

Online Social Networking and the Academic Achievement of University Students – The experience of selected Nigerian Universities

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Abstract

The main objective of this study was to investigate the relationship between online social networking and the academic achievement of students in universities in Kwara State. The study also investigated the number of social networking sites students subscribe to, the number of social networking sites students use, the number of hours the students spend daily on social networking sites, the relationship between frequency of use of social networking sites and the students' academic achievement, the relationship between gender and the students' use of Social networking sites, the relationship of students' use of social networking sites and their academic achievement from university to university. According to Cecconi (2007), Social Networking is all activities carried out within specific online services that provide free space and software tools which allow the creation of networks of people. The social networking websites users interact by adding friends, connecting on profiles, joining groups and having discussions. Social Networking technology was not originally developed for instructional purpose. As observed by Clement (1990), users developed informal collaborative networks in organizations. Studies have shown that one of the most effective channels for gathering information and expertise within an organization is its informal networks of collaborators, colleagues and friends.

Keywords: Relationship, Social networking, Academic achievement, Online, University students.

Introduction

The need for very effective and efficient ways of handling modern communication is very important, as communication remains the major sustenance of world existence. Invariably, without good communication, the world would be a difficult place to live in (Raji & AbdulKareem 2009). Networking is referred to as the connection of two or more computers to communicate with one another, that is when millions of computers in different locations around the world are connected together to allow users send and receive message to one another (Olawepo & Oyedepo 2008). Gajjala, (2007) opined that Social Networking is an online service, platform, or site that focuses on building and reflecting of social networks or social relations among people, who, for example, share interests and/or activities. A social network service consists of a representation of each user (often a profile), his/her social links, and a variety of additional services (Gajjala, 2007). According to the New Media Consortium (2008), current social networking systems like *facebook* and *myspace* are attempts to help people define themselves in ways that provide some of that context, but the information available to us about friends of friends is still superficial and is often related more to personal interests than professional work, hence subscribers to Social Networking websites simply open their web browsers and are able to edit group documents, hold online meetings, swap information and data without even leaving their desks.

Most social network services are web-based and provide means for users to interact over the Internet, such as e-mail and instant messaging. Online community services are sometimes considered as a social network service, though in a broader sense, social network service usually mean an individual-centered service whereas online community services are group-centered. Social networking sites allow users to share ideas, activities, events, and interests within their individual networks. The main types of social networking services are those that contain category places (such as former school year or classmates), means to connect with friends (usually with self-description pages), and a recommendation system linked to trust. Popular methods now combine many of these, with *Facebook* and *Twitter* widely used worldwide. There have been attempts to standardize these services

to avoid the need to duplicate entries of friends and interests. According to Golder, Wilkinson, and Huberman (2007) Social Network Sites (SNSs) also provide rich sources of naturalistic behavioral data. Profile and linkage data from SNSs can be gathered either through the use of automated collection techniques or through datasets provided directly from the company, enabling network analysis researchers to explore large-scale patterns of friendship, usage, and other visible indicators, and continuing an analysis trend that started with examinations of blogs and other websites. Onasanya, Ayelaagbe and Laleye (2012) on their study conducted on mobile phones and adult education in Nigeria discovered that the use of mobile phones has not been fully incorporated into adult education programmes in Nigeria. They recommended that policy makers and the curriculum planners of education programmes in Nigeria need to incorporate into adult education curriculum the use of mobile phones, an innovation which have made the 21st century unique.

Golder, Wilkinson, and Huberman (2007) examined a dataset consisting of 362 million messages exchanged by over four million *Facebook* users for insight into Friendship and messaging activities. Lampe, Ellison, and Steinfield (2007) explored the relationship between profile elements and number of *Facebook* friends, finding that profile fields that reduce transaction costs and are harder to falsify are most likely to be associated with larger number of friendship links. SNS researchers have also studied the network structure of Friendship. Analyzing the roles people played in the growth of *Flickr* and *Yahoo! 360's* networks, Kumar, Novak, and Tomkins (2006) argued that there are passive members, inviters, and linkers "who fully participate in the social evolution of the network". Danah Boyd and Nicole (2006) stated that Social Networking Sites (SNSs) are increasingly attracting the attention of academic and industry researchers intrigued by their affordances and reach, since their introduction, social network sites (SNSs) such as *MySpace*, *Facebook*, *Cyworld*, and *Bebo* have attracted millions of users, many of whom have integrated these sites into their daily practices. As of this writing, there are hundreds of SNSs, with various technological affordances, supporting a wide range of interests and practices. While their key technological features are fairly consistent, the cultures that emerge around SNSs are varied.

