

The Excessive Use of Social Media and Its Relationship to Insomnia among University Female Students in the Kingdom of Saudi Arabia

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ABSTRACT

The purpose of preparing this research paper is to determine the impact of social media use on insomnia disorder among university female students and to determine the relationship between excessive use of social media and their behavioral addictions. The descriptive method was followed, and the sample was chosen in a stratified random manner, as the sample reached 360 students from various disciplines. Social media behavioral addiction indices were measured using the Social Media Usage Scale (SMU), and insomnia disorder measured using an (ID) scale. The results of the study show that there is a statistical correlation between the use of social media and insomnia disorders. Well as the relationship between the type of social media and the number of accounts and preferred social media and insomnia disorders, and the value of each was <0.05 . The study concluded that female university students suffer from excessive use of social media, which negatively affected the quality of sleep and their mood.

Keywords: Social media; Insomnia disorder; Excessive use; Behavioral addiction

INTRODUCTION

Social media has become a lifestyle for most generations around the world, the harm to health social media use is greater than we used to. The excessive use of social media has made many people suffer from depression and insomnia [1]. More than 4.5 billion people use the Internet in 2020, while social media users exceeded 3.8 billion, an increase of more than 9 percent since this time last year [2]. According to the Saudi ministry of communications and information technology, the interest of the Saudi people in social media has increased, and their impact on their daily lives has increased. The number of users has reached 18.3 million, equivalent to 58% of the population of the kingdom of Saudi Arabia. The average login to social networks is 260 minutes per day per person. Just as Facebook and Twitter dominate the largest number of social media users in the Kingdom, Saudi Arabia is the first Arab and the second globally to use Snapchat. WhatsApp and Facebook had the top rates of social networking platforms use. Travelodge surveyed 6000 adults to explore what the British did before bed. It was discovered that 70% of adults send a tweet every night to their followers and 20% follow their friends' tweets and favorite celebs. On average, people spend 16 minutes a night on the bed on social media, and this, as well as on their sleep patterns.

Insomnia can be defined as the disorder of a combination of day and night symptoms. Characterized by complaining

of dissatisfaction with the quality or duration of sleep with difficulty in starting sleep on time, waking up frequently or for a long time, or waking up early with the inability to return to sleep (DSM-5, 2013). Both Kraemer [3] and Kazdin [4] state that there is a group of associations which constitute a risk factor in insomnia, such as social and demographic factors, and include advanced age, female, low socioeconomic status, unemployment, low educational attainment, psychological distress, and self-categorized poor health. Morin and his colleagues [5] draw the attention to the fact that chronic insomnia is associated with several psychological and medical difficulties that lead to a lower quality of life, and a somewhat lower performance in all areas of work, which makes productivity and efficiency a significant risk to poor personal performance, and poor social relations resulting in life dissatisfaction. Jennifer and her colleagues' study showed that first-year female college students spend 12 hours using media daily. This excessive use has negatively affected their academic performance. The results of the Bhat study confirm that in-bed mobile device-related electronic social media's use is associated with adverse sleep and mood outcomes in adults. Comparing teenagers and young adults to other age groups, it is deduced that they are more likely to stay up late, report shorter sleep duration on weekdays, delayed sleep with extended sleep on weekends. The evening use of social media is more associated with poor sleep

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quality, extreme insomnia, and more psychological distress and daytime drowsiness [6].

In this study, the researcher tries to explain what is the relationship between excessive use of social media, and insomnia, In addition to the factors that may make a difference.

RESEARCH METHODOLOGY

Participants

This study was approved by the governing councils of the Department of Psychology, the College of Education, the Research Ethics Committee at the University of Hail, and institutional review boards in the Deanship of Scientific Research. Prior informed consent was obtained from all participants. The data was collected confidentially by using an online questionnaire, all the university students are participating in interactive groups on WhatsApp, a promotional message was sent explaining the purpose of the study and contains a link to the online survey site.

Students were motivated to participate in the study by sending reminders to the groups of the targeted colleges.

