Social Media Affinity as a Predictor of Online Learning Attitudes and Academic Achievement among Computer and Mathematics Undergraduates in Lagos State

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Abstract

Engagement with social media is prevalent among undergraduates, presenting both positive and negative implications on academic performance. A lot of students, however, use the applications on a regular basis without caution. This study investigated the influence of social media affinity on computer and mathematics students' attitude to online learning in Lagos State tertiary institutions. A survey research design was adapted to purposively sample four hundred and thirty-three (433) students from six (6) public tertiary institutions in Lagos State. The data collection instrument is a questionnaire validated by two experts: a Computer Education expert and a Measurement and Evaluation professional. This resulted in the modification of some items and outright deletion of two others. The reliability of the instrument was established through a pilot study (n = 30) with Cronbach alpha analysis yielding an acceptable 0.70 internal consistency. Data was collected from Computer and Mathematics students across 200, 300 and 400 levels with the aid of Google form as an online instrument. Data were analysed using frequency, mean, standard deviation and Pearson product-moment correlation. The findings of the study revealed that tertiary institution students predominantly use social media for entertainment purposes. Female undergraduates were observed to spend more time than males on social media. A significant difference was observed in social media usage based on gender. Social media affinity significantly predicted students' attitude to online learning. It was therefore recommended that tertiary institutions in Lagos State should guide undergraduates on the risks of excessive use of social media but encourage to harness their academic benefits.

Keywords: Social media, attitude, online learning, computer, mathematics,

Introduction

The proportion of undergraduates with android phones, tablets, computers and other internet enabled devices is considerably high. Evolution of digital technology and social media has significantly influenced educational practices worldwide. Social media platforms like WhatsApp, Facebook, LinkedIn and YouTube have become central to communication and learning in higher education. Studies by Patrick and Umaru (2021) and Johnson and Lawal (2022) have shown both positive and negative impacts of social media on academic outcomes, with usage patterns influencing students' learning behaviors and performance. There is a surge of use in social media

among students of tertiary institutions in Nigeria. Study by Lawal and Awofala (2020) reveals that students use platforms to access study materials, participate in collaborative learning, and engage with peers and instructors. However, challenges such as distractions, poor time management, and limited digital literacy affect students' academic outcomes. Celestine and Nonyelum (2018) noted that excessive use of social media leads to reduced study time and negatively impact academic performance. Students are now becoming addicted to use of social media. Excessive affinity to social media is a behavioral addiction characterized as being overly concerned about social media, driven by an uncontrollable urge to log on to or use social media, and devoting so much time and effort to social media that it impairs other important life areas.

Social media affinity refers to the emotional attachment, frequent usage, and reliance on social media platforms for various purposes. Akram and Kumar (2017) identified social media as both a learning enabler and a source of distraction. Social media platforms like WhatsApp, Instagram, and YouTube are predominantly used for both educational and non-educational activities (Nurudeen, Abdul-Samad, Owusu-Oware, Koi-Akrofi & Tanye, 2022). Students with high social media affinity often integrate these platforms into their academic workflows, using them for resource sharing, discussions, and project collaborations (Celestine & Nonyelum, 2018). Social media affinity therefore encompasses usage habits, emotional connections, and reliance on these platforms for information and interaction. Among computer and mathematics undergraduates, social media affinity could shape learning experiences and foster collaboration by enabling access to digital resources.

The advancement of digital technologies has transformed contemporary teaching and learning, making social media an increasingly important component of higher education. Beyond their traditional social functions, these platforms have evolved into valuable educational tools that facilitate resource sharing, discussion forums, virtual classrooms, and peer-supported learning as evidenced within academic literature. The COVID-19 pandemic further accelerated this integration of social media into higher education as institutions worldwide shifted from

conventional face-to-face instruction to remote and blended learning. Greenhow and Galvin (2020) observed that social media became an important means of maintaining communication and promoting student engagement during emergency remote teaching. Similarly, Anthony (2024) reported that digital communication platforms have become essential components of blended learning because they promote collaboration, learner participation, and access to instructional resources beyond the physical classroom. Consequently, understanding how students interact with social media has become increasingly important for improving teaching effectiveness and online learning experiences.

