

Original paper

The Effects of Social Media on the Undergraduate Medical Students

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Abstract

Background: In recent years, social media like Facebook, Twitter, and YouTube have become the most visited websites in the world, with Facebook topping the list and recently the use of social networking sites has grown tremendously especially among the students. However, very little information is known about the scale and purpose of use, how students use these sites and, more specifically, whether these sites help or hurt their academic progress.

Aims of the study: The purpose of this study is to explore the impact of social media on undergraduate medical students of Babylon University.

Method: A research questionnaire was designed to determine the factors of social media that have impact on students. Variables identified are age, gender, stage of student, type and duration of use of social media used, effect on study timings, time and duration of sleep at night, the number of days per week, benefit in the medical field, effect on scientific level, continuous sharing with teacher on these sites, and benefit from site of medical college. About 510 undergraduate medical students in Babylon University were randomly selected, six groups were taken according to the six stages of the medical college (85 students in each group).

Results & discussion: The study revealed that ages of students range from 18 to 24 and female students form the largest percentages in all groups. From this research study it was also found that the highest percentages of students in all groups used Facebook and YouTube more than other types of social media and spend about 2 hours on internet. In addition to that higher percentage of students had a benefit from site of medical college and they had same or increased scientific level, moreover there was no relation between duration of use of social media and sleep with study timings and scientific level.

Conclusion: Our study concluded that most of students in all groups use only two types of these media, majority of students spend all days of the week using these media, there was no continuous sharing with teacher in all groups and in most of students there was a benefit from site of medical college. The study also showed that duration of use of these networks has no effect on scientific level of students and most of students has the same or increased scientific level.

Key words: Social networking websites, duration of sitting, students.

Introduction

Social media is “the relationships that exist between network of people” ⁽¹⁾. People around the world are grateful to the invention of social media, men and women now exchange ideas, feelings, personal information, pictures and videos at a truly astonishing rate ⁽²⁾. Every day, many

students are spending countless hours immersed in social media, such as Facebook, YouTube, Twitter, MySpace, and others ⁽³⁾. At first glance this may seem like a waste of time; however it also helps students to develop important knowledge and social skills. At present, whether social media is favorable or

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unfavorable, many students utilize these sites on a daily basis^(4,5).

Of all the social networking sites, Facebook is by far the most popular and most frequently used among college students, the number of Facebook users boosts up day by day^(6,7). Apart from the positive sides of Facebook, it also has some negative effects also. Use of technology such as internet is one of the most important factors that can influence educational performance of students positively or adversely^(8,9,10). Sparrowe *et al.* (2010) proposed that student users are affected by the internet and this impact is determined by the type of internet usage, they are positively affected by the informative use of internet while having drastic impact of recreational use of internet on them⁽¹¹⁾.

The University of New Hampshire said that a majority of students use social networking for social connections and entertainment, but are also using it for education and professional reasons, their research shows that 63% of heavy users received high grades, compared to 65% of light users⁽¹²⁾. Some researchers found a positive association between use of social media and academic performance of the student users. Students, using these media frequently, scored higher on reading skills test and had higher grades as well⁽¹³⁾. However, Enriquez, (2010) found a continuing drop of grades among student users of social networking sites⁽¹⁴⁾. Many researchers and parents are worried that their college students are spending too much time on social media sites and not enough time studying⁽¹⁵⁾. Therefore, this study aimed to explore the relationship between social networks and impact on students' academic performance.

Methodology and Procedure

The research conducted was analytical research and the data was collected with the help of a questionnaire in a cross sectional survey. The target population for

the study was the medical college students of Babylon University, it involved students from the first to the last stage, (range of age from 18 to 24 years old), from each stage 85 students were taken for the study. The word stage was replaced by the word group because we not take all the students in each stage. A total of 21 questions were used, they involved questions about the stage of the student, age, gender, address, type of social media used, duration of use of these media, effect on study timings, time and duration of sleep at night, the number of days per week, benefit in the field, effect on scientific level, continuous sharing with teacher on these sites, and benefit from site of medical college. The study involved totally 510 students (85 student from each six stages), the real number of students was more than 510 but some results were excluded (about 10 students in each group) because of inconsistencies, refusal for participation, in addition some of them had no website.

Statistical Analysis

The data collected were analyzed by using Microsoft Excel 2010 for Windows, and Statistical Package for the Social Sciences (SPSS version18) programme. Some continuous variables were expressed as mean \pm standard deviation (SD) while others were expressed as number and percentage. P value ≤ 0.05 was considered to be statistically significant.

Results

1. Gender distribution Most of patients were females in all groups, the percentage of females was 66% in group (1), 75% in group (2), 56% in group (3), 71% in group (4), 58% in group (5) and 61% in group (6).

2.Type of social media: Facebook and YouTube together were the most predominant social website used by students and the least website used was twitter as clarified in table (1).

3. Duration of use of social media: In all groups, duration of use of social media (2) hours per day was predominant, but some students spent even (6) hours, the

percentage of duration of use for (2) hours was 30% in group (1), 32% in group (2), 31% in group (3), 25% in group (4), 28% in group (5) and 31% in group (6).

