



THE IMPACT OF SOCIAL MEDIA SITES ON THE HIGHER SCHOOL STUDENTS' BEHAVIOR AT GEZIRA STATE, SUDAN

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ABSTRACT

Background: Social media sites have a huge effect on the future of society and human perception. In today's society, there is an increasing number of Internet users so social media has become more popular in daily life. Social media provides this opportunity where people can communicate with others and belong to different networks via virtual communities on the Internet. **Objectives:** The purpose of this study was to investigate the impact of social media sites on Higher School Students' behavior at Gezira State, Sudan. The study conducted in the academic year 2016. **Methods:** A systematic random sample of (109) male and female higher school students aged (13-20) year old was chosen. The study participants were asked to express their attitudes towards the impact of social media sites on higher school students' behavior. The questionnaire was used for collecting data. The data analyzed with SPSS personal computer program. Appropriate statistics for description (frequencies, percentage, means, standard deviations, T-Test and One way ANOVA Test) were used. **Results:** The results showed that: There were significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on the higher school student's behavior, in favor of male participants. Thus, the null hypothesis ($H_0: \mu_1 = \mu_2$) was rejected; There were significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on the higher school students behavior, related to classroom variable. Thus, the null hypothesis was rejected; there were significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on their behavior, related to the age variable. Thus, the null hypothesis (H_0) was rejected. **Conclusion:** The researcher concluded that social media sites have an impact on higher school student's behavior. The study came out with some recommendation.

Keywords: Social Media sites, higher school students, Gezira state, telecommunication companies.

1. INTRODUCTION

1.1 Background

Social media sites are online services that allow users to create an individual profile, connect with other users, and navigate through these networks of contacts. Users can also communicate with each other through a variety of tools within the same site, including chatting, sending private messages, leaving public comments in users' profiles, linking to outside content and sharing photos and videos [1].

Social media sites have created new styles of communication, which made big impact on the everyday lives of humans. Individuals use social media to display their interests, identity, social relationships, and entertainment. However, social media also has an impact on human behavior and society. Social media such as Facebook, Twitters and YouTube, have become one of the most popular Internet services in the world [2, 3].

Facebook is one of the social media sites that promote the exchange of messages between people across the world. It was created in 2004 by Mark Zuckerberg (2011), whose mission was to bring people together with different backgrounds and encourage interaction [4].

Twitter is one of the social media sites that allow individuals to communicate information through micro-blogging. The micro-blogging used by individuals to share personal stories or events and seek information. Twitter is a social media site that created in 2006 to relay real-time information to users [5].

YouTube is one of the social media sites that share video with others. It started in 2005 allows individuals to interact with the wide world community by displaying and sharing user-generated video content [6].

People usually use social media sites for personal identity construction, social relationships and entertainment. On the other hand, some people who are motivated to follow public affairs will use their social media profile to use and share information that is public-oriented in nature [7].

Human behavior changes more when they use technology, especially social media sites. The daily use of social media sites by individuals has increased so much that it has an inflection negatively into their behavior [8].

Social media sites gave varied opinions and thoughts of individuals of different cultures and different areas. This has made people broad-minded, to challenge stereotyped views on particular communities and to develop mutual respect among people of different backgrounds. Most of the social media sites content creators encourage people to pursue a career they love, to take care of themselves, and to learn new skills. This creates a positive impact on human behavior. Social media sites have a big effect on the future of society and human perception. It has become more prevalent and will only continue to grow and expand [9].

Social media is an important part of human life because it promotes the interconnectedness and interdependence of human culturally diverse world. Media for social interaction allows people to communicate and engage with information that is quickly accessible on the Internet [10].

In today's society, there is an increasing number of Internet users so social media has become more popular in daily life. In social media sites, individuals have the opportunity to express their opinions to the public and participate in conversations and dialogue through a common virtual medium, which also means that at the same time, every person is a publisher and a critic in cyberspace [10].

Social media sites have used for many reasons. People needs for connection and interaction with other, who desire to fulfill a sense of belonging through support from relationships with other people. Social media provides this opportunity where people can communicate with others and belong to different networks via virtual communities on the Internet. People use social media to acquire knowledge and learn about different opinions, topics, and events. Social media is a form of media that allows people to participate in conversations and online dialogue without being face-to-face with others [11].

Social media sites help students do significantly better in school, primarily through connecting with each other in class discussions, school assignments, and group projects in and outside the classroom [12].

1.2 Previous Studies

Azah (2009) study entitled "The impact of social networks interactive Internet and satellite messages on social and communication relations of the Egyptian and Qatari family". The study aimed to determine the impact of these messages on social relations and social interactions. A multi-stage random sample of (600) was chosen. The study found that there was a negative correlation between the rate of use of social networking sites and the level of social interaction between individuals. The study also revealed that the more individuals feel privacy using a computer, the more isolated from reality and the lower the level of social interaction [13].

Azah (2016) study was conducted to examine the impact of social networks interactive Internet and satellite messages on social relations and communication. The study aimed at identifying the motives of the Egyptian youth using Facebook and revealing the nature of social relations and friendships that are formed as a result of this exposure. The study also aimed to monitor and analyze the negative and positive psychological and social effects of this deal. A simple random sample of (136) students was used. The study found that the motivation of entertainment comes at the top of the motives for students to use the site [14].

