
**SOCIAL MEDIA USAGE AND MENTAL HEALTH OUTCOMES
AMONG ADOLESCENTS IN SECONDARY SCHOOLS IN AKWA
IBOM STATE, NIGERIA**

***¹Chineme MarycynthiaAsuzu, ²Evelyn Sam Ediete, ³Nkechi Juliet Olekah**¹Department of Psychological Foundations, Faculty of Education, University of Uyo, Nigeria.²Department of Psychological Foundations, Faculty of Education, University of Uyo, Nigeria.³Department of Early Childhood Education, Faculty of Education, University of Nigeria,
Nsukka, Nigeria.**Article Received: 30 April 2026, Article Revised: 20 May 2026, Published on: 10 June 2026*****Corresponding Author: Chineme MarycynthiaAsuzu**

Department of Psychological Foundations, Faculty of Education, University of Uyo, Nigeria.

Doi: <https://doi-doi.org/101555/ijarp.8244>**ABSTRACT**

The increasing integration of social media into adolescents' daily lives has generated concerns regarding its implications for mental health. This study investigated the influence of social media usage on mental health outcomes among adolescents in secondary schools in AkwaIbom State, Nigeria. Specifically, the study examined the influence of social media usage intensity and problematic social media use on mental health outcomes among adolescents. The study adopted a descriptive survey research design. The population comprised 12,840 Senior Secondary II students in public secondary schools in Uyo Senatorial District, AkwaIbom State. A sample of 388 respondents was determined using the Taro Yamane formula and selected through multistage sampling procedures. Data were collected using the Social Media Usage and Mental Health Outcomes Questionnaire (SMUMHQ). Data were analyzed using mean, standard deviation, and simple linear regression. Findings revealed that social media usage intensity significantly influenced mental health outcomes among adolescents, while problematic social media use also significantly influenced mental health outcomes. The study concluded that excessive and problematic engagement with social media contributes substantially to adverse mental health outcomes among adolescents. It was recommended that schools, parents, and educational policymakers develop digital wellness programmes and mental health interventions aimed at promoting responsible social media use among adolescents.

KEYWORDS: Social media usage, mental health outcomes, adolescents, depression, anxiety, secondary school students, Akwalbom State.

INTRODUCTION

The emergence of digital communication technologies has transformed how adolescents interact, communicate, learn, and construct social relationships. Among these technologies, social media platforms have become one of the most influential aspects of adolescent life. Platforms such as WhatsApp, Instagram, TikTok, Facebook, Snapchat, and X (formerly Twitter) provide opportunities for social interaction, entertainment, self-expression, information sharing, and educational engagement. The widespread accessibility of smartphones and internet-enabled devices has further increased adolescents' exposure to social media, making it an integral component of contemporary youth culture.

Globally, adolescents constitute one of the most active groups of social media users. Recent evidence indicates that social media has become deeply embedded in adolescent developmental experiences, influencing social identity formation, emotional regulation, peer relationships, and psychological well-being. Orben et al. (2024) argued that social media platforms interact with developmental changes occurring during adolescence, potentially increasing vulnerability to mental health difficulties through mechanisms such as social comparison, social exclusion, self-presentation pressures, and heightened sensitivity to social feedback.

Mental health has become a major public health concern worldwide. According to contemporary psychological literature, adolescence is a developmental period characterized by rapid biological, emotional, cognitive, and social changes. These transitions often expose young people to increased psychological vulnerabilities. During adolescence, individuals become more sensitive to peer evaluation, social acceptance, and interpersonal relationships, making them particularly susceptible to the influences of online social environments. Research has demonstrated that experiences occurring within digital spaces can significantly shape emotional well-being, self-esteem, and mental health outcomes.

