

Social Media Versus Students' Learning Outcomes: Insights from a South-West Nigeria University

Olayinka Anthony Ojo^{1*} , Bolanle Amudat Opeloye², Damola Olugbade³ 

¹University of Medical Sciences, Nigeria

²University of Ilesa, Nigeria

³First Technical University, Nigeria



This is an open access article under the Creative Commons Attribution 4.0 International License.

*Correspondence
Olayinka Anthony Ojo
oajo@unimed.edu.ng

Received:
July 18, 2023
Accepted:
October 30, 2023
Published:
December 23, 2023

Citation: Ojo, O. A., Opeloye, B. A. & Olugbade, D. (2024). Social media versus students' learning outcomes: Insights from a South-West Nigeria University. *Journal of Educational Technology and Instruction*, 3(1), 29-44.

Abstract—This study investigates the influence of social media on the learning outcomes of undergraduate students at the University of Ibadan, Ilesa campus, South-West Nigeria. Employing a descriptive survey research design, a total of 290 randomly selected undergraduate participants from 200 to 400 levels were included. The research instrument, a self-developed questionnaire titled “Social Media and Students’ Learning Outcomes,” demonstrated good reliability with a Cronbach’s Alpha coefficient of 0.739. Data analysis was conducted using percentage, mean, and ANOVA. The findings indicate that a majority of the participants regarded themselves as moderate to proficient users of social media platforms. Notably, WhatsApp, Facebook, and Instagram emerged as the most favored platforms among university students. Additionally, the study highlights the discernible effects of social media on students’ attitudes, academic performance, and academic interactions. Notably, 99.3% of undergraduates were identified as active social media users. The study concludes that while social media may not inherently enhance students’ attitudes towards learning, its unique features could be strategically leveraged to augment overall learning outcomes. The findings underscore the importance of judiciously incorporating social media as a potential educational tool in the university context. Recommendations are extended to stakeholders for thoughtful consideration when integrating social media into teaching and learning practices.

Keywords: Academic Interaction, Learning Outcomes, Social Media Nigerian University, Undergraduates

1. INTRODUCTION

Social media application provides great opportunities to improve the lives of humanity all over the world including the country Nigeria. Different scholars have written copiously on many advantages that are derived from social media in various sectors of life in the areas of education, economy, health, business, security, and so on. Just as the advantages of this social media are discussed variously, the advantages that have accrued from it have also been vehemently mentioned by scholars. For instance, Drahošová and Balco (2017) observed that, while the leading advantages of social media as identified by users within the European Union countries were information communication exchange and data sharing, the identified leading disadvantages were internet addiction, insecurity, information overload, and loss of social contacts respectively.

The 21st-century students, being digital natives, are most often inseparable from interacting with their mobile devices even in the lecture rooms. A study on social media, its usage by students, and how it affects student’s attitudes and academic performance could therefore not be out of place, especially, since social media itself is still evolving and getting better.

Social media has been emphasized as a quick, efficient, cost-effective, and internationally accessible form of communication inside and outside academic domains (Ademiluyi, Mamman, & Dauda, 2019). While social media is a powerful tool, it has both positive and negative effects on students' academic performance, disposition, and interactions (Talue, Alsaad, Alrushaidan, Alhugail, & Alfhhad, 2018; Celestine & Nonyelum, 2018; Akram & Kumar, 2017; Siddiqui & Singh, 2016). Furthermore, Owusu-Acheaw and Larson (2015) discovered a strong favorable relationship between social media use and academic attainment. These findings, together with continuous technical improvements and the numerous benefits provided by digital media, necessitate a thorough evaluation of the integration and deployment of social media as an educational tool to improve learning outcomes in higher education. As a result, the purpose of this study is to meet this necessity.

1.1 Literature Review

Merriam-Webster dictionary in 2019 defines social media as “forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages and other content (such as videos)”. Also, Al-Bahrani, Patel, and Sheridan (2015) described social media as virtual communities or networks that permit users to interact with each other, enlarge communities and share information and ideas. In addition, Bredl, Hünninger, and Jensen (2012), Hansen (2017) all viewed social media as highly influential and internet-dependent tools that facilitate/promote social interaction and communication between individuals using digital media through knowledge sharing and active participation. Finally, to Friedman (2014), social media is “a land of new opportunity” that allows for numerous benefits that cut across individuals, professions, and communities of users. It will be of great advantage to individuals who use social media positively to benefit their lives as speculated by these different authors.

The concept of attitude has been variously defined by authors. Ercag and Tezer (2017) explained that attitude reveals the closed reaction of an individual towards an item, an object, or a person. They further described attitude as the tendency to think, feel or behave positively or negatively towards the objects within the individual's environment. Students' responses and attitudes toward the usage of social media have both positive and negative sides. On the positive, adopting social media technologies for educational purposes has been proven to demonstrate the following benefits. One is the rapid sharing of resources, which may include course materials/contents, expertise in an area of study, experiences, and ideas. Secondly, it promotes networking or collaboration among students, as well as teachers thus making academic progress easy and fast. Thirdly, it makes room for an enhanced relationship and or communication between students and teachers. Fourth, it provides an alternative and easy space for all kinds of learning and forms of education. Lastly, opportunities for learning additional skills and technologies are provided to students for further improvement and employability (Friedman, 2014; Lau, 2017).