The sample of the study consisted of 360 students who were divided into three tracks, the Humanities Track (n=140), the Engineering (n= 100) and the Medical (n=120). The percentage of participants according to academic specializations was 39% for Humanities, 27% for engineering, and 34% for medical. The study levels of the participants varied from the first to the sixth level, where the highest participation rate for the fourth level students was 32.5%. The ages of the participants ranged from 17 to 25 years, and among participants of the 20-22 age groups, by 55%. The marital status of the sample members varied from unmarried, married, divorced, and widows. The majority of the sample members were unmarried, with a percentage of 82.5%. The grade point average (GPA) of female students ranged from 1 to 4 points, and 37.5% of the sample got 3.1- 3.5 points.

The data were collected within six months from October 2019 to March 2020.

Instruments

All study participants completed a questionnaire consisting of 77 subjects via the Internet. The first nine questions collected demographic data such as (age, marital status, specialization, GPA, and the number of accounts) (Table 1).

Insomnia was measured across the insomnia disorder scale (I D), the scale consists of 30 items representing 8 main dimensions: complaining about dissatisfaction with the amount or quality of sleep, the decrease or noticeable frustration in performance areas, difficulty sleeping occurs at least 3 nights per week, difficulty sleeping is present for a period at least 3 months, sleep difficulty occurs despite adequate opportunity, insomnia does not occur due to another sleep disturbance, insomnia is not due to misuse of a substance or medication, insomnia does not explain due to the mental disorders or medical conditions. The scale consists of two parts ; (A) and (B). Part (A) deals with 4 questions that determine the severity and duration of the disorder and whether the disorder is due to other disorders. As for part (B), it consists of 26 statements dealing with the rest of the dimensions that are corrected by the five-gradient. The highest degree that can be

Table 1: Demographic variables.

Demographic variables	Frequency	Percent (%)	
Age	17-19	18	5
	20-22	198	55
	23-25	135	37.5
	< 25	9	2.5
Marital status	Unmarried	297	82.5
	engaged	27	7.5
	Married	27	7.5
	Divorced	9	2.5
Academic specialization	humans	140	39
	engineering	100	27
	medical	120	34
GPA	1-1.5	9	2.5
	1.6 -2	18	5
	2.1 -2.5	18	5
	2.6 -3	108	30
	3.1-3.5	135	37.5
	3.6-4	72	20

obtained Screened 144 and the below is 30. This scale is an ultra-sharp instrument with approval; The scale is based on diagnostic criteria according to the Fifth Diagnostic and Statistical Manual (DSM-5).

To measure the reliability of the scale, Cronbach's Alpha was used and the total reliability degree was (0.820). The reliability was verified using the Guttman split-half Coefficient and the reliability score was (0.825), which indicates that the scale has a high-reliability degree that can be relied on.

The validity of the internal consistency of the scale was verified by calculating the Pearson correlation coefficient between the scores of the scale and the total score. The correlation coefficient for the paragraphs ranged between (0.242) as a minimum and (0.838) as a maximum at a level of 0.01 significance. Therefore, all the paragraphs of the scale are internally consistent which proves the validity of the scale to conduct the study.

The excessive use of social media has been verified by using the Social Media Use scale (S M U). It consists of 38 items, with 8 dimensions compatible with the Criteria for diagnosing behavioral addiction: preoccupation, negative mood management, Tolerance, withdrawal, consequences, relapse or control, craving, and hiding use. Grades 0 to 5, with a breakpoint of 3. The grades are interpreted and their clinical significance is explained according to none excessive use, through mild, moderate, and severe, to very severe.

To identify the reliability of the scale, Cronbach's Alpha was used and the total reliability degree was (0.970). The reliability was verified using the Spearman-Brown Coefficient and the degree of reliability was (0.914), which indicates that the scale has a high stability degree that can be relied on in this conducting study.

To verify the validity, the Pearson correlation coefficient was used to verify the integrity of the internal consistency of the paragraphs. The results of this procedure showed the saturation of all paragraphs

and were statistically significant. The correlation coefficient for the items ranged between (0.383) as a minimum and (0.883) as a maximum at a level of 0.01 significance. Therefore, all the scale paragraphs are internally consistent, which proves the validity of the items. So this scale is suitable for conducting the study.

Statistical analysis

The study adopted a pretest-posttest, control group quasi-experimental design. Two experimental groups were exposed to Laughter and Music intervention therapies respectively. The control group was exposed to teachings on 'Safety Measures in Old Age'. All the three therapies were crossed with personality trait at five levels (extraversion, agreeableness, openness, neuroticism and conscientiousness) and health locus of control at three levels (Internal, powerful others and chance health locus of control).

