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# **The Impact of Social Media on Students' Academic Performance among Senior Secondary School Students in Makurdi Metropolis, Benue State, Nigeria**

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## **Abstract**

This study investigated the impact of social media on students' academic performance at the Senior Secondary School level in Makurdi, Benue State, Nigeria. Three research questions were answered and three hypotheses were also tested. The study adopted survey research design. The sample comprises 109 students from 547 secondary school students in Makurdi metropolis. The researcher-developed structured questionnaire was the main instrument for data collection. Mean and standard deviation were used to answer research questions while chi-square was used to test the hypotheses at 0.05 level of significance. The result shows that there is significant relationship between usage of social media sites by student and their academic performance. It also revealed that time spent on social networking site have significant impact on the student academic performance. The study recommends that students with phones having internet facility should be encouraged by their school authorities to either use it to supplement their research in the library rather than the usual chatting with friends all the time, students should be advised to limit the time

they spend on social media sites per day and encouraged to rather substitute those hours to read novels and relevant academic books to improve their knowledge.

**Keywords:** Social Media, Social Networking, Academic Performance, Mathematics Education, Secondary Education

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## Introduction

The involvement of technological aspects for social needs has become the major communication strategy for most people during past decade. Internet is an inseparable part of human life and it involves in variety of routine activities (Thuseethan, & Vasanthapriyan, 2014). The Internet revolution changed the information world with regard to sharing, speed, storage and retrieval of information in whatever form regardless of the person's location. The evolution of social media has cut across all facets of society with its positive and negative impacts. Social media has transformed and impacted on communication, learning, research and education in general. (Chrisantus, 2015) Among the vast variety of online tools which are available for communication, social networking sites (SNS) have become the most modern and attractive tools for connecting people throughout the world (Aghazamani, 2010).

Social media consists of online technologies, practicing activities or societies that people use to generate content and share thoughts, visions, experiences and viewpoints with each other (Television Bureau of Advertising, Inc., 2009). Davis, Canche, Deil-Amen and Rios-Aguilas (2012), also refer to social media technology (SMT) as “web-based and mobile applications that allow individuals and organizations to create, engage, and share new use regenerated or existing content, in digital environments through multi-way communication”.

Social networking has taken the world towards a rich communication society, in fact it is difficult to imagine a young man who at least once a day did not check for updates in social networks and did not leaf through the news lines. The modern reality requires us to stay in touch and keep abreast of the latest news and trends via Facebook, Whatsapp, youTube, Twitter, Instagram, blogs etc. which are popular social networking sites among others providing the electronic communication within society (Thuseethan, & Vasanthapriyan, 2014).

Social networking allows individuals to express their thoughts to other users. Social networking is the leader in promoting digital journalism (Thuseethan, & Vasanthapriyan, 2014). Social network is used for several purposes like promoting or distributing the news contents throughout the world.

Most of the high schools, colleges and universities get connected by internet encompass individuals who are looking forward to mingle other individuals with same point of interest, to gather and share knowledge and first-hand information. Social networking websites act like an online society of users who is familiar with internet. Social networking is developed with more advanced features after the year 2003. Since Facebook holds the most number of active users hence the name social network. (Thuseethan, & Vasanthapriyan, 2014).

Academic excellence in mathematics as a general and important subject offered in secondary schools plays an important role in an individual placement. Due to this, people are concerned with the ways they can enhance their academic achievement in mathematics. The

emphasis on academic achievement which is also prevalent worldwide has encouraged many studies about the conditions promoting it. The role of academic achievement as one of the predictors of one's life success and also in the aspect of academic placement in schools to higher institutions as well as the level of employability in one's career is inevitable (Kyoshaba, 2009). Academic performance, which is measured by the examination results, is one of the major goals of a school. Academic performance or achievement is the outcome of education, the extent to which a student, teacher or institution has achieved their educational goals.

