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Social Media Dependence and Exposure to Cyber-Stalking: The Role of Peer Acceptance, Peer Pressure, Childhood Neglect, and Depression among Adolescents

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Abstract. Using Structural Equation Modelling (SEM), this study investigated peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression as predictors of social media dependence among in-school adolescents in Ibadan, Nigeria. A multi-stage sampling approach was employed to sample 508 adolescents from six randomly selected local government areas. Standardised instruments, including the Social Media Disorder Scale, Childhood Trauma Questionnaire, and PHQ-9, were administered. The results revealed that peer pressure ($\theta = .23$, p < .001), childhood neglect ($\theta = .17$, p < .001), cyber-stalking ($\theta = .25$, p < .001), and depression ($\theta = .26$, p < .001) significantly and positively predicted social media dependence, while peer acceptance ($\theta = -.16$, p = .001) had a significant negative effect. Depression significantly mediated the relationships between the predictor variables and social media dependence, with all indirect paths statistically significant (e.g., peer pressure: θ = .09, childhood neglect: θ = .08, cyber-stalking: θ = .06, peer acceptance: $\beta = -.07$; all p < .01). Moreover, peer acceptance moderated the relationship between peer pressure ($\theta = -0.12$; p = 0.001), childhood neglect ($\theta = -0.09$; p = 0.011), and cyber-stalking ($\theta = -0.10$; p = 0.01) 0.006), indicating a buffering relationship. The structural model goodness-of-fit indices indicated good fit - $\chi^2/df = 2.31$, CFI = 0.957, TLI = 0.944, RMSEA = 0.051, SRMR = 0.042 - and accounted for 49% variance in social media dependence ($R^2 = 0.491$). This research demonstrates the intersection of social variables, emotion, and digital behaviours that affect adolescent behaviours, and underscores the need for targeted interventions promoting peer support and emotional regulation.

Keywords: Peer acceptance, Childhood neglect, Cyber-stalking, Depression, Social media dependence

JEL Codes: o35; Y80

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1. Introduction

Adolescence is a unique time of development when depressive symptoms emerge and become permanent feeling states that establish patterns of affective and psychological health that can stabilise into adulthood. According to the World Health Organization (2020), depression is the leading cause of illness and disability in adolescents aged 10 to 19, and it can hinder educational engagement, social inclusion, and well-being. Ongoing neurobiological changes, along with changes in social domains, lead to adolescents' increased sensitivity to interpersonal events and environmental stressors. In the broad domains that adolescents navigate, short-term, conflicting social expectations increase vulnerability to mood disorders. From this perspective, early-onset depression is not only a clinical problem to treat, but also a public health issue that has significant implications for developmental paths. In addition, adolescent depression that is not treated has been shown to extend into adulthood, leading to suicidality, substance use, as well as long-term mental health problems (Adegunju *et al.*, 2024). Identifying the predictors of adolescent depression in culturally specific environments is thus crucial to formulating effective mental health interventions.

Peer relationships, especially through peer acceptance and peer pressure processes, are also closely connected to adolescents' emotional well-being and internet behaviour. Peer acceptance, or an experience of belonging and emotional support through peer groups, has been demonstrated in various international studies as a protective factor of emotional and depressive symptoms as well as psychological resilience (Omopo, *et al.* 2024; Quadri, *et al.* 2025). Adolescents who perceive belonging with peers (together with peer respect) have higher levels of self-esteem and lower levels of anxiety and emotional dysregulation. Peer pressure or peer influence and peer pressure (especially peer pressure to conform to risk-taking behaviours) is related to emotional disturbance, poor decision-making, and unhealthy coping. Within Nigerian settings, peer pressure has proven to be the consistent predictor of mental susceptibility to disorders such as depression, anxiety, and behavioural problems (Bakker, Ormel, Verhulst, and Oldehinkel, 2010). Adolescents raised under intense pressure in peer relationships may be coerced into engaging in activities that contradict what they believe in, leading them to experience internal conflict and emotional pressure. These spaces, as well, can expose some teens to the opportunity of experiencing or engaging in cyber-stalking repeated online harassment or surveillance which further increases emotional vulnerability and further enhances their activity on digital media.

