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Social Media and Academic Performance: A Survey Research of Senior Secondary School Students in Uyo, Nigeria

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Abstract. The study examined the effect of social media (SM) on the academic performance (AP) of senior secondary school (SSS) students in Uyo, Akwa Ibom State, Nigeria. Four objectives served as the study's guiding principles, and these were followed by research questions and hypotheses. A descriptive survey research design was used for the investigation. Using a simple random sampling technique, 200 students were selected as a sample from four SSSs in Uyo, Akwa Ibom State, Nigeria. A four-point Likert scale survey was used to poll the participants. The study questions were analysed using descriptive statistics such as frequency counts and percentages, whereas the null hypotheses were tested using chi-square, t-test, and Pearson product-moment correlation. Findings revealed that a large percentage of students are addicted to SM, with no significant differences in usage between boys and girls. It was also found that there is a link between SM addiction and

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a student's AP. In order to prevent students from falling behind academically, it is suggested that SM be used for educational purposes, that social networking sites (SNSs) be launched with new pages developed to effect academic activities, and that teachers and parents monitor students' use of these sites. This is recommended in an effort to balance students' SM usage and their academic goals. The study will aid students in learning more about the impact of SM and networking sites on their AP. It will also provide students with useful information for research and studies, as well as objective perspectives and a sense of balance. Significantly, the study will assist parents in becoming more aware of the potential influence and effect of SM on their children.

Keywords: academic performance; social media effectiveness; student; senior secondary school; teaching and learning

1. Introduction

Communication is as old as humanity and essential to human survival (Ladrón et al., 2022). Hence, humankind always seeks to satisfy this basic need as social beings through interpersonal or mass communication. Today, many live in a global village because of the various breakthroughs in information technology. The universe is now a global community as the world has been reduced to a sole electronic chat room (Mouratidis & Papagiannakis, 2021; Nwankwo & Ukhurebor, 2020).

Technology and social media (SM) have permeated the majority of people's lives, businesses, academic institutions, and the world at large The debut of social networking sites (SNSs) coincided with the birth of the Internet in the 1990s, which resulted in significant changes in global communication (Aznar-Díaz et al., 2020; Boyd & Ellison, 2007). The Internet is now the most essential source of knowledge, while the growing importance of SM use among students should not be overlooked (Castellacci & Tveito, 2018).

The world today is achieving improvement in communication technology with a broadened scope of communication (Chang, Tu, & Hajiyev, 2019). It is a well-known fact that modern technology in communication has impacted and influenced the global world positively; yet, we must not be oblivious to its negative influences (Gómez-Fernández & Mediavilla, 2021; Ladrón et al., 2022). Positively, it enhances good speech and information dissemination, keeps people aware of global happenings and events, and helps solve problems in the immediate environment (Zhou et al., 2020). SM/networking platforms include Yahoo Messenger, Google Talk/Messenger, Facebook, Twitter, Telegram, Snapchat, Skype, WhatsApp, WeChat, among others (Çebi & Güyer, 2020; Chang et al., 2019; Castellacci & Tveito, 2018; Feng & Wong, 2019; Fernández-Gutiérrez et al., 2020; Hou et al., 2021). Mostly, these media are used for interactions among friends and associates.

The advent of technology (the Internet) has significantly enhanced the medium of communication among third-world countries at present (García-Martín & Cantón-Mayo, 2019). As a result, many are connected to the numerous networking sites and online communities of Internet users seeking to interact or

communicate with other users on important issues, whether academic, business or personal (Gómez-Fernández & Mediavilla, 2021; Nwankwo & Ukhurebor, 2020). Academic performance (AP), in some ways, reflects one's level of learning, or the extent to which the teaching and learning process has been accomplished (Gómez-Fernández & Mediavilla, 2021; Kates et al., 2018; Ladrón et al., 2022; Liu et al., 2017). This is mostly measured by continuous assessment or examination. Owing to the importance of academic achievement in an individual's life, many seek better ways to enhance their performance academically; thus, the need for the role of SM in institutions of learning (Ladrón et al., 2022). Moreover, there is a strong and direct relationship between SM usage and the AP of students in secondary schools. However, the relationship, depending on the students' usage, has also led to many setbacks and the development of SM's negative impact on AP (Chang et al., 2019; Ladrón et al., 2022). SM and online networking sites are principally meant to complement users' interactions with tutors, teachers, other students, or other sources of information to provide assist academic assistance (Fernández-Gutiérrez et al., 2020; García-Martín & Cantón-Mayo, 2019; Gómez-Fernández & Mediavilla, 2021). However, some students and users leave the area of focus to visit other heinous websites in order to distract themselves with undesirable activities. Some users even get negatively addicted to SM, which is also extreme. Many students today have SM accounts. They preoccupy themselves with these, which leads to their poor AP, for which the teachers are blamed. "Facebook frenzy" also needs consideration (Nneji, et al., 2022; Oche & Aminu, 2010).

