



Correlation Between Social Media Addiction and Mental Health Issues: A Case Study of Federal College of Education (Technical) Bichi, Kano State, Nigeria

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Abstract

This study assessed the Relationship between Social Media Addiction and Mental Health Among Students of Federal College of Education, Bichi, Kano State, Nigeria with Implication for Counselling. Utilizing a descriptive survey design, data were collected from 365 students through simple random sampling. The Social Media Addiction and Mental Health Problem Questionnaire (SMAMHPQ), a researcher-developed instrument with strong reliability (Cronbach's alpha = 0.85) was used to measure demographic variables, social media addiction, and mental health status. Results revealed that 71% of students were classified as addicted to social media, while 54% reported mental health problems. WhatsApp (31%) was identified as the most frequently used platform, followed by Facebook, TikTok, and Instagram. Female students showed significantly higher social media addiction scores ($p = .010$) and mental health problem scores ($p = .028$) than males, whereas age did not significantly influence these outcomes. A strong positive correlation ($r = 0.859$, $p = .000$) existed between social media addiction and mental health problems. These findings point significant Counselling implications, emphasizing the need for targeted interventions that address social media addiction as well as mental health challenges with particular attention to gender-sensitive approaches. Counselling professionals are urged to facilitate coping strategies, resilience building, and psychoeducation to support students' psychological wellbeing in the context of pervasive social media use.

Keywords: Social Media Addiction, Mental Health, Counselling Implications

Introduction

Social media is a recent and highly popular internet service that has brought about substantial changes in the social structures of various countries. In recent years, the advent and widespread adoption of social media platforms have profoundly transformed how individuals communicate, interact, and share information. Particularly among young adults and students, social media has become an integral part of daily life, serving not only as a tool for socialization but also as a source of entertainment, education, and self-expression. Social media has attracted the attention of millions of users around the world owing to the possibility of fast communication, access to a large amount of information, and its widespread dissemination (Anderson & Jiang, 2018). From prominent platforms such as Facebook, Instagram, X platform (formerly Twitter), to the popular video-sharing platform YouTube and Tik-tok, over 4.7 billion individuals actively engage with social media, which corresponds to approximately 60% of the global population (Digital Global Overview Report, 2023). According to recent statistics from early 2023, a substantial 94.8% of users have accessed chat and messaging applications and websites, closely followed by social platforms, which have been used by 94.6% of users (Digital Global Overview Report, 2023). These figures underline the pervasive nature of social media in today's digital landscape, emphasizing its role as a dominant mode of communication and information sharing worldwide. However, despite its many benefits, the excessive and uncontrollable use of social media has raised concerns regarding its impact on mental well-being. The notion of social media addiction, a behavioral addiction characterized by excessive, compulsive use of social media platforms has emerged as an area of intense scholarly attention. Social media addiction is characterized by an individual's excessive preoccupation with social media, an inability to control the urge to log in or engage with social media, and the allocation of an in-coordinate amount of time and effort to social media activities, often at the expense of other essential aspects of life. This addiction to social media can be attributed to its profound impact on the human brain,



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a phenomenon analogous to the mechanisms observed in substance use disorders. Social media has the capacity to influence human psychology by activating the brain's reward centers, triggering pleasurable sensations that elevate one's mood when using social media. For example, individuals addicted to platforms like Instagram may experience feelings of pleasure through likes and comments on their posts. This activation of the brain's reward circuitry renders individuals susceptible to compulsive behaviors related to social media. When confronted with triggers associated with these pleasurable experiences, individuals are often unable to resist the compulsion to engage with social media, driven by the fear of missing out on something important online. This study seeks to explore this phenomenon in the context of students at the Federal College of Education, Bichi, Kano State, Nigeria.

