

Effect of Social Media Health Intervention Program on Life Style of Secondary School Students

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Abstract

Background: Social media plays a vital role in transforming student's life style. **Aim of the study** was to evaluate the effect of social media health program intervention on life style of secondary school students. **Subject and methods: Research design:** A quasi-experimental design was used in the current study. **Setting:** This study was conducted in two governmental secondary schools at Benha city (Om Elmommen secondary school, and manshet benha secondary military school). **Subject:** A stratified cluster sample was used. 25% of students in 1st and 2nd grade from the mentioned setting, the total number of students were 80. **Tools of data collection:** two tools were used **I-** A structured interviewing questionnaire sheet: consisted of 3 parts to assess: 1) the socio-demographic characteristics of students, 2) background of student's social media usage, 3) knowledge of students regarding social media, **II-** It was designed to assess students' lifestyle. **Results,** the study showed 52.5% of students aged from 16 to < 17 years old with mean age 16.13±1.0. 56.2% of them were male and 78.7% of them living in urban area. Regarding background of student's social media usage 50% of them using Facebook, 57.5% using social networking sites for five hours and more, 46.3% using mobile to log on social media. As regard total knowledge of students regarding social media before the program implementation; 47% of them had poor total knowledge scores, while immediately after the program implementation 85 % of them had good total knowledge and 66.2% had good total knowledge after 3 months. Concerning total lifestyle score before the program implementation 17.5% had good total lifestyle score regarding social media, while immediately after the program implementation increased to 90% also increased to 91.2% after 3 months. **Conclusion,** the study concluded that: Educational health program has showed a highly statistically significant effect on knowledge and lifestyle of the students post program and improving their knowledge and lifestyle. **Recommendations:** The study recommended that, this program should be applied on a wide range of schools to prevent health and social risks of social media and parents should monitor activities of young people on social media to protect them from negative effects of social media.

Key words: social media, students, lifestyle, and health program.

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I. Introduction

Social media is the most recent form of media and has many features and characteristics. It has many facilities on same channel as sharing images, texting, communicating, audio and video sharing, fast publishing, and linking with all over world and direct connecting. Also it is cheapest fast access to the world so is very important for all age of people. Social media use is increasing day by day with high rates and majority of youth is shifting speedily from electronic media as television to the social media so its influences are much on youth. Social media affects people's living styles specially youth (Ghulam, 2014). Social media are computer-mediated technology that allow persons, companies, governments, and other organizations to view, create and share information, thoughts, career interests, and other forms of expression via virtual communities and networks (Obar & Wildman, 2015). Social media plays a vital role in transforming student's life style. Nowadays social media has been the necessary part of one's life from shopping to electronic mails, and education. Social media include blogs where students can easily connect with each other and social networking sites (Aveseh, 2012). Social media has brought some negative impacts to youth. Social media allows for unnecessary risks in social skills, health, academic performance, privacy, safety and behavior standards of youth. It causes a lot of impacts in psychological development of youth such as depression, low self-esteem and lack of social skills. Also it exposes youth to danger such as cybercrime, kidnapping, murdering and many others because of the culture of social media where the users post a lot of their personal information online (Sinha et al., 2016. (Over-usage of social media has severe health risk due to lack of physical activities. Also spending much time on social media puts young population at risk of getting sleep disorders, strokes, heart attacks and cancer. On the other side the cases of mental psychiatric increased because of social isolation (Das & Jyoti, 2011)

Significance of the study:

Social Media is very popular among students, and they contribute the majority percentage of social media users. Several studies reveal that social media have negative impact on students. Some study concludes that most of the students use social media just to communicate with friends for long periods which affect their health and distract them from their studies. So the researchers wanted to study the effect of social media on students' lifestyle. Internet is the most powerful invention and if used in the positive direction, it can prove to be very productive. But these days, due to the social networking sites such as face book taking over, internet is producing adverse effects on students. Egypt has the largest population of internet users- 31 million in July 2012- in the Middle East and North Africa. Internet especially social media have a great impact on the Egyptian population and society (**The Boston Consulting Group, 2012**).

Aim of the study:

The study aimed to evaluate the effect of social media health program intervention on life style of secondary school students. Through: assess students' knowledge regarding student social media, assess students' lifestyle and develop program intervention about social media.

