



Modelling of Time Spent on social media and Time Spent to Study on the Academic Performance of Students in Selected Nigerian Tertiary Institutions.

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Abstract

This chapter determines the mathematical model of the time spent on social media to study and the time spent to study outside of class on the academic performance of students in the selected tertiary institutions in Nigeria. To achieve this purpose, two research questions and two research hypotheses were formulated to guide this study. The researchers adopted descriptive survey research design and a sample size of 300 were selected from the total population of the students considered using stratified random sampling technique. The regression analysis statistical method was employed to determine the mathematical model that connects the dependence variable (academic performance) and the independent variables (time spent on social media to study and time spent to study outside of class). The study reveals that, there is a positive relationship between time spent studying outside of class and academic performance of students and there is also a strong positive relationship between time spent on social media to study and academic performance of students. In addition, the mathematical model that connects all the variables were determined and formulated based on the data collected from the research findings. The study was concluded with some recommendations that, awareness programmes should be put in place to sensitize students of the advantages derived from the use of the social media to study effectively.

Keywords: *Social media, Academic Performance, Regression Analysis, Mathematical Model, Tertiary Institutions, Students*

1.0. Introduction

The use of social media is very popular amongst students of nowadays, as it provides them the freedom to do whatever they want to do. They can create and share content, comment on anything they wish to, connect and chat with their friends as well as make new friends (Manasi, 2019). The internet has created a platform for millions of computers at numerous sites in various countries, belonging to thousands of businesses, government, research institutions, educational institutions and other organization to link up with one another. It provides a very rich medium for information dissemination, and exchange, collaboration and interaction among individuals and computers without regards for geographical limitation of space. Social media has many positive effects on education including better communication, timely information, socializing online, learning, enhancing skills, and making a career among others. But the same has some negative effects which include identity theft, cyber bullying and social isolation. Research has shown that, students who are frequent users of social media are more innovative and exhibit better memory (Alwagait *et al.*, 2015). However, Nigerian youths are confronted with an environment that is rapidly changing and the time spent on non-academic activities has negatively impacted academic performance. This survey investigates the contribution of time spent on social media by students to their academic achievement. The performance of students' overtime has witnessed a constant depreciation. Many scholars see this as a direct consequence of governments neglect on education; some others say, the students should share a large part of the blame. There is no doubt that, spending time on social media helps to improve one's intelligence quotient and ultimately make one conversant with happenings around him/her. However, doing this to the detriment of one's studies has done more harm than good in our society (Ojih and Onoja, 2015). Ezeife (2008) opined that for students to be able to do academically well, they have to spend little or no time on the social media. But doing this according to Oluwatobi (2013) could as well be detrimental to students' academic performance. It is no longer news that, Nigerian students have so taken to social media that they do spend little or no time on their studies and these have added to the decline of education in Nigeria (Ogwu and Oranu, 2006). In sum, this study may help to develop a conceptual framework for guiding efforts to improve academic performance, as it relates to time used on the social media. Today's students are spending less time studying. This study investigates whether the time students spend on the social media enhances their academic performances and to formulate a mathematical model that connects the time spent on social media and time to study outside the class on the academic performance of the students. The research gap in this study is to determine and formulate mathematical models or mathematical expressions that connect two independent variables (time spent on social media to study and time spent outside the class to study) and one independent variable (academic performance).

2.0. The Concept of Social Media

Social media continuously keeps changing and as such it is difficult to assign a fixed definition to it as Jacka and Scott (2011) argued that there is no single recognized definition for social media. However, some scholars have defined it in different perspectives over the years. Kaplan and Haenlein (2010), defined social media as a group of internet-based applications that build on the ideological and technological foundations of Web 2.0 and allow the creation and exchange of user generated content. The Oxford dictionary (2011) also defined social media as "websites and applications used for social networking". Another definition of social media is that it is a communication channel which is very popular, extremely fast and broad, and which has proven to be highly effective, as well as trusted by billions of people to share and discover content concerning individuals, brands, information, entertainment and know-how (Dearborn, 2014). One theme that all these definitions underpin is that, social media involves some form of communication between individuals over the internet.

