# RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND USE OF SOCIAL MEDIA AMONG SENIOR SECONDARY SCHOOL STUDENTS IN MINNA METROPOLIS, NIGER STATE, NIGERIA

# SALIU, R. M.; GAMBARI, A. I. PhD; & UMEH, A. E., PhD

Department of Educational Technology, Federal University of Technology, Minna, Nigeria

**E-mail:** gambari@futminna.edu.ng **Phone No:** +234-803-689-7955

#### **Abstract**

The study investigated the relationship between academic performance and use of social media among secondary school students in Minna metropolis, Niger State. Correlational survey design was employed. The study has two hypotheses. Simple random sampling was used to select 500 students out of 6,653 Senior Secondary School students from five co-educational secondary school in Minna Metropolis. Social Media Questionnaire (SMQ) was used for data collection with reliability coefficient of 0.76 using Pearson Product Moment Correlation (PPMC). Spearman rank correlation was used to test the hypothesis. Findings revealed that revealed that there was no significant relationship between students' rate of social media usage and their academic performance and gender has no significant influence on students' rate of usage, frequency of usage and time spent on social media in relation to their academic performance. Based on the above findings, it was recommended that the students should be encouraged to use social media for educational activities rather than for only entertainment activities as this will improve their academic achievement.

Keywords: Academic Performance, Relationship, Social Media

#### Introduction

The world is referred to a global village today as a result of improvement in information and communication technology (ICT) . ICT is defined as sets of technological tools and materials used to translate, and to create, disseminate, store, and manage information (Mesch, 2012). In education, ICT is technology made up of electronic devices and associated human interactive tools that allow the users employ the tools for a wide range of teaching and learning processes. Kajornboon (2010) observed that ICTs include internet, satellite, cable data transmission and computer assisted equipment. But technology have two sides of a coin, bring with it both the negative and positive sides. It helps people to be better informed, enlightened, and keeping abreast with world developments. Technology exposes mankind to a better way of doing things (Andrew, 2005). Also it was revealed by Kirschner and Karpinski (2010) that over-involvement or obsession with social media by students can have negative impacts on students' academic performance.

To improve academic performance of students, there is need for paradigm shift from approach chalk and talk method to using interactive white board and some level of ICTs especially social media. Voogt (2003) revealed that the use of ICTs in education has contributed to a more constructivist learning and has increased activities involved in learning thereby given more responsibility to students. This has limited the role of the teacher to only support, advise, and coach students instead of just passing knowledge. Voogt (2003) observed also that the gradual progress in using computers started from learning about computers, using computers, and finally to learning with computers. Some educational institutions in the world now hosts its own

collection of videos featuring news, lectures, tutorials, and open courseware. Just as many individuals have their own channel, curating their expertise in a series of broadcasted lessons. These channels allow instructors to share information and blend media in unprecedented and exciting new ways and one of such technology is the social media (Brady, 2010).

Social media are <u>computer-mediated</u> tools that allow people to create, share or exchange information, ideas, and pictures/videos in <u>virtual communities</u> and <u>networks</u>. Social media are different from traditional or industrial media in many ways, such as quality, <u>reach</u>, frequency, usability, immediacy, and permanence.

In Nigeria today, a lot of secondary school students are fully engaged in social media especially for communication and entertainment during school hours which takes a lot of their time in place of their academic activities. Karpinski and Kurschnr (2009) asserted that students who are engaged in these activities end up being addicted to social media in which they see as a platform for sharing information or interacting among their peers and solving social problems among themselves, like making friends, marrying and so on. But they fail to understand that it goes beyond that (Andreas & Haenlein, 2010; Kane & Fichman, 2009). Lockyer and Patterson (2008) opined that through collective or group learning and combination of social media, students can build up positive contact, utilizing the objective of working towards specific last results, both in logged off and online modes. Silius, Miilumäki, Huhtamäki, Tebest, Meriläinen and Pohjolainen (2010) made an online networking webpage for school children, endeavoring at enhancing both community study and social communication. Their research revealed that making social networking sites as part of customary learning will pull in students and might persuade their cooperation inside the learning process. That means secondary school curriculum should be looked into especially for integrating social media to enhance effective learning process. There are many effects that stem from internet usage (Englander, Terregrossa &Wang, 2010).