Mariam (2012) study aimed to reveal the impact of the use of social networking sites through the study of a sample of Facebook users in Algeria. Questionnaire used for collecting data. The study showed that the majority of respondents spent more than three hours in the use of Facebook, and most of the sample respondents preferred Facebook site to communicate with friends and family, consciously when they use Facebook [15].

Abdelnabi (2015) study was conducted 2013 to investigate the attitudes of the Sudanese youth towards the exploitation of social media in violation of the privacy of individuals. A simple random sample of (150) Sudanese youth who used social media sites was selected. Electronic Questionnaire was used for collecting data. The data were analyzed by SPSS. The study came out with the following results: Respondents use social media at a high rate. The study showed the social role played by social media sites through addressing the issues of university youth. The weakness of social media sites dealing with students' academic issues. The study came out with some recommendations [16].

All the previous studies dealt with the relationship between the use as well as studies on the subject of privacy and its relationship to the use of social networking sites. The lack of studies that deal with the impact of social media sites on behavior in Sudanese studies, makes this study good addition to this area of studies.

2. MATERIALS AND METHODS

2.1 Study site:

The sample of the study consisted (109) male and female students, who had been chosen from the population of higher school students, whose age ranging from (13 up to 20) years old, who study in Gezira State, which lay on the center of Sudan.

2.2 Sample and data collection:

The sample had been selected from the study population by using a systematic random sample. A questionnaire was used for collecting data. The researcher had measured the validity and reliability of the questionnaire by using: Pearson Correlation Coefficient and Cronbach Alpha Coefficient. The researcher had used Likert Scale. A typical three-level Likert item had been used in the questionnaire, the three-level Likert item as follows: (Agree), (to some extent), (Disagree). The data were analyzed with SPSS personal computer program.

2.3 Study Hypotheses:

1. There are positive attitudes in higher school students responses towards the impact of social media sites on their behavior.
2. There are no significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on the higher school students behavior, related to gender variable.

$$\begin{aligned} H_0: \mu_1 &= \mu_2 & (1) \\ H_A: \mu_1 &\neq \mu_2 \end{aligned}$$

3. There are no significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on the higher school student's behavior, related to classroom variable.

$$\begin{aligned} H_0: \mu_1 &= \mu_2 = \mu_3 & (2) \\ H_A: \mu_1 &\neq \mu_2 \neq \mu_3 \end{aligned}$$

4. There are no significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on their behavior, related to Age variable

$$\begin{aligned} H_0: \mu_1 &= \mu_2 = \mu_3 & (3) \\ H_A: \mu_1 &\neq \mu_2 \neq \mu_3 \\ & \text{(or at least two means are not equal)} \end{aligned}$$

2.4 Statistics:

All data were analyzed with the SPSS personal computer program. Appropriate statistics for description (frequencies, percentage, means, standard deviations, T-Test, and ANOVA one way test) were used.

3. RESULTS and DISCUSSION

3.1 Research participants

The research participants consisted of 109 higher school students, who participated in this study and filled out and submitted the questionnaire. All participants were students of higher school, Gezira State, which lay on the center of Sudan. Information pertaining to the personal and vocational details of the study group is given in Table (1).

Table 1: The table presents the Personal Data of the study participants

Variable		Frequency (F)	Percentage (%)
Gender	Male	43	39.4
	Female	66	60.6
Age	13-14	37	33.9
	15-16	37	33.9
	17-18	25	22.9
	19-20	10	9.2
Classroom	Level One	33	30.3
	Level Two	30	27.5
	Level Three	46	42.2
Region	Wad Medani City	60	55
	Northern Gezira State	12	11
	Southern Gezira State	8	7.4
	Eastern Gezira State	15	13.8
	Western Gezira State	14	12.8

(60.6%) (f: 66) of the study participants were female, with (39.4%) (f: 43) male. In review of participants age, (13-14) and (15-16) years old are the largest group (33.9%) (f: 37), (17-18) years old is the second largest (22.9%) (f: 25), and (19-20) is third largest (9.2%) (f: 10). In the review of classroom correlation, Level Three is the largest group 42.2%) (f: 46), Level One is the second largest (30.3%) (f: 33), and Level Two is the third largest (27.5%) (f: 30). In the term of Region correlation, Wad Medani City is the largest group (55%) (f: 60), Eastern Gezira State is the second largest group (13.8%) (f: 15), Western Gezira State is the third largest group (12.8%) (f: 14), Northern Gezira State is the fourth largest group (11%) (f: 12), and Southern Gezira State is the fifth largest group (7.4%) (f: 8).

3.2 The first hypothesis: There are positive attitudes in higher school students responses towards the impact of social media sites on their behavior: To verify this hypothesis the questionnaire was divided into seven aspects, each aspect consisted of a number of items. Mean and Std. Deviation values for every item were calculated.

3.2.1 First aspect: Usage of social media sites

3.2.1.1 Part One: Information about social media sites: This part consisted of four items (1, 2, 3, and 36). Mean and standard deviation values for part one items (information about social media) were analyzed. Table (2) displayed the mean and standard deviation analysis.

