Reading habits, digital fluency and academic achievement of secondary school students in a local government area in South West Nigeria

Williams E. Nwagwu^{1,2}

Abstract. This study explored the impact of four key variables – reading habit, computer literacy, internet usage, and social media engagement - on students' academic achievement in public secondary schools in the Ibadan Northeast local government area in Oyo State, Nigeria. A quantitative research approach employing survey methodology was utilised to gather data from students in public secondary schools. A structured questionnaire was distributed among participants to collect information on their reading habits, computer literacy, internet usage, social media engagement, and academic performance. Statistical analysis, such as regression analysis, was conducted to ascertain the relationship between the aforementioned variables and academic achievement. The findings suggest a significant correlation between certain variables and academic achievement among students in public secondary schools. Reading habit demonstrated a strong positive association with academic performance, while computer literacy and selective internet usage showed moderately positive influences. Conversely, excessive engagement with social media negatively impacts academic achievement.

Keywords: reading habits, digital literacy, academic achievement, secondary school students, South West Nigeria

1. Introduction

Academic achievement remains one of the primary indicators for evaluating the effectiveness of any educational system. It encompasses students' performance in curricular activities, typically measured by assessments and examination results, and reflects the extent to which educational objectives have been met [14, 22, 56]. In secondary schools, performance in core subjects like English language and Mathematics often serves as a benchmark for judging overall academic achievement, given their compulsory nature and foundational role in broader educational progress [4, 26]. Failure in either subject can render successes in other subjects ineffective, highlighting their critical role in educational progression [41].

Despite their importance, recent evidence indicates declining academic achievement among students in public secondary schools in Oyo State, Nigeria. Data from the National Bureau of Statistics [45] and WAEC performance records (2011-2020) consistently point to poor student performance, with Oyo State ranking low nationally. Within Ibadan Northeast Local Government Area specifically, studies such as Salawu [53] have documented subpar academic outcomes among senior secondary school students. Scholars have linked this trend to various factors, including assessment practices, peer influence, school facilities, and disciplinary issues [3, 17]. However,

1 0000-0002-5225-2934 (W. E. Nwagwu)

willieezi@yahoo.com (W. E. Nwagwu)

ttps://mds.ui.edu.ng/nwagwu-williams-ezinwa (W. E. Nwagwu)





© Copyright for this article by its authors, published by the Academy of Cognitive and Natural Sciences. This is an Open Access article distributed under the terms of the Creative Commons License Attribution 4.0 International (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

 $^{^{1}}$ Department of Data and Information Science, University of Ibadan, 6 Benue Rd., Ibadan, 200132, Nigeria ²Department of Information Science, University of South Africa, Muckleneuk Campus, Preller Str., Muckleneuk Ridge, Pretoria, 0002, South Africa

limited attention has been paid to the influence of students' reading habits and digital fluency on academic achievement – an increasingly relevant issue in the 21st century.

Reading habits, defined as a consistent and purposeful approach to studying and engaging with texts [51], are widely acknowledged as foundational to students' academic success. Students who cultivate good reading habits tend to demonstrate improved comprehension, vocabulary, and lifelong learning skills [12]. Unfortunately, reading for pleasure or knowledge appears to decline among Nigerian students, particularly in Oyo State, where reading is often exam-driven rather than interest-motivated.

Simultaneously, the rise of digital technologies and the widespread availability of the internet have reshaped students' learning environments. Digital literacy – encompassing the ability to use digital tools such as word processors, spreadsheets, and presentation software – is increasingly essential for navigating academic tasks [7, 46]. Internet usage, particularly for educational purposes, enables students to access various academic resources, communicate with peers and educators, and explore knowledge beyond textbook boundaries [33, 48].

However, digital space is not without drawbacks. While selective internet usage can enhance academic performance, unregulated engagement with social media platforms may prove detrimental. Excessive time spent on platforms such as Facebook, Instagram, and TikTok has been associated with reduced attention spans, procrastination, and declining academic focus.

1.1. Statement of problem

The poor academic achievement of students in secondary schools has been a source of great concern for all stakeholders in the education sector. It is heart-rending when one considers the vast amount of money parents spend on the education of their children who don't produce commensurate academic achievement to match the huge investments made in them. Oyo State shares in this problem of the education sector despite its involvement in the sector.

Reading habits, digital literacy, internet usage, and social media usage can help students improve their academic success. Unfortunately, it has been observed that reading habits among students are generally seen to be degrading in many secondary schools in Nigeria, even in Oyo State. In most schools, the students rarely read, and even the few who read only do so to pass their examinations, not necessarily for pleasure. Furthermore, it has also been observed that most students neither use nor have access to the internet. Most schools do not have nor provide internet facilities. As a result, students are somewhat handicapped. Even when there are internet facilities, most students do not have the digital literacy skills needed to operate them. Those who might have the skills also tend to use the internet for non-academic purposes like gaming, watching videos online, online shopping, social networking and all forms of leisure, which results in a loss of study time and schedules, and this could lead to a fall in academic standards.

Most students also tend to get diverted from the proper learning process due to the built-in entertaining social media. Apart from the problems stated above, there is a dearth of local and foreign empirical research on the joint prediction of reading habit, digital literacy, internet and social media usage on academic achievement among students. This study, therefore, seeks to investigate the extent to which reading habits, digital literacy, internet and social media usage influence academic achievement among students in public secondary schools in Ibadan Northeast local government area, Oyo State.

1.2. Aim and objectives of the study

The study aims to investigate the influence of four variables – reading habits, digital literacy, internet usage, and social media usage – on academic achievement among students in public secondary schools in Ibadan Northeast local government area, Oyo State, Nigeria.

1.3. Hypotheses

The following hypotheses were tested at the 0.05 level of significance:

- H_{01} : There is no significant relationship between demographic characteristics of the students and reading habits, digital literacy, internet usage, and social media usage of the students.
- H_{02} : There is no significant relationship among the reading habits, digital literacy, internet usage, and social media usage of the students.
- H_{03} : There is no significant relationship between the demographic characteristics of the students and their academic achievements.
- H_{04} : There is no significant relationship between reading habits, digital literacy, internet usage, social media usage and academic achievement of students in public secondary schools.

2. Literature review

2.1. Conceptualizing academic achievement

Academic achievement has been widely conceptualised as the level of success students attain in educational tasks, typically measured through grades, test scores, or other formal assessments. According to Jimoh, Olutola and Balogun [32], academic achievement is the culmination of deliberate efforts by students to attain success in school subjects, reflecting their classroom status and developmental progress. Similarly, Lamas [37] defines academic achievement as the product of student learning, influenced by teaching quality, and generally expressed through grades.

Adegoke and Orekelewa [3] expand this definition, stating that academic achievement is multidimensional, encompassing cognitive, emotional, and social aspects of student development, and spanning time from school to working life. Lee and Stankov [39] and Liem and McInerney [40] further stress that academic achievement results from cognitive and non-cognitive attributes within a specific socio-cultural context. Mushtaq et al. [44] and Cachia, Lynam and Stock [21] also support this comprehensive view, emphasising short- and long-term goal attainment as a key indicator of achievement.

Beyond test scores, Siahi and Maiyo [55] argues that grades serve as benchmarks for individual success and indicators of institutional effectiveness in fulfilling educational objectives. However, Bassey [20] cautions that academic achievement should also reflect students' capacity to apply knowledge to real-life societal challenges, promoting a more holistic understanding.

2.2. Core subjects and national performance trends

In the Nigerian secondary school curriculum, English language and Mathematics are considered foundational subjects, compulsory for all students and central to the realisation of national educational goals. Ewetan and Ewetan [26] and Adekola, Shoaga and Lawal [4] underscore the indispensability of English for communication and instruction, while Abiodun and Olofin [1] emphasises the importance of Mathematics as the gateway to science and daily problem-solving.

