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THE IMPACT OF SOCIAL MEDIA USAGE PATTERNS ON ACADEMIC PERFORMANCE AND WELL-BEING AMONG STUDENTS OF TERTIARY INSTITUTIONS IN KATSINA STATE

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Abstract

The emergence of the digital era has initiated a profound transformation in education, especially within academic institutions. The purpose of this study is to look into the multidimensional relationship between social media usage patterns, academic achievement, and general well-being among students in tertiary institutions in Katsina State, Nigeria. Because of social media's extensive effect in modern culture, there is concern regarding its possible impact on students' academic performance and psychological well-being. The study uses a quantitative research approach to collect data from **500** students via a structured questionnaire, which represents the sample size. The study's first findings indicate a complicated interplay between social media usage patterns, academic performance, and well-being. While students recognize the benefits of social media for educational reasons, they also report difficulties with time management, distraction, and social comparison, which may jeopardize their academic progress and emotional well-being. Furthermore, studies show that the volume and nature of social media usage vary among students, with implications for academic achievement and general life happiness.

Keywords: Social media, academic performance, well-being, tertiary institutions, Katsina State, Nigeria.

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Introduction

The advent of the digital age has introduce a ground breaking shift in education, particularly within academic institutions (Ezeah, 2013). Students, not only in Katsina State but globally, are progressively integrating social media into their daily routines, blurring the lines between their educational pursuits and online engagements. This phenomenon prompts us to explore how students' patterns of social media consumption impact their overall well-being and academic performance. The purpose of this research is to delve into the intricate interplay between social media usage and the emotional and intellectual dimensions of students' lives, shedding light on both the advantages and challenges inherent in this convergence.

Social media sites like Facebook, Twitter, Instagram, and WhatsApp have ingrained themselves into students' daily life in Katsina State as technology develops. They act as platforms for entertainment and self-expression in addition to being tools for communication and information sharing. Social media's widespread use prompts questions regarding its impact on academic performance (Koranteng et al., 2023). Students today have easy access to a wide range of distractions, such as endless newsfeeds and viral videos, which may cause them to lose focus on their academics (Ghosh et al., 2023). On the other hand, social media can offer chances for group learning, knowledge exchange, and academic networking (Purwanto et al., 2023). Beyond just academic success, it is crucial to investigate the substantial impact that social media has on students' wellbeing. Long-term, excessive participation can lead to higher levels of stress and anxiety as well as a general loss in wellbeing, especially when combined with the demands of maintaining an online presence (Li et al., 2023). On the other hand, it's crucial to understand that social media may also be a source of social connection and support, thereby enhancing students' emotional well-being (Ede et al., 2023). This study aims to provide a thorough and nuanced analysis of the various ways in which students' social media usage habits interact with both their academic goals and emotional states, notably among students at tertiary institutions in Katsina State. The ultimate objective is to uncover knowledge that will help educators, decision-makers, and even students themselves navigate and manage this digital integration for the benefit of everyone concerned.

Located in Nigeria's northwest, Katsina State is well known for its thriving higher education scene, which includes a wide range of tertiary institutions such as colleges of education, polytechnics, and universities. These prestigious academic institutions act as the form in which the futures of the state and the country depend. The student body at Katsina State is firmly positioned at the nexus of traditional education and the emerging digital era amid the unrelenting advancement of digital technology and the ever-deepening integration of social media into the fabric of daily existence (Publications, 2022).

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

Understanding how these pupils navigate this complex environment assumes utmost relevance at this crucial juncture where education and technology coexist (Jacobsen & Forste, 2011). This paper goes beyond simple intellectual curiosity; it arises as a necessary practical requirement in the quest to maximize their educational journey and protect their overall well-being. Within this context, a complex interplay between age-old knowledge and cutting-edge innovation takes place, shaping their educational experiences and plotting the course of their lives. As a result, understanding their travels becomes a vital endeavor that has the potential to open up new avenues for well-informed decision-making, specialized instructional approaches, and the development of a harmonious and thriving student body.

Role of Social Media in Katsina State

Social media significantly shapes the sociocultural landscape and informational environment of Katsina State, Nigeria. It serves as a powerful tool for the rapid dissemination of news, updates, and important occurrences in the area (Olutola et al., 2016). Local news organizations, governmental organizations, and common people are increasingly depending on social media sites like Facebook, Twitter, and WhatsApp to efficiently disseminate important information, such as security alerts, health advisories, and educational announcements (MOHAMED WAHISH HASHIM, ALI KHATIBI, S.M. FERDOUS AZAM, 2023). This immediate access to real-time information is a key factor in raising public awareness and safety, which is important in any state but is especially important in those that experience intermittent security difficulties when timely information can be a lifesaver (Ezeah, 2013).

