

Educational and Psychological Impacts of Social Media on University Students': A Case Study of UNIDEL

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ABSTRACT The pervasive use of social media among university students has sparked significant interest in understanding its educational and psychological impacts. This study examines social media's educational and psychological effects on students at the University of Delta (UNIDEL). A cross-sectional survey design was used to engage 244 respondents selected through stratified random sampling and purposeful sampling methods. The questionnaire was administered both online and in person to ensure maximum reach and inclusiveness. For the online distribution, a Google Form link was shared through academic WhatsApp groups, student mailing lists, and departmental social media platforms. For the in-person distribution, hard copies of the questionnaire were handed out in lecture halls, laboratories, and during departmental meetings, with the assistance of class representatives. The findings reveal that social media amongst students is a double-edged sword that is predominantly beneficial for academic engagement but with nuanced challenges. Findings show that: (1) institutions should formalize social media's role in curricula (e.g., promoting academic influencers, and creating collaboration platforms) while addressing distractions through digital literacy training. (2) Targeted support for the minority experiencing anxiety or inadequacy is needed though most respondents navigate social media without significant stress. (3) balanced usage involving mindful consumption is encouraged (e.g., screen-time limits, sleep hygiene). Social media usage has its pros and cons which have a psychological and educational impact. While it enhances access to educational resources and fosters collaborative learning, excessive use can lead to addiction and psychological challenges such as anxiety and depression. Though social media has so many benefits, there's a need to balance the usage pattern. It is recommended that future research should explore broader demographics to validate findings.

KEYWORDS: Education, Psychology, Social Media, University, Students

I. INTRODUCTION

Social media usage has a wide adoption that is multifaceted among universities students. Students majorly use social media (like Facebook, YouTube, WeChat, TikTok) for entertainment, research and communication. While social media can enhance knowledge, and communication, excessive use may negatively impact academic performance and subjective well-being [4]. Students utilize social media for both academic and personal purposes, with some engaging in cybercrime and economic discussions. The growing popularity of social media has prompted researchers to investigate its effects on students [5]. Despite its benefits, social media fatigue can significantly affect students' grades, learning attitudes, and overall well-being [4]. As social media continues to evolve, understanding its impact on students remains crucial for developing appropriate applications and policies. Social media influences both academic performance and psychological well-being, necessitating an evaluation of its benefits and drawbacks. Its pros include enhancement of social support and creating a sense of belonging. However, the overall indirect impact on psychological well-being is positive, primarily due to increased social capital [6]. Despite potential time wasting, social media can improve academic performance. It has changed students' interaction patterns and influenced self-perception, creating new dynamics in social relationships [7]. Social

media usage among university students in Nigeria has both positive and negative impacts on their academic performance and mental health. While it enhances access to educational resources and fosters collaborative learning [2], excessive use can lead to addiction and psychological challenges such as anxiety and depression [1]. Studies have found that social media networking significantly predicts students' academic achievement and psychological health [3]. The benefits include improved socialization, knowledge exchange, and access to health-related information, while challenges encompass cybercrime, extremism, and reduced attention spans [4]. To maximize the educational benefits and mitigate adverse effects, a balanced approach to social media usage is necessary [1]. Institutions should implement interventions to promote responsible digital citizenship and support students' mental well-being in the context of increasing social media engagement [2]. This study seeks to determine the Educational and Psychological Impact of Social Media on University students using UNIDEL as a case study. The objective is to develop appropriate applications and policies.

II. RELATED WORKS

Social media has a significant impact on students' education and psychology, with both positive and negative effects. While it facilitates collaborative learning and access to educational resources, excessive use can lead to psychological issues such as anxiety, depression, and loneliness [8]. Social media influences students' social interactions, self-perception, and cognitive processes, affecting academic performance and mental well-being [9-10]. It can enhance academic performance but may also result in time-wasting and reduced focus on studies. The pressure to maintain an online persona can increase stress and anxiety [9]. Social media platforms have shown potential for enhancing collaborative learning and academic performance in higher education. Studies indicate that social media can facilitate peer interactions, engagement, and knowledge sharing among students [13]. Research suggests that social media use positively impacts factors such as collaborative learning, engagement, and intention to use, which in turn relate to improved academic performance [11]. Additionally, social media integration in education has been linked to enhanced digital literacy and creativity [12]. Excessive use can lead to distractions, reduced academic performance, and poor time management. However, excessive and unregulated use of social media can negatively impact students' academic performance. Studies have shown that social media distractions can lead to reduced concentration, procrastination, and ineffective time management, which, in turn, affect learning outcomes. Recent studies have explored the relationship between social media usage and academic performance among students. While some research indicates a negative correlation between social media use and academic outcomes [14, 15], others found no linear relationship [16]. Excessive social media use can lead to time waste, distraction, and reduced language proficiency, negatively impacting academic performance [14]. Smartphone logs and time diaries reveal that social media usage patterns can hurt students' academic activities. However, rather than outright condemning social media use, some researchers suggest incorporating beneficial aspects of social media into educational curricula [15]. Additionally, factors such as time management may also play a role in academic performance alongside social media use [16]. These findings highlight the complex relationship between social media and academic achievement, emphasizing the need for balanced approaches in educational settings.