2.1. Brief History of Social Media

Social media began in the late 1990s with the first recognized social media network called "Six Degrees" in 1997 and this technology enabled people to upload a profile and make friends. From 1997 to 2001 a number of community tools; Asian Avenue, black planet and MiGente began supporting

various combinations of profiles and publicly articulated friends (Boyd, Danah, Ellison and Nicole, 2007). There has been tremendous improvement since this era and today, there exists uncountable social networking sites either developed for educational use, local use, specific purposes or international use.

2.2. Classification of Social Media

Kaplan and Haenlein (2010), classified social media into six (6) different categories as follow;

1. Collaborative project (Wikipedia, Google)
2. Blogs and micro blogs (Twitter)
3. Content communities (YouTube)
4. Social networking sites (Facebook, 2go, BB chat, WhatsApp)
5. Virtual game World (World of War Craft)
6. Virtual second world (Second life)

This classification of social media into groups has been useful to scholars and individuals for easy identification and study of a particular type of social media but today a difficulty may arise due to the high proliferation of social media platforms and one may wonder which group a new developed social media type fit into. Social media is considered to be the fastest growing web application in the 21st century and this rapid development is being backed by technological advancement (Heyam, 2014). Mankind has enormously benefited and continues to benefit from it and as such, cannot underestimate its importance as far as communication is concerned. Today, social media has taken a new dimension and has encouraged more participation through the introduction of mobile phones that support social networking applications. The use of mobile phones that are powered by Android applications to social network is termed Mobile Social Networking. According to Humphreys (2007), in his study titled “Mobile Social Networks and Social Practices” social network applications have now been migrated from the computer to the mobile phone. Network information and communication can be integrated into the public space and these new services that are developed for mobile phones allow users to create, develop, and strengthen their social ties.

2.3. E-Learning Techniques

E-learning literally means Electronic Learning. Saba *et al.* (2013) defined E-learning as web-delivered and/or web-supported teaching and learning where computers, multimedia, and internet technologies are used. E-learning is a means of education that incorporates self-motivation, communication, efficiency and technology. E-learning is also called Web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning. E-learning instructional techniques encompass all the instructional approaches involving the use of electronic mediums for teaching. This includes Computer Assisted Instruction (CAI) and web/online/mobile and also learning through radio, audio tapes, video tapes, the internet and television. The use of e-learning in instruction adopts the principles of artificial intelligence. E-learning in its delivery blend enables teachers to cater to a wide range of learning styles such as auditory learning, visual learning and self-testing through puzzles and quizzes, and kinetic learning through workplace simulations (Ogwo and Oranu, 2006). Technology is developed to solve problems associated with human needs in more productive ways. If there is no problem to solve, the technology is not developed and/or not adopted. Applying this principle to educational technology would mean that educators should create and adopt technologies that address educational problems, of which there are many. Further, a technology will not be adopted by educators where there is no perceived need or productivity gain. This is what is refer to as the ‘workability’ principle. Therefore, when discussing applications of computer technology to education, the question must always be asked, “What educational problem(s) needs to be addressed?” This question needs to be asked at all levels of decision-making, from the teacher planning a programme, to a school administrator purchasing hardware and software, to an educational system officer developing policy and strategic plans. Researchers have found that typically the use of ICT leads to more cooperation among learners beyond school and a more interactive relationship between students and teachers.

E-learning is beneficial to education, corporations and to all types of learners. It is affordable, saves time, and produces measurable results. E-learning is more cost effective than traditional learning because less time and money is spent traveling. Since E-learning can be done in any geographical location and there are no travel expenses, this type of learning is much less costly than doing learning at a traditional educational institution (Saba *et al.*, 2013). Flexibility is a major benefit of e-learning. E-learning has the advantage of taking class anytime and anywhere. Education is available when and where it is needed. E-learning can be done at the office, at home, on the road, 24 hours a day, and seven days a week. E-learning also has measurable assessments which can be created so that both the instructors and students will know what the students have learned, when they have completed courses, and how they have performed (Saba *et al.*, 2013). Students like e-learning because it accommodates different types of learning styles, such as cooperative learning, experimental learning, reflective learning and responsible learning. Students have the advantage of access to a learning centre. Students can also learn through a variety of activities that apply to many different learning styles learners have. Learners can fit e-learning into their busy schedule. If they hold a job, they can still be working with e-learning. If the learner needs to learn at night, then this option is available. Learners can sit in their home and learn if they desire (Hussein, 1996).