The negatives of social media usage, however, were also seen as having an important need for consideration. Abbas, Aman, Nurunnabi, and Bano (2019) submitted that social media usage influences most student's psychosocial behaviour thereby promoting addictive psychological behaviour, including addiction to internet activities at the expense of their academic, family, and other activities relating to other aspects of their lives. It is pertinent to note that the computer, internet, and smartphones are the great promoters of social media which in turn has the capability of enhancing

students' prospects of learning and knowledge improvement but has also posed a grave danger to their success in life (Siddiqui, & Singh, 2016; Lau, 2017; Akram, & Kumar, 2017). Social media is capable of distracting students from reading and studying to gain knowledge, skill, and attitude by presenting content opposing academic activities and learning (Kitsantas, Dabbagh, Chirinos & Fake, 2016; Singh, Amiri, & Sabbarwal, 2017; Lau, 2017). The implication of students' operations on social media channels could be seen in the various negative attitude and acts perpetrated in society which often affect their learning outcomes (Al-Sharqi, Hashim, & Kutbi, 2015; Singh, Amiri, & Sabbarwal, 2017; Akram & Kumar, 2017).

These effects have also been both on the positive and negative sides. Celestine and Nonyelum (2018) opined that social media and students have a strong relationship. Students use social media to collaborate with each other and write papers that provide diverse thinking and interactions (Al-Rahmi & Othman, 2013). It further goes on to explain that apart from having contact only with just their classmates and teachers, social media now avoids them the opportunity to reach many different ideas about a topic they may be researching and also the ability to reach professionals and experts in industries. This would boost academic performance through social media usage (Celestine & Nonyelum, 2018; Al-Rahmi & Othman, 2013). Hence, supporting the claim that students who dedicated a significant portion of their time to engaging in social media interactions experienced favorable learning outcomes, as they had the opportunity to exchange and generate ideas and concepts pertaining to their academic pursuits. However, students who lack time management can easily fall prey to the negative impact of social media (Hameed, Maqbool, Aslam, Hassan & Anwar, 2013).

Siddiqui and Singh (2016) investigated the positive and negative impacts of social media on education and youth among others. The authors noted opportunities for collaboration, freedom of expression, useful posts by teachers, a platform for career development, digital citizenship and Internet productivity training, a channel for obtaining clarifications to unresolved class work, a medium for guidance counselling, and social interaction as some of the positives of social media. The negative effect identified by the authors includes creating room for distractions, intrusion of privacy, posting of inappropriate or misleading information, loss of ability to engage in face-to-face communication, crime promotion through posted private information, time wastage, and dangerous influence from inappropriate bloggers.

Kitsantas, Dabbagh, Chirinos, and Fake (2016) surveyed college students' perceptions of the positive and negative effects of social networking. The study found that social networking positively contributed to students' academic activities including communication and information gathering. Findings, however, revealed that social networking negatively affects students' interactions, health, and job completion rate, while also encouraging addictive tendencies, constituting distraction and risk to privacy.

Akram and Kumar (2017) studied the positive and negative effects of social media on society. It was discovered that the positive side of social media is that it is an important tool for professional development and opportunities, and also promotes efficient networking among academics. The negatives, however, are encapsulated in the risks associated with online interactions including cyberbullying.

Kalam, Goi, and Tiong (2023), using a meditational approach in emerging markets, observed student motivations for social media use and their effects on academic performance. Findings from the study revealed that non-academic use of social media, such as entertainment and social interactions, has a negative impact on academic performance. However, the authors found that when students employed social

media for educational purposes, it had a notable impact on improving their academic performance.

Hameed, Haq, Khan, and Zainab (2022) examined social media usage and academic performance from a cognitive loading perspective. Findings from 220 survey responses provided by undergraduate students unveiled that utilizing social media for non-academic purposes had an adverse effect on their academic performance. Conversely, the study found that employing social media for academic purposes and engaging in multitasking did not significantly influence students' academic performance. Further observation revealed that self-control could be a game changer for ensuring the positive impacts of social media on academic performance.

Nurudeen, Abdul-Samad, Owusu-Oware, Koi-Akrofi and Tanye (2022) attempted to measure the effect of social media on student academic performance using a social media influence factor model. By examining a group of 623 undergraduate students enrolled in a university in Ghana, the authors successfully identified a statistically significant negative correlation between variables related to social media influence factors and students' academic performance.

Nti, Akyeramfo-Sam, Bediako-Kyeremeh, and Agyemang (2021) studied the prediction of social media effects on student's academic performance using Machine Learning Algorithms. Five hundred and fifty undergraduates were conveniently sampled for the study and the finding revealed that an increase in social networking for educational purposes somehow affects students' academic performance.

Celestine and Nonyelum (2018) studied the impact of social media on student's academic performance using one hundred and sixty-six undergraduates from a university in Nigeria. Findings showed that the time spent on social media has a negative impact on students' academic activities thereby affecting their academic performance. The study recommended effective time management and control on social media for improved academic performance on the part of the students.

Lau (2017) investigated the effects of social media usage and social media multitasking on the academic performance of undergraduates at a university in Hong Kong. It was found that utilizing social media for academic purposes did not serve as a predictor of students' academic performance. However, engaging in non-academic activities on social media, such as video gaming, and multitasking on social media were found to have a negative impact on students' academic performance.

Hameed, Maqbool, Aslam, Hassan, and Anwar (2013) investigated the impact of social networking sites on the academic performance and attitude of 300 undergraduates of Pakistani universities. The authors discovered that social media positively influence students' academic performance and attitude. The study also found that Facebook and Twitter are the most commonly used social media platforms by undergraduates in the selected universities.

