
Research

The Influence of Media and Social Media on Substance Abuse Behaviours Among Government Day Senior Secondary School Students in North-Central Nigeria

**Uchendu, Caroline Ifeoma (PhD)^{1*}, Egbunu, Joy Anyo (PhD)²,
Nwaononiwu, Ngozi Linda (PhD)³**

¹School of Post Basic Critical Care Nursing, University of Teaching Hospital, FCT, Gwagwalada, Nigeria.

²University of Abuja Teaching Hospital, Gwagwalada, FCT, Abuja, FCT, Gwagwalada, Nigeria.

³Department of Nursing, University of Abuja Teaching Hospital, Gwagwalada, FCT, Abuja, Nigeria.

Correspondence should be addressed to: uchenducaroline@gmail.com

Abstract: The increasing exposure of adolescents to media and social media platforms has raised concerns regarding their influence on substance abuse behaviours among secondary school students in Nigeria. This study quantitatively examines the influence of media and social media exposure on substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria. A cross-sectional survey design was adopted, involving a population of 986 students drawn from selected Government Day Senior Secondary Schools across North-Central Nigeria, including urban and semi-urban educational settings in Niger, Benue, Kogi, and Nasarawa States. Data were collected using a structured questionnaire titled Media Influence and Substance Abuse Behaviour Scale (MISABS) and analysed using descriptive statistics, Pearson correlation, and simple linear regression at a 0.05 level of significance. Findings revealed that social media exposure has a strong positive relationship with substance abuse behaviours ($r = 0.71$, $p < 0.05$), while traditional media exposure also shows a moderate positive relationship ($r = 0.58$, $p < 0.05$). Regression analysis indicated that media exposure accounts for 49% of the variance in substance abuse behaviours among students ($R^2 = 0.49$, $F = 198.22$, $p < 0.05$). The study concludes that media and social media significantly influence substance abuse behaviours among adolescents. It recommends enhanced media literacy education, stricter content regulation, and strengthened school-based behavioural intervention programmes.

Keywords: Media influence, Social media, Substance abuse, Adolescents, Secondary school students, North-Central Nigeria, Behavioural Patterns, Media exposure

Introduction

Background to the Study

Substance abuse among adolescents has emerged as a persistent behavioural and public health challenge in Nigeria, particularly within secondary school populations where formative behavioural patterns are still being developed. In Government Day Senior Secondary Schools across North-Central Nigeria, reports from school administrators and counsellors indicate a gradual but noticeable increase in students' exposure to and experimentation with psychoactive substances such as alcohol, tramadol, cannabis, and inhalants. These behavioural tendencies are increasingly being shaped not only by immediate social environments but also by broader media ecosystems that continuously expose adolescents to behavioural cues.

The traditional social structures that once strongly influenced adolescent behaviour, such as family supervision, community norms, and teacher guidance, are gradually being weakened by the rapid expansion of digital communication technologies. In urban and semi-urban areas such as *Minna (Niger State)*, *Makurdi (Benue State)*, *Lokoja (Kogi State)*, and *Lafia (Nasarawa State)*, students now spend considerable time interacting with smartphones and digital platforms. This shift has repositioned media and social media as powerful agents of behavioural influence, often surpassing parental and school-based control mechanisms in shaping adolescents' perceptions and attitudes toward substance use.

Social media platforms such as *TikTok*, *Instagram*, *Facebook*, and *WhatsApp* have become highly influential among secondary school students in North-Central Nigeria. In many Government Day Secondary Schools, informal observations suggest that students frequently engage with peer-shared content that depicts substance use as fashionable, entertaining, or socially rewarding. For instance, short-form videos circulating within student networks in Bida and Otukpo often portray alcohol consumption and drug experimentation as part of youth identity formation. These digital narratives contribute to the normalisation of risky behaviours, especially when reinforced by peer engagement such as likes, shares, and comments.

Traditional media sources, including television, radio, and music videos, also play a contributory role, although their influence is increasingly overshadowed by social media. In schools located in semi-urban communities of Benue and Nasarawa States, students are still exposed to television programmes and music content that occasionally glamorise substance use or associate it with wealth, fame, and social acceptance. According to the World Health Organization, adolescent behavioural outcomes are significantly influenced by environmental exposure, particularly when repeated messaging reinforces risky behavioural

norms. In Nigeria, this exposure is intensified by increasing internet accessibility and the widespread ownership of smartphones among school-aged adolescents.