According to Lau (2017), many students nowadays are so engrossed in SM that they are constantly online, even in the classroom or library, chatting away at times that could have been used for studies and production activities. This is why many students face setbacks in their AP. In addition, these SM sites have a significant impact on their behaviour in school and in society. For example, their mode of writing is greatly affected as many students now transfer the use of abbreviations and short forms in SM text messages to their classroom work and examinations. The use of some undefined terminologies and poor word choices is increasing. Hence, their AP suffers, causing gaps in their development (Lei et al., 2021).

Nonetheless, it is a fact that not many students are aware of the opportunities that SM and networking sites offer for teaching and learning activities (Ladrón et al., 2022). Alt (2018) maintained that SNSs significantly occupy students' attention and divert it from academic learning to non-academic exercises such as movies, frivolous chat, and useless games. However, Azizi et al. (2019) and Liccard et al. (2022) contended that students are socially connected to one another for the purpose of sharing their day-to-day learning, experiences, and discussions on meaningful academic topics relating to their school subjects.

However, despite the negative influence of SM on students' AP, SM has a more positive influence and role on the AP of the students who have access to them as these enable the students' interpersonal encounters with people of great learning and other worthwhile materials and sources of learning, thereby building on their AP (Azizi et al., 2019; Ladrón et al., 2022). Obviously, technological advancements have played key roles in reshaping human activities, especially in communication.

SM, as one of the various means of human communication and interaction with one's fellows and the world through the use of computers and Internet facilities, has turned the world into a global village (Nneji et al., 2022). It has been observed that students devote more attention and time to SM than they do to their studies. A study conducted recently by Ladrón et al. (2022) revealed that incessant media use continues to lower AP, lower self-esteem, and reduce interest in college-oriented careers. A major advantage of SM, which is to provide information, is being ignored, while less advantageous uses, which include cyber-bullying, cyber theft, and entertainment are the order of the day for students; thus, the focus/ of this research study (Oguguo et al., 2020; Omachonu & Akanya, 2019).

It was observed globally that SM, even with much evident success recorded in the academic world since its advent in the late 1980s, has posed some negative challenges to the learning process (Abdalla et al., 2020; Agwi et al., 2018; Al-Yafi et al., 2018; Bekalu et al., 2019; Kolhar et al., 2021). The distractions, bad influence, laziness, and overdependence caused by these SM sites are fast becoming serious threats to students' AP (Oguguo et al., 2020; Omachonu & Akanya, 2019). Nowadays, many students pay less attention to academic activities, prefering to spend more time on SM and networking sites (Okeke & Anierobi, 2021; Zou, et al., 2019). Hence, this research study seeks to examine SM as a whole and determine its effects on the AP of SSS students in Uyo, Akwa Ibom State, Nigeria, with the following objectives: (1) to identify the various ages of SSS students utilizing SM; (2) to determine the gender of SSS students who use SM; (3) to determine the extent to which SSS students use SM; and (4) to determine whether SM influences the AP of students.

Specifically, this study sought answers to the following research questions:

- 1) To what extent do SSS students in Uyo use SM networks?
- 2) Is there any difference in the usage of SM networks between male and female SSS students in Uyo?
- 3) To what extent does the usage of SM networks influence the AP of government SSS students?
- 4) To what extent do SM networks influence the AP of SSS students in Uyo?

2. Related Studies

There are presently several studies as regards SM and AP (Alt, 2018; Azizi et al., 2019; Chang et al., 2019; Ladrón et al., 2022; Lau, 2017). However, there are a few concerns with SSS students and interpersonal connections and site cooperation. Conversely, there may be advantages for these students who use these destinations wisely and suitably (Çebi & Güyer, 2020). Other research suggests that when SSS or college students are overly influenced by the Internet and long-distance informal contact platforms, there are apparent concerns (Feng & Wong, 2019). The most frequently used online media networks among students were found to be personal communication sites (Chang et al., 2019). On a daily basis, students are drawn to various online platforms (Koca & Berk, 2019). They spend more time on Facebook, Twitter, and other web-based media via personal digital assistants (PDAs), which currently abound among these young people (Koca & Berk, 2019). Even in the midst of other activities, such as instructional and professional pursuits, a large number of students can hardly go two or three hours

without monitoring and refreshing their profiles on these informal networks (Koca & Berk, 2019). PDAs, Android phones, iPhones, and tablets are thought to be the most common ways for students to acquire simple web access and participate in various web-based media network activities (Koca & Berk, 2019).

