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The Relationship between the Use of Social Networking Sites (SNS) and Perceived Level of Social Intelligence among Jordanian University Students: The Case of Facebook

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Abstract

This study aimed to investigate Jordanian university students' use of Facebook and their perceptions of their social intelligence as well as the relationship between students' use of Facebook and a self reported measure of their social intelligence. The participants in this study were 282 students from different colleges in a Jordanian public university. For the purpose of the study, the researchers used cross-sectional survey design in which a questionnaire was administrated and collected in-class by number of faculty members, who agreed to have their classes participating in this study. The questionnaire aimed to collect data regarding students' use of Facebook as well as the perceptions of their social intelligence. The analysis of the collected data showed that the majority of the students were active Facebook users. Participants' perceptions of their level of social intelligence were positive and at moderate level. The findings showed significant association between Facebook use and perceived level of social intelligence among Jordanian university students. The current study disagreed with the common negative reputation, in Arab World, of the effect of Facebook on students' social life. The current research study showed that the use of Facebook might benefit students' social competencies and intelligence, through providing them with electronic platform that they can use to freely express themselves.

Keywords: Facebook, social intelligence, social networking sites

1. Introduction

In the recent years, Social Networking Sit (SNS) started to have great impact on different aspects of our life. For instance, on one's personal side, SNS have played integral role on providing a way to connect with family and friends, to play network games, and to serve online materials. In business, SNS have become one of the main markets to sell products and services as well as to connect companies with their customers. In politics, SNS have become an active stage for political conversation and debate (Rainie & Smith, 2012). In Arab world, SNS were powerful digital tools for supporting the revolutionary wave of demonstrations and protests (Arab Springs), where SNS have been extensively used to exchange revolutionary thoughts and to organize for demonstrations and remonstrations. As a result, governments in Egypt, Tunisia, Libya, and Yemen fall, while regimes in Syria and Bahrain are still struggling with the resistance. In addition, SNS can facilitate communication, association, and information gathering and sharing in the health care field, for instance, SNS have been used among fellow patients to discuss their conditions (Keckley & Hoffmann, 2010).

The use of SNS is very popular among university students in Jordan, where the Jordanian universities provide their students with free internet access that allows them to sign up for different SNS. However, there is a lack of research studies that investigate the diffusion of SNS among Jordanian students. Even though, there is negative reputation of the SNS among Arab people because of the assumed negative effect from the use of SNS on Arab youth's culture in terms of religion, traditions, and native language. In addition, there is a debate about the effect of the use of SNS and the Arab university students' offline social life and competencies.

One of the important dimensions of students' social competencies is social intelligence that affects students' relationship with others in the university. Joseph and Lakshmi (2010) stated in their paper under the title, Social Intelligence, a Key to Success, that: "People with high social intelligence possess magnetic powers that attract

others, and are friendly, supportive and caring; they are successful in the society" (p. 1). Therefore, it is important to study the arising variables that might affect students' social intelligence.

The current study aimed to investigate Jordanian university students' use of Facebook and their perceptions of their social intelligence as well as the relationship between students' use of Facebook and a self reported measure of students' social intelligence.

1.1 What Is Social Networking Site (SNS)?

SNS is an interactive multi-user website in which the contents are filled by the participants of the network. SNS represent an online community that allow people all the around the world to create set of connections with multiple organization or individuals (Abhyankar, 2011). As type of Web 2.0 technology, SNS allow users to communicate and collaborate over the World Wide Web. In addition, they allow users to create and share online information and materials. Ellison (2007) defined SNS "as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (p. 211).

There are several sites that used different types of social networking models; however one of the most popular SNS in Middle East and Arab world is Facebook. Taking Jordan as an example, statics have shown that 2,653,220 of Jordan people are Facebook users, where that number represents 41.41% of Jordan population (ElAhmad, 2013).

Such an emerging technology has affected the people' social life, the following section discussed an important aspect of people social life, that is social intelligence.

1.2 What Is Social Intelligence?

Social intelligence can be defined as the ability to get along with others, the depth of the one's knowledge of the social surrounding (Juchniewicz, 2008). Social intelligence highly associated with personality skills of the person (Kihistrom & Cantor, 2000). Silberman and Hansburg (2000) identified the following dimensions of social intelligence: understanding people and sympathizing with them; expressing oneself clearly; impacting others; conflict resolution; and maintaining relationships with others. Shearer (2004) assumes three skills for social intelligence: the ability to observe individual differences between individuals; the ability to recognize the feelings, mood, points of views and motivations of others; and the ability to manage and lead groups.

