



Appraisal of the Perceived Influence of Social Media Networking on Students' Interest and Attitude in Computer Science

Mbaba, A. Ekrika^a & Jimoh, Abiodun^b

^aDepartment of Curriculum and Instruction Isa kaita College of Education, Dutsin-ma, Katsina State

^bDepartment of Foundation Studies Isa kaita College of Education, Dutsin-ma, Katsina State

Corresponding author: okimba01@gmail.com

Abstract

This study seeks to exploit the influence of social media networking on students' interest and attitude in computer sciences. The study was carried out in Isa Kaita College of Education, Dutsin-ma, Katsina state. Survey research design was adopted for the study; the population was 621 computer sciences (NCE) students (2019/2020). Simple random sampling was used to select 150 research subjects from the population. A self-designed questionnaire was validated by experts with Pearson correlation coefficient value 0.65 was used. Mean and standard deviation were used to answer research questions 1-4 while Karl Pearson Product Moment Correlation and t-test were used to test the hypothesis. The study revealed that social media improve students' interest and that the more exposed the students are to social media networking, the more interest they develop in studying computer sciences. The researchers, therefore, recommend that Students should be monitored by teachers and parents to ensure they use the social media networking site more for academic purposes.

Keyword: Social Media Networking Interest Attitude

Introduction

Modern Technology in communication has turned the entire world into a "Global village". Through Social network sites such as Twitter, Yahoo Messenger, Facebook Messenger, BlackBerry Messenger (BBM), WhatsApp messenger, 2go messenger, Skype, Google talk and Google Messenger etc. These applications help people to be better informed, enlightened; and keep abreast with world developments. Social networking sites are used by most people to interact with old and new friends, near and distant friends (Asemah & Edegoh, 2012). As a result of social networking, the world has changed rapidly, resulting in the use of technology as the best medium to explore a wide area of knowledge.

Social media network has been changing as such it's difficult to have a generally accepted and recognized definition assigned to it (Jacka & Scott 2011). However, some scholars have defined it from different perspectives. Kaplan and Haenlein (2010), defined social media networking 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. Oxford Dictionary (2015), defined social media like websites and applications used for social networking. Social media is indeed a communication channel that is popular, fast, broad, and effective in sharing and discovering content

concerning individuals, brands and entertainment (Baria 2021). Social media network is a term often used to refer to new forms of media that involves interactive participation (Veletsianos, 2010). But, to others, social media networking is a core human communication media that possesses characteristics of participation, openness in conversation and community connectedness (Veletsianos, 2010; Veil, & Palenchar 2011). The few definitions above underpin the fact that social media involves some form of communication and participation between individuals through the internet. It is worth noting that one of the main characteristics of social media is that it involves some sort of digital platform whether mobile or stationary, yet not everything digital however can be grouped as a social media network. But, one common attribute of a social media network is that it allows some form of participation that may be synchronous or asynchronous in nature (Veletsianos, 2010).

Kaplan and Haenlein (2010), classified social media into six (6) different categories; Collaborative project (Wikipedia), Blogs and microblogs (twitter), Content communities (youtube), Social networking sites (FB, 2go, BB chat), Virtual game World (world of warcraft), Virtual second world (second life). This classification of social media into classes has been useful to scholars and individuals for easy identification and study of a particular social media

though today difficulty has arisen due to high proliferation of social media network (Ogehenetega, Oyenike, & Ugeh, 2016). Increasing use of social media and mobile technology for coursework has recently been observed among college students. This is because social media by its nature have the capabilities of educating, informing and entertaining its audience. In Nigeria, the profile and availability of the infrastructure plays a crucial role in its usage. Social media sites spread faster than anything and are bound to be sprouting as technology continues to improve particularly among students of higher education.

Students' attitudes could be influenced by activities that go around the environment which may enhance their or disrupt learning. Attitude may be referred to as feelings in favour or in disfavour. Attitude is an individual disposition with affective, cognitive and behavioral components. Research undertaken in the area of attitude and attitude formation shows that, attitude and behavior are linked, moreover, attitude are essentially divided into likes and dislikes (Mashra, Yadav & Bishit, 2016). Students' attitude to social media is considered to be positive or negative, moreover, students' ease of use and privacy-related issues of social media affect their attitudes as well.