The rising prevalence of social media addiction globally has been linked to various negative psychological outcomes, including anxiety, depression, stress, and low self-esteem (Onyeizu et al., 2022; Islam & Sikder, 2020). Mental health, which encompasses emotional, psychological, and social well-being, is crucial during the student years, as it directly affects academic performance, interpersonal relationships, and overall quality of life. Mental health is the main pillar of healthy human societies, which plays a vital role in ensuring the dynamism and efficiency of any society in such a way that other parts of health cannot be achieved without mental health (Galderisi, et al., 2015). According to World Health Organization's (WHO, 2005) definition, mental health refers to a person's ability to communicate with others. Some researchers believe that social relationships can significantly affect mental health and improve quality of life by creating a sense of belonging and social identity (Massari, 2010). Scientific evidence also shows that social media affect people's mental health (Cunningham, et al., 2021). In Nigeria, where internet penetration and smartphone use have witnessed rapid growth, students are increasingly vulnerable to addictive patterns of social media use. Yet, there is limited empirical research investigating how social media addiction correlates with mental health issues within Nigerian academic institutions. Understanding the relationship between social media addiction and mental health among students is critical, as college life presents unique challenges and stressors, including academic pressure, social adjustment, and identity formation. These challenges may be compounded or alleviated by social media usage patterns. Excessive engagement with social media platforms can potentially disrupt sleep, reduce physical activity, and diminish face-to-face interactions, exacerbating mental health problems (Nwafor et al., 2023). Consequently, examining these dynamics within the student population of Federal College of Education, Bichi provides an insight into the realities of social media's psychological impact. Prior research has identified a positive correlation between social media addiction and symptoms of mental health disorders in different cultural and educational contexts. For instance, studies have found that excessive social media use is associated with heightened levels of anxiety and depressive symptoms among university students (Keles et al., 2019; Onyeizu et al., 2022). This relationship may be explained by factors such as social comparison, fear of missing out (FOMO), cyberbullying, and the pressure to maintain an idealized self-presentation online (Onyeizu et al., 2022). Despite these global findings, the extent to which social media addiction relate to mental health issues within the Nigerian colleges requires further validation and exploration.

Demographic variables such as age, gender, and academic level also appear to play a moderating role in the relationship between social media addiction and mental health. Gender differences may influence how individuals experience and cope with social media use, with some studies suggesting females are more prone to certain types of online engagement that can affect psychological health differently than males (Onyeizu et al., 2022). Similarly, younger students or those in different years of study may exhibit varying susceptibility to addictive behaviors depending on their maturity, academic demands, and social network dynamics. This study investigates these moderating effects to see how demographic factors (age and gender) impact the relationship between social media use and mental well-being. The Federal College of Education, Bichi, provides an interesting case study due to its diverse student body drawn from various parts of Kano State and beyond. As an educational institution focused on teacher training, the students' mental health and behavior are especially important, as these future teachers will influence younger generations. Understanding the relationship between social media addiction and mental health within this population can inform institution specific policies and intervention programs aimed at developing healthier digital habits and promoting psychological well being of students. Therefore, the findings from this

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study can contribute to broader discussions on integrating digital literacy, mental health awareness, and support services within Nigerian higher education frameworks.

Statement of the Problem

Social media has become an integral part of students' routines, yet excessive engagement often leads to addictive behaviour causing adverse mental health effects such as anxiety, depression, and stress. In Nigeria, particularly at the Federal College of Education, Bichi, there is limited empirical evidence on the extent to which social media addiction relates to students' mental health. The lack of empirical research on this subject hinders the development of effective policies and interventions to protect student well-being. Moreover, how demographic factors like age and gender influence this relationship remains unclear. Consequently, without empirical evidence, college stakeholders are constrained in their efforts to address social media addiction and its psychological impact on students. Hence, assessing the relationship between social media addiction and mental health issues among students of Federal College of Education (Technical) Bichi, Kano State, Nigeria.

Research Objectives

1. To determine the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria.
2. To find out the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria.
3. To identify the most commonly used social media platforms among students of Federal College of Education, Bichi, Kano State, Nigeria.
4. To determine gender difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria.
5. To determine age difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria.
6. To find out gender difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria.
7. To find out age difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria.
8. To determine the relationship between social media addiction and mental health problems among students of Federal College of Education, Bichi, Kano State, Nigeria.

