The Influence of Social Network Use on Students' Academic Performance

إثر استخدام شبكات التواصل الاجتماعية على الأداء الأكاديمي للطلبة

Rania Abdalla¹, Abeer Qashou¹*

رانية عبدالله¹، عبير قشوع¹*

¹Information Technology Department, Palestine Technology University Kadoorie, Tulkarm, Palestine

¹قسم تكنولوجيا المعلومات، جامعة فلسطين التقنية خضوري، طولكرم ، فلسطين

Abstract: Social Network Sites (SNSs) are widely used by university students these days. The underlying reasons behind this use vary between academic and nonacademic purposes. The question is whether this use influences the students' academic performance or not. The aim of this study is to answer this question by examining the impact of five potential variables on the use of SNS, and the influence of this usage on the students' academic performance at Palestine Technical University- Kadoorie (PTUK). Five variables are included: the gender, age, faculty, duration of use, and computer self-efficacy. Stratified sampling technique was used to gather the required data, 369 valid survey items were retrieved and analyzed using SPSS 20.0. The findings revealed that among the five variables, only students' faculty and computer self-efficacy have positive influence on SNS use, and SNS use has positive influence on students' academic performance. The researchers recommend that PTUK should adopt strategies that direct students' use of SNS in beneficial ways.

Keywords: Social Network Sites, Academic Performance, Computer Self-Efficacy, SNS use, PTUK.

المستخلص: يتم استخدام مواقع الشبكات الاجتماعية (SNS) على نطاق واسع من قبل طلاب الجامعات في هذه الأيام. تختلف الأسباب الكامنة وراء هذا الاستخدام بين الأغراض الأكاديمية وغير الأكاديمية. السؤال هو ما إذا كان هذا الاستخدام يؤثر على الأداء الأكاديمي للطلاب. تهدف هذه الدراسة للإجابة على هذا السؤال من خلال دراسة تأثير خمسة متغيرات محتملة على استخدام SNS، وتأثير هذا الاستخدام على الأداء الأكاديمي للطلاب في جامعة فلسطين التقنية-خضوري (PTUK). تم تضمين خمسة متغيرات: الجنس، والعمر، كلية الطالب، ومدة الاستخدام، والكفاءة الذاتية في الحاسوب. واستخدمت العينة الطبقية من اجل جمع البيانات المطلوبة، تم استرداد 369 استبانة مكتملة وصحيحة، تم تحليلها باستخدام SPSS 20.0. كشفت النتائج أن اثنين فقط من بين المتغيرات الخمسة وهما "كلية الطالب" و"الكفاءة الذاتية في الحاسوب" للطلاب لها تأثير إيجابي على استخدام SNS، واستخدام SNS له تأثير إيجابي على الأداء الأكاديمي للطلاب. يوصي الباحثون بضرورة أن تتبنى جامعة فلسطين التقنية-خضوري PTUK استراتيجيات توجه استخدام الطلاب لـ SNS بطرق مفيدة.

الكلمات المفتاحية: مواقع التواصل الاجتماعي، الأداء الأكاديمي، الكفاءة الذاتية في الحاسوب، استخدام شبكات التواصل الاجتماعي، جامعة فلسطين التقنية-خضوري.

***Corresponding author: a.qashu@ptuk.edu.ps**

INTRODUCTION:

Communications and the internet have turned the whole world into a small village; the effect is apparent everywhere around us. Social Network Sites (SNSs) represent one form of this enormous development. According to Boyd and Ellison (2007) A SNS is defined as web-based services that enable individuals to create their own public or semi-public profile, define a list of others users or friends and then start communicating with them .

Recently, SNSs are part of almost everyone's daily life routine especially the youth. There are different SNSs available that anyone can easily join by filling an application form to create his/her profile and then start using it. A number of social networking sites (SNSs) based on internet are available, such as FaceBook, Twitter, YouTube, MySpace, WhatsApp, WeChat, Instagram, and LinkedIn. The estimation indicates that 2.32 billion of visitors were active in FaceBook monthly in 2018, while it is expected for Twitter users at the end of 2019 to reach 275 million per month (Guraya, Al-Qahtani, Bilal, Guraya, & Almaramhy, 2019) .