Social intelligence among individuals can develop during the course of life if the individual encounters suitable experiences and suitable training and development opportunities (Grandner, 2005). Social intelligence depends on social interaction between individuals and groups and there are several methods that contribute to the development of this type of intelligence such as language; eye contact; feelings; desires; orientation; religious, economic and scientific views (Al-Banna, 2012).

The educational literature confirmed the importance of social intelligence among individuals, as it plays a great role in structuring the system of values and principles in their future characters (Litras, Moore, & Anderson, 2010). This means the preparation of the adults to positively interact with social environments is critical in order prepares them for a successful interaction with the academic experiences in educational institutions. Social intelligence includes achieving happiness with others, commitment to the ethics of the society, coping with the social criteria, compliance with the rules of social control, accepting change and sound social interaction, and working for the good of the team that eventually leads for social happiness (Mansy, 2007).

The great developments in information and communication technologies have affected different aspects of university students' social life. For instance, the SNS have become one of the most used modes of electronic communication. The following section discussed the use of SNS among university students.

2. Literature Review

2.1 The Use of SNS among University Students

There are several research studies that investigated the use of SNS in higher education settings. Some of these research studies have focused on the use of SNS among university students. For instance, Hamat, Embi, and Hassan (2012) conducted a study to examine Malaysian university students' use of SNS, the researchers surveyed *6358* university students regarding to their use of SNS. The findings showed that 79.8% of the students had an account with a social networking site. The use of social network sites was the most common activity during the time the students spent on the internet.

Some other research studies focused on the purpose of the use of SNS, such as Facebook, among University students. For example, Akyıldız and Argan (2012) conducted a study (*n=1300*) that aimed to examine the purpose of Facebook use among undergraduate students in Turkey. The researchers followed cross sectional survey. The findings showed that 93.8% of participants have Facebook account, 86.2% have logged in to Facebook at least once a day. In addition, more than have of the participants (52.2%) reported having between 101-300 friends, and about quarter of the participants (25.8%) reported having between 301-500 friends. The participants reported that the main purposes of using Facebook were to have fun, to contact friends, and to follow news. The majority of participants used Facebook more for social activities rather than for educational ones.

Some other research studies have discussed the application of SNS in teaching and learning, Bosch (2009) conducted a study that aimed to investigate the use Facebook for teaching and learning at a South African university. The researcher used virtual ethnography and qualitative content analysis of 200 students Facebook profiles as well as semi-structured interviews with a sample of 50 undergraduate students and 5 lecturers, who use Facebook to communicate with their students. The findings showed that Facebook was widely used among participants for social connectivity as well as general communication. The students who experienced the use of Facebook for teaching and learning reported several advantages of the use of Facebook that include to acquire help from Facebook college friends, to find educational materials, to answer administrative questions, to connect with their college students during university vacation, and to contact lecturers. However, there were some of the reported disadvantages of the use Facebook by college students, which include bandwidth issues, and the distracting nature of Facebook that might lead the students to spend unproductive time on Facebook rather than focusing on their education.

Beside the studies that investigated the use of Facebook by college students, some other research studies examined the students' opinion about the integration of Facebook in class activities to support learning and teaching. Eren (2012) conducted a study to investigate the students' attitude toward the use of Facebook in foreign language classes in a university in Turkey. For the purpose of the study, Facebook was used to support language learning activities for one semester long. The researcher used mixed research design to conduct the study, where at the end of the semester, the students (*n=40*) filled a cross-sectional survey that aimed to investigate their attitude regarding the use of Facebook as supplementary tool to support their learning. In addition, semi-structured interviews were conducted with three students. The results showed that the students have positive attitude towards the use of Facebook as supplementary tool to support their learning, where the students believed that the use of Facebook would improve their language skills and the use of Facebook was effective in supporting their learning compared to traditional face-to-face settings.

The discussed studies showed that use of SNS, such as Facebook, is popular among university students, where students are used to use SNS for social activities. In addition, university students showed positive attitude toward the integration of SNS in the teaching and learning process. However, the reported studies were limited to specific cultures and countries, and cannot be generalized to other cultures. In Arab world, there is scarcity of research studies that examine the use of Facebook among university students and their opinion regarding the use of Facebook.

Some literature shows a connection between students' use of SNS and different aspect of students' social life. The following section discussed some research studies that were devoted to examine the relationship between students' use of SNS and some of their social competencies.