3.0. Research Methodology

Research Questions:

- a) Does the time students spend on social media to study enhance or decrease their academic performance?
- b) Is there any relationship between time spent studying outside of class and the academic performance of students?

Research Hypotheses

Hypothesis 1

H₀₁: There is no relationship between time spent on social media to study and academic performance of students.

H₁: There is a relationship between time spent on social media to study and academic performance of students.

Hypothesis 2

H₀: There is no relationship between time spent studying outside of class and academic performance of students.

H₁: There is a relationship between time spent studying outside of class and academic performance of students.

The research design adopted for the study was a descriptive survey. This design is considered apt because it enables the researcher to generate data through standardized collection procedures based on highly structured research instrument(s) and well-defined study concepts and related variables. A total sample size of 300 students were randomly selected from the respondents that filled the Google form online questionnaire using confidence interval of 5 and confidence level of 95% (0.05) from the total population of 524 full-time students in selected Nigeria tertiary institutions. A well-constructed and self-developed questionnaire titled “Modelling of the time spent on social media and the time spent studying on the Academic Performance of Students in Tertiary Institutions Questionnaire” was used to get the desired information from the students. The questionnaire was divided into two sections (A and B). Section A was for collection of information on personal data of respondents while Section B consisted of questions that obtained responses from the respondents with response options on a four-point Likert scale that is; Strongly Agree (SA – 1 point), Agree (A – 2 points), Disagree (D – 3 points) and Strongly Disagree (SD – 4 points).

The mathematical model is given in the form of a function such as $Y = f(X)$ as;

$$\text{ACAP} = f(\text{TISP}) \quad (3.1)$$

where **ACAP** is Academic Performance and TISP is the Time Spent to study

Based on the research, since time spent to study is divided into two sub-sectors. The time spent will therefore be decomposed to include the two sub-sectors, hence equation (3.1) is written and given as,

$$\text{ACAP} = f(\text{TPOSMTSS}, \text{TSSOOC}) \quad (3.2)$$

By integrating equation (3.2) into equation (3.1) while also showing the intercept and stochastic term and finding the logarithm function of the **time spent** components, the new equation which will show the effect of each sub-sector of the time spent on social media and on study respectively against students' academic performance now becomes:

$$\text{ACAP} = \beta_0 + \beta_1 \text{TPOSMTSS} + \beta_2 \text{TSSOOC} + \varepsilon \quad (3.3)$$

$$\text{ACAP} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \quad (3.4)$$

where **ACAP** is academic performance (Dependent Variable), **TPOSMTSS** is the time spent on social media to study (Independent Variable), **TSSOOC** is the time spent studying outside of class (Independent Variable) and ε is the stochastic term which represents other factors that may determine academic performance which are not captured in the model. The error terms account for the fact that social media is mostly on mobile phones and is more often than not available while studying in class and outside class. The β_0 , β_1 and β_2 are the parameters to be determined from the data collected from the questionnaires that are statistically analyzed. On a prior expectation, β_0 , β_1 and β_2 are expected to be < 0.005 in significance. The researchers collected the needed data through the use of a Google online questionnaire and its administration in the selected faculties. The administration of the questionnaire was carried out by the researchers.

4.0. Results and Discussion

This section presents the analyses of the data collected. Questionnaires were designed, sent out through Google form and 300 respondents were used for the analyses for efficient understanding of the research work. The responses were treated expressly in the Tables below. These Tables only show the analysis for valid responses and ignored all invalid responses.

