

Effects of Social Media on the Academic Performance of Undergraduate Students of Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria.

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ABSTRACT

Social media is an integral tool for interaction and interpersonal relationships, thus reducing physical interaction with the convenience of online platforms. This study explores the effects of social media on the academic performance of undergraduate students of Niger Delta University. Using a cross-sectional research design, data were collected through primary and secondary sources. With a sample size of 370, the data were analysed using descriptive and inferential statistics. The study revealed a widespread use of social media among students of the Niger Delta University. It also showed that social media does not significantly impact academic performance. The findings further revealed that while social media offers opportunities for information sharing, networking, and collaboration, it also presents challenges such as distraction and negative impacts on studies. It was thus recommended, among others, that there should be collaborative efforts between educational institutions and stakeholders that are crucial in developing interventions and policies that foster positive social media experiences while addressing potential risks. There is also a need for research and dialogue on the evolving dynamics of social media in academic settings to gain deeper insights into students' social media usage, equipping them with the necessary knowledge and skills to navigate the digital landscape effectively.

Keywords: Academic Performance; Addiction; Social Media; Undergraduate Students; Studies

INTRODUCTION

Before the advent of technology, life was significantly different from how it is today. People had to rely solely on face-to-face communication and interaction, making it difficult to maintain relationships and stay connected to loved ones and those who lived far away. Information travelled relatively slowly, and it took weeks or months for important news and information/messages to reach people. To remain abreast of current news and information, people had to rely on printed media, such as magazines and newspapers; however, it was impossible to share large amounts of data instantly through these platforms. Thus, a need for modern technology in information communication. Social media has become essential for fostering relationships and making people feel wanted (Dasar, 2022).

The history of technology is vast and complex, and has undergone various phases and stages of development, evolving into its current form (Wilson 2016). According to Wilson (2016), the progress of early humans is akin to the movement of an inchworm, which advances and then stops; similarly, primitive humans attained various stages of improvement, progressing from the Stone Age to the Bronze and from the Bronze to the Iron Age. He described the three stages of technological development, with the Iron Age

representing the pinnacle of technological development. During the Stone Age, humans used tools made of stone and bone, it was also known as the Palaeolithic Era. These tools included hand axes, scrapers, and spears. This era was closely followed by the Bronze Age, during which weapons and tools were made of Bronze, as well as a mix of copper and tin. The Bronze Age lasted from approximately 3500 BC to 1100 BC. In the Iron Age, which began around 1100 BC, there was a transition from bronze tools to iron tools, leading to advances in Agriculture, Architecture, and welfare. Next came the Renaissance, which was a period of great scientific and technological advancement, including the invention of the Printing Press.

Wilson (2016) asserts that the introduction of technology undoubtedly made life easier for humans, and its gradual development from phase to phase was a welcome development. However, with the rise of modern technology and most especially, social media, things are a lot better than they used to be. In the past, before the advent of technology, education was significantly more limited. Access to education was limited to a tiny percentage, primarily comprising individuals from wealthy backgrounds and upper-class families. Information in books and other materials was hard to find and inefficient (Wilson, 2016). However, with the rise of modern technology, life is relatively easier, communication and dissemination of information are more efficient and far-reaching through the use of social media. E.g. Instagram, WhatsApp, etc, and education has taken a positive turn as students have unlimited and unrestricted access to a whole lot of information on a variety of subjects. New knowledge can be learnt and new skills acquired (Wilson, 2016). Dasar (2022) asserts that people need social media for validation because, as humans, they always want to feel wanted and belong. That the pressures of online validation or comparison would ease without social media, since interpersonal relationships and communication would evolve.