The usage of SNSs is like a double-faced coin; it has a positive and a negative impact. Despite of the bright side of the use of SNS in terms of enabling, accelerating and facilitating communication, the frequent use of SNS may lead to the emergence of new habits related to the use of technology such as addiction (Al-Yafi, El-Masri, & Tsai, 2018). The main concern is whether SNS usage is a valuable mean in learning and teaching process. University students are using SNS in their everyday academic and nonacademic activities, which may have an influence on their academic performance. The impact of using SNS on the academic performance of students have been widely investigated in the western countries and some of the Middle Eastern countries like Jordan and Saudi Arabia. In Palestine a few studies have examined this relation. While some of these studies have shown a positive influence of using SNS on academic performance (Samad, Nilashi, & Ibrahim, 2019; Mahdi, 2019), other studies have shown a negative influence or no direct influence (Giunchiglia, Zeni, Gobbi, Bignotti, & Bison, 2018; Alwagait, Shahzad, & Alim, 2015; Wentworth and Middleton, 2014). The majority of these studies recommended that further research is required to study this issue in depth, thus the current study is conducted to fill that gap regarding the influence of using SNS in Palestinian universities.

In this study the researchers aim to spot light on the impact of using SNSs on the academic performance of Palestine Technical University - Kadoorie (PTUK)' students. The intensity and frequency of using SNSs varies among students. Many factors contributed to this variance. This variance in the extent of SNSs usage in relation to gender, age, faculty, time, and students' computer self-efficacy was investigated, as well as the influence of SNS use on students' academic performance.

LITERATURE REVIEW:

Gender Influence (GI):

Nowadays, social media has been recognized as an important ICT application and has an active role among young people (Goswami and Dutta, 2015). Studies examining gender differences in communication and online behavior in general show that there are different motivations for men and

women regarding the use of SNS (Haferkamp, Eimler, Papadakis, & Kruck, 2012). Women use Facebook to make fun and maintain friendships, while men aim to make new friends and new relationships (Janković, Nikolić, Vukonjanski, & Terek, 2016; Sheldon, 2008). Another difference is that women have a greater positive self-esteem, which is positively related to communication, the amount of time they spend and the fun they find on social networking sites. While researchers find negative self-esteem among men, which makes them need to communicate using social network sites in order to compensate for the lack of communication in their real lives (Janković et al., 2016; Barker, 2009). In the United States, the results of a research conducted on adolescents' show that females tend to disclose their personal information on social networking sites more than males (Goswami and Dutta, 2015). The results of some studies on the most used of social networks sites show that SNS are most used by women than men (Duggan, 2015; Doleck and Lajoie, 2018). Other studies confirm that the results are mixed with respect to the group that spends more time online. Studies that confirm that men are the most use SNS than women show that this was true in previous decades when technology was in the form of computer games or videos. It also shows that girls use the Internet for things like chatting and downloading music. For this reason, one might assume that social networking sites and other online social groups will more attract girls (Flad, 2010). Sharabati (2018) examined the influence of knowledge sharing through Facebook on students' academic performance at PTUK and recommended that gender, age, education level, or subject could be examined in future. Accordingly, the following hypothesis is formulated:

H1: Gender has significant impact (at 5% significance level) on using Social Networking Sites (SNSs).

Age Influence (AI):

Previous research suggests that age may play an important role in the use of technology and forms of adoption (Gibson, Harris, & Colaric, 2008). For example, some studies consider age to be a decisive factor in the use of Mobile commerce (Goswami and Dutta, 2015). Also Lin, Sidani, Shensa, Radovic, Miller, Colditz, & Primack. (2016) in their study about the association between social media use and depression in young adults report that age is the only significant related variable with visiting social media sites weekly. Other studies also illustrate that addicting the use of social media is more pronounced among young people than older age groups (Andreassen, Pallesen, & Griffiths, 2017). The justification for this is that the new generation of young people often use these technologies to form, develop and maintain relationships. They also use the Internet as a tool to form and enhance their social identity by obtaining feedback about their behavior and personality online (Allen, Ryan, Gray, McInerney, & Waters, 2014; Andreassen et al., 2017). In addition, young people may have more familiarity about new technological solutions and platforms as well as they are ready and able to teach them (Andreassen et al., 2017). Research frequently emphasize that adolescents and young people - compared to older generations - may be the most active and connected online (Holt, Shehata, Strömbäck, & Ljungberg, 2013). The justification according to Holt et al. (2013) for divergent results among younger and older citizens towards social media is related to different media usage habits. Holt et al. (2013) also show that the proportion of adolescents who participate and re-edit content online is also higher than the proportion of older people. Therefore, it seems that the extent of activity in interacting with people and online content is the cause of the main difference between young generations and adults. Accordingly, the following hypothesis is formulated:

H2: Age has significant impact (at 5% significance level) on using Social Networking Sites (SNSs).