2.2 Students' Use of SNS and Their Social Life and Competencies

The literature showed different studies that examined the effect of university students' use of SNS, such as Facebook, on different aspect of students' social competencies. For instance, Gray, Vitak, Easton and Ellison (2013) conducted a study that aimed to investigate the effect of first year college students use of Facebook on their social adjustment and determination at university. For the purpose of the study, the researchers used survey design, where 338 students, from a private university in USA, filled questionnaire regarding their use of Facebook as well as college social adjustments measure. The results showed that there were significant relationships between their use of Facebook in terms of number of Facebook friends and their collaboration with classmates through Facebook and social adjustment at the university.

In another research study that examined the relationship between students' use of Facebook and some social aspects of university students' life, Ellison, Steinfield and Lampe (2007) conducted a study that aimed to investigate the effect of students' use of Facebook on students' social capital in terms of maintenance and creation of social capital. For the purpose of the study, the researchers used cross-sectional survey design, where

286 students filled an online survey that contained a measure of students' intensity use of Facebook and measures of students' social capital. The result showed that strong and positive association between the students' use of Facebook and different dimensions of social capital.

However, from the perspectives of other researchers, the use of internet in general and SNS in particular, is not all good for users' social skills. For instance, Ben-Ze'Ev (2004) argued that the extensive use of SNS can negatively affect the uses' real-life social skills. The excess use of online interaction might negatively affect people' real life social skills and the lack of such skills might leads to some physiological problems that include depression and anxiety (Ben-Ze'Ev, 2004).

The claims of the negative effect of the use of SNS on university students' social life was examined in a study conducted by Kim, LaRose and Peng (2009). The researchers used cross sectional survey to measure students' favorite online activities and some psychological problems. The total number of participants was 635 university students from two American universities. The results showed that there were significant relationship between the use of SNS and unhealthy offline social skills. Similar finding were presented in Caplan's (2003) study, where the researchers used cross-sectional survey, in which 386 graduate students participants in, to measure their preference of online interaction and the negative results of internet use. The results showed that there were significant relationship between participants' preference of online interaction and some psychosocial health issues such as depression and loneliness.

The previously discussed literature showed mixed results regarding the relationship between the use of SNS and different aspects of university students' social life and competencies, where in some cases the use of SNS positively related to university students social life and in some cases the use of SNS negatively related to university students social life. In Arab world, there are widespread beliefs among people that the use of SNS has negative impact on Arab psychological and social life. However, such argument was not supported by educational and psychological research studies. Therefore the current research study aimed to o investigate Jordanian students' use of Facebook and the relationship between students' use of Facebook on and important dimension of students social competencies, that is social intelligence.

3. Purpose of the Study

The purpose of this study was to investigate Jordanian students' use of Facebook and the relationship between students' use of Facebook and a self reported measure of students' social intelligence. The research questions for this study were:

1) What is the intensity of Jordanian students' use of Facebook?

2) What are the Jordanian students' perceptions of their level of social intelligence?

3) What is the relationship between Jordanian students' use of Facebook and their perceived social intelligence?

4. Research Methods

Cross-sectional survey design was adopted to investigate students' use of Facebook and the relationship between students' use of Facebook and a self reported measure of students' social intelligence. Quantitative data were collected using questionnaire instrument. The data were collected using paper-format questionnaire. The questionnaire was administrated and collected in-class by number of faculty members at a university in Jordan. The students had the choice to participate in the study. There was not any type of compensation for students to participate in the study. The students filled the questionnaire anonymously.

4.1 Participants

The participants were university students at a public university in Jordan. The total number of participants was 282 students. The analysis of students' gender of the participants showed that 51.8% (*n=146*) of them were male students and 48.2% (*n=136*) of them were female students. More than half of the participants (59.6%, *n*=168) were between the ages of 18 to 20 years. More than one-third the participants (36.2%, *n*=102) were between the ages of 20 to 25 years. Only 8 students (2.8%) were between the ages of 26 to 30 years. Only 4 students (1.4) were older than thirty years. The participants were in different academic years, more than one-third the participants (37.2%, *n*=105) were their second academic year. 28.4% (n=80) of the participants were in their first academic year, 22.7% (n=64) of the participants were in their third academic year, 11.3% (n=32) of the participants were in their fourth academic year. Only one student (.4%) was in his/her fifth academic year. The sample of the study were from different colleges, 38.7% (n=109) of the participants were from the college of education, 22.3% (n=63) of them were from the college of Arts, 11.3% (n=32) of them were from the college of Engineering and 27.7.3% (n=78) of participants were from the college of Business Administration & Economics.

Table 1 showed descriptive summary of participants' characteristics.