Psychologically, social media use has been linked to both positive and negative mental health outcomes. On the positive side, social media fosters social connections, provides emotional support, and enhances a sense of belonging [17]. Social media platforms can provide valuable support for students coping with academic stress and mental health challenges. It serves multiple functions in the stress-coping process, acting as stressors, resources, and coping tools [18]. During the COVID-19 pandemic, female students reported more negative impacts on academics, social isolation, and mental health compared to males, with frequent social media use associated with greater stress for females [19]. Many college students appropriate social media platforms for mental health support, valuing the ability to connect with peers and make informal disclosures. These findings highlight the potential of social media-based interventions to support student mental health and well-being.

Conversely, studies have also highlighted significant mental health concerns associated with excessive social media use. Research has found strong associations between prolonged engagement on social media and increased levels of anxiety, depression, and low self-esteem [20]. Factors such as cyberbullying, social comparison, and the fear of missing out (FOMO) contribute to these negative effects [21]. Research indicates that excessive social media usage, particularly late at night, can negatively impact university students' mental health and sleep quality. Social media addiction and fatigue are associated with sleep disturbances and shorter sleep durations [22]. Late-night smartphone-based social networking site use can lead to poor sleep quality and cognitive function depletion, ultimately affecting academic performance [23]. While problematic social media usage is not necessarily a predictor of anxiety levels, addictive usage positively correlates with anxiety, with sleep disturbance and digital stress acting as mediators [24]. Excessive social media use before bedtime can impair sleep quality and negatively affect mental and physical health, potentially leading to cognitive, mood, and learning impairments [25]. These findings highlight the need for awareness and interventions to promote balanced technology use and protect students' mental and physical well-being.

Despite the growing body of research on social media's impact, there is a paucity of studies focusing on the African context, particularly Nigeria. While global studies provide valuable insights, cultural and institutional factors may influence how students in Nigeria engage with social media and the subsequent effects on their education and psychological well-being. Currently, there are no existing regulations or policies controlling social media use in Nigerian universities, highlighting the need for regulatory policies to effectively manage students' usage [26]. This study fills this gap by examining the unique experiences of students at the University of Delta (UNIDEL). By exploring the interplay between social media usage patterns and academic performance, as well as the psychological implications, this research seeks to provide context-specific insights.

III. METHODOLOGY

The study employed a cross-sectional survey design to assess the educational and psychological impact of social media on university students. A total of 244 respondents were engaged using a combination of stratified random sampling and purposeful sampling techniques. Stratified sampling ensured representation across different departments and academic levels, while purposeful sampling targeted participants who are actively enrolled in computing-related programs such as Computer Science, Software Engineering, and Cybersecurity at the University of Delta (UNIDEL). The research adopted quantitative data collection procedures, with a structured questionnaire serving as the primary instrument for data gathering. The questionnaire was developed based on existing literature on the educational and psychological effects of social media and was tailored to reflect the context and experiences of Nigerian university students.

The questionnaire was administered online and in person to ensure maximum reach and inclusiveness. For the online distribution, a Google Form link was shared through academic WhatsApp groups, student mailing lists, and departmental social media platforms. For the in-person distribution, hard copies of the questionnaire were handed out in lecture halls, laboratories, and during departmental meetings, with the assistance of class representatives. Prior to administration, the purpose of the study was explained, and respondents were assured of confidentiality and anonymity to encourage honest responses. To ensure content validity, the questionnaire was reviewed by an expert before distribution. The questionnaire was designed to gather quantitative data on the following questions:

- (a). How often do you use social media for academic purposes, such as accessing study materials or participating in discussions?
- (b). Has social media improved your ability to collaborate on academic projects or assignments?
- (c). Do you think social media has made you more aware of educational opportunities (e.g., scholarships, workshops, online courses)?
- (d). How often does social media distract you from completing your academic tasks?
- (e). Do you use educational content creators or influencers on social media to supplement your studies?
- (f). Has using social media negatively impacted the time you dedicate to studying?