Student Faculty Influence (FI):

In the available research, many terms have been used to express student's faculty such as academic specialization and academic discipline. Academic specialization may affect the use of social media. Across every platform from social media platforms, there are disciplinary differences. Therefore, scientists from the humanities, social sciences and natural resources appear to be active in communicating with other members. In contrast, biologists have a more negative use of social tools (Ortega, 2015). While other research shows that the adoption of social media use varies across academic disciplines, as faculty members in the humanities, arts, professions, applied sciences, and social sciences use social media more than those in natural sciences or mathematics and computer science (Manca and Ranieri, 2016). Also Moran, Seaman, & Tinti-Kane (2012) find that faculty who teach in the humanities and arts show higher usage rates for social media use than faculty in the natural sciences. The adoption of Social Media Sites are influenced by the availability or the lack of relevant content on social media for a particular discipline. In addition, the subject taught determines the existence of a preference for specific types of tools (Moran et al., 2012; Manca and Ranieri, 2016). In another study examining the impact of different disciplines on the use of Twitter, the researcher explains that researchers in different disciplines should not use Twitter in the same way or to the same extent for sharing or discussing their research with others (Holmberg and Thelwall, 2014). Kothari and Hickerson (2016), have examined whether the student's academic disciplines affect how to use social media, and applied to students of journalism and advertising disciplines. They show that the differences between those students are caused by the fact that the majority of teaching staff use social media activities for the convenience of students to participate and promote the work of others on the web. This strategy is more compatible with advertising discipline versus journalism students who favor activities where they learn how to identify sources as well as mobilize those sources for story ideas. Accordingly, the following hypothesis is formulated:

H3: Academic Specialization has significant impact (at 5% significance level) on using Social Networking Sites (SNSs).

Duration of use influence (DI):

According to Gonzalez, Gasco, & Llopis (2019), an important problem created by social networks is the amount of time students usually spent using them, which could turn into addiction. Not all students are capable of imposing limits on themselves regarding time consumption while using social networks (Paul, Baker, & Cochran, 2012), this could be due to the distraction tools available on these social networks such as games, advertisements and others (Zaremohzzabieh, Samah, Omar, Bolong, & Kamarudin, 2015). Feng, Wong, Wong, & Hossain (2019) found that a high frequency level of the internet and Facebook usage daily distracted students in academic tasks and consequently achieved lower GPA. Sampasa-Kanyinga, Chaput, & Hamilton (2019) indicated that using social networks for two hours or less per day was positively associated with school connectedness, whereas a more than two hours usage per day had a negative association with school connectedness. Furthermore, Wallace (2014) pointed that the compulsive use of the social networks had decreased the academic performance of students since the

increase of using SNS for nonacademic issues diminishes the time being exploit by academic activities. Hence, the following hypothesis is proposed:

H4: Duration of use has significant impact (at 5% significance level) on using Social Networking Sites (SNSs).

Computer Self efficacy Influence (SEI):

Individuals' computer self-efficacy has played an important role as a determinant of accepting and using information system (Wang, Xu & Chan, 2015). Individuals with high level of computer self-efficacy tend to accept and use information systems and computer related systems more than those with lower level of computer self-efficacy. Social networks demonstrate an example of such information systems. Computer self-efficacy could be general or specific, general computer self-efficacy refers to the individual's general skills that are system-independent, whereas specific computer self-efficacy involves the individuals' judgment of acquiring the required skills towards a specific system (Wang et al. 2015). Chen (2014) pointed that both general and specific (i.e. social networks) computer self-efficacy represent external factors that affect other factors including cognitive (perceived ease of use and perceived usefulness) and affective (arousal and pleasure) which ultimately affects individuals continuance intentions towards using the system. Nelmapius and Boshoff (2016) termed computer self-efficacy as internet self-efficacy, and examined it as a determinant for the continuing usage of Facebook. The findings revealed that internet self-efficacy significantly influence the intentions of individuals to continue using Facebook. On the other hand, Bright, Kleiser, & Grau (2015) examined the influence of social media self-efficacy on social media fatigue and indicated that social media self-efficacy produces fewer social media fatigue.   Furthermore, Reychav, Ndicu, & Wu (2016) found that computer self-efficacy had no significant influence on individuals' attitudes toward using the technological systems. Therefore, the following hypothesis is proposed:

H5: Computer Self Efficacy has significant impact (at 5% significance level) on using Social Networking Sites (SNSs).

