



## Tertiary Agricultural Students' Proclivity to Use Social Media for Improving Learning Outcomes During the COVID-19 Pandemic Era in Oyo State, Nigeria

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**ABSTRACT:** The COVID-19 pandemic caused significant disruptions in the higher education industry, leading to program closures and delays. Institutions were asked to adopt Web 2.0 teaching methods, including Social Media (SM), for engagement and multitasking. Despite this, educational institutions are yet to harness SM's potential to improve learning outcomes among students. Hence, this study investigated students' proclivity to use social media for improving learning outcomes during the COVID-19 pandemic era in Oyo State, Nigeria. A multi-stage sampling procedure was used to select a total of 210 respondents. Data were collected quantitatively through questionnaires on respondents' socioeconomic characteristics, knowledge, learning outcomes, and proclivity to use SM. Data were analyzed using frequency count, percentage, mean, Pearson Product Moment Correlation, and linear regression at  $\alpha 0.05$ . Respondents' average age was  $23.96 \pm 3.52$  years, majority (61.1%) were female, single (90.9%), and Christians (74.5%). Most (68.8%) students depended on their parents/guardians for their source of income, with an average monthly income of #30,418.27  $\pm$  56322.51. Majority (66.8%) had high knowledge of SM usage and learning outcomes (61.1%). Most (53.4%) indicated a high proclivity to use SM for improving learning. Students' proclivity to use SM was not significantly correlated with their knowledge of use ( $r=0.025$ ) while age ( $\beta=-0.287$ ) contributed to their proclivity to use SM. Students are more willing to use SM for improved learning outcomes in Oyo State, Nigeria. The government and policymakers should create guidelines and recommendations for educators on how to integrate social media platforms into their teaching methods to improve learning outcomes.

**KEY WORDS:** COVID-19 pandemic, Social media, Learning outcomes, Tertiary agricultural students.

### INTRODUCTION

Social media has recently become a potent tool for enhancing student learning outcomes (Makki, & Bali, 2021). Social media has significantly contributed to how students access, share, and interact with knowledge in the digital age. It has become increasingly more important in allowing access to educational materials and enhancing students' learning outcomes as the COVID-19 epidemic has forced educational institutions to embrace remote learning strategies (Sobaih et al., 2022). Social media, according to The Economic Times (September 21, 2023), is a type of computer technology that allows individuals to exchange ideas, views, and information via online networks and communities. Social media has a major impact on people's lives and comes in many forms, including blogs, forums, business networks, photo-sharing platforms, social gaming, microblogs, and chat apps, among others (Abraham, 2020). Social media has over 4.78 billion worldwide users as of October 2022 and 4.41 billion anticipated monthly active users by 2025 (Tankovska, 2021; Kemp, 2022). The average daily SM usage is 144 minutes per day, an increase of more than half an hour since 2015 (Tankovska, 2021). In Nigeria, the total number of active internet users as of January 2022 was 109.2 million, while the number of social media users in Nigeria in the same year reached roughly 32.90 million, with Facebook having 26.10 million users, YouTube with 32.90 million, Twitter with 325.4 thousand, LinkedIn with 6.30 million, 9.05 million Instagram users, and over 4.03 million WhatsApp users (Kemp, 2022).

Globally, growth in the use of social media in education and training is part of a movement towards more active forms of student learning; learning that is collaborative, experiential, and problem-based and which can involve situated learning. Linked to the emergence of these more active forms of student learning are the debates associated with the need to rethink the nature of pedagogy, learning, and assessment in this more digital age (Xie et al., 2020). According to research, social media can enhance learning outcomes in many ways. For instance, it can give students a place to communicate, exchange learning materials, and get feedback from teachers and other students (Junco, 2015). Social media may also assist in establishing an interactive and interesting learning environment that promotes critical thinking and active learning. Social networking may also assist pupils in improving their digital

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literacy abilities, which are crucial in the digital age (Manca and Ranieri, 2016). Further studies have shown that social media can enhance students' engagement with course content and boost their enthusiasm to learn. It offers a flexible, individualized learning environment that meets the varied requirements and interests of students (Nouri and Cotton, 2021). More so, social media can be a useful tool for improving learning outcomes among tertiary agricultural students.