Among university students, social media affinity has become particularly evident because of the increasing affordability of smartphones and internet services. Nurudeen, *et al* (2022); Lawal and Awofala (2020) reported that WhatsApp, Instagram, and YouTube remain the most frequently used platforms among African university students, serving both educational and recreational purposes. Likewise, Kalam, Goi, and Tiong (2023) found that social media enables students to access educational resources, collaborate on assignments, and interact with lecturers outside normal classroom hours. However, these authors also cautioned that the educational value of social media depends largely on students' patterns of usage, as excessive recreational engagement may negatively affect concentration and learning effectiveness.

The relationship between social media use and academic achievement has attracted considerable research attention, although findings remain inconsistent. Some studies reported positive educational outcomes associated with purposeful academic use of social media, while others have found negative relationships resulting from excessive non-academic engagement. Li, Griffiths, Niu, and Mei (2019) investigated the relationship between social networking site addiction, learning engagement, and academic achievement among university students and found that learning engagement mediated the relationship between social media use and academic performance. The findings corroborated Faleye and Lawal (2015), suggesting that social media contributes positively to academic achievement when students actively engage in meaningful

learning activities through these platforms. Similarly, Junco (2015) found that students who utilized social networking platforms primarily for educational communication and collaboration demonstrated higher academic engagement than those who used them predominantly for recreational activities. Greenhow and Galvin (2020) also argued that social media enhances students' participation in collaborative learning by promoting interaction, information exchange, and timely feedback. These findings suggest that educational benefits derive not from the frequency of social media use but from the quality and purpose of engagement.

Recent empirical studies have demonstrated positive associations between social media engagement and students' attitudes toward online learning. Kalam et al. (2023) reported that students who actively utilized social media for academic discussions and collaborative learning exhibited stronger confidence and greater participation in digital learning environments. Similarly, Greenhow and Galvin (2020) noted that social media promotes learner engagement by creating opportunities for interaction, peer support, and continuous communication outside formal classroom settings. These interactions contribute to positive perceptions of online learning and increase students' readiness to participate in technology-mediated instruction.

The growing acceptance of online learning following the COVID-19 pandemic has increased the educational significance of social media. Lawal and Awofala (2020) found that WhatsApp and YouTube emerged as the most frequently utilized platforms for online mathematics learning among Nigerian undergraduates. The study further reported increased acceptance of online learning despite students' continued preference for conventional classroom instruction. Similarly, Johnson and Lawal (2022) demonstrated that technology-assisted instructional approaches positively influenced students' academic achievement and learning confidence, indicating that appropriate integration of digital technologies can improve educational outcomes.

Gender has also emerged as an important variable in studies of social media usage and online learning. Patrick and Umaru (2021) reported significant differences in social media engagement between male and female students, with female students spending relatively more time on social

networking platforms. However, findings regarding gender differences in attitudes toward online learning remain inconsistent across studies, suggesting that contextual factors such as access to technology, digital competence, institutional support, and learning experiences may influence students' acceptance of online education.

Although considerable research has examined social media use among university students, important gaps remain. Previous studies have focused on social media addiction, general usage patterns, or academic performance without simultaneously examining students' attitudes toward online learning. Furthermore, relatively few studies have specifically investigated computer science and mathematics undergraduates, whose disciplines require sustained analytical reasoning, problem-solving, and continuous interaction with digital technologies. Existing Nigerian studies have also concentrated largely on universities, with limited attention given to students in colleges of education and polytechnics. Consequently, there remains insufficient empirical evidence regarding how social media affinity influences both academic achievement and attitudes toward online learning among computer and mathematics undergraduates across different categories of public tertiary institutions in Lagos State. Addressing this gap is important because understanding students' digital engagement patterns can assist educators and institutional administrators in developing strategies that maximize the educational benefits of social media while minimizing its potential negative effects on learning outcomes.

Research Questions

The study sought answers to the following research questions.

1) How often do science undergraduates use social media?
2) What are undergraduates preoccupied with during social media usage?
3) What is the attitude of undergraduates to online learning?