A direct relationship exists between Social media usage and the academic performance of students in mathematics in secondary school. However the darker side within technological evolution has resulted in dilemmas such as the setback of real values of life especially among students who form the majority of users interacting through the use of social networking sites (Osharive, 2015). Online social networking sites focus on building and reflecting social associations among people who share interests and or activities. With so many social networking sites displayed on the internet, mathematics students are tempted to abandon their homework and reading times in preference for chatting online with friends knowing very well that mathematics unlike other subjects requires more time for better understanding. The primary objective of every student is the academic excellence, especially at secondary school level because it is the stage of career building; therefore, the need to take their studies and reading much seriously cannot be over emphasized. Akintunde (2001) observed that the importance of developing a good reading habit by students cannot be overstated. An interaction with a mathematics student shows that social media especially facebook can easily takes one's mind when studying and leaving his data on, this allows messages to pop up and an attempt to read through consumes most of his reading time

The use of social media (like facebook, Youtube, twitter and WhatsApp) by secondary school students today is resulting to mass failure of students in mathematics (David, 2014). A growing number of Nigerian scholars agree that addiction to social media sites have become a distractive technology to students' academic work. Oluwatoyin (2011) found that 90 percent of the students could not get up to Cumulative Grade Point Average (CGPA) above 3.50 because they had spent a large part of their time on social media than on their homework and study time (which could contribute to higher grade).

Social media plays a variety of roles in education as highlighted by Al-Khalifa and Garcia (2013) which includes providing a medium to share ideas and opinions as well as allowing students to build their own communities to collaborate with each other. As stated by Ndaku (2013), students spend a lot of time on social networking sites than in their academic activities and this affects their academic performance.

On the other hand, Pasek, Kenski, Romer and Jamieson (2006) "stated that a site-specific culture can both positively and negatively affect the building of social capital and found that Facebook usage is not positively associated with lower grades of students and rather Facebook users scored higher grades". Also social network sites (SNS) promote interactions among students and teachers (Ahmed & Qazi, 2011). Hence, this study will investigate the impact of social media on students' academic performance among senior secondary school students in makurdi, Benue state.

Since the advent of social media sites in the 1990s, the academic performance of students is facing a lot of neglect and challenges. There is a deviation, distraction and divided attention between social networking activities and their academic work. It is observed that students devote more attention to social media than they do to their studies.

Secondary school students are becoming very busy with their handset; some could even go extra miles to make sure they get phones that can access internet so easily. Social media gives most student access to the Internet and this has resulted or affected the students' academics. Through the use of Facebook, chatting, checking their email, pinging, WhatsApp, YouTube, and MySpace students spend lots of time away from studying.

It is believed that the use of technology such as internet is one of the most important factors that can influence educational performance of students positively or negatively. Many parents and guardians are worried that students are spending too much time on facebook and other social media sites and have not enough time to study. Though parents are worried about students' constant use of the social media sites, many students continue to utilize these sites on a daily basis.

Preliminary investigation and interviews with some teachers and students revealed a number of challenges in relation to student's participation on social media networks. These included a high addiction rate among students which affects their time of study, the wrong usage of grammar and spelling in social media discourse as well as distracting students from their studies. Therefore, this research seeks to explore the impact of social media on students' academic performance among senior secondary school students in Makurdi metropolis.

## Purpose of the Study

This study aimed at verifying the following objectives:

- i. To examine the impact of social media on academic performance among secondary school students in Makurdi metropolis, Benue State, Nigeria.
- ii. To find out the amount of time students invest into social networking in secondary schools in Makurdi metropolis, Benue State, Nigeria.
- iii. To ascertain how the use of social media is affecting the study habits of students in secondary school students in Makurdi metropolis, Benue State, Nigeria.