Table 2: Mean and Standard Deviation analysis for the information about social media sites

No.	Item	Mean	Standard Deviation
1.	I know social media through the Internet	2.36	0.89
2.	I know social media through friends	2.27	0.89
3.	I have an idea about social media	2.05	0.90
4.	I find it easy to use social media	2.06	0.93

Table (2) showed values of standard deviation & Mean for the study sample information about social media. The biggest mean value (2.36) and standard deviation (0.89) is for the participants who have known social media sites through the Internet. The second biggest mean value (2.27) and standard deviation (0.89) is for those who have known social media sites through their friends. The third biggest mean value (2.06) and standard deviation (0.90), is for the participants who previously have an idea about social media sites. The fourth biggest mean (2.05) and standard deviation (0.93) is for the participants who have found it easy to use social media sites.

It is clear from the above that the study participants have information about social media sites.

3.2.1.2 Part Two: The aim of social media usage: This part consisted of five items (18, 19, 20, 21, and 22). Mean and standard deviation values for part two items (The aim of social media usage) were analyzed. Table (3) displayed the mean and standard deviation analysis.

Table 3: The table presents the mean and Standard Deviation analysis for the aim of social media usage.

No.	Item	Mean	Standard Deviation
1.	I use social media to share experiences and culture	2.04	0.95
2.	I use social media for entertainment and leisure	1.70	0.89
3.	I use social media for make friendships and meet new friends	1.97	0.94
4.	I use social media for scientific and academic communication	1.83	0.94
5.	I use social media to keep pace with the cognitive explosion	1.68	0.88

Table (3) showed values of standard deviation & Mean for the study sample aim for using social media sites. The biggest mean value (2.04) and standard deviation (0.95) is for the participants who have used social media sites to share experience and culture. The second biggest mean value (1.97) and standard deviation (0.94) is for those who have used social media sites to make friendships and meet new friends. The third biggest mean value (1.83) and standard deviation (0.94), is for the participants who have used social media sites for scientific and academic communication. The fourth biggest mean (1.70) and standard deviation (0.89) is for the participants who have used social media sites for entertainment and leisure. The fifth biggest mean (1.68) and standard deviation (0.88) is for the participants who have used social media sites to keep pace with the cognitive explosion.

In part two of the first aspect, (56.9%) of the study participants have used social media sites for sharing experience and culture, (54.1%) of them have used social media sites to make friendships and meet new friends, (45.9%) of participants have used social media sites for scientific and academic communication, (41.1%) of them have used social media sites for entertainment and leisure, and (40.3%) of study participants have used social media sites to keep pace with the cognitive explosion.

3.2.1.3 Part Three: The Favorite sites: This part consisted of six items (4, 5, 6, 7, 8, and 9). Mean and standard deviation values for part three items (The favorite sites) were analyzed. Table (4) displayed the mean and standard deviation analysis.

Table 4: The table presents the mean and Standard Deviation analysis for the favorite sites.

No.	Item	Mean	Standard Deviation
1.	Facebook is one of the most popular social media	2.71	0.66
2.	Twitter is one of the most popular social media	1.49	0.84
3.	YouTube is one of the most popular social media	1.50	0.83
4.	Skype is one of the most popular social media	1.52	0.85
5.	What Sapp is one of the most popular social media	3.00	0.00
6.	Other social media such as: Snap Shatt, Instagram, Viber, and Tango	1.34	0.75

Table (4) showed values of standard deviation & Mean for the study sample favorite social media sites. The biggest mean value (3.00) and standard deviation (0.00) is for the participants whose favorite site is What Sapp. The second biggest mean value (2.71) and standard deviation (0.66) is for those whose favorite social media site is Facebook. The third biggest mean value (1.52) and standard deviation (0.85), is for the participants whose favorite social media site is Skype. The fourth biggest mean (1.50) and standard deviation (0.83) is for the participants whose favorite social media site is YouTube. The fifth biggest mean (1.49) and standard deviation (0.84) is for the participants whose favorite social media site is Twitter. The sixth biggest mean (1.34) and standard deviation (0.75) is for the participants whose favorite social media sites are Snap Shatt, Instagram, Viber, and Tango.

In part three of the first aspect, the favorite social media sites respectively are What Sapp, Facebook, Skype, YouTube, Twitter, and Snap Shatt, Instagram, Viber, and Tango.

3.2.1.4 Part Four: The frequently browsed pages

This part consisted of six items (37, 38, 39, 40, 41, and 42). Mean and standard deviation values for part four items (The frequently browsed pages) were analyzed. Table (5) displayed the mean and standard deviation analysis.

Table 5: The table presents the mean and Standard Deviation analysis for the frequently browsed pages.

No.	Item	Mean	Standard Deviation
1.	Religious pages in social media are the most frequently browsed pages for me	2.25	0.95
2.	Cultural pages in social media are the most frequently browsed pages for me	2.17	0.94
3.	News pages in social media are the most frequently browsed pages for me	1.68	0.90
4.	Sport pages in social media are the most frequently browsed pages for me	1.69	1.32
5.	Song pages in social media are the most frequently browsed pages for me	1.53	0.83
6.	I browse games, entertainment, politics, and scientific pages	1.20	0.60

Table (5) showed values of standard deviation & Mean for the study sample frequently used pages. The biggest mean value (2.25) and standard deviation (0.95) is for the participants who frequently browsed religious pages. The second biggest mean value (2.17) and standard deviation (0.94) is for the participants who frequently browsed cultural pages. The third biggest mean value (1.69) and standard deviation (1.32), is for the participants who frequently browsed sports pages. The fourth biggest mean (1.68) and standard deviation (0.90) is for the participants who frequently browsed news pages. The fifth biggest mean (1.53) and standard deviation (0.83) is for the participants who frequently browsed song pages. The sixth biggest mean (1.20) and standard deviation (0.60) is for the participants who frequently browsed games, entertainment, politics, and scientific pages.