Despite this emphasis, student performance in these subjects remains dismal, particularly in Oyo State. Data from the National Bureau of Statistics [45] and the Federal Ministry of Education [28] reveal consistently poor outcomes in the West

African Senior School Certificate Examination (WASSCE) between 2011 and 2020. On average, only 30.39% of candidates obtained five credits, including English and Mathematics, with Oyo State often ranking among the bottom third of Nigeria's 36 states. This decline is particularly worrisome, as it hinders students' eligibility for tertiary education and limits their future opportunities.

The trend of underachievement is echoed in localised studies. Salawu [53] identified poor academic performance among senior secondary school students in Ibadan North-East LGA, while Adeyeba [6] found similar outcomes in Agricultural Science. These findings corroborate statewide data and signal systemic issues in instructional quality, student engagement, and resource availability.

2.3. Reading habits and their influence on academic achievement

Numerous empirical studies underscore a strong correlation between students' reading habits and academic achievement. Kamar [35], in a correlational study involving 175 senior secondary school students in Sokoto State, found a significant positive relationship between reading habits and academic performance. Using the Study Habit Inventory [18] and term examination scores, the study concluded that schools should foster reading culture through debate clubs and conducive environments.

Similarly, Anyaegbu, Aghauche and Nnamani [15] found that poor reading habits – shaped by school environment, teacher attitude, family background, and personal motivation – negatively affect academic performance among junior secondary students in Enugu South LGA. Recommendations included multi-stakeholder efforts to improve students' engagement with reading.

In the southwestern context, Popoola et al. [52] conducted a descriptive study among 300 students in Ibadan North LGA and found that strong reading habits significantly enhanced academic performance. The researchers called for better infrastructure and motivational strategies to promote reading. Enekwechi and Ezeanya [25] took a more discipline-specific approach, examining study habits as predictors of achievement in chemistry among 2,250 senior secondary students in Anambra State. Their regression analysis revealed that reading, note-taking, and test preparation habits significantly contributed to performance, accounting for 9.3% of variance. They recommended integrating habit-enhancing activities into the chemistry curriculum.

Furthermore, Bamidele [19] studied reading behaviour among 977 SS3 students in Ogun State, revealing that most students dedicated 1–2 hours daily to reading, often preferring to do so at home. These findings suggest that personal time management and home environments are crucial determinants of reading behaviour.

2.4. Reading habits, digital fluency, and academic outcomes

While the existing studies richly document the relationship between reading habits and academic performance, the intersection with digital fluency remains underexplored, particularly in rural or semi-urban contexts like Ibadan North-East LGA. Digital fluency – the ability to navigate digital platforms effectively for learning – can influence reading preferences, access to online educational resources, and self-directed learning. This intersection becomes increasingly relevant as schools integrate digital tools into classrooms and students diversify their academic information sources.

Students' reading habits may still rely heavily on print materials in contexts with low digital infrastructure or limited access to e-learning tools. However, where digital access is improving, students' ability to filter, evaluate, and engage with online content may enhance their study habits and, by extension, academic achievement. Thus, understanding how digital fluency mediates or moderates the relationship between reading habits and academic success is critical for designing effective interventions.

2.5. Internet usage and academic achievement of students

A growing body of research has examined the relationship between internet usage and students' academic achievement across different educational levels and geographic regions. Ugwulebo and Okoro [58] conducted a survey-based study at the University of Abuja, Nigeria, involving 375 students, of which 200 valid responses were analysed. The study highlighted the beneficial role of the internet in enhancing students' academic capabilities and professional development. However, challenges such as poor computer skills, slow internet connections, and the cost of accessing online services were also noted. The authors recommended the implementation of information literacy and sensitisation programs in educational institutions to promote effective utilisation of web-based academic resources.

In a related study, Fadele et al. [27] explored the effects of television and internet usage on academic performance among senior secondary school students in Kaduna State. Their findings revealed a mixed internet usage pattern: while some students used the internet to complete academic assignments, others lacked basic digital literacy or primarily engaged with non-educational content. The study emphasised the need for sensitisation initiatives and recommended integrating the internet and television as instructional tools to enhance learning outcomes.

Ahmed, Ahmed-Zakariyyah and Ahmed [10] focused on senior school Biology students in Osun Central Senatorial District. Utilising a descriptive survey and analysing responses from 600 students, the study found that internet access positively influenced students' achievement in Biology. However, the difference in performance between those who used the internet for academic purposes and those who did not was minimal. The authors concluded that while internet use has a generally positive effect, its impact is not significantly strong, suggesting that the quality and purpose of use may be more critical than mere access.

Similarly, Yebowaah [59] examined internet usage among Senior High School students in Wa Municipality, Ghana. The study involved 314 randomly selected third-year students and employed descriptive statistics, chi-square, and ANOVA for analysis. Findings showed that internet sources such as mobile phones, school ICT labs, and public cafes positively influenced academic performance. Nonetheless, the specific purposes for which students used the internet did not significantly affect their performance. The study recommended improved provision of internet infrastructure by school administrators and policymakers to ensure equitable access and to support academic excellence.

2.6. Social media usage and academic achievement of students

Social media has emerged as a significant influence on education, offering tools supporting students in various academic pursuits. It aids students in completing assignments, understanding complex concepts, preparing for assessments, enhancing practical skills, and identifying career opportunities. Platforms such as Facebook, X, Instagram, and YouTube are beneficial in keeping students informed about recent developments and research in their fields [43]. In the Nigerian context, students utilise platforms like Facebook, X, and WhatsApp to attend virtual meetings with research collaborators, boost self-esteem and well-being, conduct research, enhance learning, and strengthen interpersonal relationships and knowledge sharing [23].

Conversely, the pervasive use of social media can also negatively impact learning outcomes. Excessive use has been linked to psychological, physical, interpersonal, and educational problems among Nigerian students [16]. The entertaining nature of social media often distracts students from academic responsibilities [57], and overuse may reduce study time, cause delays in assignment submission, and result in poor grammar and spelling – all of which can harm academic performance [9, 42].

In Lagos State, Kalejaiye, Banjoko and Oludipe [34] investigated the effect of social media on chemistry students' academic performance using a descriptive research design. Their sample comprised 150 SSS2 students from five public schools. Tools used included a Chemistry Achievement Test and a Social Media Usage Questionnaire. The study found a strong negative correlation between social media usage and academic performance (r = -0.63). Gender differences in usage were insignificant, with 64% of students preferring Facebook. The study recommended that parents and teachers closely monitor students' online activities.

Osita-Ejikeme [49] explored the impact of social media on academic performance in Obio/Akpor LGA of Rivers State, guided by social constructivism theory. Using a correlational-survey design and a sample of 246 students, results indicated a significant relationship between social media usage and academic performance. The study recommended educating students on effective social media usage and balancing digital engagement with academic responsibilities. Similarly, Otaru and Nwankwo [50] assessed secondary school teachers' perceptions of social media's influence in FCT, Abuja. The findings highlighted distraction, time mismanagement, and exposure to harmful content. Significant differences in perceptions were observed based on age but not gender. The researchers recommended that guidance counsellors raise awareness of the risks and benefits of social media use.

Emeasoba and Ugwuoke [24] examined the impact of WhatsApp and Twitter on the academic performance of business studies students at the upper basic level in Enugu State. The findings indicated positive and negative influences, prompting recommendations for equipping schools with internet facilities and enhancing teachers' digital literacy. While these indigenous studies provide critical insights into the relationship between social media and academic performance, they do not explore the combined predictive effects of reading habits, digital literacy, internet usage, and social media use on academic achievement. This current study aims to bridge that empirical gap by examining the joint influence of these variables on student performance.

2.7. Conceptual model

A conceptual model describes the relationship between the main concepts of a study in a diagrammatic manner [29]. The conceptual model shows the relationship between the variables of the study. The conceptual model for this study is shown in figure 1.