Table 1. Descriptive summary of participants' characteristics

Variables	Category	Number	Percentage
Gender	Male	146	51.8
	Female	136	48.2
Age	18-20	168	59.6
	20-25	102	36.2
	26-30	8	2.8
	More than 30	4	1.4
Academic year	1	80	28.4
	2	105	37.2
	3	64	22.7
	4	32	11.3
	5	1	.4
Academic discipline	Education	109	38.7
	Arts	63	22.3
	Engineering	32	11.3
	Business Administration & Economics	78	27.7

4.2 Instruments

The used instrument in this study was questionnaire instrument that consisted from three sections. The first section of the questionnaire instrument aimed to collect demographic data about the participants that include gender, age, academic year, and academic discipline. The second section of the questionnaire consisted form five questions regarding students' use of Facebook as well as a five-point likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree) that aimed to measure the intensity of students use of Facebook. The scale consisted from six statements. In addition, the daily time spent using Facebook and the number of the Facebook's friends were coded from 1 to 5 and added to the intensity of students' use of Facebook scale. The likert scale was adopted from a study conducted by Valenzuela, Park, & Kee, (2009). The section of questionnaire that aimed to examine students use of Facebook was translated into Arabic language by the researchers, The Arabic version of that section of the questionnaire was checked by five Arabic language native speakers in order to make sure that scale is understandable before administrating the research.

The third section of the questionnaire consisted from five-point likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree) that aimed to measure students' perception of their social intelligence. The scale consisted from fifteen statements. The social intelligence scale was adopted from Al-Zoubi (2011).

The validity of the questionnaire instrument was examined by panel of experts consisted from three faculty members with different specialization that include instructional technology, educational psychology, and educational research and evaluation. The questionnaire items were adjusted based on reviewers' comments.

After administrating the questionnaire instrument, the reliability of the scales in the questionnaire instrument was measured using Cronbach's alpha. The results showed high value of Cronbach's alpha for each scale. The value of Cronbach's alpha for the scale of the intensity of Facebook use was .83. The value of Cronbach's alpha for the scale of the social intelligence was .72. The resulted values of Cronbach's alpha indicate acceptable reliability.

4.3 Data Analysis

Different types of statistical analysis were carried out in order to answer the research questions. To answer the first research question that aimed to examine the intensity of Jordanian students' use of Facebook, frequency and

percentage statistics were used to analyze students' responses to the questions regarding their use of Facebook. Students' responses to the scale of intensity of Facebook use were analyzed by descriptive statistics (e.g., means, standard deviations). To answer the second research question that aimed to examine students' perceptions of their level of social intelligence, students' responses to the scale of perceived level of social intelligence were also analyzed by descriptive statistics (e.g., means, standard deviations). In order to answer the third research questions that aimed to examine the relationship Jordanian students' use of Facebook and their perceived social intelligence, Pearson's product-moment correlation coefficient was calculated. In addition simple regression was conducted to examine the relationship between the dependent variable (perceived level of social intelligence) and the independent variable (intensity of Facebook use). In addition, statistical analysis was conducted to measure the effect of the demographic data on students' use of Facebook and their perceptions of their level of social intelligence. T-tests and Analysis of Variance (ANOVA) were used to compare the means of students' use of Facebook and their perceptions of their level of social intelligence based on demographic variables. The statistical analysis software SPSS 16.0 was used for the statistical analysis.

5. Results

5.1 Students' Use of Facebook

The analysis of students' responses to the questions regarding the use of Facebook showed that the majority of participants (92.6%) were Facebook users, while only 21 (7.4%) students reported that they do not use Facebook.

The student, who uses Facebook, varies in the time they signed up in Facebook. 18.8% (*n=49*) of Facebook users had opened their Facebook account for a year or less, about quarter of Facebook users (25.3%, n=66) had a Facebook account that is one to two years old, 19.9% (*n=52*) of Facebook users had a Facebook account that is two to three years old, 17.2% (*n=45*) of Facebook users had a Facebook account that is four to five years old. The number of students who had old Facebook account was less than students with relatively new account, where only 8.4% (*n=22*) of the Facebook users had account that is five to six years old and only 10.3% (*n=27*) of the Facebook users had account that is older than six years.