In part four of the first aspects, the frequently browsed pages respectively are Religious pages, cultural pages, Sport pages, News pages, Song pages, games, entertainment, politics, and scientific pages.

3.2.1.5 Part Five: The subscribe to social media sites

This part consisted of four items (10, 11, 12, and 13). Mean and standard deviation values for part five items (The subscribe to social media sites) were analyzed. Table (6) displayed the mean and standard deviation analysis.

Table 6: The table presents the mean and Standard Deviation analysis for the subscribe to social media sites.

No.	Item	Mean	Standard Deviation
1.	I subscribe to only one of social media site	1.74	0.93
2.	I subscribe to two of social media sites	1.46	0.82
3.	I subscribe to three of social media sites	1.42	0.79
4.	I subscribe to more than three of social media sites	1.60	0.90

Table (6) showed values of standard deviation & Mean for the study sample subscribes to social media sites. The biggest mean value (1.74) and standard deviation (0.93) is for the participants who subscribed to only one of the social media site. The second biggest mean value (1.60) and standard deviation (0.90) is for the participants who subscribed to more than three social media sites. The third biggest mean value (1.46) and standard deviation (0.82), is for the participants who subscribed to two of social media sites. The fourth biggest mean (1.42) and standard deviation (0.79) is for the participants who subscribed to three social media sites.

In part five of the first aspect, the subscribe to social media sites. (40.3%) of the study participants subscribed one site, (32.1%) of the study participants subscribed more than three sites, (25.7%) of the study participants subscribed two sites, and (22%) of study participants subscribed three sites.

3.2.1.6 Part Six: The time spent on using social media sites: This part consisted of four items (14, 15, 16, and 17). Mean and standard deviation values for part six items (The time spent on using social media sites) were analyzed. Table (7) displayed the mean and standard deviation analysis.

Table 7: Mean and Standard Deviation analysis for the time spent on using social media sites.

No.	Item	Mean	Standard Deviation
1.	I spend less than an hour using social media	1.63	0.90
2.	I spend one to two hours using social media	1.73	0.94
3.	I spend two to five hours using social media	1.36	0.75
4.	I spend more than five hours using social media	1.30	0.70

Table (7) showed values of standard deviation & Mean for the study sample time spent on using social media sites. The biggest mean value (1.73) and standard deviation (0.94) is for the participants who spent one to two hours using social media. The second biggest mean value (1.63) and standard deviation (0.90) is for the participants who spent less than an hour using social media. The third biggest mean value (1.36) and standard deviation (0.75), is for the participants who spent two to five hours using social media. The fourth biggest mean (1.30) and standard deviation (0.70) is for the participants who spent more than five hours using social media.

In part six of the first aspect, the time spent on using social media sites. (37.6%) of the study participants spent one to two hours, (33%) of the study participants spent less than an hour, (19.2%) of the study participants spent two to five hours, and (16.4%) of study participants spent more than five hours using social media sites.

3.2.2 The second aspect: Relationships

The second aspect consisted of two parts; each part consisted of a number of items as follows:

3.2.2.1 Part One: Friendships

This part consisted of ten items (23, 24, 25, 26, 30, 31, 32, 33, 34 and 35). Mean and standard deviation values for part one items (Friendships) were analyzed. Table (8) displayed the mean and standard deviation analysis.

Table 8: Mean and Standard Deviation analysis for friendships through social media sites.

No.	Item	Mean	Standard Deviation
1.	The people whom I add to my social media account are parents	2.24	0.96
2.	The people whom I add to my social media account are friends	2.11	0.97
3.	I add all people to my social media account	1.71	0.92
4.	I made many friendships through social media	2.20	0.87
5.	I communicate with friends through social media	2.53	0.83
6.	I communicate with celebrities through social media	1.45	0.81
7.	I communicate with the public through social media	1.50	0.82
8.	I communicate with programs and satellite channels through social media	1.78	0.91
9.	I communicate with others who have not been mentioned in the Questionnaire through social media	1.16	0.55
10.	The celebrities I communicate with are Islamists, artists, athletes, and actors	1.66	0.93

Table (8) showed values of standard deviation & Mean for the study sample friendships through social media. The biggest mean value (2.53) and standard deviation (0.83) is for the participants who have communicated with friends through social media sites. The second biggest mean value (2.24) and standard deviation (0.96) is for those who have added parents to their social media accounts. The third biggest mean value (2.20) and standard deviation (0.87), is for the participants who have made many friendships through social media sites. The fourth biggest mean (2.11) and standard deviation (0.97) is for the participants who have added friends to their social media accounts. The fifth biggest mean value (1.78) and standard deviation (0.91) is for those who have communicated with programs and satellite channels through social media sites. The sixth biggest mean value (1.71) and standard deviation (0.92), is for the participants who have added all people to their social media accounts. The seventh biggest mean (1.66) and standard deviation (0.93) is for the participants who have communicated with Islamists, Artists, Athletes, and Actors celebrities. The eighth biggest mean value (1.50) and standard deviation (0.82) is for those who have communicated with public through social media sites. The ninth biggest mean value (1.45) and standard deviation (0.81), is for the participants who have communicated with celebrities through social media sites. The tenth biggest mean (1.16) and standard deviation (0.55) is for the participants who have communicated with Islamic programs, Art sites, The Press, scientific research sites, and scientific pages through social media sites.