Child physical or emotional neglect is another major risk factor that has long-term consequences for adolescent development. Neglect of the child in early childhood has been linked to impaired cognitive functioning, emotional dysregulation, and poor capacity for trust and attachment (Offor, et al., 2024; Omopo et al., 2024). In the Nigerian context, studies have documented high rates of neglect with corresponding correlations to depression, anxiety, and suicidality in youths (Obadeji et al., 2020; Edet et al., 2022). Neglected adolescents are known to struggle with emotional regulation as well as find external



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sources of approval and coping in peer groups or online platforms (Quadri and Muibi, 2024). The unavailability of stable caregiving relationships limits the development of emotional resilience and adaptational coping abilities. Hence, neglected children will tend to be more vulnerable to peer negative influence and overuse of technology. In some cases, this will tend to put them in harm's way through unsafe online experiences, such as cyber-stalking, either in the form of victims or bullies, which reinforces habits of emotional instability and technology dependence. But few Nigerian studies have examined how neglect operates within a system of predictors of social and emotional status. Placing neglect within a multi-variable model may better allow us to understand how family environment intersects with peer dynamics and clinical symptoms in the formation of adolescent behaviour.

Depression and affect dysregulation stand in close reciprocity to one another, and both represent essential clinical pathways through which risk factors for social influence outcomes among adolescents. Dysregulation of emotion, the absence of skill at handling frustration, sadness, or anger, is a core component of many internalising and externalising disorders. It has been linked with impulsive behaviours, risky behaviours, and adverse interpersonal relationships across the globe (Garnefski and Kraaij, 2023). In Nigeria, while depression among adolescents is being reported more with prevalence rates of approximately 17%, emotional dysregulation remains poorly researched. This is a constraint on intervention capacities to address emotional processes underlying observable behaviours like social withdrawal, aggression, or excessive use of digital media. Depressed adolescents may utilise social media as a means of distraction or avoidance of emotions, with transient relief from symptoms masking underlying problems. However, this mechanism of coping can become dependent because virtual worlds provide instant but non-sustaining regulation of emotions. In these situations, tendencies towards digiphrenia of digital resource overuse may also include presentations of cyber-stalking, with obsessive or heightened anxiousness as motivational drivers, further embedding adolescents in unhealthy online habits. A more definitive understanding of depression and dysregulation's roles in mediating peer and family impacts is required to successfully, multi-dimensionally plan interventions.

Addiction to social media is a new theme in both international and Nigerian literature concerning teenagerhood. Adolescents are engaging in social media more and more to explore identity, establish social networks, and regulate feelings of deprivation, loneliness, and peer placement (Balogun et al. 2025). While social media may provide positive opportunities for connection and creativity, it also threatens psychological deficits in context, mainly when used in a compulsive or habitual manner. Nigerian studies have already identified social media addiction alongside emotional fatigue, depression, and socially disordered peer relationships (Ogedengbe and Quadri, 2020; Alwajud Adewusi, Oduola, and Ifabiyi, 2025). Experiencing something as burdensome as conforming to virtual norms or being popular online among contemporaries can thwart anxiety or fuel feelings of worthlessness. Perhaps more dangerously, peer pressure or depression could combine with compulsive social media use, as adolescents can get locked in cycles of comparison and validation. In some cases, behaviours that become insecurely attached to peer



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approval could develop, such as continuous cyber-stalking behaviour through mass checking, texting, or monitoring another person's channel, and thus an obsession with a particular kind of internet space grows. Despite the prominence of this experience, there is little research on how various social and emotional predictors cumulate and construct social media dependence in Nigeria. Additional integrative models to understand the sophistication of this behaviour and its foundation in offline adversity and peer processes.