Research Questions

1. What is the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?
2. What is the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?
3. Which social media platforms are most commonly used by students of Federal College of Education, Bichi, Kano State, Nigeria?
4. Is there gender difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?
5. Is there age difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?
6. Is there gender difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?
7. Is there age difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?
8. Is there a significant relationship between social media addiction and mental health problems among students of Federal College of Education, Bichi, Kano State, Nigeria?

Research Hypotheses

1. There is no significant gender difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?



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2. There is no significant age difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?
3. There is no significant gender difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?
4. There is no significant age difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?
5. There is no significant relationship between social media addiction and mental health problems among students of Federal College of Education, Bichi, Kano State, Nigeria.

Research Methodology

This study adopted a descriptive survey design. The population of the study comprised 6606 students of Federal College of Education, Bichi, Kano State, Nigeria. A total sample size of 365 students was selected for the study as suggested by Research Advisor Table for Determination of Sample Size (2006). The selection of respondents was guided by a simple random sampling technique to ensure representativeness across different schools in the College and levels of study. The instrument used for this study was a researcher-developed questionnaire titled the “Social Media Addiction and Mental Health Problem Questionnaire” (SMAMHPQ). The questionnaire consisted of three sections: demographic information, social media addiction, and mental health status. The demographic section collected data on age and gender. The social media addiction and mental health sections contained a total of 20 items, 10 items for each section measured on a four Likert scale format ranging from Strongly Agree (4) to Strongly Disagree (1). The scoring revealed that any respondent who obtained scores ranging from 25-40 from social media addiction section (Section B) is considered as social media addict. Equally, any respondent who obtained scores ranging from 25-40 from mental health problem section (Section C) is considered as having mental health issues. The questionnaire was administered to 20 pilot respondents from the Federal College of Education, Kano, (Now Yusuf Maitama Sule University of Education, Kano) to assess the reliability of the instrument using SPSS software. A Cronbach’s alpha reliability coefficient of 0.85 was obtained, indicating good internal consistency. Data collected from the main survey were analyzed using parametric statistics. Descriptive statistics specifically frequency counts were employed to determine the prevalence of social media addiction; the most commonly used social media platforms and mental health status of students. T-test for independent samples was used to determine the gender and age difference in the prevalence of social media addiction and mental health status. Furthermore, Pearson Product Moment Correlation (PPMC) was used to examine the relationship between social media addiction and mental health problems.

Presentation of Results

Table 1: Demographic Characteristics of Respondents (N = 365)

Demographic Variables	Frequency	Percentage %
Gender		
Male	226	62%
Female	139	38%
Total	365	100%
Age Group		
16-20	270	74%
21-30	95	26%
Total	365	100%

Source: Field Data, 2025

Table 1 shows a summary of the demographic characteristics of the respondents across two key demographic variables: gender and age group. The information on the table indicates a sample of 365 students from Federal College of Education, Bichi, Kano State, Nigeria. Based on gender, the study included 226 male respondents representing 62% and 139 female respondents representing 38%, reflecting a higher proportion of males in the sample. This distribution allows the study to explore possible gender-based differences in social media use and mental health outcomes. Regarding age group, 270 respondents (74%) fell within the 16-20 years category, while the remaining 95 respondents (26%) were between 21-30 years old. This distribution highlights that the majority of the sample comprises younger students aged 16 to 20, which is

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typical of the student population and important for understanding age-related influences on social media addiction and mental health.

RQ1: What is the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?

Table 2: Prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria

Prevalence of social media addiction	Frequency	percentage %
Addicted	259	71%
Not Addicted	106	29%
Total	365	100%

Source: Field Data, 2025

Table 2 shows the distribution of social media addiction status among the 365 students surveyed at Federal College of Education, Bichi, Kano State, Nigeria. Majority of the respondents, 259 students (71%), were classified as addicted to social media based on the study's criteria. The remaining 106 students (29%) were classified as not addicted to social media. This indicates that social media addiction is quite prevalent among students of Federal College of Education, Bichi, Kano State, Nigeria

RQ2: What is the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria?

