



## AN EMPIRICAL STUDY TO INVESTIGATE THE IMPACT OF SOCIAL NETWORKING SITES ON STUDENT'S ACADEMIC PERFORMANCE AND ATTITUDE IN CASE OF PAKISTAN

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### ABSTRACT

*The purpose of study is to assess the effect of social networking sites on students' academic performance and student's behavior. The variables that determine the use of social networking sites as the independent variable and the dependent variables are students' academic performance and student's behavior. The population of this research was the university students of twin cities Rawalpindi and Islamabad (Pakistan). The data was collected through questionnaires, and sample size was 300. The data were collected from both public and private universities. The questionnaire contains the four sections. The first section and the second section contains the general questions about the social networking sites, the third part of questionnaire assess students' academic performance and the last one is used to assess students' behavior. SPSS was used for the analysis of descriptive statistics and in AMOS structural equation modeling was used to test hypotheses of the data. The results of this study shows positive and significant relationship between the social networking sites and students' academic performance and their behavior. Facebook and Twitter are mostly use by the students. The findings of this study are limited because it covers only education sector.*

**Keywords:** Social networking sites, Academic performance, Student's behavior

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## INTRODUCTION

A wider range of social networking sites currently use in our society, people preferred to stay on these sites. Provide them with the acquisition of interests in activities, such as uploading photos and videos, update status, make friends, and some other additional activities. This phenomenon is becoming increasingly serious the temples look at SNS sites affect students' academic and student behavior. Social networking sites usually provide many features, these features are includes students have interest in these sites on a daily check. Around the world to millions of users access social networking sites. These sites include Facebook, Twitter, LinkedIn, Orkut, etc. These websites not only can help students to connect with their class fellows, family and with friends to communication each other, but also the development of a global relationship. Social networking sites are the easiest and cheapest way to communicate each other anywhere in world, where a person can stay connected with his friends as compare to other sources. Social networking sites are a phenomenon around the world in the past few years, by the majority of students; young people always like to try new things, and to maintain contact with each other. Therefore, this study only focused on how students are being phenomenon of SN sites, their academic performance and their behavior. This study defines social networking sites as an independent variable, student's achievement and student's behavior are dependent variable.

### Identification of gap

Social networking sites are most common now a day in our society. Many researchers done a lot of work in the recent years, Ogedebe *et al.* (2012) conduct a research on usage of Facebook and its effect on academic performance of students. We find some gaps in that research. After in depth study of the article we add a dependent variable in current research. We have not only used Facebook, but also used other networking sites such as Twitter, Orkut and LinkedIn by using the sample size of 300, and checked the social networking usage and its effect on student's academic performance as well as student's behavior. Another study discusses the association between educational performance of the students and the usage of social networking sites (Schweizer *et al.* (2006). They founded that usage of social networking sites are increasing rapidly and it is an unexplored area in Pakistan so using these gaps current research is on using social networking sites and its impact on student performance and student behavior.

## LITERATURE REVIEW

Social Network Sites (SNSs) like, Facebook, Orkut, LinkedIn and Twitter have involved millions of users, many of whom have hinged these social sites into their day-to-day lives. Most sites helped strangers to connect on shared interests, political views, or some other happenings. Sites also differ in the extent to which they include new material and communication tools, such as mobile logging, blogging, video conferences, audio calls and photo/video-sharing. Social networking sites were

mostly designed for globally accessible and reachable; many entice homogeneous inhabitants primarily, therefore it is not unusual to discover individuals using these sites to isolate themselves by age, nationality, behavior, education level or additional elements that naturally segment society.

### **Facebook**

Facebook was created in 2004. In 2007, it was reported that Facebook have more than 21 million registered member and they are creating 1.6 billion page views every day. The main purpose of Facebook was to more secure integration of its user into daily practices of media. Stephen, (2007) indicated that Facebook is most popular among college students and they are the strong factor for its success that is why in September 2005, a high school version was launched by Facebook for the usage of college students. In November 2006, communities for commercial organizations were introduced through Facebook. Facebook have maintained privacy of communities and it is very helpful in learning institutions (Stephen, 2007).

### **Twitter**

Twitter is another online networking service. Twitter was launched in July 2006. And it rapidly becomes popular in the world and become of one of the most visited website on internet. It helps its user in sending and reading text based messages that can be up to 140 characters and also helps its user in updating their profiles through mobiles phone (Macfarlane, 2003).