A direct relationship exists between social media usage and students' interest in learning. Peet (2010), sees interest as learning to do something because it is needed to be done. But to Philip (2011), interest is a feeling or emotion that causes attention to focus on an object or a process. It is a mental state evoked by something like quality, subject or activity. It means to cause someone to become involved in something (Mbaba, Jimoh & Bakori, 2018). Interest can be explained in the following contexts: individual interest; (personal quality that is quite stable and fluctuates little) situational interest; (emotional state elicited by amusing mathematics-related activities or the content of teaching materials) and interest-induced; (psychological state that occurs when an individual is showing intense interest in something and focuses all attention on what sparks that interest). (Schraw & Lehman, 2010; Yu-Je, Chia-Hus & Ching-yaw, 2011; Mbaba, Jimoh & Bakori 2018). Students' interest in the use of social media could be a blessing where it enhances improvement in academic studies and bad where it is geared toward frivolities. Olubiyi (2012), noted that these days' students are so engrossed in social media that they are almost 24 hours online. Even in classrooms and

lecture theatres, it has been observed that some students are always busy pinging, 2going or Facebooking, while lectures are on. Times that ought to be channeled towards learning have been crushed by the passion for meeting new friends online, and most times used for discussing trivial issues. Hence most students' academics suffer setbacks as a result of distractions occasioned by social media. (Obi, Bulus, Adamu & Sala'at 2012). This study, therefore, shall among others seek to diagnose the influence of social media on attitude and interest of students in computer science.

Statement of the Problem

The world today is a global market where the internet is the most important sort of information. Since the advent of social media networking sites in the 1990s, it is assumed in some quarters that the academic performance of students is facing a lot of challenges associated with the use of social media network. Moreover, students seem to be deviating and distracted from actual studies as a result of social networking activities. It was also observed that students' interest and attitude to study has also been declined due to the much attention and time they give to social media network rather than academic work.

It is therefore of great importance to explore some of the trending issues facing students' interest and attitude as a result of social media. Students at all levels of learning now have divided attention to studies, as a result of available opportunities to be harnessed from social media. Whether these opportunities promote studies is a question that needs to be answered. Thus, this study seeks to investigate the Influence of Social Media Networking on computer science students' Interest and Attitude in Isa Kaita College of education Dutsinma Katsina State.

Research questions

1. What is the perceived influence of social media networking on students' interest in computer science?
2. What is the perceived influence of social media networking on students' attitude in computer science?
3. What is the level of students' exposure to social media networking?
4. What is the influence of social media networking on students' interest and attitude based on gender?

Hypothesis

H0₁ There is no significant difference in the relationship between students' exposure to social media networking and their interest in computer science

Method

Survey design was adopted for this study with a self-designed questionnaire titled "Social Media- Network Influence on students' Interest and Attitude (SMNISIA)". The questionnaire has two sections. Section A contains demographic information such as gender, age and level. Section B contains psychographic information with questions on key issues bothering on the research questions. The instrument was responded to on 5 points likert scale rated: SA= strongly Agreed 5, A=Agreed 4, U=Undecided 3 D= Disagree 2, SD= strongly Disagree1. The third table is rated as follows; Daily 5, twice a week 4, thrice a week 3 every day 2 and every moment 1. A decision mean was calculated as $5+4+3+2+1 = \frac{15}{5} = 3.0$. Therefore, any mean below 3.0 is rated as less influence while above the decision mean indicates better influence. The population of this study consists of all the 621 students registered across the 3 levels in the Department of computer science, Isa Kaita College of Education Dutsinma in the 2019/2020 session. Simple random sampling was used to select 150 students used for this study. The sample size includes male 88 and female 62 across all the levels in the department

Validation of instrument

The instrument was vetted by two experts of measurement and evaluation from the Department of Psychology, Isa Kaita College of Education Dutsinma. Recommended corrections were effected before production and distribution to research subjects.

Reliability of the Instrument

The instrument was determined using a split-half test using the odd and even-numbered items to form the two halves. The two halves were administered to a sample of students from the college not selected for the main study. The Pearson correlation coefficient was used to determine the reliability of the instrument. A coefficient value of 0.65 was obtained. This indicates that the research instrument was reliable; hence it was used for the study.

Administration of the Instrument

The questionnaires were administered to the students during their examination. As the students finished their exams, each of them was given a questionnaire to go and complete and return it before going out from the venue. In this way, the entire 150 copies of questionnaire were returned.

Method of Data Analysis

The data collected from the study were analyzed using mean and standard deviation to answer research questions 1-4 while Karl Pearson Product Moment Correlation and t-test was used to test the hypothesis.