Hypotheses

$H_0$1: The differences between the attitude of male and female students to online learning is not significant.

$H_0$2: No significant association exists between level of students, social media engagement, academic achievement and attitude to online learning.

$H_0$3: Gender, level of students and social media usage are not significant predictors of science undergraduates' learning outcomes.

Methodology

The study adapted a survey research design which allows for data collection from a relatively large number of participants. The population of study comprised undergraduates of Computer Education, Mathematics, and Mathematics Education in public tertiary institutions in Lagos State. Four hundred and thirty-three (433) students were purposively sampled from departments of Computer science, Computer Education, Mathematics, and Mathematics Education in Lagos State tertiary institutions. A close-ended questionnaire titled "Social Media Affinity and Attitude Toward Online Learning" (SOMEATOL) developed by the researchers served as the instrument for data collection. The questionnaire contained three sections namely; Biodata, Social Media Affinity scale and Attitude towards Online Learning questionnaire. The Social Media Affinity scale consisted of six items were on four-point scale, while the Attitude towards Online Learning questionnaire comprised of seventeen items similarly on four-point scale. The instrument was validated by two experts in Science Education to ensure face and content validity. This process led to the modification of four items and deletion of two items. In establishing the reliability coefficient of the research instrument, a pilot study of thirty-two (32) students who were not part of main samples was selected and used. Data from the pilot study was subjection to Cronbach analysis. A reliability coefficient value 0.73 obtained indicated an internal consistency of the research instrument. The research instrument was distributed using an online survey instrument - Google Form. The Google form questionnaire link was shared with Mathematics and Computer students of public tertiary institutions in Lagos through their class representatives on social media platforms including WhatsApp and Facebook while email accounts were used for students whose email addresses were accessible. The electronic forms assisted to ensure anonymity of respondents as well as flexibility of time to respond to the questionnaire. Students' academic achievement were quantified using their Cumulative Grade Point Average (CGPA) which is a special average measure of a student's score in all courses taken so far in the institution. For all the institutions involved, the maximum CGPA obtainable is 5.00. Data were analyzed using frequency, percentage, mean, standard deviation, Pearson Product Moment Correlation coefficient, t-test and linear regression.

Results

Table 1: Distribution of respondents by institution (n = 433)

Institution		Frequency	Percentage (%)
	College of Education	144	33.3
	Polytechnic	202	46.6
	University	87	20.1
	Total	**433**	**100.0**

Table1 shows that 144 (33.3%) of the respondents were students in Colleges of Education, 202 (46.6%) are Polytechnic undergraduates while 87 (20.1%) are University students.

Table 2: Gender distribution of respondents (n = 433)

Gender	Frequency	Percentage (%)
Female	177	40.9
Male	256	59.1
Total	**433**	**100.0**

Gender distribution of respondents as displayed in Table 2 comprising 40.9% female and 59.1% male.

Table 3: Level distribution of respondents (n = 433)

Level of Study	Frequency	Percentage (%)
200L	130	30.0
300L	148	34.2
400L	155	35.8
Total	**433**	**100.0**

Table 3 shows that 30.0% of the respondents were 200-level; 34.2% 300-level; and 35.8% 400level undergraduates.

Table 4: Departmental distribution of respondents (n = 433)

Course of Study	Frequency	Percentage
Computer Education	181	30.7
Computer Science	133	41.8
Mathematics	70	16.2
Mathematics Education	49	11.3
Total	**433**	**100.0**

Table 4 shows the distribution of respondents by course of study. 181 (30.7%) were Computer Education; 133 (41.8%) were Computer Science; and 70 (16.2%) Mathematics undergraduates while 49 (11.3%) pre-service mathematics teachers.

Research Question One: How often do undergraduates of Lagos tertiary institutions use social media?