### **Orkut**

Orkut is a social network site that was launched on January 2004. It was launched in United States with only English interface. But it did not get more popularity in U.S. but when it was more quickly used by Portuguese-speaking Brazilians and they became dominant user in very short period of time. It is a goggle's social network site. The main purpose of Orkut was to help its user in sharing media, updating their status and making communication through instant messaging (IM), (Boyd and Ellison, 2008).

### **Linkedin**

Another social network site is LinkedIn and was launched in 2003. The uniqueness of this social network site was the first mainstream social network for business purposes only. It targeted only business persons and is a socially organized social network site with broad audiences and considered as a professional site. LinkedIn help its users to post a profile and make it possible for its user to interact through private messaging (Kraut *et al.*, 1998).

### **Academic performance**

Academic Performance refers to how students deal with their studies and how they complete different assignments given to them by their teachers. The popularity of the social networking sites enlarged briskly in the last span. This is most likely due to the reason that every person used it

extensively to get worldwide access. These social networking sites such as Twitter and Facebook have become a furious craze for everyone these days. Students are paying more attention towards these social networking activities rather than utilizing this time for their studies and this surely affects their academic performance. The destructive effects of these social networking sites outweigh the progressive ones. These sites have caused some latent harm to society. The students become preys of social networks more often than anyone else. This is because of the reason that when they are studying or probing their course material online, they get attracted to these sites to kill the boredom in their study time, sidetracking their attention from their work & they forget why they are using internet. LaRose *et al.* (2001) proposed that student users are affected by the internet and this impact is determined by the type of internet usage. The misuse of these sites on a daily basis has many destructive effects on the physical and mental health of students making them sluggish and unenthusiastic to build interaction with the people in real life.

### **Student's behavior**

Many years ago emails, instant messaging and blogging all these are the communication applications of internet are rapidly increased in the youth's life and this made the internet a significant social context for development of youth especially students. However there are some behaviors that can take place due to frequent use of social networking sites especially students who are using frequently using social networking sites, results in reduction of time for other activities that are related academic, physical and social hobbies that requires face to face meeting (McKenna and Bargh, 2000). Planned behavior theory provided the foundation for the behavioral factor of frequently engaging in social networking sites. It is stated that probability of involving in the behavior for using social networking sites increases when individual has strong intention of acting upon certain behaviors. Group norms and self-esteem are two main factors of planned behavior theory in the context of engaging in social networking sites. Group norms for the colleagues and friends significantly enhanced the likelihood of intentions of students of universities to involve in the specific work activity and those students who identify the use of social networking sites as normative among friends have the strong intention of using social networking sites frequently.

There is another significant factor that is the behavioral consequence related to communication technology based behavior and this is self-esteem. Young individuals having lower self-esteem have the high level of usage of instant messaging than those who have high level of self-esteem (Nalwa and Anand, (2003). Positive feedback improves the self-esteem and negative feedback leads to lower the level of self-esteem and that is reason that being socialized young people uses internet's communication applications because it provides more positive interaction with others (DeBell and Chapman, 2006). Ogedebe *et al.* (2012) conducted a research on usage of Facebook and its effect on academic performance of students. Research was also planned to find how generally Facebook is used by University students. 20 questionnaires was designed and delivered to 150 students of different Universities. Six hypotheses were tested. First of all, the more time

students spend on Facebook, students with lower grade point averages. Secondly, the student's grade point average students in high privacy settings on Facebook. Third, more students update your Facebook status, the less likely they have a good class attendance. Fourth, the longer the time spent by a student on Facebook, the more likely they participate in class. The fifth, a student more friends on Facebook, on Facebook, he spent more time. The collected data testing and analysis of the data SPSS and AMOS was used.

Cotton (2001) conducted a research to the use of social networking sites affect alumni attitude volunteer service and philanthropy, consistency between this attitude and behavior. Collected data from 3,085 participants through participation and explore the interview. Structural equation modeling is selected to the data. The results show that, through social networking sites, communication and emotional intimacy frequency is consistent, positive attitudes and behavior relationships, with the help of this power have a strong volunteer services and charitable institutions. Alexandra *et al.* (2008) used the planned behavior theory to investigate the analytical elements that causes high level usage of social networking sites among the young aged from 17<sup>th</sup> to 24<sup>th</sup> years. Another factor is also investigated to predict behavioral consequences specially related to such behaviors that are technology based and this factor was self-esteem. Correlation between self- esteem and communication options by students of university is examined and it examined that students having low self-esteem showed strong inclination to email communication as compared to the students having high self-esteem.