Most sites support the maintenance of pre-existing social networks, but others help strangers connect based on shared interests, political views, or activities. Some sites cater to diverse audiences, while others attract people based on common language or shared racial, sexual, religious, or nationality-based identities. Sites also vary in the extent to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo/video-sharing. Eveland, Brown and Mattocks (1994) stated that the networks are not connected and do not generally follow workgroup alignments rather than technical specialization. Therefore, it is significant to use members' interpersonal connections effectively in their activities. Although, users of Social Networking engage in varieties of meaningful activities, some of them employ the facilities for questionable and fraudulent practices, but many new users subscribe to the networks on daily basis for the purpose of collaborating with others around the world. Onasanya, Nathaniel & Akingbemisilu (2012) conducted a study on the influence of satellite communication devices on students' acquisition of hidden curriculum in Nigeria senior secondary schools. They reported in their findings that students cultivated great deal of interest for watching myriads of satellite programmes (audio-visual) for fun and entertainments rather than medium of instructing them academically. Similarly, sports channels and programmes were frequently watched due to interest developed for them.

Education they say is the best legacy parent can give to their children, it is expected that every child sent to school should learn to the maximum, but some factors can influence the learning process (Academic achievement) of the students while in school (Molagun & Taiwo 2001).

These factors could either be at the societal level or individual level. At the societal level, the factors include culture, home (family), political instability, non-availability of teaching materials among others. At the individual level, some of the factors enumerated include: student' Intelligent Quotients (IQ), seriousness/readiness on the part of the student, early marriage which is mostly common among the female students. The buildup of a body of knowledge is education, hence when one seeks knowledge, you are trying to be educated, and the highest place to seek knowledge of education is the universities. At the universities, students are free to rightly use or explore all facilities within and outside their school environment to facilitate their teaching and learning process, part of which is the Social Networking. Higher institution is obviously the highest place where we seek knowledge; hence no State/Country can develop academically or technologically without relatively enough higher institutions within the State or the Country.

Some social networking sites and date lunched

The number of existing Social Networking sites has greatly increased over the years. In reality, nearly every day, an Internet user gets online; an invitation to subscribe to one Social Networking site or the other is flashed. Boyd and Ellison (2007) reported a list and timelines of the launched dates of many major SNs and when community sites re-lunched with the SNs features. This is as shown in Figure 1.

Syed (2012) identified the following as some positive and negative effects of social networking:

1. Friends and Relations: Social networks started as a place to connect with your friends in an easy and convenient way. Truly speaking, many of you might have found your old pals from school or college who were out of touch due to one reason or other, well I would say I have and I thank social networks for this. Social networks has provided us the opportunity to connect with people and build better relationships with friends with whom we are unable to meet personally, and let them know about our life and take input about their lives and events happening with them.

2. Reducing Communication Barriers: With social networks we are able to communicate our thoughts and perceptions over different topics with a large number of audiences, and raise our voice. The sharing feature available on the social networks makes your opinion about any topic reach huge number of people (even to those who are not on your friends list). We have the option to make groups with people who are like minded and share the related news with them and ask for their opinion or input about the topic. Simply there are a number of options available for us to communicate with others on these social networks.
3. Opportunities for Businesses: Social networks have become a crucial part of many of us. We don't even notice this but as soon as we open our desktops or laptops to access the web, we sub-consciously open our favorite social network just to see about the updates received. Businesses have noticed the value of social networks in our life, and they are using different techniques to promote their products. There are a number of customized applications being made on the social platforms, whose main purpose is to promote the product or brand. As social marketing is cost effective and brands have a huge audience, they are shifting more towards social marketing.