Table 1: Socio-Demographic Characteristics of Respondents

S/N	Items	Characteristics	Frequency	Percentage
1	Sex	Male	141	47%
		Female	159	53%
2	Age (in years)	16 - 20	57	19%
		21 - 25	94	31.3%
		26 and above	149	49.7%
3	Level	100 Level	27	9%
		200 Level	27	9%
		300 Level	4	1.3%
		400 Level	37	12.3%
		ND	52	17.3%
		HND	153	51%

It can be deduced from Table 1 above that 141 (47%) of the respondents are male while 159 (53%) are female; showing that majority of the respondents are female. About 57 (19%) of the respondents are between the age range of 16 - 20 years, followed by 94 (31.3%) between the age range of 21 - 25 years, while 149 (49.7%) are 26 years and above; depicting that majority of the respondents are 26 years and

above. More so, and based on the academic levels, 27 (9%) of the respondents each are in 100 Level and 200 Level, 4 (1.3%) are in 300 Level, 37 (12.3%) are in 400 Level, 52 (17.3%) are in ND I & II, while 153 (51%) are in HND I & II. This depicts that majority of the sampled respondents are HND students.

Table 2: Social Media and Academic Performance

S/N	Items	SA	A	D	SD
1	I usually have unlimited access to Facebook and this has affected my academic performance negatively based on my CGPA results.	41 (13.7)	53 (17.7)	134 (44.7)	72 (24)
2	I engage in academic discussions on Zoom, and this has improved my academic performance.	66 (22.0)	146 (48.7)	62 (20.7)	26 (8.7)
3	I make use of WhatsApp to disseminate information to my course mates.	176 (58.7)	103 (34.3)	21 (7.0)	0 (0.0)
4	I solely rely on information gotten from Wikipedia/ goggle to do my assignments without consulting other sources.	61 (20.3)	98 (32.7)	94 (31.3)	47 (15.7)

Table 2 above shows that majority of the respondents (134) disagreed that they usually have unlimited access to Facebook, and that this affected their academic performance positively based on their CGPA results, followed by 72 that strongly disagreed, while 53 agreed and another 41 strongly agreed to the statement. From Table 2, 146 agreed that they engage in academic discussions on Zoom and that this improved their academic performance, followed by 66 that strongly agreed to this, while 62 disagreed and another 26 strongly disagreed. More so, majority of the respondents (176) strongly agreed that they engage in academic discussions on Zoom, and that this improved their academic performance, followed by 103 that agreed to this, while 21 disagreed to this statement. Lastly, about 98 of the respondents agreed to engaging in academic discussions on Zoom, and that this improved their academic performance, with an addition of 61 that strongly agreed to this, while 94 disagreed and another 47 strongly disagreed to the statement.

Table 3: Relationship Between of Social Media Usage and Academic Performance

SN	Items	SA	A	D	SD
1	I use materials gotten from blogging sites to complement what I have been taught in class.	123(41.0)	118(39.3)	42 (14.0)	17 (5.7)
2	I will not perform well in my academics even if I stop using social media.	32 (10.7)	24(8.0)	135 (45.0)	109 (36.3)
3	The usage of blogging sites for research has helped improved my grades.	62 (20.7)	156(52.0)	74 (24.7)	8 (2.7)
4	Engaging in academic forums on yahoo reduces my rate of understanding.	16 (5.3)	50(16.7)	156 (52.0)	78 (26.0)

Observation from Table 3 shows that, 123 of the respondents strongly agreed that they engage in academic discussions on Zoom, and that this improved their academic performances, followed by 118 that agreed to this. Meanwhile, 42 disagreed and another 17 strongly disagreed. Majority of the respondents (135) disagreed that they will not perform well in their academics even if they stop using social media, followed by 109 that strongly disagreed to this, while 32 strongly agreed and only 24

agreed to the statement. Table 3 also showed that majority of the sampled respondents (156) agreed that the usage of blogging sites for research has helped improved their grades, another 62 agreed to this, while 74 disagreed and another 8 strongly disagreed. Lastly from the table, majority of the respondents (156) disagreed to the statement that, engaging in academic forums on yahoo reduces their rate of understanding, followed by 78 that strongly agreed to this, while 50 agreed and just 16 strongly agreed to this.

It was deduced from Table 4. that majority of the sampled respondents (152) disagreed that they prefer to study online rather than the four walls of a classroom, 38 strongly disagreed to this. However, 66 of the respondents agreed to this and 44 strongly agreed. Furthermore, the table shows that, 116 of the respondents agreed that their understanding is related to their level of exposure to the internet, another 73 strongly agreed to this, while 107 disagreed and 4 strongly disagreed to the statement.

