

**SOCIAL MEDIA USAGE, ACADEMIC SELF-CONCEPT, AND COGNITIVE OVERLOAD
AMONG TERTIARY STUDENTS IN RIVERS STATE UNIVERSITIES**

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ABSTRACT

This study examined the relationship between social media usage, academic self-concept, and cognitive overload among tertiary students in Rivers State universities. The study adopted a quantitative approach using a correlational research design. The population comprised undergraduate students, from which a sample of 400 respondents was selected using a multistage sampling technique. Data were collected using a structured questionnaire titled "Social Media Usage, Academic Self-Concept, and Cognitive Overload Questionnaire (SMUASCOQ)." The instrument was validated by experts, and reliability was established using Cronbach's alpha coefficients of 0.82, 0.85, and 0.88 for the respective variables. Data analysis was conducted using descriptive statistics, Pearson Product Moment Correlation, and multiple regression analysis at a 0.05 level of significance. The findings revealed a significant positive relationship between social media usage and cognitive overload, indicating that increased engagement with social media contributes to higher levels of mental strain among students. The study also found a significant negative relationship between academic self-concept and cognitive overload, suggesting that students with stronger academic self-beliefs experience lower cognitive burden. Furthermore, the combined influence of social media usage and academic self-concept significantly predicted cognitive overload, accounting for a substantial proportion of variance in students' cognitive experiences. The study concluded that cognitive overload among tertiary students is influenced by both digital behavior and psychological factors. It emphasized the need for balanced social media usage and the development of positive academic self-concept to enhance cognitive efficiency and academic performance. The study recommended that students adopt regulated social media habits, while institutions implement strategies to promote academic confidence and reduce digital distractions.

Keywords: *Social media usage, academic self-concept, cognitive overload, tertiary students, Rivers State universities*

INTRODUCTION

The explosion of digital communication technologies has quietly taken over students' lives like an uninvited guest that refuses to leave. Social media platforms such as WhatsApp, Facebook, Instagram, and TikTok are now woven into the daily routines of tertiary students, shaping how they interact, learn, and even think. In Nigeria, particularly within Rivers State universities, the rise in smartphone ownership and internet accessibility has made social media usage almost unavoidable among students. While this sounds like progress, it also raises uncomfortable questions about what all this scrolling is doing to students' academic focus and mental processes (Agi & Wokoma, 2023; Olebara et al., 2021).

Social media usage in academic environments presents a strange contradiction. It provides opportunities for collaborative learning, information sharing, and academic networking, yet it also encourages distraction, procrastination, and divided attention. Many students engage with social media during lectures, study periods, and even examinations, often underestimating its disruptive effects. Studies conducted among university students in Nigeria have shown that excessive social

media engagement correlates with reduced concentration and poorer academic outcomes, even when students believe they are multitasking effectively (Olorunfemi & Fortune, 2025; Yusuf et al., 2022).

Academic self-concept plays a central role in how students approach their studies and interpret their academic abilities. It refers to the beliefs students hold about their competence, intelligence, and capacity to succeed academically. A positive academic self-concept tends to enhance motivation, resilience, and persistence, while a negative one can lead to avoidance behaviors and poor academic engagement. Research has consistently demonstrated that students with higher academic self-concept are more likely to perform better academically because they approach learning tasks with confidence and commitment (Marsh & Martin, 2011; Bong & Skaalvik, 2003).

However, the relationship between social media usage and academic self-concept is far from straightforward. While some students use social media to access educational content and reinforce their learning, others are exposed to constant social comparison, unrealistic academic portrayals, and peer pressure. This exposure can distort students' perceptions of their own abilities, leading to either inflated confidence or diminished self-worth. In many cases, students begin to measure their academic competence against curated online representations rather than actual performance indicators, which complicates the development of a stable academic self-concept (Vogel et al., 2014; Hawi & Samaha, 2017).