Ismail (2021) examined how social media affects teenagers' lifestyle choices and educational practices. Despite the harmful effects that social media have on youth, he claimed that it is impossible to imagine today's world without social media. Given the importance of social media in adolescents' daily lives, it is therefore necessary to have a deeper knowledge of how technology influences their social relationships.

In a recent study by Kolhar et al. (2021) it was found that the majority of students used social networking sites. They were unable to concentrate on their academic tasks because of their extensive usage of social media for non-academic purposes. Additionally, they delayed going to sleep, which led to shorter sleep cycles. Furthermore, their research revealed that excessive social media use weakens interpersonal relationships. They contended that this has a negative impact on social well-being and may cause dejection, anxiety, and mood swings. Additionally, persistent sleep deprivation, which is a major contributor to the emergence of illnesses associated with the metabolic syndrome, can result from the late-night social media use that was noted in this study.

Numerous studies have shown that owing to the misuse of social networking websites and applications, students routinely perform poorly academically (Agwi & Ogwueleka, 2018; Apuke, 2016; Bamigboye & Olusesan, 2017; Kolhar et al., 2021; Ngonso, 2019; Oguguo et al., 2020; Omachonu & Akanya, 2019). This has developed into an important recurring source of concern for students, teachers, parents, and guardians, as well as other parties interested in the field of education, such as researchers. Additionally, if this problem is not appropriately addressed, poor academic performance may deteriorate even further. According to most of the research on the subject, the number of high school students who communicated through these online media networks is relatively small (Feng & Wong, 2019; Ngonso, 2019).

The majority of Nigerian SSS students access at least one person-to-person communication site numerous times every day. Because of the impact that web-based media may have on students' academic performance, cell phones have been banned from study halls, and colleges have banned numerous well-known web-based media sites. Following that, this study investigated the habit-forming nature of SSS students' use of web-based media, how frequently they use them, what they use them for, and how this impacts their scholastic performance as part of this inquiry project. Since much research has revealed a difference in SNS's interest based on gender orientation as well as age, an examination was conducted among both SSS male and female students. Therefore, it was believed that there would be a higher level of agreement regarding optional school attendance in the studied area if people could adjust to the existence of one-on-one communication and scholastic performance.

Based on these presumptions, the purpose of this study is to determine the degree to which SSSs use social networking websites and applications to inform their AP. Hence, this study has implications for students, instructors, and parents. The study will aid students in learning more about the impact of SM and networking sites on their AP. It would provide students with useful information for research and studies, as well as objective perspectives and a sense of balance. Significantly, the study will assist parents in becoming more aware of the potential influence and effect of SM on their children. As a result, they must do everything possible to guide them. Also, the study would help the school teachers to know the possible influence that SM has on the students, thereby equipping them with the necessary information on how to create awareness among students.

3. Methodology

3.1 Research Design

The study involved the collection of opinions from respondents, using a descriptive survey research design. When conducting research on a large population, a survey design is utilized (Castellacci & Tveito, 2018). Therefore a survey design was employed so as to draw a fair representative sample for the purpose of generalization based on the number of SSSs in Uyo. The descriptive method was used because it is the most appropriate method for such a study.

3.2 Population, Samples, and Sampling Technique

All SSS II students studying public governance in Uyo in the 2020/2021 sessions were included in the study, which had a population of two thousand and five hundred (2,500) students. The schools and students were chosen using a random sampling procedure. A progressive quota sampling method was used to obtain the sample size for the study; this method enables the researcher to study a reasonable portion of the population. A total of two hundred (200) students from four (4) SSs were selected as the study sample. The method was chosen because it ensures that every member of the population has an equal chance of being chosen and reduces the risk of bias during the selection process.

3.3 Instrument for Data Collection

To acquire the necessary information from the students, a well-constructed and self-developed questionnaire entitled SM and AP of Students Offering Government in the selected SSS schools was employed. There were two sections to the questionnaire (A and B). Section A focused on gathering information on the respondents' personal (demographic) data, whereas Section B comprised questions that would elicit replies from the respondents. On a four-point Likert scale (which is most appropriate because it makes it easy to report one number simply and directly without misrepresentation), respondents were asked to rate their responses: Strongly agree (SA), Agree (A), Disagree (D), or Strongly disagree (SD).

