

# Assessment of the Impact of Social Networking Media on Students' Academic Performance in Higher Institutions: A case Study of Federal Polytechnic, Ilaro

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## ABSTRACT

Social networking has recently gained widespread of use, both across the youth and adults. Its popularity is especially found among the youths, being a means of communication that is simple to use with the advent of internet enabled mobile phones. This study evaluates the impact of social networking on the academic performance of students using Federal Polytechnic, Ilaro as a case study. The assessment was done by conducting a quantitative research to properly analyze and give a clear picture of the study. The information in the study was carried out using structured questionnaire which was distributed randomly across 100 students spread within the school of Applied Science, Engineering, Environmental and Management Studies. The analysis of the survey was done using Statistical Package for Social Sciences (SPSS) version 20. The finding from this study is that students are influenced negatively to a large extent by the advent of social networking since much attention is focused on this rather than academic activities. Majority of students failed to utilize the social networking to their academic advantage. We also discovered that this wide spread trend in technology is uncontrollable among student and has seriously impacted on their academic performance.

## CCS Concepts

• **General reference** → **Cross computing tools and techniques** → **Evaluation** • **Mathematics of computing** → **Probability inference problems** → **Hypothesis testing and confidence interval computation**

## Keywords

Social Networking, Internet enabled mobile phone, Academic Performance, Technology and Student.

## 1. INTRODUCTION

One of the basic needs in human being is communication. Right from the olden days till now, man has always found a means of doing this. The earliest means of communication had the benefit of being easy and simple without complex technology involved, but was never as effective as what obtains now. There is the disadvantage of not being able to reach out to large audience.

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Mass media came as a result of this. With this development, the role of man became more significant in the society. Further advancement in technology came with Computer, Networking and the Internet turning the world into a global village.

The era of internet recently experienced an explosion in the various applications it's able to support. The fact that the online environment is interactive in nature expanded the social networking options. Initially, connection through the internet was not popular, but it was able to gained a wider audience and much attention. Thus, social networking media are now used in several ways to form groups, communities, chatting, blogging and others.

The Social Networking is able to connect friends and family together enabling easy mode of communication. With this social networking, a chain of friends could be maintained to chat and share information as well as ideas with. The intention of social networking is great but its negative impact on the students at large recently became a concern. Observations in class and outside class show that student spent more time meant for their studies on social networking. This study establishes this fact in its pilot study using the students of the Federal Polytechnic, Ilaro as a case study. Questionnaires were administered randomly to students at various levels of schools within the institution.

The paper is sectioned into six. Section one gave a general introduction of the study, section two reviews few types of social networking platforms commonly used, advantages and disadvantages were also discussed in this section. Methodology of the study was done in section three. Section four presented the result of the statistical analysis of the survey as well as discussion. Finally, the conclusion of the study was done in section six.

## 2. LITERATURE REVIEW

Social Networking can be conceived as an internet based applications that enables individual to communicate and interact by creating a public profile within a restricted system, selecting a list of users to share a connection with and also view such list within the system [1]. The birth of social media started some years back and has since developed into a sophisticated technology. At the inception, the use of social media started with analog telephone for social interaction. A popular use of social media was via novel application, an online dialogue framework, created by Ward Christensen. They visualized a platform of keeping in touch with co-workers for information dissemination, meetings reports and others, instead of engaging in several phone calls, dispatching letters and memos and others. They developed computerized bulletin boards called CBBS, which is Computerized Bulletin Board System. The expansion of CBBS was swift than envisaged. Several people added to this concept through new ideas and comments and eventually gave birth to a

significant experience in the era of computer and internet, leading to the emergence of online social networking.

The breakthrough of social networking came during the time of Internet service providers in the 1990 with the availability of internet services. CBBS expanded their roles beyond offering services to company to offering services to more people. More people thus joined the online community with the purpose of creating identity in the globe as well as sharing common interests and views via websites to socialize. The websites are therefore referred to as social networking sites.