Raacke and Raacke (2008) conducted a study to survey Facebook users privacy issues as well as the benefits and risks of Facebook. A questionnaire to collect data that contains 36 multiple choices distributed among 119 colleges of US in 2007. Beside with this approach 6 additional respondents were chosen for online face-to-face in depth interviews. Four segments were made and used for qualitative analysis: reutilization, privacy invasion and the rumor mill. The study concluded that although Facebook is a day-to-day use of the users, but the users can also have their own concerns about privacy, because a large amount of information uploaded on Facebook. The results propose that for secure Facebook usage, users must change their attitude towards the privacy matters. Many students in India and the United States, their interests in many ways showed similarity, but at the same time differ. There search results show that, Indian and the United States students socialize with each other through SNSs about a large collection of different matters. It's easier for American students to use SNSs to organize offline activities, such as community get-together, social events and academic counseling and coordination arrangements. Once again, this shows the strength of the U.S. approach to focus on SNSs to maintain existing relationships. Dwyer, (2007) conducted a research to explore the privacy and trust concern in social networking sites. For the purpose of data collection study was conducted over the Internet. Questions are asked to My Space and Facebook evenly. Questions including the concept of trust, net work privacy concerns, information sharing, and the general use of this site and the development of the new partnership. The study determines

the differences between each of the social networking sites My Space and Facebook. Facebook user privacy is very intense; they have good satisfaction & trust concern about their privacy, although My Space members pay more attention to the establishment of new social interaction

Boyd (2004) examined the scope of online social networking among students and also investigated the need, thinking and style of learning in classroom is affected by the use of these networks. He came with the conclusion that there is a difference among the students who are using social networking and those who are not using, regarding preferences for learning and that is the reason that social networking is rapidly used by the students so that they can be capable of coping with learning culture as it is changing rapidly. This leads to cause the changes in the attitude of students for seeking knowledge itself. The change in attitude is that they are paying more attention and importance to sharing knowledge in groups and interacting with each other rather than learning individually. The use of these tools is changing student attitudes towards learning itself, from a one-way transfer of knowledge to a much more interactive and group-oriented environment.

### **Population and sample size**

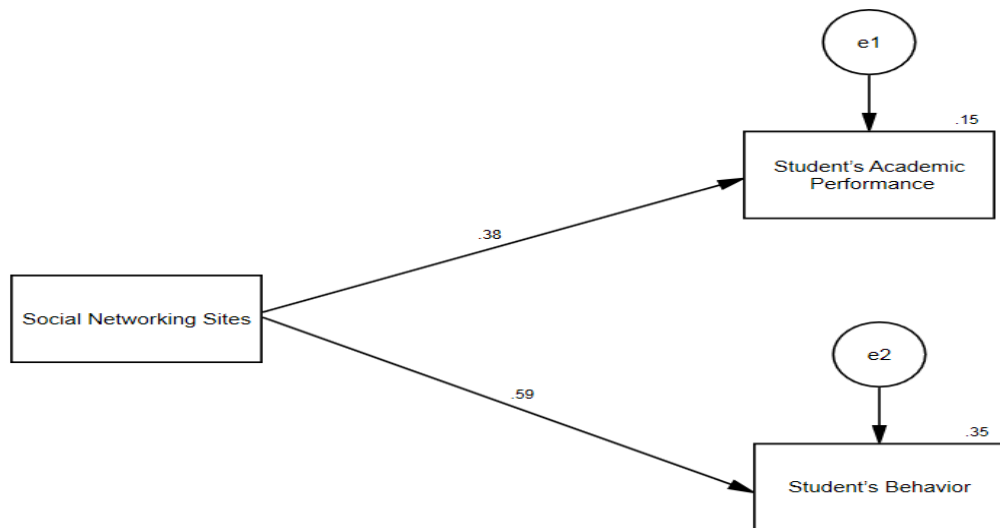
Students of different universities Rawalpindi & Islamabad have been selected for the study. Students are well aware of social networking sites therefore male and female both are selected for research. Convenient sampling technique used for sampling and get the response from the university students. Sample size of 300 students has been taken from Arid Agriculture University, COMSATS, Bahria University, Quaid-e-Azam University and NUST.