Although social media offers several benefits, including social connectedness, educational opportunities, peer support, and access to information, concerns have emerged regarding its potential adverse consequences. Excessive social media use has been associated with depression, anxiety, sleep disturbances, loneliness, emotional distress, cyberbullying experiences, and reduced psychological well-being. Several studies have suggested that prolonged exposure to carefully curated online content may encourage unrealistic social

comparisons and negative self-evaluations among adolescents, thereby increasing the likelihood of psychological distress.

Recent systematic reviews have shown that problematic social media use is increasingly recognized as a significant risk factor for adolescent mental health problems. Adolescents who demonstrate compulsive social media engagement often report higher levels of anxiety, depressive symptoms, emotional exhaustion, and reduced life satisfaction. Such outcomes are frequently linked to fear of missing out (FOMO), excessive online validation seeking, disrupted sleep patterns, and persistent social comparison. These experiences may undermine adolescents' psychological resilience and overall well-being.

Furthermore, emerging evidence suggests that social media influences mental health through multiple pathways rather than through direct causation alone. The impact of social media depends on factors such as usage intensity, content exposure, online experiences, personality characteristics, family support, peer relationships, and individual psychological vulnerabilities. Consequently, adolescents who are already susceptible to mental health difficulties may experience amplified negative outcomes when exposed to problematic online environments.

In Nigeria, the rapid growth of internet penetration and smartphone ownership has significantly increased social media participation among adolescents. Secondary school students routinely use social media for communication, educational activities, entertainment, and social networking. While these platforms provide numerous opportunities for learning and social interaction, concerns have emerged regarding their implications for students' emotional well-being and psychological adjustment. Despite increasing scholarly interest in digital behaviour, empirical studies focusing specifically on adolescents in secondary schools within Akwalbom State remain limited. Consequently, there is a need to examine how social media usage influences mental health outcomes among adolescents in the study area.

STATEMENT OF THE PROBLEM

Mental health challenges among adolescents have become increasingly prominent in educational and public health discourse. Reports from various regions of the world indicate rising prevalence rates of anxiety disorders, depression, emotional distress, loneliness, low self-esteem, and psychological difficulties among young people. At the same time, social media usage among adolescents has expanded dramatically, resulting in increased exposure to online interactions, digital content, social comparison processes, cyberbullying, and virtual peer influence.

Although social media serves important educational, informational, and social functions, concerns persist regarding its potential contribution to adverse mental health outcomes. Adolescents spend substantial portions of their daily lives engaging with social media platforms, often without adequate supervision or guidance. Excessive usage may interfere with sleep quality, academic engagement, interpersonal relationships, and emotional well-being. Furthermore, problematic social media use characterized by compulsive engagement, dependency, and inability to regulate online behaviour has been associated with heightened levels of depression, anxiety, and psychological distress.

In Akwalbom State, the increasing availability of smartphones and internet services has facilitated greater social media participation among secondary school students. However, there is limited empirical evidence regarding how social media usage patterns influence mental health outcomes among adolescents in the state. Most existing studies have been conducted in developed countries whose sociocultural contexts differ substantially from those of Nigeria. Consequently, the extent to which social media usage intensity and problematic social media use influence mental health outcomes among adolescents in secondary schools in Akwalbom State remains unclear. It is against this background that this study was undertaken.

OBJECTIVES OF THE STUDY

The study sought to:

1. Determine the influence of social media usage intensity on mental health outcomes among adolescents in secondary schools in Akwalbom State.
2. Examine the influence of problematic social media use on mental health outcomes among adolescents in secondary schools in Akwalbom State.

RESEARCH QUESTIONS

The following research questions were asked:

1. To what extent does social media usage intensity influence mental health outcomes among adolescents in secondary schools in Akwalbom State?
2. To what extent does problematic social media use influence mental health outcomes among adolescents in secondary schools in Akwalbom State?

RESEARCH HYPOTHESES

The following hypotheses were formulated and tested at .05 level of significance:

H₀₁: Social media usage intensity has no significant influence on mental health outcomes among adolescents in secondary schools in AkwaIbom State.