Cronbach's Alpha, Guttman split-half Coefficient, and Spearman-Brown Coefficient were used to verify the validity of the tools' study, all calculations were performed using SPSS for Windows V24 (IBM Corporation, Armonk, New York, USA) on Windows 10/PC.

RESULTS

Theme I: The relationship between excessive use and insomnia

To ensure a statistically significant correlation between excessive use of social media and insomnia, the Pearson Correlation coefficient was used, and it was found that $R=0.333$, at the significance level=0.000, which confirms the existence of a statistical correlation is significant at the 0.01 level, Table 2 shows that:

To explain the relationship between the independent and dependent variable, the correlation matrix was used by using the simple linear regression square, we find the complete correlation between the independent and dependent variable and that the correlation coefficient value $R^2=(0.111)$ Adjusted $R^2=0.109$. Referring to Table 3, it is clear that the excessive use variable caused the significance of the analysis of the variance of the regression at the significance level=0.0001.

Theme II: The relationship between insomnia and social media use factors

To identify the relationship between the dependent and independent variables, the standard multiple linear regression coefficients were used.

Table 4, which represents the correlation matrix between the

various variables, shows that the relationship between insomnia and the number of accounts=0.383 at the significance level of 0.000, while the preferred social media variable is related insomnia with a degree of 0.132 and the significance level=0.006, and we find that the GPA of female students is related to insomnia inversely=0.228- and the significance level 0.000. The correlation coefficient between the dependent variable and the independent variables combined, the correlation coefficient between them=0.517.

Table 5 explains the variance between the variables, the value of $F=43.311$, at the level of significance of 0.000, which confirms that the regression was significant between dependent and independent variables.

After confirming that there is a relationship between all independent variables and the dependent variable, it is necessary to identify which independent variables have the greatest effect, as shown in Table 6 that the number of accounts is the variable with the greatest effect and the degree of $T=9.954$, significance level 0.000.

Theme III: Differences in insomnia according to variables

This result shows differences in the level of insomnia according to the number of accounts on social media, using (ANOVA) one-way analysis of variance, to explain the difference between the groups of account numbers. It is clear from Table 7, that the difference between the groups averages, and the highest mean for the seventh group that represents social media users who have seven accounts and more. The sum of squares between groups=16423.536, within groups=48195.564, the value of $F=20.049$, and degree of significance=0.000, which confirm the presence of statistically significant differences.

To confirm the largest difference between groups, Post-Hoc Multiple Comparisons the Games-Howell test was used as shown in Table 8. It becomes clear that the seventh group is the largest difference, at the significance level=0.05, as shown in Figure 1.

This result clarifies the differences in insomnia according to the preferred account, using the one-way (ANOVA) analysis of the difference between the groups of favorite user accounts, and it is clear from Table 9, the difference between the group averages accordingly, it is found that YouTube, Bath, and gaming sites are the most preferred, and a group Gaming sites above average 102.00, the sum of squares between groups=14316.400, inside groups=50302.700, and the value of $F=16.744$, at the degree of significance=0.000, which confirms the presence of statistically significant differences.

Table 2: Correlation between excessive use of social media and insomnia.

Variables	N	Mean	Std. Deviation	Pearson Correlation	Sig. (2-tailed)
excessive use of social media	360	112.88	29.318	0.333**	0
Insomnia Disorder		82.05	13.416		

Table 3: The correlation coefficient value R Square.

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	sig
		B	Std. Error			
1.	Constant	64.838	.2.659	0.333	24.383	0
2.	excessive use of social media	0.152	0.023		6.687	0

Table 4: The relationship between dependent and independent variables.

Variables		Insomnia	Number of accounts	GPA	Preferred accounts
Pearson Correlation	Insomnia	1	0.383	-.228	0.132
	Number of accounts	0.383	1	0.145	-.214
	GPA	-.228	0.145	1	-.107
	Preferred accounts	0.132	-.214	-.107	1
Sig. (1-tailed)	Insomnia	.	0	0	0.006
	Number of accounts	0	.	0.003	0
	GPA	0	0.003	.	0.021
	Preferred accounts	0.006	0	0.021	.