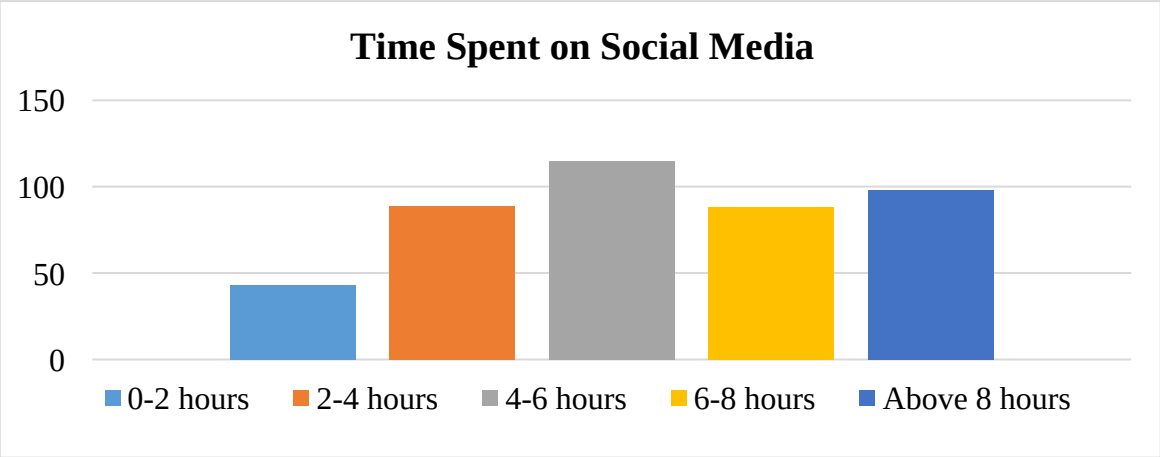

Fig 1: Time spent on social media

In Figure 1, about 26.6% of undergraduates spend between four and six hours whenever they log on to social networks. This is trailed by students who expend more than eight hours daily (22.6%) on social media while a similar portion of students spend either two to four or six to eight hours on social media on a daily basis. Just 9.9% spent the least time on social media.

Table 5: Time spent on social media by undergraduates based on gender (n = 433)

Gender	Frequency	Mean (hrs)	Std Deviation
Female	177	3.37	1.317
Male	256	3.17	1.259
Total	**433**	**3.25**	**1.285**

Female students in Table 5 spent a little more of average time (m = 3.37 hours) on social network than male undergraduates (m = 3.17 hours).

Research Question Two: What are undergraduates preoccupied with during social media usage?

Table 6: Activities mostly engaged in on social media by undergraduates (n = 433)

Activity	Gender	Frequency	Total Frequency	Percentage
Academic	Male	71	103	23.8
	Female	32		
Sport	Male	27	69	15.9
	Female	42		
News	Male	38	67	15.5
	Female	29		
Entertainment	Male	75	108	24.9
	Female	33		
Chats	Male	45	86	19.9
	Female	41		
Total		**433**	**433**	**100.0**

Data in Table 6 show the activities mostly engaged in on social media platforms by undergraduates. From the sample, 108 (24.9%) indicated that they use social media sites for entertainment. This is followed by 103 (23.8%) who use social media for academic activities. Chats, Sport activities and News claimed 86 (19.9%), 69 (15.9%) and 67 (15.5%) respectively revealing that majority of the students are mostly drawn to social media sites for entertainment purposes. The highest frequency of male activity on social media tilts towards entertainment while the highest for females are attracted to sports. Social media affinity for males premised on academic occupies the second position while Chats occupies same position for females, followed by academic use.

Research Question Three: What is the attitude of undergraduates to online learning?

Table 7a: Attitude to online learning by level of study (n = 433)

Level	N	Mean	Std. Deviation
200L	130	46.41	7.249
300L	148	47.48	6.869
400L	155	48.95	6.874
Total	**433**	**47.65**	**7.044**

In Table 7a, the mean attitude scores were 46.41, 47.48 and 48.95 for 200, 300 and 400 level undergraduates respectively out of a maximum of 68 points representing a minimum of 68.25% implying an above average mean score on attitude to online learning.

Table 7b: Attitude to online learning by course of study (n = 433)

Department	Mean	N	Std. Deviation	Range
Computer Science	46.49	133	5.640	25
Computer Education	47.19	181	6.722	26
Mathematics	47.49	70	8.077	34
Mathematics Education	49.35	49	6.799	23
Total	**47.27**	**433**	**6.687**	**34**

Hypothesis One: The difference between the attitude of male and female students to online learning is not significant.

