

Research Article

Maladaptive Smartphone use among Jordanian Adolescents: Prevalence, Correlations, and the Role of Cognitive Emotion Regulation

Supplementary file

Table S1. Differences in maladaptive smartphone use based on demographic characteristics

Variables	Category	Frequency	Mean	Standard deviation	F-value	p-value
School type	Public	565	61.70	16.31	3.53	0.61
	Private	395	55.31	14.96		
Age/groups (years)	13	136	59.67	17.22	2.51	0.04
	14	212	54.79	15.23		
	15	285	59.54	15.41		
	16	228	61.29	16.38		
	17	99	60.94	15.98		
Scheffe <i>post hoc</i> for age groups	13>14					0.040
	15>14					0.007
	16>14					<0.001
	17>14					0.011
Gender	Male	410	54.39	13.70	60.42	<0.001
	Female	550	62.56	16.82		
Grades	Seventh grade	59	57.75	16.69	1.77	0.13
	Eighth grade	173	56.52	17.43		
	Ninth grade	312	58.08	14.74		
	Tenth grade	262	61.09	15.97		
	Eleventh grade	154	60.99	16.58		
GPA	Excellent	415	55.82	15.48	5.86	<0.001
	Very good	333	60.09	16.36		
	Good	139	62.17	15.50		
	Moderate	58	66.29	14.82		
	Weak	15	69.40	15.41		
Scheffe <i>post hoc</i> for GPA	Weak>excellent					0.009
	Moderate>very good					0.047
	Moderate>excellent					<0.001
	Good>excellent					<0.001
	Very good>excellent					0.002
Residence	North	237	59.20	16.49	3.06	0.05
	Middle	600	58.55	16.13		
	South	123	61.38	14.86		
Father's education	Illiterate	37	62.60	12.60	0.30	0.88
	Eleventh grade and below	93	64.38	15.64		
	Tawjihi (high school)	232	60.91	16.92		
	Diploma	112	58.53	16.02		
	Bachelor's degree or higher	486	57.03	15.67		
Mother's education	Illiterate	17	61.35	11.09	0.80	0.52
	11 th grade and below	81	63.74	15.64		
	Tawjihi (high school)	264	61.45	16.44		
	Diploma	176	59.81	15.32		
	Bachelor's degree or higher	422	56.28	15.97		
Family monthly income	<150 JD	34	59.62	14.09	3.09	0.009
	150 – 300 JD	121	60.58	16.44		
	301 – 500 JD	207	61.75	17.64		
	501 – 1,000 JD	321	58.42	15.96		
	1001 – 1,500 JD	122	56.34	14.55		
	1501 – 2,000 JD	155	57.69	14.97		
Scheffe <i>post hoc</i> for family monthly income	301 – 500 JD>1,001 – 1,500 JD					0.044
Perceived quality of sleep	Good	304	50.81	13.57	73.22	<0.001
	Moderate	486	60.92	15.48		
	Bad	170	68.55	15.03		
Scheffe <i>post hoc</i> for perceived quality of sleep	Bad>moderate					<0.001
	Bad>good					<0.001
	Moderate>good					<00.001

Abbreviation: JD: Jordanian Dinar; GPA: Grade point average.

Table S2. Differences in maladaptive smartphone use subscales based on demographic characteristics