The COVID-19 pandemic caused significant disruptions in the higher education industry, leading to closures and delays in programs (Küsel, Martin, and Markic, 2020; Purcell and Lumbreras, 2021). Universities were forced to reorganize their systems, switch to online education, and work with fewer resources. Leaders in higher education were required to use creative leadership techniques to effectively address the requirements of teachers, staff, and students (Seltzer, 2020; Dumulescu and Mutiu, 2021). Institutions were asked to adopt new teaching and learning methods incorporating Web 2.0, such as social media for constant engagement and multitasking to improve learning outcomes. Given this, social media platforms such as Facebook, Twitter, Instagram, and WhatsApp became essential tools for communication and learning during the pandemic era (Papademetriou et al., 2020), emphasizing the pressing need for educational institutions and stakeholders to enhance learning outcomes. Although SM as an educational tool can be used to enhance learning outcomes, it has not been maximally and adequately utilised by agriculture students in tertiary institutions in Nigeria, and their proclivity to do so to improve their learning outcomes is poorly understood. Hence the study aims to investigate tertiary agricultural students' readiness to leverage social media for learning in Oyo State, Nigeria.

Specifically, the study seeks to:

- i. describe the socioeconomic characteristics of the respondents;
- ii. assess the respondents' knowledge of SM;
- iii. determine the respondents' learning outcomes (cognitive, affective, and psychomotor) from SM connectivity; and
- iv. analyze the proclivity to use SM for improving learning outcomes among respondents.

The study hypothesized that:

- i. there is no relationship between the respondents' knowledge of SM and their proclivity to use SM; and
- ii. there is no significant contribution of selected variables to the respondents' proclivity to use SM.

### **METHODOLOGY**

The study was conducted in Oyo State, an inland state in southwestern Nigeria, with Ibadan as its capital (Nenge, 2019). The state is divided into 33 Local Government Areas and has a projected population of 7,976,100 in 2022 (National Population Census, 2022). It is bordered by Kwara State, Osun State, Ogun State, and the Republic of Benin. Oyo State is known for being the site of the first university in Nigeria, the University of Ibadan, which was established in 1948 and later converted into an autonomous university in 1962 ([www.ui.edu.ng](http://www.ui.edu.ng)). The state has two state universities, Ladoke Akintola University of Technology and First Technical University, seven private universities, and several polytechnics (Olusegun, 2021).

The population of this study consists of all tertiary agricultural students in Oyo State. A multi-stage sampling procedure was used. In the first stage, respondents were purposively selected from four agricultural tertiary institutions in Ibadan, Nigeria given the presence of large agricultural students. The institutions included the University of Ibadan, Ladoke Akintola University of Technology, the Federal College of Animal Health and Production Technology, and the Federal College of Agriculture, Ibadan. Each institution had six agricultural departments. In the second stage, 50% of the departments were randomly selected from each school. The final stage involved obtaining the total number of penultimate and final-year students in each department, followed by a random sampling of 10% of the total number of students in each selected department, giving a total number of 210 sampled students. Primary data was collected using questionnaires and analyzed using frequency count, percentage, mean, Pearson Product Moment Correlation, and linear regression at  $\alpha 0.05$ .

Tertiary agricultural students' proclivity to utilize SM for improved learning outcomes was measured on a 3-point Likert-type scale with response options of "Very willing", "Somewhat willing", and "Not willing", having been assigned scores of 2, 1, and 0, respectively. The maximum, minimum, mean, and standard deviation scores were determined. The proclivity to utilize SM was determined using the mean score as the benchmark. Respondents with scores below the mean were categorized as having a low proclivity to use SM, while those with scores equal to or above the mean were categorized as having a high proclivity to use SM for improving learning outcomes.