According to (Khan, 2009) facebook users often time experience poor performance academically. Similarly, (Englander, Terregrossa & Wang, 2010) posited that social media is negatively associated with academic performance of student and is a lot more momentous than its advantages. Internet addiction consequently gave rise in internet usage within the last couple of decades. Nalwa and Anand (2003) recommended that addicted users prefer using internet setting back their personal and professional responsibilities which ultimately leads to poor academic performance. This means there are benefits and risks associated with using any social network. There have been reports regarding its effect on students' academic performance. Some researchers investigated the end result of social networking usability among College students' and with their academic performance. They found a poor effect and influence when the media is overuse in such a way that do not academically improve learning or its process (Canales, Wilbanks & Yeoman 2009; Karpinski & Duberstein 2009; Stollak, Vandenberg, Burklund & Weiss 2011; Wang, Chen & Liang, 2011).

In general, women seem to use social networking sites (SNSs) more to explicitly foster social connections. Female participants in a multi-stage study conducted in 2007 to discover the motivations of facebook users scored higher on scales for social connection and posting of photographs. Similarly, a study of blogs maintained in MySpace, women were found to be more likely not only write blogs but also write about family, romantic relationships, friendships, and health in those blogs (Jones, Millermaier, & Schuler (2008). Ahmed and Qazi (2011) reported

results from their study which explored the relationship between social networking sites (SNSs) usage and educational achievement of the student user, finding that internet or SNS usage was not significant enough to affect the academic performance of students adversely in terms of gender. Similarly, Ketema, and Negussie (2014) examined the relationship between facebook practice on academic performance of students and found that there is no significant relation between usage time and frequency of login facebook with student Grade Point Average(GPA)...

However, Khan (2009) observed that visiting social networking sites regularly is time consuming and make students experience poor performance academically. Additionally, Englander, Terregrossa and Wang (2010) observed that social media when related with academic performance of students has negative adverse effects as it causes serious distractions. Nalwa and Anand (2003) suggested that addicted users prefer using internet setting to support their personal and professional activities which ultimately leads to poor academic performance. It is against this background that this study was carried out to investigate the Relationship between Academic Performance and Use of Social Media among Secondary School Students in Minna Metropolis, Niger State.

# **Aim and Objectives of the Study**

This study investigated the relationship between academic performance and use of social media among secondary school students in Minna metropolis, Niger State.

The following are the specific objectives:

- (i) To determine the relationship between students usage of social media and their academic performance
- (ii) To determine the influence of gender on the rate of usage of social media by students in relation to their academic performance.

# **Research Questions**

This study sought to answer the following research questions:

- (i) Is there any relationship between secondary school students' usage of social media and their academic performance?
- (ii) Is there any influence of gender on the rate of usage of social media in relation to their academic performance?

# **Research Hypotheses**

- HO<sub>1</sub> There is no significant relationship between the rate of usage of social media and secondary school students' academic performance.
- HO<sub>2</sub> There is no significant relationship between male and female students' usage of social media in relation to their academic performance.

#### Methodology

Correlational survey design was adopted in this study; this is because the researchers explored the extents to which social media affect academic performance of senior secondary school students in Economics in Minna metropolis. The population of the study consists of 6,653 senior secondary school (SS III) schools students in Minna. The target population was SSIII students in public schools in Minna Metropolis. Simple random sampling was used to select students from five schools and simple random sampling was equally used to select students from five coeducational schools out of the 15 schools in Minna. The schools are Hiltop Model School, Minna; Day Secondary School, Minna; Limawa Secondary School, Minna; Ahmadu Bahago Secondary

School and Zarumai Secondary School, Minna. 500 SSIII students were selected from coeducational schools using random sampling. The reason for selecting SSSII is because the study was to find out how social media has influenced the academic performance of the students over four years. Out of the 500 students selected 310 were males while 190 were females.

The research instrument for this study is researcher's designed questionnaire and existing records on past examination results in economics from selected schools i.e the end of term results for first, second and third terms from SS I to SS III from the various schools selected. The instrument is designated as Social Media Questionnaire (SMQ). The questionnaire was made up of two sections. Section A contains items on biographic data of the respondents such as name of school, age of student, gender of student and class of student whether art or science class. Section B contains information on the use of social media by students. Twenty-three items closed and open-ended questionnaire was constructed for the study. Before administering the instrument on respondents, the draft copy was validated by two Educational Technology experts. Based on their comments, the questionnaire was modified by deleting some items and some were restructured.