Table 8: Undergraduates attitude to online learning by gender (n = 433)

Gender	Mean	N	Std. Deviation	T	Sig
Female	46.63 48.20	256	6.338 7.078	$t_{(344.72)}$= 2.354	0.019
Male	**47.27**	177	**6.887**		
Total		**433**			

In Table 8, analysis of the mean undergraduates' attitude to online learning by gender shows that the attitude of male undergraduates to online learning is significantly higher than that of female colleagues ($t = 2.354$, $p < 0.05$), hence the null hypothesis is rejected and the alternative accepted. Thus, the difference between male and female undergraduates' attitudes to online learning is significant.

Hypothesis Two: There is no significant relationship among academic level, social media affinity, academic achievement and attitude to online learning.

Table 9: Relationships in academic level, social media affinity, academic achievement and attitude to online learning

Variables		Academic Level	Social Media Affinity	Academic Achievement	Attitude to Online Learning
Academic Level	Pearson Correlation	1			
	Sig. (2-tailed)				
Social Media Affinity	Pearson Correlation	.038	1		
	Sig. (2-tailed)	.425			
Academic Achievement	Pearson Correlation	.295**	-.035	1	
	Sig. (2-tailed)	.000	.464		
Attitude to Online Learning	Pearson Correlation	.046	.473**	-.025	1
	Sig. (2-tailed)	.340	.000	.614	

The relationship between students' academic level and academic achievement is positive, and statistically significant ($r = 0.295$; $p < 0.05$) in Table 9. However, relationship between students' academic level and attitude to online learning is weakly positive and non-statistically significant ($r = 0.046$; $p > 0.05$). The relationship between social media affinity and attitude to online learning was significantly positive ($r = 0.473$; $p < 0.05$).

Hypotheses Three: Gender, level and social media usage are not significant predictors of undergraduates' learning outcomes.

Table 10a: Multiple regression model summary and ANOVA on learning outcomes

R	R Square	Adjusted R Square	Std. Error of the Estimate
.299[a]	.089	.083	.73062

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.483	3	7.494	14.039	.000[b]
	Residual	229.000	429	.534		
	Total	251.483	432			

a. Dependent Variable: Academic Achievement
b. Predictors: (Constant), Social Media Affinity, Level, Gender

In Table 10a, analysis of data by linear regression reveals that the study variables social media affinity, level of study and gender, contributed 8.3% to undergraduates' cumulative grade point average. The value of $p = 0.00 < 0.05$ shows that gender, academic level and social media usage significantly predict learning outcomes

Table 10b: Regression model summary and ANOVA of attitude to online learning

R	R Square	Adjusted R Square	Std. Error of the Estimate
.482[a]	.232	.227	5.880

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4413.521	3	1471.174	42.545	.000[b]
	Residual	14592.435	422	34.579		
	Total	19005.955	425			

a. Dependent Variable: Attitude to online learning
b. Predictors: (Constant), Social Media Affinity, Level, Gender

In Table 10b, shows the Multiple Regression and ANOVA of predictor variables on students' attitude to online learning. The F-ratio = 42.545 was obtained at $p < 0.05$. This implies that there a significant linear relationship between predictor variables and students' attitude to online learning. The regression analysis of social media affinity, level of study and gender indicated 22.7% contribution to undergraduates' attitude to online learning.

Table 11a: Table of coefficients[a] indicating relative effects of the predictor variables on undergraduates' learning outcomes

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.632	.217		12.144	.000
	Gender	-.026	.072	-.017	-.359	.720
	Level	.280	.043	.297	6.444	.000
	Social Media Affinity	-.009	.009	-.046	-.988	.324

a. Dependent Variable: Academic Achievement

The values of the beta coefficients in Table 11a indicates that the highest contributing factor to learning outcomes is Level ($\beta = 0.297$, t = 6.444; $p = 0.000$); then social media affinity ($\beta = 0.046$, t = -0.988; $p = 0.324$) and lastly, gender ($\beta = 0.017$, t = -0.359; $p = 0.720$).