Against this background, understanding the influence of media and social media on substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria becomes critically important. The region presents a unique socio-educational environment where urbanisation, digital connectivity, and varying levels of parental supervision intersect to shape adolescent behaviour. This study therefore situates itself within this evolving behavioural landscape, aiming to empirically examine how media exposure contributes to substance abuse behaviours among students.

Conceptual Review

The conceptual review of this study is anchored on three core constructs: media and social media exposure, substance abuse behaviour, and the behavioural mechanisms that connect them. It provides a structured understanding of how these concepts operate within adolescent environments in North-Central Nigeria, particularly among Government Day Senior Secondary School students, where digital exposure is rapidly reshaping behavioural patterns.

Media and Social Media Exposure

Media and social media exposure refers to the extent, frequency, intensity, and nature of adolescents' interaction with both traditional and digital communication platforms, and how such interaction shapes attitudes, perceptions, and behavioural tendencies. In the context of this study, it encompasses students' engagement with television, radio, music videos, newspapers, and, more critically, social networking platforms such as *TikTok*, *Instagram*, *Facebook*, *WhatsApp*, and *YouTube*. The concept is not limited to passive consumption but extends to active participation through commenting, sharing, content creation, and peer-to-peer dissemination of media materials.

In contemporary North-Central Nigeria, media exposure among Government Day Senior Secondary School students has become increasingly digitalised. In urban centres such as Minna, Lokoja, Makurdi, and Lafia, adolescents commonly access media through personal smartphones, while in semi-urban communities such as Bida, Otukpo, and Keffi outskirts, access is often shared through cybercafés or peer-owned devices. This variation in access patterns influences the intensity of exposure, but not necessarily its behavioural impact, as even intermittent exposure to high-influence content can shape adolescent perceptions of normalised behaviour, including substance use.

Social media exposure, in particular, has introduced a new behavioural ecosystem characterised by algorithm-driven content distribution. Unlike traditional media, where content is scheduled and regulated, social media platforms continuously personalise and reinforce content based on user engagement patterns. This means that a student who interacts with substance-related content even briefly may be repeatedly exposed to similar content through recommendation algorithms. In school environments across Niger and Benue States, anecdotal evidence from teachers suggests that students are increasingly influenced by viral trends that depict alcohol consumption, drug experimentation, or “party culture” as symbols of popularity and social acceptance.

A critical dimension of social media exposure is its peer-reinforced structure. Adolescents are not only exposed to content but also to peer validation mechanisms such as likes, shares, comments, and reposts. In Government Day Secondary Schools in Makurdi and Lokoja, students often form informal digital networks where trending content is circulated and discussed. Within these networks, substance-related content may gain social currency, thereby increasing its perceived acceptability. This peer validation significantly strengthens the behavioural influence of media exposure, as adolescents are more likely to imitate behaviours that appear socially rewarded within their peer group.

Traditional media exposure, although less dominant, continues to play a contributory role in shaping adolescent perceptions. Television programmes, music videos, and radio broadcasts in Nigeria sometimes portray substance use in ways that associate it with wealth, fame, or emotional coping. In semi-urban school environments in Nasarawa and Kogi States, students still report exposure to music content that subtly normalises alcohol consumption or depicts drug use as part of entertainment culture. However, compared to social media, traditional media lacks the interactive and repetitive reinforcement mechanisms that intensify behavioural adoption.

From a behavioural science perspective, media and social media exposure operate through mechanisms of observational learning, cognitive reinforcement, and normalisation. Adolescents repeatedly exposed to substance-related content begin to reinterpret risk perception, gradually perceiving such behaviours as less harmful or socially acceptable. This process is particularly pronounced during adolescence, a developmental stage characterised by identity exploration and heightened susceptibility to peer influence.

Media and social media exposure in the context of this study represents a multidimensional behavioural influence system that operates through access, repetition,

interaction, and peer reinforcement. Within Government Day Senior Secondary School environments in North-Central Nigeria, this exposure has become a significant determinant of adolescent behavioural outcomes, particularly substance abuse tendencies, thereby justifying its central role in the quantitative model tested in this study.