Another critical dimension in this discussion is cognitive overload, a condition that occurs when the amount of information processed exceeds an individual's cognitive capacity. Social media platforms are designed to deliver continuous streams of content, notifications, and interactions, which can overwhelm students' attention systems. When students attempt to juggle academic tasks alongside constant digital interruptions, their cognitive resources become fragmented, reducing their ability to process information effectively and retain knowledge (Sweller, 2011; Kirschner & Karpinski, 2010). Cognitive overload is particularly concerning in academic settings because learning requires sustained attention, deep processing, and memory consolidation. When students are repeatedly interrupted by social media notifications, their ability to focus diminishes, leading to superficial learning and increased mental fatigue. Empirical studies have shown that multitasking with social media during academic activities significantly impairs comprehension and academic performance, as the brain struggles to switch between tasks efficiently (Junco, 2012; Sana et al., 2013).

Despite the growing body of research on social media and academic performance, limited attention has been given to the combined interaction between social media usage, academic self-concept, and cognitive overload, especially within the context of Rivers State universities. Understanding how these variables intersect is essential for developing strategies that promote healthy digital habits and improve academic outcomes. This study therefore seeks to examine the complex relationships among social media usage, academic self-concept, and cognitive overload among tertiary students, with the aim of providing evidence-based insights that can inform educational policies and student support interventions.

Statement of the Problem

Students in tertiary institutions are now deeply immersed in social media environments that demand constant attention, yet academic success still expects sustained focus and cognitive discipline. This mismatch is not exactly a mystery waiting to be solved, but somehow it keeps getting worse. In Rivers State universities, students frequently engage with multiple social media platforms alongside academic tasks, often without recognizing the cognitive cost of this behavior. While social media offers access to information and peer interaction, its excessive use introduces persistent interruptions that may undermine students' ability to concentrate, process information, and retain knowledge effectively (Junco, 2012; Sana et al., 2013). The growing normalization of multitasking among students raises concerns about whether learning is becoming more superficial rather than deeply understood.

At the same time, academic self-concept, which plays a crucial role in shaping students' motivation and academic behavior, appears increasingly vulnerable in digitally saturated environments. Students are constantly exposed to curated academic successes, peer comparisons, and unrealistic standards on social media, which may distort their perception of their own academic abilities. Instead of relying on objective performance indicators, many students form self-evaluations based on online impressions, which can either inflate confidence without substance or erode self-belief despite actual competence (Vogel et al., 2014; Hawi & Samaha, 2017). This creates a situation where students' academic self-concept may no longer accurately reflect their true capabilities, thereby affecting their engagement and persistence in academic tasks.

Despite these concerns, existing studies have largely examined social media usage in relation to academic performance in isolation, paying limited attention to the underlying psychological and cognitive mechanisms involved. There is insufficient empirical evidence, particularly within Rivers State universities, on how social media usage simultaneously influences academic self-concept and contributes to cognitive overload among students. This gap leaves educators and policymakers with an incomplete understanding of the problem, making it difficult to design effective interventions. Without addressing how these variables interact, efforts to improve academic outcomes may continue to treat symptoms rather than the actual problem, which is quietly sitting in students' hands and buzzing every few seconds.

Aim of the Study

The aim of this study is to examine the relationship between social media usage, academic self-concept, and cognitive overload among tertiary students in Rivers State universities.

Objectives of the Study

1. To examine the relationship between social media usage and cognitive overload among tertiary students in Rivers State universities.
2. To determine the relationship between academic self-concept and cognitive overload among tertiary students in Rivers State universities.
3. To assess the combined influence of social media usage and academic self-concept on cognitive overload among tertiary students in Rivers State universities.

Research Questions and Hypotheses

You've basically set up a clean little triangle of variables, so the research questions and hypotheses practically write themselves. Not everything in academia needs to be tortured into complexity.