The influence of social network use on academic performance (IoGPA):

There is no consensus among the previous literature on the impact of using social networks on students' academic performance. Based on the results, the available literature could be classified into three categories. The first category includes the studies that found a positive influence of using social network sites on academic performance (Samad et al., 2019; Ainin, Naqshbandi, Mogavvemi, & Jaafar, 2015). The second category are those which found a negative influence (Sampasa-Kanyinga et al., 2019, Rostaminezhad, 2018, Leyrer-Jackson & Wilson, 2018); The third category are the studies in which no influence was noticed (Alwagait et al, 2015). Some other studies like Lambić (2016) gave mixed results, the researcher conducted a study on 139 students of the Faculty of Education in Sombor (Serbia), the findings revealed a positive correlation between Facebook usage for educational purposes on academic performance, and no significant difference in using Facebook for general purposes between students' groups divided by academic performance. Researchers who have found a positive correlation argued that the higher the usage, the better students' perception about their academic performance (Ainin et al,

2015). Similarly, Samad et al. (2019) conducted a study on 366 female students in Malaysia, they found that students' social wellbeing is positively correlated with their learning performance. On the other hand, researchers who found a negative influence claimed that this usage distracts students from their academic responsibilities by consuming their time and effort, consequently they will study less and achieve lower grades (Marker, Gnambs & Appel, 2017). Although that this conclusion seems reasonable, Lambić (2016) pointed that it is not only social network usage that distract students, other activities such as television and socializing contribute as well. Additionally, other researchers who support this negative influence like Van Der Schuur, Baumgartner,Sumter & Valkenburg (2015) argued that the use of social networking while doing another activity like studying or learning (multitasking) could reduce the situational working memory capacity that can be utilized by the main activity on hand (i,e studying).

Based on the above discussion, in order to examine the influence of social networks on academic performance of PTUK students the following hypothesis is formulated:

H6: Social Networking Use has significant impact (at 5% significance level) on Academic Performance.

Fig (1) illustrates the proposed research model.
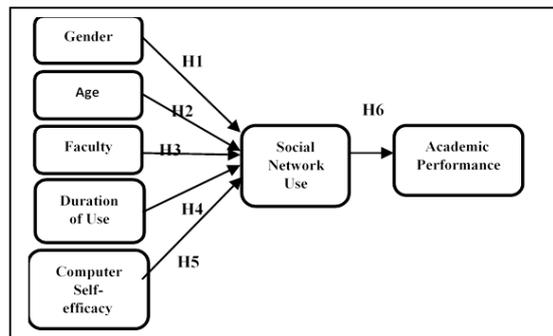
Figure (1): Research Model

METHODOLOGY:

Questionnaire Design:

In order to collect the required data, a self-report questionnaire was designed using closed questions method. It consisted of two main parts: demographic characteristics and the items for measuring each variable. The second part consisted of the items related to each variable in the study. Most of the items were constructed based on available, tested and verified items derived from previous related literature. Appendix A shows the sources of these items.

STUDY SAMPLE:

The population of the study is the students of PTUK. According to the registration deanship, the total number of the enrolled students in the university in the academic year (2019/2020) is 6745 students.

The sample size that should be drawn from this population at (α=0.05) significance level should be 366 according to Daniel and Cross (2013) equation for calculating sample size. The number of distributed questionnaires was 400, the retrieved questionnaires were 394, yielding a response rate of 98.5%. The researchers excluded 26 questionnaires because some of the critical items were not fully answered .

Data Collection :

Stratified sampling technique was used to gather the required data. The reason behind this selection is to guarantee the participation of the students from all colleges according to their rational distribution in the population. The students are distributed among colleges as shown in **Table (1):**

Table (1): Student distribution according to college

College	Number of students	Number of required questionnaires*
Engineering and Technology	1933	105
Applied Sciences	501	27
Art and Literature	570	31
Palestine Technical College (Diploma)	1672	91
Business and Economics	1851	100
Agriculture	218	12
Total	**6745**	**366**

*Number of required questionnaire= (college students' number/total number of students) * 366

DATA ANALYSIS:

This study adopted the quantitative approach since it is deductive in its nature. SPSS version 20 was used to analyze the collected data, test the hypotheses and to build the regression model.