Substance Abuse Behaviour

Substance abuse behaviour refers to the patterned use of psychoactive substances in a manner that is excessive, non-medical, or harmful to an individual's physical health, psychological well-being, academic performance, and social functioning. In adolescent populations, particularly among Government Day Senior Secondary School students, substance abuse is not only a clinical concern but also a behavioural and developmental issue shaped by environmental exposure, peer dynamics, and increasingly, digital media influence. It typically involves substances such as alcohol, cannabis (commonly referred to as "igbo"), inhalants (such as glue, petrol, and paint fumes), and the misuse of prescription drugs including tramadol and codeine-based syrups.

In North-Central Nigeria, substance abuse behaviour among secondary school students has become an observable concern in both urban and semi-urban school environments. In schools located in *Minna (Niger State)*, *Makurdi (Benue State)*, *Lokoja (Kogi State)*, and *Lafia (Nasarawa State)*, school disciplinary records and counselling reports increasingly point to cases of experimentation with alcohol and prescription drugs among students. These behaviours are often initiated in peer groups and later reinforced through exposure to online content that portrays substance use as fashionable, stress-relieving, or a marker of social identity.

A key feature of adolescent substance abuse behaviour is its experimental and imitation-based nature. Many students do not initially engage in substance use due to dependency but rather out of curiosity, peer pressure, or exposure to behavioural models seen in their environment. In Government Day Secondary Schools in Bida and Otukpo, for example, school counsellors have reported cases where students attempt to replicate behaviours observed in viral social media content, such as mixing energy drinks with alcohol or using prescription drugs without medical supervision. These behaviours are often misinterpreted by adolescents as harmless recreational activities, particularly when they are not immediately associated with visible health consequences.

Substance abuse behaviour is also closely linked to psychological and social vulnerability. Adolescents experiencing academic stress, family instability, or emotional

distress may be more susceptible to experimenting with substances as a coping mechanism. In semi-urban communities within Nasarawa and Kogi States, teachers have observed that some students resort to substance use as a form of emotional escape, particularly when exposed to peer networks that normalise such behaviour. This suggests that substance abuse is not only externally influenced but also internally motivated by psychosocial conditions.

Within the Nigerian educational context, substance abuse behaviour is further complicated by weak enforcement of behavioural regulations and limited access to structured counselling services. Although some Government Day Senior Secondary Schools have guidance and counselling units, their effectiveness is often constrained by inadequate staffing and limited training. As a result, early signs of substance-related behavioural changes such as absenteeism, declining academic performance, and aggression are sometimes detected late, allowing behaviours to become more entrenched.

From a conceptual standpoint, substance abuse behaviour is understood as the observable outcome of a complex interaction between environmental exposure, cognitive perception, and behavioural reinforcement. In the context of this study, it represents the dependent variable influenced by media and social media exposure. Adolescents who are repeatedly exposed to substance-related content online are more likely to develop permissive attitudes toward drug use, which may translate into experimentation and eventual behavioural adoption.

Substance abuse behaviour among Government Day Senior Secondary School students in North-Central Nigeria is a multidimensional phenomenon shaped by curiosity, peer influence, psychological vulnerability, and increasingly, media-driven behavioural modelling. Its growing prevalence underscores the importance of understanding external influences such as media and social media exposure, which form the central explanatory variables in this study's quantitative framework.

Theoretical Link Between Media Exposure and Behaviour

The relationship between media exposure and adolescent behaviour is grounded in established behavioural and communication theories which explain how individuals acquire, interpret, and reproduce behaviours observed in their environment. In the context of this study, the theoretical linkage focuses on how media and social media exposure influence substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria through processes of observation, imitation, reinforcement, and normalisation.

A central theoretical foundation for this relationship is Social Learning Theory, which posits that individuals learn behaviours by observing others, particularly those perceived as influential, attractive, or relatable. Applied to media contexts, adolescents are not merely passive recipients of information but active interpreters of behavioural cues presented in media content. In schools across Minna, Makurdi, Lokoja, and Lafia, students are frequently exposed to social media influencers, music artists, and peer-generated content that depict substance use as part of leisure, success, or social identity. When such behaviours are repeatedly observed and appear socially rewarded, adolescents may internalise them as acceptable behavioural options.

Closely related to this is the concept of observational reinforcement, where behaviours seen to attract attention, admiration, or social validation are more likely to be imitated. On platforms such as TikTok and Instagram, which are widely used among students in Government Day Secondary Schools in Bida and Otukpo, substance-related content often receives high engagement in the form of likes, shares, and comments. This digital validation serves as a reinforcement mechanism, strengthening the perceived desirability of the behaviour and increasing the likelihood of imitation among impressionable adolescents.