Table 4: Time Spent Studying Outside of Class

SN	Items	SA	A	D	SD
1	I prefer to study online rather than the four walls of a classroom	44 (14.7)	66 (22.0)	152 (50.7)	38 (12.7)
2	My understanding is related my level of exposure to the internet	73 (14.0)	116 (38.7)	107 (35.7)	4 (1.3)
3	Other social media sites take a chunk out of my daily routine	42 (14.0)	119 (39.7)	126 (42.0)	13 (4.3)

About 126 of the respondents disagree that, other social media sites take a chunk out of their daily routine, followed by 119 that agreed to this statement. However, 42 strongly agreed to this, while only 13 strongly disagreed.

Table 5: Time Spent on Social Media to Study

SN	Items	SA	A	D	SD
1	Hours spent online can never be compared to the number of hours I spend reading.	99 (33.0)	143 (47.7)	41 (13.7)	17 (5.7)
2	There is no improvement in my grades since I became engaged into these social networking sites.	24 (8.0)	52 (17.3)	158 (52.7)	66 (22.0)
3	Online social networks distract me from my studies.	36 (12.0)	122 (40.7)	100 (33.3)	42 (14.0)
4	Addiction to online social networks is a problematic issue that affects my academic life.	65 (21.7)	96 (32.0)	101 (33.7)	38 (12.7)
5	I spend most of my hours on social network daily.	41 (13.7)	117 (39.0)	109 (36.3)	33 (11.0)

Table 5 above, shows that 143 of the respondents agreed that hours spent online can never be compared to the number of hours they spend reading, followed by 99 that strongly agreed to this. However, 41 of the respondents disagreed and just 17 strongly disagreed to this statement. Majority of the respondents (158) disagreed that there was no improvement in their grades since they became engaged into these social networking sites, followed by 66 that strongly disagreed, while 52 agreed and 24 strongly agreed to the statement. More so, 122 of the sampled respondents agreed and 36 strongly agreed that online social networks distract them from their studies, while about 100 disagreed and another 42 strongly disagreed to this statement. One hundred and one disagreed and 38 strongly disagreed to the statement that addiction to online social networks is an issue that affects their academic life, while 96 agreed and 65 strongly agreed to this. Finally, Table 5 shows that 117 of the respondents agreed and 41 strongly

agreed that they spend most of their time on social networks daily, while 109 disagreed and another 33 strongly disagreed to this statement.

Testing of Hypotheses

Hypothesis One

H₀: There is no relationship between time spent on social media to study and academic performance of students.

H₁: There is a relationship between time spent on social media and academic performance of students.

TPOSMTSS - Time Spent on Social media to study (See Table 4.5)

Table 6: Model Summary for Hypothesis One

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.924 ^a	.854	.845	.75353

a. Predictors: (Constant), TPOSMTSS5, TPOSMTSS3, TPOSMTSS4 (from Table 4.5)

Table 6 shows that the coefficient of determination (R-square) value is 0.854, which shows that 85.4% of the change in academic performance is explained by the study variable (time spent on social media to study); while the remaining 14.6% is explained by the rest of the variables not considered in this study. The value shows a strong relationship between the variables of the study; that is, a high variation exists in the model.

Table 7: ANOVA^a for Hypothesis One

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	56.251	3	18.750	33.023	.000 ^b
Residual	168.069	296	.568		
Total	224.320	299			

a. Dependent Variable: SMAP2

b. Predictors: (Constant), TPOSMTSS5, TPOSMTSS3, TPOSMTSS4 (from Table 4.5)

The results in Table 7 show that the F value is 33.023 which is significant at 5% significance level with the P-value ($0.000 < 0.05$). This indicates that the regression model is important in explaining the effect of time spent on social media to study and students' academic performance.