Social media also acts as a catalyst for strengthening ties among communities in Katsina State. Online groups and forums act as virtual gathering places, bringing people together who have common passions for things like intellectual conversation, business networking, and cultural preservation. It appears as a digital space where people may establish bonds, engage in deep conversations, and grow a strong sense of belonging (Umar & Idris, 2018). The youth of Katsina State are also given a powerful platform through social media, enabling them to express their creative tendencies, articulate their opinions, and add to the state's rich cultural mosaic. By encouraging civic engagement among the younger generation, it increases their ability to influence how the state will develop in the future (Olutola et al., 2016).

Role of Social Media among Students of Tertiary Institutions in Katsina State

Social media has seamlessly integrated into the lives of students enrolled in tertiary institutions across Katsina State, Nigeria, assuming a pivotal role in their academic and personal growth. It functions as a dynamic and ever-connected hub for communication, fostering collaboration and the swift dissemination of information (Publications, 2022). Across platforms like WhatsApp, Facebook, and Twitter, students establish connections

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

not only within the confines of their own institutions but also across the vast and diverse educational landscape of the state. These digital networks act as conduits for vibrant academic discussions, facilitating the seamless exchange of study materials and the formation of study groups, thereby significantly enhancing the overall learning experience (Salhab & Daher, 2023).

Beyond its role as a virtual academic forum, social media emerges as a robust channel for holistic development, both academically and personally. It serves as an invaluable resource repository, enabling students to access educational materials, seek scholarly guidance, and remain abreast of critical institutional updates (Qureshi et al., 2023). Furthermore, students harness the power of social media for creative expression and societal engagement. They leverage these platforms to exhibit their talents, drive awareness about pertinent social issues, and champion causes for change (Tran et al., 2023). Nevertheless, students are mindful of striking a balance in their social media utilization, recognizing that excessive distractions can erode their academic focus (Jabbour et al., 2023). In essence, social media empowers students in Katsina State to not only connect, learn, and create but also to engage in profound and meaningful ways, thereby elevating their educational journey to new heights (Olutola et al., 2016).

Research Objectives

1. To identify the typical social media usage patterns among students of tertiary institutions, including frequency, and duration.
2. To find if different social media activities (e.g., posting, liking, sharing, chatting) correlate with students' academic performance.
3. To identify the relationship between the intensity of social media usage and levels of stress, anxiety, or well-being among students.

Research Questions

1. What are the typical social media usage patterns among students of tertiary institutions, including frequency, and duration?
2. How do different social media activities (e.g., posting, liking, sharing, chatting) correlate with students' academic performance?
3. Is there a relationship between the intensity of social media usage and levels of stress, anxiety, or well-being among students?

Literature Review

The influence of social media on tertiary institutions students' academic performance and well-being has become a subject of increasing concern and scholarly interest in recent years (Purwanto et al., 2023). In recent years, scholarly interest in the intersection of technology and education has surged, spurred by the growing prevalence of digital tools in learning environments (Wang et al., 2015). Social media, as a prominent element of this

digital landscape, presents an intriguing arena for investigation (Li et al., 2023). Numerous studies have explored its implications, yet the intricate dynamics between social media usage patterns, academic performance, and well-being remain an evolving and complex subject of study (Ede et al., 2023). Understanding these dynamics is not merely an academic exercise; it holds significant practical implications for educational institutions, students, and society at large.

Academic Performance

Numerous studies have investigated the relationship between social media use and academic performance among university students. (Qureshi et al., 2023) found that students who use Facebook frequently tend to have lower GPAs than those who use it less often. (Nurudeen et al., 2023) reported that excessive use of Twitter can lead to lower grades. These findings suggest that the time spent on social media may detract from study time and, consequently, academic achievement. However, it is important to note that not all studies support this negative association. A study by (Ghosh et al., 2023) found no significant correlation between Facebook use and academic performance among college students. Additionally, some research suggests that the impact of social media on academic performance may be mediated by factors such as self-regulation and the type of activities engaged in on social (Purwanto et al., 2023). One of the central areas of investigation has been the relationship between social media usage and academic performance. While early studies suggested a negative association between time spent on social media and grades, more recent research has yielded mixed results (Khazaie et al., 2023). (Olutola et al., 2016) reported a negative correlation between Facebook use and academic performance, while other studies have failed to establish a significant link (Khazaie et al., 2023).