1.2 Purpose of the Study

The purpose of this study is to investigate the impact of social media on various aspects of university students' academic experience. Specifically, the study aims to:

- a) Assess students' self-rated level of social media usage.
- b) Identify the top three preferred social media platforms among university students in Nigeria.
- c) Examine the influence of social media on students' attitudes towards learning.
- d) Determine whether social media has a positive effect on students' academic performance.

- e) Analyze the effects of social media on students' academic interactions.

1.3 Research Questions

The following research questions were generated in order to achieve the specific objectives of the study.

- a) What is the student's rating of their social media usage?
- b) Which are the three (3) most favourite social media platforms among university students in Nigeria?
- c) What are the effects of social media on students' attitudes to learning?
- d) Is social media having any positive effect on students' academic performance?
- e) How is social media affecting students' academic interactions?

1.4 Research Hypotheses

H₀1: There is no significant difference in the effects of social media on the attitude of students from different academic levels.

H₀2: There is no significant difference in the effects of social media on the academic performance of students from different academic levels.

H₀3: There is no significant difference in the effects of social media on the academic interactions of students from different academic levels.

2. METHODS

2.1 Research Design

The survey design was chosen for this study, a widely accepted approach for data collection Krosnick (2018). The use of a self-developed questionnaire tailored to the research objectives ensures focused data collection (Creswell & Creswell, 2017). Administering the questionnaire to randomly selected degree students at the University of Ibadan, Ilesa campus, enhances the sample's representativeness and minimizes biases (Medina et al., 2019). This methodological choice adheres to established principles of social science research, ensuring rigor and validity in data collection.

2.2 Participants

The population of the study comprised all undergraduate students of the University of Ibadan, Ilesa campus, in 200, 300, and 400 academic levels. Fresh students were excluded for lack of adequate experience in higher education learning. A total of 290 undergraduate students were randomly selected for this study from the population. Analysis revealed that the sample consists of one hundred and thirteen (113, 39%) 400-level students, eighty-eight (88, 30.3%) 300-level students, and eighty-nine (89, 30.7%) 200-level students.

Table 1 shows that majority of the respondents (89%) were above the teen age, thus implying that their responses could be relied upon since they are more mature and must have been more familiar with social media. Also, the table revealed that most of the respondents (66.2%) were females, while the male respondents were few (33.8%). This could be a result of the large number of female population in the institution.

Table 1. Students' Demographic Data

| Characteristic | | n | % |
|----------------|--------|-----|--------|
| Age | 15-19 | 21 | 7.2% |
| | 20-24 | 162 | 55.9% |
| | 25-29 | 96 | 33.1% |
| | 30-34 | 10 | 3.4% |
| | 35-39 | 1 | 0.3% |
| | Total | 290 | 100.0% |
| Sex | Male | 98 | 33.8% |
| | Female | 192 | 66.2% |
| | Total | 290 | 100.0% |

2.3 Research Instruments

A questionnaire titled: "Social media and students' learning outcomes" was developed by the researchers and used for data collection from respondents. The instrument has an overall reliability coefficient of 0.739 (Cronbach's Alpha). The questionnaire comprised four sections. Section "A" of the questionnaire exacts demographic and social media usage data from respondents. Other sections of the questionnaire contain items on the effects of social media on students' attitudes (Section B), the effect of social media on students' academic performance (Section C), and the effect of social media on students' academic interactions (Section D).

2.4 Data Analysis

The collected data underwent descriptive statistical analysis. Questionnaire responses were scored as follows:

- Strongly Agree (SD): 4 points (mean score range = 3.5 – 4.0)
- Agree (A): 3 points (mean score range = 2.5 – 3.5)
- Disagree (D): 2 points (mean score range = 1.5 – 2.4)
- Strongly Disagree (SD): 1 point (mean score range = 0.5 – 1.4)
- Not Sure (NS): 0 points (mean score range = 0 – 0.4)

Assessments of the effects of social media on student attitudes, academic performance, and academic interaction were categorized as follows:

- Very Good: Mean score range = 3.5 – 4.0
- Good: Mean score range = 2.5 – 3.4
- Bad: Mean score range = 1.5 – 2.4
- Very Bad: Mean score range = 0 – 1.4

Responses regarding student social media usage were classified as:

- Non-user: 0 points
- Poor user: 1 point
- Average user: 2 points
- Regular/Good user: 3 points

For additional context, Smith et al. (2008) provide relevant insights into similar research.

3. RESULTS

The results presented are based on the analysis of 290 questionnaires that were returned by respondents. The research questions generated for the purpose of the study guided the presentation and discussion of results.

3.1 Answering Research Questions

Figure 1 shows students' ratings of their social media usage. The chart indicates that a simple majority of the students (54.8%) saw themselves as average users of social media while most of the others (43.4%) believed that they are good users.