Another relevant theoretical perspective is the Cultivation Theory, which suggests that prolonged exposure to media content gradually shapes an individual's perception of reality. In the Nigerian adolescent context, continuous exposure to media narratives that portray substance use as normal, glamorous, or stress-relieving may lead students to overestimate its prevalence and acceptability. For instance, in semi-urban school environments in Niger and Nasarawa States, repeated exposure to music videos and online skits that trivialise drug use can gradually shift students' risk perception, making substance use appear less harmful than it actually is.

The Theory of Planned Behaviour further explains how attitudes shaped by media exposure can influence behavioural intentions. According to this framework, behaviour is determined by attitudes toward the behaviour, subjective norms, and perceived behavioural control. In this study context, media and social media exposure shape adolescents' attitudes toward substance use by normalising it, while peer-driven online interactions influence subjective norms. In schools within Makurdi and Lokoja, students who perceive substance use as socially accepted within their peer digital networks are more likely to develop intentions to experiment with such behaviours.

In addition, reinforcement theory helps explain how repeated exposure to substance-related content strengthens behavioural tendencies over time. When adolescents continuously encounter content that depicts substance use without visible negative consequences, the absence of immediate punishment or harm acts as a form of negative reinforcement, reducing perceived risk. This is particularly significant in Government Day Senior Secondary Schools where students may lack structured digital literacy education to critically evaluate media content.

Within the Nigerian context, these theoretical perspectives converge to explain a shared behavioural pathway: media exposure → cognitive normalisation → peer reinforcement → behavioural experimentation. This pathway is observable in schools across North-Central Nigeria, where increasing smartphone access has intensified exposure to global media narratives without corresponding behavioural regulation or guidance.

The theoretical link between media exposure and behaviour demonstrates that adolescent substance abuse is not a spontaneous act but a socially learned and environmentally reinforced behaviour. Media and social media serve as powerful behavioural architects, shaping perceptions, attitudes, and intentions that ultimately manifest as observable substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria.

Empirical and Contextual Positioning in Nigeria

The relationship between media exposure and adolescent substance abuse behaviours has been widely explored in empirical literature, with growing consensus that digital environments now play a central role in shaping youth behavioural outcomes. In Nigeria, recent studies indicate a noticeable shift from traditional peer and family-based influence structures toward media-driven behavioural modelling, particularly among secondary school students. This shift is especially evident in urbanising regions where smartphone penetration and internet accessibility have expanded rapidly.

Empirical evidence from Nigerian school-based studies suggests a strong association between exposure to social media content and increased likelihood of risky behavioural experimentation among adolescents. For instance, studies conducted among secondary school populations in parts of Benue and Niger States have reported that students who spend longer hours on social media platforms are more likely to engage in substance-related curiosity and experimentation. These findings align with broader behavioural observations within Government Day Senior Secondary Schools, where

teachers have reported increasing cases of students imitating drug-related behaviours seen in online videos and entertainment content.

In addition, research within tertiary and secondary education contexts in Nigeria has shown that substance use among adolescents is often reinforced by peer groups that are themselves influenced by digital media. In school environments in Makurdi, Lafia, and Lokoja, students frequently form online peer networks through WhatsApp and Instagram groups where content related to lifestyle, entertainment, and sometimes substance use is shared and normalised. This creates a feedback loop in which media exposure influences peer norms, and peer norms further reinforce media-driven behavioural expectations.

The contextual reality in North-Central Nigeria further strengthens the relevance of this study. The region is characterised by a mix of urban, semi-urban, and rural school environments, each with varying levels of digital access and parental supervision. In urban centres such as Minna and Makurdi, students often have unrestricted access to smartphones, allowing continuous engagement with social media platforms. Conversely, in semi-urban and peri-urban areas such as Bida, Otukpo, and Keffi outskirts, students may have shared or limited access but are still exposed to similar behavioural content through peer networks and cybercafés. This demonstrates that even limited access does not necessarily reduce exposure intensity, as content is frequently redistributed among peer groups.

The increasing availability of inexpensive smartphones has significantly altered adolescent behavioural environments in Nigeria. According to reports from the World Health Organization, digital exposure among adolescents in low- and middle-income countries is rapidly increasing, often outpacing the development of regulatory frameworks and behavioural safeguards. In Nigeria, this digital expansion has created an environment where adolescents are exposed to globalised behavioural content without sufficient contextual filtering or guidance.