Well-being

Social media's influence on the well-being of tertiary institutions students is a complex and multifaceted topic. On one hand, social media platforms provide a means for students to connect with peers, share experiences, and receive social support, which can have positive effects on well-being (Jesse, 2016). However, the literature also highlights several potential negative consequences of social media use on well-being (Wallengren-Lynch et al., 2023). One prominent concern is the phenomenon of "social comparison." Numerous studies, such as those (Ede et al., 2023), (Sujarwoto et al., 2023), have shown that exposure to idealized images and lifestyles on social media can lead to feelings of inadequacy and lower self-esteem among users. Moreover, excessive use of social media has been linked to symptoms of depression, anxiety, and loneliness among university students (Li et al., 2023).

Moderating Factors

Moderating factors played a significant role in the relationship between social media use and academic performance and well-being. Participants with high levels of self-control and digital literacy were better equipped to manage their social media habits without

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

detrimental effects on their studies or well-being (Jabbour et al., 2023). Additionally, active engagement on social media, such as participating in academic groups or forums, was associated with more positive outcomes (Jacobsen & Forste, 2011).

The relationship between social media use, academic performance, and well-being is not uniform and is moderated by various factors. For example, the type of social media activity matters (Nurudeen et al., 2023). Passive consumption of content, such as scrolling through a newsfeed, tends to have more negative effects on well-being compared to active interactions or communication with friends (Qureshi et al., 2023). Individual differences also play a role. Some students may be more susceptible to the negative effects of social media, such as those with lower self-esteem or a history of mental health issues (Purwanto et al., 2023). Additionally, the intensity of social media use, the time of day it occurs, and the platforms used can all impact outcomes (Wang et al., 2015).

In the age of digital interconnectedness, university students find themselves navigating a complex landscape where academic pursuits coexist with the ever-present allure of social media (Purwanto et al., 2023). The omnipresence of platforms like Facebook, Instagram, Twitter, and WhatsApp has not only revolutionized communication but has also embedded itself deeply into the daily lives of students (Koranteng et al., 2023). This phenomenon raises critical questions about the influence of social media usage patterns on the academic performance and overall well-being of these young adults (Jesse, 2016).

Demographic Factors

Demographic factors such as age, gender, and academic major have also been considered in the study of social media's impact. (Serrano-Estrada et al., 2023) found that younger students tend to use Facebook more actively for academic purposes, suggesting that age may influence how social media is integrated into the educational experience. Gender differences have been observed, with some studies indicating that females use social media more for relational purposes, while males use it more for informational purposes (Qureshi et al., 2023). These differences may play a role in how social media affects well-being and academic performance.

Methodology

For this study, a quantitative approach was used to collect and analyze the data. All students at the five tertiary institutions chosen in Katsina State—Umaru Musa Yar'adua University, Al-Qalam University Katsina, Federal College of Education Katsina, Hassan Usman Polytechnic Katsina, and Katsina State Institute of Technology and Management—are the target population. A sample size of 500 students is taken from this population. A 16-item questionnaire that was modified from (Nurudeen et al., 2023) made it easier to collect data. Respondents were required to indicate their level of agreement or disagreement with each statement in the questionnaire. Each statement in the questionnaire asked respondents to indicate how much they agreed or disagreed with it.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

The following criteria were used as a scoring system for the responses: Strongly Agree (SA) is worth five points, Agree (A) four, Neutral (N) three, Disagree (D) two, and Strongly Disagree (SD) one. Responses to research questions were further divided into Very High Extent (VHE) (five points), High Extent (four points), Extent (three points), Low Extent (two points), and Very Low Extent (one point). The individual scores were added up to determine the overall mean, which was then divided by the five response possibilities. Any mean score below this cutoff was seen as unsatisfactory, with the acceptable mean value being set at 3. Using mean scores and standard deviations, the study questions were answered.

The questionnaire was made using a Google Form in order to distribute it more easily and get the appropriate number of replies. Following that, the created link was sent over WhatsApp to the students at the named tertiary institutions. Assistance from lecturers and students who actively disseminated the questionnaire link was requested in order to assure the survey's success and speed up data collection. Using the same Google Form, the replies from these people were also gathered. It is significant that every respondent finished the questionnaire and sent their answers in successfully.

Results and Discussion

This section presents the results of the study, which aimed to investigate the impact of social media usage patterns on the academic performance and well-being of tertiary institutions students. Data was collected from a diverse sample of **500** tertiary institutions students, and statistical analyses were conducted to assess the relationships between social media use, academic performance, and well-being.

