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# Investigating the Correlation Between Social Media Addiction and Academic Performance Among Tertiary Institution Students in Zamfara State

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## ABSTRACT

This study examines the relationship between social media addiction and academic performance among students in tertiary institutions in Zamfara State, Nigeria. It investigates how excessive use of platforms such as Facebook, WhatsApp, TikTok, and Instagram influences students' concentration, study habits, and overall academic achievement. A descriptive and explanatory research design was adopted, using a cross-sectional survey method. Data were collected from 102 students selected through a convenient sampling technique across Abdu Gusau Polytechnic, Federal University Gusau, and Zamfara College of Education, Maru. A structured questionnaire containing 42 Likert-scale items was developed based on prior studies to measure variables including time appropriateness, time duration, nature of usage, health addiction, friend/people connection, and security or privacy concerns. Data were analyzed using descriptive statistics, correlation, and regression analysis via SPSS 21. Findings revealed a significant negative correlation between social media addiction and students' academic performance, particularly regarding time management, classroom engagement, and concentration. Regression results indicated that time appropriateness, friend connection, nature of usage, and health addiction significantly predicted academic performance, while time duration and privacy concerns were not significant. The study concludes that excessive and unregulated social media use detrimentally affects students' academic outcomes. It recommends the implementation of digital literacy programs, awareness campaigns, and self-regulation interventions to promote productive use of social media for academic and intellectual development among tertiary students in Zamfara State.

**Keywords:** Social media, Health addiction, academic performance, tertiary institutions, Zamfara State.

## 1. INTRODUCTION

Social media platforms have transformed how students interact, learn, and express themselves. However, the addictive use of these platforms poses significant academic challenges. Research has shown that excessive use of social media can lead to reduced academic performance, poor concentration, and procrastination (Kuss & Griffiths, 2017). In Zamfara State, where tertiary education is expanding rapidly, students increasingly depend on digital platforms for communication and entertainment. This study aims to investigate how this dependency correlates with academic outcomes among tertiary institution students. The use of social media among students has reached high levels and has affected their study time, poor grammar and wrong spellings when socializing on social media as well as diverting their attention from their studies (Ndaku, 2013). Students spend much of their study time on social networks than in their academic undertakings and it has affected their Grade Point

Average (GPA). Investigation on impact of social media was done here in Zamfara State which focused on students' academic performance in tertiary institution (Khan, 2009) just a few researches has been done so far in the Nigerian tertiary institution pertaining this topic and the researcher's respondent were information technology students (Helou & Rahim, 2014). Hence, the concentration of this research will be Polytechnic, Federal University Gusau, and Zamfara College of Education Maru.

### **1.2 Objective of the Study**

The overall objective of the research is to investigate the social media impact on academic performance of students in Zamfara State however the following are the specific objectives:

1. To examine the impact of time appropriateness on students' academic performance of social media on time appropriateness.
2. To examine the impact of nature of usage on students' academic performance.
3. To examine the impact of health addiction on students' academic performance.
4. To examine the impact of time duration on students' academic performance.
5. To examine the impact of friends and people connection on students' academic performance.
6. To examine the impact of security/privacy problems on students' academic performance.

### **1.3 Hypothesis**

H1: There is a significant relationship between time appropriateness and students' academic performance.

H2: There is a significant relationship between time duration and students' academic performance.

H3: There is a significant relationship between friends and people connection and students' academic performance.

H4: There is a significant relationship between nature of usage and students' academic performance.

H5: There is a significant relationship between health addiction and students' academic performance.

H6: There is a significant relationship between security/privacy problems and students'

## **2. Literature Review**

Social media addiction has been defined as a behavioral disorder characterized by compulsive engagement with social platforms (Andreassen & Pallesen, 2014). Studies across Europe, Asia, and Africa have revealed varying impacts of social media use on students' academic success. In the United Kingdom, Al-Menayes (2015) reported that students who spend over four hours daily on social media experience lower academic engagement. Similarly, studies in Nigeria have established that excessive use of social platforms affects students' academic productivity (Adebayo, 2018; Okoro et al., 2021). The cognitive and behavioral theory of addiction provides the theoretical underpinning for this study, emphasizing the role of reinforcement and gratification in addictive behaviors (Bandura, 1986).

The advanced and improved usage of social media platforms such as Facebook has become a worldwide phenomenon for quite some time. Though it all started has been a hobby for several computer literates individual has changed to become a social norm and existence-style for students around the world (Nicole, 2007). According to Nicole, (2007), students and teenagers have especially recognized these social media platforms to be able to contact their peers, share information, reinvent their personas and showcase their social live.