### **Results**

Table-1 reveals the correlation matrix of all variables of this study. The outcomes shows that student's academic performance is significantly and positively correlated with usage of social networking sites ( $r = .74, p < .01$ ) and student attitude ( $r = .56, p < .01$ ). Usage of social networking sites are also positively and significantly associated with student's attitude ( $r = .64, p < .01$ ). The values of Cronbach's Alpha coefficient for all instruments that used in this current study are also present above table. All scales reliabilities greater than .70 recommended by (Nunnally, 1978). Cronbach's alpha value of .76, .83 and .81 for usage of social networking sites, student's academic performance and student's attitude respectively, were significantly high for research use.

Figure 1: Structural Equation Modeling represents the relationship between social networking sites, students' academic performance and student's attitude. Figure-1 reveals that the usage of social networking sites is positively related to student's academic performance ( $0.38, p < .05$ ). Figure-1 also shows that social networking sites are also significantly and positively related to student's attitude ( $= .59, p < .05$ ). The results show that social networking sites explain variance in student's academic performance is 15% and explain variance in student's attitude due to usage of social

networking sites is 35%. The results show positive and significant relationship between social networking sites, student’s academic performance and student attitude.



**Table 1: Descriptive statistics, reliability and correlation matrix of all variables.**

	Variables	Mean	S.D	I	II	III
I	Social networking sites	3.57	.62	(.76)		
II	Student’s academic performance	3.68	.59	.74	(.83)	
III	Student’s attitude	3.36	.57	.64	.56	(.81)

**Table 2: Multiple regression results**

Social Networking Sites	Student’s academic Performance	.38*
Social Networking Sites	Student’s attitude	.59*

\*P < .05

## DISCUSSION

Similar results are shown by the studies such as Ogedebe *et al.* (2012) that SNSs usage has no negative effect on studies academic performance. Hampton and Wellman, (2001) also conclude that there is no negative association between the students GPAs and usage of Facebook. The study found positive relationship between social networking sites, student’s performance and student’s attitude, so it is concluded that social networking sites, has a positive impact on student behavior Results matches with the study of (Lampe *et al.*, 2007) that growth of social networking sites brings a positive change in personal behavior of internet users. This research specifies the impact of use of SNSs on students’ academic performance and student’s behavior. This research also tests the validity of perception that SNSs negatively affect students’ lives. Results show that there is positive association between SNSs, students’ academic performance and student’s behavior. Research

shows that it is wrong perception that SNSs have negative impact on students'. If parents properly monitor their children activities on internet then it will be very helpful for their learning purposes. However students use internet services not only for completing their assignments but they also communicate with friends during exams to exchange notes. It is an easy and cheapest way of communication. They also use social networking sites to establish and maintain relationships with their friends and relatives no matter where they are they can communicate with them.

## CONCLUSION

The few states to consider the ethics of making "friends" with on Facebook and social networks are divided on whether a person may accept a "friend request" from a known or unknown person. The results of this study found that usage of social networking sites have positive and significant relationship with student educational performance and student's attitude. The findings of this study aligned with previous findings (Ogedebe *et al.* 2012) that also found positive relationship between usage of social networking sites, student's academic performance and student's attitude, when students positively used social networking sites it enhancing the student's academic performance. The result shows that the perception of most of the students is that they learn from the group pages and it was helpful for all of them to achieve their goals. Most of the students want to use the social networks at their institution for educational purpose. They liked how their fellows respond on their posts. But they are certain of that the use of page has not positive impact on their relationship with the teachers and fellows. They had faced difficulties at start and they believed that the benefits of using the Facebook page need the extra time and effort.

## RECOMMENDATIONS AND FUTURE RESEARCH

This research specifies the impact of use of social networking sites on students' academic performance and student's attitude. This research also tests the validity of perception that social networking sites negatively affect students' lives. Results show that there is positive association between social networking sites, students' academic performance and student's attitude. Research shows that it is wrong perception that social networking sites have negative impact on students'. If parents properly monitor their children activities on internet then it will be very helpful for their learning purposes. However students use internet services not only for completing their assignments but they also communicate with friends during exams to exchange notes. It is an easy and cheapest way of communication. They also use social networking sites to establish and maintain relationships with their friends and relatives no matter where they are they can communicate with them.