Reliability of the Data:

The reliability of these items was examined using Cronbach Alpha Coefficient with a cut off value of 0.6 (George and Mallery, 2003, Corbitt et al., 2003). **Table (2)** illustrates these values.

Table (2): Cronbach Alpha Coefficient of the variables

Variable	Cronbach Alpha Coefficient
Gender (GI)	0.65
Age (AI)	0.60
Faculty (FI)	0.71
Time (DI)	0.70
Self-Efficacy (SEI)	0.61
Use	0.60
loGPA	0.80
Total	**0.75**

The overall Cronbach Alpha for the whole questionnaire was reported to be 0.75, whereas the values of the variables were all greater than or equal to 0.6. This implies that the internal consistency between the items of each variable is considered to be acceptable.

DESCRIPTIVE STATISTICS:

Demographic Profile:

Table (3): Students' Demographic Profile

Demographic Category	Classification	Frequency	Percent %
Gender	Male	133	36.0
	Female	236	64.0
	Total	**369**	**100**
Age	18-20 Years	195	52.8
	21-23 Years	153	41.5
	>23 Years	21	5.7
	Total	**369**	**100**
Academic Level	Second Year	138	37.4
	Third Year	93	25.2
	Fourth Year and more	138	37.4
	Total	**369**	**100**
College	Engineering and Technology	88	23.8
	Sciences	35	9.5
	Art and Literature	39	10.6
	Palestine Technical College	93	25.2
	Business and Economics	96	26.0
	Agriculture	18	4.9
	Total	**369**	**100**
Time Spent on SNS	Less than one hour	19	5.1
	1-3 Hours	124	33.6
	4-6 Hours	138	37.4
	More than 6 hours	88	23.8
	Total	**369**	**100**
Purpose of using SNS	Academic issues	182	49.3
	Others	187	50.7
	Total	**372**	**100**
Number of SNS used	1-3 Platforms	158	42.8
	4-6 Platforms	178	48.2
	More than 6 Platforms	33	8.9
	Total	**369**	**100**

Table (3) presents the demographic profile of the surveyed students. The study sample consisted of 36.0% males and 64.0% females, 52.8% of the respondents were within the age group of (18-20 years), followed by age group (21-23 years) with 41.5%, and last came the age group (>23 years) with 5.7%. Regarding the academic level, the second year and forth and more year students formed the majority of the study sample with 37.4% each, followed by third year students with a percentage of 25.2%. The percentages of students according to college ranged from 4.9% for Agriculture College to 26% for Business and Economics. The time that students spent on SNS varied among study sample. About 37.4% of the students indicated that they use SNS between 4-6 hours per day, followed by those who used it between 1-3 hours per day with 33.6%, next students who used it more than 6 hours per day with 23.8%, and last students who used SNS for less than one hour per day (5. %). The use of SNS for academic

purposes such as information sharing or discussions was the motivator for 49.3% of the study sample, on the other hand, 50.7% pointed that they use SNS for both academic and non-academic issues such as socializing with friends. The last demographic characteristic was the number of SNS used. The majority of students (48.2%) used 4-6 SNS platforms, then those who used 1-3 platforms with (42.8%), and lastly came those who used more than 6 platforms with 8.9%.

Means and Standard Deviations:

Table (4) shows the means and standard deviations of the students' responses towards survey items.

The total means of students' responses to the study variables ranged from $3.57 - 4.2$ which are considered to be high values. The highest mean was for computer self-efficacy (4.2) reflecting that students believed that their ability to use computers affect their SNS use.