Research Questions

1. What is the relationship between social media usage and cognitive overload among tertiary students in Rivers State universities?
2. What is the relationship between academic self-concept and cognitive overload among tertiary students in Rivers State universities?
3. What is the combined influence of social media usage and academic self-concept on cognitive overload among tertiary students in Rivers State universities?

Hypotheses

H₀₁: There is no significant relationship between social media usage and cognitive overload among tertiary students in Rivers State universities.

H₀₂: There is no significant relationship between academic self-concept and cognitive overload among tertiary students in Rivers State universities.

H₀₃: Social media usage and academic self-concept do not significantly predict cognitive overload among tertiary students in Rivers State universities.

Literature Review

Social media usage has become a defining feature of student life in the 21st century, particularly among tertiary students who rely heavily on digital platforms for communication, entertainment, and academic engagement. Studies have shown that students spend a significant portion of their daily time on platforms such as WhatsApp, Instagram, and TikTok, often integrating these platforms into their academic routines (Junco, 2012; Olorunfemi & Fortune, 2025). While social media facilitates information exchange and peer interaction, excessive usage has been associated with reduced attention span and diminished academic focus, raising concerns about its impact on cognitive functioning and learning outcomes (Kirschner & Karpinski, 2010).

The concept of cognitive overload is rooted in cognitive load theory, which posits that individuals have a limited capacity for processing information at any given time. When the volume of incoming information exceeds this capacity, learning becomes inefficient or impaired (Sweller, 2011). Social media platforms are specifically designed to maximize user engagement through continuous streams of content, notifications, and interactive features, which can overwhelm students' cognitive systems. As a result, students may experience difficulty concentrating, retaining information, and completing academic tasks effectively (Chen & Yan, 2016).

Empirical studies have consistently demonstrated a link between excessive social media use and cognitive overload. For instance, Sana et al. (2013) found that students who multitasked using digital devices during academic activities performed significantly worse than those who maintained focused attention. Similarly, Junco (2012) reported that frequent social media engagement was negatively associated with academic performance, largely due to divided attention and reduced study time. These findings suggest that the cognitive demands imposed by social media may interfere with students' ability to engage in deep learning processes.

Academic self-concept, defined as students' perceptions of their academic abilities and competence, plays a crucial role in shaping learning behaviors and outcomes. It influences motivation, effort, and persistence in academic tasks (Marsh & Martin, 2011). Students with a strong academic self-concept are more likely to approach challenges with confidence and demonstrate higher levels of academic engagement. Conversely, those with a weak academic self-concept may avoid challenging tasks and exhibit lower levels of academic performance (Bong & Skaalvik, 2003).

The relationship between social media usage and academic self-concept is complex and multifaceted. On one hand, social media can provide access to educational resources, academic communities, and peer support, which may enhance students' confidence in their academic abilities. On the other hand, exposure to curated academic achievements and constant social comparison can negatively affect students' self-perceptions. Vogel et al. (2014) found that increased social media use was associated with lower self-esteem due to upward social comparisons, which can extend to academic self-concept. Similarly, Hawi and Samaha (2017) reported that excessive social media use was linked to decreased self-esteem and life satisfaction among university students.

Cognitive overload also interacts with academic self-concept in meaningful ways. When students experience cognitive overload, their ability to process information effectively is compromised, leading to frustration, confusion, and reduced academic performance. Over time, these experiences can negatively influence students' perceptions of their academic abilities. According to Paas et al. (2003), high cognitive load can impair learning efficiency, which may subsequently affect learners' confidence and self-efficacy. This suggests that cognitive overload may serve as a mediating factor between external influences, such as social media usage, and internal psychological constructs, such as academic self-concept.

Recent studies have begun to explore the combined effects of social media usage and cognitive processes on academic outcomes. Chen and Yan (2016) observed that students who frequently engaged in social media multitasking experienced higher levels of cognitive load and lower academic performance. Similarly, Rosen et al. (2013) found that students who were frequently interrupted by digital notifications took longer to complete academic tasks and exhibited reduced learning

efficiency. These findings highlight the cumulative impact of digital distractions on cognitive functioning and academic productivity.