Social networking exists to enable communication and information sharing among people through messages, regardless of distance. These networking systems facilitate communication irrespective of location and proximity (Waheed et al., 2017). Social media use has expanded in scope. A key reason for this expansion is the availability and accessibility of these social networking sites. Due to the popularity and influence of social networking sites (Waheed et al., 2017). Social networking sites now reflect every student's style and cultural wishes, even in the future. The sites may serve as instructional tools to advance academic learning, although they can also impact learning (Abudabbous, 2021). Abudabbous (2021) averred that social networking can enhance academic learning by providing access to fresh ideas and novel information that can improve academic research. He explained that there are several open-source materials available to everyone with an internet connection, which is a source of an unlimited reservoir of knowledge that is accessible, free and available to anyone who so desires. Students can visit different

sites to source for their unique needs, thereby widening their knowledge scope on a variety of subjects, since the internet contains information on every matter. Media sites through which students can learn include YouTube, LinkedIn, Facebook, Instagram, and others. Therefore, interpersonal relationships amongst students have improved as it is relatively easier to connect with them. Also, study groups can be formed without being confined to the four corners of a classroom. Ideas can be discussed, opinions shared, questions answered, and issues resolved, leading to a deeper comprehension and understanding (Abudabbous 2021). According to Abudabbous (2021), outside scholarly activities, they can also interact and connect with other minds and individuals who share related goals, visions, ambitions, and similar interests worldwide, which would have been impossible and extremely difficult to achieve physically, considering the geographical proximity. New friendships can be formed, relationships built, and existing bonds strengthened (Abudabbous, 2021). Social media influences consumers' buying behaviour. This influence is exerted through information dissemination (Yang, 2024). The primary objective of this study is to investigate the effects of social media on undergraduate students of Niger Delta University. The specific objectives are to explore the use and effects of social media on the academic performance of undergraduate students of Niger Delta University.

LITERATURE REVIEW

Obukoadata and Okon (2022), in a study, "Mediamorphosis: Assessing the influence of digital media on traditional newspapers in Nigeria from the audience and media managers' perspectives", explained the increase of social media among people, transforming them into producers and consumers of information simultaneously. The study adopted Roger Fidler's theory of media morphosis, while applied and survey research methods were employed. The findings revealed that traditional media now have low circulation figures due to social media. Banigo (2024) researched "The influence of social media on news reportage and authenticity of COVID-19 Stories". A survey research design was employed to assess the opinions of 53 respondents. The study adopted the theory of user gratification. It was revealed that social media influences the authenticity of news reported, such as COVID-19 news reporting. It was found that social networking sites have features that make it easy to find people who share similar interests. Wheeler et al (2008), in a study, "The Good, the bad and the wiki," showed that people's experiences towards collaborative learning remained positive despite several challenges. Zahid et al (2016) researched "The Impact of Social Media on students' academic performance". The sample size for the study was 300, while the data collection method was a questionnaire. Results indicate that the effect of social media on students is positive.

Rithika and Selvaraj (2013) studied "The impact of social media on students' academic performance". The sample size for the study was 100. The findings revealed that reliance on social media can cause a decline in physical interactions between interactions as people opt for the ease of digital communication over the effort of meeting in person.

Smith et al. (2018) conducted a study on "Definitions of bullying and cyberbullying: How useful are the terms?" Findings from the study showed that cyberbullying has become a pervasive issue in the digital age, and improper behaviours are heightened by students frequently using social media as a means of procrastination and disengagement from genuine academic pursuits. The study relied on secondary data.

Ajewole and Fasola (2012) researched "Social network addiction among youths in Nigeria" A survey research design was used for the study. The data gathered were analysed using descriptive statistics. It revealed that a significant number of respondents get addicted to social media. Buhari, Ahmad and Ashara (2014) conducted a study, "The use of social media among students of Nigerian Polytechnic" With the use of a descriptive survey and

930 sample size, selected from Kaduna Polytechnic, the study revealed that social media has positively influenced their academic performance.

Kowalski et al. (2014) in the study, "Bullying in the digital age," adopted the general aggression model theory. Findings revealed that cyberbullying perpetration was based on normative beliefs about aggression. Bandi et al (2024) averred that the integration of social media into the daily lives of college students has significant implications towards savings. In a study, "How social media influences students' financial and academic outcomes", Bandi et al (2024) found that social media has financial implications, while a negative relationship with respect to academic achievement.

Otami and Amah (2024), in the study "The role of social networks in job search and career development", explained that social media offers undergraduate students unprecedented opportunities to explore and pursue employment opportunities.

