Impact of Social Media Usage on Academic Performance of University Students in Enugu Metropolis

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Abstract

The use of social media has affected communication between people in the past decade. This paper tries to examine the influence of social media on the academic performance of the undergraduate students in Enugu metropolis. It focuses on extent and frequency to which undergraduate students use social media. The study adopted a survey research design. A close-ended questionnaire was designed to address the key issues in the research. Three tertiary institutions were used for the study. The data collected was analyzed using percentages. The hypotheses were tested using regression and correlation analysis. The findings show that undergraduate students in Enugu metropolis have access to social media. It also shows that majority of them were active users ofFacebook, Twitter, BBMand Whatsapp. The findings also revealed that the success of a student is weakly related to social media used but strongly related to the time spent and social media used. As a result the paper recommends that students should minimize social media use in order to increase their academic performance, students academic advisers should guide the students on sites that will assist them in their academic work since they are closer to the students.

Keywords: Social Media, Academic Performance, Undergraduate Students, Technology

Introduction

In the 21st century, education has shifted to a technology based which is one of the most rapid growing facilities in the world today. Therefore, social media (networking) technology is an integrating tool of education that improved national development in the education sector. Social media have affected communication between people in educational community positively since the past decades. Now, life is made easy by this media for development academically, socially, and politically for anyone that is connected to it. As a result, Andreas & Michael (2010), refer to social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content." Social media, as defined by Bryer & Zavatarro (2011), "are technologies that facilitate social interaction, make possible collaboration, and enable deliberation across stakeholders". These technologies now include blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms, and virtual worlds. Social Media Online (2011) defines social media as primarily internet-and mobile-based tools for sharing and discussing information by users. Social media is generally used on a regular basis by millions of people across the globe for different reasons. A big portion of social media users is made up of youths where most of them are college students (Dahlstrom, de Boor, Grunwald, &Vockley,2011).

Given the popularity of social media, a number of Universities are using them as marketing program and as a means of communication with current and prospective students and also the alumni. University professors are embracing the social media for effective discussions and dealing with their students in matters relating to academics and improving learning benefits through better communication within and outside the classes. However, recent reviews show over-participation or addiction of students to social networking may have a negative impact on their academic performance (Kirschner & Karpinski, 2010).

Addiction to the usage of social media has extremely increased in recent times. The perils of its effects on the academic performance of the over-involved students are disturbing. It is a common sight to see a youth chatting in sensitive and highly organized places like church, mosque and lecture venues. Some are so carried away that even as they are walking along the high way, they keep chatting. The manufacturing and distribution of equally sophisticated cellular phones has complicated the situation, as youths no longer need to visit a cybercafé before they send and receive messages. Attention has been shifted from visible to invisible

friends, while important ventures like study and writing are affected in the process. This phenomenon has become a source of worry to many who believe in knowledge and skill acquisition. Kirschner & Karpinski, (2010) observed that academic performance which is depicted by the grades of students is a great concern, students that spend excessive time on social networks become dependent on it and it is believed that their academic performance diminishes proportionately. It is perceived that school grades will suffer when spending too much time on social sites such as Facebook, Twitter and My space as valuable study time is lost (Karpinski, & Duberstein, 2009). This has spurred discussion among faculties, across disciplines and from various schools in relation to the effectiveness and stability of social media as a teaching tool. These therefore necessitate the study on the effects of social media usage on University students' academic performance, whether these opportunities promote studies is a question that needs to be answered.

Objectives of the Study
The study is guided by the following specific objectives:
1. To determine whether undergraduate students of Universities in Enugu metropolis have access to social media networks;
2. To determine the frequency of use of social media sites by undergraduate students of Universities in Enugu metropolis;
3. To determine the extent of social media use by undergraduate students in Universities in Enugu metropolis; and
4. To ascertain the influence of social media use on the academic performance of undergraduate students in Universities in Enugu metropolis.

Scope of the Study
The work is limited to University of Nigeria Enugu Campus (UNEC), Enugu State University of Science and Technology (ESUT), and Godfrey Okoye University (GOU) which spans through federal, state and private Universities.

Literature Review
Many scholars have carried out general studies of web technology impact on academic achievement of students. The progressive and destructive impacts of technology on achievement were documented. Researchers like Hunley, Evans, Delgado-Hachey, Krise, & Schell, (2005) examined the effect of technology on children's early stage learning. The authors discovered a positive impact of technology on learning but seriously advised parents to watch the activities of their wards when using Internet technology. Parents were further advised to direct their wards to sites that will assist them in their academic works. Some other researchers however, discovered that there is no relationship between the use of computers (social media) and students' academic achievement. Similarly, Onyeka, Sajoh & Bulus (2013) argue that the frequent use of social media sites has no negative effect on the students' studies. In the same vein, Ogedebe, Emmanuel & Musa (2012) posited that Facebook usage does not have adverse effect on the academic work of students in the Universities.