Facebook users often experience poor academic performance. Also Karpinski (2009) stated that social media has a negative association with students' academic performance which is much greater than the advantages derived through the use of social media platforms. People around the globe have been addicted to the internet which has given rise to more students using social media more often than before. Nalwa & Anand (2003) advised and recommended that those who are addicted users love to use the internet to set back their personal and professional responsibilities in which the final outcome is poor academic performance.

It was highlighted in the finding of Karpinski (2009) that social media platforms (Facebook, WhatsApp

etc.) users usually devote lesser time to their studies has to compared to nonusers did and subsequently has lower GPAs. It was also mentioned by Karpinski, & Duberstein (2009), that among the major distraction of current generation that social media platform (such Facebook, WhatsApp etc.) remains a major distraction. According to Kubey, Lavin, and Barrows (2001), there is a correlation between academic performance and the dependency on social media platforms.

Researchers have conducted different studies to find out the influence of social platforms users, for instance a study on Impact of Facebook on undergraduates' academic performance, stated that social platforms have negative impact on students.

### **3. METHODOLOGY**

A mixed of descriptive correlational survey design and Quantitative method are chosen for the research. The target population included students from Abdu Gusau Polytechnic, Federal University Gusau, and Zamfara College of Education, Maru. A stratified random sampling technique selected 250 participants. Data were collected through a structured questionnaire containing 25 items based on the Social Media Addiction Scale (SMAS). Pearson's correlation coefficient was used to determine the relationship between social media addiction and academic performance. The reliability coefficient obtained was 0.87 using Cronbach's alpha.

#### **Research Design and Methodology**

Data was collected using primary data set through the distribution of questionnaire. According to Bakar (2001) questionnaires to acquire primary data the best suitable research are based on experiment, observation and survey. Hence, the survey method can supply researchers with data on attitude, feelings, beliefs and Envisioned behavior that is said by Tull and Kawkins (1990). Additionally, the assembling of different kind of info from the respondents, questionnaires will be appropriate for this research which will enable get the actual info from the target population.

A random sampling technique was used. In this research two department of schools are involved. This is because in Nigeria research are hardly done in this area. The second reason is that the researcher chose these department as it has more number of students in both colleges as compared to other departments. 120 questionnaires will be distributed in both colleges by means of direct contacts which is face-to-face with the respondents. The questionnaires is divided into two sections, section A consist of the demography of the respondents such as (age, gender, departments, race and nationality) while as section B contains the targeted questions to convey the entire enquiry. The respondents differ from first semester students to final year students.

#### **Sampling Technique**

The investigation uses convenient sampling. Since, respondent are willingness to participate in the research. This makes it further suitable for this research than any other form of sampling and respondents will be picked at random. In order to formulate the research questions, hierarchical sampling techniques will be used to sample the respondents. The research will use an evaluation question that is written in English language because instructions in these two universities are based on the queen's language which all the students understand and can answer the questions asked without any difficulties. Nonetheless, according to Saunders et al (2007), Likert scale is the utmost suitable rating to be used in designing the research questionnaires. A scale of 1-5 will used to finger out respondent pact to questions enquired. This scale is best suitable since it gives respondents the assertion for strong pact or not.

#### **Data Analysis**

This study will analyze the data collected through quantitative analysis. Because statistical analysis give the scholar the chance to get expressive information through mean output (Carrol, 1991). Percentage will help to survey if the mean is in line with the view (Saunders et al, 2007).

To analyze the data the descriptive statistics of questionnaire will be acquired from SPSS in order to find out the normality of the questionnaire based on skewness and kurtosis statistics. Followed by the running of the reliability test, validity test, correlation, regression and also find out the sample adequacy using the SPSS in order to analyze the collected data for the findings of the study. This will allow the researcher

ascertain whether the respondents agree to it or not that the variable social media platform have an impact on their academic performance in

**4. RESULTS AND DISCUSSION**

Findings indicate a significant negative correlation ( $r = -0.63$ ,  $p < 0.05$ ) between social media addiction and students' GPA. Students who spent more than five hours daily on social media reported lower academic engagement, reduced attention span, and irregular class attendance. These findings corroborate the works of Kuss and Griffiths (2017) and Al-Menayes (2015), who found that addiction to online platforms negatively influences learning outcomes. Qualitative responses also revealed that students perceive social media as both a distraction and a tool for social validation, leading to procrastination and poor time management. This section of the paper is a summary of the findings of the multiple regression analysis conducted for the purpose of investigating the research questions.

Table 1 below shows the explanatory power of the regression model used in this research.