The African and particularly Nigerian literature has been examining predictors of adolescent wellbeing in isolation from each other - looking at either family or peer effects - not both. This compartmentalised view has hindered our understanding of adolescents' navigation across the numerous overlapping social systems that influence their emotional and behavioural development. While some studies have modelled the connection between peer pressure and depression in adolescents or child neglect and psychological distress, much fewer have attempted to model peer acceptance as a separate yet possibly protective variable. The interaction between depression and behavioural outcomes such as social media addiction has not been well theorised in very few structural models. The potential role of the risk of cyber-stalking may also not be as well understood in the literature despite evidence increasing on the psychological repercussions on adolescents. Making a case for the need for multivariate integrated models that can assess risk and resilience systems at the same time is needed, especially in sub-Saharan contexts where adolescents are often with multiple clusters of risk simultaneously. These matters should be possible to study through structural equation modelling (SEM) which would give the research more directions to understand both direct and indirect effects, building a more robust and pragmatic picture of adolescent development.

Structural Equation Modeling (SEM) provides a constructive method to represent the complicated relationships between psychosocial variables affecting adolescents' well-being. In contrast to regular regression, SEM simultaneously estimates multiple relationships, such as mediation and models involving latent variables. The SEM allows for better understanding of how external variables (e.g., child neglect, peer acceptance and peer pressure) inform psychological intermediaries (e.g., depression) and how these inform outcomes (e.g., access to social media addiction). Researchers can jointly estimate these relationships to examine theoretical models of the lived experiences of Nigerian youth. SEM opens the possibility of delineating risk pathways versus protective pathways and therefore informs interventions to increase resilience rather than vulnerability. Although SEM is theoretically powerful, it has rarely been taken to its optimum usage in studies among Nigerian adolescents, where much of the predominance of studies have in like consisted mostly of a bivariate/correlations analysis. In this respect, SEM is a methodological advancement that reflects the very nuances of youth psychological and behavioural health.

This study fills a significant gap in adolescent literature by practicing and testing a structural equation model of peer acceptance, peer pressure, childhood neglect, cyber-stalking and depression, related to social media addiction amongst Ibadan adolescents in Nigeria. No studies have put these variables into a testable model for adolescents in Ibadan, although some studies have examined parts of this model in

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isolation. The combination of protective (e.g., peer acceptance) factors and risk (e.g., peer pressure, neglect, cyber-stalking, and depression) factors creates a rich opportunity to examine adolescent experience in this urban Nigerian context. By covering direct and indirect effects, this study aims to

advance more precise theories of adolescent adjustment and enable mental health interventions. Specifically, the aim is to describe how emotional states of depression serve to mediate the impact of

social, familial and digital risk environments on adolescents' online behaviour. The study will provide

empirical insight into the dynamics of social media addiction and inform educational, clinical and policy-

level responses to adolescents' mental health needs in Ibadan and other urban Nigerian contexts.

1.1 Purpose of the Study

This study aims to examine how peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression predict social media dependence among adolescents in Ibadan, Nigeria. Using Structural Equation Modelling (SEM), the study explores both direct and indirect pathways between social influences, emotional states, online risk behaviours, and digital dependence. The specific objectives are:

. To examine the direct effects of peer acceptance, peer pressure, childhood neglect, cyber-stalking,

and depression on social media dependence among adolescents in Ibadan.

ii. To assess the mediating role of depression in the relationship between childhood neglect, peer

dynamics (acceptance and pressure), cyber-stalking, and social media dependence.

iii. To determine the extent to which peer acceptance serves as a protective factor against social

media dependence in the presence of adverse social experiences such as peer pressure, neglect,

and cyber-stalking.

iv. To provide and test a structural equation model to explain the interplay between peer acceptance,

peer pressure, childhood neglect, cyber-stalking, and depression as predictors of adolescent social

media dependence in Ibadan.

1.2 Hypothesis

The Following Hypotheses were tested at the 0.05 level of significance:

Ho1: Peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression will not

significantly predict social media dependence among adolescents in Ibadan.

Ho2: Depression will not significantly mediate the relationship between childhood neglect, peer

acceptance, peer pressure, cyber-stalking, and social media dependence among adolescents in

Ibadan.

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H₀₃: Peer acceptance will not significantly moderate or buffer the relationship between adverse social experiences (peer pressure, childhood neglect, and cyber-stalking) and social media dependence among adolescents in Ibadan.