This view is however rejected by some researchers who acknowledge that social media sites do not enhance their academic performance. For example, Moon (2011) in a study on "impact of facebook on undergraduate academic performance", averred that social media have negative impact on students. According to the result, the more students use facebook, the more it affects their academic performance. Similarly, Oye (2012) notes that most of the younger students use social networking sites mainly for socializing activities, rather than for academic purpose. Oye (2012) further observed that most of the students do feel that social networking sites have more positive impact on their academic performance. In another study conducted by Shana (2012), it was revealed that students use social network mainly for making friends and chatting. The result showed that only 26 percent of the students (respondents) indicated that they use social media for academic purpose.

Also a growing number of Nigerian scholars agree that addiction to social media sites are potentially a disruptive technology to students' academic work in higher education. Among them is Oluwatoyin (2011) who surveyed 1,860 Facebook users from the Lagos State University and found that most of the students could not get cumulative grade point average (CGPA) above 3.50 because they've spent large part of their time on social media than on their home work and study time which could contribute to higher grade. Oluwatoyin's findings is further supported by Ajewole & Fasola (2011) whose study of 884 students from eight higher institutions in Oyo State showed that majority of them spend more time on social media at the detriment of their studies.

Methods
The study adopted a survey research design. The three tertiary institutions that were used for the study are University of Nigeria Enugu Campus (UNEC), Enugu State University of Science and Technology (ESUT), and Godfrey Okoye University (GOU). The sample selected using purposive sampling technique are one hundred and fifty students (150), (fifty (50) students in each school). The study focused on eight (8) social

networks used frequently by students. Four (4) of the social networks (BBM, Whatsapp, 2go, and Facebook) were selected and used for the analysis based on the frequency of usage. The study was restricted to undergraduate students of the selected Universities. A close-ended questionnaire was designed to address the key issues in the research. The research used a paper-based survey and was conducted with the cooperation of level coordinators/registration officers of the selected departments. This was done to ensure accuracy and to know the exact CGPA's of the respondents'. Participation was voluntary for all the students. Students from (3) departments participated: Business Management, Accounting and Marketing. The data collected was analyzed using percentages. The hypotheses were tested using regression and correlation analysis.

Result and Discussion

The analyses show that the respondents were made up of 150 students, 66(44%) males and 84 (56%) females. The distribution according to the level of study indicated the following: 100 level (5%), 200 level (22%), 300 level (27%) and 400 level made up the last 46% of the respondents

Access to Social Media

The data in table 1 below shows that the respondents have access to social media. All the respondents agreed that they have access to social media.

Table 1: Access to social Media Sites

	Frequency	Percent	Valid percent	Cumulative percent
Yes	150	100.0	100	100
No	-	-	-	-
Total	150	100	100	

Time Spent Per Day Using Social Media

In examining the amount of time spent by those using social media, 4 representing 3% of the respondents indicated they spent less than one hour per day; and 21 representing 14% of the respondents indicated they spent between one to two hours per day using social media. Overwhelmingly, 110 respondents representing 73% of the respondents revealed that they were always active. This is made possible by the sophisticated handheld devices that are connected to the internet 24 hours a day. Table 2 provides a summary of responses to this question.

Table2: Time Spent Per Day Using Social Media

Frequency	Percent	
Less than 1 hour	4	3
1 -2 hours	21	14
2-3 hours	4	3
4-10 hours	6	4
Always active	110	73
Missing	5	3
Total	150	100.0

Social Media use by respondents

Table 3 below demonstrates the distribution of social media use among the students. Majority of them were active users of 3 or more social sites. Facebook, Twitter, BBM and Whatsapp accounted for 77% of the respondents.

Table 3: Social Media Use By Respondents

Social Media	Frequency	Percent
FB	56	37
Twitter	20	13
2go	10	6
BBM	30	20
Gtalk	3	2
Windows live	-	-
Skype	-	2
Whatsapp	31	20
Total	150	100

Table 4 below shows frequency distribution of CGPA (Academic performance) of the respondents. It shows that 71(47.33%) has a CGPA of 1.00-2.44,47(31.33%) a CGPA of between 2.45-3.49 and 32(21.33%) a CGPA of between 3.5-4.49.

Table 4: Frequency distribution of CGPA (Academic performance) of the respondents

CGPA	Frequency	Percentage (%)
0-0.99	0	0
1.00-2.44	71	47.33
2.45-3.49	47	31.33
3.5-4.49	32	21.33
4.5-5.0	0	0
TOTAL	150	100

Test of Hypothesis

To test the hypotheses, dummy variable regression analyses were carried out. Dummy variables were introduced due to the level of measurement of time spent on social media and the social media use. Time spent on social media and the social media used.

Hypothesis 1

H_{01}: there is no significant relationship between academic performance of university students and the time spent on social media.

Table 5: Relationship between academic performance of university students and the time spent on social media.