Hypothesis:

To fulfill the aim of this study the following research hypotheses formulated: 1-The health program intervention will improve student's knowledge regarding social media. 2- The health program will improve student's lifestyle.

Research design:

A quasi experimental design was utilized to carry out this study.

Study setting:

This study was conducted in two governmental secondary schools at Benha city (Om Elmomnen secondary school, and manshet benha secondary military school). These schools selected randomly were representing 25% from total eight secondary schools at Benha city.

Study subjects:

A stratified cluster sample was used in this study. 25% of students in first and second grade from the above mentioned setting were included in the study, the total number of students were 80.

Tools of data collection:

Two tools were used for collecting data based on literature review and experts' opinion:

Tool (I): A structured interviewing questionnaire: It consisted of the following three parts:

Part one: Socio-demographic characteristics of students included ten items as age, sex, residence, mother education, father occupation ...etc.

Part two: Concerned with background of student's social media usage included five items, Social media sites, hours of using social media/day, people student communicate with on social media, devices used to log on social media, and purpose of using social media.

Part three: Designed to assess students' knowledge regarding social media which consisted of eleven questions that included (52) items about social media, its advantages, its disadvantages and how to decrease its dangers. Scoring **system**; for each question was given as follows: 3 if good knowledge, 2 if average knowledge, and 1if poor knowledge. The total knowledge scores were considered good if the score of the total knowledge $\geq 75\%$ (≥ 39), considered average if it is equals $50\% < 75\%$ ($26 < 39$), and considered poor if it is less than 50% (< 26).

Tool (II): It was designed to assess students' lifestyle which consisted of (30 items) divided into 5 categories, sleeping pattern (6 items), nutrition (6 items), physical activity (5 items), general health status (7 items), and social relations (6 items). **Scoring system:** A score of each item as, 2= always, 1= sometimes, 0= never. The total lifestyle score considered good if the score of the total lifestyle $\geq 50\%$, and considered poor if it is $< 50\%$.

Content validity and reliability:

Content validity was checked before the pilot study and the actual data collection, through distribution of the first tool to five experts in the field of the study, with a covering letter and explanation sheet that explains study, purpose and other related information to ensure appropriateness, relevancy, clarity and completeness of the tool. Modifications and changes were introduced as required. Reliability was measured by using (.6473) for Attitude toward internet use scale.

Pilot Study:

A pilot study was carried out on 10% of students who were excluded from the sample to evaluate the tool clarity and estimate time required to fill the questionnaires. There were no unclear questions, or statements. No further modifications were required at this stage of tools development.

Field work:

- Preparation of data collection tools was carried out over a period of five months from the beginning of October 2016 to end of February 2017.
- Official permissions were obtained from the dean of the Faculty of Nursing- Director of Benha educational administration.
- A pilot study was carried out to test clarity and simplicity of questions.

Program construction:

The current study was carried out on four phases, preparatory phase, development phase, implementation phase and evaluation phase.

1. Program assessment phase: The program was designed after extensive review of related literature, by the researchers. Based on results obtained from pre-assessment tools, it was revised and modified.

2. Program development phase: The program was developed based on the actual results that were obtained from pre-program assessment using a structured interviewing questionnaire sheet, literature review.

An objective of the program was to improve knowledge and lifestyle of students regarding social media.

Contents of program: The content of the program was designed to meet students' needs regarding social media and to fit into their interest and level of understanding. Its contents were:

- Social media and its importance
- Most common sites of social media
- Advantages of using social media
- Disadvantages of social media
- Risks of social media on health and lifestyle
- Prevention of social media negative effects.

3. Program implementation phase:

The researcher started data collection by introducing herself to students and explained the procedure of selecting student, the title and the research purpose and its importance to students. All questions were answered and detailed explanation was given to obtain their acceptance and cooperation during filling the tools of the study. The investigator entered to students with the list and explained the procedure of selecting student, the title and the research purpose and its importance to students then, select students from list randomly every each other to participate in study and take their acceptance or permission to participate verbally while, went out the rest of students.

Students were divided into small groups; each group included about 10 students. Data collection for each group was carried out in 2 sessions. The two sessions were implemented for each group separately for 1 week (2 days/week). The duration of each session was 60 minutes. Sometimes the researcher worked with two groups in the same day.