H₀₄: A structural equation model comprising peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression will not significantly explain the variance in social media dependence among adolescents in Ibadan.

2. Theoretical Underpinning - Bronfenbrenner's Ecological Systems Theory

Bronfenbrenner's Ecological Systems Theory (1979) was developed to elucidate the dynamic and complicated interrelations between adolescents and social contexts. Specifically, the theory suggests that human development is influenced by a nested environmental structure with systems arranged in the following contexts: microsystem (e.g., family, peers), mesosystem (connections between microsystems), exosystem (indirect contexts), macrosystem (e.g., culture and society), and chronosystem (development through time). The behaviours of adolescents, such as their use of social media and their emotional reactions, are more than just a variable derived from their momentary interactions with their peers and their parents; they also borrow from interaction and relationships influenced by social frameworks and technological progress. Peer acceptance and processes of peer pressure happen in the microsystem, and children's daily interactions in the microsystem have a powerful impact on emotional regulation and their behavioural choices. Similarly, childhood neglect indicates an internal family microsystem breakdown with waves of influence extending into other contexts.

In this study, cyber-stalking and social media addiction can also be understood in terms of these exosystem and macrosystem influences. These behaviours are examples of how an adolescent engages, namely, delaying gratification based on the trends that characterise teenage behaviour within certain digital cultures, access to technology, and constantly evolving online communication; all things that can indirectly influence adolescent experience. Depression, as a psychological fallout, perhaps mediates the effects of environmental adversity and reflects how internal events can emerge from external situations. This study showed that by applying the lenses of Ecological Systems Theory, we were able to understand how teenagers' digital habits do not exist in isolation from other behaviours, but rather occur in interrelated nested systems. Similarly, the use of SEM further supports our theoretical stance, in that SEM allows us to dichotomous systems that shape adolescents' behaviours and emotional upbringing in a Nigerian urban context.

3. Methods

The research utilised cross-sectional quantitative surveys with the SEM method to determine peer rejection, peer acceptance, peer pressure, childhood neglect, youth-led cyber-stalking and depression

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among adolescents who are dependent on social media in Ibadan. Participants were clustered through multistage sampling techniques from public secondary schools in the city of Ibadan. In the first stage, six (6) local government areas (LGAs) were randomly selected from the eleven (11) Ibadan LGAs, with simple random sampling through balloting. For the second stage of the sampling process, for marked way to be complemented by simple randomisation, one public secondary school was randomly selected from each of the six LGAs to provide the sample of schools (6). For the third stage, students at Senior Secondary School class (SS1 to SS3) were randomly selected from the six (6) schools. Each school was stratified for the grade level and gender, and a total of 508 adolescents were randomly sampled, while ensuring their proportionate representation regarding the size of the school was observed across the six (6) schools with approximately eighty-five (85) to ninety (90) students per school) Parents' consent was sought and received after obtaining ethical clearance from the relevant educational authority. The consent and assent were sought from the students, and the researchers insist on anonymity, confidentiality, voluntary participation, etc. Data was collected in a classroom, under a controlled environment, by trained research assistants who administered the instruments in the classrooms of the six (6) schools.

The study employed validated standardised tools to measure the study variables. The subscales of the Peer Relations Questionnaire (Rigby and Slee, 1993) were adapted and used to assess peer acceptance and peer pressure. Childhood neglect was measured using the neglect subscale of the Childhood Trauma Questionnaire (Bernstein and Fink, 1998). Depression symptoms were assessed with the Patient Health Questionnaire-9 (PHQ-9), and cyber-stalking was assessed using a modified version of the Cyberstalking Scale by Spitzberg and Hoobler (2002) that assesses experiences of regular digital stalking or harassment. Social media dependence was assessed using the Social Media Disorder Scale (SMD-9) by van den Eijnden *et al.* (2016). All the instruments employed a Likert-scale format and were pilot-tested among 30 students from a contiguous LGA to ascertain reliability, where Cronbach's alpha was more than 0.70 for all the scales. Data was analysed through SPSS (Version 26) for preliminary statistics and AMOS (Version 26) for SEM analysis. Model fit was determined using measures such as Chi-square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardised Root Mean Square Residual (SRMR) with a statistical significance level set at 0.05.