### **RESULTS AND DISCUSSION**

#### **Socioeconomic characteristics**

The socio-economic characteristics result of the respondents in Table 1 show that most (61.1%) of the students were female. This implies that more female agricultural students are dominant in the area and are more inclined to acquire a tertiary education than their male counterparts, who might be more inclined to do business. The average age of the respondents was  $24 \pm 4$  years, implying that a reasonable proportion of the respondents are in their productive age, active, and have the strength to learn the skills and use social media for improved outcomes. This is in line with Popoola (2014) who found that 68.9% of Mass Journalism students in Oyo

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State were between the ages of 21-25 years. The result further reveals that 90.9% were single, implying that the respondents are still young adults who have not come of age to bear the responsibility of marriage. This conforms with Mangden and Diyoshak (2023) who found that 84.4% of students in Jos were single. The respondents' average household size was  $6\pm 3$  persons. This indicates that a significant number of the students come from modest to medium-sized households. Most (68.8%) of the students depended on their parents/guardians for their source of income. To a large extent, the respondents' income source determines their level of income and has significant implications for their financial stability. It indicates that depending solely on parents for financial support may limit students' ability to fully engage in extracurricular activities, access academic materials, or participate in internships and job opportunities that require financial investment. This finding is in line with Ukegbu et al. (2019) who in their study of food insecurity and associated factors among university students found that 87.9% of students receive their income from their parents/guardians. In addition, the mean monthly income of the respondents was  $\#30,418.27\pm 56322.51$ . This suggests that many students in the study area may come from low-income families and may have limited access to resources needed to support their academic pursuits. Ukegbu et al. (2019) also affirm this as they found that most students in the Southeast are low-income earners.

**Table 1: Distribution of respondents by socioeconomic characteristics (n=208)**

Variable	Category	Frequency	Percentage	Mean $\pm$ SD
Sex	Male	127	61.10	
	Female	81	38.90	
Age ( in years)	<20	3	1.50	
	20-23	97	46.60	24 $\pm$ 4 years
	24-27	88	44.20	
	28-45	16	7.70	
Marital status	Single	189	90.90	
	Married	19	9.10	
	Tradition	1	0.50	
Household size	2-5	113	54.3	
	6-10	89	42.8	
	11-15	3	1.4	6 $\pm$ 3
	16-20	2	1.0	
	21-25	1	0.5	
Source of income	Parants/guardian	143	68.8	
	Benefactors	7	3.4	
	Personal savings	58	27.9	
Monthly income (#)	5000-20000	138	66.3	#30,418 $\pm$ 56323
	20001-40000	42	20.2	
	40001-60000	15	7.2	
	60001-80000	2	1.0	
	>80000	11	5.3	

**Source: Field survey, 2023**

### Knowledge of social media

Results in Table 2 provide data on the student's knowledge of social media, which includes their knowledge of social media platforms, characteristics of social media accessibility, and the uses of social media. The findings show that the majority (99.5%)

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of the respondents were knowledgeable about social media platforms. On one of the uses of social media, 90.4% of the respondents reported knowing the uses of social media for various purposes. The majority (92.3%) were aware of the requirements required or not required before using social media, and the majority (94.7%) were aware of the devices that could be used to access social media. In addition, 90.4% of the respondents knew the various uses of YouTube as one of the prominent social media platforms, while 82.2% knew the social media platforms that could be used to engage students in teaching and learning. The findings imply that social media is a potential tool for engaging students in teaching and learning. This conforms with the studies suggesting that social media platforms can be used as a medium for student engagement and delivering educational content, including videos and tutorials (Mext et al., 2011; Cathala et al., 2021).