Table 1. Type of social website

Groups	F	F and Y	F, Y, and T	F and T	Y	T	Total
1	33 (39%)	37 (43%)	8 (9%)	2 (2%)	4 (4%)	1 (1%)	85(100%)
2	20 (24%)	28 (33)	21 (24%)	2 (2%)	13 (16%)	1 (1%)	85(100%)
3	38 (45%)	42 (50%)	2 (2%)	0 (0%)	3 (4%)	0 (0%)	85(100%)
4	9 (10%)	42 (50%)	16 (19%)	3 (4%)	13(15%)	2 (2%)	85(100%)
5	27 (31%)	35 (42%)	9 (10%)	4 (5%)	10 (12%)	0 (0%)	85(100%)
6	25 (29%)	53 (63%)	4 (5%)	0 (0%)	3 (3%)	0 (0%)	85(100%)
Total	152(178%)	237(281%)	60 (69%)	11(13%)	46(54%)	4(4%)	510 (600%)

F=Facebook, Y=YouTube, T=Twitter

4. Numbers of friends: Numbers of friends of students was more in real life than in internet in all groups, the real friend percentages were 86% in group (1), 88% in group (2), 86% in group (3), 90% in group (4), 75% in group (5) and 77% in group (6).

5. Duration of sleep at night

Predominant percentage of students had duration of sleep at night about 6 hours, the percentage of students who had this duration of sleep was 47% in group (1), 61% in group (2), 43% in group (3), 36% in group (4), 31% in group (5) and 41% in group (6).

6. Benefit of use of social media in the medical field of the students

Most students get benefit from use of social media for medical purposes, the percentage of students who had a benefit from their use was as follows: in group (1), it was 72%, 96% in group (2), 96% in group (3), 92% in group (4), 64% in group (5) and 87% in group (6).

7. Distribution and relations of some parameters with study groups

Table (2) shows distribution and relations of some parameters with study groups, it shows that most students in all groups sleep at night at 11 and 12 o'clock, it also shows that the highest percentages of students spend all days of the week using social media, the percentage of students who had negative effects on their study timings due to use of social websites was more in all groups except group (2). In

addition, the table illustrates the effect of social media on scientific level of students, in the first, second, and fourth groups, there was increased effect in most students while there was no change in their scientific level in the third, fifth, and sixth groups. In all groups, the highest percentages of students had no sharing with teachers on the social media. The table reveals that in all groups, predominant numbers of students had got benefit from the site of medical college on social websites.

It also shows increasing numbers of students who benefit in medical field with the increase in duration of use. The table illustrates the relation between duration of use of social media and gender, in all groups duration of use was more in male students than females except in group (2). In all groups except groups (1) and (2), there was an association between duration of use of social media and effects on study timings (increased numbers with increased use). The results of the table also shows that there is no significant association between duration of use of social media and scientific level.

Discussion

According to Elphinston and Noller (2011), social network websites grab attention of the students and then diverts them towards non-educational and inappropriate actions including useless

chatting, on the basis of the above statement we can say that social networking sites may badly affect the academic life and learning experiences of the student⁽¹⁶⁾.