4. Results

4.1 Participants Demographic Data

The demographic representations of the participants are shown in Table 1

Table 1: Demographic Characteristics of the Participants (N = 508)



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Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	248	48.8
	Female	260	51.2
Age Group (Years)	13–14	96	18.9
	15–16	237	46.7
	17–18	175	34.4
Class Level	SS1	169	33.3
	SS2	172	33.9
	SS3	167	32.9
Local Government Area	Ibadan North	88	17.3
	Ibadan South-West	85	16.7
	Ibadan North-East	84	16.5
	Ibadan South-East	86	16.9
	Ibadan North-West	83	16.3
	Ibadan South	82	16.1

Source: Authors 'own compilation

Table 1 indicates the demographic information of the 508 in-school adolescent participants who were recruited from six randomly selected local government areas of Ibadan. The gender distribution was nearly equal, although females were somewhat better represented than males (51.2% vs. 48.8%). The majority of participants were between the ages of 15 and 16 years (46.7%), followed by the ages 17–18 (34.4%) and 13–14 (18.9%). Class-level representation was fairly balanced across SS1 (33.3%), SS2 (33.9%), and SS3 (32.9%). The sample was also proportionately representative of the six participating LGAs, with each of them representing about 16–17% of the entire sample to capture regional variation within the Ibadan metropolis. This distribution reflects a representative sample that is suitable for generalising findings to the adolescent population in public secondary schools in urban Ibadan.

4.2 Hypothesis Testing



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Hypothesis 1: Peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression will not significantly predict social media dependence among adolescents in Ibadan.

To test Hypothesis 1, a multiple regression analysis was conducted to determine whether peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression significantly predicted social media dependence among adolescents in Ibadan. The results are presented in Table 2.

Table 2: Multiple Regression Analysis Predicting Social Media Dependence

Predictor Variable	В	SE	β	t	р
Peer Acceptance	-0.18	0.05	-0.16	-3.60	.001**
Peer Pressure	0.21	0.04	0.23	5.25	.000**
Childhood Neglect	0.19	0.05	0.17	3.80	.000**
Cyber-Stalking	0.24	0.04	0.25	6.00	.000**
Depression	0.28	0.05	0.26	5.60	.000**
Model Summary					
R = .66; R ² = .44					
F(5, 502) = 78.45, p < .001					

Note: B = unstandardised coefficient; SE = standard error; β = standardised beta; **p < .01

Source: Authors' calculation

The regression analysis presented in Table 2 suggests that peer pressure (β = .23, p < .001), childhood neglect (β = .17, p < .001), cyber-stalking (β = .25, p < .001), and depression (β = .26, p < .001) all positively and significantly predicted social media dependence in young people, whereas peer acceptance negatively and significantly predicted the same (β = -.16, p = .001). The overall model was significant statistically, F(5, 502) = 78.45, p < .001, predicting approximately 44% of dependence on social media (R^2 = .44). The findings indicate the rejection of the null hypothesis (H_{01}), indicating that the set of predictors peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression influences adolescents' dependence on social media in Ibadan.

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indicate the rejection of the null hypothesis (H₀₁), indicating that the set of predictors peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression influences adolescents' dependence on social media in Ibadan.

Furthermore, cyber-stalking provides a new psychosocial hazard in the cyber world, increasing the emotional vulnerability of adolescents already susceptible to neglect or peer pressure. Perceptions of being watched, harassment, or unwarranted contact can intensify feelings of helplessness, anxiety, and compulsive surfing on the internet. Depression in this case is both a consequence and a motive for such dependency. Teenagers suffering from emotional dysregulation or depressive symptoms will divert attention to social media from psychological pain or obtain comfort through internet affirmation, reinforcing use. Peer acceptance is a protective factor; teenagers who are accepted and in their peer group are more emotionally secure and less inclined to seek outside validation through social media, and therefore, the negative predictive relationship was discovered.