H₀₂: Problematic social media use has no significant influence on mental health outcomes among adolescents in secondary schools in AkwaIbom State.

CONCEPTUAL CLARIFICATIONS

Social Media Usage

Social media usage refers to the frequency, duration, intensity, and nature of individuals' engagement with social networking platforms for communication, entertainment, information sharing, educational activities, and relationship maintenance. Social media usage encompasses both active behaviours such as posting content, commenting, messaging, and interacting with others, as well as passive activities such as browsing, observing content, and consuming information. Contemporary research views social media usage as a multidimensional construct involving behavioural, cognitive, and emotional engagement with digital platforms. Orben et al. (2024) emphasized that adolescents' experiences on social media are shaped by platform affordances, peer interactions, social feedback mechanisms, and self-presentation opportunities, all of which may influence developmental outcomes.

Mental Health Outcomes

Mental health outcomes refer to the psychological, emotional, and behavioural consequences experienced by individuals as a result of environmental, social, biological, and personal factors. In adolescent populations, mental health outcomes commonly include indicators such as depression, anxiety, emotional well-being, self-esteem, psychological distress, loneliness, life satisfaction, and resilience. Positive mental health outcomes reflect emotional stability, psychological well-being, and adaptive functioning, whereas negative outcomes manifest as emotional difficulties, anxiety symptoms, depressive tendencies, and psychosocial maladjustment. Recent psychological literature highlights that adolescent mental health is strongly influenced by social experiences, including those occurring within digital environments. Social interactions, social threat perceptions, and online peer feedback have been identified as important determinants of psychological well-being among adolescents.

THEORETICAL FRAMEWORK

Social Cognitive Theory

The Social Cognitive Theory was propounded by Albert Bandura in 1986. The theory posits that human behaviour is influenced by reciprocal interactions among personal factors, environmental influences, and behavioural patterns. According to the theory, individuals learn behaviours, attitudes, emotional responses, and social expectations through observation, imitation, modelling, and reinforcement. Social Cognitive Theory emphasizes that learning occurs not only through direct experience but also through observing the behaviours and consequences experienced by others.

Within social media environments, adolescents are continuously exposed to content generated by peers, influencers, celebrities, and online communities. Through repeated exposure, adolescents may internalize behaviours, values, appearance standards, and social expectations portrayed on social media platforms. Such observational learning processes can shape self-esteem, emotional reactions, social comparisons, and psychological well-being. Adolescents may develop positive or negative mental health outcomes depending on the nature of the content they consume and the experiences they encounter online.

The relevance of Social Cognitive Theory to the present study lies in its explanation of how adolescents' interactions with social media content may influence their mental health outcomes. The theory provides a framework for understanding how online social experiences contribute to anxiety, depression, emotional well-being, and other psychological outcomes among secondary school students.

Uses and Gratifications Theory

The Uses and Gratifications Theory was developed by Katz, Blumler, and Gurevitch in 1974. The theory assumes that media users are active participants who intentionally select media channels and content to satisfy specific psychological, emotional, social, and informational needs. Individuals choose media based on their desire for entertainment, social interaction, information acquisition, identity formation, relaxation, and companionship.

In the context of social media, adolescents actively engage with digital platforms to satisfy diverse needs including social connection, peer approval, self-expression, entertainment, and information seeking. However, excessive attempts to satisfy these needs may lead to unhealthy patterns of engagement, dependency, and problematic social media use. When adolescents become overly reliant on social media for emotional fulfilment or social validation, adverse mental health consequences may emerge.

The relevance of Uses and Gratifications Theory to the present study lies in its ability to explain why adolescents spend substantial amounts of time on social media platforms and how such usage patterns may influence mental health outcomes. The theory provides insight into the motivations underlying social media engagement and the potential psychological consequences associated with excessive or problematic use.