- (g). How often do you feel anxious or stressed due to academic-related posts or discussions on social
- (h). Does seeing others' academic achievements on social media motivate you or make you feel pressured?
- (i). How often do you experience feelings of inadequacy or low self-esteem due to comparisons with peers on social media?
- (j). Do you think social media contributes to procrastination or avoidance of academic responsibilities?
- (k). How often does social media affect your sleep schedule, leading to decreased academic focus?
- (l). Does social media help you cope with academic stress by providing relaxation or support networks?

IV. RESULTS AND DISCUSSION

The demography shows that 90% of the respondents were male and 10% female. 90% of the respondents were between 18-22 years and 10% between 23-27. These are youthful generation that are internet and social media friendly. 60% of them were BSc holders while 40% had SSCE. The responses to the questions are shown in Figure 1-12.

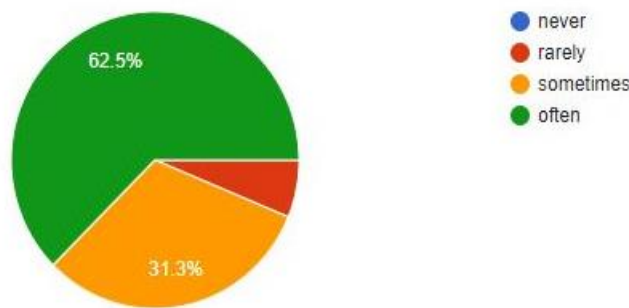


Figure 1: Responses to Likert Item 1

From Likert item 1(How often do you use social media for academic purposes, such as accessing study materials or participating in discussions), 62.5% of the respondents use social media for academic purposes often, 31.3% use it sometimes while 6.2% rarely do. This shows that a significant majority (62.5%) of respondents frequently use social media for academic purposes, indicating its relevance as a learning tool. Additionally, 31.3% use it occasionally, suggesting that while social media plays a role in academic engagement, its usage varies among students. The small percentage (6.2%) of those who rarely use it implies that most respondents recognize its academic benefits, though some may still prefer traditional learning methods or other digital resources.

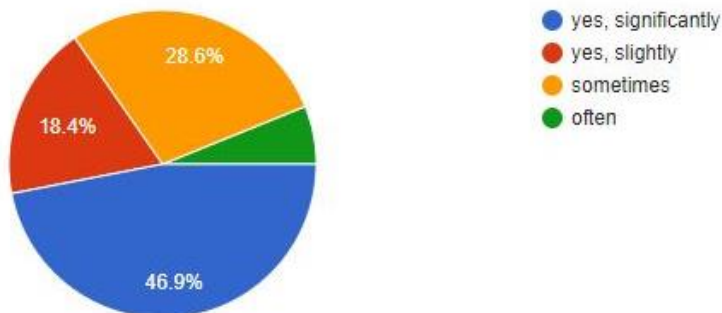


Figure 2: Responses to Likert Item 2

From Likert item 2 (Has social media improved your ability to collaborate on academic projects or assignments), a significant proportion of 46.9% respondents admitted that social media has improved their ability to collaborate with other students on academic projects or assignments, 28.6% said social media sometimes pull through for them in terms of collaboration, while 18.4% said social media has added a slight improvement in their ability to collaborate with other students.



Figure 3: Responses to Likert Item 3

From Likert item 3 (Do you think social media has made you more aware of educational opportunities), a notable percentage of 97.9% reported that social media has had a huge impact on educational opportunities awareness. However a little number of persons 2.1% opined contrarily.