Regarding the students' purposes of Facebook usage, the data showed that the majority of the students (86.6%, n=226) used Facebook to socialize with family and friends. The second popular students' purpose for Facebook usage was for academic purposes, where 31% (*n=81*) reported using Facebook for academic purposes. Some of the participants reported that they used Facebook to contact faculty members and class mates, to look for and to download educational materials. The third popular students' purpose for Facebook usage was to upload and share files such as videos and pictures, where 26.4% (*n=69*) reported using Facebook to upload and share files. Another popular use of Facebook, among Jordanian students, was to exchange political and economic opinions with others, where a little less than quarter of the participants 22.2% (*n=58*) reported using Facebook to Chat about political and economic issues. 11.9% (*n=31*) of the participants reported using Facebook to play online games. A low percentage of students (less than 2.7%) reported using Facebook for other purposes that include killing time, reading news, reading and uploading religious quotes, knowing new people, applying for jobs, and making pranks.

The collected data regarding the average daily time that the students spent on Facebook showed that the students varied in their daily time they spent on Facebook. 16.1% (*n=42)* of the participants reported spending less than ten minutes a day on Facebook. A little more than a quarter of the students (28.0%, n=73) of the participants reported spending 10 to 30 minutes a day on Facebook. 15.7% (*n=41*) of the participants reported spending more than half an hour but less than an hour a day on Facebook, 13.0% (*n=34*) of the participants reported spending one to two hours a day on Facebook. A little more than the quarter of the students (27.2%, n=71) of the participants reported spending more than two hours a day on Facebook.

Similar to average daily time that the students spent on Facebook, the reported number of the Facebook' friends varied among participants. About one third of the participants (33.3%, n=87) reported that they had less than fifty friends on Facebook. 16.5% (*n=43*) of the participants reported that they had 51 to 100 friends on Facebook, 11.9% (*n=31*) of the participants reported that they had 101 to 150 friends on Facebook. Only 7.7% (*n=20*) of the participants reported that they had 151 to 200 friends on Facebook. A little less than one third of the participants (30.7%, n=80) of the participants reported that they had more than 200 friends on Facebook. Table 2 shows descriptive summary of participants' use of Facebook.

Table 2. Descriptive summary of participants use of Facebook

Variables	Category	Number	Percentage
Use of Facebook	Yes	261	92.6
	No	21	7.4
Old of Facebook account	A year or less	49	18.8
	1-2 years	66	25.3
	2-3 years	52	19.9
	4-5 years	45	17.2
	5-6 years	22	8.4
	More than six years	27	10.3
Purpose of Facebook use	Contacting family and friends	226	86.6
	Academic purposes	81	31
	Load and share files (pictures and videos)	69	26.4
	Chat about political and economic issues	58	22.2
	Playing online games	31	11.9
	Others		
	• Killing time	5	1.9
	• Reading news	7	2.7
	• Reading and uploading religious quotes	4	1.5
	• Knowing new people	5	1.9
	• Applying for jobs	1	.4
	• Making pranks	1	.4
Average daily time spent on Facebook	Less than 10 minutes	42	16.1
	10-30 minutes	73	28.0
	31-60 minutes	41	15.7
	1-2 hours	34	13.0
	More than 2 hours	71	27.2
Number of Facebook friends	Less than 50	87	33.3
	51-100	43	16.5
	101-150	31	11.9
	151-200	20	7.7
	More than 200	80	30.7

Participants' Intensity of Facebook use was slightly positive and closer to neutral, with general mean of 3.18 and standard deviation of .85. The range of respondents' mean scores was between 2.83 and 3.65. Participants responded most positively to item 1 (mean=3.65) that stated "Facebook is part of my everyday activity", and least positively to item2 (mean=2.83) that stated "I am proud to tell people I'm on Facebook". Table 3 shows the means and standard deviations of participants' responses to the intensity of Facebook use scale.

Table 3. Means and standard deviations of participants' responses to the intensity of Facebook use scale

N	Intensity of Facebook use Scale	N	Mean	STD
1	Facebook is part of my everyday activity	261	3.65	1.09
2	I am proud to tell people I'm on Facebook	261	2.83	1.11
3	Facebook has become part of my daily routine	261	3.48	1.22
4	I feel out of touch when I haven't logged onto Facebook for a while	261	2.92	1.40
5	I feel I am part of the Facebook community	261	3.53	1.09
6	I would be sorry if Facebook shut down	261	3.09	1.39
7	Average daily time spent on Facebook	261	3.07	1.46
8	Number of Facebook friends	261	2.85	1.67
	Average		*3.18*	*.85*

5.2 Students' Perceptions of Their Level of Social Intelligence

Participants' perceptions of their level of social intelligence was positive and moderate level, with general mean of 3.71 and standard deviation of .45. The range of respondents' mean scores was between 4.26 and 2.47. Participants responded most positively to item 1 (mean=3.65) that stated "I get along well with people", and least positively to item 15 (mean=2.47) that negatively stated "Best of doing business individually". Table 3 shows the means and standard deviations of participants' responses to the intensity of Facebook use scale. Table 4 shows, after reversing the negatively stated items, the means and standard deviations of participants' responses to perceived level of social intelligence scale.