## Research Questions

This study was guided by the following research questions:

- i. What is the impact of social media on academic performance among the secondary school students in Makurdi metropolis, Benue State, Nigeria?
- ii. What is the amount of time students invest into social networking in secondary school students in Makurdi metropolis, Benue State, Nigeria?
- iv. To what extent does the use of social media affect the study habits of students in secondary school students in Makurdi metropolis, Benue State, Nigeria?

## Research Hypotheses

The following hypotheses were formulated to guide the study:

- i. There is no significant relationship between social media and academic performance among the secondary school students in makurdi metropolis.
- ii. There is no significant relationship between the use of social media and study habits of students.

## Methods

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 the standardized collection procedures based on highly structured research instrument(s) and well defined study concepts and related variables. This study was carried out in Makurdi metropolis of Benue State, Nigeria. The population of the study was 547 SSS III students in Makurdi metropolis. Simple random technique was used in selection 109 respondents.

An instrument titled “Social Media and Academic Performance of Students Questionnaire (SMAPQ) was developed by the researcher. The questionnaire was administered to the selected students by the researcher. A total of 109 copies of the questionnaire were distributed to elicit responses from the students and retrieved on the spot by the researcher. This method was used to ensure for proper response and high retrieval of copies of the instrument.

Data collated was analyzed using mean and percentage and bar chart to represent answer to the research questions while chi-square ( $X^2$ ) was used to test the null hypotheses at 0.05 level of significance.

Using the four points scale, an arithmetic mean value of 2.50 was obtained. Any item with a mean value of 2.50 and above was regarded as having agreed to the item, while any item with a mean value below 2.50 was regarded as not agreeing to the item.

## Results

### Presentation of Demographic Data

The data collected on respondents’ bio data with the questionnaire is presented in the table below

**Table 1: Distribution of respondents’ bio-data**

<b>GENDER</b>	<b>FREQUENCY</b>	<b>PERCENTAGE</b>
Male	42	38.53%
Female	67	61.47%
<b>TOTAL</b>	<b>109</b>	<b>100</b>
<b>AGE</b>		
10-14	9	8.256%
15 –19	75	68.807%
20 and Above	25	22.935%
<b>TOTAL</b>	<b>109</b>	<b>100</b>

The table above shows that 42 respondents which represent 38.53% of the sample size for the survey were male and 67 respondents which represent 61.47% of the sample size in the survey were female. This implies that the majority of the respondents were females.

From the table the age range of 15-29 representing 68.807% of the respondents were the majority, hence the age range dominated in the survey.

**Research Questions one**

What is the impact of social media on academic performance among the secondary school students in Makurdi?

**Table 2: Mean rating of responses on impact of social media and academic performance.**

S/N	ITEM	SA	A	D	SD	N	MEAN	REMARK
1	Addiction to online social networks is a problematic issue that affects my academic life	20	52	14	23	109	2.63	Accept
2	I sometimes 'Facebook' during class hours.	4	31	60	14	109	2.23	Reject
3	I am tempted to log on to Facebook when reading online	34	42	21	12	109	2.90	Accept
4	Social media usage affect my studies negatively	13	20	56	20	109	2.24	Reject
5	I will not perform well in my academics even if I stop using social media	5	31	28	45	109	1.96	Reject
6	I engage in academic discussions on social media and this has improved my academic performance.	36	50	19	4	109	3.08	Accept
7	Most of my time on social media is to chat with friends	32	48	26	3	109	3.00	Accept
8	I use materials gotten from blogging sites to complement what I have been taught in class.	46	31	20	12	109	3.02	Accept

From table 2 above the respondents accepted item 1, 3, 6, 7 and 8 with the mean values of 2.63, 2.90, 3.08, 3.00 and 3.02 while the respondents disagreed on item 2, 4, and 5 with the mean value of 2.23, 2.2.4 and 1.96.