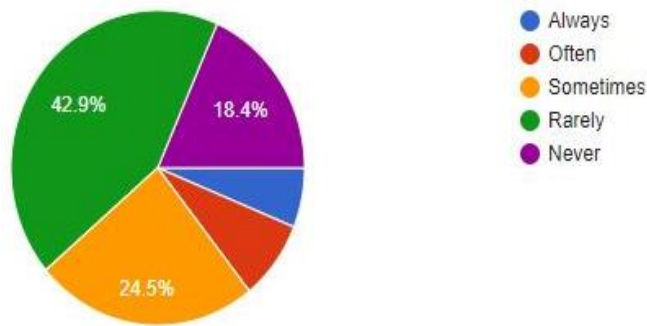


Figure 4: Responses to Likert Item 4

From Likert item 4 (How often does social media distract you from completing your academic tasks), A notable percentage of 42.9% said social media rarely distracts them from being productive academically, 24.5% said it sometimes do distract them from completing their academic tasks, while 18.4% admitted that social media apps never distract them from completing their academic tasks. However, 14.2% opined that social media always or often distract them from completing their academic tasks.

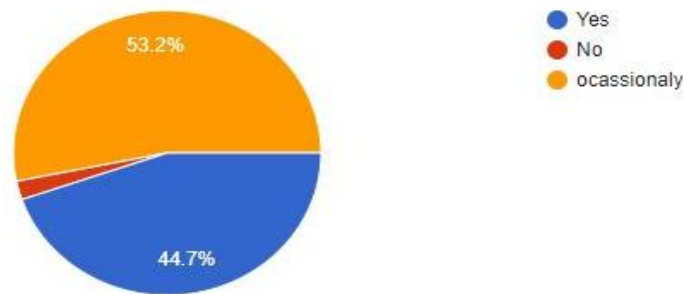


Figure 5: Responses to Likert Item 5

From Likert item 5 (Do you use educational content creators or influencers on social media to supplement your studies), a notable number of 53.2% admitted they occasionally use educational content creators on social media apps to supplement their studies, 44.7% admitted they are always engaged in using educational content creators on social media apps, while 2.1% don't use educational content creators or influencers on social media to supplement their studies.

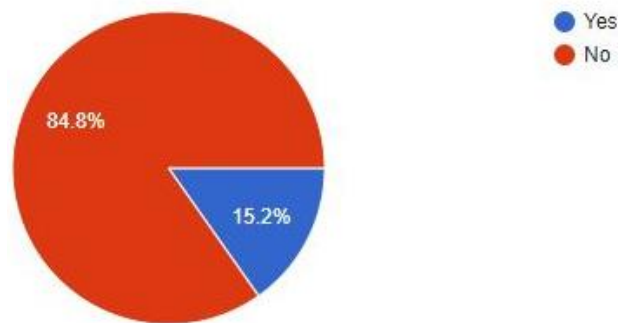


Figure 6: Responses to Likert Item 6

From Likert item 6 (Has using social media negatively impacted the time you dedicate to studying), a significant number of 84.8% admitted that social media apps has no negative impacts accorded to the time they use in studying, while 15.2% admitted that social media apps do affect their studying time-frames.

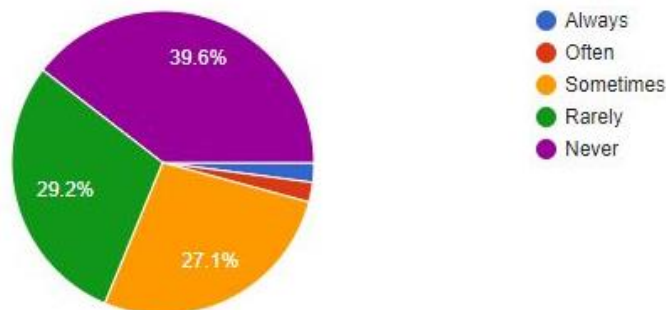


Figure 7: Responses to Likert Item 7

From Likert item 7 (How often do you feel anxious or stressed due to academic-related posts or discussions on social), a notable number 39.6% of students indicated that they never felt anxious or stressed due to academic posts on social media and 29.2% said they do encounter anxiety and stress on social media but on rare occasions has no effect on them, while 27.1% of students admitted that they do experience stress and anxiety on social media apps sometimes. . However, 4.1% opined that social media always or often feel anxious or stressed due to academic-related posts or discussions on social.