3.4 Validity and Reliability of the Instrument

The validity of the instruments was established. A copy of the instrument was submitted to the project supervisor and two experts in measurement and evaluation for professional and expert scrutiny for both face and content validations. After vetting, observations and suggestions were made and used to

effect corrections. Again, items were modified before the questionnaires were administered to respondents.

A split-half test was used to verify the research instrument's reliability, with odd and even-numbered objects forming the two halves. The two halves were given to thirty (30) students from the population who had not been chosen for the main study but were nonetheless included in the study's population. The Pearson product moment-correlation coefficient was employed to assess the instrument's dependability. The research instrument was found to be dependable with a coefficient of 0.85. As a result, it was used to obtain the information necessary for the study (Ngonso, 2019).

3.5 Procedure of Data Collection

Two hundred (200) copies of the questionnaires were administered by hand (physically) at all the schools selected for the study. The students, following the instructions given in the questionnaire, supplied the relevant answers to the questions freely. This method ensured correct completion; one hundred and sixty-eight (168) questionnaires were retrieved and their responses compiled and analysed at a 0.05 level of confidence.

3.6 Method of Data Analysis

The null hypotheses were assessed with an independent t-test at a 0.05 level of significance, whereas the survey questions were addressed using mean and standard deviation.

4. Analysis and Discussion of Results

The information presented in this section was generated using a questionnaire and achievement test. The data are presented in tables for easy interpretation and understanding. As stated previously, out of two hundred (200) copies of questionnaires and achievement tests distributed, one hundred and sixty-eight (168) were returned and considered valid for this study. The study's findings are provided in light of the research questions and hypotheses.

4.1 The Extent of SM Networks Use among Students

Table 1 shows the students' usage of SM network.

Table 1: Mean (\bar{X}) analysis on the extent of usage of SM network

S/N	Items	SA	A	D	SD	X	Remarks
1	Many of my classmates are on different SNs	62	88	12	6	3.2	Agreed
2	I also have a SM account	82	60	14	12	3.3	Agreed
3	I always log into my account every day	55	79	20	14	3.0	Agreed
4	I spend at least two hours online every day	64	74	21	9	3.1	Agreed
5	Facebook is the first and last thing I do every day	34	68	25	41	2.6	Agreed
	Average Score	59	74	18	17	3.04	Agreed

The result in Table 1 reveals that most of the respondents agreed that many of their classmates have SM accounts. They also agreed that they themselves own a SM account, and many of them log in to their account every day. They indicated that they spend at least two hours every day online, and many also indicated that Facebook is their first and last activity every day. The average mean of 3.04 reveals that secondary school students use SM networks every day.

4.2 Gender Differences in the Use of SM Networks

Table 2: Mean (\bar{X}) analysis of differences by gender in the use of SM

S/N	Items	Sex	SA	A	D	SD	$\bar{\mathbf{X}}$	Remarks
1	More girls have multiple Facebook	Male	40	34	8	5	3.3	Agreed
	accounts than boys	Female	14	24	28	15	2.4	Disagreed
2	Boys are more frequently found	Male	14	16	25	32	2.1	Disagreed
	online than girls	Female	18	26	18	19	2.5	Agreed
3	Boys only go online if their friends	Male	26	34	16	11	2.9	Agreed
	request it	Female	12	16	24	29	2.1	Disagreed
4	Girls post more information than boys	Male	41	35	7	4	3.3	Agreed
		Female	21	28	15	14	2.8	Agreed
5	Both boys and girls use SM equally	Male	14	16	26	31	2.2	Disagreed
		Female	34	40	5	8	3.4	Agreed
	Average	Male	27	27	16	11	2.8	Agreed
		Female	20	27	18	16	2.6	Agreed

The results in Table 2 show that boys agreed that girls have more Facebook accounts than boys; however, the girls disagreed. The boys disagreed with always being online, while the girls agreed. The boys agreed they go online only when requested to; the girls disagreed with that. Both boys and girls agreed that girls post more personal information than boys do. The girls believed that boys use SM as much as girls do, while the boys refuted this. In the end, the mean score shows that both genders use SM networks with no noticeable gender differences.

