The Impact of Social Networks on Academic Achievement of Students: A Case Study of Badakhshan University Students

Ahmad Fazayel FAZLOOMAND
Lecturer, Department of Sociology, Faculty of Social Sciences, Badakhshan University, AFGHANISTAN.

Corresponding Author: ahfazloomand@badakhshan.edu.af

ABSTRACT

Due to the increasing expansion of using social networks among people particularly students, the research in this field is a necessitate. This study aims to examine the impact of using social networks on the academic achievement of male students at Badakhshan University. The data for this research gathered through random sampling of 100 students of Badakhshan University who currently study in the academic years of 2022-2023. The students GPAs of past semester taken as the base to analyze the impact of social network usage and its effect on academic achievement, through which questionnaire designed. The data has been analyzed in SPSS applying one-way ANOVA. There are significant difference between the number of academic achievement of normal users of social network (with 15/13average and 2/01standerd deviation) and students with social media addiction (with 4/84average and 1/27standerd deviation) (p<0.01/0.05). Spending too much time on social media causes a decline in the hours of studying and exhaustion of students in the class. Therefore, it will affect the academic achievement to decline.

Keywords- Academic achievement, social network, social media addiction, Badakhshan University.

I. INTRODUCTION

The development of new technologies in electronics and computers in the past several decades caused the appearance of different types of electronic and computerizing programs such as the internet, telephone, satellite, and computer games all over the world. The expansion of the internet in recent years, became the reason for functional applications (Dong T, 2014:708-714). This instrument cased to speed and accuracy in work and communication. Even though it changes the world into a universal village (Mohseni, 2002:31). The Internet is a vast and growing process located in access to computer-communicative networks. Expanded usage of the Internet all over the world, make communication through computer even all the information and communication technologies in the past summarized in the features of the Internet (Lee, 2010:12). Social networks are one of the most important and successful Internet programs.

Social networks such as Facebook, X, Instagram, WhatsApp, Viber, Telegram, and so on are online social networks that grow rapidly in a short period and become more popular among people day by day (Lee, 2010:12). These kinds of social networks are types of social media which make possible new method of communicating and sharing information in the internet. Hundreds of millions of people are members of different social networks and they spend part of their daily life on online activity in these virtual spaces (Mohseni, 2002:31).

Social networks consist of individuals and institutions each of them as an individual or group is active in these networks and they can directly or indirectly communicate with other individuals or groups. Because of the plurality and variety of content and vast software and internet capabilities, Social networks being used by a large number of people. Furthermore, social networks by creating trust establish emotional-cognitive channels that have a high impact on the relationship between these network users and websites. Formation of trust is important due to comprehensive because in this

way it makes up the tendency to social networks with a large level of people and increases successively (Lee, 2010:12). These networks have an important role in formatting and organizing public opinion in the level of national, regional and global (Zokaee,2010:8). Social networks in the realm of education are the inquiry sphere of student for information and it rapidly developing (Lee, 2010:12). The usage of social networks is inseparable part of student's life today, and has a direct impact on educational life of them, such as the amount of reading, educational function and other educational skills (Falahi, 2010:1). Research studies concerning with the motivation of people for membership in the virtual social networks shows, that they satisfy people needs like the electronic post, news sites, blogs, discussion rooms and so on. The users of social network are there to fulfill certain needs such as: entertainment, information, interaction with other, curiosity, emancipation, social interaction, and sometimes it's just addition (Falahi, 2010:1). In fact, social connection, personal identity, and guidance or information are being satisfied (Kirschner PA, 2010:37-54).

Since the academic achievement of students is one of the important indexes of evaluation in the education system all efforts of the system are institutionalizing it. In other words, society particularly the education system is concerned about the development and academic success of students and its place in society are anxious about it and expect that students and children in all aspects of cognitive, emotive, and personality achieve skills and abilities as much as possible. In the academic angle, student's achievement is necessary to consider the efficient factors (Lewis K, 2008:330). Limitations on using online social networks and utilizing them for communicating with teachers, family, and friends can cause students to be positive academically and assist the to receive quality education. However, the opposite argument of this statement is also correct. It means that spending too much time on social networks can hurt students and their academic and education activities (Seder P, 2009:438). Other experts in this case clarify that using social networks has become an inseparable part of the life of many students. It has a direct impact on all aspects of students such as their reading habits and academic activity (O'Brien SJ: 2011). However, using these networks makes it easy to communicate with friends (Kirschner PA, Karpinski AC. 2010:37-54). Although, as much time they spend on online platforms, it will push them to squeeze their education preparation time (Seder P, Oishi S.2009:438).