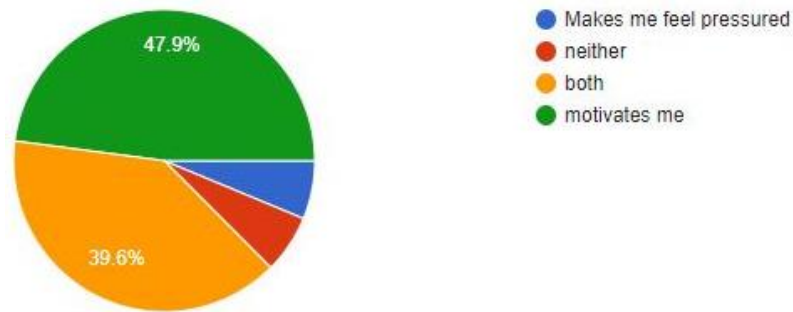


Figure 8: Responses to Likert Item 8

From Likert item 8 (Does seeing others' academic achievements on social media motivate you or make you feel pressured), 47.9% of students admitted that academic posts being posted on social media do motivates them to achieve more academic heights, while 39.6% of students admitted that social media apps academic posts do serve as both motivation and pressure to them.

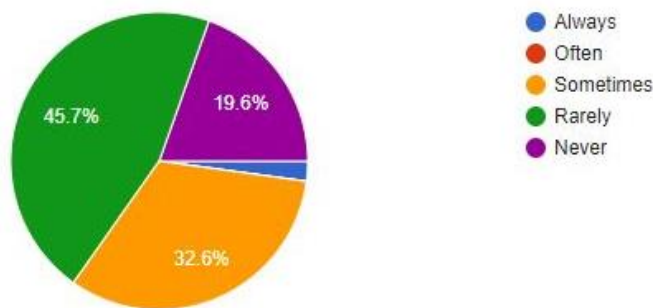


Figure 9: Responses to Likert Item 9

From Likert item 9 (How often do you experience feelings of inadequacy or low self-esteem due to comparisons with peers on social media), a significant number of 45.7% said on rare occasions they do experience feelings of low self-esteem due to comparison with peers on social media apps and 32.6% said they sometimes experience inadequacy or low self-esteem, while 19.6% said that they have never experienced inadequacy or feeling of low self-esteem while using social media apps. While 2.1% always experience feelings of inadequacy or low self-esteem due to comparisons with peers on social media.

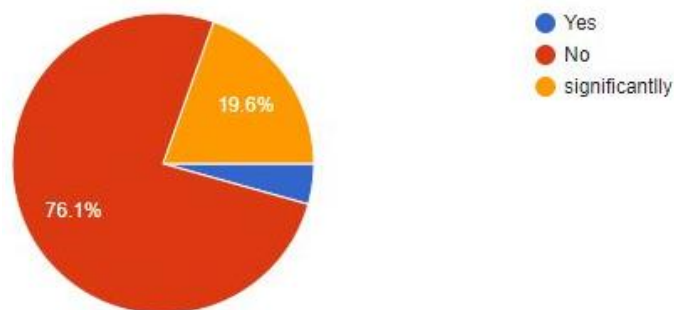


Figure 10: Responses to Likert Item 10

From Likert item 10 (Do you think social media contributes to procrastination or avoidance of academic responsibilities), 76.1% of students admitted that social media has no mental contribution to procrastination in their academic responsibilities, while 19.6 of students admitted that social media significantly has an impact on why they procrastinate or avoid their academic responsibilities. However, 4.3% think that social media always contributes to procrastination or avoidance of academic responsibilities.

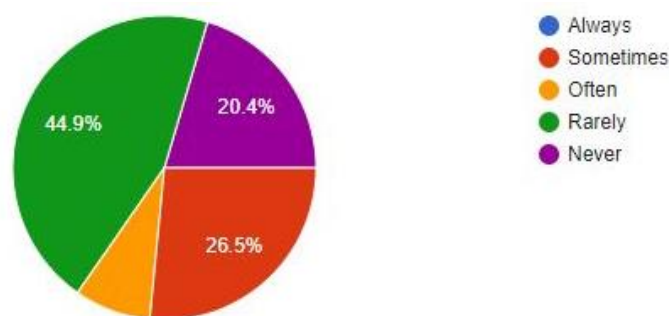


Figure 11: Responses to Likert item 11

From Likert item 11 (How often does social media affect your sleep schedule, leading to decreased academic focus), 44.9% admitted that social media rarely has an effect in their sleep schedule, leading to mental breakdown and decreased in academic focus and 26.5% admitted that social media do sometimes affect their sleeping schedule, while 20.4% admitted that social has never had any effect on their sleeping schedule. However, 8.2% opined that social media often affects their sleep schedule, leading to decreased academic focus.