On the other hand, he explained the negative effects as thus;

1. Leads to Addiction: Many studies have shown that the extensive use of social media can actually cause addiction to the users. Throughout their day, they feel to post something on their pages or check others posts as it has become an important part of our life.
2. Lead to Isolation: Extreme usage of social media has reduced the level of human interaction. Because of social networks the interaction with other people has become effortless and people have isolated their lives behind their online identities. Face to face communication and meetings has been reduced and many of us have lost the flavor and charm to be together under one roof.
3. Affecting Productivity: Mostly businesses use social media to find and communicate with clients. But it is a great distraction to employees, who may show more interest in what their friends are posting than in their work tasks. Wired.com posted two studies which demonstrated damage to productivity caused by social networking. Nucleus Research reported that *Facebook* shaves 1.5% off office productivity while Morse claimed that British companies lost 2.2 billion a year to the social phenomenon. New technology products have become available that allow social networks to be blocked, but their effectiveness remains spotty. Larry (2011) in a paper presented at the 119th Annual Convention of the American Psychological Association, said pre-teens and teenagers who use technology, like the Internet and video games, on a regular basis will have more stomach aches, sleeping problems, anxiety and depression. In his paper entitled, "Poke Me: How Social Networks Can Both Help and Harm Our Kids," he opined that Teens who use *Facebook* continuously may show narcissistic tendencies and young adults show more signs of other psychological disorders. Spending more time on *Facebook* may also bring health related problems.

Materials and methods

Research Hypothesis: The following hypothesis were formulated from the research questions and tested at 0.05 level of significant:

The following null hypotheses were tested:

H₀₁: there is no significant relationship between the academic achievement of students who spend more time on social networking sites and those who spend less time.

H₀₂: there is no significant relationship between students' use of social networking sites and their academic achievement based on gender.

H₀₃ there is no significant relationship between students' use of social networking sites and their academic achievement when universities are compared.

Sample and sampling techniques

The population for the study comprises of all university undergraduates in Kwara State, Nigeria, while the target population consisted of three (3) selected universities in Kwara State. In all, 223 (55.8%) of the respondents were male and 177 (44.2%) were female, while 100 (50 %) of the respondents were students from University of Ilorin, 100 (25%) of the respondents were from Kwara State university, Malete and 100 (25%) are respondents from Al-Hikmah University, Ilorin. The procedures used in selecting sample for this study were purposive sampling and proportional stratified sampling techniques. The purposive sampling method was used to select three Universities

in Kwara state. The institutions covered include: University of Ilorin, Ilorin, Kwara State University Malete and Al-Hikmah University, Ilorin. Purposive sampling techniques was considered appropriate for the study because it is a form of non-probability sampling technique which is characterized by the use of judgment and deliberate effort to obtain representative samples by including presumable typical areas of groups in the sample (Hassan, 1998). In addition, the proportional stratified sampling technique was used to select four hundred (400) respondents from the three (3) universities selected for the study. A proportionally stratified sampling according to James (2010) provides the researchers the opportunity to select respondents at random from the subgroup in proportion to the size of the group in the total population. Thus, the proportional stratified sampling technique was adopted to select the respondents according to the population of the sampled universities, vis two hundred respondents from university of Ilorin, one hundred respondents each from Kwara State University, Malete, and Al-Hikmah University, Ilorin making a total of four hundred respondents all at 400 levels of each of the three universities.

Instrumentation

The research instrument that was used to gather the relevant data for this study was a researchers – designed questionnaire with two sections. Section A deals with respondents' personal information such as name of institution, department, academic level and gender; while section B composed of 12 questions which was formatted with "yes" or "no" questions, multiple choice questions and open ended questions where respondents are to express themselves on the question(s) asked. Respondents ticked (✓) as appropriate for their response, and filled in the blank space to supply answer where applicable. The Pearson Product Moment Correlation coefficient was employed to test for correlation between the two set of data collected and the correlation coefficient of $r = 0.81$ indicated that there is a high relationship between the two sets of data, hence confirming the reliability of the questionnaire

Procedure for data collection

The copies of the research questionnaire was administered to the universities' students through personal contact by the researchers to ensure the questionnaire items are properly filled without delay, the completed questionnaires was collected by the researchers and data gathered from the questionnaire was used to find out the relationship between online social networking and academic achievement of university students. Pearson Product Moment Correlation Coefficient was used to test the stated hypothesis. Analyses were conducted at 0.05 level of significance.

Results

Hypothesis 1: *There is no significant relationship between the academic achievement of students who spend more time on social networking sites and those who spend less time.*

Table 1 presents data on the relationship on academic achievement of students and time spent on social networking sites. The table shows a calculated r-value of 0.787 and critical r-value of .195 with 145 degree of freedom at 0.05 level of significance at 2 hours. Since the calculated r-value is greater than the critical r-value 2 hours, the null hypothesis 1 was not accepted and the alternate hypothesis was accepted. Thus, there is a significant relationship between the academic achievement of students who spend more time on social networking sites and those who spend less time.