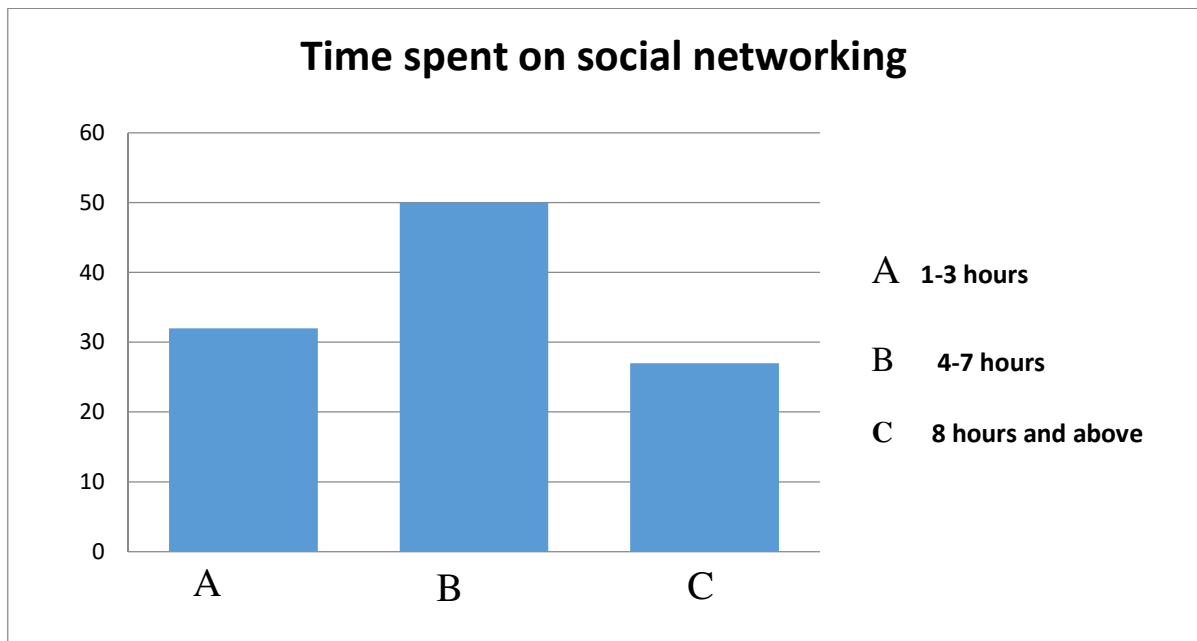
**Research Question Two**

What is the amount of time students invest into social networking?

**Table 3: The responses of respondents on amount of time invested in social networking**

Time	Number of respondents	Percentage value
1-3 hours	32	29.5%
4-7 hours	50	45.8%
8 hours and above	27	24.7%
<b>Total</b>	<b>109</b>	<b>100</b>

From the table above 29.5% of the total sample size spend 1-3 hours on social networking, 45.8% of the sample spend 4-7 hours on social network daily and 24.7% respondent spend 8 hours and above on social network daily. Therefore out of the twenty-four hours in a day, most students spend up to 4-7 hours on social networks every day.