The first part of the second aspect, relationships through social media sites, study participants added to their accounts friends, parents, and communicated with friend, and made many friendships through social media sites.

3.2.2.2 Part Two: Social Relationships: This part consisted of six items (48, 49, 50, 51, 52 and 53). Mean and standard deviation values for part two items (Social relationships) were analyzed. Table (9) displayed the mean and standard deviation analysis.

Table 9: Mean and Standard Deviation analysis for Social Relationships through social media sites

No.	Item	Mean	Standard Deviation
1.	I prefer to contact with real people face-to-face than communicating with them through social media	2.01	0.89
2.	I prefer to communicate with people through social media than contact with them face-to-face	1.72	0.88
3.	I can balance between using social media and spend time with people	2.32	0.89
4.	Social media has negatively affected my friendships	1.46	0.81
5.	Social media has refined my relationships with people	1.67	0.80
6.	Social communication did not affect my social relationships	2.01	0.96

Table (9) showed values of standard deviation & Mean for the study sample social relationships through social media. The biggest mean value (2.32) and standard deviation (0.89) is for the participants who can balanced between using social media and spend time with people. The second biggest mean value (2.01) and standard deviation (0.89) is for those who preferred to contact with real people face-to-face than communicating with them through social media. The third biggest mean value (2.01) and standard deviation (0.96) for those participants who have mentioned that, social communication did not affect their social relationships. The fourth biggest mean value (1.72) and standard deviation (0.88), is for the participants who preferred to communicate with people through social media than contact with them face-to-face .The fifth biggest mean (1.67) and standard deviation (0.80) is for the participants who have seen that social media has refined their relationships with people. The sixth biggest mean value (1.46) and standard deviation (0.81) is for those who have seen that social media has negatively affected their friendships.

The second part of the second aspect, social relationships through social media sites, (72.5%) of study participants can balanced between using social media and spend time with real people, (62%) of study participants preferred to contact with real people face-to-face than communicating with them through social media, (55.1%) of the study participants have mentioned that, social communication did not affect their social relationships.

3.2.3 The Third Aspect: The effects of widespread social media: The third aspect consisted of two parts, each part consisted of a number of items as follows:

3.2.3.1 Part One: Positive effects: This part consisted of five items (27, 47, 60, 61, and 62). Mean and standard deviation values for part one items (Positive effects) were analyzed. Table (10) displayed the mean and standard deviation analysis.

Table 10: Mean and Standard Deviation analysis for positive effects of social media sites.

No.	Item	Mean	Standard Deviation
1.	I benefited greatly from my social media involvement	2.44	0.84
2.	Social media has positively influenced my academic achievement	1.94	0.85
3.	The proliferation of social media has recently been attributed to overcoming social isolation	1.75	0.90
4.	The proliferation of social media has recently been attributed to keeping abreast of technical progress	2.24	0.91
5.	The proliferation of social media has recently been attributed to share experience with friends, and to communicate with relatives permanently	1.10	0.43

Table (10) showed values of standard deviation & Mean for the study sample on the positive effects of the social media sites. The biggest mean value (2.44) and standard deviation (0.84) is for the participants who have benefited greatly from their social media involvement. The second biggest mean value (2.24) and standard deviation (0.91) is for those who have seen that the proliferation of social media has recently been attributed to keeping abreast of technical progress. The third biggest mean value (1.94) and standard deviation (0.85), is for the participants who have stated that, the social media has positively influenced their academic achievement. The fourth biggest mean (1.75) and standard deviation (0.90) is for the participants who have seen that the proliferation of social media has recently been attributed to overcoming social isolation. The fifth biggest mean value (1.10) and standard deviation (0.43) is for those who have stated that, the proliferation of social media has recently been attributed to share experience with friends, and to communicate with relatives permanently.

The first part of the third aspect, positive effects of social media sites. The study participants have benefited greatly from social media sites, kept them abreast to technical progress, positively influenced their academic achievement.

3.2.3.2 Part Two: Negative effects: This part consisted of four items (43, 44, 45, and 46). Mean and standard deviation values for part two items (Negative effects) were analyzed. Table (11) displayed the mean and standard deviation analysis.

Table 11: Mean and Standard Deviation analysis for positive effects of social media sites

No.	Item	Mean	Standard Deviation
1.	I am disturbed by the lack of privacy in the social media	1.55	0.87
2.	Social media is wasting my time	1.63	0.84
3.	In social media rumors spread rapidly	2.44	0.86
4.	I am disturbed by abuses and harmful writing on social media	1.11	0.45

Table (11) showed values of standard deviation & Mean for the study sample on the Negative effects of social media sites. The biggest mean value (2.44) and standard deviation (0.86) is for the participants who have confirmed the rapidly spread of rumors through social media sites. The second biggest mean value (1.63) and standard deviation (0.84) is for those who have seen that the social media is wasting their time. The third biggest mean value (1.55) and standard deviation (0.87), is for the participants who have disturbed by the lack of privacy in the social media. The fourth biggest mean (1.11) and standard deviation (0.45) is for the participants who have disturbed by abuses, and the harmful writings through social media sites.

The second part of the third aspect, Negative effects of social media sites. Social media sites helped the rapidly spread of rumors.