Furthermore, school-based observations in Government Day Senior Secondary Schools across North-Central Nigeria indicate that substance abuse behaviours are increasingly linked to content imitation rather than direct substance availability alone. Teachers in schools in Nasarawa and Kogi States have reported cases where students attempt to replicate substance-related trends seen on *TikTok* or *Instagram*, suggesting that behavioural modelling has become a significant pathway for substance initiation. This highlights the evolving nature of adolescent substance use, where digital influence now

complements or even supersedes traditional risk factors such as family background or socioeconomic status.

Despite growing empirical attention, there remains a gap in studies that quantitatively isolate the influence of media and social media exposure within secondary school populations in North-Central Nigeria. Many existing studies focus broadly on adolescent behaviour without distinguishing between media types or examining their differential effects. This study addresses this gap by providing a quantitative assessment of both traditional media and social media exposure, thereby offering a more nuanced understanding of their respective contributions to substance abuse behaviours among Government Day Senior Secondary School students.

The empirical and contextual evidence from Nigeria demonstrates that media and social media exposure are significant determinants of adolescent substance abuse behaviours. However, the intensity and nature of this influence vary across geographical and educational contexts. Within North-Central Nigeria, the convergence of increased digital access, peer reinforcement systems, and limited behavioural regulation creates a particularly sensitive environment where media exposure plays a decisive role in shaping adolescent behavioural outcomes.

Conceptual Synthesis

The conceptual synthesis of this study integrates media and social media exposure, behavioural influence mechanisms, and substance abuse behaviour into a unified explanatory framework that reflects the lived realities of Government Day Senior Secondary School students in North-Central Nigeria. It moves beyond isolated conceptual definitions to present a coherent understanding of how exposure, interpretation, and behavioural adoption interact within adolescent environments.

At the core of this synthesis is the proposition that media and social media exposure function as primary external stimuli that shape adolescents' cognitive framing of substance use. In practical terms, repeated exposure to content that depicts alcohol consumption, drug experimentation, or "*party culture*" as socially acceptable alters students' perception of risk and normality. In school environments such as Minna, Makurdi, Lokoja, and Lafia, students are frequently exposed to digital narratives that associate substance use with popularity, emotional relief, or social belonging. These narratives form the initial stage of behavioural influence.

The second dimension of the synthesis is behavioural interpretation and internalisation. Exposure alone does not automatically result in substance abuse; rather, adolescents process media content through cognitive filters influenced by peer interaction, personal experiences, and environmental context. In Government Day Senior Secondary Schools in Bida and Otukpo, for example, students who repeatedly encounter substance-related content on social media may begin to reinterpret such behaviours as less harmful, particularly when similar behaviours are endorsed or normalised within peer groups. This stage represents the transition from exposure to attitude formation.

The third dimension involves peer reinforcement and social validation mechanisms. Social media platforms intensify behavioural adoption through likes, shares, comments, and viral trends, which function as digital forms of social approval. In Nigerian school contexts, especially in Makurdi and Lokoja, students often participate in informal online peer networks where trending content is circulated and discussed. When substance-related behaviours receive attention or appear widely accepted within these networks, adolescents are more likely to perceive them as normative, thereby increasing behavioural susceptibility.

The final dimension of the synthesis is behavioural manifestation, represented by substance abuse behaviour. This occurs when cognitive acceptance and peer reinforcement translate into actual experimentation or sustained use of substances such as alcohol, cannabis, or prescription drugs. In North-Central Nigeria, school reports from Niger and Nasarawa States indicate that some students begin with experimentation influenced by online content and gradually progress to habitual use when reinforced by peer groups or emotional coping needs.

Within this integrated framework, traditional media plays a secondary but still relevant role, primarily by reinforcing broader cultural narratives around lifestyle, entertainment, and success. However, social media remains the dominant driver due to its immediacy, interactivity, and algorithmic reinforcement structures. This distinction aligns with the study's quantitative findings, where social media exposure showed a stronger correlation ($r = 0.71$) with substance abuse behaviour compared to traditional media ($r = 0.58$).

The synthesis further acknowledges the moderating influence of contextual factors such as parental supervision, school counselling effectiveness, and socio-economic conditions. In many Government Day Secondary Schools across North-Central Nigeria,

these moderating structures are weak or inconsistent, thereby increasing the likelihood that media-driven behavioural influences will translate into actual substance use behaviours.