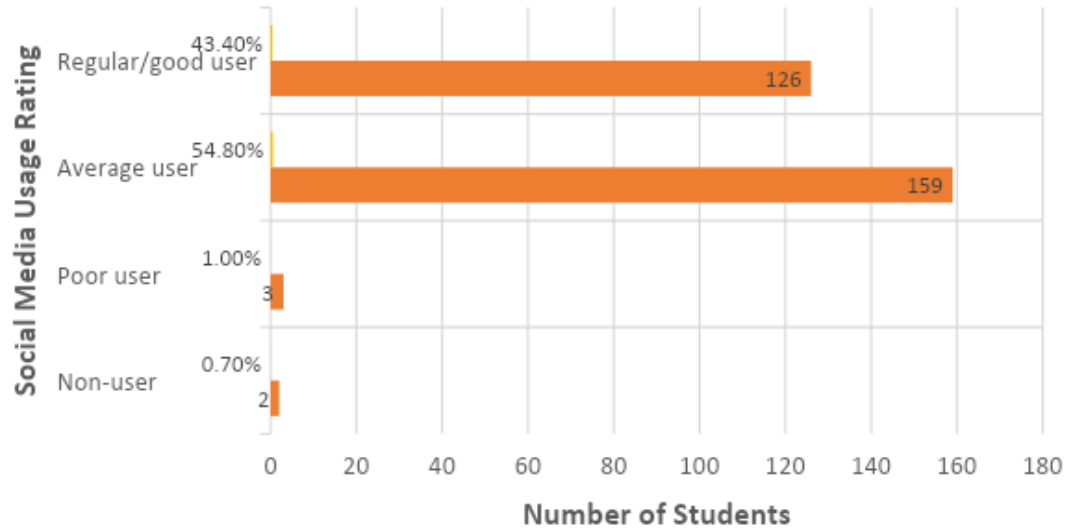


Figure 1. Students' Social Media Usage Rating

Research Question 2: Which are the three (3) most favourite social media platforms among university students in Nigeria?

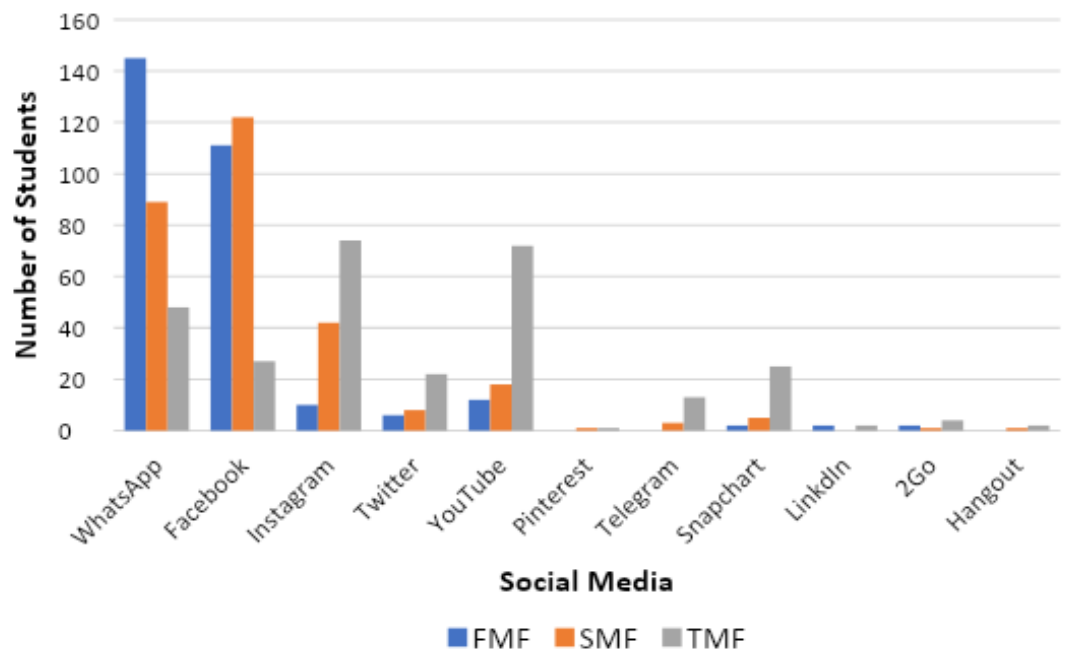


Figure 2. Most Favourite Social Media

Figure 2 reveals students’ three most favourite social media platforms. The chart shows that WhatsApp was the first most favourite (FMF) social media platform with the highest number of students (145). The second most favourite (SMF) social media platform among students was Facebook (122), while Instagram (74) was voted as the third most favourite (TMF) social media platform among undergraduate students.

Research Question 3: What are the effects of social media on students’ attitudes to learning?

Table 2. Effects of Social Media on Students’ Attitude to Learning

| Statement | SA | A | D | SD | NS | Total | | |
|---|-------|-------|-------|-------|-------|-------|-------|--------|
| | | | | | | Mean | SD | Remark |
| Social media has limited the time I have for academic activities | 18.3% | 32.8% | 29.7% | 12.8% | 6.6% | 2.2 | 1.10 | Bad |
| I always spend more time than necessary on social media | 13.8% | 26.9% | 31.7% | 15.9% | 11.7% | 2.3 | 1.22 | Bad |
| The time I spend on social media is more on socials than academics | 11.7% | 23.8% | 36.9% | 17.2% | 10.3% | 2.4 | 1.20 | Bad |
| Video, music, stories/ gist and entertainment are my favourites on social media | 35.5% | 40.0% | 13.1% | 4.8% | 6.6% | 1.7 | .94 | Bad |
| I use my Smartphone for social interaction more than academic | 14.8% | 25.2% | 34.5% | 13.8% | 11.7% | 2.2 | 1.21 | Bad |
| Spending time on social media made me sleep and wake up late | 12.8% | 25.9% | 33.8% | 17.2% | 10.3% | 2.3 | 1.21 | Bad |
| I am more addicted to social media than academic activities | 6.9% | 14.1% | 41.7% | 25.5% | 11.7% | 2.6 | 1.26 | Good |
| Total | | | | | | 2.24 | 1.163 | Bad |