3.2.4 The Fourth Aspect: Reflection of what displayed on the user page: The fourth aspect consisted of six items (54, 55, 56, 57, 58, and 59). Mean and standard deviation values were analyzed. Table (12) displayed the mean and standard deviation analysis.

Table 12: Mean and Standard Deviation analysis for Reflection of what displayed on the user page

No.	Item	Mean	Standard Deviation
1.	I register my real name in social media	2.26	0.93
2.	I add my correct personal information in social media	2.05	0.97
3.	All photos and information I offer on social media, reflects my true personality	2.09	0.97
4.	All photos and information I offer on social media, reflects my mental state	1.46	0.77
5.	All photos and information I offer on social media, reflects the things I love	1.88	0.97
6.	All photos and information I offer on social media, has taken from other sites or kids photos	1.03	0.26

Table (12) showed values of standard deviation & Mean for the study sample on the reflection of what displayed on the user page. The biggest mean value (2.26) and standard deviation (0.93) is for the participants who have registered their real name in social media. The second biggest mean value (2.09) and standard deviation (0.97) is for those who have stated that, all photos and information they offered on social media, reflects their true personality. The third biggest mean value (2.05) and standard deviation (0.97), is for the participants who have added their correct personal information on social media. The fourth biggest mean (1.88) and standard deviation (0.97) is for the participants who have stated that, all photos and information they offered on social media, reflects the things they love. The fifth biggest mean value (1.46) and standard deviation (0.77) is for those who have stated that, all photos and information they offered on social media, reflects their mental status. The fifth biggest mean value (1.03) and standard deviation (0.26) is for those who have stated that, all photos and information they offered on social media, has taken from other sites, kids photos.

The fourth aspect, reflection of what displayed on the user page. (65.1%) of the study participants registered their real name in social media. All photos and information participants offered on social media reflects participants true personality. (55.1%) of the study participants added their correct personal information in social media.

3.2.5 The Fifth Aspect: The best Telecommunication Companies that provide INTERNET services in Sudan:

The fifth aspect consisted of five items (63, 64, 65, 66, and 67). Mean and standard deviation values were analyzed. Table (13) displayed the mean and standard deviation analysis.

Table 13: Mean and Standard Deviation analysis for Telecommunication Companies services

No.	Item	Mean	Standard Deviation
1.	The telecommunications company I communicate with to provide internet service within Sudan is Zain Telecommunications	1.88	0.97
2.	The telecommunications company I communicate with to provide internet service within Sudan is Sudani Telecommunications	1.60	0.88
3.	The telecommunications company I communicate with to provide internet service within Sudan is MTN (Mobile Telephone Network) Telecommunications	2.24	0.93
4.	There are other telecommunications company I communicate with to provide internet service within Sudan, not mentioned in the Questionnaire	1.04	0.28
5.	The performance of the telecom company I deal with to provide Internet service within Sudan is very satisfactory	2.10	0.84

Table (13) showed values of standard deviation & Mean for the study sample on the Telecommunication Companies services. The biggest mean value (2.24) and standard deviation (0.93) is for the participants who have subscribed to MTN services. The second biggest mean value (2.10) and standard deviation (0.84) is for study participants who have satisfied to Sudanese telecommunication companies services. The third biggest mean value (1.88) and standard deviation (0.97), is for the participants who have subscribed to Zain telecommunication company. The fourth biggest mean (1.60) and standard deviation (0.88) is for the participants who have subscribed to Sudani telecommunication company. The fifth biggest mean value (1.04) and standard deviation (0.28) is for those who have subscribed to other telecommunication in Sudan.

The fifth aspect, the Telecommunication Companies services. The telecommunication companies that offered INTERNET services in Sudan, respectively: MTN, Zain and Sudani.

3.2.6 The Sixth Aspect: Social media language: The sixth aspect consisted of two items (28 and 29). Mean and standard deviation values were analyzed. Table (14) displayed the mean and standard deviation analysis.

Table 14: Mean and Standard Deviation analysis for Social media language

No.	Item	Mean	Standard Deviation
1.	The language of the social media that I use, is Arabic language	2.55	0.82
2.	The language of the social media that I use, is English language	1.69	0.86

Table (14) showed values of standard deviation & Mean for the study sample on social media language. The biggest mean value (2.55) and standard deviation (0.82) is for the participants who have used the Arabic language. The second biggest mean value (1.69) and standard deviation (0.86) is for study participants who have used the English language.

The sixth aspect, the social media language. The language of the social media that used by (78.9%) of the study participants is the Arabic Language, while (21.1%) of the study participants used the English language. According to study participant responses to the questionnaire aspects, the study participants have positive attitudes towards the impact of social media sites on their behavior.

3.3 The second Hypothesis: There are no significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on the higher school students behavior, related to gender variable:

$$H_0: \mu_1 = \mu_2$$

$$H_A: \mu_1 \neq \mu_2$$

This hypothesis aimed to indicate that, whether the gender variable has an impact on higher school students' behavior. To test this hypothesis, the T-test was used for the difference between two independent sample averages and the results were shown in Table (15).

Table 15: Means & Std. Deviation & T-Test values of study participants

Gender	N	Mean	Std. Deviation	t	df	Sig. (2 tailed)	95% confidence interval		Sig.
							Lower	Upper	
Male	43	2.48	0.96	3.76	84.292	0.000	0.322	1.047	Sig.
Female	66	1.80	0.88						

Table (15) showed that the mean value of male attitudes towards the impact of social media sites on higher school students' behavior (2.48), whereas the female mean value is (1.88). The calculated t value is (3.76) which is bigger than the statistical t table value (1.984), df (84.292). As $Cal\ t > Tab\ t$ and Sig. (2-tailed) (0.000) is less than 0.025. This indicated that there are significant differences at the level of sig. (0.05) between male and female participants in favor of male participants. Thus, the null hypothesis ($H_0: \mu_1 = \mu_2$) was rejected.