After the validation, the modified questionnaire was tested using SSS III students from two schools that are part of the population but not part of the sample size. The rationale behind the pilotl testing was to enable the researcher to determine and diagnose problems encounter and forestall such problems during the real field work for the final administration of the instrument in the schools to be surveyed. Test Re-test method was used and a reliability coefficient of 0.76 was obtained using Spearman Rank Correlation Coefficient.

Before the collection of data, Permission to conduct the study in the selected schools was sought. The researcher co-opted one trained research assistant from each of the schools to assist in the administration and collection of the completed copies of questionnaire. The statistical method that was used in the analysis of data was descriptive and inferential statistics. Analysis of the data was done using the Statistical Packages for Social Sciences (SPSS Version 20). All the two null-hypotheses were tested at 0.05 level of significance.

#### **Results**

# **Hypotheses Testing**

**HO**<sub>1</sub> There is no significant relationship between the rate of usage of social media and students' academic performance.

Table 1: Correlation coefficient between social media and academic performance

N	df	$\overline{X}$	SD	<b>r(</b> ρ)	P-Value
330	46.06	46.06	30.75		
	328			-0.26	0.000
330		43.70	14.55		
	330	330 46.06 328	330 46.06 46.06 328	330 46.06 46.06 30.75 328	330 46.06 46.06 30.75 328 -0.26

<sup>\* =</sup> Significant at P<0.05

Table 1 shows that there was significant relationship between Social Media usage and Academic Performance of the students. This is the result of the computed Spearman ( $\rho$ ) =-0.26, P<0.05 which was significant at 0.05 alpha level. Hence, the null hypothesis was rejected. Therefore, there was weak negative correlation between the two variables of rate of use of social media

and academic performance of the senior secondary school students in Minna metropolis. It implies that the rate of use of social media affect the academic performance of senior secondary school students in Minna. The more they use social media, the more their academic is negatively affected.

**HO<sub>2</sub>** There is no significant relationship between male and female students' usage of social media in relation to their academic performance.

Table 2: Correlation coefficient between male and female students' usage of social media in relation to their academic performance

Variables	N	df	$\overline{X}$	SD	<b>r(</b> ρ)	P-Value
Male	210		40.39	27.08		-
		328			0.87	0.000
Female	120		50.24	32.03		

<sup>\* =</sup> Significant at P<0.05

Table 2 shows that there was significant relationship between males and females SS III students' usage of social media in relation to their academic performance. This is the result of the computed Spearman ( $\rho$ ) = 0.87, P<0.05which was significant at 0.05 alpha level with mean 40.39, SD=27.08 for x values and 50.24 mean, SD=32.03 for y values. The computed r value of 0.87 denotes positive strong correlation between male and female students' usage of social media in relation to their academic performance, as such hypothesis two was rejected. Therefore, there was correlation between male and female students' usage of social media and academic performance. This implies that there is no difference in the effect of social media on academic performance of male and female students.

# **Discussion**

The result of the analyses shows that there was significant relationship between Social Media usage and Academic Performance of the students. This was supported by Tamayo, Sacha and Cruz (2014) who investigated the relationship of Social Media in relation to the Academic Performance of the students of Bachelor of Science in Information Technology at Centro Escolar University –Malolos and found that there is more frequent user of social media among the respondents. Similarly, it corroborates the study of Ketema, and Negussie (2014) who examined the relationship between facebook practice on academic performance of students and found that there is no significant relation between usage time and frequency of login facebook with student GPA. This is also in agreement with Ahmed and Qazi (2011b) who reported results from their study which explored that there is relationship between SNS usage and educational achievement of the student

The finding of the analyses shows that there was significant relationship between male and female SS III students' usage of social media in relation to their academic performance. The finding is in agreement with the finding of Ahmed and Qazi (2011) who reported results from their study which explored the relationship between social networking sites (SNSs) usage and educational achievement of the student user, finding that internet or SNS usage was not significant enough to affect the academic performance of students adversely in terms of gender.