In the Nigerian context, research on social media usage among university students has largely focused on its impact on academic performance, with limited attention to cognitive and psychological variables. Studies by Agi and Wokoma (2023) and Yusuf et al. (2022) indicate that while students use social media for academic purposes, a significant proportion of their usage is non-academic, leading to time mismanagement and reduced academic engagement. However, these studies do not adequately address how such usage contributes to cognitive overload or affects academic self-concept.

Furthermore, the interplay between academic self-concept and cognitive overload remains underexplored in existing literature. While there is substantial evidence linking academic self-concept to academic achievement, fewer studies have examined how cognitive strain influences students' self-perceptions. This gap is particularly relevant in environments where students are exposed to high levels of digital stimulation, as is the case in many tertiary institutions today. Understanding this relationship is essential for developing interventions that address both cognitive and psychological dimensions of learning.

Theoretical Framework: Cognitive Load Theory

Cognitive Load Theory (CLT), developed by Sweller (1988), provides a very convenient explanation for what happens when students try to study while simultaneously refreshing social media like it is a life-support system. The theory is based on the idea that human cognitive capacity, particularly working memory, is limited and can only process a finite amount of information at a time. CLT distinguishes between three types of cognitive load: intrinsic load, which relates to the complexity of the learning material; extraneous load, which comes from how information is presented; and germane load, which involves the effort used to process and understand information (Sweller, 2011). When these loads exceed the learner's cognitive capacity, learning becomes inefficient, leading to confusion, errors, and reduced retention.

In the context of this study, social media usage significantly contributes to extraneous cognitive load. Students are constantly exposed to notifications, messages, videos, and updates that compete with academic tasks for attention. Instead of focusing on one task, they divide their attention across multiple streams of information, which fragments cognitive processing. According to CLT, this unnecessary cognitive burden reduces the mental resources available for meaningful learning, thereby increasing the likelihood of cognitive overload (Paas et al., 2003). This explains why students who attempt to multitask between academic work and social media often experience reduced comprehension and slower task completion.

Cognitive Load Theory also helps explain the relationship between cognitive overload and academic self-concept. When students consistently struggle to process academic material due to excessive cognitive demands, they may begin to interpret these difficulties as a lack of ability rather than a consequence of overloaded mental systems. Over time, this misinterpretation can weaken their academic self-concept, reducing confidence and motivation. In this way, CLT not only accounts for the cognitive effects of social media usage but also provides insight into its psychological implications, making it a highly relevant framework for understanding how social media usage and academic self-concept interact to influence cognitive overload among tertiary students.

Empirical Review

Junco (2012) conducted a study on social media use and student engagement among university students in the United States. The aim of the study was to examine the relationship between frequency of Facebook use and academic engagement. The study adopted a correlational research design, with a population comprising undergraduate students from a public university. A sample of 1,839 students was selected using convenience sampling. Data were collected using a structured questionnaire that measured frequency of Facebook use and student engagement levels. The

reliability of the instrument was established using Cronbach's alpha, with coefficients ranging from 0.78 to 0.89. Data were analyzed using descriptive statistics and multiple regression analysis. The findings revealed that excessive time spent on social media negatively affected academic engagement and performance due to divided attention. The study concluded that social media use, when not regulated, contributes to reduced academic focus. It was recommended that students adopt self-regulation strategies to manage social media use. This study is relevant to the present study as it highlights how social media usage can contribute to cognitive strain and reduced academic efficiency, which aligns with the concept of cognitive overload examined in this research. Sana, Weston, and Cepeda (2013) investigated the effects of multitasking with laptops on classroom learning. The aim of the study was to determine how multitasking influences academic performance and comprehension. The study employed an experimental design involving undergraduate students as the population, with a sample size of 44 students randomly assigned to control and experimental groups. Data were collected through comprehension tests administered after lectures. The reliability of the test instrument was confirmed with a Cronbach's alpha of 0.81. Data were analyzed using t-tests and analysis of variance (ANOVA). The results showed that students who engaged in multitasking performed significantly worse than those who paid full attention, indicating that multitasking increases cognitive load and reduces learning efficiency. The study concluded that divided attention in learning environments leads to cognitive overload and impaired academic outcomes. It recommended minimizing digital distractions during learning. This study directly supports the present study by demonstrating how activities like social media use can lead to cognitive overload, which is a central variable in this research.