**Figure 1: Distribution of time student spent on social network**

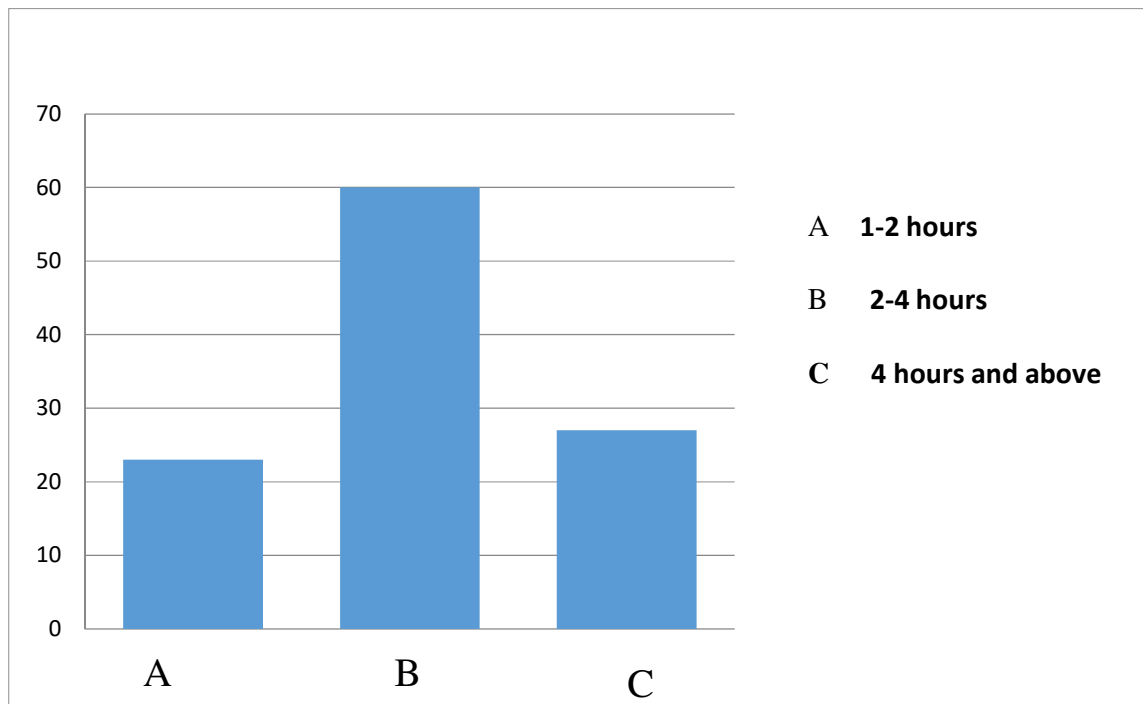


Figure 2: Distribution of time student spent reading their book

### Research Question Three

Does the use of social media affect the study habits of students?

Table 4 mean score of responses on social media effect on the study habits of students

S/N	ITEM	SA	A	D	SD	N	Mean	REMARK
1	The rate of my log in to social media is very frequent	36	50	19	4	109	3.08	Accept
2	Hours spent online can never be compared to the number of hours I spend reading	34	42	12	21	109	2.82	Accept
3	Online social networks distract me from my studies.	27	42	28	12	109	2.77	Accept
4	I don't focus while studying and my data is on	25	54	21		109	2.87	Accept
5	Constant use of social media sites, take away the time for reading and doing my assignment.	46	31	20	12	109	3.02	Accept
6	I understand better while reading and chatting at the same time	12	30	19	48	109	2.06	Reject

The table shows the mean response of students in response to how social media affect their study habit. The respondents agreed to all the items except item 6 which posed the question to students if they understand better while they are reading and chatting at the same time.



### Hypothesis One

There is no significant relationship between social media and academic performance among the secondary school students in Makurdi Metropolis.

**Table 5 chi-square Analysis of impact of social media and Academic performance of students in mathematics**

S/N	ITEM	SA	A	D	SD	N	X <sup>2</sup> -CAL	X <sup>2</sup> -TAB
1	Observed values	20	52	14	23	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
2	Observed values	4	31	60	14	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
3	Observed values	34	42	21	12	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
4	Observed values	13	20	56	20	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
5	Observed values	5	31	28	45	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
6	Observed values	36	50	19	4	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
7	Observed values	32	48	26	3	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
8	Observed values	46	31	20	12	109		
	Expected values	(23.7)	(38.1)	(30.5)	(17.5)			
<b>Total</b>		<b>190</b>	<b>305</b>	<b>244</b>	<b>133</b>	<b>872</b>	<b>308.3243</b>	<b>33.92</b>

In table 5 above, the calculated chi-square value is 308.32 and the tabulated value is 12.59 at 0.05 level of significance with a d.f of 6. Since the calculated chi-square is greater than the tabulated value, therefore rejects the null hypothesis that there is no significant relationship between social media and academic performance among the secondary school students in Makurdi metropolis.