4.3 Influence of SM Network usage on SSS Student Academic Performance

Table 3: Mean (\bar{X}) analysis on influences of SM usage on AP

S/N	Items	SA	A	D	SD	$\bar{\mathbf{X}}$	Remarks
1	Students spend much time on SM	52	58	32	26	2.8	Agreed
2	They abandon their books to chat with friends	54	66	28	20	2.9	Agreed
3	Students spending time online do not have time for books	48	56	42	22	2.8	Agreed
4	Chatting for long makes students fail exams	40	62	38	28	2.7	Agreed
5	Students even chat during classes	38	54	49	27	2.6	Agreed
	Average	46	59	38	25	2.8	Agreed

The results depicted in Table 3 show that the respondents agreed that they spend much time on SM chatting with friends and do this to the detriment of educational pursuits. The respondents indicated that when they often spend time online, their academic work suffers as some are distracted by Internet chatting while lessons are in progress. This certainly affects their academic performance negatively.

4.4 The extent of the Influence of SM Networks on Academic Performance of SSS Students

Table 4: Mean (\overline{X}) analysis on the achievement test results of SSS students

Range	Frequency	Mid-point (X)	FX	D2
1-20	26	10.5	273	13.6
21-40	88	30.5	2684	-6.4
41-60	36	50.5	1818	-26.4
61-80	16	70.5	1128	-46.4
81-100	2	90.5	181	-66.4
Total	168	252.5	6084	-132.1

The results in Table 4 show that 26 students scored less than 21 %, 88 scored between 21-40%, 36 scored between 41-60%, 16 scored between 61-80%, and only 2 scored above 80%. The mean score of 24.1% is less than the average mark of 15% and the pass mark of 40%, indicating that most of the students failed the test.

4.5 Analysis of the Hypotheses

4.5.1 Usage of SNs among SSS Students

 H_{o1} : There is no significant usage of SNs among SSS students in Uyo. This hypothesis is tested using the chi-square statistical tool at a 0.05 level of significance, and the result is presented in Table 5.

Table 5: Chi-square summary test on the level of usage of SM network

Option	F_0	F_{e}	X ² -cal	x-2-crt	Remark
Strongly Agreed	59	42	59.85	7.82	Significant
Disagreed	74	42			
Strongly Disagreed	18	42			
Disagreed	17	42			
Total	168	168			

df =3; p<.0.5.

The results in Table 5 show that the chi-square calculated value of 59.85 is greater than the chi-square value of 7.82 at a 0.05 level of significance and a degree of freedom of 0.05 level of significance. This result is significant. Hence, the null

hypothesis is rejected, meaning there is significant use of SM networks among SSS students in Uyo.

4.5.2 Difference between Male and Female SSS Students in their Level of Usage of SM Networks

 H_{o2} : There is no significant difference between male and female SSS students in their level of usage of SM networks in Uyo.

This hypothesis is tested using the t-test statistical tool, and the result is presented in Table 6.

Table 6: T-test analysis on the differences in level of usage of SM

Variables	N	Х	SD	DF	T-cal	t-test	Decision
Male	87	13.8	132.1	166	0.08	1.98	Significant
Female	81	13.2	144.6				

df= 166<; n=168

The results in Table 6 show that the t-test calculated value of 0.08 is less than the t-test critical value of 1.98 at a 0.05 level of significance and 166 degrees of freedom. This result is significant. Hence, the null hypothesis is retained, indicating that there is no significant difference between male and female secondary school students in their level of usage of SM networks.

4.5.3 Relationship between SM Use and AP among SSS Students

 H_{03} : In Uyo, there is no correlation between SM use and AP among SSS students.

The Pearson's product-moment correlation is used to test this hypothesis, and the results are shown in Table 7.

Table 7: Test of relationship

Variable	N	X	SD	DF	T-cal	t-test	Decision
SM network	168	1685	28403	166	0.77	0196	0.196
AP	168	5100	292650				

df= 166; p<.05; n =168

Table 7 indicates that at a 0.05 level of significance and 166 degrees of freedom, the t-calculated value of 0.77 is greater than the t-critical value of 0.196. This is a significant result. As a result, the null hypothesis 3 is rejected, while the alternative hypothesis is kept. This suggests that there is a link between SM network usage and secondary school students' academic achievement in Uyo.