Additional research is needed to explore the most beneficial design for investigate the impact of social networking sites on students performance. Though social networking sites have been used for some educational purposes, research could explore the specific kinds of activities that are most beneficial to learners. Most of the schools did not provide the access to the Facebook. On the other hand, the usage of social networking sites in positive way must be understood by the administration of the schools and allow the access to these networking sites for learning activities.

## REFERENCES

- Acquisiti A. and R. Gross (2006). Imagined communities: Awareness, information sharing, and privacy on the Facebook. *Lecture Notes in Computer Science, number*, Vol. 4258, pp. 36–58.
- Alexandra, E., J. Suzanna, M., K. White and P. W. Shari (2008). Interpersonal communication: The social exchange approach. *Cyber Psychology & Behavior. December*, Vol. 11, No. 6, pp. 739-741.
- Baltaretu, C. M. and D. C. Balaban (2010). Motivation in using social network sites by Romanian students. A qualitative approach. *Journal of Media Research*, Vol. 6, pp. 67-74.
- Boyd, D. (2004). Friendster and Publicly Articulated Social Networks. Proceedings of the SIGCHI Conference on Human Factors and Computing Systems, Vienna, Austria, 2004.
- Boyd, D. M., and N. B. Ellison (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, Vol. 13, pp. 210–230.
- Cotten, S. R. (2001). Implications of Internet technology for medical sociology in the new millennium. *Sociological Spectrum*, Vol. 21, No. 3, pp. 319–340.
- DeBell, M. and C. Chapman (2006). Computer and Internet use by students in 2003 (NCES 2006–065). US Department of Education. Washington, DC: National Center for Education Statistics.
- Dwyer, C. (2007). Digital Relationships in the 'MySpace' Generation: Results From a Qualitative Study. Proceedings of the 40th Hawaii International Conference on System Sciences (HICSS), Hawaii, 2007.
- Gemmill .E and M. petersonl (2006). Technology Use Among College Students” Implications for Student Affairs Professionals. *Journal of National Association of Student Personnel Administrators*, Vol. 43, No. 3, pp. 656-670.
- Hampton, K. and B. Wellman (2001). Long distance community in the network society. *American Behavioral Scientist*, Vol. 45, No. 3, pp. 476–495.
- Kraut, R., V. Lundmark, M. Patterson, S. Kielser, T. Mukopadhyay and W. Scherli (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, Vol. 53, No. 9, pp. 1017–1031.

- Lampe, C., N. Ellison and C. Steinfield (2007). A face(book) in the crowd: Social searching versus social browsing. Proceedings of the 20th Anniversary Conference on Computer Supported Cooperative Work, Banff, Alberta, Canada pp. 167-170.
- LaRose, R., M. S. Eastin, and J. Gregg (2005). Reformulating the Internet paradox: Social cognitive explanations of Internet use and depression”Retrieved April 2, 2005. from <http://www.behavior.net/JOB/>.
- Macfarlane, G. J. (2003). Effects of psychosocial and individual psychological factors on the onset of musculoskeletal pain: Common and site-specific effects. *Annals of Rheumatic Diseases*, Vol. 62, No. 8, pp. 755–760.
- McKenna, K. Y. A. and J. A. Bargh (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, Vol. 4, No. 1, pp. 57–75.
- Nalwa, K. and A. P. Anand (2003). Internet addiction in students: A cause of concern. *Cyber Psychology & Behavior*, Vol. 6, No. 6, pp. 653–656.
- Ogedebe P. M., J. A. Emmanuel and Y. Musa (2012). A survey on Facebook and Academic Performance in Nigeria Universities. *International Journal of Engineering Research and Applications*, Vol. 2, No. 4, pp. 788-797.
- Raacke, J. and J. B. Raacke (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyber Psychology & Behavior*, Vol. 11, pp. 169-174.
- Schweizer, K. J., J. M. Leimeister and H. Krcmar (2006). The role of virtual communities for the social network of cancer patients. Proceedings of the Americas Conference on Information Systems, Acapulco, Mexico, 2006.
- Stephen D. (2007). Semantic Networks and Social Networks. The Learning Organization. *information technology and libraries*, Vol. 12, No. 5, pp. 411-422.