Table 3: Mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria

Mental health status	Frequency	percentage %
Have Mental Health Issue	196	54%
Not Have Mental Health Issue	169	46%
Total	365	100%

Source: Field Data, 2025

Table 3 presents the distribution of mental health problems among the 365 students surveyed at Federal College of Education, Bichi, Kano State, Nigeria. A total of 196 students (54%) were identified as having mental health issues according to the criteria used in the study. Conversely, 169 students (46%) were classified as not having mental health issues. This indicates that slightly more than half of the students in the sample are experiencing mental health challenges.

RQ3: Which social media platforms are most commonly used by students of Federal College of Education, Bichi, Kano State, Nigeria?

Table 4: Social Media Platforms commonly used by students of Federal College of Education, Bichi, Kano State, Nigeria.

Commonly Used Social Media	Frequency	percentage %
WhatsApp	113	31%
Facebook	82	22%
Instagram	62	17%
Twitter	24	7%
Tik-Tok	66	18%
Others	18	5%
Total	365	100%

Source: Field Data, 2025

Table 4 illustrates the distribution of the most commonly used social media platforms among the 365 students surveyed at Federal College of Education, Bichi, Kano State, Nigeria. WhatsApp is the most frequently used platform, with 113 students (31%) indicating it as their preferred social media platform. Facebook follows, used by 82 students (22%), reflecting continued popularity among the student population. Instagram is the choice of 62 students (17%), showing a strong preference among a significant portion of the respondents. TikTok is used by 66 students (18%), indicating growing popularity, especially among younger users. Twitter is less commonly preferred, with 24 students (7%) using it as their main platform. Finally, Others constitute a small group of 18 students (5%) who use alternative or less common social media platforms. This distribution highlights WhatsApp as the dominant social media platform among students, followed by Facebook, TikTok and Instagram, suggesting these platforms are key channels for engagement, communication, and possibly the development of social media addiction within this population.



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Ho1: There is no significant gender difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?

Table 5: t-test analysis for prevalence of social media by gender

Variables	Gender	N	Mean	S.D	t-cal	Df	P-Value (2-tailed)
Social Media Addiction	Male	226	26.14	5.829	-2.577	363	.010
	Female	139	27.71	5.332			

Source: Field Data, 2025

Table 5 shows the analysis of social media addiction prevalence by gender among students of Federal College of Education, Bichi, Kano State, Nigeria. The independent samples t-test results indicate that there is a significant difference in social media addiction scores between male and female students. The mean social media addiction score for male students is 26.14, while the mean score for female students is 27.71. The mean difference between the two groups is 1.57. The t-test yielded a significant result ($t = -2.577$, $df = 363$, $p = .010$). Therefore, the null hypothesis that there is no significant gender difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria is rejected. This suggests that female students experience higher levels of social media addiction compared to their male counterparts in this population.

Ho2: There is no significant age difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria?

Table 6: t-test analysis for prevalence of social media by age

Variables	Age	N	Mean	S.D	t-cal	Df	P-Value (2-tailed)
Social Media Addiction	16-20	270	26.85	5.458	.665	363	.506
	21-30	95	26.40	6.318			

Source: Field Data, 2025

Table 6 shows the analysis of social media addiction prevalence by age group among students of Federal College of Education, Bichi, Kano State, Nigeria. The independent samples t-test results indicate that there is no significant difference in social media addiction scores between students aged 16-20 and those aged 21-30. The mean social media addiction score for students aged 16-20 is 26.85, while the mean score for students aged 21-30 is 26.40. The mean difference between the two groups is 0.45. The t-test yielded a non-significant result ($t = 0.665$, $df = 363$, $p = .506$). Therefore, the null hypothesis that there is no significant age difference in the prevalence of social media addiction among students of Federal College of Education, Bichi, Kano State, Nigeria is retained. This suggests that age does not significantly affect the level of social media addiction among the students in this population.