Table 4. Means and standard deviations of participants' responses to perceived level of social intelligence scale

N	Perceived level of social intelligence Scale	N	Mean	STD
1	I get along well with people.	261	4.26	.73
2	I notice easily if others are lying.	261	4.10	.93
3	I can adapt easily to new people and new situations.	261	3.81	.94
4	I can achieve the wishes of others.	261	3.42	1.07
5	I can predict the feelings of others.	261	3.57	1.04
6	I realize the weaknesses of others.	261	3.46	1.09
7	I know how to make others laugh.	261	4.04	.90
8	I can convince others to do anything.	261	3.70	.95
9	I can take advantage of others if they wish.	261	3.96	.88
10	I can talk with others in the area they are talking.	261	4.00	.90
11	I feel that people of all ages love me.	261	3.91	1.00
12	*I feel scared when I'm with strangers.	261	3.04	1.27
13	I response to all people enthusiastically free from bias, prejudice, or hurting them.	261	3.67	1.07
14	I praise others when they do a good job.	261	4.23	.94
15	*I prefer to do jobs individually.	261	2.47	1.26
	Average		3.71	.45

Note. * reversed scored items

5.3 The Relationship between the Use of Facebook and Social Intelligence

The statistical analysis showed that the intensity of Facebook use and perceived level of social intelligence were significantly correlated. $r(259)=.255$, $p < 0.01$. Table 5 shows the Correlation Matrix of the dependent variable (perceived level of social intelligence) and the independent variable (intensity of Facebook use).

Table 5. The correlation matrix of the dependent variable (perceived level of social intelligence) and the independent variable (intensity of Facebook use)

		Perceived level of social intelligence
Intensity of Facebook use	Pearson Correlation	.255(**)
	Sig. (2-tailed)	.000
	N	261

** Correlation is significant at the 0.01 level (2-tailed).

A linear regression analysis was conducted to show the proportion of variance in the dependent variable (Perceived level of social intelligence) explained by the independent variable (Intensity of Facebook use). The summary of the linear regression results are presented in Table 6 and Table 7. The results indicated Intensity of Facebook use explained a significant proportion of variance in perceived level of social intelligence scores, $R^2=.065$, $F(1, 259)=17.951$, $p < .001$.

Table 6. Standard regression model summary

Model	**R**	**R^2**	**Adjusted R^2**	**Std. Error**
1	.255	.065	.061	.44

Predictors: (Constant), Intensity of Facebook use

Dependent Variable: Perceived level of social intelligence

Table 7. ANOVA: Regression significance

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	3.527	1	3.527	17.951	.000
	Residual	50.892	259	.196		
	Total	54.419	260			

Predictors: (Constant), Intensity of Facebook use

Dependent Variable: Perceived level of social intelligence

The independent variable (Intensity of Facebook use) significantly predicted the dependent variable (Perceived level of social intelligence) t=4.23, Beta=.255; $p < .001$. (Table 8)

Table 8. Regression coefficients of standard regression model

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	3.279	.106		30.84	.000
	Intensity of Facebook use	.137	.032	.255	4.23	.000

Dependent Variable: Perceived level of social intelligence

5.4 The Effect of Student's Demographic Characteristics on Their' Use of Facebook and Their Perceived Level of Social Intelligence

The results of t-tests show that there were no significant differences between students' use of Facebook and their perceived level of social intelligence based on their gender. The results of ANOVA show that there were no significant differences between students' use of Facebook and their perceived level of social intelligence based on their age and academic year. In addition, the results of ANOVA shows that there were no significant differences between students' perceived level of social intelligence based on their major. However, the results of ANOVA shows that students' use of Facebook differs based on their major. Therefore, a post hoc pairwise comparison using the LSD command was performed. The results shows that the only significance differences between the students' use of Facebook based on their major were found between education students and students from both, Engineering and Business Administration and Economics majors. The comparisons were made only between the Facebook's users. Table 9 and Table 10 shows that the Engineering students use the Facebook the most (mean=3.42), followed by the Business Administration and Economics students (mean=3.28). The mean difference between the Education and the Engineering students was -.40, p=.02<.05. The mean difference between the Education and the Business Administration and Economics students was -.26, p=.04<.05.