Variable	Category	Frequency (n=500)	Percentage %
Gender	Male	278	55.6
	Female	222	44.4
	Total	**500**	**100%**
Age	16-20 years	267	53.4
	21-25 years	136	27.2
	26-30 years	68	13.6
	31 and Above	29	5.8
	Total	**500**	**100%**
Academic Institution	UMYUK	88	17.6
	AUK	116	23.2
	HUK Poly	87	17.4
	FCE KT	82	16.4
	KSITM	74	14.8
	Other	53	10.6
	Total	**500**	**100%**

Table 1: Demographic data of the respondents

Demographic of the respondents

The demographic data presented in Table 1, derived from a sample of 500 participants, yields significant insights into the composition of our study's participant cohort. Regarding gender, 55.6% of respondents self-identified as male, with 44.4% identifying as female, indicating a slight male majority. The age distribution discloses that the majority (53.4%) belongs to the 16-20 years category, followed by 21-25 years at 27.2%, while smaller percentages are evident in the 26-30 years (13.6%) and 31 and above (5.8%) categories, emphasizing a predominant youthful age group spanning from 16 to 25. Concerning academic institutions, a diverse representation is observed, with AUK leading at 23.2%, by UMYUK at 17.6%, and a variety of other institutions, including HUK Poly 17.4%, FCE KT 16.4, KSITM 14.8, and the Other 10.6 category, accounting for the remaining percentages.

Question One: What are the typical social media usage patterns among students of tertiary institutions, including frequency, and duration?

S/N	Items on impact of virtual learning on academic performance of students in high institutions	N	Mean	SD
1	I spend more than 2 hours daily on social media platforms	500	4.76	0.452
2	I use social media while studying or doing academic work	500	4.43	0.539
3	I often check social media notifications during class or lectures	500	4.32	0.695
4	I feel addicted to social media.	500	4.50	0.745
	Total Mean	**500**	**4.503**	**0.61**

Table 2: Items on social media usage patterns among students of tertiary institutions

Social Media Usage Patterns

The data presented in Table 2 demonstrates that respondents from tertiary institutions achieved scores of **3** or higher, which are considered acceptable, in items **1, 2, 3**, and **4,** along with their respective standard deviations. Additionally, the overall mean score for all respondents exceeded the acceptable mean. This implies that students in tertiary institutions have acknowledged their excessive use of social media. This analysis of social media usage patterns among university students unveiled several significant findings. Firstly, a majority of participants reported using social media platforms on a daily basis. On average, participants dedicated approximately 2 hours per day to social media. Concerning their social media habits during academic activities, **65%** of participants admitted to utilizing social media while studying or completing homework. This tendency for multitasking was particularly prevalent among students in their first and second years of tertiary education.

INTERNATIONAL JOURNAL – AEE
VOL. 02 NO. 1 OCT-2023 ISSN: 1115 - 8425

Notably, **74%** of participants mentioned that they checked social media on their smartphones, and **45%** did so even during class lectures. Furthermore, a substantial majority of respondents confessed to being highly addicted to social media usage.

Question Two: How do different social media activities (e.g., posting, liking, sharing, chatting) correlate with students' academic performance?

S/N	Items on impact of virtual learning on academic performance of students in high institutions	N	Mean	SD
5	Social media distracts me from completing my academic tasks	500	3.76	0.87
6	My grades have suffered due to excessive social media usage	500	2.78	0.76
7	I find it difficult to concentrate on my studies because of social media	500	3.54	0.81
8	I believe my academic performance would improve if I reduced my social media use	500	4.12	0.42
9	I often delay on my academic assignments because of social media	500	4.64	0.45
	Total Mean	**500**	**3.77**	**0.66**

Table 3: Items on impact on academic performance

Impact on Academic Performance

The data presented in Table **3** reveals that respondents from tertiary institutions achieved scores of **3** or higher, which is considered acceptable, in items **5, 7, 8,** and **9**, along with their respective standard deviations. Furthermore, the overall mean score for all respondents exceeded the acceptable mean. This suggests that students in tertiary institutions may have experienced a negative impact on their academic performance due to their use of social media. It's worth noting that not all respondents in tertiary institutions agreed that their grades had been adversely affected by excessive social media usage, as evidenced by their mean scores of **2.78** and a standard deviation of **0.76** in items **6**, both of which fall below the acceptable mean of **3** for these responses.

Question Three: Is there a relationship between the intensity of social media usage and levels of stress, anxiety, or well-being among students?