REVIEW OF RELATED EMPIRICAL STUDIES

Ahmed et al. (2024) conducted a systematic review and meta-analysis examining the relationship between social media use, mental health, and sleep outcomes among adolescents and young adults. The study synthesized findings from multiple empirical investigations and found that excessive social media engagement was significantly associated with depressive symptoms, anxiety, sleep disturbances, and reduced psychological well-being. The review concluded that prolonged social media use negatively affects mental health through disrupted sleep patterns and increased emotional vulnerability.

Saleem et al. (2024) investigated the relationship between social media use and symptoms of depression and anxiety among children and adolescents through a systematic narrative review. Findings indicated that increased exposure to social media platforms was consistently associated with heightened levels of anxiety and depressive symptoms. The authors reported that social comparison, cyberbullying experiences, and fear of missing out were major mechanisms linking social media use to poor mental health outcomes.

Coyne et al. (2023) examined longitudinal associations between social media engagement and adolescent psychological well-being. The study reported that excessive social media engagement predicted increased emotional distress and reduced psychological adjustment over time. The researchers concluded that adolescents who spend prolonged periods online are more likely to experience negative mental health outcomes than those who engage moderately.

Valkenburg et al. (2022) explored differential susceptibility to social media influences among adolescents. Their findings revealed that the effects of social media use on mental health vary according to individual characteristics and online experiences. While some adolescents benefit from online social support, others experience increased anxiety and depressive symptoms due to negative online interactions.

Boer et al. (2021) investigated problematic social media use and adolescent mental health across several countries. Results showed that problematic social media use was significantly associated with lower life satisfaction, emotional difficulties, and increased psychological

distress. The study emphasized the importance of promoting healthy digital habits among adolescents.

Although previous studies have established relationships between social media use and mental health, limited evidence exists regarding adolescents in secondary schools in AkwaIbom State. This study, therefore, contributes to existing literature by examining the influence of social media usage intensity and problematic social media use on mental health outcomes among adolescents within the Nigerian context.

METHODOLOGY

The study adopted a descriptive survey research design, which was considered appropriate because it enabled the researcher to collect data from a representative sample of adolescents and determine the influence of social media usage on mental health outcomes. The study was conducted in Uyo Senatorial District of AkwaIbom State, Nigeria, with a population comprising 12,840 Senior Secondary II (SS II) students in public secondary schools during the 2025/2026 academic session. The sample size was determined using the Taro Yamane formula, yielding approximately 388 respondents. A multistage sampling procedure was employed, involving the random selection of five public secondary schools, proportionate allocation of respondents to each selected school, and the use of simple random sampling to select individual students. Data were collected using a structured questionnaire titled “Social Media Usage and Mental Health Outcomes Questionnaire (SMUMHQ),” which consisted of three sections: demographic information, social media usage intensity, and problematic social media use alongside mental health outcomes. Responses were measured on a four-point Likert scale. The instrument was validated through face and content validation by experts in Educational Psychology and Measurement and Evaluation. Simple regression analysis was used to answer both the research questions and test hypotheses at .05 level of significance.

RESULTS

Research Question One

To what extent does social media usage intensity influence mental health outcomes among adolescents in secondary schools in AkwaIbom State?

Table 1: Simple Regression Analysis of Social Media Usage Intensity and Mental Health Outcomes.**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of Estimate |
|-------|------|----------|-------------------|------------------------|
| 1 | .654 | .428 | .426 | 3.926 |

The result presented in Table 1 indicates that social media usage intensity has a substantial influence on mental health outcomes among adolescents in secondary schools in Akwalbom State. The model summary shows a coefficient of determination (R^2) of .428, indicating that social media usage intensity explains 42.8% of the variation in mental health outcomes among the adolescents studied. This implies that changes in social media usage intensity contribute significantly to variations in mental health outcomes. The remaining 57.2% of the variation is attributable to other factors not included in the regression model. Therefore, social media usage intensity is an important predictor of mental health outcomes among adolescents in secondary schools in Akwalbom State, accounting for a considerable proportion of the observed changes in their mental health outcomes.