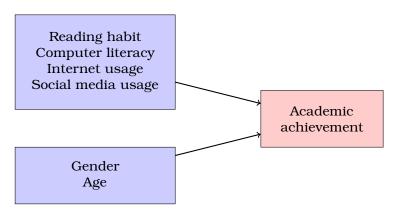


Figure 1: Conceptual model for the study.

The independent variables for the study are reading habits, digital literacy, internet usage, and social media usage, while the dependent variable is academic achievement. All the independent variables will be treated as single variables. However, students' academic achievement was measured based on their achievement in the two core subjects in secondary schools: English language and Mathematics.

3. Methodology

This study was conducted in the Ibadan Northeast Local Government Area of Oyo State, Nigeria, for several compelling reasons. First, existing data from national examinations such as WAEC have consistently shown that students in Oyo State perform poorly in key subjects like English and Mathematics. Within Ibadan Northeast, studies such as Salawu [53] have documented significant academic underachievement among senior secondary school students. This makes the area relevant for investigating factors that influence academic performance.

Moreover, there is a noticeable gap in the literature regarding the combined influence of reading habits, digital literacy, internet usage, and social media engagement on students' academic outcomes in this locale. As a semi-urban environment, Ibadan Northeast offers a diverse socioeconomic background, allowing for a more comprehensive understanding of how students access and engage with learning resources – both traditional and digital. The area's unique characteristics provide a suitable context for exploring how these variables interact to influence academic achievement. Additionally, the proximity of the researcher to the study location, particularly given the presence of the University of Ibadan, made data collection more feasible and ensured better engagement with schools and educational stakeholders. The findings from this study are expected to offer insights that can inform educational policies and interventions aimed at improving student outcomes in similar contexts.

The study adopts a descriptive survey research design. This design was considered appropriate because it provides the strategy for obtaining data and describing existing conditions on the subject without manipulating the variables by the researcher. The study's target population consists of two senior secondary school students in a mixed public senior secondary school (SSS) in Ibadan Northeast Local Government Area, Oyo State. There are twenty-five mixed public senior secondary schools in the local government, totalling 4,333 senior secondary school students. Table 1 shows the population of the study.

From the total population of 4,333 students, twelve schools were selected for the study using systematic random sampling, as shown in table 2.

3.1. Research instruments

A questionnaire and two achievement test score sheets were used to collect the study data. The questionnaire was a self-constructed questionnaire titled "Reading Habits, Digital literacy, Internet and Social Media Usage Questionnaire" (RHCLISMUQ). It contained five sections, all of which consisted of structured items. Section A was constructed to obtain the students' personal information such as their gender, age and class. Section B was constructed to examine the nature of reading habits among the students. It consists of nine items. The rating scale was based on Never = 4; Sometimes = 3; Often = 2; Always = 1.

Section C was constructed to examine the students' digital literacy level. It consisted of eleven (11) structured items. The rating scale is based on the following: Not at all = 4; Poorly = 3; Moderately = 2; Very well = 1.

Section D examines the purposes and habits of internet usage among the students. It consists of eleven (11) structured items. The rating scale is based on Never = 4; Sometimes = 3; Often = 2; Very often = 1. Section E examines the patterns of social media usage among the students. It consists of ten (10) structured items. The rating scale is based on Never = 4; Sometimes = 3; Often = 2; Very often = 1.

The research objective was explained to the principals and later to the selected class teachers who assisted in administering the questionnaires and the achievement test. The teachers were briefed on supervising the data collection with the questionnaire and achievement tests. The research assistants were trained and guided on what to do

Table 1 Population of the study (N = 4,333).

Name of school	Male	Female	Total
IMG Grammar School, Gbelekale	76	82	158
Ayekale Community Grammar School, Agugu	67	70	137
Army Barracks Grammar School, Iwo Road, Ibadan	94	100	194
Community Grammar School, Iwo Road	99	87	186
Christ The King Secondary School, Oluyoro	91	93	184
Fazil-Omar-Ahmadiyya (F.O.A.) Grammar School, Ajibola Aremo	83	84	167
Holy Trinity Grammar School, Old Ife Road	93	91	184
Islamic Mission Grammar School, Agugu	79	87	166
Basorun High School, Basorun	94	101	195
Lagelu Grammar School, Agugu	96	95	191
Agugu High School, Agugu	91	98	189
Hisibu Lahi-Algalib Secondary School, Agodi Gate	96	101	197
I.M.G. High School (along Renascent High School Road)	97	99	196
Loyola College, Old Ife Road, Ibadan	82	96	178
I.M.G Grammar School, Agodi	90	92	182
Mufu Lanihun Comprehensive High School, Express Road	89	93	182
Okebadan High School Oluyoro	82	98	180
Olubadan High School, Aperin	91	96	187
Olubadan Grammar School, Orita Aperin	92	91	183
Ode Aje/Ajibola High School	73	74	147
Ratibi College, Oluyoro Oke-Offa	63	71	134
Renascent High School, Agugu	89	87	176
St. John's secondary school, Ode-Aje	54	61	115
United High School, Agugu	72	77	149
Community Secondary School, Agugu	86	90	176
Total	2,119	2,214	4,333

Table 2 Schools selected for study (*n* = 12).

Name of school	Male	Female	Total
IMG Grammar School, Gbelekale	76	82	158
Army Barracks Grammar School, Iwo Road, Ibadan	94	100	194
Christ The King Secondary School, Oluyoro	91	93	184
Holy Trinity Grammar School, Old Ife Road	93	91	184
Basorun High School, Basorun	94	101	195
Agugu High School, Agugu	91	98	189
I.M.G. High School (along Renascent High School Road)	97	99	196
I.M.G Grammar School, Agodi	90	92	182
Okebadan High School Oluyoro	82	98	180
Olubadan Grammar School, Orita Aperin	92	91	183
Ratibi College, Oluyoro Oke-Offa	63	71	134
St. John's secondary school, Ode-Aje	54	61	115
TOTAL	1,017	1,077	2,094

and how to administer the instruments to students in their classes. The instruments were collected from the students after they had responded to them. The instrument was administered from $21 \, \text{July} \, 2022$ to $24 \, \text{November} \, 2022$.

Data from the instruments were analysed using descriptive and inferential statistical techniques: frequency, percentage counts, mean, standard deviation, and multiple

regression analysis. Demographic data of the students were presented using frequency counts and percentages. Research questions were answered using mean and standard deviation, while hypotheses were tested using Pearson product-moment correlation analysis at the 0.05 significance level.

4. Results

4.1. Demographic information

Table 3 shows the distribution of respondents' demographic characteristics. By gender, 48% are male while the remaining 52% are female. This implies that females participated most in this study.

Table 3 Demographic characteristics.

Demographic characteristics	Categories	Frequency	%
	Male	170	48
Gender	Female	184	52
	Total	354	100
	13 to 15	54	15.3
Ago	16 to 18	232	65.5
Age	18 and above	68	19.2
	Total	354	100.0

Table 3 reveals that 15.3% of the respondents fall between the ages of 13 and 15, while about 65.5% fall within the age range of 16 and 18. The result further showed that 19.2% of the respondents are 18 years and above.

4.2. Analysis of the research questions

4.2.1. RQ1: What is the nature of the reading habits of the public secondary school students in Ibadan Northeast local government area, Oyo State?