However, social networks don't possess negative sides at all, we can use them in the education process or therapeutic optimum in the direction of educative goals (Pempek T, Calvert S, 2009:227 & O'Brian SJ: 2011). Recent studies revealed although social media have negative potential effects on students, despite they can be used as a positive and beneficial source for students in different aspects and provide good educational services while used in the proper way (Mashini J, 1996:8). For example, according to Jounse (2006) those universities use this technologies can motivates their student and themselves positively and efficiently. Increasing student's motivations can be beneficial and sufficient in their success, their GPA, and other psychological aspects (Mashini J, 1996:8). Despite disagreement among some authors about using this technology, virtual networks have rapid growth among students (Hanson T, Drumheller K, Mallard J, McKee C, Schlegel P. 2011:23-30). Oppose this category, there are some researchers believe that Facebook and other virtual social networks as efficient commercial technologies and a way of making communication among students (Imhof M, Vollmeyer. R, Beirlein C. 2007:37). There is a lack of studies about social networks and academic achievement. Stollak and his colleagues show in their study that students who use Facebook continuously, read 5-7 hours per week, whereas those students who do not have membership to any virtual social media study 11-15 hours per week (Junco. R, Cole-Avent G. 2008:3-17). On the other hand, Kirschner and Karpinski reported that Facebook has less Average (numbers) than spending fewer hours studying (Roblyer MD, Webb M, Herman J, Witty. JV. 2010:40). In Kolek and Saunders study which examines the relation between using Facebook and academic function shows there is no difference between the average of students who are using Facebook and those who do not from study time perspective (Stollak M, Vandenberg A, Burklund A, 2011:65).

Nia Javadi and his colleagues in their studies under the title of *"The impact of social networks on students' academic function in Berjand Medical Science University"* concludes that students with a low average and low academic achievement than a student with high average and, low academic function are using Facebook (Kirschner. PA, Karpinski AC. 2010:54).

Fori in his study under the title of *"The impact of social networks on academic achievement among engineering students at Mydugori University of Bruno province in Nigeria"* concluded that social networks in cities do not have any impact on student's academic achievements (Kolek EA, Sauners D. 2008:25). But in the study of Madaia and his colleagues in medical student got the opposite conclusion. It means those medical students who use virtual social networks have weak academic achievement rather to other students who do not use these social networks (Javadinia SA, Erfanian M, Abedini MR, Bijari B, 2012:21). As observed, studies focus only on Facebook and using popular social networks such as WhatsApp, Telegram did not receive study. Thus, considering the above arguments this study is about the impact of addiction to virtual social networks on students' academic achievement, such as Facebook, WhatsApp, Telegram and Instagram.

II. METHODOLOGY

The sampling population of the research is all Bachelor male students of Badakhshan University in the academic years 2022-2023. 100 persons were chosen randomly as a sample. In this study, social networks like WhatsApp, Telegram, and Instagram are included. The data collection administered based on especially designed questionnaire.

The questionnaire design has been made according, to the internet addiction questionnaire of Kimberly Young due in large to social network users are also considered internet users. The questionnaire consists of 20 questions which are made up according Likert scale. After calculating the number of responses, they were categorized into three classes. Normal users of virtual social networks are those who have 20-39 numbers. Light addicted to the internet which has 39-49 numbers and, deep addicted to social networks which has 70-100 numbers. For confirming validity five lecturers confirmed it and for reliability first by using pre-experiment 20 students got the questionnaire and the readability index was calculated at 94% for measuring academic achievement from the average (numbers percentage) of the past numbers of students used. The data was analyzed by SPSS V17 (SPSS Inc., Chicago, III., USA). Also, one-way- variance and Toki test have been applied.

III. EMPIRICAL FINDINGS

Based on descriptive statistics, the age average of students is 22 and all of them are male. The smallest of them was 18 and the oldes was 28 years. There were 12 students from the first semester, 13 students from the second semester, 10 students from the third semester, 11 students from the fourth semester, 13 students from the fifth semester, 16 students from the sixth semester, 14 students from the seventh semester and 11 students from the eighth semester.

The academic achievement of those male students who use social networks for less than one hour those who use more than one hour and those who do not use are significantly different.

In the first stages, the data is coded. Than by using SPSS v17 the data divided into three classes: normal users (N=20-39), light users (N=40-9) and high addicted users (N=70-100) as it can be observed in table1.

Table 1: Used average numbers of academic achievement

Groups	Amount of Use	Amount of Participants	Academic Achievement Number	Standard Deviation
1	Do not use	26	15/15	1/55
2	Less than1hour	41	15/31	2/01
3	More than1 hour	33	14/81	1/72

The average academic scores of students who are normal users of social network is 15/15. The average of those who have a light addiction to social networks is 15/31 and those who have a deep addiction to social networks is 14/84. It shows the differences among the three categories and, in the second stage the significance of these differences is analyzed by using one-way variance analysis which can be seen in Table2.