Table 9. The means of students' use of Facebook based on their major

	Major	N	Mean	Std. Deviation	Std. Error Mean
Students' use of Facebook	Education	99	3.02	.87	.08
	Engineering	31	3.42	.60	.10
	Business Administration & Economics	73	3.28	.89	.10

Table 10. Summary of post hoc pairwise comparisons of students' response for the use of Facebook

Dependent Variable	(I) Major	(J) Major				95% Confidence Interval of the Difference	
			Mean Difference (I-J)	Std. Error	Sig.	Lower	Upper
Major	Education	Engineering	-.40	.17	.02	-.74	-.05
		Business Administration & Economics	-.26	.13	.04	-.52	.00

6. Discussion and Conclusion

Similar to the findings of other discussed research studies in different cultures (Bosch, 2009; Hamat, Embi, & Hassan, 2012; Akyıldız & Argan, 2012), the current research study revealed that the majority of university students in Jordan have Facebook account. The majority of participants were active users of Facebook, where they logged in Facebook daily and about two third of them (66.8%) have more than 50 Facebook friends. About two third of Facebook users (64%) have three years or less old Facebook account, where the availability of free internet access in Jordanian universities gave the students chances to use internet and to create SNS accounts. Beside the use of Facebook to chat with people, about one third of participants (31%), who use Facebook, reported using Facebook for educational purposes. Students' adoption and positive attitudes toward the use of Facebook for educational purposes was reported in some research studies (Bosch, 2009; Eren, 2012).

Participants' responses to the intensity of Facebook use scale showed that the participants responded most positively to the item that stated that the use of Facebook is part of their everyday activity; however the participants responded least positively to the item that stated that they were proud to tell other people that they use of Facebook. Such responding to this item can be attributed to the cultural barriers of the use of Facebook, where Facebook is known as a mean to develop relationship among females and males that considered culturally unacceptable in Islamic/Arabic traditions, mainly for females (Shen, & Khalifa, 2010). The overall mean of participants' intensity of Facebook use was slightly positive and closer to neutral, with general mean of 3.18 and

standard deviation of .85. The results indicated that even though the participants were users of Facebook, they were not heavy Facebook users.

Participants' perceptions of their level of social intelligence were positive and at moderate level, with general mean of 3.71 and standard deviation of .45. The results related to university students' perception of moderate social intelligence level, can be attributed to their experience in high schools and university, where about more than two third of the participants (71.6%) have been in the university for one year or more. University students have more chances to interact with other people, (e.g. faculty members, others students, and administrators) with varied social characteristics. In addition, university students have greater chance to use electronic types of social interaction that would improve their social competencies (Ellison, Steinfield, & Lampe, 2007). The findings showed significant relation between students' use of Facebook and their perceived level of social intelligence. The positive association between the use of Facebook and the social intelligence aligns with research studies that showed positive relationship between Facebook' use and university students social life and competencies (Ellison, Steinfield, & Lampe, 2007; Gray, Vitak, Easton, & Ellison, 2013) and contradict with research studies that showed negative effect of Facebook and use on university students social life and competencies (Caplan, 2003; Ben-Ze'Ev, 2004; Kim, LaRose, & Peng, 2009). Facebook provided the university students an electronic platform to explicitly express their social and political point of views without fear as well as to develop opposite sex relationship. Such freedom in expressing opinions and developing relationships contributed on students' perceptions of their social skills and intelligence.

Students' perceptions of their social intelligence were not different based on their gender, age, academic year, and major. In addition, students' use of Facebook was not different based on their gender, age, and academic year. However, significant differences in students' use of Facebook were found between education students and students from both, Engineering and Business Administration and Economics majors. The engineering students used the Facebook the most followed by Business Administration and Economic. The students form the Engineering and Business Administration and Economic departments have more access to the computer and internet compared to education students, where several of their classes are offered in computer laps.

The mentioned results contributed towards better understanding of the Facebook usage among university students and its relation with personal and social communication with others. The current study represents one of first studies, in Arab world, that discusses the use of Facebook and its relation with students' social competencies. Other studies, in Arab world, are still necessary to shed light on some of issues related to the use of Facebook and other social variables.

The currents study has some limitations; all the results are based on self-reported data that are subjected to different types of bias (Razavi, 2001). In addition, only undergraduate students from four colleges in one university participated in this study. More graduate and undergraduate students from different colleges, and different Jordanian universities would enhance the generalizability of the study.

References

Abhyankar, A. (2011). Social Networking Sites. *College Research Journal*, 18-21.