The conceptual synthesis establishes a clear and logically connected pathway: *media exposure* → *cognitive interpretation* → *peer reinforcement* → *behavioural adoption (substance abuse)*. Within the Nigerian adolescent context, particularly in North-Central secondary schools, this pathway is intensified by high social media usage, peer network reinforcement, and limited behavioural regulation, thereby providing a strong conceptual foundation for the quantitative relationships tested in this study.

Results

This section presents a detailed quantitative analysis of the data collected from 986 Government Day Senior Secondary School students across selected states in North-Central Nigeria. The analysis is structured in line with the study objectives and focuses on examining the influence of media and social media exposure on substance abuse behaviours. Descriptive statistics, correlation analysis, and regression analysis were employed to provide a comprehensive understanding of the relationships between the study variables.

Demographic Characteristics of Respondents

The demographic profile of respondents indicates a balanced representation across gender, age, and school location, reflecting the diversity of Government Day Senior Secondary Schools in North-Central Nigeria. A significant proportion of respondents were aged between 15 and 18 years, which corresponds to the critical adolescent developmental stage where behavioural identity formation is most active.

Students from urban centres such as Minna, Makurdi, and Lokoja constituted a slightly higher proportion due to higher school enrolment and population density, while respondents from semi-urban areas such as Bida, Lafia outskirts, and Otukpo provided complementary representation. This distribution ensures that the findings reflect both high and moderate media exposure environments.

Descriptive Analysis of Study Variables

The descriptive statistics provide insight into the general level of media exposure and substance abuse behaviour among respondents.

Table 1.

Variable	Mean	Standard Deviation
Social Media Exposure	3.89	0.74
Traditional Media Exposure	3.45	0.68
Substance Abuse Behaviour	3.67	0.71

The results indicate a relatively high level of social media exposure among students, suggesting frequent engagement with platforms such as *TikTok*, *WhatsApp*, *Instagram*, and *Facebook*. Traditional media exposure is moderately high, reflecting continued access to television, radio, and music content. Substance abuse behaviour also records a moderately high mean score, indicating that a noticeable proportion of students exhibit tendencies toward experimentation or engagement with psychoactive substances.

In practical terms, students in urban schools such as those in Makurdi and Minna reported higher daily screen time, often exceeding 4–6 hours, while those in semi-urban areas reported lower but more shared or peer-driven exposure patterns.

Correlation Analysis

Pearson correlation was used to determine the relationship between media exposure variables and substance abuse behaviour.

Table 2

Variables	Correlation Coefficient (r)	Significance
Social Media Exposure vs Substance Abuse Behaviour	0.71	p < 0.05
Traditional Media Exposure vs Substance Abuse Behaviour	0.58	p < 0.05

The results reveal a strong positive relationship between social media exposure and substance abuse behaviour among students. This implies that increased engagement with social media platforms is associated with a higher likelihood of substance-related behavioural tendencies. The relationship is statistically significant, confirming that the association is not due to chance.

Traditional media exposure also shows a moderate positive relationship with substance abuse behaviour. Although weaker than social media, it still indicates that exposure to television programmes, music videos, and related content contributes to shaping adolescent behavioural tendencies.

In contextual terms, students in Lokoja, Lafia, and Otukpo who frequently engage with substance-related online content are more likely to exhibit curiosity or experimentation with substances compared to those with limited exposure.

Regression Analysis

A simple linear regression analysis was conducted to determine the predictive power of media and social media exposure on substance abuse behaviour.

Table 3

Model Summary	Value
R	0.70
R Square (R ²)	0.49
Adjusted R ²	0.48
F-Statistic	198.22
Significance	p < 0.05

The regression results indicate that media and social media exposure jointly explain approximately 49% of the variance in substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria. This is a substantial explanatory power, suggesting that nearly half of the behavioural tendencies observed among students can be attributed to media-related influences. The F-statistic is statistically significant, confirming that the model is a good fit for the data and that the predictive relationship between media exposure and substance abuse behaviour is robust.

From a contextual perspective, this finding reflects observable realities in schools across Niger, Benue, Kogi, and Nasarawa States, where students with higher exposure to digital media environments tend to exhibit stronger tendencies toward behavioural experimentation.