Table 11b: Table of coefficients[a] indicating relative effects of predictor variables on undergraduates' attitude to online learning

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	31.758	1.755		18.093	.000
	Gender	1.208	.581	.089	2.078	.038
	Level	.182	.352	.022	.516	.606
	Social Media Affinity	.785	.072	.467	10.926	.000

a. Dependent Variable: Attitude to Online Learning

Table 11b shows the relative effects of the predictor variables on students' attitude to online learning with respect to standardized Beta (β) weights. Social media affinity contributed the highest and directly to students' attitude to online learning (β = 0.467; t = 10.296; p < 0.05). The contributions of other predictor variables to students' attitude to online learning are: gender (β = 0.089; t = 2.078; p <0.05), academic level (β=0.022; t= 0.516; p>0.05). This can be inferred that all predictor variables had positive relative effect on students' attitude to online learning. Gender, academic level and social media affinity had significant relative effect on students' attitude to online learning.

Discussion

This study examined the influence of social media affinity on computer and mathematics undergraduates' attitudes toward online learning and academic achievement in public tertiary institutions in Lagos State, Nigeria. The results provide important evidence regarding students' social media usage patterns, their attitudes toward online learning, and the predictive role of social media affinity in educational outcomes.

The study findings revealed that a substantial proportion of respondents spend between four and six hours daily on social media, while a considerable number spend more than eight hours per day, reflecting the increasing integration of social media into students' daily academic and social lives, particularly following the widespread adoption of digital technologies after the COVID-19 pandemic. The result corroborates Nurudeen et al. (2022), who reported that WhatsApp, Instagram, and YouTube have become indispensable communication and learning platforms among university students in Africa. Similarly, Kalam et al. (2023) observed that social media is currently an important component of students' learning experiences by facilitating communication, access to information, and collaborative learning. The widespread ownership of smartphones and improved internet accessibility have also increased students' dependence on these platforms. While prolonged engagement creates opportunities for knowledge sharing and collaboration, excessive use may also reduce study time and expose students to distractions that negatively influence academic productivity.

The study also found that female students spent slightly more time on social media than their male counterparts. This finding supports Patrick and Umaru (2021), who similarly observed greater social media engagement among female students. The difference may reflect gender variations in communication preferences and online social interaction. Nevertheless, the relatively small disparity suggests that social media is a common feature of undergraduate life irrespective of gender. Consequently, educational interventions on social media use should target all students rather than focusing on a particular gender.

An important finding of this study is that entertainment constitutes the primary purpose of social media use among respondents, whereas academic activities rank second. Although the relatively high proportion of students using social media for academic purposes is encouraging, the dominance of entertainment suggests that students have not fully exploited the educational potential of these platforms. Bamigboye and Olusesan (2017) similarly reported that university students predominantly utilize social networking sites for entertainment despite their educational capabilities. The conclusion of Akram and Kumar (2017) that social media serves as both an educational resource and a source of distraction, highlights the need for lecturers to deliberately integrate teaching and learning activities into popular social media platforms so that students increasingly associate them with academic engagement rather than recreation alone.

Findings further indicate that students generally possess favourable attitudes toward online learning, with attitude scores increasing progressively from 200 level to 400 level. This suggests that students become more comfortable with online learning as they gain greater exposure to digital learning environments during academic programmes. Increased familiarity with virtual classrooms, online assessments, and electronic learning resources may serve as an explanation to this. The finding is consistent with Lawal and Awofala (2020), who reported increased acceptance of online mathematics learning among Nigerian undergraduates following the adoption of virtual learning during the COVID-19 period.

A significant gender difference was found in students' attitudes toward online learning, with male students demonstrating more favourable attitudes than female students. Although this finding differs from some previous Nigerian studies that reported minimal gender differences in technology acceptance, it may suggest differences in digital self-efficacy, confidence in using educational technologies, or previous exposure to online learning environments. Other factors, like variations in learning preferences may also contribute to this difference implying that tertiary institutions should provide adequate digital support and training for all students, particularly those who may experience lower confidence in online learning environments.