At the beginning of the first session, an orientation to the program and its purpose took place. The tools of the study took about 30 minutes to be filled by student. The researcher repeated this procedure with all students in every year at the three schools. The sessions contained knowledge about social media (meaning, importance, advantages, disadvantages, common sites, risks of social media on health and lifestyle, prevention of negative effects). An instructional media was used including an illustrated booklet and purchase. Data collection period continued for five months, starting at the beginning of October 2016, till the end of February 2017.

4. Program evaluation phase:

Immediate posttest was done after program implementation. Then follow up after 3 months was performed.

Administrative and ethical considerations:

An official permission was obtained using proper channels of communication. Prior to pilot study, an informed consent was obtained from the vice dean for students affairs at which the study was conducted. The investigator took an oral consent from students to participate in the study. The participant has the right to withdraw at any time. Explanation of the procedure and assurance of confidentiality were done.

Statistical analysis

The collected data were verified prior to computerized entry; statistical analysis was done by using the Statistical Package for Social Science (SPSS) version 20. Data were presented in tables by using mean, standard

deviation, number, percentage distribution, and Chi- Square. Statistical significance was considered at: P- Value > 0.05 insignificant- Value < 0.05 significant, P- Value < 0.001 highly significant.

II. Results

Table (1) shows that 52.5% of students aged from 16 to < 17 years old with mean age 16.13±1.0 and 56.2% of them were male. As regards father education 28.7% were university graduates and 65% of them were employees. Concerning mother education 30% had primary/preparatory education and 66.2% were housewives.

Table (2) illustrates that 58.8% of student's families had 5-6 members. 45% of students were ranked the middle in birth order, 55% had insufficient family income and 78.7% of them living in urban area.

Table (3) shows the students' background regarding use of social media 50% of them using Facebook, 57.5% using social networking sites for five hours and more, 63.8% of them communicate with friends and 46.3% of them using mobile for social media communication. As regards purpose of using social networking sites 40% of students using it to connect with friends.

Table (4) Explains that highly statistically significant differences between the students' mean knowledge score about social media before , post immediately and after 3 months of the program implementation (P < 0.001).

Figure (1) illustrates that before the program implementation 93.8% of the students had poor total knowledge scores, 6.2% had average total knowledge scores regarding social media, while immediately after the program implementation the total knowledge scores increased to 85% had good knowledge, 15% had average knowledge and after 3 months 66.2% had good knowledge and 33.8% had average knowledge.

Table (5) Explains that highly statistically significant differences among the students' mean score of lifestyle regarding social media before , post immediately and after 3 months of the program implementation (P < 0.001).

Figure (2) illustrates that, before the program implementation 82.5% of the students had poor total lifestyle scores, 17.5% had good total lifestyle scores regarding social media, while immediately after the program implementation the students total good lifestyle scores increased to 90% also, after 3 months the total good lifestyle scores increased to 91.2%.

Table (1): Socio-demographic characteristics of students in the study sample (n =80)

Items	NO.	%
Age (years)		
<16	25	31.3
16-17	42	52.5
>17	13	16.2
Mean ± SD	16.13±1.0	
Sex:		
Male	45	56.2
Female	34	43.8
Father education:		
Illiterate	8	10.0
Read/Write	15	18.8
Primary/Preparatory education	16	20.0
Secondary education	18	22.5
University education	23	28.7
Father Job		
Employee	52	65.0
Manual work	16	20.0
Unemployed/ retired	12	15.0
Mother Education		
Illiterate	12	15.0
Read/Write	21	26.3
Primary/Preparatory education	24	30.0
Secondary education	17	21.3
University education	6	7.5
Mother Job		
Housewife	53	66.2
Working	27	33.8

Table (2): Socio-economic characteristics of students in the study sample (n=80)

Socio-economic variables	No.	%
Family size:		
3-4	24	30.0
5-6	47	58.8
7+	9	11.2
Mean \pm SD	5.3 \pm 1.3	
Birth order:		
First	20	25.0
Middle	36	45.0
Last	24	30.0
Family income:		
Enough and saving	7	8.7
Enough	29	36.3
Insufficient	44	55.0
Residence:		
Urban	63	78.7
Rural	17	21.3

Table (3): Frequency distribution of students' background regarding use of social media (n=80)