5. Discussion of Results

5.1 Level of Usage of SM Network among SSS Students

Secondary school students use SM networks in substantial numbers, according to the findings of this study. Some students said they have many accounts and spend at least two hours per day on SM, further indicating that SM is the first and last thing they do every day. The findings of this study support the assertions of Çebi

and Güyer (2020) and Ellison et al. (2007) that SM, which began as a hobby for a few computer-savvy people, has evolved into societal norms and a way of life for people globally. Similarly, according to García-Martín and Cantón-Mayo (2019) and Vaughn (2008), teenagers have fully embraced SM as a means of communicating with friends, sharing information, reinventing themselves, and showcasing their social life. As a result, these groups in our communities are increasingly using these media.

5.2 Gender Differences in the Level of Usage of SM Network

The second finding in this study reveals that, although boys perceived girls as being the greater users of SM networks, boys often use SM networks as much as girls do. The study found no significant differences in SN usage between boys and girls, as both genders have multiple accounts and spend at least two hours per day online. This result affirms the earlier reports of Geash and Haralambous (2009) and Ladrón et al. (2022), which stated that boys and girls own SM accounts, though the reasons for the accounts may vary based on gender. Girls have an SN account primarily to reinforce pre-existing friendships, while boys use it for flirting and making new friends. The findings also corroborate the observations of García-Martín and Cantón-Mayo (2019) and Merten and Williams (2019), namely that girls are more likely than boys to use SM to share relationship problems, despite spending nearly the same amount of time on these social networking sites (SNSs).

5.3 Social Network Usage and AP of Students

According to the study's findings, there is a significant relationship between students' use of SM and their AP. The results reveal that students spent much time on SNs; this may have been responsible for the poor performance on the test as the overall performance of the students was poor with a mean of 24.10%, which was below the pass mark. Very few students were able to score above 50%. This finding supports the assertion of Ladrón et al. (2022), namely that SM users frequently experience low AP because SM is negatively connected with student academic achievement. Similarly, Azizi et al. (2019), Chang et al. (2019) and Lau (2017) found that SM users devote less time to their studies than non-users, resulting in lower school scores.

The results revealed the following summarized major findings: (1) SSS students in Uyo significantly use SM networks, some owning multiple accounts and spending more than two hours per day on such networks; (2) there is no significant difference between boys' and girls' levels of usage of SNs except for the type of information that each shares; and (3) owing to the significant way these students use SM, their AP has been negatively impacted, with many of them failing examinations.

4. Conclusion and Recommendations

The study examined the influence of SM on the AP of students in government SSS in Uyo, Akwa Ibom State, Nigeria. Considering the increasing dependence on the Internet for information and the introduction of several SM networks into the cyber world that are compatible with mobile phones, youths and teenagers have been lured into misusing and abusing the media, which may be responsible for other problems, including poor AP. This is the thrust of the study: objectives were

formulated to determine the extent to which students use SM, the extent to which students use the SM, whether there are differences among boys and girls, and how the level of usage influences the AP of the students.

The results of the study show that secondary students significantly use SM networks; however, this does not significantly differ among boys and girls, depending on the type of information they share. It was observed that students perform poorly academically based on how much time they spend on SM, as this negatively affects their academic work. Generally, the students significantly use SM networks a great deal, with most of them owning multiple accounts and spending significant amounts of time chatting, regardless of their gender. Furthermore, the use of SM has a negative impact on the AP of SSS students.

It is believed that educationists and policymakers should take results such as these into consideration and implement recommendations. Based on the findings of this study, the following recommendations are made:

- 1) School administrators should formulate and implement policies regarding the use of mobile phones in the school environment to limit students' access to SM during school hours. This will enable them to focus on academic work while in school.
- 2) Teachers should always encourage personal study among students by giving students take-home assignments and projects regularly and checking the same on a regular basis with adequate rewards and punishment for defaulters, as well as helping students study outside their homes.
- 3) School administrators and teachers should take advantage of the SM by creating groups through which learning is enhanced, school work is discussed, solutions to academic problems are proffered, and assignments are given to help students make proper and profitable use of the SM.
- 4) Further study could be carried out in the following areas: an investigation into the strategies adopted by schools in controlling excessive use of SM among students; investigation into the SNs addiction of SSS students.

Data Availability

All data produced or investigated during this work were included in this submitted article.

Conflicts of Interest

There is no conflict of interest whatsoever to declare.

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Authors' contributions

All authors contributed significantly to this study.