Table (4): Means and Standard Deviations of the Items

Paragraph	Mean	Std. Deviation
As I get older my usage of SNSs increases	3.27	1.05
Younger students use SNSs more frequent than older students	4.07	0.96
SNSs usage is not related to age	3.71	1.06
AITotal	3.68	0.62
Male students use SNSs more frequently	2.99	1.08
Male & Female students use SNSs for different reasons	3.67	0.88
Student Gender determines SNSs use intensity	2.97	1.06
GITotal	3.20	0.68
Students' faculty affects the intensity of using SNSs	3.62	1.11
SNS use complies with the nature of specialization	3.51	1.03
SNS use complies with my academic requirements	3.59	1.00
FITotal	3.57	0.84
The amount of time I spend using social networking sites is very large compared to the time I spend in the study	3.88	1.11
Social networking sites attract me a lot from my study and duties	3.61	1.14
I spend most of my time using SNSs in leisure and entertainment	3.78	1.03
DITotal	3.76	0.85
I don't face any problems while using SNS	4.23	0.87
Using SNS does not require a lot of mental effort	3.94	0.95
I learned how to use SNS easily	4.37	0.75
SEITotal	4.20	0.64
I use SNS to find and disseminate information	3.84	0.95
I use SNS to keep in touch with friends	4.19	0.75
I use SNS to achieve my academic goals	4.13	0.87
UseTotal	4.04	0.62
Using SNS helps me to study more efficiently	3.34	0.11
Using SNS improve my academic performance	3.34	0.11
In general, using SNS is helpful in my studies.	3.51	0.16
IoGPATotal	3.46	0.94

Note: AITotal: Age Influence Total, GITotal: Gender Influence Total, FITotal: Faculty Influence Total, DITotal: Duration of use Influence Total, SEITotal: Self Efficacy Influence Total, UseTotal: SNS Use Total, IoGPATotal: influence of social network use on academic performance.

For all responses, the maximum value is 5, and the minimum value is 1, bold figures represent high means (Value> 3.4).

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Correlation and Hypotheses Testing :

The proposed framework aims to investigate the influence of social network usage on PTUK students' academic performance. An inclusive literature review has been performed to identify how the using of SNS affects the academic performance and what are the factors that have impact on SNS use. Then Pearson Correlation has been used to test the influence of these factors on the use and then on the

academic performance. The bi-variate correlations determine if each factor can significantly affect the use. By performing this test, the impact of each factor can be tested and measured despite its association with other foretellers.

Table (5): Individual Correlation Coefficients Between Dependent and Independent Variables.

Independent variables	Dependent variable SNS use	
	Pearson corr.(r)	P
Age (AI)	0.094	.070
Gender (GI)	0.081	.119
Faculty (FI)	**.190**	**.000**
Time (DI)	.080	.125
Self-Efficacy (SEI)	**.210**	**.000**
Independent variable	Dependent variable Academic Performance	
	Pearson corr.(r)	P
SNS use	**0.299**	**.000**

Table (5) shows the values of the correlation coefficients between the independent variables and the dependent variable. The results show that the correlation between faculty and self-efficacy as independent variables and the SNS use as dependent variable are significant at significance level 5%. As well as for the correlation between SNS use and the academic performance.

Table (6): Hypotheses testing results

Hypothesis	Independent	Dependent	Pearson corr.(r)	P	Result
H1	Age (AI)	SNS use	0.094	0.070	Not Supported
H2	Gender (GI)	SNS use	0.081	0.119	Not Supported
H3	Faculty (FI)	SNS use	**0.190**	**0.000**	Supported
H4	Time (DI)	SNS use	0.080	0.125	Not Supported
H5	Computer Self Efficacy (SEI)	SNS use	**0.210**	**0.000**	Supported
H6	SNS use	Academic Performance	**0.299**	**0.000**	Supported

As a result, **Table (6)** is constructed to display the results of the hypotheses examination:

The relation between faculty and SNS use is found to be positive and significant with (r =0.190, p <0.001). This finding supports H3 proposing a significant relationship between the faculty and SNS use. H5 is also confirmed as the relation between computer self-efficacy and SNS use is found to be significant and positive. Finally, the positive relationship between SNS use and academic performance demonstrates and proves H6 with (r= 0.299, p< 0.001).

As the hypotheses testing showed that student's faculty significantly influence his/her level of using SNS; the researchers conducted an extra test to explore the difference in the means of using SNS according to faculty, the results are shown in **Table (7).**

The means of the students form all colleges are high (>3.4); Only Agriculture college students mean is very high. The reason behind this result is that the agriculture college is equipped with the necessary modern labs and equipment required for conducting research; hence students are encouraged to conduct academic research which requires them to use SNS more frequently than others.