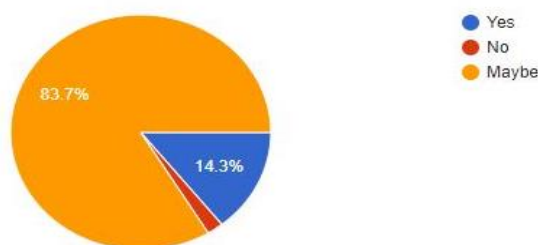


Figure 12: Responses to Likert Item 12

From Likert item 12 (Does social media help you cope with academic stress by providing relaxation or support networks), 83.7% admitted that there's a probability that social media has actually helped them cope with academic stress by providing relaxation or support networks, while 14.3% admitted that social media has actually helped as their coping mechanism for academic stress and as their support networks. However, 2% opined that social media doesn't help cope with academic stress by providing relaxation or support networks

The analysis of the survey results reveals several key insights into how a predominantly young, male, and educated demographic engages with social media for academic purposes, alongside associated benefits and challenges. Key findings show that a significant majority (62.5%) frequently use social media for academic purposes (Figure 1), and 97.9% credit it with raising awareness of educational opportunities (Figure 3). This underscores its role as a critical tool for accessing resources and information. Nearly all respondents (97.9%) leverage educational influencers, with 44.7% consistently engaging with such content (Figure 5), highlighting the integration of informal learning channels into academic routines. Almost half (46.9%) report improved collaboration through social media (Figure 2), suggesting its effectiveness in fostering peer interaction. Academic achievements shared on social media motivate 47.9% of respondents (Figure 8), though 39.6% experience mixed feelings of motivation and pressure, indicating dual psychological impacts. Most respondents (84.8%) deny that social media reduces study time (Figure 6), and 76.1% reject its link to procrastination (Figure 10). However, 14.2% acknowledge frequent distractions (Figure 4), and 19.6% admit to procrastination (Figure 10), pointing to variability in self-regulation. While 39.6% never feel academic stress from social media (Figure 7), a third (27.1%) sometimes do, and 4.1% report frequent stress. Similarly, 32.6% occasionally experience inadequacy from peer comparisons (Figure 9), revealing vulnerability in a subset.

Social media is widely seen as a coping mechanism, with 83.7% agreeing it helps manage academic stress (Figure 12). Most (44.9%) report rare sleep disruptions (Figure 11), but 8.2% face frequent issues, suggesting a need for balance in usage patterns. The sample's male dominance (90%) and youth (90% aged 18–22) may limit generalizability. Gender differences in social media use (e.g., collaboration styles, stress responses) and age-related adaptability to technology could influence results. With 60% holding BSc degrees, respondents may be more digitally literate, potentially inflating positive perceptions of social media's academic utility compared to less tech-oriented groups. The findings aligns with Valkenburg et al., (2006) that posits that social media has been linked to both positive and negative outcomes. The implications of the findings show that: (1) institutions should formalize social media's role in curricula (e.g., promoting academic influencers, creating collaboration platforms) while addressing distractions through digital literacy training. (2) Targeted support for the minority experiencing anxiety or inadequacy is needed though most respondents navigate social media without significant stress. (3) balanced usage involving mindful consumption is encouraged (e.g., screen-time limits, sleep hygiene). This could mitigate risks like procrastination and sleep disruption without undermining benefits.

V. CONCLUSION

Social media significantly influences academic engagement and psychological well-being. While it enhances access to resources and peer interaction, excessive use may contribute to distraction and anxiety. This study sought to determine the Educational and Psychological Impact of Social Media on University students using UNIDEL as a case study. The finding shows that social media is used for academic purposes, it is a critical tool for accessing resources and information, it integrates informal learning channels into academic routines, it is effective in fostering peer interaction, it enables academic achievements sharing on social media which motivates others, brings about vulnerability in self-regulation as it can cause distraction, it introduces vulnerability, it functions as a coping mechanism, and it helps to manage academic stress. Though social media has so many benefits, there's a need to balance the usage pattern. The drawback in the study is that the sample is male and youth dominated hence it cannot be generalized. For this tech-savvy demographic, social media is a double-edged sword that is predominantly beneficial for academic

engagement but with nuanced challenges. The findings advocates for leveraging its strengths while fostering strategies to address its pitfalls, particularly among vulnerable subgroups. It is recommended Universities should incorporate digital literacy programs to educate students on responsible social media use while promoting academic benefits. Future research should explore broader demographics to validate findings.

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