## 2.1 Common Types of Social Networking Media.

### 2.1.1 MySpace

MySpace is a social networking media owned by LLC and Justin Timberlake and was founded by Chris Dewolfe and Tom Anderson launched in 2003[2]. The birth of myspace.com gave enormous opportunity to the internet users in term of extensive control over a user's profile content. A number of people from all spheres of life have dedicated pages in MySpace. The market for Myspace was great and users had the best of time creating unique identities to show online until year 2005 when Facebook came into the scene. In order for MySpace to keep up with the latest trend and stand tall in the competitive market, additional features were created such as mobile applications and others.

### 2.1.2 Facebook

The birth of Facebook came as a result of hacking Harvard's database that has identification images of Harvard's student. Facebook began as a local network developed for students of Harvard. The intention of hackers of Harvard was to compare the faces of students with animal images for the purpose of entertainment, unfortunately, there were damages of site's content and the creator decided to let go before they got caught by the school authority. Although the application was shut down, the notion of developing an online community of students was birthed. The podium was upgraded and the Facebook came into existence. It was released into campuses aside from Harvard thus exposing younger population to the website. In 2006, facebook.com ultimately offered the opportunity to the rest of the world. As 2007 approached, the registrants reached an overwhelming digit- roughly a million dozen. Facebook has grown to become the biggest and most popular social networking site today with a population of above 500 million active users [3].

### 2.1.3 WhatsApp

WhatsApp messenger offers free texting and attempt to shift mobile consumers' preference from the traditional short messages services (SMS). Texting in general have been found to be dominating people's interaction and has affected mobile voice call revenue [4], [5]. For instance in the United Kingdom (UK), 58 and 90% adults and teenagers respectively have been found to send out messages at least once a day to communicate with family and friends with the total number of texts sent in the UK in 2011 around 150 billion. It was stated also by [6] that the amount of calls from landlines and mobile phones fell in the same. Whatsapp Messenger has been in existence for sometimes with recent updates improving the functionalities of the social networking. The idea behind this application is to replace SMS with a cross platform mobile messenger that works on an internet data plan. It

is popular because there is no cost to message friends and family ther than the internet data plan that users already have on their phones. In order to launch into the application, enter phone number of the device into the application. It then sorts through the contacts on the phone to figure out who else also has the app already installed. Users can then invite more contacts or go ahead and start sending messages to the ones that the app discovered. The Whatsapp messenger was purposely created by Brian Acton and Jan Koum in year 2009 [7] to make communication and the distribution of multimedia messaging more easy and faster.

### 2.1.4 Twitter

Twitter is another online social networking application through which users send and read short messages called "tweets". Users that are registered can read as well as post tweets, but unregistered users can only read them. Users access Twitter through the website interface, SMS, or mobile device app. Twitter users follow others or are followed. Unlike on most online social networking sites, such as Facebook or MySpace, the relationship of following and being followed requires no reciprocation. A user can follow any other user, and the user being followed need not follow back. Being a follower on Twitter means that the user receives all the messages (called tweets) from those the user follows [8]. Twitter Incorporation is based in San Francisco and has more than 25 offices around the world. Twitter was created in March 2006 by Jack Dorsey, Evan Williams, Biz Stone and Noah Glass and launched by July 2006. Twitter has more than 500 million users, out of which more than 284 million are active users.

### 2.1.5 Blackberry Messengers (BBM)

BlackBerry Messenger popularly known as BBM, is a proprietary Internet-based PIN instant messenger and video telephony application included on BlackBerry devices that allows messaging and voice calls between BlackBerry, iOS, Windows Phone and Android users. With BBM, It is possible to chat and share in real-time with BBM contacts and groups. Pictures can be shared, know when someone has read message sent or is typing a reply, and update of BBM status or picture. Also news can be shared with multiple people using broadcast messages, multiperson chats, and group chats. With BBM Groups, events can be planned, track to-do lists, share pictures, and chat with up to 30 people at the same time without needing to add them all as BBM contacts. BBM can also be used over a Wi-Fi connection, especially while travelling to avoid extra data charges [9].

## 2.2 Advantages of Social Networking

### 2.2.1. Global Connectivity

One of the advantages that social networking gives is the ability to connect to friends and families from all spheres of life as long as the internet connectivity is intact. With social networking, an individual can initiate and build strong business partnership in any part of the world without meeting that individual in person.