Items	No.	%
Social media sites:		
Face book	40	50.0
Twitter	7	8.7
Instagram	14	17.5
YouTube	16	20.0
Google+	3	3.8
Hours of social media using/day:		
<1	5	6.3
1<3	15	18.7
3<5	14	17.5
5+	46	57.5
People student communicate with on social media:		
Family	11	13.7
Friends	51	63.8
Relatives	18	22.5
Device used to log on social media :		
Computer	3	3.8
Laptop	11	13.7
Tap	29	36.2
Mobile	37	46.3
Purpose for using social media:		
Connect with friends	32	40.0
New people	15	18.8
Exchange of information	4	5.0
Spend leisure time	14	17.5
Entertainment	12	15.0
Acquire expertise	3	3.7

Table (4): Mean knowledge score among studied students regarding social media at different time of program implementation (n=80)

Knowledge	Pre-intervention	immediate post	After 3 months	Paired t test (1)	P value (1)	Paired t test (2)	P value (2)
	Mean ±SD	Mean ±SD	Mean ±SD				
Meaning of social media	.3625±.48376	.8000±.4025	.6636±.4747	-6.610	<0.001**	-3.503	<0.001**
Most famous social media	2.0000±.7463	6.2000±.560	6.1963±.556	-29.888	**0.001>	-36.673	<0.001**
Advantages of social media	3.0250±1.043	7.5250±.779	6.9159±1.30	-23.692	**0.001>	-20.011	<0.001**
Disadvantages of social media	2.3000±.9195	6.5000±.693	6.4112±.726	-23.801	**0.001>	-28.319	<0.001**
Decreasing risks of social media	1.9250±.6894	3.8000±.40	3.8131±.391	-16.192	**0.001>	-19.831	<0.001**
Best time for using social media	.3000±.46115	.8125±.3927	.7290±.4465	-5.763	**0.001>	-5.360	<0.001**
Best use for camera when using social media	.4375±.49921	.7625±.4282	.7009±.4600	-3.467	**0.001>	-2.639	<0.001**
Site of computer when using social media	.5000±.50315	.7000±.4611	.6542±.4778	-2.039	**0.001>	-1.621	<0.001**
Persons you talk through social media	.3750±.48718	.7875±.4116	.7290±.4465	-4.488	**0.001>	-6.425	<0.001**
Knowing law of using social media	.4625±.50174	.7625±.4282	.6822±.4678	-3.222	**0.001>	-3.267	<0.001**
Reading usage conventions	.2875±.45545	.8375±.37124	.7383±.4416	-6.461	**0.001>	-6.138	<0.001**
Total	11.9750±3.63	29.4875±2.88	28.233±3.10	-25.486	**0.001>	-27.100	<0.001**

Figure (1): Percentage distribution for total knowledge scores of students regarding social media before, post immediately & after 3 months of the program implementation (n=80).

Table (5): Mean score of studied students' lifestyle regarding social media at different time of program implementation (n=80)

	Pre-intervention	immediate post	After 3 months	Paired t test (1)	P value (1)	Paired t test (2)	P value (2)
	Mean ±SD	Mean ±SD	Mean ±SD				
Sleeping	8.8875±2.2445	15.1000±1.83910	15.8625±1.96	-20.139	<0.001**	-20.46	<0.001**
Nutrition	6.7000±1.0954	13.1250±1.74570	13.7000±1.46	-30.659	**0.001>	-33.867	<0.001**
Physical Activity	8.4000±1.454	13.2875±1.4	13.8250±1.16	-19.98	<0.001**	-24.356	<0.001**
General Health Status	11.9375±1.7235	18.4750±2.233	19.6500±1.5	-21.29	<0.001**	-16.445	<0.001**
Social Relations	10.8375±1.5131	15.1250±1.8167	16.7500±1.2	-22.55	**0.001>	-44.737	<0.001**

Figure (2): Percentage distribution for total lifestyle scores of students regarding social media before, post immediately & after 3 months of the program implementation (n=80).

III. Discussion

Social media is based on the idea of how people know and interact with each other. It gives people the chance to share, connect with each other and explore the world more openly. Social networking has a large influence on people live especially students as it helps a lot in many fields of life such as political field, economic field and educational field. More than 90 percent of students using social networking sites, they have included these networks into their daily routines. As well as positive impact of social media, it has negative impact on students; it affects their performance, mind ability, health and relation with family.