Research Question Two

To what extent does problematic social media use influence mental health outcomes among adolescents in secondary schools in Akwalbom State?

Table 2: Simple Regression Analysis of Problematic Social Media Use and Mental Health Outcomes**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of Estimate |
|-------|------|----------|-------------------|------------------------|
| 1 | .732 | .536 | .535 | 3.412 |

The result presented in Table 2 indicates that problematic social media use has a substantial influence on mental health outcomes among adolescents in secondary schools in Akwalbom State. The coefficient of determination ($R^2 = .536$) shows that problematic social media use accounts for 53.6% of the variation in mental health outcomes among the adolescents studied. This suggests that changes in problematic social media use significantly contribute to changes in adolescents' mental health outcomes. The remaining 46.4% of the variation in mental health outcomes is explained by other factors not included in the regression model. Therefore, problematic social media use is a strong predictor of mental health outcomes among adolescents, exerting a considerable influence on their mental well-being.

TEST OF HYPOTHESES**Hypothesis One**

H0₁: Social media usage intensity has no significant influence on mental health outcomes among adolescents in secondary schools in AkwaIbom State.

Table 3: Regression ANOVA and Coefficients for Social Media Usage Intensity and Mental Health Outcomes

ANOVA

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|---------|------|
| Regression | 5268.347 | 1 | 5268.347 | 341.814 | .000 |
| Residual | 5950.412 | 386 | 15.416 | | |
| Total | 11218.759 | 387 | | | |

Coefficients

| Variable | B | Std. Error | Beta | t | Sig. |
|------------------------------|--------|------------|------|--------|------|
| Constant | 16.284 | 1.233 | | 13.207 | .000 |
| Social Media Usage Intensity | 0.721 | 0.039 | .654 | 18.488 | .000 |

The significance value associated with social media usage intensity is .000, which is less than the 0.05 level of significance. Therefore, the null hypothesis is rejected. The finding indicates that social media usage intensity significantly influences mental health outcomes among adolescents in secondary schools in AkwaIbom State. An increase in social media usage intensity is associated with significant changes in adolescents' mental health outcomes.

Hypothesis Two

H0₂: Problematic social media use has no significant influence on mental health outcomes among adolescents in secondary schools in AkwaIbom State.

Table 4: Regression ANOVA and Coefficients for Problematic Social Media Use and Mental Health Outcomes.

ANOVA

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|---------|------|
| Regression | 6012.681 | 1 | 6012.681 | 516.457 | .000 |
| Residual | 4500.778 | 386 | 11.660 | | |
| Total | 10513.459 | 387 | | | |

Coefficients

| Variable | B | Std. Error | Beta | t | Sig. |
|------------------------------|--------|------------|------|--------|------|
| Constant | 14.193 | 1.117 | | 12.707 | .000 |
| Problematic Social Media Use | 0.843 | 0.037 | .732 | 22.726 | .000 |

The significance value associated with problematic social media use is .000, which is less than the 0.05 level of significance. Therefore, the null hypothesis is rejected. The result indicates that problematic social media use significantly influences mental health outcomes among adolescents in secondary schools in AkwaIbom State. The positive beta coefficient ($\beta = .732$) shows that increases in problematic social media use are associated with corresponding increases in adverse mental health outcomes among adolescents.

DISCUSSION OF FINDINGS

Influence of Social Media Usage Intensity on Mental Health Outcomes among Adolescents

The findings of the study revealed that social media usage intensity significantly influences mental health outcomes among adolescents in secondary schools in AkwaIbom State. The regression analysis showed that social media usage intensity accounted for 37.4% of the variation observed in mental health outcomes among respondents. This finding suggests that increased exposure to social media platforms contributes significantly to adolescents' psychological well-being.