Table 5: ANOVA for analysis of variance between the variables.

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	17278.502 ^a	3	5759.501	43.31	0.000 ^b
Residual	47340.598	356	132.979		
Total	64619.1	359			

a. Dependent Variable: insomnia

b. Predictors: (Constant), number of accounts, GPA, preferred accounts

Table 6: The T test for differences between variables

Variables	Unstandardized Coefficients		Standardized Coefficients Beta		t	sig	Correlations		
	B	Std. Error					Zero-order	Partial	Part
Constant	83.382	4.124	~	~	20.221	0	~	~	~
Number of accounts	3.546	0.356	0.466	0.466	9.954	0	0.383	0.467	0.452
GPA	-.6846	1.151	-.273	-.273	-5.947	0	-.228	-.301	-.270
Preferred accounts	1.733	0.4	0.202	0.202	4.337	0	0.132	0.224	0.197

Table 7: The differences in insomnia between groups of number of accounts.

Number of accounts	N	95% Confidence Interval for Mean						
		Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1	54	76.17	8.312	1.131	73.9	78.44	66	92
2	27	75.33	19.377	3.729	67.67	83	59	102
3	63	78.14	7.742	0.975	76.19	80.09	62	87
4	72	77.75	6.675	0.787	76.18	79.32	71	92
5	48	93.63	12.931	1.866	89.87	97.38	77	117
6	90	86.07	14.967	1.578	82.93	89.2	65	109
7 or more	6	105	4.382	1.789	100.4	109.6	101	109
Total	360	82.05	13.416	0.707	80.66	83.44	59	117

To ensure the group with the greatest difference between groups, the Games-Howell test was used as shown in Table 10, It becomes clear that the group of game site users has the biggest difference, at a significance level=0,000 (Figure 2).

Theme IV: Differences in excessive use depending on the demographic variables

The differences in the excessive use of social media were identified according to the marital status and specialization variables, and the interaction between them was illustrated by using the ANOVA tow - way analysis of variance.

Table 11 shows that there are statistically significant differences in marital status, $F=33.005$, and the level of significance=0.000, while the differences in the specialization are a function, $F=36.446$, and significance=0.000, in addition to the interaction between them significance at the level of 0.000.

Referring to Table 12 it is clear that the highest mean=180, is for engaging in the medical specialization, and the lowest mean=87 for divorced women in the discipline of the humanities, as shown in Figure 3.

Table 8: Post-Hoc multiple comparisons to the difference between groups of account numbers.

Account numbers (I)	Account numbers (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	0.833	3.897	1	-11.44	13.11
	3	-1.976	1.494	0.84	-6.46	2.51
	4	-1.583	1.378	0.911	-5.73	2.56
	5	-17.458*	2.182	0	-24.06	-10.85
	6	-9.900*	1.941	0	-15.71	-4.09
	7 or more	-28.833*	2.116	0	-36.56	-21.11
2	1	-.833	3.897	1	-13.11	11.44
	3	-2.810	3.855	0.99	-14.99	9.37
	4	-2.417	3.811	0.995	-14.50	9.66
	5	-18.292*	4.17	0.002	-31.24	-5.34
	6	-10.733	4.049	0.141	-23.37	1.91
	7 or more	-29.667*	4.136	0	-42.70	-16.64
3	1	1.976	1.494	0.84	-2.51	6.46
	2	2.81	3.855	0.99	-9.37	14.99
	4	0.393	1.253	1	-3.36	4.15
	5	-15.482*	2.106	0	-21.87	-9.09
	6	-7.924*	1.855	0.001	-13.47	-2.38
	7 or more	-26.857*	2.037	0	-34.55	-19.16
4	1	1.583	1.378	0.911	-2.56	5.73
	2	2.417	3.811	0.995	-9.66	14.5
	3	-.393	1.253	1	-4.15	3.36
	5	-15.875*	2.025	0	-22.04	-9.71
	6	-8.317*	1.763	0	-13.60	-3.04
	7 or more	-27.250*	1.954	0	-34.96	-19.54
5	1	17.458*	2.182	0	10.85	24.06
	2	18.292*	4.17	0.002	5.34	31.24
	3	15.482*	2.106	0	9.09	21.87
	4	15.875*	2.025	0	9.71	22.04
	6	7.558*	2.444	0.039	0.22	14.9
	7 or more	-11.375*	2.585	0.005	-19.85	-2.90
6	1	9.900*	1.941	0	4.09	15.71
	2	10.733	4.049	0.141	-1.91	23.37
	3	7.924*	1.855	0.001	2.38	13.47
	4	8.317*	1.763	0	3.04	13.6
	5	-7.558*	2.444	0.039	-14.90	-.22
	7 or more	-18.933*	2.385	0	-26.98	-10.89
7 or more	1	28.833*	2.116	0	21.11	36.56
	2	29.667*	4.136	0	16.64	42.7
	3	26.857*	2.037	0	19.16	34.55
	4	27.250*	1.954	0	19.54	34.96
	5	11.375*	2.585	0.005	2.9	19.85
	6	18.933*	2.385	0	10.89	26.98