Ho3: There is no significant gender difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria

Table 7: t-test analysis for mental health status by gender

Variables	Gender	N	Mean	S.D	t-cal	Df	P-Value (2-tailed)
Mental –health Issues	Male	226	23.06	4.854	-2.202	363	.028
	Female	139	24.21	4.843			

Source: Field Data, 2025

Table 7 shows the analysis of mental health status by gender among students of Federal College of Education, Bichi, Kano State, Nigeria. The independent samples t-test results indicate that there is a significant difference in mental health problem scores between male and female students. The mean mental health problem score for male students is 23.06, while the mean score for female students is 24.21. The mean difference between the two groups is 1.15. The t-test yielded a significant result ($t = -2.202$, $df = 363$, $p = .028$). Therefore, the null hypothesis that there is no significant gender difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria is rejected. This suggests



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that female students report significantly higher levels of mental health problems compared to their male counterparts in this population.

Ho₄: There is no significant age difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria

Table 8: t-test analysis for mental health status by age

Variables	Age	N	Mean	S.D	t-cal	Df	P-Value (2-tailed)
Mental –health Issues	16-20	270	23.59	4.714	.638	363	.524
	21-30	95	23.22	5.324			

Source: Field Data, 2025

Table 8 shows the analysis of mental health status by age group among students of Federal College of Education, Bichi, Kano State, Nigeria. The independent samples t-test results indicate that there is no significant difference in mental health problem scores between students aged 16-20 and those aged 21-30. The mean mental health problem score for students aged 16-20 is 23.59, while the mean score for students aged 21-30 is 23.22. The mean difference between the two groups is 0.37. The t-test yielded a non-significant result ($t = 0.638$, $df = 363$, $p = .524$). Therefore, the null hypothesis that there is no significant age difference in the mental health status of students of Federal College of Education, Bichi, Kano State, Nigeria is retained. This suggests that age does not significantly affect the level of mental health problems among the students in this population.

Ho₄: There is no significant relationship between social media addiction and mental health problems among students of Federal College of Education, Bichi, Kano State, Nigeria

Table 9: Correlation analysis for Social Media Addiction and Mental health Issues

Variables	N	Mean	S.D	Pearson Correlation	P-Value (2-tailed)
Social Media Addiction	365	26.73	5.889	.859	.000
Mental health Issues	365	23.50	4.875		

Source: Field Data, 2025

Table 9 shows the correlation analysis between social media addiction and mental health issues among 365 students of Federal College of Education, Bichi, Kano State, Nigeria. The Pearson Product-Moment Correlation coefficient indicates a strong positive correlation of 0.859 between social media addiction scores and mental health issues scores. This correlation is statistically significant at the 0.05 level (2-tailed), with a p-value of .000. Therefore, the null hypothesis that there is no significant relationship between social media addiction and mental health problems among students of Federal College of Education, Bichi, Kano State, Nigeria is rejected. This result suggests that higher levels of social media addiction are strongly associated with greater mental health issues in the student population studied. This significant positive relationship supports the hypothesis that social media addiction is closely linked to mental health challenges among students.

Summary of Findings

1. Majority of students (71%) at Federal College of Education, Bichi, Kano State, Nigeria, are classified as addicted to social media.
2. Slightly more than half of the students (54%) report having mental health problems.
3. WhatsApp (31%) is the most commonly used social media platform among the students, followed by Facebook (22%), TikTok (18%), and Instagram (17%).
4. Gender significantly influences social media addiction levels, with female students exhibiting higher addiction scores than male students ($p = .010$).
5. Age does not significantly affect social media addiction levels among the students ($p = .506$).
6. Gender significantly affects mental health status, with female students reporting higher mental health problem scores than males ($p = .028$).
7. Age does not significantly influence mental health status in this student population ($p = .524$).



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8. There is a strong positive correlation between social media addiction and mental health problems ($r = 0.859$, $p = .000$), indicating that higher addiction levels are associated with worse mental health outcomes.