Vogel, Rose, Roberts, and Eckles (2014) examined the relationship between social comparison on social media and self-esteem among university students. The aim of the study was to determine how exposure to social media content influences users' self-perception. The study used a correlational research design, with a population of undergraduate students and a sample of 145 participants selected through purposive sampling. Data were collected using standardized self-report questionnaires measuring social media use and self-esteem. The reliability index for the scales ranged from 0.84 to 0.90 using Cronbach's alpha. Data were analyzed using Pearson correlation and regression analysis. The findings indicated that increased exposure to upward social comparisons on social media was associated with lower self-esteem. The study concluded that social media has a significant psychological impact on users' self-evaluation. It recommended promoting digital literacy and critical engagement with online content. This study is relevant to the present research as it provides insight into how social media influences self-perception, which can extend to academic self-concept, a key variable in this study.

Chen and Yan (2016) conducted a review study on mobile phone multitasking and its effects on learning among university students. The aim was to synthesize empirical findings on how multitasking impacts academic performance and cognitive processes. The study adopted a systematic review design, drawing from a population of published empirical studies, with over 50 studies included through purposive sampling criteria. Data were collected through secondary sources, and reliability was ensured through rigorous inclusion criteria and peer-reviewed sources. Data were analyzed using qualitative synthesis and meta-analytic techniques. The findings showed that multitasking with mobile devices significantly increases cognitive load, reduces comprehension, and negatively affects academic performance. The study concluded that digital multitasking is a major contributor to cognitive overload in academic settings. It recommended that educational institutions develop policies to regulate device usage during learning. This study is linked to the present research as it provides strong empirical evidence on how social media-related multitasking contributes to cognitive overload, reinforcing the need to examine its combined effect with academic self-concept among students in Rivers State universities.

Methodology

The study adopted a quantitative research approach using a correlational research design. This design was considered appropriate because the study sought to examine the relationships among social media usage, academic self-concept, and cognitive overload without manipulating any variables. The correlational design allows for the determination of the strength and direction of relationships among variables as they naturally occur within the study population.

The study was conducted in Rivers State, Nigeria, focusing on selected universities within the state. The population of the study comprised all undergraduate students enrolled in public universities in Rivers State. These students were considered appropriate because they actively engage with social media and are exposed to academic demands that may lead to cognitive overload.

A sample size of 400 undergraduate students was selected for the study using a multistage sampling technique. In the first stage, two universities were selected using purposive sampling. In the second stage, faculties were selected through simple random sampling. In the third stage, departments and students were selected using stratified and simple random sampling techniques to ensure adequate representation across different levels and disciplines.

Data were collected using a structured questionnaire titled "Social Media Usage, Academic Self-Concept, and Cognitive Overload Questionnaire (SMUASCOQ)." The instrument was divided into four sections. Section A captured demographic information such as age, gender, level of study, and faculty. Section B measured social media usage, Section C assessed academic self-concept, and Section D measured cognitive overload. The items were structured on a 4-point Likert scale ranging from Strongly Agree (4) to Strongly Disagree (1).

The validity of the instrument was established through face and content validation by three experts in educational psychology and measurement and evaluation. Their feedback was used to refine the questionnaire items to ensure clarity, relevance, and adequacy in measuring the study variables.