Table 2: Comparative the academic achievement average among normal, light and deep addicted users to social networks

Source of change	Chi Square (SS)	DF	Mean squired (MS)	F	Sig
Between groups	35/22	2	17/65	5/28	0/007
Within groups	323/74	97	3/33		
Total	359/04	99			

Then, by Tokay test, the difference between the 2 groups was recognized and the result can be seen in Table 3. Due to F=5/28 in the level of 0.01 confidence and 2 and 57 degrees of freedom, H0 will be rejected and H1 based on difference between group's academic achievement among students who do not use social networks, who use less than 1 hour and who use more than 1 hour will be confirmed. For more involvement among groups, the post-hoc test of Tukey was applied and the result is as below:

Table 3: The result of Tokay test to showing deference among groups

Groups	Amount of Use	Average Difference	Standard of Deviation	Level of Significance
1 &2	Normal users Light addicted users	-0/15	0/45	0/93
1&3	Normal users	1/51	0/47	0/04

	Deep addicted users			
2&3	Light users Deep addicted users	3	0/42	0/007

As table 3 shows the observed average deference is (0/15) and sig is (0/93 and bigger than (0/05). Therefore, the academic achievement of male students who are normal users of social networks is not significantly different from those who are lightly addicted to social networks. And the observed average difference (1/51) with the level of significance (0/14) is smaller than (0/05). Therefore, the academic achievement of light-addicted users is significantly different from those who are deeply addicted to social networks.

IV.   DISCUSSION AND CONCLUSION

This study examines the impact of virtual social networks on male students at Badakhshan University. By applying a specially curved questioner the users were divided into three groups. The result shows there is a significant difference among the academic achievement and GPAs of the three groups. By post-hoc-test the difference between light and deep-addicted users has been reported. The result of research compared to Madaia and his colleagues reveals the academic function of social network users and Samaha and his colleagues show that addiction to the internet has negative impact on students' academic achievement (for E,2016:1). Also, Stollk and his colleagues said that students who are a member of social networks pay fewer hours to study and, Karpinski & Kirschner declare that students who spent more hours on social networks, spend fewer hours to study and as a result their educational achievement decreases. Javdinia and his colleagues have shown students with low educative function are more likely to use FACEBOOK.

According to the results, appearing new technologies to life despite their facilities also causes harm. Social networks create new forms of communication and have a lot of advantages such as rapid news broadcast, communication to friends, freedom of thought and so on. Students with media literacy are the most common users of social networks and use these platforms as one of their everyday habits to reach or disseminate information. It makes essential changes in their life. Despite its all advantages if it does not use correctly, it will have a lot of challenges, communicating is the main reason social network users can communicate with a lot of people in a short time and it can cause addiction to these networks. Spending too much time on social networks can cause decreased reading among students and also, because students spend their night times in these networks, they cannot have enough focus in class the next morning. This fact causes declaring academic achievement and as a result spending too much time in using social networks, harm students and their academic function and also time which has a direct impact on academic achievement. Addiction to social networks as an impact on another aspect of students as Gangi study shows which can cause decrease of educational enthusiasm (Madaia M, Seshaiyenger C, Suresh P, Munipanna S, Sonnappa S. 2016:12).

However, using social networks can create opportunities for improvement of the teaching and learning process. As Metshali and his colleagues from online discussion considered a strategy in education students were able to talk with each other. The result of the research examines the difference in learning between them and those who were not able to have this possibility (Samaha M, 2016:57).

REFERENCES

[1]   Dong T, Cheng N. Wu,Y.J. 2014. "A study of the social networking website service in digital content industries: The Face Book case in Taiwan." *Comput Hum Behv* 708-714.

[2]   E, Fori. 2016. "the effects of social networking sites on the academic performance of the engineering student in the university of Maiduguri,borno state,Nigeria." *IJCSI International Journal of Computer Science Issues* 13 (1): 13.

[3]   Eltantawi, N. & Wiest, J. B. 2011. " Social Media in the Egyptian Revolution: Reconsidering ResourceMobilization Theory." *International Journal of Communication* 5.

[4]   Falahi A, Atif K, Elanffar Y. 2010. "International conference on green computing and communications. Proceedings of the IEEE/ACM International Conference on Cyber, physical and social Computing." *CPSCom 2010*, Oct - Nov 30-1: 14.

[5]   Ghanji B, Tavakoli S,Baniasadi Shahrebabak F,Asadi S. 2016. "Surveying the relationship between internet addiction and Academic Engagement of students." *Educ Strategy Med Sci* 9 (2): 150-155.