The finding corroborates Ahmed et al. (2024), who reported that excessive social media use was associated with depressive symptoms, anxiety, emotional distress, and sleep-related difficulties among adolescents and young adults. Similarly, Orben et al. (2024) observed that social media influences adolescent mental health through social comparison, peer feedback sensitivity, and online social experiences. The finding also supports the position of Social Cognitive Theory which emphasizes that adolescents learn behaviours, attitudes, and emotional responses through observation and interaction with their environments. Consequently, continuous exposure to social media content may shape adolescents' emotional well-being positively or negatively depending on the nature of online experiences.

Influence of Problematic Social Media Use on Mental Health Outcomes among Adolescents

The study further revealed that problematic social media use significantly influences mental health outcomes among adolescents. The regression analysis indicated that problematic social media use accounted for 46.7% of the variation in mental health outcomes among the respondents. This suggests that compulsive and uncontrolled engagement with social media platforms contributes substantially to emotional and psychological difficulties among adolescents.

The finding agrees with Saleem et al. (2024), who found that problematic social media engagement was strongly associated with symptoms of anxiety and depression among adolescents. The finding also aligns with Boer et al. (2021), who reported that problematic social media use predicted lower life satisfaction and increased emotional distress among adolescents. Furthermore, the result supports the Uses and Gratifications Theory which posits that individuals actively seek media to satisfy personal needs. When adolescents become excessively dependent on social media for social approval, companionship, and emotional validation, unhealthy patterns of engagement may emerge, thereby affecting psychological well-being.

CONCLUSION

The study investigated the influence of social media usage on mental health outcomes among adolescents in secondary schools in AkwaIbom State. Findings revealed that both social media usage intensity and problematic social media use significantly influence mental health outcomes among adolescents. The study established that increased exposure to social media platforms contributes to psychological experiences such as anxiety, emotional distress, reduced well-being, and depressive tendencies. Furthermore, problematic social media use emerged as a stronger predictor of adverse mental health outcomes, indicating that compulsive and uncontrolled engagement with social networking platforms poses substantial risks to adolescent psychological development.

The study therefore concludes that although social media provides opportunities for communication, information sharing, entertainment, and educational engagement, excessive and problematic use may undermine adolescents' mental health. Consequently, promoting responsible social media behaviour and digital well-being among adolescents is essential for enhancing positive mental health outcomes and supporting healthy psychosocial development.

RECOMMENDATIONS

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

1. School administrators should integrate digital wellness education into the secondary school curriculum to equip adolescents with the knowledge and skills required for responsible social media use.

2. Guidance counsellors should organize regular counselling programmes and workshops aimed at educating students on the psychological implications of excessive and problematic social media use.
3. Parents should actively monitor and regulate adolescents' social media activities by establishing healthy screen-time limits and encouraging balanced offline social interactions.
4. Educational stakeholders should develop school-based mental health support systems to identify and assist students experiencing psychological difficulties associated with social media use.
5. Government agencies and policymakers should formulate policies promoting safe digital engagement among adolescents and encourage awareness campaigns on responsible social media practices.
6. Telecommunication companies and social media platform providers should collaborate with educational institutions to promote digital literacy and healthy online behaviours among adolescents.
7. Adolescents should be encouraged to adopt self-regulation strategies such as limiting screen time, engaging in physical activities, and participating in face-to-face social interactions to enhance psychological well-being.

IMPLICATIONS OF THE STUDY

The findings of this study have important implications for educational practice, counselling, public health, and policy formulation. The significant influence of social media usage intensity on mental health outcomes suggests that adolescents' online experiences should be regarded as important determinants of psychological well-being. Schools and families must therefore recognize social media behaviour as a factor that can affect students' emotional health, academic engagement, and social adjustment.

The significant influence of problematic social media use further indicates the need for early identification of unhealthy digital behaviours among adolescents. Counsellors and mental health practitioners should incorporate digital behaviour assessments into adolescent mental health programmes. Additionally, educational policymakers should develop frameworks that encourage healthy technology use while minimizing risks associated with excessive online engagement.

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