In a study conducted on "Social network addiction among youths in Nigeria", Ajewole and Fasola (2012) concluded that the majority of respondents spend more time on social media, which negatively affects their academic productivity. The study adopted the descriptive survey method. The sample population was drawn from eight (8) higher institutions, with 884 sample size. A study by Siddhartha et al. (2020) examined the "Usage of social media among undergraduate university students". A cross-sectional survey was adopted for this research. With a convenient sampling method, the study reveals that there are equal pros and cons of using social media networks for students. Thus, Social media usage must be utilised properly and rightfully.

Heffner (2016) did a study on the "Effects of social media use in undergraduate students". The study results showed that social media does not have a positive effect on the students' academic achievements. In a different study, Mushtaq (2015) explored the "Effects of social media on undergraduate students' academic performances". The study was carried out at Alberoni University of Afghanistan. A sample size of 371 was used. Findings showed no statistically significant differences between the positive and negative impacts. Sankar and Pushpa (2020) conducted a study, "Impact of social media on academic performance of university students" The convenience sampling technique was used to select a sample size of 100. Findings established a significant connection between social media and academic performance. The research revealed that social media is beneficial to humans for communication and scholarly activities, if not used in unwanted ways.

THEORETICAL FRAMEWORK

The Theoretical frameworks used for this study are the Social Learning Theory and the Uses and Gratification Theory. The Social Learning Theory is a psychological theory that examines how people learn from others and their environment. The Theory was developed by Albert Bandura (1977), who argued that learning is not just about mental processes but also about how we observe and imitate the behaviours of others. According to this theory, we learn by watching others perform a behaviour, and then by imitating that behaviour ourselves. One of the key ideas of the Social Learning Theory is the concept of Reciprocal Determinism. The concept is the idea of a two-way relationship that exists between an individual and his/her environment, which involves an individual influencing and being influenced by environmental factors. The Social Learning Theory can help to understand how students learn about Social Media use from observing and imitating the behaviours of others. It can also help to shed light on how social media influences the behaviours, attitudes and beliefs of students through observational learning. The relevance of the social learning theory to this theory is based on the fact that the theory explains that new behaviours and attitudes are imbibed through observing and imitating others. Undergraduates live in a social media-driven world. And as people in transition to adulthood, who constantly socially interact and observe through

social media, as the primary environments for such, coupled with the influence of peer models whose behaviour is considered worthy of emulation, they may be influenced either positively or negatively within the context of their academic pursuits. The Uses and Gratification Theory is another theory that can give a better understanding of the study. This theory was first developed by Communication Researchers Elihu Katz and Jay Blumler in the 1960s. They were interested in understanding why people use mass media. The Uses and Gratification Theory is a model that explains why people use the Media. It suggests that people use media to satisfy specific needs, such as obtaining information, entertainment, or engaging in social interactions. It also indicates that people have diverse motivations for using social media, and businesses can influence how they utilise it. This also applies to undergraduate students. At the age of transition to adulthood, they are driven by several motivations to use social media. Such motivations may influence the way they utilise it for either academic or non-academic purposes.

METHODOLOGY

A cross-sectional survey research design was adopted in the research. The Taro Yamane formula was used to determine a sample size of 370 from a population of 18,132 undergraduate students. A multi-stage sampling technique was used. First, four faculties were purposefully selected from the existing thirteen. Next, one department was selected purposefully from each of the four chosen faculties. Within each selected department, respondents were randomly selected through a random sampling process. The number of respondents chosen from each department was based on their populations to ensure fair representation. Questionnaires were distributed accordingly to the populations of the selected departments. Data were collected from primary and secondary sources. While Primary data were gathered through a questionnaire distributed to the four departments, Secondary data were obtained from various sources such as journals, conference papers, internet materials, and publications. Data were analysed using descriptive and inferential statistics.

Findings

Table 1: Sex Distribution of Respondents

S/N	SEX	FREQUENCY	PERCENTAGE
1	Male	200	54%
2	Female	170	46%
	Total	370	100%

Source: Fieldwork, 2024

Table 1 presents the sex composition of the respondents, indicating a higher proportion of males than females. Males make up 54% of the respondents, while females make up 46% of the respondents.