**Table 2: Distribution of respondents on their Knowledge of social media**

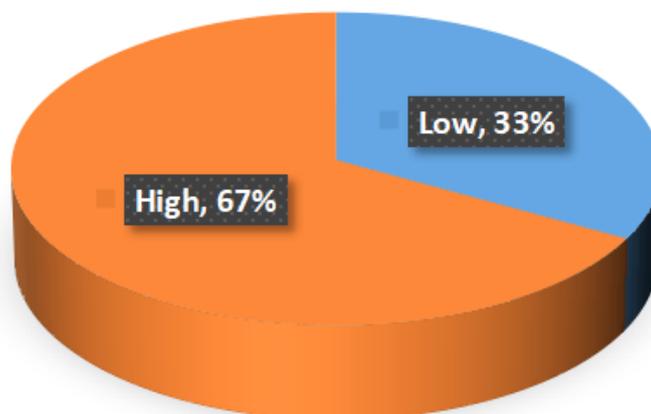
Knowledge questions	Correct F (%)
List three examples of social media platforms known to you.	207 (99.5)
One of the uses of social media is?	188 (90.4)
Which of these is not needed before using social media?	192 (92.3)
I can access social media using any of the following devices except one.	197 (94.7)
YouTube is one of the prominent social media platforms used for?	188 (90.4)
Which of these social media can be used to engage in teaching and learning?	171 (82.2)

Source: Field survey, 2023

### Respondents' level of knowledge of social media

Fig. 1 shows the knowledge categorization of the students in the study area. The result shows that the majority (66.8%) of the respondents had high knowledge of social media in the area. This suggests that social media has become an integral part of the lives of the students in the study area. This high level of social media knowledge may have positive implications for students in terms of communication, networking, and access to information. However, it may also have negative implications, such as addiction to social media and reduced academic performance due to excessive use of social media (Masood et al., 2020; Chen and Xiao, 2022; Jabeen et al., 2023).

## Knowledge of Social Media



Source: Field survey, 2023

### Respondents' learning outcomes (cognitive, affective, and psychomotor)

#### Cognitive knowledge

The result from Table 3 shows that the cognitive knowledge of the respondents is divided into five sub-domains. Under the knowledge sub-domain, 88.5% of the respondents agreed to have developed the ability to identify common issues at the end of each lesson; 85.6% developed the ability to remember facts; and 84.2% developed the ability to recite learned information. On the comprehension sub-domain, 85.6% agreed to develop the ability to understand learned information; 84.1% developed the ability to interpret learned information; and 83.7% developed the ability to clarify others' understandings of learned information at the end of

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each lesson. Meanwhile, on the application subdomain, 86.5% develop the ability to apply learned materials in real life, while 84.6% agree to develop the ability to use learned materials in new situations after each lesson. Furthermore, under the subdomain, 88.0% and 82.2% agreed to have developed the abilities to develop new ideas and create new ways of solving issues, respectively, while on the evaluation subdomain, 85.1% developed the ability to interpret a given issue and 84.1% developed the ability to evaluate some given world problems. The implication of the results from Table 3 is that the majority of the respondents had high cognitive knowledge in various sub-domains, indicating that they possess important cognitive skills necessary for effective learning and problem-solving. This suggests that the teaching methods and learning materials used in the educational program are effective in enhancing the students' cognitive abilities. A study by Harris and Bacon (2019) supports this implication, as it found that the use of active learning strategies, such as problem-based learning, inquiry-based learning, and cooperative learning, can significantly improve students' cognitive skills in various domains.