### 2.2.2 Real Time Sharing of Information

Many social networking options incorporate an instant messaging feature, which makes it possible to exchange information in real-time through a chat. This is a great feature for teachers to use to facilitate classroom discussions. In addition, the Internet is the ultimate online textbook. Students need not borrow loads of textbooks from the library. Much of what they need to know they can find online.

### 2.2.3 Ubiquity

The provision and access to learning material anywhere, anytime, and in various formats has potential to enhance deep student learning capabilities. In higher education, whatsapp is used for the enhancement of discussions and sharing information among students and their lecturers. According to [4], social networking encourages learners to learn by anticipating needs, make collaborative learning efficient and effective, and build a relationship that stimulates learner-to-learner for consistent and progressive learning. This advantage has not been maximized by the students.

### 2.2.4 Speed of Information Dissemination

Social networking media are able to broadcast to thousands of people within minute that information and event taking place. Those that are receiving the information can then disseminate that information further to their own viewers/followers. The news tends to spread like a wildfire and before you know it millions of people across the world is talking about it. This is the new information super highway.

### 2.2.5 Simplicity and Inexpensive

Since communication through mobile phones has become easier, faster and cheaper, social networking is less expensive as compared to the normal phone messaging. An individual can chat with friends and family overseas through any of social networking means without having to incur global SMS charges.

## 2.3 Disadvantages of Social Networking

### 2.3.1 Distractions

It is common to find people especially students continuously glued to their phone all in the name of social networking. On the part of the students, seventy per cent of the times meant for their studies are spent in this wise. It takes disciplined students to define the boundaries between their academics and this medium of communication. The rate of failure in our institutions today is also blamed on the uncontrollable usage of this technology. Social networking is a lot of distraction even to employees.

### 2.3.2 Depersonalisation

Face-to-face socialization is reduced or in some cases eliminated because of the autonomy afforded by the virtual world; individuals are free to create a fantasy persona and can pretend to be someone else. Online socialization cheats people of the opportunity to learn how to resolve conflicts in the world outside the Internet and it could retard or cripple one's social skills and developments.

### 2.2.3. Exposure to Fraud and Hackers

The information posted on the Internet is available to almost anyone who is clever enough to access it. Most thieves need just a few vital pieces of personal information to make a victims' life a nightmare and if they successfully steal a victim's identity, it could cost dearly. A report on CNET reveals over 24 million Americans put their personal information at risk by posting it on public sites such as social communities [10].

## 3. METHODOLOGY

### 3.1 The Case Study

The subject of the study is students of the Federal Polytechnic, Ilaro. The institution is made up of four academic schools – Applied Science, Engineering, Environmental and Management Studies. The population under-study is incredibly large, making it impossible to interview and administer questionnaire to the whole population.

### 3.2 Data Collection

A survey was developed containing three sections of closed-response (Likert-type scaling) and open-response items. Section 1 of the survey asked respondents to provide demographic information (e.g., gender, age, level in school, ethnicity, faculty). Section 2 invited the students to provide academic information (e.g. GPA, hours spent studying). Section 3 asked about Internet usage (e.g., hours spent on the Internet, types of social network used) and its effect on academic performance of the students. Analysis of the survey was done using Statistical Package for Social Sciences (SPSS) version 20.

The form of data collection was through questionnaire administration. Data were collected from 100 undergraduate students of Federal Polytechnic, Ilaro (N = 100). Twenty-five samples each were randomly taken from the four schools (Applied Science, Engineering, Management Science and Environmental Studies). The sample consisted of 52 (52%) male participants, and 48 female participants (48%). The majority of participants identified themselves as Yoruba (68%), with the next largest ethnic group identified as Igbo (16%). Majority of the participants representing 28% were between ages 18-25 years respectively. In addition, majority of the students were in 200 level (30%) whose Grade Point Average (GPA) ranges between 2.50 and 2.99.