An interesting finding is the positive and statistically significant relationship between social media affinity and students' attitudes toward online learning. Students who demonstrated stronger

affinity for social media were more likely to possess favourable attitudes toward online learning. This finding agrees with Li et al. (2019), who reported that students' engagement with social networking platforms positively influences participation in technology-mediated learning activities. Similarly, Kalam et al. (2023) found that social media promotes collaborative learning, facilitates communication between students and instructors, and enhances access to educational resources, thereby improving students' readiness to engage in online learning.

Nevertheless, despite the significant influence on attitudes toward online learning, social media affinity demonstrated a weak and statistically insignificant relationship with academic achievement. This suggests that extensive social media engagement alone does not automatically translate into improved academic performance. Rather, accessing the educational benefits of social media depend on the purpose and quality of its use. Students who majorly access social media for entertainment, and passive browsing are unlikely to experience significant academic gains while their colleagues who engage in academic discussions, collaborative problem-solving, instructional videos, and educational resource sharing are more likely to benefit academically. This agrees with previous studies: Akram and Kumar (2017); Junco (2015) who argued that social media possesses both educational opportunities and academic risks depending on usage patterns.

The regression analyses provided additional insight into the determinants of learning outcomes and attitudes toward online learning. Although gender, academic level, and social media affinity jointly predicted academic achievement, they explained only 8.3% of the variation in students' cumulative grade point averages. This relatively low explanatory power stipulates that academic achievement is influenced by numerous other factors not addressed in this study. These could include self-regulated learning, digital competence, institutional support, and socioeconomic background that may play substantial roles in determining students' academic success. Future studies can incorporate these variables to develop a more comprehensive predictive model of academic achievement among Nigerian undergraduates.

In contrast, the predictor variables jointly explained 22.7% of the variance in students' attitudes toward online learning, with social media affinity emerging as the strongest predictor. This finding demonstrates the central role of students' digital engagement in shaping their perceptions of online learning environments. Students who are familiar with digital communication and collaboration through social media appear to adapt more readily to virtual learning systems. This finding suggests that higher institutions should intentionally leverage students' familiarity with social media by integrating these platforms into formal teaching and learning processes for academic discussions, group assignments, and dissemination of learning materials to strengthen students' engagement and acquaintance with online learning.

Overall, the findings demonstrate that social media represents both an educational opportunity and a potential source of academic distraction. While high social media affinity significantly enhances students' attitudes toward online learning, its contribution to academic achievement depends largely on purposeful educational utilization rather than frequency of use alone. The educational value of social media therefore lies in its strategic integration into teaching and learning activities.

Conclusion

The study established that undergraduate students in Lagos State tertiary institutions exhibit high levels of social media engagement, with entertainment constituting the predominant purpose of use. Although students generally demonstrated favourable attitudes toward online learning, significant gender differences were observed, with male students reporting more positive attitudes than their female counterparts. Social media affinity showed a significant positive relationship with students' attitudes toward online learning and emerged as the strongest predictor of online learning attitude. However, social media affinity did not significantly predict academic achievement, suggesting that the educational value of social media depends more on purposeful academic engagement than frequency of use. The findings therefore demonstrate that while social media can enhance students' readiness for digital learning, its contribution to academic success remains limited unless appropriately integrated into teaching and learning processes.

Recommendations

Based on the findings of this study, it is recommended that:

1. Tertiary institutions should integrate structured academic activities into commonly used social media platforms such as WhatsApp, Telegram and YouTube to improve students' engagement with online learning.
2. Digital literacy and responsible social media use should be incorporated into first-year orientation programmes to encourage productive and progressive academic usage.

3. Institutional policies should discourage excessive recreational social media use during academic hours while promoting educational engagement. This can be substantiated periodic seminars by institution's counselling unit.
4. Female students should receive targeted digital learning support programmes to improve confidence and participation in online learning environments.
5. Future studies should investigate additional predictors of academic achievement such as self-regulated learning, digital competence, motivation, internet accessibility and learning engagement.

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