Table 2 shows the effects of social media on student’s attitude to learning. Analysis of the table reveals that students were of the view that: social media has limited the time they have for academic activities ($\bar{X} = 2.2$); they always spend more time than necessary on social media ($\bar{X} = 2.3$); they spend more time on socials than academics on social media ($\bar{X} = 2.4$); entertainments are their favourites on social media ($\bar{X} = 3.4$); they use their Smartphones for social interaction more than academic media ($\bar{X} = 2.2$); and that spending time on social media made them sleep and wake up late ($\bar{X} = 2.3$). Most respondents however did not agree that they are more addicted to social media than academic activities ($\bar{X} = 2.6$). On average, the effects of social media on students’ attitude to learning was bad ($\bar{X} = 2.24$).

Research Question 4: Is social media having any positive effects on students’ academic performance?

Table 3 shows the effects of social media on student’s academic performance. Analysis of the table reveals that most students held positive views about expressions on the effects of social media in the table. Most students agreed that: feedback from colleagues/lecturers on social media would improve their academic performance (74.9%, $\bar{X} = 2.8$); they have always learned from social media platforms (95.6%, $\bar{X} = 3.4$); their membership of social media groups contributes to academic performance (80%, \bar{X}

= 2.9); discussions on social media platforms improve their academic performance ($\bar{X} = 2.9$); they have always benefited from academic posts on social media ($\bar{X} = 3.4$); and spending more time on academic-related activities on social media would certainly improve their grades ($\bar{X} = 2.9$). On average, the effect of social media on students' academic performance was good ($\bar{X} = 3.05$).

Table 3. Effects Of Social Media on Student’s Academic Performance

| Statement | SA | A | D | SD | NS | Total | | |
|--|-------|-------|-------|------|-------|-------------|--------------|-------------|
| | | | | | | Mean | SD | Remark |
| Feedbacks from colleagues/ lecturers on social media would improve my academic performance | 25.2% | 49.7% | 11.4% | 3.1% | 10.7% | 2.8 | 1.182 | Good |
| I have always learned from social media platforms | 46.6% | 49.0% | 1.0% | 0.0% | 3.4% | 3.4 | .815 | Good |
| My membership of social media groups contributes to my academic performance | 26.9% | 53.1% | 9.7% | 2.4% | 7.9% | 2.9 | 1.080 | Good |
| Discussions on social media platforms improve my academic performance | 31.4% | 49.7% | 9.3% | 1.0% | 8.6% | 2.9 | 1.107 | Good |
| I have always benefited from academic posts (such as course materials, notes, lectures, tips etc.) on social media | 53.1% | 38.3% | 4.5% | 0.3% | 3.8% | 3.4 | .895 | Good |
| Spending more time on academic related activities on social media would certainly improve my grades | 37.2% | 41.0% | 8.3% | 4.5% | 9.0% | 2.9 | 1.201 | Good |
| Total | | | | | | 3.05 | 1.047 | Good |

Research Questions 5: How is social media affecting students’ academic interactions?

Table 4. Effects of Social Media on Student’s Academic Interactions

| Statement | SA | A | D | SD | NS | Total | | |
|---|-------|-------|-------|------|-------|-------|-------|--------|
| | | | | | | Mean | SD | Remark |
| I love to be part of social media groups where academic topics are discussed | 51.4% | 38.6% | 3.1% | 0.7% | 6.2% | 3.3 | 1.027 | Good |
| Social media has helped improved my academic interaction | 31.0% | 54.8% | 6.2% | 1.4% | 6.6% | 3.0 | 1.010 | Good |
| It is very easy for me to ask academic related questions from my colleagues/teacher on social media | 33.8% | 43.8% | 9.7% | 2.4% | 10.3% | 2.9 | 1.206 | Good |
| I have been able to answer academic related questions raised by colleagues on social media | 30.3% | 50.0% | 9.0% | 1.7% | 9.0% | 2.9 | 1.125 | Good |
| I want difficult courses to be discussed with colleagues on social media | 25.2% | 42.8% | 13.1% | 6.9% | 12.1% | 2.6 | 1.267 | Good |

| Statement | SA | A | D | SD | NS | Total | | |
|--|-------|-------|-------|------|------|-------|-------|--------|
| | | | | | | Mean | SD | Remark |
| I would like to have access to my lecturers on social media for academic purposes only | 24.1% | 42.8% | 17.2% | 8.3% | 7.6% | 2.7 | 1.152 | Good |
| Total | | | | | | 2.9 | 1.131 | Good |

Table 4 reveals the effects of social media on student’s academic interactions. Analysis of the table shows that most students held positive views about expressions on the effects of social media in the table. Most students agreed that: they love to be part of social media groups where academic topics are discussed (90%, $\bar{X} = 3.3$); social media has helped improve their academic interaction (85.8%, $\bar{X} = 3.0$); it is very easy for them to ask academic related questions from their colleagues/teacher on social media (77.6%, $\bar{X} = 2.9$); they have been able to answer academic related questions raised by colleagues on social media (80.3%, $\bar{X} = 2.9$); they want difficult courses to be discussed with colleagues on social media (68%, $\bar{X} = 2.6$); and they would like to have access to their lecturers on social media for academic purposes only (66.9%, $\bar{X} = 2.7$). On average, the effect of social media on students’ academic interactions was good ($\bar{X} = 2.9$).