### Hypothesis Two

There is no significant relationship between the use of social media and study habits of students.

**Table 6: chi-square Analysis of relationship between the use of social media and study habits of students.**

S/N	ITEM	SA	A	D	SD	N	X <sup>2</sup> -cal	X <sup>2</sup> -tab
1	The rate of my log in to social media is very frequent	36 (30)	50 (41.16)	19 (19.83)	4 (17.72)	109		
2	Hours spent online can never be compared to the number of hours I spend reading	34 (30)	42 (41.16)	12 (19.83)	21 (17.72)	109		
3	Online social networks distract me from my studies.	27 (30)	42 (41.16)	28 (19.83)	12 (17.72)	109		
4	I don't focus while studying and my data is on	25 (30)	54 (41.16)	21 (19.83)	9 (17.72)	109		
5	Constant use of social media sites, take away the time for reading and doing my assignment.	46 (30)	31 (41.16)	20 (19.83)	12 (17.72)	109		
6	I understand better while reading and chatting at the same time	12 (30)	30 (41.16)	19 (19.83)	48 (17.72)	109		
	<b>TOTAL</b>	<b>180</b>	<b>249</b>	<b>119</b>	<b>106</b>	<b>654</b>	<b>140.64</b>	<b>25.00</b>

From the table 6 above, there is significant relationship between social media and students study habits. This hypothesis was rejected because the value of chi-square calculated is greater than chi-square tabulated.

### Discussion of Findings

The study examined the relationship between social media and academic performance among secondary school students in Makurdi metropolis. The findings of the research are fascinating, from the bio-data, female students dominated in the research which implies that the responses and finding of the research is more from female students than the male students in SSS III in Makurdi metropolis.

The finding of this study shows that Use of social media has impact on the academic performance of the students in mathematics Makurdi Metropolis. This goes in line with the observations of Peter (2015) who find out that the use of social media has significant influence on the academic performance of the students; there is a significant influence on student's usages of social media network on their achievement. The findings also agree with Abdukadir (2016) whose finding shows that social media has an impact on students' academic performance especially for the ones who spend most of their time chatting with friends, this impact included decrease in marks and grades, which can lead eventually to failure and dropout.

The findings also revealed that students invest substantial time in social networking, the results revealed that the amount of time spent on social media sites interfere with the academic performance of students in Makurdi metropolis. These findings are in line with Abdukadir (2016)

whose study revealed that students fall into three categories: category one, spent between 6 to 8 hours per day, while category two, spent 3 to 5 hours of their time, whilst the last category spent half an hour to 2 hours per day and this implies that the students spend a considerable portion of their daily life interacting through social media.

In addition, the students develop the poor writing skills and their grammar usage becomes very poor due to the abbreviations they use in the process of chatting (social networking sites). The finding of this study is in line with Pokhan (2010), whose study revealed that social networking is most likely to affect students' grammar usage, make the students take short cuts in school work and got distracted in their academic exercise.

## Conclusion

In conclusion, students use social networking primarily for social related purposes with less emphasis on academic related purposes. This therefore implies that social media usage has a substantial impact on the academic performance of SSS III students in mathematics in Makurdi Metropolis. Excessive use of social media will lead to poor performance of students and affect the quality of education.

The following recommendations were made:

- i. Students with phones having internet facility should be encouraged by the college authority to either use it to supplement their research in the library rather than the usual chatting with friends all the time.
- ii. Students should be advised to limit the time they spend on social media sites per day and encourage them to rather substitute those hours to read novels and relevant academic books to improve in their academic performance.
- iii. Teachers, parents, guardians and school management should teach students the importance of prioritizing their needs and visit social networking sites with good intents rather than for ulterior motives. They should be encouraged to explore the potential benefits of social media sites.

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