Discussion of Findings

The first finding of this study revealed that majority of students (71%) at Federal College of Education, Bichi, Kano State, Nigeria, are classified as addicted to social media. This finding aligns with Allahverdi (2022) who conducted a study on Relationship between perceived social media addiction and social media applications frequency usage among university students and found that around 70% of students believed they were addicted to social media. The finding also agreed with Chukwudum, et al., (2023) who conducted a study on Prevalence of Social Media Addiction and its predictive role on Mental health of Undergraduates in a Nigerian University and found a significant prevalence rate of social media addiction among undergraduates, reporting that 43.3% of students were classified as addicted to social media. Although this prevalence is somewhat lower than the 71% found at Federal College of Education, Bichi, it corroborates that social media addiction is a widespread concern among Nigerian students. The second finding revealed that slightly more than half of the students (54%) report having mental health problems. This finding resonates with Awopetu, et al., (2024) who conducted systematic review of social media addiction and mental health of Nigerian university students: The good, the bad and the ugly, and concluded that, though, social media has contributed significantly to the modern dissemination of clinical delivery but its addiction, could negatively affect the mental health of the students. The finding also agree with Ayinde, et al., (2022) who conducted descriptive study of mental health and burnout among Nigerian medical students and found a prevalence of psychological distress at 54.5% among Nigerian university students.

The third finding of this study revealed that WhatsApp (31%) is the most commonly used social media platform among the students, followed by Facebook (22%), TikTok (18%), and Instagram (17%). This finding aligns with the findings of Tambuwal, et al., (2025) who conducted study on Assessing Social Media Usage Patterns Among Undergraduate Students in Sokoto Metropolis, Nigeria and reported that WhatsApp was the most frequently used social media platform among undergraduate students, with approximately 32.5% of respondents using it, followed by Facebook at 30%, Instagram at 25%, and Twitter at about 6.25%. The finding also resonates with findings of Oche, et al., (20219) who conducted a study on Prevalence and effect of social media on sleep among students of higher institutions in Sokoto Metropolis, Sokoto State Nigeria and reported that a total of 97.9% of the respondents used social media with WhatsApp ((84.9%) and Facebook ((81.7%) being the commonly used platforms. The fourth finding of this study revealed that gender significantly influences social media addiction levels, with female students exhibiting higher addiction scores than male students ($p = .010$). The finding resonates with Choudhury and Ali (2020) who conducted a cross-sectional survey among college-going youth in Guwahati, Assam, India on Social media addiction among youth: A gender comparison. The study found a significant difference in social media addiction between both male and female participants with females showing higher addiction scores than males (Mean rank=216.29 and Mean rank= 253.32) respectively and p value= .001. The study also aligns with Aparicio-Martínez, et al., (2020) who conducted a study on gender differences in the addiction to social networks in the Southern Spanish university students. The results showed difference among male and female about addiction (chi-square = 12.77, p -value = 0.002).

The fifth finding of this study revealed that age does not significantly affect social media addiction levels among the students ($p = .506$). This finding aligns with Gazi, et al., (2017) who conducted a study to identify whether there is a statistically significant differentiation between social media addiction levels of users; according to gender, age and educational situation, daily social media use time and tool used to connect to social media. The study revealed that as a result of the one-way analysis of variance, there was no significant difference between participants' age and social media dependence. This finding disagree with Li, et al., (2021) who conducted a study on impacts social media have on young generation and older adults and found that younger people, particularly teens and young adults, are more vulnerable to social media addiction compared to middle-aged adults. The sixth finding of this study Gender significantly affects mental health status, with female students reporting higher mental health problem scores than males ($p = .028$) resonates with Cen, et al., (2025) who conducted a cross-sectional study on gender differences in the relationship between mental health and



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academic performance among undergraduate students at a medical school in Shanghai and found that female students exhibited significantly higher rates of mental health problems across multiple dimensions than their counterpart males with female exhibiting mental health positive rate (41.9%) than males (39.6%). This finding did not align with the finding of K Damodaran and Paul (2016) who conducted a study assess differences on Gender and Mental Health. They highlighted that independent sample t test revealed no significant gender difference in overall mental health and conclude that male and female youth of Kerala do not differ in terms of their mental health.