Table 4 shows the responses of the respondents on their nature of reading habit as follows: 2.3% agreed they never complete and submit their assignments on time, 7.3% with sometimes, 4.2% with often, and 86.2% always do. Also, 13.6% agreed they never begin their assignments as soon as the teacher gives them, 25.1% sometimes, 14.7% often and 46.6% always do. 5.9% agreed they study for at least three hours each day after classes, 11.9% sometimes, 39.3% often and 42.9% always. 8.2% agreed that they never re-read a study material several times as a habit, 31.6% sometimes, 18.6% often and 41.5% always do. Further, 53.7% never find themselves too tired, bored or sleepy to study well, 26% sometimes, 9.6% often and 10.7% always. Findings also showed that 38.1% of the respondents never spend much time reading fiction (novels) and going out, 28.5% do sometimes, 13.3% often and 19.8% always. The table equally reveals that 48.3% of the participants never find it hard to keep their mind on what they are studying for any good length of time, 29.7% do sometimes, 8.2% often, and 13.3% do always. Also, 30.2% never seem to get very little done for the time they spend studying, 33.9% sometimes, 16.4% often and 19.2% always. Finally, 4.8% never keep all their notebooks for each subject carefully arranged for studying, 8.5% do sometimes, 4.8% often and 81.9% always. In conclusion, the results showed that respondents who are public secondary school students in Ibadan Northeast local government area, Oyo State, have a high level of reading habit as indicated in the study's findings.

The summary of the findings showed that 144 (40.7%) of the respondents had a low reading habit, and the remaining 210 (59.3%) had a high reading habit. Thus, the

Table 4Nature of the students' reading habit.

How often does each of the following apply to you?		Sometimes	Often	Always
Complete and submit your assignments on time	2.3%	7.3%	4.2%	86.2%
Begin your assignments as soon as the teacher gives them		25.1%	14.7%	46.6%
Study for at least three hours each day after classes	5.9%	11.9%	39.3%	42.9%
Re-read a study material several times as a habit	8.2%	31.6%	18.6%	41.5%
Find yourself too tired, bored or sleepy to study well	53.7%	26.0%	9.6%	10.7%
Spend much time reading fiction (novels), going out etc.	38.1%	28.5%	13.3%	19.8%
Find it hard to keep your mind for any good length of time on what you are studying	48.3%	29.7%	8.2%	13.3%
Seem that you get very little done for the amount of time you spend studying	30.2%	33.9%	16.4%	19.2%
Keep all your notebooks for each subject carefully arranged for studying	4.8%	8.5%	4.8%	81.9%

results indicated that participants in the study had a high reading habit.

4.2.2. RQ2: What is the students' digital literacy level?

Table 5 shows the percentage responses of respondents based on their level of digital literacy. The table shows that 15% of the respondents do not know parts of a computer hardware at all, 7.6% know poorly, 22.3% know moderately, and 55.1% know very well. Also, 25.4% do not use keyboard shortcuts at all, 16.1% do poorly, 32.4% do

Table 5Level of digital literacy.

How well do you know or are you able to do the following?	Not at all	Poorly	Moderately	Very well
Know parts of a computer hardware	15%	7.6%	22.3%	55.1%
Use keyboard shortcuts	25.4%	16.1%	23.4%	35%
Use the keyboard of computer	22.9%	8.8%	24.9%	42.9%
Use the computer mouse	24%	8.2%	16.9%	50.8%
I am able to use the computer for learning purposes	25.1%	14.1%	23.2%	37.0%
I am able operate the computer without any support	39.8%	17.5%	21.5%	21.2%
Use MS Word	38.7%	17.2%	19.8%	24.3%
Use MS Excel	42.4%	15%	16.9%	24.9%
Use any web browser	25.4%	16.9%	22.3%	35.3%
Use MS PowerPoint	36.7%	11.9%	26.8%	24.6%
Operate a computer without any support	31.4%	15.3%	25.4%	28%
Use a smartphone for sending SMS, chatting, browsing, email	6.2%	5.6%	6.5%	81.6%

moderately, and 35% do very well. The results equally revealed that 22.9% of the respondents do not use the computer's keyboard at all, 8.8% do so poorly, 24.4% do so moderately, and 42.9% do so very well. Furthermore, 24% do not use the computer mouse at all, 8.2% do poorly, 16.9% do moderately, and 50.8% do very well. 25.1% are unable to use the computer for learning purposes at all, 14.1% do poorly, 23.2% do moderately, and 37% can use it very well. 39.8% cannot operate the computer without support, 17.5% does poorly, 21.5% does moderately, and 21.2% does very well. It can be deduced from the above that the public secondary school students in Ibadan Northeast local government area, Oyo State, have a high level of digital literacy, which is seen from the high percentage of respondents who use and are familiar with the computer very well.

The summary of findings showed that 154 (43.5%) of the respondents have a low level of digital literacy and 200 (56.5%) have a high level of digital literacy, which implies that participants in the study have a high level of digital literacy.

4.2.3. RQ3: What is the students' internet usage level and patterns?

Table 6 shows the results on students' purposes of using the internet. 6.8% of the respondents have never used social media such as Facebook, WhatsApp, Twitter, etc, 14.4% use the internet sometimes, 7.1% often use it and 71.8% use it very often. 5.6% have never used the internet to download videos for their studies/learning, 30.5% use it sometimes, 11% often use it, and 52.8% use it very often. 6% of the respondents have never used the internet to consult dictionaries/encyclopedias/manuals, 25.9% do sometimes, 14.8% do it often, and 53.4% use it very often. The results also revealed that 14.7% of the respondents have never used the internet to download useful textbooks for later use, 28.5% do sometimes, 13.3% do often, and 43.2% use it very often. Also, 15.8% of the participants have never used the internet to download music, 20.1% do sometimes, 11.3% do often, and 52.5% do very often. 13.3% have never used the internet to download information about the celebrities that they like, 22.9% do sometimes, 15.3% do often, and 48% do very often. Further, 12.4% have never used the internet to obtain national or world news, 26.3% do sometimes, 18.9% do often, and 42.1% do very often. 7.9% have never used the internet to prepare for a

Table 6 Purpose of using the internet.

How often do you use the internet for the following purposes or reasons?	Never	Sometimes	Often	Very often
To use social media (Facebook, Whatsapp, Twitter, etc.)	6.8%	14.4%	7.1%	71.8%
To download videos for your studies/learning	5.6%	30.5%	11%	52.8%
To consult dictionaries/encyclopedias/manuals	6%	25.9%	14.8%	53.4%
To download useful textbooks for your later use	14.7%	28.5%	13.3%	43.2%
To download music	15.8%	20.1%	11.3%	52.5%
To download information on celebrities you like	13.3%	22.9%	15.3%	48%
To obtain national or world news	12.4%	26.3%	18.9%	42.1%
To read or send emails	11%	24.6%	15.3%	48.9%
To prepare for your class assignments	7.9%	23.2%	12.7%	56.2%
To prepare for your school exams	16.9%	11.9%	24.9%	46.0%
To update your overall/general knowledge	9.6%	21.5%	13.3%	55.4%

class assignment, 23.2% use it sometimes, 12.7% use it often and 56.2% use it very often. This result implied that a very high percentage of the public secondary schools in the study have a high percentage of internet usage for multi-purpose events related to their academics.

The summary of the findings showed that 139 (39.3%) of the respondents use the internet at a low level and 215 (60.7%) do so at a high level. This indicates that a higher-than-average percentage of public secondary school students in the study use the internet at a high level, which could possibly influence their academic achievement.

4.2.4. RQ4: What are the students' social media usage patterns?

Table 7 showed the pattern of use of social media as follows: 14.4% never use social media longer than they initially intended, 30.5% do sometimes, 11% do often, and 44.1% do always. 32.2% of the respondents never neglect household chores to spend more time on social media, 26.8% do sometimes, 9.9% do often, and 30.8% do always. 50.3% of the respondents never neglect school work to spend more time on social media, 27.1% do sometimes, 7.1% do often, and 15.3% do always. Also, 13% of the participants never check their social media messages/posts very often each day, 33.6% do sometimes, 15% do that often, and 38.4% do always. The table further reveals that 19.2% of the respondents never find themselves looking forward to social media again and again, 32.2% do sometimes, 17.2% do it often, and 31.4% do it always. Equally, 28.8% of the respondents never yell or act annoyed if someone bothers them when using social media, 33.6% do sometimes, 10.5% do often, and 26.8% do always. Finally, 13.8% of the respondents never choose to spend more time on social media over going out with others, 27.7% do sometimes, 13% do often, and

Table 7 Patterns of using social media.