The focus of this study included both individual factors (e.g., personality traits) and environmental factors (e.g., family influences) to examine multifaceted concepts of adolescent mental well-being and cyberbullying. Bronfenbrenner (1974) viewed development as a reciprocal transaction between an individual and their environment. The model indicates that individuals are influenced by engagement within developmental contexts or levels of environmental layers i.e., (1) the microsystem (immediate social environment); (2) the mesosystem (the connection between those micro-systems); and (3) the macrosystem (broader, societal factors). Individuals can be subject to interactional supervision across multiple environmental contexts and situations. In adolescent development, cyber-stalking is an emerging social issue that can significantly impact adolescent mental well-being and has the potential to deepen the sense of isolation, anxiety, and depression of adolescents who are experiencing emotional distress or mental health challenges. The micro-system (e.g., peers, social media sites) may provide a support network and might even provide social support at times, while the micro-contexts (interactions between home, school, and peer contexts) indicate how adolescents have sought to cope with cyber-victimisation experiences. Further, a broader context, the exosystem (e.g., institutional structures of systemic influence via the media, and organisational policies) serves as another level of analysis and might limit the perpetration of some experiences, while other experiences expose adolescents' continued victimisation. The last level of development, the macrosystem, includes institutionalised cultural norms, society's attitudes toward digital behaviour such as cyberbullying, and at-risk populations, determines a level of safety versus subjectivity or vulnerability. The ecological systems theory emphasises the conscious collective responsibility to change policies and to create healthier digital environments that facilitate and promote ethical code and behaviour to secure our adolescents' well-being.

These results align with outcomes in a few empirical studies. For instance, Alwajud Adewusi, Oduola, and Ifabiyi (2025) illustrated that peer pressure and social media use together predicted drug use among Nigerian youth, pointing towards peer factors affecting risk behaviour patterns. Similarly, Edet *et al.* (2022)



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established that childhood adversity increases depression and suicidality by far, both of which are established predictors of addictive actions, are as the overuse of the media. The current study also confirms the findings of Bakker, Ormel, Verhulst, and Oldehinkel (2010), who found that adolescents experiencing severe peer pressure exhibit higher emotional distress levels. Together, these findings confirm that negative social experience and affective vulnerabilities in the absence of buffering relationships like peer acceptance contribute significantly to social media addiction in Nigerian youth.

Hypothesis 2: Depression will not significantly mediate the relationship between childhood neglect, peer acceptance, peer pressure, cyber-stalking, and social media dependence among adolescents in Ibadan.

Table 3: Mediation Analysis Showing Depression as a Mediator of the Relationship between Predictors and Social Media Dependence

Predictor	Direct Effect (β)	Indirect Effect via Depression (β)	Total Effect (β)	95% CI (Indirect)	Mediation Type
Peer Acceptance	-0.13**	-0.07**	-0.20**	[-0.10, -0.04]	Partial mediation
Peer Pressure	0.17**	0.09**	0.26**	[0.06, 0.13]	Partial mediation
Childhood Neglect	0.11*	0.08**	0.19**	[0.05, 0.12]	Partial mediation
Cyber-Stalking	0.19**	0.06**	0.25**	[0.03, 0.10]	Partial mediation

Note: β = Standardised beta coefficient; CI = Confidence Interval (bootstrapped); *p < .05; **p < .01 Source: Authors own compilation

Results in Table 3 indicate that depression, as hypothesised, does mediate between all four predictor variables: peer acceptance, peer pressure, child neglect, and cyber-stalking and social media addiction. The indirect effects through depression were all significant at p < .01, with the confidence interval derived from bootstrapping not containing zero, which confirms the presence of partial mediation. For instance, the negative indirect effect of peer acceptance ($\beta = -.07$, 95% CI [-.10, -.04]) indicates that lower peer acceptance is linked with more depression, which in turn predicts higher social media dependence. In the same way, the indirect influences of cyber-stalking ($\beta = .06$), peer pressure ($\beta = .09$), and childhood neglect ($\beta = .08$) were statistically significant, meaning that these risk factors are enhancing depressive symptoms, thereby promoting excess use of social media. Since indirect effects were statistically significant in all the variables, the null hypothesis (H_{02}) is not supported, affirming that depression is a major mediator for the model.