3.2 Testing of Hypotheses

Table 5. ANOVA of Differences in the Effect of Social Media on Student’s Attitude, Academic Performance, and Academic Interaction

| | N | M | SD | Sum of Squares | df | Mean Square | F | Sig. |
|--------------------------------|-------|-----|-------|----------------|-----|-------------|-------|------|
| Students’ Attitude | 200 | 89 | 15.25 | 54.086 | 2 | 27.043 | 1.173 | .311 |
| | 300 | 88 | 16.34 | 6616.618 | 287 | 23.054 | | |
| | 400 | 113 | 15.92 | 6670.703 | 289 | | | |
| | Total | 290 | 15.84 | 4.804 | | | | |
| Students’ Academic Performance | 200 | 89 | 17.89 | 25.568 | 2 | 12.784 | .947 | .389 |
| | 300 | 88 | 18.13 | 3875.953 | 287 | 13.505 | | |
| | 400 | 113 | 18.58 | 3901.521 | 289 | | | |
| | Total | 290 | 18.23 | 3.674 | | | | |
| Students’ Interactions | 200 | 89 | 17.20 | 24.863 | 2 | 12.432 | .693 | .501 |
| | 300 | 88 | 17.13 | 5146.533 | 287 | 17.932 | | |
| | 400 | 113 | 17.76 | 5171.397 | 289 | | | |
| | Total | 290 | 17.40 | 4.230 | | | | |

Table 5 above shows the differences in the effects of social media on student’s attitude, academic performance, and academic interaction respectively. Statistics on the table show that the mean scores are very similar for students across the levels, thus indicating that the views of the students about the effects of social media on their attitude to learning, academic performance, and academic interaction are the same

irrespective of their levels of study. Analysis of variance (ANOVA) performed on the data to determine the level of significance indicated that there is no significant difference in the effects of social media on either attitude to learning ($F_{(2, 289)} = 1.173$, $p (0.311) > 0.05$, or academic performance ($F_{(2, 289)} = 0.947$, $p (0.389) > 0.05$ or academic interaction ($F_{(2, 289)} = 0.693$, $p (0.501) > 0.05$). The hypotheses were therefore accepted.

4. DISCUSSION

Students' social media usage according to the finding of this study reveals that 99.3% of undergraduates are social media users and that WhatsApp, Facebook, and Instagram are the three most favourite social media platforms. This is in line with previous studies by Siddiqui and Singh (2016) which also found that more than 95% of Indian youths are social media users and that Facebook is one of the most favourites. Hameed, et.al. (2013) also found that Facebook and Twitter were favourites among undergraduates. Students in tertiary institutions are social media compliant (Stathopoulou, Siamagka, & Christodoulides, 2019). The finding could be attributed to the fact that undergraduates adopt social media for learning, communication, and interactions (Terzi, Bulut & Kaya, 2019), discussion (Kim, Karatepe, Lee, & Demiral, 2018), collaboration (Wolf, et al., 2015; Hossain, Jahan, Fang, Hoque, & Hossain, 2019), information sharing and seeking clarifications from their teachers, especially, with the advent of Covid-19 pandemic (Suseno, Laurell, & Sick, 2018; Tulin, Pollet, & Lehmann-Willenbrock, 2018).

The effect of social media on student's attitudes to learning as observed in this study was not good. Students were of the view that social media was negatively impacting their attitude to learning. This finding supports Sharqi, Hashim, & Kutbi (2015) who found that social media could help improve student's social behavior but raised concerns about negative effects. The finding, however, differs from the observation of Akgunduz and Akinoglu (2016) who noted that social media-supported learning positively impacted students' attitudes and self-directed learning skills in science education.

The findings of the study on the effect of social media on students' academic performance show that social media is capable of influencing learning outcomes. It was found that social media has a good effect on the academic performance of undergraduates. Several authors have found similar results including Kalam, Goi, and Tiong (2023), Hameed, Haq, Khan, and Zainab (2022), Nti, Akyeramfo-Sam, Bediako-Kyeremeh, and Agyemang (2021), and Sivakumar (2020) who reported that a positive relationship exists between social media for academic purposes and student's academic performance. Rithika and Selvaraj (2013) had earlier observed that high-scoring students are fond of using social networking websites. Lau (2017) in the study conducted to determine the effects of social media usage and social media multitasking on the academic performance of university students, found that though using social media for academic purposes did not significantly predict students' academic performance, using it otherwise negatively impacted academic performance. Celestine and Nonyelum (2018) also confirmed that too much Social Media usage would have negative effects on performance in class activities and overall academic performance.

Finally, this study found that social media had a good effect on students' academic interaction which would definitely promote improved academic performance. Al-Rahmi and Othman (2013), Maqableh, Rajab, Quteshat, Masa'deh, Khatib, and Karajeh (2015), and Talaue, AlSaad, AlRushaidan, AlHugail, & AlFahhad (2018) have all found that social media positively improve collaborative learning, learning interactions and

engagements which together contribute to improved academic performance among undergraduates. Chukwuere and Chukwuere (2017) also found that social media refines students' thought processes, interactions, and communication.