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5. References

- Abdalla, R., & Qashou, A. (2020). The influence of social network use on students' academic performance. *Palestine Technical University Research Journal*, 8(2), 112-130. http://dx.doi.org/10.53671/ptukrj.v8i2.120
- Agwi, U.C., & Ogwueleka, F.N. (2018). Impact of social media on students' academic performance. *International Journal of Scientific and Engineering Research*, 9(3), 1454-1462.
- Apuke, D.O. (2016). The influence of social media on academic performance of undergraduate students of Taraba State University, Jalingo, Nigeria. *Research on Humanities and Social Science*, 6(19), 63-72.
- Alt, D. (2018). Students' wellbeing, fear of missing out, and social media engagement for leisure in higher education learning environments. *Current Psychology*, 37, 128-138. https://doi.org/10.1007/S12144-016-9496-1
- Al-Yafi, K., El-Masri, M., & Tsai, R. (2018). The effects of using social network sites on academic performance: The case of Qatar. *Journal of Enterprise Information Management*, 31(3), 446-462.
- Azizi, S., Soroush, A., & Khatony, A. (2019). The relationship between social networking addiction and academic performance in Iranian students of medical sciences: A cross-sectional study. *BMC Psychology*, 7(28), 1-8. https://doi.org/10.1186/s40359-019-0305-0
- Aznar-Díaz, I., Romero, J., García, A., & Ramírez, M. (2020). Mexican and Spanish university students' internet addiction and academic procrastination: Correlation and potential factors. *PLoS ONE*, *15*(5), *e0233655*, *15*(5), e0233655. https://doi.org/10.1371/journal.pone.0233655
- Bamigboye, O.O., & Olusesan, A.A. (2017). An analysis of impact of social media for learning in Eastern Cape universities, South Africa. *International Journal of Educational Sciences*, 17(3), 69-75. https://doi.org/10.1080/09751122.2017.1305755
- Bekalu, M.A., McCloud, R.F., & Viswanath, K. (2019). Association of social media use with social well-being, positive mental health, and self-rated health: Disentangling routine use from emotional connection to use. *Health and Education Behavior*, 46(2_suppl), 69S-80S. https://doi.org/10.1177/1090198119863768
- Boyd, D., & Ellison, N. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 1-11. https://doi.org/10.1111/j.1083-6101.2007.00393.x
- Castellacci, F., & Tveito, V. (2018). Internet use and well-being: A survey and a theoretical framework. *Research Policy*, 47(1), 308–325. https://doi.org/10.1016/j.respol.2017.11.007.
- Çebi, A., & Güyer, T. (2020). Students' interaction patterns in different online learning activities and their relationship with motivation, self-regulated learning strategy and learning performance. *Education and Information Technologies*, 25(6), 3975–3993. https://link.springer.com/article/10.1007/s10639-020-10151-1.
- Chang, C.-T., Tu, C.-S., & Hajiyev, J. (2019). Integrating academic type of social media activity with perceived academic performance: A role of task-related and non-task-related compulsive Internet use. *Computers & Education*, 139, 157–172. http://dx.doi.org/10.1016/j.compedu.2019.05.011
- Ellison, N., Steinfield, C., & Lampe, C. (2007). The benefits of face book "fiends," social capital and college students' use of online social network sites. *Journal of Computer Mediated Communication*, 12(4), 1143-1168.
- Feng, S., & Wong, Y. W. (2019). The Internet and Facebook usage on academic distraction of college students. *Computers & Education*, 134, 41-49. https://doi.org/10.1016/j.compedu.2019.02.005.