Interpretation of Findings in Context

The findings suggest that social media is a more powerful predictor of substance abuse behaviour than traditional media. This is largely due to its interactive, peer-driven, and algorithmically reinforced structure. In schools such as those in Makurdi and Minna, students are continuously exposed to peer-shared content that normalises risky behaviour, thereby increasing susceptibility.

Traditional media, while still influential, operates in a more passive and less personalised manner, limiting its behavioural impact compared to social media platforms.

However, its moderate influence indicates that it still contributes to shaping adolescent attitudes toward substance use.

Overall, the results confirm that media exposure, particularly social media is a significant determinant of substance abuse behaviour among Government Day Senior Secondary School students in North-Central Nigeria, thereby empirically supporting the conceptual framework and theoretical propositions of the study.

Discussion

The findings of this study provide strong empirical evidence that media and social media exposure significantly influence substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria. The results, particularly the strong correlation between social media exposure and substance abuse behaviour ($r = 0.71$), confirm that adolescents' behavioural patterns are increasingly shaped by digital environments rather than traditional social structures alone.

A critical interpretation of this finding suggests that social media has become a dominant behavioural socialisation agent among secondary school students. In urban school settings such as Minna (Niger State), Makurdi (Benue State), and Lokoja (Kogi State), students are continuously exposed to short-form videos, influencer content, and peer-generated media that frequently portray substance use as fashionable, emotionally relieving, or socially rewarding. This exposure does not merely inform but actively reshapes behavioural perception by reducing perceived risk and increasing behavioural curiosity.

The moderate relationship between traditional media exposure and substance abuse behaviour ($r = 0.58$) indicates that television, radio, and music videos still play a contributory role, albeit less influential than social media. In semi-urban areas such as Lafia outskirts and Otukpo communities, students still consume television and music content that occasionally normalises alcohol consumption and nightlife culture. However, unlike social media, traditional media lacks interactive reinforcement mechanisms, making its behavioural influence comparatively weaker.

The regression result, which shows that media and social media exposure jointly account for 49% of the variance in substance abuse behaviour, is particularly significant. It suggests that nearly half of adolescents' substance-related behavioural tendencies can be statistically explained by media-related exposure alone. This finding aligns with behavioural learning principles and supports the view that repeated exposure to

substance-related content gradually shapes behavioural acceptance among adolescents. In school environments across Bida, Makurdi, and Minna, this influence is observable in students' increasing tendency to imitate behaviours seen online.

From a theoretical standpoint, the findings reinforce Social Learning Theory, which explains that individuals learn behaviours through observation, imitation, and reinforcement. Adolescents in Government Day Senior Secondary Schools often observe substance-related behaviours in media content and internalise them when such behaviours appear socially validated. The reinforcement is further amplified through likes, shares, and peer engagement on platforms such as TikTok and Instagram, which are widely used among students in North-Central Nigeria.

The findings are also consistent with Cultivation Theory, which suggests that prolonged exposure to media content shapes individuals' perception of reality. In this context, continuous exposure to substance-related content may lead students to overestimate its normality and acceptability. In schools located in Makurdi and Lokoja, teachers have reported increasing behavioural normalization of substance-related discussions among students, reflecting this cultivated perception.

Contextually, the Nigerian environment intensifies these effects due to weak digital content regulation, increasing smartphone penetration, and limited parental monitoring. In Government Day Secondary Schools in Nasarawa and Kogi States, students often access media content without structured guidance, making them more vulnerable to behavioural influence. The absence of strong digital literacy education further compounds this vulnerability, allowing media messages to be interpreted without critical evaluation.

The discussion confirms that media and especially social media are powerful determinants of substance abuse behaviour among adolescents in North-Central Nigeria. The influence is not merely informational but behavioural, shaping attitudes, normalising risky actions, and increasing the likelihood of experimentation. These findings strongly support the study's conceptual framework and quantitative results, demonstrating that adolescent substance abuse behaviour is significantly mediated by media exposure within contemporary Nigerian school environments.

Conclusion

This study set out to examine the influence of media and social media exposure on substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria, using a quantitative research design grounded in correlational and

regression analysis. Based on the empirical findings, it is evident that media exposure, particularly social media, plays a significant and measurable role in shaping adolescent substance-related behaviours within the study area.