3.4 The Third Hypothesis: There are no significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on the higher school students behavior, related to classroom variable.

$$H_0: \mu_1 = \mu_2 = \mu_3$$

$$H_A: \mu_1 \neq \mu_2 \neq \mu_3$$

This hypothesis aimed to indicate that, whether the classroom variable has an impact on higher school students' behavior. To test this hypothesis, the One ANOVA Test was used. Table (16) showed the means and standard deviation values of the study participants.

Table 16: The table presents the Means & Std. Deviation values of study participants

Variable (Experience)	N	Mean	Std. Deviation	95% Confidence Interval	
				Lower	Upper
Level One	33	1.81	0.39	1.67	1.95
Level Two	30	1.60	0.49	1.41	1.78
Level Three	46	1.45	0.50	1.30	1.60

Table (16) showed the mean & std. deviation values of study participants' attitudes towards the impact of social media sites on higher school students' behavior, related to classroom variable. The mean value of participants who have been at level one (1.81), whereas the mean value of the participants who have been at level two (1.60), and the mean value of participants who have been at level three (1.45), so, as showed in table (15), $\mu_1 \neq \mu_2 \neq \mu_3$. To verify this result, one-way ANOVA test was used, as appeared in Table (17).

Table 17: The table presents One way ANOVA Test to find out differences between study participants according to classroom variable

Sources of contrast	Sum of squares	df	Mean squares	F	Sig.
Between groups	2.515	2	1.257	5.666	0.005
Within groups	23.522	106	0.222		
Total	26.037	108			

Table (17) showed calculated (Cal) (F) value as an indication of differences between the study participants attitudes towards the impact of social media sites on higher school students' behavior, related to classroom variable. Cal (F) value was (5.666), whereas (F) value that derived from the statistical table (Tab) was (2.347). Since Cal (F) value > Tab (F) value, and also level of significant adopted for this study (0.05) > (0.005). Thus, the null hypothesis (H0) (There are no significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on the higher school students behavior, related to classroom variable) was rejected. Once the null hypothesis was rejected, we have to determine which of the means is not equal, to verify this, comparison differences were used to compare every two mean values together, the hypotheses for this is as follows:

$$H_0: \mu_i = \mu_j,$$

$$H_A: \mu_i \neq \mu_j, \quad i < j = 1, 2, 3$$

Table 18: The table presents Multiple Comparison to compare mean values together

	Experience(i)	Experience(j)	Mean difference (i-j)	Std. Error	Sig.	95% Confidence Interval	
						Lower	Upper
LCD	Level One	Level Two	0.21818	0.11883	0.069	-0.0174	0.4538
		Level Three	0.36166*	0.10746	0.001	0.1486	0.5747
	Level Two	Level One	-0.21818	0.11883	0.069	-0.4538	0.0174
		Level Three	0.14348	0.11055	0.197	-0.0757	0.3627
	Level Three	Level One	-0.36166*	0.10746	0.001	-0.5747	-0.1486
		Level Two	-0.14348	0.11055	0.197	-0.3627	0.0757

*The mean difference is significant at the (0.05) level.

Table (18) showed the comparison mean values, which compared every two mean values together to determine which value is significant. The researcher notices that: The differences between mean values of (Level One) group and (Level Three) group are significance. The difference between mean values of (Level One) group and (level two) group is not significance. The difference between mean values of (level Two) group and (Level three) group is not significance.

3.5 The Fourth Hypothesis: There are no significant differences at the level of significance (0.05) between students' responses on the impact of the social media sites on their behavior, related to the age variable:

$$H_0: \mu_1 = \mu_2 = \mu_3$$

$$H_A: \mu_1 \neq \mu_2 \neq \mu_3$$

(or at least two means are not equal)

This hypothesis aimed to indicate that, whether the age variable has an impact on higher school students' behavior. To test this hypothesis, the ANOVA test was used. Table (19) showed the means and standard deviation values of the study participants.

Table 19: The table presents the Means & Std. Deviation values of study participants

Variable (Age)	N	Mean	Std. Deviation	95% Confidence Interval	
				Lower	Upper
13-14	37	1.81	0.39	1.678	1.943
15-16	37	1.59	0.49	1.428	1.760
17-18	25	1.44	0.50	1.230	1.649
19-20	10	1.30	0.48	0.954	1.645

Table (19) showed that there is a large convergence between the mean values of the study participant's attitudes towards the impact of social media sites on higher school students' behavior, related to the age variable. The mean value of the participants whose age ranged between 13-14 years old (1.81), whereas the mean value of participants whose age ranged between 15-16 years old (1.59), and the mean value of participants whose age ranged between 17-18 years old (1.44), and the mean value of participants whose age ranged between 19-20 years old (1.30). To verify this result, one-way ANOVA test was used, as appears in Table (20).