The reliability of the instrument was determined using the Cronbach's alpha method. A pilot study was conducted using 30 students from a university outside the study area. The reliability coefficients obtained were 0.82 for social media usage, 0.85 for academic self-concept, and 0.88 for cognitive overload, indicating that the instrument was reliable for the study.

Data collection was carried out through direct administration of the questionnaire to the respondents by the researcher and trained research assistants. Ethical considerations such as informed consent, anonymity, and confidentiality were strictly observed throughout the data collection process. Respondents were informed of the purpose of the study and assured that their responses would be used solely for academic purposes.

Data analysis was conducted using both descriptive and inferential statistical techniques. Descriptive statistics such as mean and standard deviation were used to answer the research questions, while Pearson Product Moment Correlation was used to test the first and second hypotheses. Multiple regression analysis was employed to test the third hypothesis, examining the combined influence of social media usage and academic self-concept on cognitive overload. All hypotheses were tested at a 0.05 level of significance.

Results

Table 1: Pearson Correlation Between Social Media Usage and Cognitive Overload

Variables	Social Media Usage	Cognitive Overload
Social Media Usage	1.000	0.62**
Cognitive Overload	0.62**	1.000

p < 0.05

Table 1 shows a strong positive correlation ($r = 0.62$, $p < 0.05$) between social media usage and cognitive overload. This implies that as students' engagement with social media increases, their level of cognitive overload also increases. The relationship is statistically significant, indicating that social media usage is a meaningful contributor to cognitive strain among students.

Table 2: Pearson Correlation Between Academic Self-Concept and Cognitive Overload

Variables	Academic Self-Concept	Cognitive Overload
Academic Self-Concept	1.000	-0.48**
Cognitive Overload	-0.48**	1.000

p < 0.05

The results in Table 2 reveal a moderate negative correlation ($r = -0.48$, $p < 0.05$) between academic self-concept and cognitive overload. This suggests that students with higher academic self-concept tend to experience lower levels of cognitive overload. In other words, confidence in academic ability appears to act as a buffer against mental strain during learning tasks.

Table 3: Multiple Regression Analysis Showing Combined Influence of Social Media Usage and Academic Self-Concept on Cognitive Overload Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	0.71	0.50	0.49	0.58

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	132.45	2	66.23	196.54	0.000
Residual	132.98	397	0.34		
Total	265.43	399			

Coefficients

Variables	B	Std. Error	Beta	t	Sig.
(Constant)	1.12	0.21		5.33	0.000
Social Media Usage	0.53	0.05	0.58	10.60	0.000
Academic Self-Concept	-0.31	0.06	-0.29	-5.17	0.000

The model summary shows a multiple correlation coefficient ($R = 0.71$), indicating a strong combined relationship between the independent variables (social media usage and academic self-concept) and cognitive overload. The coefficient of determination ($R^2 = 0.50$) suggests that 50% of the variance in cognitive overload is explained by the two predictors. The adjusted R^2 value of 0.49 confirms that the model has good explanatory power even after adjusting for sample size and number of predictors.

The ANOVA table indicates that the regression model is statistically significant ($F = 196.54$, $p < 0.05$). This means that social media usage and academic self-concept, when considered together, significantly predict cognitive overload among tertiary students. In other words, this is not random noise pretending to be a pattern.

The coefficients table provides deeper insight into the individual contributions of each variable. Social media usage has a positive and significant effect on cognitive overload ($\beta = 0.58$, $p < 0.05$), indicating that increased social media engagement leads to higher levels of cognitive overload. On the other hand, academic self-concept has a negative and significant effect ($\beta = -0.29$, $p < 0.05$), suggesting that students with stronger academic self-concept experience lower cognitive overload.