Result

Table 1: Social Media Networking Influence on Students' Interest

S/N	Items on students' interest	N	SA	A	U	D	SD	Mean	Std. D
1	I enjoy studying computer programming through YouTube	150	50	57	20	17	6	3.85	1.12
2	I enjoy learning computer applications using social media networking	150	65	61	18	-	6	4.23	0.81
3	I avoid lessons on social media networking	150	12	22	27	58	31	2.51	1.20
4	My drive for the lessons is most time low when there is no social media networking	150	13	43	40	27	27	2.92	1.24
5	I have curiosity in computer science lessons because of the availability of social media networking	150	50	33	42	10	15	3.62	1.28
6	I'm usually uncomfortable with computer science lessons	150	24	15	24	30	57	2.46	1.48
7	I hate working in computer science lab	150	12	6	9	52	71	1.91	1.19
8	I'm inspired to create designs and post videos on social media networking	150	40	45	44	15	6	3.65	1.10

9	I love practicing computer science	150	87	36	15	9	3	4.30	1.01
10	I love replicating my computer graphics on social media networking	150	46	68	24	3	9	3.93	1.04
Mean = 3.34									

Table1 showed the influence of social media networking on students' interest in computer science. This table showed the responses of all respondents. The items responded to include "I enjoy studying computer programming through YouTube ($M= 3.87$ $SD= 1.11$), I enjoy learning computer application using social media networking $M, =4.23$ $SD,= 8144$),

I love practicing computer science ($M,= 4.30,SD; 1.01$), I'm inspired to create designs and post videos on social media networking ($M,=3.65$ $SD,=1.10$) etc". The table revealed that the overall response mean of **3.34** is above the decision mean of **3.0**. This result answered research question one, that social media-networking influence students' interest.

Table 2: Social Media Networking Influence on Students' Attitude

S/N	Items on students' attitudes	N	SA	A	U	D	SD	Mean	Std. D
1.	I trust information gathered through social media networking	150	58	31	42	15	4	3.83	1.14
2.	I can't study any topics in computer science without the use of social media networking	150	20	48	36	30	16	3.17	1.21
3.	I use Google much more than other media networking	150	46	49	40	9	6	3.80	1.07
4.	I have curiosity in social media networking because of the opportunity to gather much information	150	31	33	33	50	3	3.26	1.18
5.	I am seriously inspired to study computer science when social media networking is used	150	44	51	21	18	16	3.57	1.31
6.	I always take advantage of social media networking in all my dealings	150	38	67	27	12	6	3.79	1.04
7.	I like to compare the submission of different social media applications in all my studies	150	25	55	42	18	10	3.45	1.11
8.	I take note of what I am searching before logging into social media networking	150	60	30	30	21	9	3.74	1.28
9.	I keep my connection on social media networking on while in the classroom	150	29	40	33	24	24	3.17	1.35
10.	Social media networking is my best companion for studying computer applications and operations	150	56	33	33	12	16	3.67	1.33
Overall Mean								3.55	

Table 2 also showed students' responses on social media networking on students' attitude in computer science. This table showed the responses of all respondents, the items responded to include "I trust information gathered through social media networking ($M= 3.83$, $SD = 1.13$), I use Google much more than other media networking ($M,= 3.80,SD,= 1.07$), I keep

my connection on social media networking on while in the classroom ($M,= 3.17,SD. = 1.35$) etc". The table revealed that the overall response mean of **3.55** is above the decision mean of **3.0**. This result answered research question two on attitude, meaning that social media-networking influences students' attitude in computer science.

Table 3: Exposure of Students to Social Media Networking

S/N	Items	N	Daily	Twice week	aThrice week	a Every moment	Three hours X daily	SD
21	I usually engage myself in Facebook and WhatsApp	150	31	27	16	57	19	3.49 1.42

22	I use Google to search academic information	150	27	27	4	53	39	3.73	1.19
23	I play a lot of games through the social media networking	150	67	30	7	18	28	3.13	1.02
24	I post my pictures and videos on my Instagram page	150	35	42	13	33	27	3.17	1.29
25	I tweet and responds to trending tweets	150	30	39	42	24	15	2.60	1.40
26	I'm addicted to reaching friends through e-mail	150	31	46	19	33	21	3.02	1.36
27	I study computer practical's on YouTube	150	33	40	23	24	30	2.95	1.31
28	I download documents and videos using Vidmate	150	24	31	7	48	40	3.61	1.26
29	I use word processor file for reading documents	150	25	9	19	79	18	3.91	1.38
30	I often chats with my friends on messenger	150	25	9	19	79	18	3.86	1.44
Overall Mean = 3.35									