Akyıldız, M., & Argan, M. (2012). Using online social networking: Students' purposes of Facebook usage at the University of Turkey. *Journal of Technology Research*, *3*.

Al- Banna, S. (2012). *The effectiveness of a training program based on story mode in developing the social intelligence among children kindergarten* (Unpublished Master Dissertation). Al- Balqa Applied University, Amman.

Al-Zoubi, A. (2011). The relationship between social intelligence and aggressive behavior among gifted and non-gifted students. *Jordan Journal of Educational Sciences*, *7*(4), 419-431.

Ben-Ze'Ev, A. (2004). *Love online: Emotion on the Internet*. New York, NY: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511489785

Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communicatio: South African Journal for Communication Theory and Research*, *35*(2), 185-200. http://dx.doi.org/10.1080/02500160903250648

Caplan, S. (2003). Preference for on line social interaction: A theory of problematic internet use and psychosocial well-being. *Communication Research*, *30*(6), 625-648.

ElAhmad, K. (2013). *Facebook Users in Arab World 2013*. Retrieved March 15, 2014, from http://visual.ly/Facebook-users-arab-world-2013

Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210-230.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, *12*(4), 1143-1168.

Eren, Ö. (2012). Students' Attitudes towards Using Social Networking in Foreign Language Classes: A Facebook Example. *International Journal of Business and Social Science*, *3*(20), 288-294.

Gardner, H. (2005). *Multiple lenses on the mind*. Paper presented at the expogestion conference, Bogota Colombia, May 25. Retrieve March 17, 2014, from http://www.pz. Harvard. edu/pls/HG Multiple Lenses. Pdf

Gray, R., Vitak, J., Easton, E. W., & Ellison, N. B. (2013). Examining social adjustment to college in the age of social media: Factors influencing successful transitions and persistence. *Computers & Education*, *67*, 193-207. http://dx.doi.org/10.1016/j.compedu.2013.02.021

Hamat, A., Embi, M. A., & Hassan, H. A. (2012). The Use of Social Networking Sites among Malaysian University Students. *International Education Studies*, *5*(3), 56. http://dx.doi.org/10.5539/ies.v5n3p56

Joseph, C., & Lakshmi, S. S. (2010). Social Intelligence, a Key to Success. *The IUP Journal of Soft Skills*, *4*(3), 15-21.

Juchniewicz, J. (2008). *The influence of social intelligence on effective music teaching* (Unpublished Doctoral Dissertation). Florida State University, USA. http://dx.doi.org/10.1177/0022429410378368

Keckley, P. H., & Hoffmann, M. (2010). *Social networks in health care: Communication, collaboration and insights*. New York: Deloitte Center for Health Solutions.

Kihlstrom, J. F., & Cantor, N. (2000). Social intelligence. *Handbook of intelligence*, *2*, 359-379. http://dx.doi.org/10.1017/CBO9780511807947.017

Kim, J., LaRose, R., & Peng, W. (2009). Loneliness as the cause and the effect of problematic Internet use: The relationship between Internet use and psychological well-being. *Cyber Psychology & Behavior*, *12*(4), 451-455. http://dx.doi.org/10.1089/cpb.2008.0327

Litras, S., Moore, D. W., & Anderson, A. (2010). Using video self-modelled social stories to teach social skills to a young child with autism. *Autism research and treatment*. http://dx.doi.org/10.1155/2010/834979

Mansy, A. (2007). *Social intelligence*. Retrieved January 8, 2014, from http://faculty.Ksu.edu.sa/dr-Aber-mansy/default.aspx

Rainie, L., & Smith, A. (2012). *Social networking sites and politics*. Retrieved April 14, 2014, from http://www.pewinternet.org/Reports/2011/The-Internet-and-Campaign-2010.aspx

Razavi, T. (2001). *Self-report measures: An overview of concerns and limitations of questionnaire use in occupational stress research*. Retrieved May 20, 2014, from http://netec.mcc.ac.uk/BibEc/data/Papers/fthsotoam01-175.html#top

Shearer, B. (2004). Multiple intelligences theory after 20 years. *The Teachers College Record*, *106*(1), 2-16.

Shen, K. N., & Khalifa, M. (2010). Facebook usage among Arabic college students: Preliminary findings on gender differences. *International Journal of E-Business Management*, *4*(1), 53-65. http://dx.doi.org/10.3316/IJEBM0401053

Silberman, M. L., & Silberman, M. (2000). *People smart: Developing your interpersonal intelligence*. Berrett-Koehler Publishers.

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is There Social Capital in a Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation1. *Journal of Computer-Mediated Communication*, *14*(4), 875-901.