Table (7): The mean of SNS use according to college

Student College	Mean of SNS use
Engineering	3.9659
Sciences	3.9429
Art and Literature	4.0000
Palestine Technical College	4.0932
Business and Economics	4.0799
Agriculture	4.2593
Total	**4.0434**

Regression Model:

In order to examine the overall influence of the independent variables on SNS usage, a multiple regression model was built. The reason behind this is that when multiple independent variables are examined together the influence a specific variable may be affected by the addition of other independent variables and consequently influence the result on the dependent variable (Abu-Shanab and Haider, 2015). The researchers built two regression models; the first is multiple regression model to measure the impact of the five independent variables on SNS use, and a second simple linear regression model to measure the impact of SNS use on academic performance.

Multiple Regression Model:

Table (8): Model Summary

Model number		Model Summary		
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.290a	0.084	.071	.599
a. Predictors: (Constant), SEIAvg, FIAvg, AIAvg, DIAvg, GIAvg				

Table (9): ANOVA analysis

Model		ANOVA^b				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.915	5	2.383	6.644	000^a
	Residual	129.833	362	.359		
	Total	141.749	367			
a. Predictors: (Constant), SEIAvg, FIAvg, AIAvg, DIAvg, GIAvg						
b. Dependent Variable: UseAvg						

Table (10): Variables Coefficient values

Model		Unstandardized Coefficients		Standardized Coefficients		
		Coefficients [a]				
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.462	.308		7.993	**.000**
	AIAvg	.037	.054	.036	.683	.495
	GIAvg	.000	.049	-.001	-.020	.984
	FIAvg	.139	.039	.186	3.569	**.000**
	DIAvg	.048	.038	.066	1.261	.208
	SEIAvg	.184	.050	.190	3.695	**.000**
	a. Dependent Variable: UseAvg					

Table (8), Table (9), and Table (10) show the results of the multiple regression model, the ANOVA analysis and variables coefficient values respectively. The overall model is significant at 5% level of significance, with determination factor r2=8.4% indicating that these independent variables are responsible for 8.4% of the change in SNS use. Computer self-efficacy and student faculty are the only significant variables with almost equal values.

Simple Regression Model:

Table (11): Model Summary

Model number	Model Summary			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	299a	.090	.087	.89439
	Predictors: (Constant), UseAvg			

Table (12): ANOVA analysis

Model		ANOVA[b]				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.915	5	2.383	6.644	000a
	Residual	129.833	362	.359		
	Total	141.749	367			
	a. Predictors: (Constant), UseAvg					
	b. Dependent Variable: IoGPAAvg					

Table (13): Variable Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients		
		Coefficients [a]				
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.637	.307		5.326	**.000**
	UseAvg	.451	.075	.299	6.010	**.000**
	a. Dependent Variable: IoGPAAvg					

Table (11), Table (12), and Table (13) shows the results of the simple regression model, the ANOVA analysis and variable coefficient values respectively. The overall model is significant at 5% level of significance, with determination factor r2=9.0% indicating that the independent variable is responsible for 9.0% of the change in academic performance.

DISCUSSION AND IMPLICATIONS:

Five factors are inspected in the current study for their influence on SNS use. The relationship between the use of social networks and academic performance is also tested. The target population in this study is Palestine Technical University students from all colleges. Pearson correlation results show that there is a positive and significant relationship between faculty and SNS use. The same result appears in multiple regression results. This finding is consistent with Ortega (2015), Manca and Ranieri (2016) and Moran et al. (2012).

Concerning gender, the results demonstrate that it has no significant impact on SNS use. This result coincides with the results of Janković et al. (2016) while it does not agree with the results of Goswami and Dutta (2015) and Maqableh et al (2015). Perhaps the reason for this surprising result is that equal opportunities are offered nowadays to both men and female students in whole life matters (Lavanya and Karthikeyan, 2016).

Surprisingly, Age seems to be an insignificant factor in the use of social networking sites. This finding agrees with Maqableh et al (2015). However, it does not agree with Holt et al. (2013). It is currently clear that all college students have access to the the internet especially with the development and spread of wireless communication. This thing facilitates using SNS for students. Moreover, they have computers and smart phones (Wentworth and Middleton, 2014). Technology has now invaded schools and universities and students of that age are required to use them for research, knowledge, and homework. This may be a justification for the result we have obtained regarding the impact of age on the use of SNS.