**Table 3: Cognitive knowledge of the respondents**

Cognitive items	Agree (%)	Undecided (%)	Disagree (%)	Mean
<b>Knowledge: By the end of each lesson;</b>				
I develop the ability to remember facts	85.6	10.1	4.3	2.82
I develop the ability to define phenomena or terms	81.7	16.8	1.4	2.72
I develop the ability to identify common issues	88.5	10.6	1.0	2.83
I develop the ability to memorize learned information	82.7	13.5	3.8	3.02
I develop the ability to recite learned information	84.2	12.5	3.4	3.42
<b>Comprehension: By the end of each lesson;</b>				
I develop the ability to understand learned information	85.6	11.5	2.9	3.08
I develop the ability to interpret learned information	84.1	13.9	1.9	2.73
I develop the ability to clarify others on learned information	83.7	12.5	3.8	2.72
I develop the ability to explain a theory in my own way	80.3	15.4	4.3	2.66
I develop the ability to predict the outcome of a result	78.8	16.8	4.3	2.62
<b>Application: By the end of each lesson;</b>				
I develop the ability to use learned materials in new situations	84.6	13.5	1.9	2.75
I develop the ability to apply learned materials in real life	86.5	11.5	1.4	2.99
I develop the ability to demonstrate learned outcomes	82.2	13.9	3.4	2.71
I develop the ability to transfer new knowledge to others	84.6	14.9	0.5	2.76
<b>Analysis: By the end of each lesson;</b>				
I develop the ability to differentiate between phenomena or facts	78.4	17.8	3.8	2.67
I develop the ability to categorize subjects into its parts	75.5	21.2	3.4	2.59
I develop the ability to criticize others opinion	72.6	16.8	10.6	2.47
I develop the ability to compare different terms	82.2	13.5	2.9	3.01
<b>Synthesis: By the end of each lesson;</b>				
I develop the ability to put parts together	81.7	14.9	3.4	2.74
I develop the ability to design different art works	68.8	23.1	7.7	2.48
I develop the ability to construct words	78.4	18.8	2.9	2.68
I develop the ability to create new ways of solving issues	82.2	15.4	2.4	2.66
I develop the ability to develop new ideas	88.0	9.1	2.9	2.72
<b>Evaluation: By the end of each lesson;</b>				
I develop the ability to evaluate some given world problems	84.1	13.9	1.9	2.71
I develop the ability to judge value of material for a given purpose	73.6	23.1	3.4	2.58
I develop the ability to appraise my performance in a given task	83.2	13.0	3.8	2.67
I develop the ability to argue constructively on issues of discuss	79.3	13.9	6.7	2.63
I develop the ability to interpret a given issue	85.1	11.5	3.4	2.66

**Source: Field survey, 2023**

### Affective domain

Results from Table 4 show that the affective knowledge of the students was considered under four subdomains. The findings reveal that under the receiving subdomain, 83.7% of the respondents agreed to have developed the ability to listen to lectures attentively, and 83.2% developed the ability to determine awareness of feelings at the end of each lesson. On the responding subdomain, 87.0%

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agreed to have developed the ability to actively learn from friends, and 84.6% developed the ability to react actively to situations. Furthermore, under the valuing subdomain, 88.5% agreed that they developed the ability to recognize the worth of something, while 83.2% developed the ability to support ideas to increase proficiency. In addition, on the characterizing subdomain, 85.1% agreed to have developed the ability to value beliefs that influence behavior, while 84.1% developed the ability to internalize values that can control behavior. The implication of these findings is that developing affective knowledge, specifically in the subdomains of receiving, responding, valuing, and characterizing, is important in promoting holistic learning and growth in students. This aligns with recent studies that have emphasized the importance of addressing not only cognitive but also affective aspects of learning in fostering academic achievement (Blake et al., 2015).