Table 2. Distribution and relations of some parameters with study groups

		G1	G2	G3	G4	G5	G6	Total
Time of sleep at night (hours)	9	8(9%)	2(3 %)	3(4 %)	6(7 %)	8(9 %)	2 (3%)	29(35%)
	10	12(13%)	19(22%)	6 (7%)	8(9 %)	3(4 %)	6(7 %)	48(62%)
	11	17(20 %)	27(31%)	12(13 %)	32(37 %)	14 (16 %)	12(14 %)	114(131%)
	12	23(27 %)	20(23 %)	44(51 %)	22(26 %)	33(39 %)	33(39%)	175 (205%)
	1	18(20 %)	13(15 %)	16(19 %)	10(11 %)	21(25 %)	17(20 %)	95(110%)
Days of use of social media	2	7(8 %)	5(6 %)	4(5 %)	8(9 %)	6(7 %)	15(17%)	45(52%)
	Work	15 (17%)	2 (2%)	3 (3%)	11 (13%)	4 (5%)	6 (7%)	41 (47%)
	Week-end	29 (34%)	24 (28%)	17 (20%)	16 (19%)	17 (20%)	7 (8%)	110 (129 %)
Effect on study timings	Both	41 (46%)	59 (69%)	65 (76%)	58 (68%)	64 (75%)	72 (85%)	359 (419 %)
	Yes	44 (52%)	22(26%)	67 (79%)	57 (67%)	54 (63%)	62 (73%)	306 (360%)
Effect on science level	No	41 (48%)	63 (74%)	18 (21%)	28 (33%)	31 (37%)	23 (27%)	204 (240%)
	Same	26 (30%)	21(25%)	47 (55%)	40 (47%)	46 (54%)	51 (60%)	231(271)
	Increased	41 (48%)	64(75%)	32 (37%)	41 (48%)	31 (36%)	28 (32%)	237(276)
Continuous sharing with teachers	Decreased	18 (22%)	0 (0%)	6 (8%)	4 (5%)	8 (10%)	6 (8%)	42(53)
	Yes	5 (6%)	17 (20%)	9 (11%)	19 (22%)	25 (30%)	26 (30%)	101(119)
Benefit from site of medical college	No	80 (94%)	68 (80%)	76 (89%)	66 (78%)	60 (70%)	59 (70%)	409(481)
	Yes	51 (60%)	62 (73%)	54 (64%)	59 (69%)	54 (64%)	44 (52%)	324(382)
Relation between duration of use of social media and benefit in medical field	No	34 (40%)	23 (27%)	31 (36%)	26(31%)	31 (36%)	41 (48%)	186 (218)
	Yes	61 (3.1±1.7)	81 (4.0±2.9)	81 (3.1±2.4)	78 (4.4±2.1)	54 (3.7±2.8)	74 (3.1±2.2)	429 (3.6±2.2)
	No	24(2.5±2.1)	4(3.1±2.4)	4(2.5±2.1)	7(3.8±2.4)	31(3.5±1.4)	11(2.1±1.4)	81(3.1±1.8)
Relation between gender and duration of use of social media	P value	1.48	0.61	0.49	0.3	0.8	0.01	
	Male(no., mean±sd)	19 (3.15±1.7)	10 (3.1±2.2)	29 (3.1±2.4)	14 (3.3±2.3)	27 (4.2±2.4)	24 (3.2±1.8)	123 (3.4±2.2)
	female(no., mean±sd)	66 (2.5±2.1)	75 (4.0±2.9)	56 (2.5±2.1)	71 (3.1±2.5)	58 (2.4±0.7)	61 (3.1±1.7)	387 (3.1±2.3)
Relation between duration of use of social media and effect on study	P value	0.1	0.4	0.4	0.001	0.001	0.7	
	Yes (no., mean±sd)	41 (3.3±1.9)	22 (3.01±0.9)	67 (3.4±2.6)	57 (3.3±2.01)	54 (4.3±2.3)	62 (3.6±1.80)	303 (3.4±2.2)
	No (no., mean±sd)	44 (2.07±1.2)	63 (2.4±1.4)	18 (2.2±0.7)	28 (3.1±2.01)	31 (2.3±1.08)	23 (1.9±0.70)	207 (2.3±1.2)
Relation between duration of use of social media and scientific level	P value	0.000	0.05	0.05	0.05	0.000	0.000	
	Same level (no., mean±sd)	30 (2.5±1.8)	28 (1.5±0.8)	47 (3.3±2.7)	40 (3.5±1.8)	46 (3.5±1.3)	51 (3.5±1.8)	242 (3.1±1.9)
	Increased (no., mean±sd)	45 (3.5±1.3)	48 (2.9±1.2)	32 (2.4±1.1)	41 (3.5±2.7)	31 (4.5±2.8)	28 (3.5±2.6)	225 (3.8±2.8)
	Decreased (no., mean±sd)	10 (3.5±2.8)	9(1.3±0.4)	6(6.0±1.09)	4(5.2±1.5)	8 (3.5±0.4)	6 (2.5±0.5)	43 (4.1±1.8)
	P value	0.6	0.07	0.08	0.2	0.2	0.4	

Whereas on the other hand, Nicole *et al.*, (2012) reviewed that the students are socially connected with each other for sharing their daily learning experiences and do conversation on several topics⁽¹⁷⁾.

From a sample of 510 students we found that all the students used one or more social media as shown in table (1). The social networking sites that students used for academic purposes included Facebook, YouTube and Twitter. Twitter was the least used of all the websites, the students found Facebook and Youtube easier to use and this was consistent with a study done by Ellison *et al.*, 2007⁽¹⁸⁾.

This study also revealed that the higher percentages of students in all groups reported that there was no effect of social media on their study timings (table 2) because most students spent less than 3 hours per day in addition they had less friends online than real life.

In addition, there was few negative effects of social media on scientific level and this agree with a study by Shahzad Khan (2012)⁽¹⁹⁾, this might be due to most students, as found in the results, remain few hours on internet, also they get benefit from these sites in medical field, they get enough sleep because most of them sleep at 12 o'clock and sleep about 6 hours at night and they had benefit from site of medical college table (2). Regarding difference in gender, numbers of females were more than males in all groups but this may not mean that females use social media more than males because the total numbers of females in each stage of the college are largely higher than males. The study did not focus widely on effects of social media according to gender.

Conclusion

Our study has revealed that the number of female students were more than males but the duration of sitting on social media was less than male students, most of students in all groups spent only two hours on social media, most of them use only two types of

these media, there was no continuous sharing with teacher in all groups and in most of students, there was a benefit from site of medical college. The study also showed that duration of use has no effect on scientific level of students and most of students has the same or increased scientific level.

Recommendations

Our recommendations were joined with recommendations which were taken from one of the questionnaire about suggestion of students about social media, most students wish to share information with their teachers, formation of teaching groups that include students and teachers on social networks to discuss important subjects, connect with scientific sites, control time and duration of use, beneficial topics used, in addition site of medical college should be more developed to give more benefit for students.

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