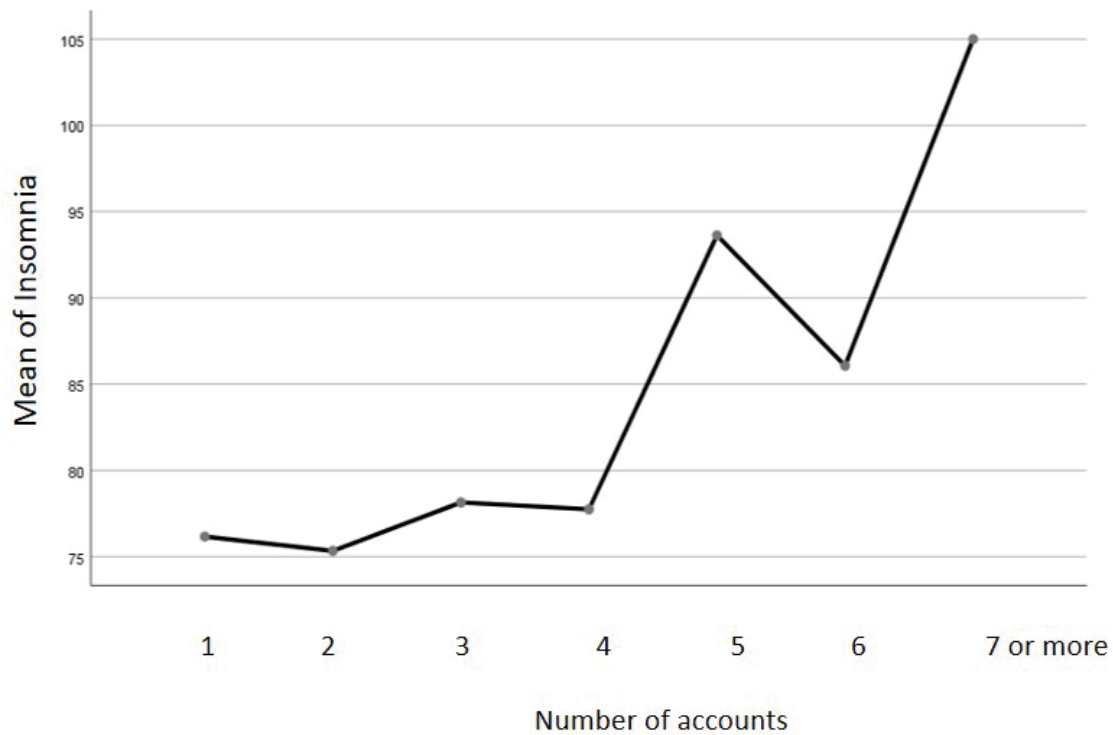


Figure 1: Differences in insomnia depending on the number of accounts.

Table 9: Differences in insomnia depending on preferred account.

Preferred account	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Instagram	135	83.53	14.815	1.275	81.01	86.06	59	117
Twitter	81	82.78	12.708	1.412	79.97	85.59	66	109
Snapchat	90	74.1	9.221	0.972	72.17	76.03	62	96
Bath	9	91	0	0	91	91	91	91
Whatsapp	18	78.5	1.543	0.364	77.73	79.27	77	80
YouTube	18	96.5	4.63	1.091	94.2	98.8	92	101
Games sites	9	102	0	0	102	102	102	102
Total	360	82.05	13.416	0.707	80.66	83.44	59	117

Table 10: Post -Hoc multiple comparisons to the difference between groups the preferred account.