**Table 4: Distribution of respondents based on their affective knowledge**

Affective items	Agree (%)	Undecided (%)	Disagree (%)	Mean
By the end of each lesson;				
Receiving				
I develop the ability to determine awareness of feelings	83.2	13.5	3.4	2.74
I develop the ability to determine awareness of emotions	78.8	16.8	4.3	2.68
I develop the ability to listen attentively to friends	82.2	14.9	2.9	2.66
I develop the ability to listen to lectures attentively	83.7	13.9	2.4	2.76
Responding				
I develop the ability to actively participate in classes	83.2	14.9	1.9	2.73
I develop the ability to actively learn from friends	87.0	12.5	0.5	2.79
I develop the ability to react actively to situations	84.6	14.4	2.4	2.80
I develop the ability to comply with given procedures	83.2	14.4	2.4	2.67
I develop the ability to follow directions	84.1	12.5	3.4	2.67
Valuing				
I develop the ability to recognize the worth of something	88.5	10.6	1.0	3.01
I develop the ability to express the worth of something	80.8	16.3	2.9	2.66
I develop the ability to support ideas to increase proficiency	83.2	14.9	1.9	2.67
I develop the ability to attach worth to information	81.7	16.8	1.4	2.70
Organization				
I develop the ability to create a unique value	83.2	13.9	2.9	2.69
I develop the ability to prioritize value over another	78.4	17.3	4.3	2.62
I develop the ability to arrange information	86.1	11.5	2.4	2.73
I develop the ability to elaborate information	86.1	11.1	2.9	2.72
Characterizing				
I develop the ability to internalize values that can control my behavior	84.1	12.5	3.4	2.69
I develop the ability to valuing belief that influences behavior	85.1	11.1	3.8	2.79

**Source: Field survey, 2023**

### Psychomotor knowledge

From Table 5, the majority of the respondents (85.6%) agreed that they developed the ability to convert learned outcomes into habitual action with confidence and the ability to be guided via instruction to perform a skill at the end of each lesson. In addition, 81.7% agreed that they developed the ability to engage in activities to achieve a level of proficiency, and 80.3% agreed to modify learned skills to meet the needs of special events. The implication of these findings is that the students in the agricultural sector have developed a certain level of competency and confidence in applying the knowledge and skills they have learned in their lessons to real-life situations. This suggests that the teaching approach used in the agricultural sector is effective in promoting practical application and problem-solving skills among the students. The ability to transfer learned outcomes into habitual action and modify learned skills to meet special events can be crucial in the field of agriculture, where practical skills and problem-solving abilities are highly valued. Recent studies have also emphasized the importance of practical application and problem-solving skills in education. For instance, Mustaffa, et al. (2016) claimed that problem-based learning models are crucial for the growth of students' cognitive and affective domains as well as their ability to solve mathematical problems because they motivate students to learn new information before attempting to solve the given problem.

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**Table 5: Distribution of respondents based on their psychomotor knowledge**

Psychomotor items	Agree(%)	Undecided (%)	Disagree (%)	Mean
By the end of each lesson I develop the ability to:				
convert learned outcomes into habitual action with confidence	85.6	13.5	1.0	2.79
imitate a displayed behavior	71.2	19.2	9.6	2.52
utilize trial and error	75.0	19.7	5.3	2.53
skillfully perform complex patterns of actions	76.0	19.2	4.3	2.90
modify learned skills to meet special events	80.3	16.8	2.9	2.64
apply sensory information to motor activity	77.9	19.2	2.9	2.63
type a report on a computer or phone without looking at the keyboards	63.9	22.1	13.9	2.36
feel ready to act	73.6	21.2	5.3	2.53
engage in activities to achieve a level of proficiency	81.7	14.9	3.4	2.65
create new movement patterns for a specific situation	77.9	16.8	5.3	2.58
be guided via instruction to perform a skill	85.6	11.5	2.9	2.73

**Source: Field survey, 2023**

### Overall learning outcomes of the respondents

Table 6 below reveals that the majority of the students (61.1%) have high learning outcomes. The implication of the high overall learning outcomes among the students in the study area is that the educational interventions implemented in the agricultural education program were effective in enhancing students' knowledge and skills. The high learning outcomes can contribute to the student's academic success and increase their employability in the agricultural sector. This is in line with a meta-analysis study by Deslauriers, Schelew, and Wieman (2019), who found that active learning interventions in science, technology, engineering, and mathematics (STEM) courses led to increased learning outcomes and reduced failure rates compared to traditional lecture-based teaching. These findings suggest that the use of effective educational interventions can significantly improve students' learning outcomes and promote their academic success.