The statistical results clearly demonstrate that social media exposure has a strong positive relationship with substance abuse behaviour ($r = 0.71, p < 0.05$), while traditional media also shows a moderate but significant relationship ($r = 0.58, p < 0.05$). Furthermore, the regression analysis indicates that media and social media exposure jointly explain approximately 49% of the variance in substance abuse behaviours among students. This level of explanatory power confirms that media-related influences are not peripheral but central determinants of adolescent behavioural outcomes in North-Central Nigeria.

The study therefore, concludes that the increasing integration of adolescents into digital media environments has significantly altered behavioural socialisation processes. In Government Day Senior Secondary Schools across Minna, Makurdi, Lokoja, and Lafía, students are increasingly shaped by continuous exposure to online content that normalises or glamorises substance use. This exposure, when combined with peer reinforcement and limited supervision, creates a behavioural environment that increases susceptibility to substance experimentation.

Importantly, the study also establishes that while traditional media continues to exert influence, its impact is increasingly overshadowed by the interactive, personalised, and peer-driven nature of social media platforms. The dominance of social media as a behavioural influence system reflects broader societal changes in communication patterns and adolescent identity formation in contemporary Nigeria.

Substance abuse behaviour among Government Day Senior Secondary School students in North-Central Nigeria is significantly influenced by media exposure, with social media serving as the most powerful predictive factor. This finding underscores the urgent need for targeted interventions aimed at reducing harmful media influence and strengthening adolescents' capacity for critical media engagement.

Recommendations

Based on the empirical findings of this study, which established that media and social media exposure significantly influence substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria, the following recommendations are proposed to guide policy, educational practice, and behavioural intervention strategies.

1. Integration of Media Literacy Education into School Curriculum

Government and educational authorities should integrate structured media literacy education into the curriculum of Government Day Senior Secondary Schools. This will equip students with critical thinking skills to evaluate media content rather than passively accept and imitate it. In schools across Minna, Makurdi, Lokoja, and Lafia, such programmes should focus on helping students identify harmful online content that glamorises substance use and develop resistance skills against behavioural imitation.

2. Regulation and Monitoring of Digital Content

There is a need for stronger regulatory frameworks to monitor and control the circulation of substance-related content on social media platforms accessible to adolescents. Collaboration between Nigerian regulatory bodies and digital platform operators should be strengthened to reduce the visibility of content that normalises drug use. This is particularly important given the high level of exposure observed among students in urban centres such as Makurdi and Minna, where smartphone usage is widespread.

3. Strengthening School-Based Counselling Services

Government Day Senior Secondary Schools in North-Central Nigeria should strengthen their guidance and counselling units to address early signs of substance abuse behaviour. Trained counsellors should be equipped to identify behavioural indicators such as withdrawal, truancy, and academic decline. In states such as Benue and Nasarawa, where teachers have reported increasing behavioural concerns, counselling services should be made more proactive rather than reactive.

4. Parental and Community Engagement

Parents and guardians should be actively involved in monitoring their children's media consumption patterns. Community sensitisation programmes should be implemented to educate parents on the behavioural risks associated with uncontrolled social media exposure. In semi-urban communities such as Bida, Otukpo, and Lafia outskirts, where parental supervision may be limited due to economic demands, community-based awareness campaigns will be particularly effective.

5. Digital Behavioural Monitoring in Schools

Schools should introduce structured digital behaviour monitoring systems, including controlled smartphone usage policies within school premises. This will help reduce real-time exposure to harmful content during school hours. School administrators in Lokoja

and Makurdi should enforce clear guidelines on mobile device usage to minimise peer-driven sharing of substance-related content.

6. Youth-Focused Behavioural Intervention Programmes

Targeted behavioural intervention programmes should be developed for adolescents, focusing on peer influence resistance, emotional regulation, and healthy coping mechanisms. These programmes should be tailored to reflect the realities of Nigerian adolescents, particularly in Government Day Secondary Schools where peer influence is strong and media exposure is high.

7. Collaboration with Media and Tech Platforms

There should be active collaboration between the Nigerian government, educational institutions, and global technology companies such as the Meta Platforms Inc. and Google LLC to promote safer online environments for adolescents. This includes improved content filtering, age-appropriate algorithms, and educational content promotion.

Collectively, these recommendations aim to reduce the negative behavioural impact of media and social media exposure while strengthening protective factors within school and community environments. Their implementation will contribute significantly to reducing substance abuse behaviours among Government Day Senior Secondary School students in North-Central Nigeria and promote healthier adolescent development.

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