Table3 showed the responses of students on exposure to social media networking. This table showed that the respondents all agreed with items on the problems faced by students when using the social media networking. Eg I usually engage myself in Facebook and WhatsApp ($M=3.49$ $SD=1.42$), I use Google to search academic information ($M=3.73$ $SD=1.19$), I study computer practical's on YouTube ($M=2.95$

$SD=1.31$), I use word processor file for reading documents ($M= 3.91$ $SD=1.38$), I download documents and videos using Vidmate ($M=3.61$ $SD=1.38$) etc. The table revealed that the overall response mean ($M, =3.35$) is higher than the decision mean of **3.0** indicating that students' exposure to social media networking is high.

Table 4: Social Media Networking and Students' Interest and Attitude Based on Gender.

Items	Gender	N	Mean	Std. D
Social media networking and students' interest	Male	88	33.8409	36.5341
	Female	62	32.7581	4.78896
Social media networking and students' attitude	Male	88	36.5341	5.55836
	Female	62	33.9839	4.78896

Table 4 showed the influence of social media networking on students' interest and attitude based on gender. The data provided revealed that male students' interest mean score is $M=33.84$ and SD , is **36. 53**. On the other hand, female mean score is $M= 32.76$ and $SD, = 4.79$ indicating that the use of social media

networking influence male students more slightly than female. In students attitude male students mean scores is $M,= 36.53$ and $SD,= 5.56$ while female mean scores is $M,= 33. 98$ and $SD, 4.79$, this also showed that male attitude toward social media networking is slightly high.

Table 5: Karl Pearson Product Moment Correlation on Students' Exposure to Social Media-Networking and Students' Interest and T Test

Variable	Mean	Standard Deviation	N	r	t	df	P- Value	Decision
----------	------	--------------------	---	---	---	----	----------	----------

Students' Exposure to Social Media	3.35	0.437	10	0.69	8	0.067	Not significant
Students' Interest in Computer Science	3.34	0.829					
				2.12			

Table 5 above showed the correlation between students' exposure to social media networking and their interest, $(r) = 0.69$. This score showed a strong relationship between students' exposure to social media networking and their interest in computer sciences. The relationship is positive meaning that the more students are exposed to social media networking the higher their interest in computer sciences. The table also presents the t-value of students' exposure to social media networking and Students' Interest in Computer Science as 2.12 and having P-Value of 0.067 level of significance. Thus, since the P-Value 0.067 is higher than 0.05, the t-value is not significant, this implies that the hypothesis is accepted, meaning that there is no significant difference in the relationship between students' exposure to social media networking and their interest in computer science.

Discussion

Research question 1 seeks to find the influence of social media networking on students' interest in computer science? From the result analyzed using 5 point likert scale with a calculated cut off mean score 3.34 is more than $M=3.0$ for decision making. Hence, social media networking influences students' interest in Computer sciences. This result is supported by the findings of Olubiyi (2012) states that students are influenced by the nature of social media networking they are exposed to. This result is also in support of the findings of Mbaba, Jimoh & Bakori, (2018) whose findings showed that digital text-audio and audio-visual influence students' interest. Students' attitude is influenced by social media networking ($M=3.55$) this is in line with the observations of Nicole (2007), who noted that students' attitude to towards social media networking are positively related. More so, a mean score of 3.35 was obtained for students' exposure to social media networking. Indicating positive high exposure, which is in line with the findings of other studies that identified students' participation in social media networking as high and that such improvement should be harnessed to improve their academic performance (Peter 2015; Omorogbe & Iguodala, 2018).

Gender influence on social media networking in respect of attitude and interest where examined, for

interest $M=33.84$ and 32.76 for male and female respectively. Students' attitude recorded 36.53 and 33.98 for male and female receptively. This mean score shows a slight difference in the influence of social media networking on students based on gender. This is result supported the study of Mbaba (2018), who stated that students' participation in the use of mobile technology was high and that its usage also recorded slight difference in favour of male. Finally, the relationship between students' exposure to social media networking and interest in computer science was tested and the result $r = (0.69)$ shows high correlation therefore the higher students are exposed to social media networking the high their interest. The P-Value 0.067 showed that there is no significant difference in the relationship between students' exposure to social media networking and their interest in computer science. This result is in line with the result of Baria (2021) who studied social media networking in relation with academic performance.