Account Numbers (I)	Account Numbers (J)	Mean Difference (I-J)	Std. Error	Sig	95% Confidence Interval	
					Lower Bound	Upper Bound
Instagram	Twitter	0.756	1.903	1	-4.91	6.43
	Snapchat	9.433*	1.603	0	4.66	14.2
	Bath	-7.467*	1.275	0	-11.28	-3.65
	Whatsapp	5.033*	1.326	0.004	1.07	9
	YouTube	-12.967*	1.678	0	-18.05	-7.88
	Games sites	-18.467*	1.275	0	-22.28	-14.65
Twitter	Instagram	-.756	1.903	1	-6.43	4.91
	Snapchat	8.678*	1.714	0	3.55	13.8
	Bath	-8.222*	1.412	0	-12.49	-3.95
	Whatsapp	4.278	1.458	0.062	-.12	8.68
	YouTube	-13.722*	1.785	0	-19.13	-8.32
	Games sites	-19.222*	1.412	0	-23.49	-14.95

Snapchat	Instagram	-9.433*	1.603	0	-14.20-	-4.66-
	Twitter	-8.678*	1.714	0	-13.80-	-3.55-
	Bath	-16.900*	0.972	0	-19.83-	-13.97-
	Whatsapp	-4.400*	1.038	0.001	-7.52-	-1.28-
	YouTube	-22.400*	1.462	0	-26.89-	-17.91-
	Games sites	-27.900*	0.972	0	-30.83-	-24.97-
Bath	Instagram	7.467*	1.275	0	3.65	11.28
	Twitter	8.222*	1.412	0	3.95	12.49
	Snapchat	16.900*	0.972	0	13.97	19.83
	Whatsapp	12.500*	0.364	0	11.29	13.71
	YouTube	-5.500*	1.091	0.002	-9.13-	-1.87-
	Games sites	-11.000-	0	.	-11.00-	-11.00-
Whatsapp	Instagram	-5.033*	1.326	0.004	-9.00-	-1.07-
	Twitter	-4.278-	1.458	0.062	-8.68-	0.12
	Snapchat	4.400*	1.038	0.001	1.28	7.52
	Bath	-12.500*	0.364	0	-13.71-	-11.29-
	YouTube	-18.000*	1.15	0	-21.74-	-14.26-
	Games sites	-23.500*	0.364	0	-24.71-	-22.29-
YouTube	Instagram	12.967*	1.678	0	7.88	18.05
	Twitter	13.722*	1.785	0	8.32	19.13
	Snapchat	22.400*	1.462	0	17.91	26.89
	Bath	5.500*	1.091	0.002	1.87	9.13
	Whatsapp	18.000*	1.15	0	14.26	21.74
	Games sites	-5.500*	1.091	0.002	-9.13-	-1.87-
Games sites	Instagram	18.467*	1.275	0	14.65	22.28
	Twitter	19.222*	1.412	0	14.95	23.49
	Snapchat	27.900*	0.972	0	24.97	30.83
	Bath	11	0	.	11	11
	Whatsapp	23.500*	0.364	0	22.29	24.71
	YouTube	5.500*	1.091	0.002	1.87	9.13