The seventh finding of this study revealed that age does not significantly influence mental health status in this student population ($p = .524$). This finding is contrary with Singh and Mishra (2021) who conducted a study on age and gender difference in mental health of young adults and found that majority of years young adults between the age range of 18-21 years portrayed poor mental health (64.60%) followed by young adults with average (35.40%) mental health as compared to young adults of age-range between 22-25 years. The result further revealed that the young adults belonging to the age range of 22-25 years also portrayed poor (51.10%) and average (48.90%) mental health. This finding also disagree with Clarkin, et al., (2024) who found that Younger participants were more likely to identify a mental health problem. The last finding of this study revealed that there is a strong positive correlation between social media addiction and mental health problems ($r = 0.859$, $p = .000$), indicating that higher addiction levels are associated with worse mental health outcomes. This finding resonates with Feng, et al., (2025) who conducted a network analysis on the relationships between mental health and social media addiction, and between academic burnout and social media addiction among Chinese college students: A network analysis. The study reveals a significant positive correlation between social media addiction and both academic burnout and mental health issues. This study also aligns with Zaw and Azenal (2021) who conducted a study on the association between social media addiction and mental health among International Islamic University Malaysia (IIUM) undergraduate nursing students and found that there is an association between social media addiction and mental health status and social media can have a negative impact on mental health among the students.

Conclusions

Based on the outcomes of this study, it is concluded that social media addiction is highly prevalent among students of Federal College of Education, Bichi, Kano State, Nigeria, with a majority (71%) classified as addicted. It is also concluded that slightly more than half of the students (54%) report experiencing mental health problems. WhatsApp is the most commonly used social media platform among students, followed by Facebook, TikTok, and Instagram. Furthermore, gender significantly influences social media addiction levels and mental health status, with female students exhibiting higher addiction scores and reporting more mental health problems than their male counterparts. Conversely, age does not significantly affect social media addiction levels and mental health status within the student population studied. Lastly, there is a strong positive correlation between social media addiction and mental health problems, indicating that higher levels of addiction are associated with worse mental health outcomes among students.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Given the high prevalence of social media addiction among students, targeted intervention programs should be developed to raise awareness about the risks of excessive social media use and to promote healthier digital habits among students.
2. Since more than half of the students report mental health problems, mental health support services including counselling and stress management workshops should be made more accessible and promoted within the institution to address these challenges.
3. Considering WhatsApp and Facebook are the most commonly used platforms, awareness and prevention campaigns focusing on responsible social media use should prioritize these channels to maximize reach and impact.
4. Because female students are more vulnerable to social media addiction and mental health issues, gender-sensitive support programs and prevention strategies should be designed to address the specific needs of female students.
5. Since age does not significantly affect social media addiction and mental health status in this population, interventions and support efforts can be designed broadly for all student age groups without age specific differentiation.



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6. Given the strong positive correlation between social media addiction and mental health problems, it is recommended that integrated approaches combining social media use monitoring and mental health screening be implemented to identify at-risk students early and provide timely support.
7. Educational authorities and policymakers should collaborate to incorporate digital literacy and mental health education into the curriculum to equip students with skills to manage social media use and mental well-being effectively.

Counselling Implications

The findings of this study have important Counselling implications for students at Federal College of Education, Bichi, Kano State, Nigeria. Given the high prevalence of social media addiction and the significant proportion of students experiencing mental health problems, counsellors should be equipped to address issues related to excessive social media use and its psychological impacts, such as anxiety, depression, and stress. Counsellors can play a crucial role in helping students develop healthy coping mechanisms and digital habits to manage social media use effectively and reduce addiction related harm. Interventions should also focus on strengthening mental health resilience, particularly among female students, who are more vulnerable to both social media addiction and mental health challenges.

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