- Fernández-Gutiérrez, M., Gimenez, G., & Calero, J. (2020). The use of ICT in education leading to higher student outcomes? Analysis from the Spanish autonomous communities. *Computers & Education*, 157(103969). https://doi.org/10.1016/j.compedu.2020.103969
- García-Martín, S., & Cantón-Mayo, I. (2019). Use of technologies and academic performance in adolescent students. *Comunicar*, 59, 73-81. https://doi.org/10.3916/C59-2019-07
- Gómez-Fernández, N., & Mediavilla, M. (2021). Exploring the relationship between information and communication technologies (ICT) and academic performance: A multilevel analysis for Spain. *Socio-Economic Planning Sciences*, 77(101009). https://doi.org/10.1016/j.seps.2021.101009
- Hou, R., Han, S., Wang, K., & Zhang, C. (2021). To WeChat or to more chat during learning? The relationship between WeChat and learning from the perspective of university students. *Education and Information Technologies*, 26, 1813–1832. https://doi.org/10.1007/s10639-020-10338-6
- Ismail, A. (2021) Impact of social media on teenagers: Nigerian experience. *Journal of Media & Management*, 3(4), 1-7. https://doi.org/10.47363/JMM/2021(3)134
- Kates, A., Wu, H., & Coryn, C. (2018). The effects of mobile phone use on academic performance: A meta-analysis. *Computers & Education*, 127, 107–112. https://psycnet.apa.org/doi/10.1016/j.compedu.2018.08.012
- Koca, T., & Berk, E. (2019). Influence of Internet addiction on academic, sportive, and recreative activities in adolescents. *Journal of Public Health*, 27, 531–536. https://doi.org/10.1007/s10389-018-0965-x
- Kolhar, M., Kazi, R.N.A., & Alameen, A. (2021). Effect of social media use on learning, social interactions, and sleep duration among university students. *Saudi Journal of Biological Sciences*, 28(4), 2216-2222. https://doi.org/10.1016/j.sjbs.2021.01.010
- Ladrón de Guevara Rodríguez, M., Lopez-Agudo, L., Prieto-Latorre, C., & Marcenaro-Gutierrez, O. (2022). Internet use and academic performance: An interval approach. *Education and Information Technologies*, 27, 11831-11873. https://doi.org/10.1007/s10639-022-11095-4
- Lau, 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. http://dx.doi.org/10.1016/j.chb.2016.11.043
- Lei, H., Xiong, Y., Chiu, M., Zhang, J., & Cai, Z. (2021). The relationship between ICT literacy and academic achievement among students: A meta-analysis. *Children and Youth Services Review*, 127(106123). http://dx.doi.org/0.1016/j.childyouth.2021.106123
- Liu, D., Kirschner, P., & Karpinski, A. (2017). A meta-analysis of the relationship of academic performance and social network site use among adolescents and young adults. *Computers in Human Behavior*, 77, 148–157. https://doi.org/10.1016/j.chb.2017.08.039
- Merten, M., & Williams, A. (2019). Adolescents' online social networking following the death of a peer. *Journal of Adolescent Research*, 24, 67-90. http://dx.doi.org/10.1177/0743558408328440
- Mouratidis, K., & Papagiannakis, A. (2021). COVID-19, Internet, and mobility: The rise of telework, telehealth, e-learning, and e-shopping. *Sustainable Cities and Society*, 74(103182). https://doi.org/10.1016/j.scs.2021.103182
- Ngonso B.F. (2019). Effect of social media on teenagers and youths: A study of rural Nigerian teenagers and youths in secondary schools. *Global Media Journal*, 17, 32.
- Nneji, C.C., Urenyere, R., Ukhurebor, K.E., Ajibola, S., & Onaseso, O.O. (2022). The impacts of COVID-19-induced online lectures on the teaching and learning

- process: An inquiring study of junior secondary schools in Orlu, Nigeria. *Frontiers in Public Health*, *10*, 1054536. https://doi.org/10.3389/fpubh.2022.1054536
- Nwankwo, W., & Ukhurebor, K. (2020). Web forum and social media: A model for automatic removal of fake media using multilayered neural networks. *International Journal of Scientific & Technology Research*, 9(1), 4371-4377.
- Oguguo, B.C.E., Ajuonuma, J.O., Azubuike, R., Ene, C.U., Atta, F.O., Chidimma J., & Oko, C.J. (2020). Influence of social media on students' academic achievement. *International Journal of Evaluation and Research in Education*, *9*(4), 1000-1009. https://doi.org/10.11591/IJERE.V9I4.20638
- Okeke, N.U., & Anierobi, E. I. (2021). The influence of social media on aggressive behaviours of in-school adolescents in Anambra State. *Journal of the Nigerian Academy of Education*, 16(1), 279-292.
- Omachonu, C.G., & Akanya, J. (2019). Effects of social media on the academic achievement of students: A case study of the students of the Aayigba, Nigeria. *International Journal of English Language Teaching*, 7(5), 14-23.
- Vaughn, C. (2008). Social networking: Communication revolution or evolution? *Bell Labs Journal*, 13-17. http://dx.doi.org/10.1002/bltj.20298
- Zhou, D., Liu, J., & Liu, J. (2020). The effect of problematic Internet use on mathematics achievement: The mediating role of self-efficacy and the moderating role of teacher-student relationships. *Children and Youth Services Review, 118*(105372). https://doi.org/10.1016/j.childyouth.2020.105372
- Zou, Y., Xia, N., Zou, Y., Chen, Z., Wen, Y. (2019). Smartphone addiction may be associated with adolescent hypertension: A cross-sectional study among junior school students in China. *BMC Pediatrics*, 19(1), 310. https://doi.org/10.1186/s12887-019-1699-9