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The mediation model in Table 3 offers clear evidence that depression is a robust psychological connection between bad social experiences, such as peer pressure, child neglect, cyber-stalking and low peer acceptance, and addiction to social media. This finding reflects an established developmental pathway in which adolescent students who have negative interpersonal relations are likely to develop internalising problems like depression. Peer rejection or low acceptance strips social buffering and emotional regulation from teenagers, whereas peer pressure and cyber-stalking bring additional stressors that intensify emotional dysregulation. These affective disturbances then have a propensity to manifest depressive symptoms, which may in turn compel teenagers to seek refuge in more convenient and protective virtual environments of social media. This use of compensation often leads to addiction, especially if social media is used to self-medicate or regulate mood.

The role ascribed to depression as a partial mediator within this model is in line with cognitive—behavioural explanations, which propose that aversive social contexts generate negative thought and emotional distress that, if not addressed, drive compulsive acts such as problem internet or social media usage. Within the context of child neglect, the mediation effect identified is particularly enlightening, as early emotional deprivation has the effect of damaging adolescents' ability to form secure attachment and cope with distress. Consequently, the likes of them tend to experience persistent depressive symptoms, which they may try to manage through excessive social media consumption. Similarly, cyber-stalking entails a sense of vulnerability and psychological insecurity, furthering depressive states as well as digital avoidance or escapism. The fact that depression mediates both peer acceptance and peer pressure influences serves to highlight the precedence of emotional well-being in the process of determining how social variables map onto behavioural outcomes.

Continuing with Ecological Systems Theory (EST), the adolescent is shaped by several interconnected layers (environmental systems), which consist of immediate surroundings (microsystem), such as family, friends, and school, with larger environmental factors (macrosystem). Therefore, depression may not represent a significant mediator in the relationship between social media factors and social media dependence because interactions between layers of these environmental systems may have more influence on adolescents than depression (e.g., peer pressure, experiences with cyber-stalking). While it is unlikely that depression is a factor in adolescents' online and social media behaviours, the dynamics of the adolescent's need for peer validation and pressures to conform to social norms in digital environments mean that potential influences of depression are likely overshadowed by negotiating these digital spaces. Conversely, the mesosystem brings together adolescents' relationships and experiences in their home and school environments, which can affect adolescents' social media dependence and media coping practices with cyber-stalking/peer rejection experiences. Thus, from an EST perspective, it is evident that social media dependence is impacted by textual relationships and life experiences, where the impact of both depends on ecological systems, rather than depression solely. Ultimately, within the ecological layers of environments, there are multiple and complex environmental systems that have greater influence in



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mediating the connection between social media factors and social media dependence, versus depression alone.

This finding is supported by Garnefski and Kraaij (2023), who, in their longitudinal study, showed that low emotional regulation and increased depressive symptoms mediate between negative social interaction and maladaptive coping styles during adolescence. They found that their findings confirm that adolescents who are not emotionally resilient use technology for emotional escape or distraction. Parallel to this finding, Edet *et al.* (2022) found that childhood adversity is strongly predictive of depression and suicidality in Nigerian youth, a correlation that closely mirrors the established mediation pathway in this study. Both studies validate that emotional well-being is one important vehicle through which negative social experience impacts such behavioural outcomes as social media addiction, particularly in low-resource settings where mental health services are often suboptimal.

Hypothesis 3: Peer acceptance will not significantly moderate or buffer the relationship between adverse social experiences (peer pressure, childhood neglect, and cyber-stalking) and social media dependence among adolescents in Ibadan

To test Hypothesis 3, a moderation analysis was conducted using hierarchical multiple regression and interaction terms to examine whether peer acceptance buffers the effects of peer pressure, childhood neglect, and cyber-stalking on social media dependence. Interaction effects were computed after centring the predictor and moderator variables to minimise multicollinearity.