**Table 6: Overall level of learning outcome among respondents**

Overall level of learning outcome	Freq.	%	Min.	Max.	Mean	SD
Low	81	38.9	106.00	224.00	162.37	16.74
High	127	61.1				

**Source: field survey, 2023**

### Proclivity to use social media for improved learning outcomes among respondents

Result 7 shows that most of the respondents (95.7%) were willing to use social media to share new ideas with colleagues and 92.3% to download resource materials. In addition, 89.9% were willing to get enough information on a topic and to carry out research activities, respectively, using social media. This finding suggests that social media can be an effective tool for sharing information and resources among colleagues and for conducting research activities despite the cost of a subscription. Furthermore, the results suggest that social media can be an important platform for enhancing collaboration and knowledge-sharing among educators, which can ultimately contribute to improved teaching and learning outcomes. This finding is supported by the study of Rasheed et al. (2020), who discovered significant connections between the usage of social media by research students and their involvement and originality in the field. Their research indicates that social media use may foster more creativity and engagement among students throughout their research training. Furthermore, the result from Table 7 shows that the majority of the respondents (55.3%) were not willing to use SM if it exposes their privacy, while 43.3% were not willing to use SM if it could lead to cyberbullying. This finding is consistent with past studies including that of Rasheed et al. (2020) who found that cyberbullying lowers the usage of SM by students.

**Table 7: Proclivity to use SM for improving learning outcomes among respondents**

Proclivity to use social media	VW %	SW %	NW %	Mean
Will you be willing to use SM;				
to share new ideas with colleagues?	95.7	3.8	0.5	1.95
to carry out research activities?	89.9	9.6	0.5	1.89
even if it distracts you from your studies?	33.2	33.7	33.2	1.00

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to engage in group discussions with colleagues?	83.2	10.1	6.7	1.76
to download resource materials?	92.3	5.3	1.9	2.00
even if it can lead to cyberbullying?	34.1	22.6	43.3	0.91
even if it is time and space-consuming?	35.6	37.0	27.4	1.08
to strengthen interpersonal skills?	83.2	9.6	7.20	1.76
in order to watch educational videos?	87.0	9.1	3.8	1.83
to get enough information on a topic?	89.9	8.7	1.4	1.88
as a complement to traditional teaching methods?	78.4	15.9	5.8	1.73
even if it exposes your privacy?	27.4	17.3	55.3	0.72
to improve reading abilities?	82.7	10.1	7.2	1.75
even if it leads to internet addiction?	34.1	26.0	39.9	0.94
to reduce the cost of buying books?	80.3	10.1	9.6	1.71
even if it reduces face-to-face interaction among peers?	49.5	36.5	13.9	1.39
even if it weakens your writing abilities?	30.8	27.9	41.3	0.89
for its interactivity?	80.8	13.9	5.3	1.75
even if it costs money for a subscription?	57.2	33.2	9.6	1.48
in order to acquire new skills?	88.0	8.7	3.4	1.85

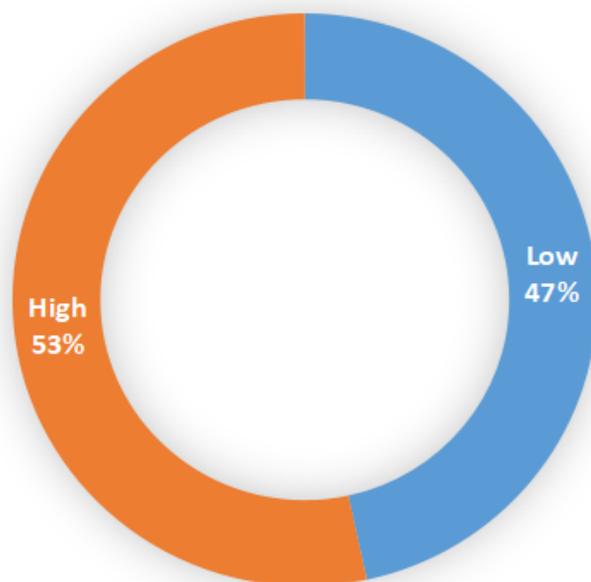
Source: Field survey, 2023.