Variables/categories	n	Compulsive behavior		Functional impairment		Withdrawal		Tolerance	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
School type									
Public	565	20.62	5.64	19	5.82	14.26	4.55	7.82	2.42
Private	395	18.47	5.07	16.79	5.34	12.88	4.37	7.17	2.21
F-value		4.34		1.34		2.61		2.72	
* <i>p</i> *-value		0.04		0.25		0.11		0.1	
Age groups (years)									
13	136	20.26	6.01	17.95	5.85	13.95	4.76	7.51	2.38
14	212	18.18	5.25	16.67	5.5	12.68	4.47	7.25	2.22
15	285	20.14	5.21	18.43	5.66	13.46	4.36	7.52	2.28
16	228	20.17	5.52	18.86	5.76	14.43	4.54	7.84	2.53
17	99	20.19	5.68	18.59	5.75	14.43	4.34	7.73	2.35
F-value		4.42		1.65		1.83		0.21	
* <i>p</i> *-value		<0.001		0.16		0.12		0.94	
Scheffe <i>post hoc</i>		15>14							
		16>14							
		17>14*							
Gender									
Male	410	18.3	4.83	16.64	5.08	12.47	3.92	6.98	2.11
Female	550	20.8	5.75	19.17	5.95	14.6	4.73	7.99	2.43
F-value		47.17		42.22		47.71		40.55	
* <i>p</i> *-value		<0.001		<0.001		<0.001		<0.001	
Grades									
Seventh	59	19.29	5.55	17.63	5.84	13.49	4.94	7.34	2.32
Eighth	173	19.24	6.13	16.82	5.89	13.11	4.84	7.36	2.28
Ninth	312	19.47	5.14	18.07	5.54	13.09	4.17	7.44	2.26
Tenth	262	20.31	5.44	18.73	5.56	14.31	4.49	7.75	2.45
Eleventh	154	20.02	5.59	18.64	5.98	14.56	4.51	7.77	2.45
F-value		2.6		1.25		2.08		0.77	
* <i>p</i> *-value		0.03		0.29		0.08		0.54	
Grade point average									
Excellent (90 – 100%)	415	18.65	5.18	16.99	5.52	12.87	4.42	7.32	2.3
Very good (80 – 89%)	333	20.11	5.6	18.26	7.79	14.09	4.59	7.65	2.4
Good (70 – 79%)	139	20.6	5.4	19.47	5.6	14.4	4.43	7.71	2.35
Moderate (60 – 69%)	58	22.12	5.43	21	5.43	15.05	4.14	8.12	2.29
Weak (≤59%)	15	24.47	6.64	20.87	4.81	15.73	4.46	8.33	2.47
F-value		5.84		6.22		3.89		1.41	
* <i>p</i> *-value		<0.001		<0.001		<0.001		<0.001	
Scheffe <i>post hoc</i>		Weak>Vg		Mod>Vg		Mod>Ex			
		Weak>Ex		Mod>Ex		Good>Ex			
		Mod>Ex		Good>Ex**		Vg>Ex**			
		Good>Ex		Vg>Ex*					
		Vg>Ex**							
Residence									
North	237	19.91	5.53	18.34	5.82	13.47	4.61	7.49	2.46
Middle	600	19.54	5.6	17.74	5.7	13.75	4.55	7.52	2.31
South	123	20.37	5.01	19.31	5.55	13.84	4.21	7.86	2.35
F-value		1.88		5.9		0.82		1.38	
* <i>p</i> *-value		0.15		<0.001		0.44		0.25	
Scheffe <i>post hoc</i>				South>Middle*					
Father's education									
Illiterate	37	21.32	4.49	19.24	4.4	14	3.9	8.03	2.19
≤11 th grade	93	21.48	5.5	19.95	5.87	14.96	4.46	7.99	2.03
Tawjihi	232	20.57	5.76	18.84	5.93	13.74	4.76	7.75	2.6
Diploma	112	19.38	5.25	18.06	6	13.6	4.38	7.49	2.33

(Cont'd...)

Table S2. (Continued)

Variables/categories	n	Compulsive behavior		Functional impairment		Withdrawal		Tolerance	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Bachelor's degree or high school	486	18.96	5.39	17.29	5.5	13.42	4.47	7.36	2.29
F-value		0.42		0.14		1.05		0.46	
p-value		0.79		0.97		0.38		0.76	
Mother's education									
Illiterate	17	20.12	4.33	18.24	4.38	14.65	4.58	8.35	1.54
≤11 th grade	81	21.64	5.43	20.09	5.6	14.4	4.65	7.62	2.15
Tawjihi	264	20.54	5.63	19.05	5.8	14.03	4.69	7.83	2.48
Diploma	176	19.85	5.36	18.27	5.56	14.01	4.23	7.68	2.3
Bachelor's degree or high school	422	18.8	5.4	17.03	5.63	13.16	4.47	7.29	2.34
F-value		0.64		1.47		0.6		1.49	
p-value		0.63		0.21		0.66		0.2	
Family monthly income									
<150 JD	34	20.71	5.29	18.12	5.36	13.76	4.27	7.03	2.02
150 – 300 JD	121	20.51	5.55	18.75	6.04	13.56	4.63	7.75	2.44
301 – 500 JD	207	20.57	6.18	19.2	6.25	14.17	4.66	7.81	2.38
501 – 1,000 JD	321	19.34	5.38	17.86	5.67	13.71	4.53	7.5	2.35
1,001 – 1,500 JD	122	18.8	4.91	17.01	4.96	13.13	4.35	7.41	2.37
1,501 – 2,000 JD	155	19.37	5.13	17.41	5.28	13.52	4.43	7.4	2.31
F-value		1.75		2.81		3.12		2.52	
p-value		0.12		0.02		0.01		0.03	
Scheffe <i>post hoc</i>				301 – 500 JD>1,001 – 1,500 JD*					
Perceived quality of sleep									
Good	304	17.19	4.67	15.39	4.9	11.6	4.01	6.63	2.18
Moderate	486	20.3	5.45	18.69	5.64	14.14	4.27	7.8	2.28
Bad	170	20.66	5.18	21.22	5.3	16.15	4.52	8.52	2.33
F-value		54.9		60.1		57.48		36.19	
p-value		<0.001		<0.001		<0.001		<0.01	

Note: Statistical significance at * $p < 0.05$ and ** $p < 0.01$.

Abbreviations: JD: Jordanian Dinar; SD: Standard deviation.