#### Conclusion

Based on the findings of the study, the following conclusions were drawn: using social media which has effect on student's academic performance. Students use social media frequently mostly for communication, information and entertainment activities, thereby affecting their academic performance in school. In other words, the high rate of students' usage of social media, the lower their academic performance becomes. Gender has no significant influence on students' rate of usage, frequency of usage and time spent on social media in relation to their academic performance.

#### Recommendations

Based on the findings of the study and the conclusions derived from the study, the following recommendations were made:

- (i) Students should be encouraged to use social media for educational activities rather than for the entertainment activities as this will improve their academic achievement.
- (ii) The parents should be aware that students need parental guidance while using the social media. Parents should advice, guide and protect their children from excessive use of social media that may adversely affect their academic performance.
- (iii) Teachers should be aware and orient the students on how to use Social Media moderately. Monitor school work diligently and encourage students to indulge to a more fulfilling and productive activities. Social Media can be an aid in classroom activities. Since youth are Social Media involved nowadays and nothing can keep them away to that, it is better to utilized this technology to a more productive way.

#### References

- Ahmed, I., & Qazi, F. T. (2011, June). A look out for academic impacts of social networking sites (SNSs): A student based perspective. *African Journal of Business Management*, 5(12), 5022-5031.
- Andrew, I. (2005). *Reading in mass communication and Nigeria satellite*. Makurdi: Benue State University.
- Brady, K. P. (2010). Lifting the limits on social networking sites. *The School Administrator*, 67(2),8.
- Canales, W., & Yeoman. C. (2009). Facebook usage in relation to personality and academic performance. *Modern Psychological Studies*, 3(2), 57-66.
- Englander, T., & Wang, Y. (2010). Educational review. *Journal of Education*. 62(1), 85 -96.
- Jones, S, Millermaier, S., Goya-Martinez, M., & Schuler, J. (2008). Whose space is Myspace? A content analysis of myspace profiles, First Monday, 13.9, Retrieved Sept. 5th, 2009, http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2202/2024.
- Kajornboon, B. A. (2010). The effect of using social networking assisted interaction between peer and teacher in English language learning. Thailand: Chulalongkorn University Language Institute.

- Ketema, G,. & Negussie, N. (2014). Relationship between facebook practice and academic performance of University students. *Asian Journal of Humanites and Social Sciences*, 2(2), 31-37.
- Khan, U. (2009). Facebook students underachieve in exams. Daily Telegraph. Retrieved on July, 2013, from http://www.telegraph.co.uk/education/educationnews/5145243/Facebook-students-underachieve-in-exams.html.
- Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and academic performance. *Computers in Human Behavior*, 26(6), 1237-1245. http://dx.doi.org/10.1016/j.chb.2010.03.024
- Mesch, G. S. (2012). Technology and youth. *New Directions for Youth Development*, 2012(135), 97-105.doi:10.1002/yd.20032.
- Nalwa, K., & Anand, A. P. (2003). CyberPsychology behavior. doi:10.1089/109493103322725441. 6(6): 653-656.
- Stollak, V., & Burklund, W. (2011).Getting social: The impact of social networking usage on grades among college students. *ASBBS*, 18(1), 859-865.
- Voogt, J. (2003). Consequences of ICT for aims, contents, processes, and environments of learning. In J. van den Akker, W. Kuiper & U. Hameyer (Eds.), Curriculum landscapes and trends(pp 217 236). Dordrecht: Kluwer Academic Publishers.
- Wang, C., & Liang (2011). *The effects of social media on college students.* The Alan Shawn Feinstein Graduate School. Providence: Johnson & Wales University.
- Karpinski, A., & Kurschnr, U. (2009). A description of facebook use and academic performance among undergraduate and graduate students. San Diego, California: American Educational Research Association.
- Andreas M. K., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53, 59-68.
- Kane, G. C., & Fichman, R. G. (2009). The shoemaker's children: Using Wikis for information systems teaching, research and publication. *MIS* Quarterly, 33(1), 1-17.
- Lockyer, L., & Patterson, J. (2008). Integrating social networking technologies in education: A case study of a formal learning environment. paper presented at the Eighth IEEE International Conference on Advanced Learning Technologies.
- Silius, M., Huhtamäki, T., & Pohjolainen, M. (2010). Students' motivations for social media enhanced studying and learning. *Knowledge Management & E-Learning: An International Journal*, 2(2), 51-67.