5. CONCLUSION

This study has shown that social media could positively influence students' academic performance and interaction.

Firstly, students universally express a positive view of their social media engagement, indicating a substantial involvement with these platforms in their academic pursuits. Upon closer examination, it becomes evident that among Nigerian university students, three primary social media platforms emerge as favorites: WhatsApp, Facebook, and Instagram. These platforms wield a considerable influence on students' academic interactions and learning experiences.

Delving into the impact of social media on students' attitudes towards learning, our study uncovers a nuanced dynamic. While it has the potential to enhance engagement and facilitate information sharing, there exists a parallel risk of distraction and diminished focus if not managed judiciously.

In terms of academic performance, our findings offer compelling evidence that social media, when harnessed effectively, can yield positive outcomes. Through avenues such as content sharing, discussions, and collaborative learning, these platforms prove instrumental in augmenting overall educational achievements.

The influence of social media on students' academic interactions emerges as a noteworthy revelation. When utilized with purpose, it fosters a dynamic environment for the exchange of knowledge, particularly through platforms that facilitate discussion groups and collaborative projects. However, it is imperative that educators exercise vigilant supervision to ensure these interactions remain productive and aligned with educational objectives.

In light of these conclusions, a series of actionable recommendations emerge:

- a. Stakeholders within universities should strategically leverage students' preferred social media platforms to foster academic interactions, content sharing, and learning activities.
- b. Course lecturers and facilitators should proactively establish and oversee discussion groups on social media platforms, offering additional support to students who may require further assistance in comprehending course material.
- c. Educators should demonstrate a steadfast commitment to overseeing students' activities within social media groups created for educational purposes, ensuring that discussions remain focused and beneficial.
- d. Moreover, educators are encouraged to embrace the principles of social learning theory by aiding in the creation and monitoring of social media groups where the exchange of learning ideas and academic discussions can be observed and guided.
- e. Lastly, policymakers in tertiary education, exemplified by entities such as the National Universities Commission in Nigeria, should emphasize the integration and implementation of cybersecurity and media ethics as core courses within the curriculum. This step will equip students with a comprehensive understanding of the advantages and potential pitfalls associated with social media and mobile technologies.

6. REFERENCES

- Abbas, J., Aman, J., Nurunnabi, M., & Bano, S. (2019). The impact of social media on learning behavior for sustainable education: Evidence of students from selected universities in Pakistan. *Sustainability*, *11*(6), 1683.
- Ademiluyi, L. F., Mamman, J. S. & Dauda, O. A. (2019). Influence of social media on communication skill and academic performance of business education students in colleges of education in Southwest, Nigeria. *International Journal of Education, Learning and Development*, *7*(8), 57-69.
- Akram, W., & Kumar, R. (2017). A study on positive and negative effects of social media on society. *International Journal of Computer Sciences and Engineering*, *5*(10), 351-354.
- Al-bahrani, A., Patel, D. & Sheridan, B. (2015). Engaging students using social media: The students' perspective. *International Review of Economics Education*, *19*(2), 36-50.
- Akgunduz, D., & Akinoglu, O. (2016). The effect of blended learning and social media-supported learning on the students' attitude and self-directed learning skills in science education. *Turkish Online Journal of Educational Technology-TOJET*, *15*(2), 106-115.
- Al-Rahmi, W., & Othman, M. (2013). The impact of social media use on academic performance among university students: A pilot study. *Journal of information systems research and innovation*, *4*(12), 1-10.
- Al-Sharqi, L., Hashim, K., & Kutbi, I. (2015). Perceptions of social media impact on students' social behavior: A comparison between Arts and Science students. *International Journal of Education and Social Science*, *2*(4), 122-131.
- Bredl, K., Hünninger, J., & Jensen, J. L. (2012). Methods for analyzing social media: Introduction to the special issue. *Journal of Technology in Human Services*, *30*(3-4), 141-144.
- Celestine, A. U., & Nonyelum, O. F. (2018). Impact of social media on students' academic performance. *International journal of scientific & engineering research*, *9*(3), 1454-1462.
- Chukwuere, J. E., & Chukwuere, P. C. (2017). The impact of social media on social lifestyle: A case study of university female students. *Gender and Behaviour*, *15*(4), 9966-9981.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Drahošová, M., & Balco, P. (2017). The analysis of advantages and disadvantages of use of social media in European Union. *Procedia Computer Science*, *109*, 1005-1009.
- Ercag, E. & Tezer, M. (2017). The effect of social media use on the academic success and attitude of students. *International Journal of Sciences and Research*, *73*(7), 179-191.
- Friedman, L. (2014). Five benefits of the social media. www.linkedin.com>pulse>201404221.....
- Hameed, I., Haq, M.A., Khan, N., & Zainab, B. (2022). Social media usage and academic performance from a cognitive loading perspective. *On the Horizon*.
- Hameed, Z., Maqbool, A., Aslam, N., ul HASSAN, E., & Anwar, M. (2013). An Empirical Study to Investigate the Impact of Social Networking Sites on Student's Academic Performance and Attitude in Case of Pakistan. *Asian journal of empirical research*, *3*(6), 775-784.
- Hansen, D. T. (2017). *The teacher and the world: A study of cosmopolitanism as education*. Routledge.