Hypothesis 2: *There is no significant relationship between students' use of social networking sites and their academic achievement based on gender.*

Table 2 presents data on the relationship between students' use of social networking sites and their academic achievement based on gender. The table shows calculated r-values of 0.031 and 0.057 and a critical r-value of .195 with 221 and 175 degree of freedom respectively at 0.05 level of significance. Since the calculated r-values are less than the critical r-value, the null hypothesis was accepted. Thus, there is no significant relationship between students' use of social networking sites and their academic achievement based on gender.

Hypothesis 3: *There is no significant relationship between students' use of social networking sites and their academic achievement when universities are compared.*

Table 3 presents data on the relationship between students' use of social networking sites and their academic achievement when universities are compared. The table shows a calculated r-value of 0.044 and a critical r-value of .195 with 398 degree of freedom at 0.05 level of significance. Since the calculated r-value is less than the critical r-value, the null hypothesis was not rejected. Thus, there is no significant relationship between students' use of social networking sites and their academic achievement when universities are compared.

Discussion

Since their introduction, social networking sites have attracted millions of users, many of whom who have integrated these sites into their daily lives. Adolescents have especially embraced this new way of communicating with classmates and keeping in touch with friends. Though there may be benefits to keeping connected with others by use of these sites, there is also the danger that they may negatively affect students' academic achievement. This study has shown that although many students find their SNS memberships to be important in their lives, they are also aware of the benefits of education. Though some admit to spending a lot of time on these sites, the issue remains to be how they are participating and how this is affecting their academic achievement. Communication is rapidly changing, and more emphasis must be placed on how educators can help students enjoy the benefits of social networking while also recognizing the problems they may create. It was also indicated in the result that out of the three null hypotheses that were generated and tested at 0.05 alpha levels, one was not accepted and two were accepted. The major findings of the study therefore include that:

There is a significant relationship between the academic achievement of students who spend more time on social networking sites and those who spend less time.

- ❖ There is no significant relationship between students' use of social networking sites and their academic achievement based on gender.
- ❖ There was significant difference in the sexual behaviour of the respondents on the basis of gender.
- ❖ there is no significant relationship between students' use of social networking sites and their academic achievement when universities are compared.

Conclusions and recommendations

The results of this project have shown that more attention needs to be placed on understanding social networking sites and their impact on students' academics. School administrators need to not only be aware of what sites students are participating on, but also the significant role that these sites have in the academic achievement of students. Though these sites have the potential to distract students from studying, homework, or other academic requirements, they can also benefit students if used properly and appropriately.

It is therefore recommended that students should give priority to their academic studies than social networking. School administrators should build upon the positive attributes that these sites have, such as the ability for students to join students' groups or meet others from school. This can be done by giving classroom presentations on the risks and benefits of social networking, highlighting the problematic behaviors associated with these sites but also educating students on how it could be used effectively to support learning. School counselors should also communicate with parents about their children and Internet use in the home, also they should hold meetings to educate parents on the issues that occur online, such as cyber-bullying, and how to monitor their child's Internet use. Parents also need to be aware that there are times when their child's social networking participation is interfering with homework and studying. Further research needs to be done on the influence of social networking participation on student academic performance and/or attitudes. This research should be done with a larger population of students and to encompass many different grade levels. In addition, there should be a students' survey about how this technology could impact on their academics, much more importance should be focused on how these sites impact their relationships with other students. Qualitative research should be done to find out how this communication tool affects teens and their relationships with their peers.