Table 20: The table presents One way ANOVA Test to find out differences between study participants according to the age variable

Sources of contrast	Sum of squares	df	Mean squares	F	Sig.
Between groups	3.182	3	1.061	4.873	0.003
Within groups	22.855	105	0.218		
Total	26.037	108			

Table (20) showed calculated (Cal) (F) value as an indication of differences between the study participants attitudes towards the impact on higher school students' behavior, related to the age variable. Cal (F) value was (4.873), whereas (F) value that derived from the statistical table (Tab) was (2.129). Since Cal (F) value > Tab (F) value, and also level of significant adopted for this study (0.05) > (0.003). Thus, the null hypothesis (H₀) (There are no significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on their behavior, related to the age variable) was rejected.

5. CONCLUSION

Personal data of the higher school students were analyzed. (60.6%) of the study participants were female students; (33.9%) of participants' age ranged between (13-14) and (15-16) years old, (42.2%) of the participant were at level three classroom and (55%) of study participants were from Wad Medani City.

According to study participant responses to the questionnaire aspects, the study participants have positive attitudes towards the impact of social media sites on their behavior.

There were significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on the higher school student's behavior, in favor of male participants. Thus, the null hypothesis (H₀: $\mu_1 = \mu_2$) was rejected.

There were significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on the higher school student's behavior, related to classroom variable. Thus, the null hypothesis was rejected.

There were significant differences at the level of significance (0.05) between students' responses on the impact of social media sites on their behavior, related to the age variable. Thus, the null hypothesis (H₀) was rejected.

The researcher concluded that social media sites have an impact on higher school students' behavior.

6. RECOMMENDATIONS

In spite of the negative effects, social media connectivity with families, friends and some government safety organizations, has resulted in people feeling safe while moving out. However, the researcher recommended that there are serious steps should be taken to mitigate the negative influences of social media such as:

- Inculcating virtuous moral values in schools.
- Raising youth on positive behavior.
- Spread out awareness programs on the positive and negative effects of social media sites.
- Stop spreading rumors through social media sites.
- Adherence to religious values in the use of social networking sites.
- User knowledge of security options.
- User's use of his profile in a positive way.
- Not exceed the limits in interactions on social networking sites.
- Protect the user himself.
- Respecting others.
- Full attention when commenting on social media.
- Avoid excessive use of social media sites.
- Good screening for anyone who wants to add his name to the list of friends.
- Full attention in the dissemination of personal data.

7. REFERENCES

1. Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*. 2007; 13, 210–230.
2. Zhang, W., & Chia, S. C. (2006). The effects of mass media use and social capital on civic and political participation. *Journal of Communication Studies*. 2006; 57, 277–297.
3. Alexa. Global top sites. 14 Oct. 2010; available: http://www.alexa.com/site/ds/top_sites?ts_mode=global&lang=none.
4. Facebook. (2011). Statistics. 26 September 2011; available: <http://www.facebook.com/press/info.php?statistics#!/press/info.php?statistics>.
5. Java, Akshay., et al. Why we Twitter: Understanding micro-blogging usage and communities. 5 December 2010; Available: <http://ebiquity.umbc.edu/paper/html/id/367/Why-We-Twitter-UnderstandingMicroblogging-Usage-and-Communities>.
6. Ostrow, Adam. YouTube is the top social media innovation of the decade. 4 December 2010; Available: <http://mashable.com/2009/12/22/youtube-2010/>.
7. Hilbert, M. The maturing concept of e-democracy: From e-voting and online consultations to democratic value out of jumbled online chatter. *Journal of Information Technology & Politics*. 2009; 6, 87–110.
8. Anonymous. Social Media: Impact on human behavior and society. 2018; available: <https://www.indibrain.com/article/547/social-media-impact-on-human-behavior-and-society>
9. Team GD Ideas. Social Media – Impact on human behavior and society. 23 March 2019; available: <https://www.groupdiscussionideas.com/social-media-impact-on-human-behavior-and-society/>

10. Georgetown University. Bridging Babel: New social media and interreligious and intercultural understanding. 4 November 2010; available: <http://repository.berkeleycenter.georgetown.edu/UGFNewSocialMedia.pdf>
11. Rosen, Devan; Stefanone, Michael A. & Lackaff, Derek. Online and offline social networks: Investigating culturally-specific behavior and satisfaction. In Proceedings of the 43rd Hawai'i International Conference on System Sciences. 2010; New Brunswick, NJ: Institute of Electrical and Electronics Engineers.
12. Jacob, Amedie. "The Impact of Social Media on Society". Advanced Writing: Pop Culture Intersections 2. 2015; Available: http://scholarcommons.scu.edu/engl_176/2
13. Azah, M. The impact of interactive social networks in the Internet and satellite channels on social and communication relations - a survey study on students of the University of Sharjah. 2009; Available: <https://abdanabi.wordpress.com/2017/11/20/>
14. Azah, H. The impact of social networks on the social relations of the Egyptian family-Arab Center for Research and Studies. 2016; Available: <https://abdanabi.wordpress.com/2017/11/20/>
15. Mariam, N. (2012). The use of social networking sites and its impact on social relations - A study on a sample of Facebook users in Algeria. M.A. Thesis in media and communication, University of El-Khadr-Batna. 2012; Available: <https://abdanabi.wordpress.com/2017/11/20/>
16. Abdelnabi, A. & Fatimah, G. (2017). Attitudes of Sudanese youth towards the violation of privacy on social networking sites. Research submitted to the conference of value determinism. Available: <https://abdanabi.wordpress.com/2017/11/20/>



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