Table 2: Age of Respondents

S/N	AGE	FREQUENCY	PERCENTAGE
1	Below 18	56	15.1%

2	18-24	182	49.2%
3	25-29	90	24.3%
4	30 and above	42	11.4%
	Total	370	100%

Source: Fieldwork, 2024

A high percentage (49.2%) of the respondents fall between the ages of 18 - 24 years. A lower percentage (24.3%) of the respondents are aged 25 -29 years, while 15.1% of the respondents are below 18 years. 11.4% of the respondents are 30 years and above.

Table 3: Faculty/Department of Respondents

S/N	FACULTY/DEPARTMENT	FREQUENCY	PERCENTAGE
1	Management Sciences/Accounting	111	30%
2	Engineering/Civil Engineering	89	24%
3	Agriculture/Agricultural Economics, Extension and Rural Development	96	26%
4	Social Sciences/Sociology	74	20%
	Total	370	100%

Source: Fieldwork, 2024

Table 3 presents the faculty or department of the respondents. Students from the Management Sciences make up 30% of the respondents, 24% are from the Faculty of Engineering, 26% are from the Faculty of Agriculture, and 20% are from the Faculty of Social Sciences.

Table 4: Frequency of Use of the Internet

S/N	FREQUENCY OF USE	FREQUENCY	PERCENTAGE
1	Daily	256	69.1%
2	Weekly	72	19.5%

3	Rarely	37	10%
4	Never	5	1.4%
	Total	370	100%

Source: Fieldwork, 2024

A total number of 256 respondents (69.1%) indicated daily use of the Internet, 19.5% indicated that they use the Internet every week, 10% said they rarely use the Internet, while 1.4% said they do not use the Internet.

Table 5: Social Media Use

S/ N	DO YOU USE SOCIAL MEDIA?	FREQUENCY	PERCENTAGE
1	Yes	360	90%
2	No	10	10%
	Total	370	100%

Source: Fieldwork, 2024

While 90% of the respondents are social media users, 10% are not.

Table 6: Social Media Platforms

S/N	NUMBER OF SOCIAL MEDIA PLATFORMS USED	FREQUENCY	PERCENTAGE
1	1 Platform	9	2.4%
2	2 Platforms	45	12.2%
3	3 or more platforms	306	82.7%
	Total	360	97.3%

Source: Fieldwork, 2024

A greater portion of the respondents (82.7%) reported the use of three or more social media platforms. 12.2% use two social media platforms, while 2.4% use only one.

Table 7: Social Media Influence on Academics

S/ N	ACADEMIC DIMENSION	YES	%	NO	%	NOT SURE	%
1	Do you find it difficult to concentrate on your studies due to social media distractions?	196	53%	135	36.5%	20	5.4%
2	Have you ever used social media to collaborate on academic projects or seek help with homework?	258	70%	88	23.8%	7	1.9%
3	Do you think social media significantly affects your academic performance?	245	66%	82	22.2%	21	5.7%
4	Do you think social media negatively affects your academic performance?	141	38%	165	44.6%	32	8.6%

Source: Fieldwork, 2024

Fifty-three per cent (53%) of the respondents admitted to finding it difficult to concentrate on their studies due to social media distractions, 36.5% disagreed, while 5.4% were unsure. More than two-thirds of the respondents (70%) have used social media to collaborate on academic projects or seek help with assignments, 23.8% have not, while 1.9% are uncertain. Two-thirds of the sample (66%) report that social media has had a positive impact on their academic performance, while 38% indicate that it has had a negative impact.

Table 8: Use of social media for studies

S/N	HOW OFTEN DO YOU USE SOCIAL MEDIA WHILE STUDYING OR ATTENDING CLASSES?	FREQUENCY	PERCENTAGE
1	Very often	190	51.4%
2	I barely use it	136	36.8%
3	I never use it	21	5.7%
	Total	347	93.9%

Source: Fieldwork, 2024

Table 8 shows that 51.4% of the respondents often use social media for studies or attending classes, 36.8% barely use it, while 5.7% never use it.