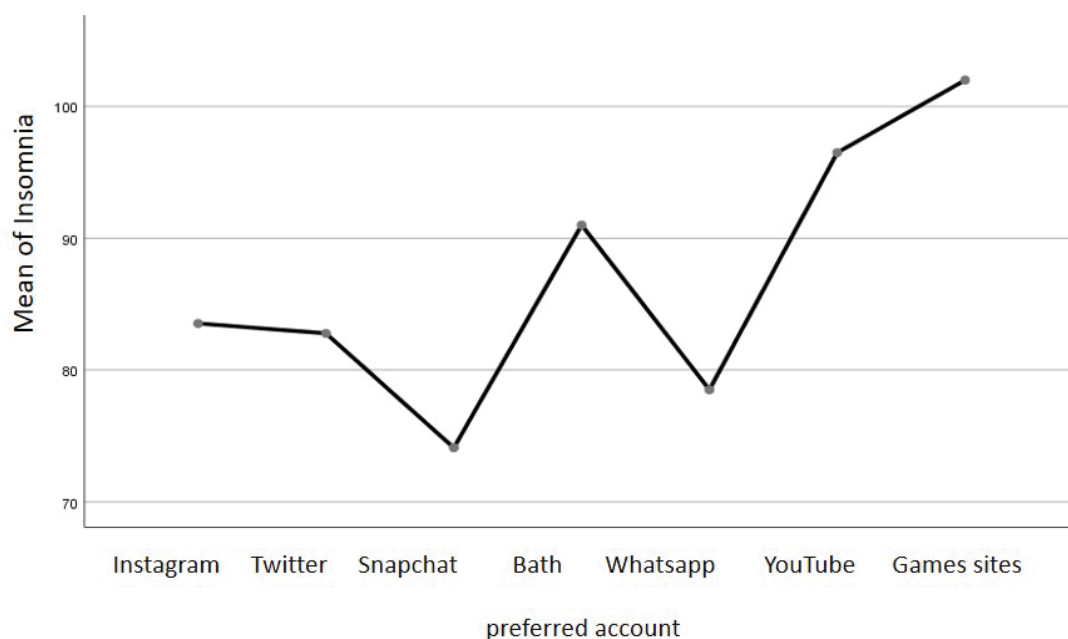


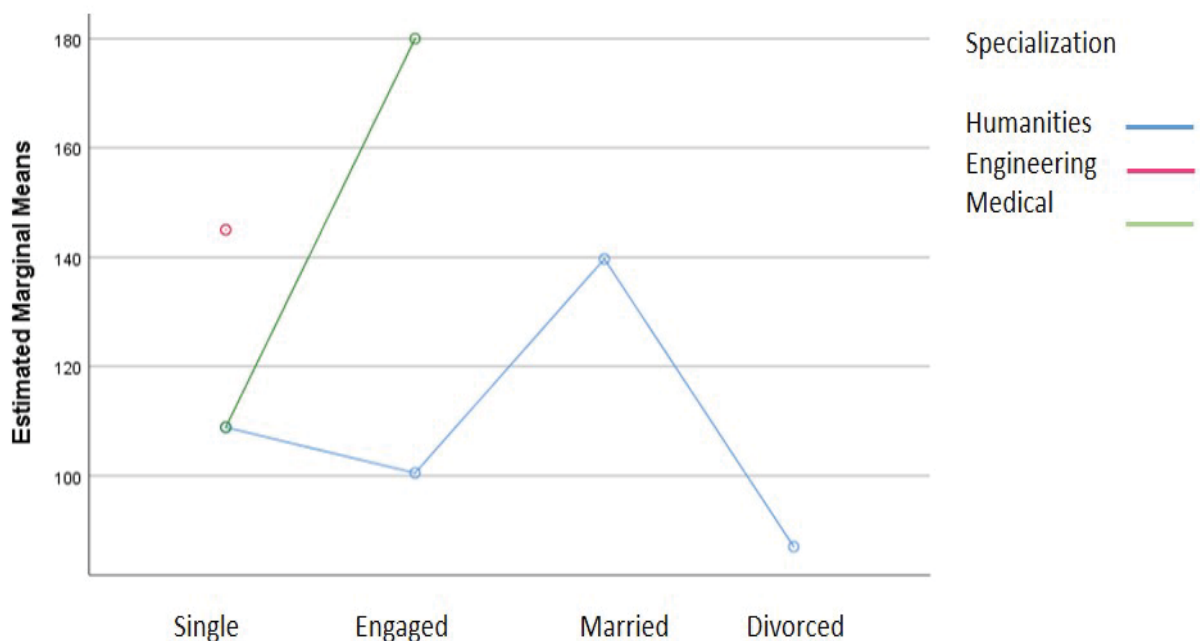
Figure 2: Differences in mean of insomnia according to the preferred calculation.

Table 11: The differences in excessive use according to marital status and specialization, and interaction between them.