Concerning socio-demographic characteristics table 1. The finding of the present study showed that the studied sample, more than half of them their aged from 16 to < 17 years old with mean age 16.13 ± 1.0 (secondary school students), 56.2% of them were male. This finding in the same line with **Evelyn, (2016)** who found that, most of the respondents were males (68%) and attended secondary schools.

As regards father education, around one-third of fathers were university graduates, two-thirds of them were employees. Concerning mother education, one third had primary/preparatory education; two-thirds of them were housewives. This result was in congruent with **Evelyn, (2016)** who found that, the majority of parents were self-employed and mostly worked as traders (44.6%)

Regarding family size, income and residence table 2. The current study showed that, more than half of student's families had 5-6 members also, they had insufficient family income. While more than three quarters of them living in urban area. This in contrast with **Rajeev and Jobilal,(2015)** who reported that, the majority of the respondents belong to nuclear families, belong to middle economic status families and live in semi-urban areas.

Concerning students' background about the use of social media table 3. The results of the present study cleared that half of students using Facebook, this result was in the same line with **digital trust foundation,(2013)** which reported that, Facebook remains the most popular social media platform among teens. The site used most frequently by teens is Facebook (41%), followed by Instagram (20%), Snapchat (11%), and Twitter (6%). While in contrast with **Al Sharki et al., (2015)** in their study about " Perceptions of Social Media Impact on Students' Social Behavior: A Comparison between Arts and Science Students" they found that, the most commonly used social media tool among studied students were YouTube, twitter and then Facebook.

Regarding hours of using social media per day, more than half of the students using social networking sites for five hours and more. Also around half of them using mobile for social media communication, and one-fifth of students using social media to Connect with friends. This result was in the same line with **American Academy of Pediatrics, (2011)** which reported that, 22% of teenagers log on to their favorite social media site more than 10 times a day. 25% of teenagers use cell phones for social media. Also, similar to **Madden et al., (2013)** who focused that Teens have frequent and almost constant online access, with two-thirds having access to more than one device. Smartphones and other mobile devices have become the primary devices for online access for teens. **Digital Trust Foundation (2013)** added, constant access provided by mobile phones, 92% of teens report going online daily. In the same line **Evelyn, (2016)** who stated, the respondents primarily used social media for staying connected, with old friends (74%), making new friends (73.3%) and staying in touch with family members (62.6%). **Bhavana, (2014)**, added 93% teens spend minimum 6 hours per day on social media.

As regard the mean knowledge score among studied students regarding social media table 4 & figure 1. The present study revealed that, there were highly statistically significant differences between the students' mean knowledge score about social media before, post immediately and after 3 months of the program implementation. This result was in agreement with **Narjis et al.,(2015)** who revealed that, there was a significant increase in the knowledge mean scores of the intervention group after the training program ($p=0.001$). As the mean score of students' knowledge in the intervention group, was 0.67 ± 0.42 in the pre-test, increased to 3.15 ± 1.13 in the first post-test and their mean score of knowledge was 2.87 ± 0.89 in the second post-test.

Regarding Mean score of studied students' lifestyle regarding social media table 5 & figure 2. The present study revealed highly statistically significant differences among the students' mean score of lifestyle regarding social media before, post immediately and after 3 months of the program implementation ($P < 0.001$). This finding was supported by **Jesu Kulandairaj,(2014)** who reported that, social media mainly affect lifestyle and social relations of youth So, preventive measures should be taken towards these negative effects and the young people should be well educated and should have proper awareness regarding such problems of Social media to promote their health. In the same line **Emily, (2013)** mentioned, it is important to increase health education and interventions for students including lifestyle interventions to improve their health as those young adults are indeed forming new health habits, developing a sense of health beliefs, making lifestyle choices and behaviors which will be maintained for the rest of their lives.

IV. Conclusion

According to results & research hypothesis concluded that: The educational health program had a positive effect to improve the students' knowledge and lifestyle regarding social media.

Recommendations:

- 1- Parents should monitor activities of young people on social media to protect them from negative effects of social media.
- 2- This program should be applied on a wide range of schools to prevent health and social risks of social media.

3- Schools and other governmental agencies should organize social events that realistic interaction and face to face relations among youth.

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