### 3.3 The Application Software

Statistical Package for Social Sciences (SPSS) version 20 was the Application software employed in the analysis process. SPSS is a powerful statistical user friendly program widely used in research and several other fields for data manipulation and statistical analysis. The package is useful for both students and researchers [11].

## 4. RESULTS AND DISCUSSION

From results obtained in this research, all the 100 participants indicated that they are aware of social networking media, out of which 66% of them take the platform as a “dedicated website that enables users to communicate with each other by posting information, comment, messages, and so on. According to this findings, majority of the participant indicated that they use Facebook and Whatsapp more than twitter, BBM and Badoo.

Also, the average number of hours spent on social networks per day from the survey shows that majority of the respondents spent more than 3hours on the social networking. In addition, about 73% of the respondents disagree and strongly disagree that students engaging in social networking does not make good academic standings, 92% were of the opinion that social networking sites is an effective tools for e-learning. It was also opined by the majority of the respondents (65%) that the advent of social networking platform affects students' study time and that they have more friends on such platform to real life.

It was also evidenced that majority of the students devote more time on social networking than academic activities, which further shows that social networking affect students' academic performance, with Federal Polytechnic, Ilaro as a case study.

### TEST OF HYPOTHESIS

Based on the set objectives of this study, we shall recall our statement of hypothesis and also sought out presented tables that have direct bearing on the stated objective and hypothesis.

$H_0$  : There is no significant relationship between Social Network and student academic performance

$H_a$  : There is significant relationship between Social Network and student academic performance

Pearson's R and Spearman correlation (Symmetric measures) were adopted in testing the relationship between social networking and student academic performance. The student's grade point and response of the students on the relationship between social network and academic performance were cross tabulated as shown in table 1 below.

**Table 1: Cross tabulation of student GPA and relationship between social network and academic performance.**

	There exists relationship between social network and student academic performance				Total
	SA	A	U	D	
Grade point 3.50-4.00 point	11	0	0	0	11
Grade point 3.00-3.49 point	8	16	3	0	27
Grade point 2.50-2.99 point	16	20	5	0	41
Grade point 2.00-2.49 point	7	6	2	0	15
Grade point Less than 2.0 point	1	1	0	4	6
Total	43	43	10	4	100

Source: Field Survey, 2015

Note: SA – Strongly Agree      A – Agree  
U – Undecided      SD – Strongly Disagree      D – Disagree

**Table 2: Symmetric Measures**

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Interval by Interval Pearson's R	.418	.104	4.549	.000 <sup>c</sup>
Ordinal by Ordinal Spearman Correlation	.252	.103	2.574	.012 <sup>c</sup>
N of Valid Cases	100			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

From the analysis, Pearson's R value of 0.418 shows that there exist a relationship between social networking and students' academic performance. Testing the significance of the relationship, the  $T_{critical}$  of 4.549 with p-value of 0.000 (where  $\alpha = 0.05$  level of significance) shows that there is an evidence of rejecting the null hypothesis. Therefore, we can conclude that there is a significant relationship between social networking and student academic performance since p-value of 0.000 is less than  $\alpha = 0.05$  level of significance. The Spearman Correlation measures the relationship between the ranks of the data in question.

## 5. CONCLUSION

Social Networking is a popular phenomenon and is widely used by the students of our time. It has its positive effect on minority of students that engaged it for their academic advantage as well as negative impact on majority of students that engages it otherwise. This study has demonstrated that the students of Federal Polytechnic Ilaro are aware of social networking and have access to them especially with the advent of internet enabled mobile phone. Our findings also indicated that they are influenced to a large extent by the social media negatively because attention is focused on chatting, music and others while their academic activities are neglected and left to suffer. Also, this study discovered that the use of social networking is uncontrollable among students which are the leading cause of poor academic performance among them.

Based on the analysis from this survey, it is pertinent that a similar interactive platform be conceived and developed that will major on academic delivery to students; this platform will be more interesting if class instructors would participate to ensure control over the platform and enforce pure academic issues. This platform will be made compulsory to all students, while instructors occupy students with short class notes, quizzes and assignments. All these must be interactive and should be made as simple as possible to create the interest on the part of the student.

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