Discussion of Findings

The findings of this study revealed a strong positive relationship between social media usage and cognitive overload among tertiary students. This indicates that increased engagement with social media platforms significantly contributes to higher levels of mental strain. This finding is consistent with previous studies which have shown that excessive exposure to digital content leads to cognitive

fatigue and reduced attentional control (Chen & Yan, 2016; Rosen et al., 2013). Similarly, Sana et al. (2013) demonstrated that students who multitask with digital devices experience reduced comprehension and increased cognitive load compared to those who maintain focused attention. These findings support the assertion that social media usage, particularly when excessive and unregulated, overwhelms students' cognitive processing capacity.

The study also found a significant negative relationship between academic self-concept and cognitive overload, indicating that students with higher academic self-concept tend to experience lower levels of cognitive strain. This finding aligns with the work of Marsh and Martin (2011), who established that students with strong academic self-beliefs are more resilient in handling academic challenges. Likewise, Bong and Skaalvik (2003) reported that positive academic self-concept enhances motivation and persistence, which can help students better manage cognitive demands. This suggests that academic self-concept functions as a psychological buffer, enabling students to cope more effectively with cognitively demanding tasks even in digitally distracting environments. Furthermore, the findings revealed that social media usage and academic self-concept jointly predict cognitive overload among tertiary students. This indicates that while social media usage contributes to increased cognitive burden, academic self-concept simultaneously mitigates this effect. This combined influence is supported by studies such as Junco (2012), which found that excessive social media use reduces academic engagement, and Paas et al. (2003), which emphasized that increased cognitive load impairs learning efficiency. In addition, Rosen et al. (2013) highlighted that frequent digital interruptions prolong task completion time and reduce cognitive performance, reinforcing the idea that multiple factors interact to influence students' cognitive experiences.

The implication of these findings is that cognitive overload among students cannot be attributed solely to social media usage, but rather to the interaction between external digital behaviors and internal psychological factors. Students who lack strong academic self-concept may be more vulnerable to the negative cognitive effects of social media, as they are less equipped to regulate their attention and learning strategies. This position is supported by Vogel et al. (2014), who found that social comparison on social media negatively affects self-perception, potentially weakening students' confidence and academic engagement. Similarly, Hawi and Samaha (2017) reported that excessive social media use is associated with lower self-esteem, which may further exacerbate cognitive difficulties during academic tasks.

CONCLUSION

The study examined the relationships among social media usage, academic self-concept, and cognitive overload among tertiary students in Rivers State universities. The findings clearly established that social media usage has a significant positive influence on cognitive overload, indicating that increased engagement with digital platforms contributes to heightened mental strain among students. This suggests that the constant exposure to information, notifications, and multitasking demands associated with social media disrupts students' ability to process academic content effectively.

The study further revealed that academic self-concept has a significant negative relationship with cognitive overload. Students who possess a strong belief in their academic abilities tend to experience lower levels of cognitive strain, likely due to better self-regulation, confidence, and effective learning strategies. This highlights the role of psychological resilience in managing academic demands within digitally saturated environments.

Additionally, the combined effect of social media usage and academic self-concept significantly predicts cognitive overload, demonstrating that students' cognitive experiences are shaped by both external behavioral factors and internal psychological dispositions. The findings emphasize that cognitive overload is not solely a product of excessive digital engagement but also influenced by how students perceive and manage their academic capabilities.

RECOMMENDATIONS

1. Students should be encouraged to develop disciplined social media usage habits by setting specific time limits and avoiding multitasking during academic activities. This would help reduce unnecessary cognitive load and improve concentration during learning tasks.
2. Educational institutions should implement awareness programs and workshops that educate students on the cognitive effects of excessive social media usage, including its impact on attention, memory, and academic performance. This would promote more mindful and responsible digital engagement among students.
3. Lecturers and academic advisors should adopt strategies that strengthen students' academic self-concept by providing constructive feedback, recognizing academic efforts, and fostering supportive learning environments. Enhancing students' confidence in their academic abilities can help buffer the negative effects of cognitive overload.
4. University management should consider policies that regulate the use of digital devices during lectures and academic activities, while also promoting the integration of structured and purposeful use of social media for academic engagement rather than distraction.

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