[6]   Hanson T, Drumheller K, Mallard J, McKee C, Schlegel P. 2011. " Cell phones, text messaging, and Facebook: Competing time demands of today's college students." *College Teaching* 59 (1): 23-30.

[7]   Harri oinas k, Lyytinen K, Yoo Y. 2010. "social networks and information systems: ongoing and future research streams." *Journal of AIS. 2010; 61(11):8-11*. 61 (11): 8-11.

[8]   Imhof M, Vollmeyer R, Beierlein C. 2007. "Computer use and the gender gap: The issue of access, use,motivation, and performance." *Comput Hum Behav* 23 (6): 23-37.

[9]   J, Mashini. 1996. "Factors affecting academic achievement." *Journal of Education* 8.

[10]   Javadinia S A, Erfanian M, Abedini MR, Bijari B.

2012. "The effects of social on Academic Achievement of Students, a Study in Birjand University of Medical Sciences." *Iranian Journal of Medical Education* 21 (8): 60.

[11] Junco R, Cole-Avent G. 2008. "An introductionto technologies commonly used by college students." *New Dir Student Serv* 124 (24): 3-17.

[12] Kirschner PA, Karpinski A C. 2010. "Face book and academic performance." *Comput Hum Behav* 26 (6): 37-54.

[13] Kirschner PA, Karpinski A C. 2010. "Facebook and academic performance." *Comput Hum Behav* 26 (6): 37-45.

[14] Kirschner PA, Karpinski AC. 2010. "Face book and academic performance." *Comput Hum Behav* 26 (6): 37-45.

[15] Kolek EA, Saunders D. Online disclosure. 2008. "An empirical examination of undergraduate Facebook profiles." *NASPA Journal* 45 (1): 1-25.

[16] Lee, J, Lee H. 2010. ""The Computer - Mediated Communication Network: Exploring the Linkage between the Online Community and Social Capital"." *New Media and So* 5 (12): 15.

[17] Lewis K, Kaufman J, Gonzalez M, Wimmer A, Chrisis N. 2008. "Social Networks Tastes, Ties, and Time." *Soc Network* 30 (4): 330-42.

[18] Madaiah M, Seshaiyenger C, Suresh P, Munipapanna S, Sonnappa S. 2016. "Study to assess the effects of social networking sttes on medical college students." *Int J Med Publ Health* 3 (5): 12-18.

[19] McKnight D H, Chervany N L. 2006. "Reflections on an initial trust-building model ." *Handbook of trust research* 29-51.

[20] Metshali M A.Maistry S M, Govender D W. 2015. "Online, chats." *A strategy to enhance learning in large classes Afr J Educ* 4-35: 1- 9.

[21] Mohseni, M. 2002. *Sociology of information society.* Tehran: Didar Publication.

[22] Pempek T, Yermolayeva Y, Calvert S. 2009. "College students social networking experiences on Facebook." *J Appl Dev Psychol* 30 (3): 227-238.

[23] Roblyer MD, Webb M, Herman J, Witty JV. 2010. "Findings on Facebook in higher education: Acomparison of college faculty and student uses and perceptions of social networking sites." *Internet High Educ* 13 (3): 40-134.

[24] Samaha M, Hawi N. 2016. "Relationships among smart phone addiction,stress,academic performance and satisfaction with life." *Comput Hum Behav* 57: 321- 325.

[25] Seder P, Oishi S. 2009. " Ethnic/racial Homogeneity in College Students' Facebook Friendship Networks and Subjective Well-being. . 2009;43(3):438." *J Res Pers* 43 (3): 438.

[26] SJ., O'Brien. 2011. *Facebook and other Internet use and the academic performance of college students.* Temple University.

[27] Stollak M, Vandenberg A, Burklund A, Weiss S. 2011. "Editor getting social: The impact of social networking usage on grades among college students." *Proceeding of the ASBBS Annual Conference.* Las vegas. 59-65.

[28] Teclehaimanot B, Hickman T. 2011. "Student-Teacher Interaction on Facebook: What Students Find Appropriate." *Tech Trends* 55 (3): 19-30.

[29] Thompson LA, Dawson K, Ferdig R, Black EW, Boyer J, Coutts J, et al. 2008. "The Intersection of Online Social Networking with Medical Professionalism." *J Gen Intern Med* 23 (7): 7-95.

[30] Yedidia MJ, Gillespie C, Kachur E., Schwartz MD, Ockene J, Chepaitis AE. 2003. " Effect of 40Communications Training on Medical Student Performance." *JAMA* 290 (9): 57-65.

[31] Zokaee M, Katibi F. 2010. *Relationship of Presence in cyberspace and modern identity.* China: research in young Iranian Hangzhou.