- Hossain, M. A., Jahan, N., Fang, Y., Hoque, S., & Hossain, M. S. (2019). Nexus of electronic word-of-mouth to social networking sites: a sustainable chatter of new digital social media. *Sustainability*, *11*(3), 759.
- Kalam, A., Goi, C., & Tiong, Y. Y. (2023). Student motivations for social media use and their effects on academic performance- a meditational approach in emerging market. *Interactive Technology and Smart Education*.
- Kim, T. T., Karatepe, O. M., Lee, G., & Demiral, H. (2018). Do gender and prior experience moderate the factors influencing attitude toward using social media for festival attendance? *Sustainability*, *10*(10), 3509.
- Kitsantas, A., Dabbagh, N., Chirinos, D. S., & Fake, H. (2016). College students' perceptions of positive and negative effects of social networking. *Social networking and education: Global perspectives*, 225-238.
- Krosnick, J. A. (2018). Questionnaire design. *The Palgrave handbook of survey research*, 439-455.
- Lau, W. W. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in human behavior*, *68*, 286-291.
- Maqableh, M., Rajab, L., Quteshat, W., Masa'deh, R. E. M. D. T., Khatib, T., & Karajeh, H. (2015). The impact of social media networks websites usage on students' academic performance. *Communications and Network*, *7*(04), 159-171.
- Medina, M. S., Smith, W. T., Kolluru, S., Sheaffer, E. A., & DiVall, M. (2019). A review of strategies for designing, administering, and using student ratings of instruction. *American journal of pharmaceutical education*, *83*(5).
- Merriam-Webster. (n.d.). Social media. In Merriam-Webster.com dictionary. Retrieved July 11, 2023, from <https://www.merriam-webster.com/dictionary/social%20media>
- Nti, I. K., Akyeramfo-Sam, S., Bediako-Kyeremeh, B., & Agyemang, S.A. (2021). Prediction of social media effects on students' academic performance using Machine Learning Algorithms (MLAs). *Journal of Computers in Education*, *9*, 195 - 223.
- Nurudeen, M., Abdul-Samad, S., Owusu-Oware, E. K., Koi-Akrofi, G. Y., & Tanye, H. A. (2022). Measuring the effect of social media on student academic performance using a social media influence factor model. *Education and Information Technologies*, *28*, 1165-1188.
- Owusu-Acheaw, M. & Larson, A. (2015). Use of social media and its impact on academic performance of tertiary institution students: A study of students of Koforidua Polytechnic, Ghana. *Journal of Education and practice*, *6*(6), 94-101.
- Rithika, M., & Selvaraj, S. (2013). Impact of social media on students' academic performance. *International Journal of Logistics & Supply Chain Management Perspectives*, *2*(4), 636-640.
- Siddiqui, S., & Singh, T. (2016). Social media its impact with positive and negative aspects. *International journal of computer applications technology and research*, *5*(2), 71-75.
- Singh, M. M., Amiri, M., & Sabbarwal, S. (2017). Social media usage positive and negative effects on the life style of Indian youth. *Iranian Journal of Social Sciences and Humanities Research*, *5*(3).
- Sivakumar, R. (2020). Effects of social media on academic performance of the students. *The Online Journal of Distance Education and e-Learning*, *8*(2), 90-97.
- Smith, T. W., Mohler, P. P., Harkness, J., & Onodera, N. (2008). Methods for assessing and calibrating response scales across countries and languages. In *New frontiers in comparative sociology* (pp. 45-94). Brill.

- Stathopoulou, A., Siamagka, N. T., & Christodoulides, G. (2019). A multi-stakeholder view of social media as a supporting tool in higher education: An educator–student perspective. *European Management Journal*, *37*(4), 421-431.
- Suseno, Y., Laurell, C., & Sick, N. (2018). Assessing value creation in digital innovation ecosystems: A Social Media Analytics approach. *The Journal of Strategic Information Systems*, *27*(4), 335-349.
- Talaue, G. M., AlSaad, A., AlRushaidan, N., AlHugail, A., & AlFahhad, S. (2018). The impact of social media on academic performance of selected college students. *International Journal of Advanced Information Technology*, *8*(4/5), 27-35.
- Terzi, B., Bulut, S., & Kaya, N. (2019). Factors affecting nursing and midwifery students' attitudes toward social media. *Nurse education in practice*, *35*, 141-149.
- Tulin, M., Pollet, T. V., & Lehmann-Willenbrock, N. (2018). Perceived group cohesion versus actual social structure: A study using social network analysis of egocentric Facebook networks. *Social Science Research*, *74*, 161-175.
- Wolf, D. M., Wenskovitch Jr, J. E., & Anton, B. B. (2015). Nurses' use of the Internet and social media: Does age, years of experience and educational level make a difference? *Journal of Nursing Education and Practice*, *6*(2), 68-75.

AUTHOR BIOGRAPHIES

**Olayinka Anthony
OJO** PhD/Senior Educational Technologist
University of Medical Sciences,
Centre for Health Professions and Biomedical Education
Ondo, Nigeria
Contact e-mail: oajo@unimed.edu.ng
ORCID: <https://orcid.org/0000-0003-3209-549X>

**Bolanle Amudat
OPELOYE** Master in Educational Management
University of Ilesa
Osun State, Nigeria

**Damola
OLUGBADE** PhD/Research Fellow I
First Technical University,
Centre for Languages and General Studies
Ibadan, Nigeria
Contact e-mail: damola.olugbade@tech-u.edu.ng
ORCID: <https://orcid.org/0000-0003-3938-6273>