How often does each of the following apply to you?	Never	Sometimes	Often	Always
You use social media longer than you initially intended	14.4%	30.5%	11%	44.1%
You neglect household chores to spend more time on social media		26.8%	9.9%	30.8%
You neglect school work to spend more time on social media		27.1%	7.1%	15.3%
You check your social media messages/posts very often each day	13%	33.6%	15%	38.4%
You find yourself looking forward to social media again and again	19.2%	32.2%	17.2%	31.4%
You yell or act annoyed if someone bothers you when using social media	28.8%	33.6%	10.5%	26.8%
You lose sleep time due to late-night log-ins to social media	31.1%	24.6%	10.7%	33.6%
You think or say to yourself "just a few more minutes" when using social media	17.5%	33.3%	17.5%	31.4%
You feel depressed, moody or nervous when you are offline, which goes away once you are back on-line	16.1%	29.9%	14.4%	39.5%
You choose to spend more time on social media over going out with others	13.8%	27.7%	13%	45.5%

45.5% do always. The above indicates that only a small percentage of the respondents who are less than average make regular use of social media, especially for academic purposes, while a larger percentage do not use social media regularly.

Findings revealed that 181 (51.1%) of the participants have a low level of social media use while 173 (48.9%) have a high level of social media use. This could have both positive and negative impacts on their academic achievement. Thus, a high level of social media usage could provide students with important information about their studies and vice versa, while a high level of addiction to social media usage can make students lose sight of their studies. At the same time, students who used social media at a low level may find it difficult to get important information about their studies.

4.3. Testing the hypotheses

The following hypotheses were tested at the 0.05 level of significance:

4.3.1. H_{01} : There is no significant relationship between demographic characteristics of the students and reading habits, digital literacy, internet usage, and social media usage of the students

Table 8 shows a significant relationship among the students' digital literacy, internet usage, and social media usage. That is, digital literacy (r = .314, N = 354, p < .05) and internet usage (r = .538, N = 354, p < .05) has significant relationship with social media usage of the students. On the other hand, reading habit (r = .076, N = 354, p > .05), age (r = .003, N = 354, p > .05) and gender (r = .025, N = 354, p > .05) have no significant relationship with social media usage of the students.

Table 8Correlation between the demographic characteristics and the students' reading habits, digital literacy, internet usage, and social media usage.

Variable	1	2	3	4	5	6
Social media usage	1					
Gender (<i>p</i> -value)	0.025 0.645	1				
Age (p-value)	0.003 0.958	.090 .093	1			
Reading habit (p-value)	0.076 0.155	.050 .349	.092 .084	1		
Digital literacy (p-value)	0.314** 0.000	.126* .018	.025 .640	.593** .000	1	
Internet usage (p-value)	0.538** 0.000	.111* .036	.006 .912	.438** .000	.881** .000	1

4.3.2. H_{02} : There is no significant relationship among the reading habits, digital literacy, internet usage, and social media usage of the students

Table 9 shows a significant relationship among the students' digital literacy, internet usage and social media usage. That is, digital literacy (r = .314, N = 354, p < .05), and internet usage (r = .538, N = 354, p < .05) has significant relationship with Social media usage. On the other hand reading habit (r = .076, N = 354, p > .05) has no significant relationship with social media usage. It implied a significant relationship between digital literacy, internet usage, and social media usage among students.

Table 9Correlation among the independent variables.

Variable	1	2	3	4
Social media usage Reading habit (p-value)	1	1		
Reading Habit (p-value)	.155	1		
Digital literacy (p-value)	.314** .000	.593** .000	1	
Internet usage (p-value)	.538**	.438**	.881** .000	1

4.3.3. H_{03} : There is no significant relationship between the demographic characteristics of the students and their academic achievements

The correlation coefficient, R = 0.046 as shown in table 10, indicated a weak negative relationship between the demographic characteristics of the students and their academic achievement. The influence of the demographic characteristics accounts for -0.4% of the students' academic achievement variations.

Table 10Regression model summary of the demographic characteristics of the students and academic achievements.

Model	R	R^2	Adjusted R^2	Standard error of the estimate
1	$.046^a$.002	004	7.35681

a. Predictors: (Constant), Age, Gender

The coefficient table 11 shows that the gender and age of the students have no significant relationship with their academic achievement.

Table 11Relationship between demographic characteristics of the students and academic achievements.

Model		Unstandardized Standardized coefficients coefficients		t	Sig.	
		B	Std. error	Beta		
1	(Constant) Gender Age	21.266 .653 110	1.934 .786 .670	.045 009	10.996 .832 165	.000 .406 .869

Dependent variable: Academic achievement

Table 12 shows the results of the ANOVA test, where F = 0.375 with degrees of freedom 2, 351, 353 and a non-significant p-value greater than 0.05. The result revealed that the age and gender of the students have no significant influence on their academic achievement with a p-value of 0.688, which is greater than 0.05.

4.3.4. H_{04} : There is no significant relationship between reading habits, digital literacy, internet usage, social media usage and academic achievement of students in public secondary schools

The correlation coefficient, R = 0.417 as shown in table 13 indicates a weak positive relationship between the academic achievement and various factors such as reading habits, digital literacy, internet usage and social media usage. It further revealed that

Table 12ANOVA of the regression analysis of the demographic characteristics of the students and academic achievements.

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression Residual Total	40.548 18997.045 19037.593	2 351 353	20.274 54.123	.375	.688 ^a

a. Dependent variable: Academic achievement, predictors: (Constant), Age, Gender

Table 13Regression model summary of the relationship between reading habits, digital literacy, internet usage, social media usage and students' academic achievement.

Model	R	R^2	Adjusted R^2	Standard error of the estimate		
1	$.417^a$.174	.164	6.71449		

a. Predictors: (Constant), Social media use, Reading habit, Computer literacy, Internet usage

the collective influence of these variables can account for 16.4% of the variations in the students' academic achievement.

Table 14 shows the results of the ANOVA test, where F = 18.317 with degrees of freedom 4, 349, 353 and a significant p-value of less than 0.05. The result revealed that reading habits, digital literacy, internet usage and social media usage jointly significantly influence the students' academic achievement with a p-value of 0.000, which is less than 0.05.

Table 14ANOVA of the regression analysis of the relationship between reading habits, digital literacy, internet usage, social media usage and students' academic achievement.

Model		Sum of squares	df	Mean square	$oldsymbol{F}$	Sig.
1	Regression Residual Total	3303.152 15734.441 19037.593	4 349 353	825.788 45.084	18.317	$.000^a$

a. Dependent variable: Academic achievement, predictors: (Constant), Social media use, Reading habit, Computer literacy, Internet usage

The coefficient table 15 showed that reading habits, digital literacy, internet usage and social media usage significantly correlate with the students' academic achievement.

5. Discussion

The study's findings on the influence of reading habits, digital literacy, internet usage, and social media usage on academic achievement among public secondary school students in Ibadan Northeast reveal a complex but telling portrait of student behaviour and its implications for educational outcomes. The evidence points to a multidimensional relationship in which traditional academic enablers such as reading habits are reshaped and sometimes weakened – by emergent digital practices and socio-technological dynamics.

The influence of reading habits is particularly significant in this context. Although students generally recognise the importance of reading, the pattern of engagement

Table 15Regression analysis of the relationship between reading habits, digital literacy, internet usage, social media usage and students' academic achievement.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.
		В	Standard error	Beta		
1	(Constant)	24.036	2.205		10.903	.000
	Reading habit	.244	.062	.254	3.940	.000
	Computer literacy	.076	.028	.330	2.707	.007
	Internet usage	295	.086	433	-3.418	.001
	Social media use	151	.071	140	-2.144	.033

Dependent variable: Academic achievement

suggests a predominance of examination-oriented reading rather than reading for comprehension or intellectual development. This approach limits the development of critical thinking and language acquisition skills essential for higher academic achievement. The decline in sustained and intentional reading can be linked to motivational and structural deficits, such as lack of access to quality reading materials and the absence of reading culture in homes and schools [38]. Furthermore, the increasing dominance of digital media appears to compete with and, in many cases, displace traditional reading practices.