		B	Std. Error	Beta	T	P Value
R^2	F (P value)					
'.181	'8.012 (.000)					
b_t		2.347	.081		28.965	.000
b_2		.263	.207	.098	1.271	.206
b_s		.533	.289	.140	1.840	.068
b_4		.314	.289	.083	1.084	.280
b_5		1.010	.183	.426	5.528	.000

The model summary offers the multiple correlation coefficient R and coefficient of determination (R^2) for the regression model. From the result R = 0.425 and R^2 = 0.181 which indicates that 18% of the variance in CGPA (academic performance of university students) can be explained by the regression model. In other words the success of a student is strongly related to the time spent on social media they use. However there is still a lot of variation in outcomes between academic performances of university students that is not related to time spent on social media. Our model (the linear regression equation between academic performance of university students and the time spent on social media) predicts the academic performance of university students accurately as F = 8.012 and p < 0.000.

As regression results show, the mean CGPA of students that are always active on social media is 2.35, that of students which spent 4 – 10 hrs is higher by 0.263, that of students which spent 2 - 3 hrs is higher by 0.53 3, that of students which spent 1 - 2hrs is higher by 0.314 and that of students which spent < lhr is higher by 1.010. It can also be seen that only the estimated coefficient of students which spent < lhr is statistically significant, as its p value (0.000) is less than 0.05 level of significance. Other estimated coefficients are not significant as their p values are greater than 0.05. Therefore, statistically the mean CGPA of students that always active and spent <1 hr are about the same but the mean CGPA of students that spent <1 hr statistically significantly higher by 1.010.

Hypothesis 2

H_{02}: there is no significant relationship between academic performance of university students and the social media use.

Table 6: Relationship between academic performance of university students and the social media use.

R^2	F (P Value)	B	Std Error	Beta	t	P value
.011	1.572 (.212)					
b1		2.547	.074		34.490	.000
b2		.284	.226	.103	1.254	'.212

$H_{,,2}$: there is no significant relationship between academic performance of university students and the social media use.

From the result R = 0.103 and R^2 = 0.011 which indicates that 1% of the variance in CGPA (academic performance of university students) can be explained by our regression model. In order words the success of a student is weakly related to social media used. Our model (the linear regression equation between academic performance of university students and the social media used) do not predict the academic performance of university students accurately as F = 1.572 and p = 0.212.

As these regression results show, the mean CGPA of students that use Facebook, Twitter, BBM and Whatsapp is 2.547 and that of students which use 2go, Gtalk, Windows Live, Skype is higher by 0.284. Therefore, statistically the mean CGPA of students that use Facebook, Twitter, BBM and Whatsapp and 2go, Gtalk, Windows Live, Skype are not the same but the mean CGPA of students that use 2go, Gtalk, Windows Live, Skype is statistically insignificant higher by 0.284.

Hypothesis 3

H_m: there is no significant relationship between academic performance of university students and the time spent on social media and the social media use.

Table 7: Relationship between academic performance of university students and the time spent on social media and the social media use.

	B	Std Error	Beta	t	P value
R^2	F (P Value)				
b_i .182	6.388 (000)	2.343	.083	28.269	.000
b_2	'.256	.209	.095	1.228	.222
b_3	.537	.291	.141	1.849	.067
b_4	.319	.291	.084	1.096	.275
b_5	.998	.188	.421	5.317	.000
b_6	.066	.215	.024	.305	.761

The result reveals that R = 0.426 and R^2 = 0.182 which indicates that 18% of the variance in CGPA can be explained by our regression model. In other words the

success of a student is strongly related to the time spent and social media used. However there is still a lot of variation in outcomes between academic performances of university students that is not related to the time spent and social media used. Our model (the linear regression equation between academic performance of university students and the time spent and social media used) predicts the academic performance of university students accurately as $F = 6.388$ and $p < 0.000$.

From the results of the coefficient for model and significance, we have

As these regression results show, the mean CGPA of students that spent 4 - lOhrs is higher by 0.256, that of students which spent 2 - 3hrs is higher by 0.537, that of students which spent 1 - 2hrs is higher by 0.319 and that of students which spent <lhr is higher by 0.999 when social media used is being controlled. Also the mean CGPA of students that use 2go, Gtalk, Windows Live, Skype is higher by 0.066 when time spent is being controlled. Only the estimated coefficient of students which spent <lhr is statistically significant, as its p value (0.000) is less than 0.05 level of significance. Other estimated coefficients are not significant as their p values are greater than 0.05. Therefore, statistically the mean CGPA of students that always active and spent <1 hr are about the same but the mean CGPA of students that spent <lhr statistically significantly higher by 0.998.

Conclusion and Recommendations

From the data collected and analyzed, it can be concluded that University undergraduate students in Enugu metropolis are exposed to the use of social media. This is shown by the amount of time spent on social media and the frequency of visit has a statistically significant relationship with a student's academic performance. Our analyses strongly support our inference and show that if access to social media is restricted and controlled, and the idle time is rather channeled into studying, this will greatly improve students' performance. The study recommends that students should minimize social media use in order to increase their academic performance and students academic advisers should guide the students on sites that will assist them in their academic work since they are closer to the students.

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