision were reported by 5.04% of the participants. Al-Khlaiwi & Meo (2004) conducted a study among 437 of Saudi participants in King Saud University, Riyadh and found an association between long duration use of mobile phones and health risk factors. The main health hazards for excessive use of mobile phones that were reported by the participants were headache (21.6%), sleep disturbance (4%), tension (3.9%), fatigue (3%), and dizziness (2.4%). Khan (2008) aimed to detect the negative health impacts of excessive use of smartphone on 286 of Saudi Medical University students. In the study, an average daily smartphone use of less than 30 min was reported by more than half of the participants (55.94%), followed by more than one-fourth (27.97%) of the participants reporting between 30-60 min, 11.53% of the participants reporting between 60-90 min, and 4.54% of the participants reporting more than 90 min of average daily smartphone use. The main health risk factors of smartphone use that Khan found were memory disturbances (40.56%), hearing problems (38.8%), impaired concentration (34.27%), sensation of warmth behind/around the ear and within the auricle (28.32%), fatigue (24.48%), sleeplessness (23.07%), and facial dermatitis (16.7%). Matar Boumosleh

and Jaalouk's (2017) study of 688 of Lebanese university students demonstrated that 15.09 years old was the mean age of first use of smartphone, and almost half (49%) of the study sample reported an excessive use of smartphones at around 5 hours/weekday. The main smartphone-related compulsive behavior symptoms were sleep disturbance due to late-night smartphone use (38.1%), a decline in sleeping hours less than four hours (35.8%), and fatigue during daytime (35.9%). Moreover, the study revealed that smartphone addiction symptoms were significantly associated with students who first used smartphones at a younger age, had anxiety or depression signs, had a high frequency of use during weekdays, and primarily used it as an entertainment device, and not for calling others. Babadi-Akashé et al. (2014) studied 296 University students in Iran and showed that the main smartphone addiction behaviors were compulsive addiction (21.49%), routine activities (21.49%), depressive symptoms (17.30%), and obsessive disorder (14.20%).

Szyjowska et al. (2005) studied 140 Polish university students in Lodz, Central Poland and found a significant association between the frequency of mobile phone usage and the development of complaints and symptoms of ill health. The main risk factors that might be associated with using a smartphone were a thermal sensation behind and around the ear, headache, and impaired concentration. Lepp et al. (2013) studied U.S. college students and revealed a significant relationship between percent body fat and cardiorespiratory fitness and excessive use of smartphones. Their findings illustrate that college students who identified as high-frequency users of smartphones reported lower rates of cardiorespiratory fitness than did low-frequency users due to adaptation to a sedentary lifestyle. Kwon et al. (2013) studied 197 South Korean university students and company employees and showed that the main smartphone addictive symptoms were World Wide Web-oriented relationships, withdrawal and social isolation, unstable daily-life schedules, and overuse. Kim et al. (2013) studied 795 elementary to high school students in South Korea and found that the main smartphone addictive symptoms were tolerance, withdrawal, disruption of adaptive functions, and computer-generated life orientation. Comparable results were found in Lin et al.'s (2014) study of 283 university students in Taiwan, which detected smartphone-related addictive symptoms such as functional deficiency, withdrawal and tolerance, and obsessive behavior. Several researchers have detected negative impacts of excessive smartphone use on individuals' wellbeing due to smartphone radiation, such as headaches, visual and auditory impairment, brain tumors, isolation, and loneliness (Zhao et al., 2007; Balci et al., 2007; Mild et al., 2007).

In Kuwait, no studies have been conducted on the relationship between mobile phone addiction or misuse and user health. Most studies have concentrated on the effects of social media in general on social life. An earlier study concentrated on the misuse of the internet and its relationship with social isolation (Al-Kandari & Al-Qashan, 2002). Another concentrated on the differences between teens and youth on social isolation and depression (Al-Kandari, 2012). Concerning social media, it has been found that the most popular social media in Kuwait, especially among young people, are WhatsApp, twitter, YouTube,

إدمان الهواتف الذكية وعلاقتها بالأعراض الصحية عند الشباب في الكويت

يعقوب يوسف الكندري

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الكلمات المفتاحية: إدمان الهواتف الذكية، الصحة، تأثير التكنولوجيا على الصحة، الكويت.

ملخص البحث:

الأهداف: تهدف الدراسة الحالية إلى إيجاد علاقة بين إدمان الهواتف الذكية والأعراض الصحية، الجسدية والنفسية على السواء. كما تهدف الدراسة إلى الكشف عمّا إذا كان هناك أي فروق بين الذكور والإناث في هذه الأعراض الصحية.

المنهج: أُختير عدد ١٤٣١ شابًا كويتيًّا من الذكور والإناث تتراوح أعمارهم بين ١٧ و ٢٦ عامًا (م = ١٥, ٢٢؛ ع = ٥٥, ٢). وتعدُّ الاستبانة الأداة الرئيسة لهذه الدراسة. وقد استُخدمت أربعة مقاييس رئيسة في هذه الدراسة وهي: مقياس إدمان الهاتف الذكي، مقياس الأعراض الصحية، مقياس درجة استخدام وسائل التواصل الاجتماعي، ومقياس العزلة الاجتماعية، واختبار فروض الدراسة فقد استُخدم الإحصاء الوصفي والاستدلالي. النتائج: تكشف نتائج الدراسة الحالية عن التأثير السلبي لإدمان الهواتف الذكية على حدوث مجموعة من الحالات الصحية النفسية الجسدية للمستجيبين. كما أظهرت العلاقات المتبادلة بين إدمان الهواتف الذكية وأعراض الأمراض الجسدية والأعراض النفسية لأفراد العينة المبحوثة.

الخاتمة: أوضحت الدراسة الحالية بأنَّ الاستخدام المفرط للهواتف الذكية يؤثر سلبيًّا على الصحة النفسية الجسدية لأفراد العينة، مما يؤدي إلى أعراض صحية قد تؤثر على علاقاتهم الشخصية المستقبلية، والإنجازات الأكاديمية، والأداء الوظيفي.

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Smartphone addiction and its Relationship with Health Symptoms among Youth in Kuwait

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Keywords: Smartphone addiction, Health; Technology effect on Health, Kuwait.

Abstract: The current study aimed to find a relationship between smartphone addiction and health symptoms, both somatic and psychological. It also examined if there is any difference between males and females in these health symptoms. A total of 1431 young Kuwaitis were selected aged 17 to 26 years old ($M = 22.15$; $SD = 2.55$). A questionnaire was the major tool of this study. It included some demographic information and other variables related to using social media via smartphone were asked. Four major scales have been used: Smartphone Addiction Scale (SPAS), Health Symptoms Scale (HSS), Degree of using Social media, and Social Isolation Scale (SIS). SPSS (version 23) was used for data entry and analysis. Descriptive and inferential statistics were used. The current study findings reveal a negative impact of smartphone addiction on respondents' psycho-somatic health conditions, many young Kuwaiti reported a high prevalence of somatic symptoms. I showed that young Kuwaiti also report psychological health symptoms as a detrimental outcome of misusing smartphones. It showed also mutual relationships between smartphone addiction and respondents' somatic and psychological ill health symptoms.