This competition creates a cognitive environment where deep reading is replaced by fragmented attention and superficial information processing [47]. However, where students demonstrate consistent and habitual reading practices – especially those motivated by curiosity and learning rather than solely for exams – there is clear evidence of positive academic outcomes. This reinforces the role of intrinsic motivation and literacy culture as critical components of educational success [54]. Compared to the findings of Popoola et al. [52] in Ibadan North and Bamidele [19] in Ogun State, which similarly showed that time management and study habit orientation impact performance, this study reveals a more curriculum-aligned reading pattern driven by school structures.

Digital literacy is another core determinant of academic achievement, particularly in a technology-driven learning landscape. Students who possess functional digital skills – such as conducting online research, using educational applications, and preparing digital assignments – appear to have an advantage in navigating academic tasks. However, the study also reveals a digital divide that separates students with access to digital tools and support from those without. Many schools lack digital infrastructure, and students from less privileged backgrounds often have limited or no access to devices or the internet, creating a systemic inequality that impedes learning [11].

Moreover, while some students show competence in using digital tools, the depth and scope of their digital literacy remain questionable. Often, digital engagement is confined to entertainment or social networking, rather than knowledge acquisition or academic reinforcement [13]. The implications are twofold: first, digital literacy must be intentionally cultivated as a pedagogical goal; second, the presence of digital tools does not automatically translate into academic utility without guided instruction and purpose-driven use [5]. These patterns resonate with findings from Agina-Obu and Okwu [7] and Fadele et al. [27], who highlighted the superficial use of ICT tools by students despite reported competence, indicating a gap between skill and purposeful application.

When focused and educational, internet usage enhances academic performance by providing access to vast knowledge and learning resources. Students who use the internet to watch tutorials, research school assignments, or interact with educational content are likelier to perform better in their studies [30]. However, this benefit is contingent on structured and meaningful usage. Internet access is often unstructured and unmonitored, leading students to prioritise entertainment or social interaction over academic engagement. This problem is exacerbated by a lack of digital oversight at home and in school, suggesting a need for parental and institutional involvement in guiding internet behaviour [2].

Moreover, students' information-seeking behaviour online is often unsystematic, raising concerns about their ability to evaluate and apply information critically. These patterns underline schools' need to incorporate information literacy into the curriculum so that students can maximise the educational potential of internet tools. Similar to the observations by Ugwulebo and Okoro [58] and Ahmed, Ahmed-Zakariyyah and Ahmed [10], this study confirms that academic gains from internet usage are largely dependent on how students use the internet – not just whether they have access.

Social media usage presents a particularly contradictory dynamic. While these platforms offer opportunities for collaborative learning and academic networking, the findings suggest their predominant use is for socialisation, entertainment, and escapism [8]. The addictive design of social media platforms encourages compulsive use, often at the expense of study time and academic focus. Students frequently report spending significant time on platforms such as Facebook, Instagram, WhatsApp, and TikTok, with little to no academic returns. This behaviour contributes to reduced concentration, poor time management, and lower academic performance. The psychological and behavioural implications of excessive social media use - such as anxiety, distraction, and fragmented attention – compound the problem, especially when such use is not balanced by disciplined study habits or guided digital engagement [31].

Nonetheless, this is not to suggest that social media is inherently detrimental. When used strategically – for example, through academic discussion forums, educational pages, and peer study groups – it can be a supportive tool. The challenge, therefore, lies in shifting student behaviour from passive consumption to purposeful engagement [8]. These findings closely mirror those of Kalejaiye, Banjoko and Oludipe [34] and Kwalli and Baba [36], who found that students' uncontrolled social media use negatively affects performance, while responsible use correlates with better academic results.

The study also found limited correlation between demographic variables and the studied behaviours, suggesting that reading habits, digital literacy, and technology usage patterns cut across gender and age lines in this context. This homogeneity could indicate a broader cultural trend in which socio-technological behaviours are becoming standardised among youth, regardless of demographic distinctions. However, it may also mask underlying inequities related to socioeconomic status or parental education levels, which were not explored in depth in this study but are likely to influence both access to and proficiency in digital and reading practices.

The overarching implication of the study is the urgent need for systemic intervention at multiple levels. Schools must take deliberate steps to integrate digital literacy and reading culture into their formal curricula. This includes not only access to digital infrastructure but also pedagogical frameworks that train students to use technology in academically meaningful ways [5]. Libraries, reading clubs, and structured digital programs can play transformative roles in this regard. At the policy level, there is a clear need for investment in educational technology and literacy development, particularly in underserved regions. Parents and guardians must also shape students' habits by modelling positive behaviour and providing guidance on responsible digital engagement.

6. Conclusions

This study investigated the predictive influence of reading habits, digital literacy, internet usage, and social media engagement on the academic achievement of public secondary school students in Ibadan, Nigeria. The results demonstrate that all four factors significantly shape students' academic outcomes, with reading habits emerging as the strongest predictor. Students who consistently practised purposeful reading achieved better academic results, underscoring the foundational role of reading culture in educational success. Digital literacy also proved critical, as students who could navigate digital tools and applications competently were better equipped to research, complete assignments, and engage with modern learning systems. However, access alone was not sufficient – students needed structured guidance and pedagogical support to harness digital tools for academic purposes. This finding reveals that digital skill development must be integrated deliberately and equitably into school curricula.

Internet usage offered both opportunities and challenges. While academically focused internet use enhanced performance, excessive engagement with non-academic content diluted its benefits. Similarly, social media displayed a dual influence: it served as a collaborative platform for some students while distracting others from academic tasks. This duality reflects the tension between digital empowerment and digital distraction in contemporary student life.

The implications of this study are clear. Improving academic achievement requires a holistic strategy that combines the reinforcement of traditional literacy with intentional digital education. Schools must invest in infrastructure, curriculum design, and teacher training to cultivate reading culture and digital fluency. Parents and policymakers should provide supportive environments encouraging purposeful learning while mitigating digital distractions.

Students' academic success in the 21st century is shaped not just by their access to knowledge but also by their ability to engage with it meaningfully. Strengthening reading habits, fostering digital competence, and promoting responsible internet and social media use are key steps toward nurturing a generation of learners equipped for academic excellence and lifelong growth.

References

- [1] Abiodun, A.P. and Olofin, S.O., 2020. Influence of Teacher Characteristics On Academic Performance of Senior Secondary School Students in Mathematics in Three Geo-Political Zones of Nigeria. *Euro Afro Studies International Journal*, 1(2), pp.13–33. Available from: https://doi.org/10.5281/zenodo.3700220.
- [2] Abubakar, H. and Salmanu, Y., 2018. Impact of Internet Technology Usage on Job Performance of Senior Secondary School Teachers in Kaduna State Nigeria. *International Journal of Curriculum and Instruction*, 10(2), pp.152–167. Available from: https://ijci.net/index.php/IJCI/article/view/119.
- [3] Adegoke, O.S. and Orekelewa, O.C., 2020. Indiscipline Model and Academic Performance of Secondary School Students in Ibadan: Implication for Educational Foundation in Nigeria. *International Journal of Research and Innovation in Social Science*, 4(8), pp.450–460. Available from: https://rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-8/450-460.pdf.
- [4] Adekola, B.O., Shoaga, O. and Lawal, F.O., 2015. Performance of Senior Secondary School Student in English Language as Correlate of Academic Performance in General Subjects. *Journal of Education, Society and Behavioural Science*, 6(4), p.335–340. Available from: https://doi.org/10.9734/BJESBS/2015/15562.
- [5] Adeove, A.A. and Adeove, B.J., 2017. Digital literacy skills of undergraduate