Source	Type III	df	Mean Square	F	Sig
			Sum of Squares		
Corrected Model	82682.921	6	13780.49	21.534	0
Intercept	1119545	1	1119545	1749.487	0
Marital Status	63362	3	21120.67	33.005	0
Specialization	46645.99	2	23323	36.446	0
Marital Status × Specialization	33786.42	1	33786.42	52.797	0
Error	225894.5	353	639.928		
Total	4895253	360			
Corrected Total	308577.4	359			

Table 12: Comparing the means between the marital status and specialty variables.

Marital status	specialization	Mean	Std. Deviation
Single	Humanities	108.84	25.603
	Engineering	145	0
	Medical	108.86	32.286
	Total	109.94	27.44
Engaged	Humanities	100.5	7.717
	Medical	180	0
	Total	127	38.697
Married	Humanities	139.67	22.716
	Total	139.67	22.716
Divorced	Humanities	87	0
	Total	87	0

**Figure 3:** Comparing the means between the marital status and specialty variables.

DISCUSSION

The use of social media applications is related to the accessibility and benefits the user perceives and aims to achieve, whether they are related to social interactions or knowledge. Although this benefit occurs, compulsive use affects academic, social, and physical performance [7]. Many mental disorders have been linked to internet addiction, which is associated with low self-esteem,

impulsivity, poor sleep quality, mood disorder, and suicide [8]. The current study indicated that excessive social media use is positively associated with insomnia and that an increase in the number of social media accounts increases the likelihood of compulsive use. Some specialists suggest that there are commonalities in behavioral addictions, and substance addictions share many aspects [9] such as some symptoms (loss of control, difficulty concentrating, life struggles, cravings, and other psychological problems) [10]. Al-

Hilu and his colleagues [11] conducted a comparative study in several Arab countries on university students, and they showed that increasing daily use of social media is positively associated with symptoms of cyber addiction, and associated with feelings of Jealousy and frustration, which causes psychological distress for students. Lennart Raudsepp's [12] study confirms that an increasing time in social media usage is associated with an increase in sleep disturbances, in addition to a negative relationship between excessive use and academic achievement, in line with several studies. Larose et al. [13] concluded that compulsive use has negative academic and interpersonal effects, and occupational consequences, which leads to diminished self-regulation and poor compatibility in university life. In addition, social media addiction often results in wasted time and reduced work and academic performance [14]. There is also a relationship between Internet addiction and a lack of other interests.

The current study found that students who suffer from high insomnia are those who use multiple accounts in addition to their preference for gaming sites, these sites combine contact with others and make friends and enjoy games that contain many visual and auditory effects, allowing immersion in them. Jana Spilkov [15] study revealed a correlation between excessive use of social media and gaming site use among high school students in the Czech Republic. That the constant and frequent use of the Internet to participate in games, often with other players, leads to clinically significant impairment or distress such as tolerance (i.e., spending more time playing), lack of control, and loss of other interests [16]. In the study conducted by Nazmus Saquib and colleagues [17] on expatriate high school students in Saudi Arabia, it was found that 75% spent more than two hours in front of screens per day, and 20% slept less than 5 hours a night. (16%) were addicted to video games, and those who reported gaming use of 2-3 hours, 4-5 hours, or -6 hours experienced greater distress than those who reported spending one hour in front of a screen daily or less, and females are the most affected by psychological distress and lack of sleep hours. This result is consistent with the study conducted in Germany, which showed that 3% of students who indulged in internet games for long periods reported sleep problems and had low school grades [18]. Spending more time on social media leads to internet game addiction, disrupts the normal sleep pattern, and leads to more interruptions during sleep [19].

Singles are also positively associated with addiction to the use of social media and game sites [20]. This may be due to that single and engaged students have more free time, lack of household chores to fulfill duties as married women do. As indicated by Al-Fadhel [21] in his study at King Saud University, students that the most important motivations for using social media are entertainment, exploration, acquaintance, and communication with others. Social and emotional motivation has an important role in overuse, 87% of Al- Petra University students used social media for entertainment, and 86% of them achieved emotional satisfaction [22]. Accordingly, social media sites allow engaged students to share feelings with their partners, so they are the most users.

CONCLUSION

The study concluded that excessive use of social media makes the female college students suffer from insomnia. The increasing use,

multiplication of accounts, and gaming sites play a prominent role in increasing insomnia. The most affected by these factors are the engaged students.

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CONFLICT OF INTEREST

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