VW= Very willing, SW= Somewhat willing, NW=Not willing

**Level of willingness to use social media among respondents**

Figure 2 shows a high level of willingness among the respondents (53.4%) to use social media for improving learning outcomes in the study area. This could be given that the respondents are knowledgeable and familiar with the use of social media, including the high benefit they derive from using it for learning. The finding also implies that social media can be a valuable tool in promoting effective teaching and learning. This finding is consistent with the theory of gratification and previous studies that have highlighted the potential benefits of social media in education. For example, Manca and Ranieri (2016) found that the use of social media in higher education can enhance students' engagement, participation, and collaborative learning.

**Fig. 2: Level of willingness to use social media among respondents**



Source: Field survey, 2023

**Hypotheses**

**Relationship between the respondents' knowledge of SM and their proclivity to use SM**

Data shown on Table 8 indicates no significant relationship ( $r = 0.025, p > 0.05$ ) between the respondents' knowledge of social media and their willingness to use it. The lack of a strong correlation between social media knowledge and willingness to use it suggests that even those with only a basic understanding of social media may be willing to use it for a variety of purposes.

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**Table 8: Relationship between the respondents' knowledge of SM and their proclivity to use SM**

Variable	r-value	p-value	Decision
Knowledge	0.025	0.720	Not significant

Source: Field survey, 2023

### Hypothesis 9: Test of the contribution of selected variables to the respondents' proclivity to use SM

The result in Table 9 shows a negative and significant contribution of age to the respondents' willingness to use social media ( $\beta = -0.287, p < 0.05$ ). This indicates that as respondents advance in age, their proclivity to use social media for learning decreases. This finding is supported by Hruska and Maresova (2020), who investigated the Use of Social Media Platforms among Adults in the United States and discovered that as people get older, their use of social media decreases.

On the other hand, the result in Table 4.9.7 also shows that sex ( $\beta = -0.130, p > 0.05$ ), marital status ( $\beta = -0.036, p > 0.05$ ), and monthly income ( $\beta = -0.029, p > 0.05$ ) have no significant contribution to the respondents' willingness to use social media. This suggests that these demographic variables may not be important factors to consider when promoting the adoption of social media for educational purposes. In addition, the findings in Table 4.9.7 reveal that knowledge has no significant contribution ( $\beta = 0.026, p > 0.05$ ) to the proclivity to use social media among the respondents. The lack of a significant contribution of knowledge to the proclivity to use social media for learning implies that respondents don't need high knowledge of social media before they can use social media. Moreover, the overall benefit of the respondents, which was expected to be a predictor, has an insignificant effect on their proclivity to use social media ( $\beta = -0.039, p > 0.05$ ). This could be because the respondents use SM for several other purposes other than for learning which could also influence their use of it.

**Table 9: regression analysis of selected independent variables contributing to proclivity to use social media**

Variables	$\beta$ -value	t-value	p-value	Decision
Age	-0.287	-3.499	0.001	Significant
Sex	-0.130	-1.892	0.060	Not significant
Marital status	-0.036	-0.447	0.636	Not significant
Monthly income	-0.029	-0.389	0.698	Not significant
Knowledge	0.026	0.376	0.707	Not significant
Overall benefit	-0.039	-0.561	0.575	Not significant
R= 0.340				
R <sup>2</sup> = 0.116				
Adjusted R <sup>2</sup> = 0.089				
Standard Error = 5.257				

Source: Field survey, 2023

## CONCLUSION AND RECOMMENDATIONS

The respondents were more willing to use SM for improved learning outcomes in Oyo State, Nigeria. The government and policymakers should create guidelines and recommendations for educators on how to integrate social media platforms into their teaching methods to improve learning outcomes.

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