Regarding the findings about the duration of use, the results indicated no significant influence of the duration of using SNS on the SNS use. This result contradicts the findings of previous work of Feng et al. (2019) and Škařupová, Ólafsson,and Blinka (2016) who revealed that the extra time of using the social networks is most likely associated with the online games and similar activities and therefore lead to lower academic performance. on the other hand, this result complies with the results of Mahdi (2019) and Lambić (2016) regarding the use of Facebook for general purposes.

Students' computer Self Efficacy positively and significantly influenced the SNS use in the current study, this matches the findings of Boshoff (2016). This result seems to be logical, as the individuals with greater level of self-efficacy towards using social network sites will be less likely to face problems while using social networks, consequently this will encourage them to continue using these networks. Similarly, Bright et al. (2015) pointed that individual's computer self-efficacy significantly and positively influence social media use. On the other hand, the findings contradict the results of Reychav et al. (2016) found it insignificant.

Concerning the last hypothesis, the current study revealed a positive significant influence of SN use on students' academic performance. This result is in line with the result of Samad et al. (2019) and Ainin et al. (2015); while opposite to the findings of Sampasa-Kanyinga et al. (2019) and Rostaminezhad (2018). This supports the idea that social media networks are playing a vital role in academic environment. PTUK students were divided almost equally based on the purpose of using social networks (as previously shown in descriptive statistics section), this means that about half of the students are aware of the benefits of using social networks for academic issues, and that they are actually doing so. Nevertheless, further research is needed in attempt to change other students' attitudes about SNS use so that they can employ it more efficiently in their academic life, hence improving their academic performance.

CONCLUSION AND RECOMMENDATION:

The purpose of this study is to examine the influence of gender, age, faculty, duration, and computer self-efficacy on using social network sites as well as examining the influence of SNS use on academic performance. The study achieved its purpose and concluded that only student faculty and computer self-efficacy significantly influences SNS use, which in turn positively and significantly influence the academic performance. The findings of the current study reveal that gender, age, and duration of use are not significant predictors for SNS. On the other hand, the results indicated that students use of SNS is high as the means of SNS use were almost all >3.4 for all colleges. Agriculture College has the highest mean due to the encouraging academic research environment. This is because Tulkarm city where PTUK is located is an agricultural area in which the agricultural sector is the main focus .

The researchers recommend that although that duration of use is not significant predictor of SNS use, but the level of using SNS among students is high as 37.4% of the surveyed students use SNS between 4-6 hours daily. PTUK should utilize this intense use and direct it towards academic issues by improving the current network as well as adopting strategies through which students and instructors can use SNS within class and employ it a way that benefit the course. These include sensitizing and training students to balance usage between academic and non-academic purposes and focusing on its importance in research. Finally, social networks pose a threat to students' social lives, so students should be directed and educated to help counter this threat.

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APPENDIX A:

Variable	Paragraph	Source
Age Influence	As I get older my usage of SNSs increases	PETER (2015)
	Younger students use SNSs more frequent than older students	
	SNSs usage is not related to age	
Gender Influence	Male students use SNSs more frequently	PETER (2015)
	Male & Female students use SNSs for different reasons	
	Student Gender determines SNSs use intensity	
Faculty Influence	Students' faculty affects the intensity of using SNSs	Developed by the researchers
	SNS use complies with the nature of specialization	
	SNS use complies with my academic requirements	
Duration Influence	The amount of time I spend using social networking sites is very large compared to the time I spend in the study	PETER (2015); Benson, Hand & Hartshorne (2019); Gonzalez et al. (2019)
	Social networking sites attract me a lot from my study and duties	
	I spend most of my time using SNSs in leisure and entertainment	
Self-Efficacy Influence	I don't face any problems while using SNS	Shanan et al. (2008)
	Using SNS does not require a lot of mental effort	Bright et al. (2015); Balakrishnan & Gan (2016)
	I learned how to use SNS easily	
SNS Use	I use SNS to find and disseminate information	PETER (2015); Bright et al. (2015)
	I use SNS to keep in touch with friends	Guraya et al. (2018);
	I use SNS to achieve my academic goals	Maqableh et al (2015)
Academic Performance	Using SNS helps me to study more efficiently	Shanan et al. (2008); Ainin et al. (2015)
	Using SNS improve my academic performance	Maqableh et al (2015)
	In general, using SNS is helpful in my studies.	Gonzalez et al. (2019)