Conclusion

Social media networking sites are highly utilized and preferred among students in their day to day activities. The study also revealed that students' interest and attitude are influenced by their use of social media networking. Moreover, social media exposure of students is high and thus their interest. Therefore, student exposure to social media should be harnessed for better academic output.

Recommendations

In the light of the findings of this study, the researchers made the following recommendations:

1. Students should be monitored by teachers and parents to ensure they use the social media networking sites more for academic purposes.
2. Teachers should ensure they use the social media networking as a tool to improve the academic work in schools.
3. Students should better manage their study time and prevent distractions that can be provided by the social media. There should be a decrease in the number of time spent by students when surfing the net.
4. The use of Social media networking by students should be focused on the academic relevance of

those sites instead of using them for negative purposes.

References

- Asemah, E.S. & Edegoh, L.O.N. (2012). Social media and insecurity in Nigeria: A critical appraisal. *Being a paper presented at the 15th National Conference of African Council for Communication Education*, Federal University of Technology, Minna, Nigeria.
- Baria G. (2021). Social media exposure of students in relation to academic performance *international journal of advance engineering, management and science* 7(3)11-18
- Jacka, M., & Scott, P.R.,(2011). *Auditing social media: A governance and risk guide*. Retrieved from eu.wiley.com/WileyCDA/wileyTitle/productCd-118061756.html.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68.
- Mbaba, A. E. Jimoh A & Bakori G. M. (2018). The impact of digital audio-text and audio-visual instructional media on learning of cultural and creative arts amongst junior secondary schools students in Rivers State , Nigeria. *Sokoto Education Review* 18(1)87-94.
- Mbaba, A. E (2018). Incorporating mobile technology in senior secondary school classroom instruction in Nigeria: Basic Issues. *Journal of Nigeria association for educational media and technology* 22 (1)1pp122- 129.
- Nicole E. S. (2007). The benefits of Face book "Fiends;" Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*.
- Obi N. C., Bulus L. D. Adamu G. M. & Sala'at A. B. (2012). The need for safety consciousness among Youths on Social Networking sites. *Journal of applied Science and management (JASM)* 14(1).
- Ogedebe, P. M., Emmanuel, J. A., & Musa, Y. (2012). A survey on Facebook and Academic Performance in Nigeria Universities. *International Journal of Engineering Research and Applications (IJERA)* ISSN: 2248-9622 www.ijera.com Vol, 2, 788-797.
- Ogehenetega, L. U., Oyenike, O. E & Ugeh, C. H (2016). Comparative study of (networking) usage by undergraduates in two tertiary institutions of Nigeria. *Journal of Research on Humanities & Social Science*, 4(15)21-24.
- Olubiyi'S.(2012), social media and Nigeria Youth burden. retrieved from <http://bluepringng.com/2012/12/social-media-and-nigerian-youth-burden> retrieved 21/05/2013.
- Omorogbe D. E. Iguodala(2018). Attitude and mutivation for social media networking among secondary school students in oredo local government area of edo state. *University of Dares Salaam library journal* 13(01)88-102
- Oxford advance learners dictionary online (2015) social media network. Retried from www.oxfordlearnersdictionaries.com
- Peet, W. (2010). *Interest driven learning*. Retrieve on 24th Sept., 2014 from <http://www.drpeet.com>.
- Peter O. (2015). *Social media and academic performance of student in university of Lagos*. A student project submitted to the Department of Educational Administration for the award of Bachelor degree in educational Administration (Unpublished).
- Philip, L. (2011). *Interest, Roget's 21st Century Thesaurus* (3rd ed.). Retrieved May 7, 2012, from <http://www.thesaurus.com/browse/interest>
- Serwaa, N.A.; Dadzie, P.S. (2015). Social media use and its implications on child behaviour: A study of a basic school in Ghana. *Int. J. Soc. Media Interact. Learn. Environ.* 3, 49–62.
- Schraw, G. & Lehman, S. (2010). Situational interest: a review of literature and directions for future research. *Educational Psychology review*, 13(1), 23-52.
- Veil, S. R. Buchner, T. & Palencher M. (2011). A work –in process literature Review: incorporating social media in risk and crisis communication. *Journal of contingencies and crisis management* 19(2), 111-112
- Veletsianos G. (2010). *A definition of emerging technologies for education*. Education, AU press
- Yu-je, L., Chia-Hus, C. & Ching-yaw, C., (2011). The influence of interest in learning and learning hours on learning outcomes of vocational college students in Taiwan: using a teachers' instructional attitude as the moderator. *Global Journal of Engineering Education*, 13(3), 140-153.