Table 8: Coefficients for Hypothesis One

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.882	.152		12.381	.000
TPOSMTSS3	.209	.071	.212	2.937	.004
TPOSMTSS4	.347	.067	.386	5.197	.000
TPOSMTSS5	-.436	.059	-.434	-7.414	.000

a. Dependent Variable: SMAP2

The results in Table 8 shows a significant and positive effect of time spent on social media and students' academic performance. This indicates that independent variable has positive effect on the dependent variable. That is, an increase in the independent variable (time spent on social media to study) will yield a corresponding effect on the dependent variable, causing an increase in students' academic performance. Since the values for levels of significance are 0.004, 0.000 and 0.000 respectively, which are lesser than the p-value of 0.05, we hereby reject the null hypothesis and accept

the alternative which states that there is significant and positive relationship between time spent on social media to study and academic performance of students.

Model Equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e_{ij} \tag{4.1}$$

$$ACAP = 1.882 + 0.212 X_1 + 0.386 X_2 + e_{ij} \tag{4.2}$$

The equation above shows the coefficients for the hypothesis of beta, independent variables and error term.

Hypothesis Two

H₀₂: There is no relationship between time spent outside of class studying and academic performance of students.

H₁: There is a relationship between time spent outside of class studying and academic performance of students.

Key: SMAP - Social Media and Academic Performance (See Table 4.2)

TSSOOC - Time spent studying outside of class (See Table 4.4)

Table 9: Model Summary for Hypothesis Two

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985 ^a	.971	.969	.87661

a. Predictors: (Constant), TSSOOC3, TSSOOC1

Table 9 shows that the coefficient of determination (R-square) value is 0.971, which shows that 97.1% of the change in academic performance is explained by the study variable (time spent studying outside of class); while the remaining 2.9% is explained by the rest of the variables not considered in this study. The value shows a strong relationship between the variables of the study; that is, a high variation exists in the model.

Table 10: ANOVA^a for Hypothesis Two

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	47.540	2	23.770	30.933	.000 ^b
Residual	228.230	297	.768		
Total	275.770	299			

a. Dependent Variable: SMAP1

b. Predictors: (Constant), TSSOOC3, TSSOOC1 (from Table 4.4)

The results in Table 10 show that the F value is 30.933 which is significant at 5% significance level with the P-value (0.000 < 0.05). This indicates that, the regression model is important in explaining the effect of time spent outside of class studying on students' academic performance.

Table 11: Coefficients for Hypothesis Two

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.349	.214		6.316	.000

TSSOOC1	.423	.057	.390	7.376	.000
TSSOOC3	.142	.066	.115	2.167	.031

a. Dependent Variable: SMAP1

The result in Table 11 shows a significant and positive effect of time spent outside of class on students' academic performance. This indicates that the independent variable has a positive effect on the dependent variable. That is, an increase in the independent variable (time spent outside of class) will yield a corresponding effect on the dependent variable, causing an increase in students' academic performance. Since the significant values is 0.000 and 0.031 respectively, which are less than p-value of 0.05, we hereby reject the null hypothesis and accept the alternative which states that there is significant and positive relationship between time spent outside of class and academic performance of students.

Model Equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e_{ij} \quad (4.3)$$

$$ACAP = 1.349 + 0.390 X_1 + 0.115 X_2 + e_{ij} \quad (4.4)$$

The equation above shows the coefficients for the hypothesis of beta, independent variables and error term.

5.0. Recommendations

Based on the findings of this study, the following recommendations are made:

- Lecturers should ensure they use social media as a tool to improve the academic performance of students. This can be achieved by administering course works, video tutorials, assignments and exercises for students online via the social media.
- Students on their part should better manage their study time and shun habits of surfing the internets at all times instead of engaging in unproductive activities.
- More educative networking sites should be created and expanded to enhance and improve academic activities.

6.0. Conclusion

Based on the results of this research, it is concluded that social media has a positive influence on the academic performance of students. However, there are various benefits of social media if utilized appropriately. For example, students creating educative and captivating forums online where academic careers can be enhanced and also to keep in touch with other students who have been away from school. The findings of this study and previous ones showed some noteworthy results. The first independent variable influences the academic performance of students, that is, time spent on social media to study was positively related to students' academic performance, as most of them spent more hours of their day surfing the internet on trending and academic sites. The results of this study suggests that, it should be clearly communicated to them that, their abilities, motivation and behavior work in tandem to influence their academic performance. Lecturers should come up with ways on how their students can maximize the benefits of social media.

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