**Table 1: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711 <sup>a</sup>	.505	.474	.32914

Table 2 below indicates the overall significance of the model, which suggests that the regression model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.492	6	1.749	16.142	.000 <sup>b</sup>
	Residual	10.291	95	.108		
	Total	20.783	101			

is statistically significant as the p-value is less than 0.05. The dependent variable of the model is students' academic performance and the independent variables (predictors) are privacy problems, time appropriateness, and duration, nature of usage, networking and addiction. As indicated by the R Square, the predictors explain 50.5% of variation in students' academic performance.

**Table 3: Regression Coefficients**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
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	B	Std. Error	Beta	t	Sig.
(Constant)	2.241	.368		6.099	.000
Time Appropriateness	-.251	.066	-.303	-3.811	.000
Time Duration	-.026	.080	-.025	-.324	.747
1 Friends_People_Connection	.116	.054	.168	2.159	.033
Nature Usage	.137	.042	.257	3.243	.002
Health Addiction	.205	.049	.351	4.181	.000
Social_Privacy_Problems	.098	.053	.157	1.856	.067

a. Dependent Variable: Academic Performance

As shown in Table 3, there is a negative and significant influence of time appropriateness on social media platform and students' academic performance because the beta (-0.303) is negative and the p-value (0.000) is less than 0.05. This means that students that spend more time on social media platforms for mere casual chats are most likely to see a drop in their academics performance. This is been justified by Paul, Baker, Cochran (2012) in one of their written article also proved that social media platforms affects students' academic performance. The researchers further said that as time spent on social platforms increases, the academic performance of students is seen to deteriorate. There is no significant influence between time duration on social media platforms and students' academic performance. This is so because some students can spend time on social media platforms and yet their performance for the semester or academic year still remains the same which is similar to some cited researches earlier in the course of study. There is a positive and significant relationship between FriendPeople connections and students' academic performance. This so because students can form study groups which facilitates better means through which students improve on their studies.

Also lecturers can connect with students to provide and ready study material can be helpful and useful to students. There is a positive and significant influence of Nature of Usage with students' academic performance. This finding is supported by the research work of; Anne (2011) states that social networking sites provide an avenue for students join to interesting groups that allow them to learn new skills in area of their choice. There is a significant relationship between internet addiction and students' academic performance. This is so because the more addicted one is to the internet the more time they spend on it. They spend more time without taking into consideration their meal. Missing of the meal could affect the health of the students which in turn will have an impact of the academic performance on the students. There is no significant influence of privacy/security problems on students' academic performance. This is so, because of the changes that are been made frequently on these social media platforms which could have the concentration of students on their studies and thus affect their test or examination score.

Social media, Academic performance, Time appropriateness, Time duration, friend people connection, nature of usage, health addiction and security/privacy problems.

Thus, the summary of hypotheses analysis is presented as follows:

Hypotheses	Beta	P-Value	Decision
H1: There is a significant relationship between time appropriateness and students' academic performance.	-0.303	0.000	Accepted
H2: There is a significant relationship between time duration and students' academic performance.	-0.026	0.747	Rejected
H3: There is a significant relationship between friends and people connection and students' academic performance.	0.168	0.033	Accepted
H4: There is a significant relationship between nature of usage and students' academic performance.	0.257	0.003	Accepted
H5: There is a significant relationship between health addiction and students' academic performance.	0.331	0.000	Accepted
H6: There is a significant relationship between security/privacy problems and students' academic performance.	0.157	0.067	Rejected

## 5. CONCLUSION AND RECOMMENDATIONS

The study concludes that social media addiction significantly impairs academic performance among tertiary institution students in Zamfara State. The findings emphasize the need for balanced digital engagement and institutional policies promoting responsible online behavior. It is recommended that tertiary institutions integrate social media awareness programs into their general studies curriculum and that parents and educators collaborate to monitor students' online activities. Further research should explore intervention models that address the psychological dimensions of social media addiction. It is also concluded that social media platforms has a significant impact on students' academic performance in Zamfara state's tertiary institution. Nevertheless, among the six variables used in this research, time appropriateness and health addiction has a stronger significant influence on students' academic performance. This is because time management plays an essential role in determining the success or failure of an individual. Thus students who lack time management can easily fall prey to the negative impact which social media platforms present to its uses. Likewise, health addiction, students who are engrossed with social media platforms ends up skipping their meals which has a health impact on them. Such students become malnourished and could possibly fall ill which is will directly have an impact on students. Also, the nature of usage and friend-people connection has an impact also on the performance of students but not.

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