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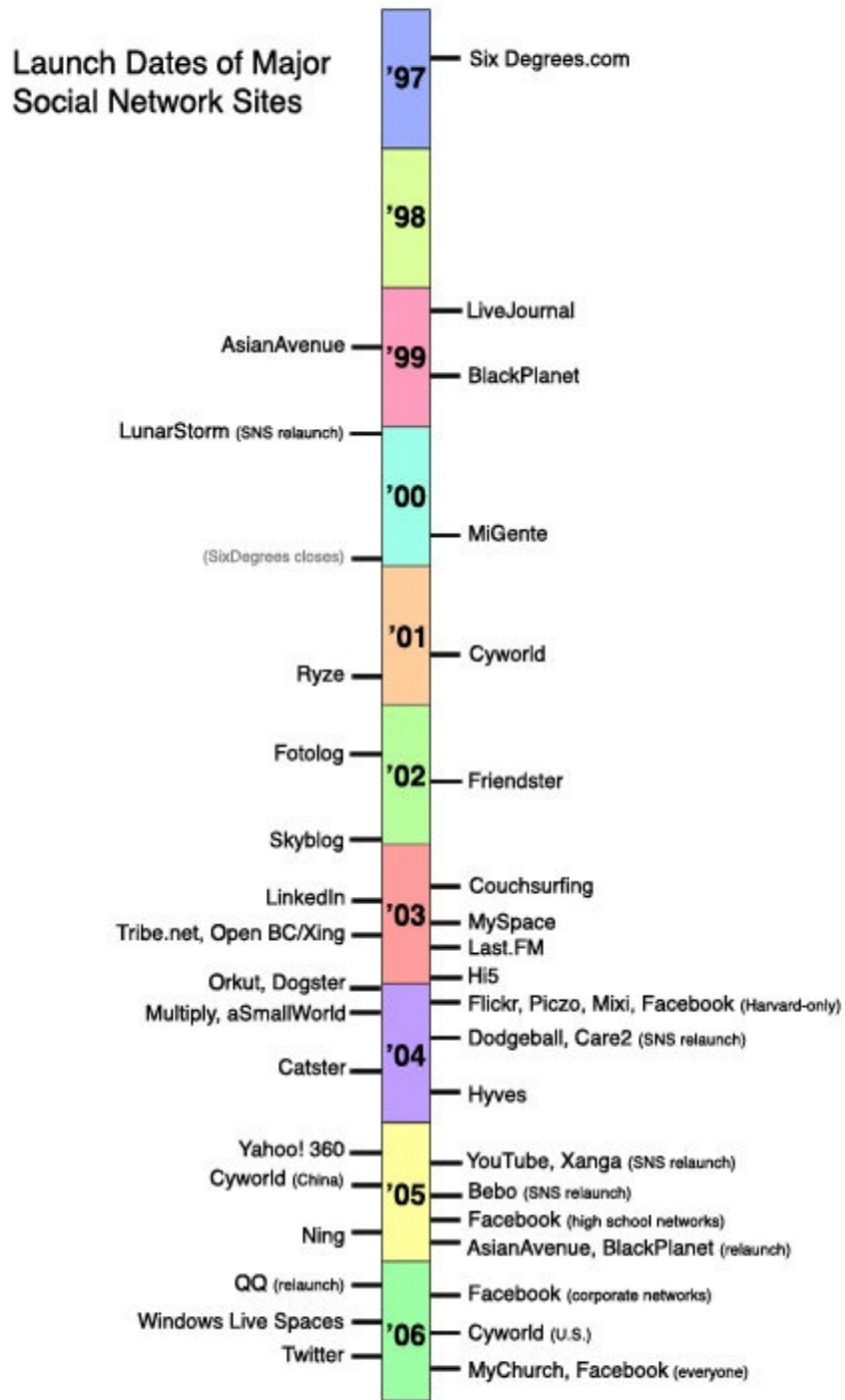


Figure 1. Timeline of the launch dates of many major Social Networking Sites
 Source: Boyd and Ellison (2007)

Table 1: Pearson’s Product Moment Correlation Coefficient showing relationship on academic achievement of students and time spent on social networking sites

Variables	No	Mean	Standard Deviation	Df	Calculated r-value	Critical r-value	Sig.
g.p	400	5.88	3.476	398		0.195	0.05
30mins	374	3.03	1.433	372	0.074		
1hr	238	3.50	1.262	236	0.082		
1hr30mins	125	3.36	1.221	123	0.109		
2hrs	149	3.02	1.302	145	0.787**		

**= Correlation is significant at the 0.05 level (2 tailed)

Table 2: Pearson’s Product Moment Correlation Coefficient Showing relationship on students’ use of social networking sites and their academic achievement based on gender

Variables	No	Mean	Standard Deviation	Df	Calculated r-value	Critical r-value	Sig.
g.p.	400	3.36	1.334	398		0.195	0.05
Gender							
Male	223	5.51	3.767	221	0.031		
Female	177	6.11	3.268	175	0.057		

**= Correlation is significant at the 0.05 level (2 tailed)

Table 3: Pearson’s Product Moment Correlation Coefficient Showing relationship on students’ use of social networking sites and their academic achievement based on sampled universities

Variables	No	Mean	Standard Deviation	Df	Calculated r-value	Critical r-value	Sig.
Network	400	6.35	3.370	398	0.044	0.195	0.05
CGP	400	3.19	1.349	398			

**= Correlation is significant at the 0.05 level (2 tailed)