- students in Nigeria universities. *Library Philosophy and Practice (e-journal)*, p.1665. Available from: https://digitalcommons.unl.edu/libphilprac/1665/.
- [6] Adeyeba, A.O., 2017. Contribution of Information Communication Technology to Effective Teaching and Learning of Agricultural Science in Some Selected Public and Private Secondary Schools in Ibadan North East Local Government in Oyo State. *Global Journal of Agricultural Research*, 5(3), pp.12–21. Available from: https://tinyurl.com/4je4whut.
- [7] Agina-Obu, R. and Okwu, E., 2023. Impact of Digital Literacy on University Students' Use of Digital Resources in Nigeria. *Asian Journal of Information Science and Technology*, 13(2), p.60–65. Available from: https://doi.org/10.51983/ajist-2023.13.2.3587.
- [8] Ahmad, S.A., 2019. Social Media and Students' Academic Performance in Nigeria. *Asian Journal of Education and e-Learning*, 7(1), pp.1–8.
- [9] Ahmed, K.M. and Ainebyona, G., 2020. Investigating the Effects of Social Media on the Education of University Students in Hargeisa, Somaliland. *American Research Journal of Humanities* & Social Science, 3(2), pp.66–76. Available from: https://www.arjhss.com/wp-content/uploads/2020/02/H326676.pdf.
- [10] Ahmed, M.A., Ahmed-Zakariyyah, R.B. and Ahmed, A.R., 2018. Influence of Internet Usage on Senior School Students' Achievement in Biology in Osun State, Nigeria. *Kampala International University Journal of Humanities*, 3(2), pp.237–241. Available from: https://ijhumas.com/ojs/index.php/niuhums/article/view/314.
- [11] Ajiboye, O.O. and Jakob, P.A., 2024. Digital Literacy Skills and Information Sharing Practices among Undergraduates in Universities in Kwara State. *Ilorin Varsity International Journal of Library & Information Science*, 7(1), pp.100–115. Available from: https://tinyurl.com/35zpmbrz.
- [12] Akande, S.O. and Oyedapo, R.O., 2018. Effects of social media use on the reading habits of selected high school students in Nigeria. *Information Impact: Journal of Information and Knowledge Management*, 9(1), pp.46–58. Available from: https://doi.org/10.4314/iijikm.v9i1.5.
- [13] Akinwale, O.E. and Onokala, U.C., 2022. Social Media in Nigeria: A Curse or Blessing in Time of COVID-19 and Crisis Situation? A Behavioural Perspective. In: A.A. Eniola, ed. *Entrepreneurship and Post-Pandemic Future*. Emerald Publishing Limited, p.53–71. Available from: https://doi.org/10.1108/978-1-80117-902-720221005.
- [14] Akuezuilo, J.A. and Egenti, F.C., 2024. Study Habits and Learning Styles as Predictors of Academic Achievement of Secondary School Students in Anambra State. *Journal of Guidance and Counselling Studies*, 8(1), pp.81–93. Available from: https://journals.unizik.edu.ng/jgcs/article/view/3557.
- [15] Anyaegbu, M.I., Aghauche, E.E. and Nnamani, E., 2016. Poor reading habit and the academic performance of Junior Secondary School students in Enugu South Local Government Area of Enugu State. *Education Research Journal*, 6(8), pp.112–121. Available from: https://www.researchgate.net/publication/320621871.
- [16] Anyira, I.E. and Udem, O.K., 2020. Effect of Social Media Addiction on Reading Culture: A Study of Nigerian Students. *Library Philosophy and Practice (e-journal)*, (4170). Available from: https://digitalcommons.unl.edu/libphilprac/4170.
- [17] Araromi, M.O. and Olatubosun, O.C., 2018. Students' Reading-Related Factors as Predictors of Achievement in English Reading Comprehension in Lagelu Local Government Area, Oyo State, Nigeria. *European Journal of Education Studies*, 5(7). Available from: https://oapub.org/edu/index.php/ejes/article/view/2155.
- [18] Bakare, C.G.M., 1972. *Study Habits Inventory (SHI): Manual.* Ibadan: Psychoeducational Research Productions. Available from: https://www.collegesidekick.com/study-docs/24030425.

- [19] Bamidele, I.A., 2018. The Reading Habits of Public Senior Secondary School Students in Ogun State, Nigeria. *MiddleBelt Journal of Library and Information Science*, 16, pp.41–54. Available from: https://mbjlisonline.org/index.php/jlis/article/view/39.
- [20] Bassey, I.O., 2020. School administration and academic performance of secondary school students. Available from: https://doi.org/10.2139/ssrn.3568473.
- [21] Cachia, M., Lynam, S. and Stock, R., 2018. Academic success: Is it just about the grades? *Higher Education Pedagogies*, 3(1), pp.434–439. Available from: https://doi.org/10.1080/23752696.2018.1462096.
- [22] Credé, M. and Kuncel, N.R., 2008. Study Habits, Skills, and Attitudes: The Third Pillar Supporting Collegiate Academic Performance. *Perspectives on Psychological Science*, 3(6), pp.425–453. Available from: https://doi.org/10.1111/j.1745-6924. 2008.00089.x.
- [23] Eke, H.N., Omekwu, C.O. and Odoh, J.N., 2014. The Use of Social Networking Sites among the Undergraduate Students of University of Nigeria, Nsukka. *Library Philosophy and Practice (e-journal)*, (1195). Available from: http://digitalcommons.unl.edu/libphilprac/1195.
- [24] Emeasoba, N.C. and Ugwuoke, L.N., 2019. Influence of social media on academic performances of business studies students in Upper Basic Education Level of Enugu Education Zone. *Global Journal of Education, Humanities & Management Sciences*, 1(2), pp.220–234. Available from: https://www.gojehms.com/index.php/GOJEHMS/article/view/41.
- [25] Enekwechi, E.E. and Ezeanya, M.C., 2021. Study-Habit as a Predictor of Secondary School Students' Achievement in Chemistry in Anambra State. *International Journal of Education and Evaluation*, 7(2), pp.36–42. Available from: https://ijee.io/get/IJEE/VOL.%207%20NO.%202%202021/Study-Habit% 20as%20a%20Predictor.pdf.
- [26] Ewetan, T.O. and Ewetan, O.O., 2015. Teachers' Teaching Experience and Academic Performance in Mathematics and English Language in Public Secondary Schools in Ogun State, Nigeria. *International Journal of Humanities Social Sciences and Education*, 2(2), pp.123–134. Available from: https://www.arcjournals.org/pdfs/ijhsse/v2-i2/12.pdf.
- [27] Fadele, O., Haruna, S., Amusan, T., Oluwmuyiwa, S. and Onwuegbunam, N., 2019. An Investigation on Utilization of Internet and Television in Senior Secondary Schools in Rigachukun Inspectorate of Kaduna State in Nigeria. *Preprints*. Available from: https://doi.org/10.20944/preprints201911.0312.v1.
- [28] Federal Ministry of Education, 2017. *Nigeria Digest of Education Statistics* 2014-2016. Available from: https://education.gov.ng/wp-content/uploads/2019/03/digest.pdf.
- [29] Grant, C. and Osanloo, A., 2014. Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House". *Administrative Issues Journal: Connecting Education, Practice and Research*, 4(2), pp.12–26. Available from: https://files.eric.ed.gov/fulltext/EJ1058505.pdf.
- [30] Guevara Rodríguez, M. Ladrón de, Lopez-Agudo, L.A., Prieto-Latorre, C. and Marcenaro-Gutierrez, O.D., 2022. Internet use and academic performance: An interval approach. *Education and Information Technologies*, 27(8), pp.11831–11873. Available from: https://doi.org/10.1007/s10639-022-11095-4.
- [31] Ismail, A., 2021. Impact of Social Media on Teenagers: Nigerian Experience. *Journal of Media & Management*, 3(4), pp.1–7. Available from: https://doi.org/10.47363/JMM/2021(3)134.
- [32] Jimoh, M.I., Olutola, A.T. and Balogun, A.O., 2015. School-Based Assessment as