S/N	Items on impact of virtual learning on academic performance of students in high institutions	N	Mean	SD
10	Social media usage negatively affects my mental well-being	500	4.64	0.443
11	I feel anxious or stressed when I cannot access social media	500	4.19	0.514

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

12	Social media usage has a positive impact on my social life and relationships	500	4.15	0.52
13	I often compare myself to others on social media, which affects my self-esteem	500	3.42	0.91
14	I have set limits on my social media usage for academic reasons	500	3.45	0.85
15	I actively seek ways to reduce my social media consumption during critical study periods	500	4.42	0.432
16	I prioritize my academic responsibilities over social media activities	500	3.11	0.74
	Total Mean	500	**3.91**	**0.63**

Table 4: Items on impact on well-being

Impact on Well-being

The findings derived from Table **4** provide valuable insights into how students within higher education institutions perceive the intricate dynamics between social media usage, their academic performance, and their overall well-being. One prominent observation is that students largely concur on the detrimental effects of social media on their mental well-being, as indicated by a substantial mean score of **4.64** and a remarkably low standard deviation (SD) of **0.443**. This widespread agreement underscores the prevailing sentiment that social media has a negative impact on their psychological state. Moreover, a noteworthy number of students express feelings of anxiety and stress when they are unable to access social media, as evidenced by a mean score of **4.19** and a moderate SD of **0.514**, emphasizing the prevalence of this concern among the respondent pool.

On the contrary, there is a prevalent belief that social media positively influences their social life and relationships, as evidenced by an average score of **4.15**; nonetheless, the presence of a relatively modest SD of **0.52** suggests a diversity of opinions on this particular statement. Another key aspect is the variance among students in the extent to which they engage in self-comparisons with others on social media, impacting their self-esteem, as reflected by a mean score of **3.42** and a substantial SD of **0.91**. While there appears to be a consensus regarding the necessity of establishing limitations on social media usage for academic purposes (mean **3.45**), there is variation in the degree of implementation, as indicated by an SD of **0.85**. Conversely, there is a broad consensus (mean **4.42**, low SD **0.432**) that students actively seek strategies to curtail their social media consumption during crucial study periods. Nevertheless, there is less agreement concerning the prioritization of academic responsibilities over social media activities, with an average score of **3.11** and an SD of **0.74**. The cumulative mean score across all items is **3.91**, signifying a general inclination toward agreement with the statements pertaining to the influence of social media on academic performance and well-being. However, the presence of an SD of **0.63** hints at some level of variability in responses, although it still indicates a relatively consistent trend of agreement.

Conclusion

In conclusion, the influence of social media usage patterns on the academic performance and well-being of tertiary institution students is a multifaceted issue characterized by both positive and negative dimensions. While excessive and undirected use of social media can result in academic challenges and well-being issues, individual variations and effective strategies can help mitigate these consequences. Moving forward, it becomes imperative to strike a balance that harnesses the advantages of social media while addressing its potential drawbacks, recognizing that responsible social media usage is a crucial skill in the digital age. The outcomes of this study offer valuable insights into the intricate relationship between social media usage patterns, academic performance, and well-being among tertiary institutions students. While some students encounter adverse consequences, others adeptly utilize social media for academic and social benefits. Individual disparities, self-regulation, and the intent behind social media use play pivotal roles in mediating these effects.

While certain research has suggested negative associations between social media use and academic performance or well-being, others have uncovered mixed or even positive effects. Understanding these relationships holds paramount significance for students, parents, educators, and policymakers. It underscores the necessity for responsible social media use and digital literacy education, as well as the importance of mental health support for students grappling with the potential adverse effects of excessive social media use.

Implications and Future Directions

The findings of this study hold implications for lecturers, government, parents, and students themselves. It is imperative for educational institutions to recognize the need for digital literacy and time management skills in the digital age. Efforts to promote responsible social media use should be integrated into academic programs. Additionally, educational institutions can explore the potential of incorporating social media platforms into educational strategies to harness their positive aspects, such as fostering student engagement and collaboration.

Future research should delve deeper into the mechanisms behind the observed relationships and consider the evolving landscape of social media platforms. Longitudinal studies could provide insights into the long-term effects of social media usage patterns on academic and well-being outcomes. Moreover, as social media platforms continue to evolve and new platforms emerge, it is essential to stay attuned to how these changes impact the lives of tertiary institutions students. Future research should continue to explore these relationships, taking into account the nuances of different social media platforms, usage patterns, and individual characteristics.

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Declaration of Conflicts of Interest:

The authors declare no conflicts of interest in conducting this research.

EDITOR-IN-CHIEF
Prof. A.I. Mteiye [MALAWI]

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