Test of Hypothesis

H₀: Social media does not significantly affect the academic performance of students of the Niger Delta University.

S/ N	X	Y	(X - X)	(Y-Y)	(X - X)(Y- Y)	(X - X) ²	(Y-Y) ²
1	90	20	28.75	-0.5	-14.375	826.6	0.25
2	70	22	8.75	1.5	13.125	76.6	2.25
3	45	20	-16.25	-0.5	8.125	264.1	0.25
4	40	20	-21.25	-0.5	10.625	451.6	0.25
	245	82			17.5	1618.9	3

Author's Computation

$$\bar{X} = \frac{245}{4} = 61.25$$

$$\bar{Y} = \frac{82}{4} = 20.5$$

Using Pearson's Moment Correlation Coefficient

$$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

$$= \frac{17.5}{\sqrt{1618.9 \times 3}}$$

$$= \frac{17.5}{23.7} = 0.7$$

Testing the significance of correlation

$$t = r \sqrt{\frac{n-2}{1-r^2}}$$

$$= 0.95 \sqrt{\frac{4-2}{1-0.7^2}}$$

$$= 1.4$$

$$DF = n - 2$$

$$= 4 - 2$$

$$DF = 2$$

With 2 degrees of freedom at a 0.05 significance level, t* is 4.30

t - Calculated value is 1.4

t - Critical value is 4.30

The analysis of data shows that the calculated value is less than the critical value at a 0.05 (5%) significance level. Therefore, based on this, the Null hypothesis (H₀) is accepted, i.e., social media does not significantly affect the academic performance of students of the Niger Delta University.

DISCUSSION OF FINDINGS

The study revealed that a significant proportion of students at the Niger Delta University use social media. It also identified the extent and pattern of use of social media. While the highest number of respondents indicated daily use of the Internet, the use of social media spans various platforms. A good proportion of the students use more than three platforms. Despite concerns about

the potential distractions caused by social media and social networking sites, the findings of this study showed that students are highly inclined to use social media in their daily activities or routines. Social media was perceived positively by a significant portion of respondents. The study also found that a significant proportion of students frequently use social media while studying or attending classes, though a considerable number saw it as a distraction to their studies. This is in line with the findings that social media has revolutionised the way undergraduate students communicate, relate and connect with others, both within and outside their immediate social circles (Wheeler et al., 2008).

The study further revealed that social media does not significantly affect the academic performance of students. This conclusion is based on the outcome of the correlation coefficient test, which shows that the computed value is smaller than the critical value at a 0.05 significance level. The result indicated that social media does not significantly affect students' academic performance, though it provides a medium for self-expression and interaction. The result is indicative of the fact that most students use social media for other purposes more than academic endeavours. This corroborates the findings that too much use of social media for non-academic purposes, such as scrolling or engaging in distracting activities, could potentially harm academic performance by reducing study time and concentration (Siddhartha et al., 2020). Though Sankar and Pushpa (2020) averred that there is a significant connection between social media and academic performance, Siddhartha et al. (2020) stated that social media usage is a crucial factor for any undergraduate, regardless of their course of study, because social media has become an essential factor for individuals to excel in their careers. Social media usage must therefore be utilised properly and rightfully. If students spend long periods on social media sites for academic purposes, they can share and generate new ideas and concepts related to their studies. This explains the complexity of the impact of social media on academic performance. While it can serve as a tool for achieving good academic grades, excessive use can cause distractions and lower academic grades. This also underscores the importance associated with students' use of social media.

CONCLUSION

The study explored the effect of social media on the academic performance of Niger Delta University students, Wilberforce Island, Bayelsa State. An analysis of students' digital engagement revealed that social media serves as a vital tool for communication, networking, and information sharing among students. Despite concerns about its potential distractions, there is significant evidence that social media has both positive and negative impacts on academic performance. Used correctly, social media has emerged as a necessary factor for career excellence and a platform for self-expression. Thus, in recognising the integral role of social media in students' lives, it becomes imperative for higher educational institutions to promote responsible digital citizenship. Also, collaborative efforts between educational institutions and stakeholders are crucial in developing interventions and policies that foster positive social media experiences while addressing potential risks.

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