- a Determinant of Students' Achievement in WAEC and NECO Examinations: Geography in Focus. *Journal of Educational Foundation and Development*, 1(1), pp.93–101. Available from: https://www.researchgate.net/publication/387398976.
- [33] Jones, S., 2002. The Internet Goes to College: How Students Are Living in the Future with Today's Technology. Washington, D.C.: Pew Internet and American Life Project. Available from: https://eric.ed.gov/?id=ED472669.
- [34] Kalejaiye, A.O., Banjoko, S.O. and Oludipe, O.S., 2018. The impact of social media on senior secondary school students' academic performance in chemistry. *Journal of Chemical Society of Nigeria*, 43(3), pp.352–360. Available from: https://journals.chemsociety.org.ng/index.php/jcsn/article/view/186.
- [35] Kamar, K.Y., 2020. Relationship between Reading Habits and Students' Academic Performances of Secondary Schools in Sokoto State, Nigeria. *International Journal of Research and Innovation in Social Science*, 4(2), pp.242–245. Available from: https://rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-2/242-245.pdf.
- [36] Kwalli, U.I. and Baba, A., 2024. Influence of Social Media on Academic Performance of Senior Secondary School Students: A Case Study of Secondary Schools in Zaria Local Government Area, Kaduna State. *Journal of Contemporary Education Research*, 5(8). Available from: https://hummingbirdjournals.com/jcer/article/view/199.
- [37] Lamas, H.A., 2015. School Performance [Sobre el rendimiento escolar]. *Propósitos y Representaciones. Journal of Educational Psychology*, 3(1), p.313–386. Available from: https://doi.org/10.20511/pyr2015.v3n1.74.
- [38] Lawal, Y., 2023. Reading Culture: Nigeria As a Case Study. Available from: https://economicconfidential.com/reading-culture-nigeria-study/.
- [39] Lee, J. and Stankov, L., eds, 2016. Non-Cognitive Psychological Processes and Academic Achievement. Routledge.
- [40] Liem, G.A.D. and McInerney, D.M., eds, 2018. *Big Theories Revisited 2, Research on Sociocultural Influences on Motivation and Learning*, vol. 12. Charlotte, NC: Information Age Publishing.
- [41] Magaji, Z.B. and Umar, R.T., 2015. Effect of mathematics and English language proficiency on academic performance of business education students in financial accounting. *ATBU, Journal of Science, Technology & Education*, 3(1), pp.58–67. Available from: https://atbuftejoste.com/index.php/joste/article/view/97.
- [42] Mingle, J. and Adams, A., 2015. Social Media Network Participation and Academic Performance In Senior High Schools in Ghana. *Library Philosophy and Practice (e-journal)*, p.1286. Available from: https://digitalcommons.unl.edu/libphilprac/1286/.
- [43] Mok, 2024. of M., The impact social media on Teach-Transforming education in ing and Learning: the digital Available from: https://www.advance-he.ac.uk/news-and-views/ impact-social-media-teaching-and-learning-transforming-education-digital-age.
- [44] Mushtaq, K., Hussain, M., Afzal, M. and Gilani, S.A., 2019. Factors Affecting the Academic Performance of Undergraduate Student Nurses. (2). Available from: https://doi.org/10.21089/njhs.42.0071.
- [45] National Bureau of Statistics, 2019. *WAEC Results Statistics* (2016-2018). Available from: https://education.gov.ng/wp-content/uploads/2019/10/WAEC_RESULTS_STATISTICS_2016-2018.pdf.
- [46] Nwafor, S.C., 2015. Assessment of Teachers Use of ICT for Secondary Schools Computer Studies Curriculum Implementation in Rivers State. Unpublished B.Sc. Project. Ignatius Ajuru University of Education, Port Harcourt.
- [47] Ogunbodede, K.F. and Sawyerr-George, O.E., 2023. Digital resources and the

- reading habits of university students in Nigeria. *International Journal of Professional Development, Learners and Learning*, 5(1), p.ep2304. Available from: https://doi.org/10.30935/ijpdll/12748.
- [48] Olatokun, W.M., 2013. Internet access and usage by secondary school students in a Nigerian Municipality. *South African Journal of Libraries and Information Science*, 74(2), pp.138–148. Available from: https://doi.org/10.7553/74-2-1295.
- [49] Osita-Ejikeme, U.E., 2018. Social Media and Students' Academic Performance among Secondary School Students. *International Journal of Research*, 5(9), pp.153–167. Available from: https://www.researchgate.net/publication/348522564.
- [50] Otaru, B.M. and Nwankwo, S.O., 2021. Perceived Influence of Social Media on Students Academic Performance As Expressed By Secondary School Teachers in Federal Capital Territory, Abuja: Implications for Counselling. *International Journal of Innovative Technology Integration in Education*, 5(1), pp.17–24. Available from: https://ijitie.aitie.org.ng/index.php/ijitie/article/view/204/.
- [51] Owusu-Acheaw, M., 2014. Reading Habits Among Students and its Effect on Academic Performance: A Study of Students of Koforidua Polytechnic. *Library Philosophy and Practice (e-journal)*, p.1130. Available from: http://digitalcommons.unl.edu/libphilprac/1130.
- [52] Popoola, G.A., Amoo, O.K., Umar, O.G., Popoola, A.A. and Olatunji, O.M., 2021. Influence of Reading Habit on Student Academic Performance in a Senior Second School in Ibadan. In: C. McCray, ed. *Multifaceted Strategies for Social-Emotional Learning and Whole Learner Education*. Hershey, PA: IGI Global Scientific Publishing, chap. 7, pp.141–162. Available from: https://doi.org/10.4018/978-1-7998-4906-3.ch007.
- [53] Salawu, R., 2014. Prevalence of Bullying Among Public Secondary School Students in Ibadan North East Local Government Area, Oyo State, Nigeria. Ph.D. thesis. University of Ibadan. Available from: https://library.adhl.africa/handle/123456789/ 11795.
- [54] Schiefele, U., Schaffner, E., Möller, J. and Wigfield, A., 2012. Dimensions of Reading Motivation and Their Relation to Reading Behavior and Competence. *Reading Research Quarterly*, 47(4), pp.427–463. Available from: https://doi.org/10.1002/RRQ.030.
- [55] Siahi, E.A. and Maiyo, J.K., 2015. Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, India. *International Journal of Educational Administration and Policy Studies*, 7(7), p.134–141. Available from: https://doi.org/10.5897/ijeaps2015.0404.
- [56] Sunday, E.I. and Akporehwe, N.J., 2022. Study Habits and Academic Performance of Science Education Undergraduates in Rivers State University, Nigeria. *Journal of Education, Society and Behavioural Science*, 35(1), p.1–10. Available from: https://doi.org/10.9734/jesbs/2022/v35i130395.
- [57] Talaue, G.M., AlSaad, A., AlRushaidan, N., AlHugail, A. and AlFahhad, S., 2018. The impact of social media on academic performance of selected college student. *International Journal of Advanced Information Technology*, 8(4/5), pp.27–35. Available from: https://doi.org/10.5121/ijait.2018.8503.
- [58] Ugwulebo, J.E. and Okoro, S.N., 2016. Impact of Internet Usage on the Academic Performance of Students: A case study of the University of Abuja, Nigeria. International Journal of Scientific & Engineering Research, 7(10), pp.1018–1029. Available from: https://www.researchgate.net/publication/350705510.
- [59] Yebowaah, F.A., 2018. Internet Use and its Effect on Senior High School Students in Wa Municipality of Ghana. *Library Philosophy and Practice (e-journal)*, p.1817. Available from: https://digitalcommons.unl.edu/libphilprac/1817.