Table 4: Moderation Effects of Peer Acceptance on the Relationship between Adverse Social Factors and Social Media Dependence

Predictor	В	SE	β	t	р
Peer Pressure (PP)	0.21	0.04	0.22	5.25	.000**
Childhood Neglect (CN)	0.17	0.05	0.16	3.40	.001**
Cyber-Stalking (CS)	0.24	0.04	0.25	6.10	.000**
Peer Acceptance (PA)	-0.19	0.05	-0.17	-3.75	.000**
PP × PA (Interaction)	-0.10	0.03	-0.12	-3.33	.001**
CN × PA (Interaction)	-0.07	0.03	-0.09	-2.55	.011*
CS × PA (Interaction)	-0.08	0.03	-0.10	-2.78	.006**
Model Summary					



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R = .69; R ² = .48			
F(7, 500) = 66.88, p < .001			

Note: B = unstandardised coefficient; SE = standard error; β = standardised beta; *p < .05; **p < .01 Source: Authors own compilation

As shown in Table 4, peer acceptance successfully moderated the effects of peer pressure (β = -.12, p = .001), childhood neglect (β = -.09, p = .011), and cyber-stalking (β = -.10, p = .006) on social media addiction. All three interaction terms were statistically significant and negative, indicating that higher levels of peer acceptance buffer the harmful effect of these adverse experiences. That is, adolescents who reported high peer pressure, neglect, or cyber-stalking were less likely to be addicted to social media if they also reported high peer acceptance. This supports the buffering hypothesis and leads to the rejection of the null hypothesis (H_{03}). Peer acceptance thus seems to be a protective factor, diluting the impact of stressful social environments on adolescents' online behaviour.

The results presented in Table 4 significantly confirm peer acceptance's buffering role in the moderation of the adverse effects of social stressors on adolescent digital behaviour. The significant negative interaction effects indicate that peer acceptance has the effect of reducing the role of peer pressure, neglect of children, and cyber-stalking addiction to social media. This finding is supported by the stress-buffering hypothesis that suggests that close social relationships can buffer against the psychological effects of negative experiences. In the situation of adolescents exposed to peer pressure or online bullying, peer acceptance can validate their emotional worth and sense of belongingness. As such, they may become less reliant on maladaptive coping strategies such as excessive use of social media. In the same manner, for those adolescents who have been neglected in the beginning, acceptance by an encouraging peer group can neutralise earlier relationship deficits, supporting emotional equilibrium and discouraging compulsive internet use.

Peer acceptance is a social buffer that confers teenagers with an ancillary source of support, isolating them from the accumulation of distress into pathological digital habits. In childhood neglect, peer acceptance can yield a corrective experience that instills trust and emotional safety that would otherwise be threatened by early relational trauma. For adolescent boys being cyber-stalked a cyber-facsimile of interpersonal threat being strongly connected to peers can build psychological self-assurance and render them less susceptible to digital dependence as an escape. Essentially, teen boys who are esteemed and supported by peers are better off in managing feelings, remaining interested offline, and withstanding the emotional temptation of social media as a means to escape or compensate.

With relevance to EST, adolescents interact with several environmental systems, including their respective microsystems (social surroundings) like family, peers and education, to their overall social contexts (macrosystems). For example, peer acceptance, a component of the microsystem on social



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surroundings, has the capacity to moderate the impact of adverse social stressors, which can include peer pressure, neglect, and cyber-stalking. Teens who have the experience of peer acceptance generally do not perceive themselves as vulnerable to psychological distress from social stressors, which aids in their overall reliance on maladaptive coping strategies (such as excessive social media use). The potential buffering effect of peer acceptance against social stressors is supported through the entire mesosystem (involvement of home, school, and peer environments) as it provides positive relationships that allow the adolescent to counter feelings of isolation and low self-worth.

This peer acceptance buffering function is also evident in Rigby and Slee's (1993) work, which indicated that positive peer relationships significantly influenced psychological well-being, as well as reduced the impact of bullying and exclusion on schoolchildren. Similarly, Obosi, Fatunbi, and Oyinloye (2022) identified that adolescents with higher peer support were less prone to having severe mental health issues, regardless of peer pressure. These studies verify the results of the present study by demonstrating that peer acceptance not only forecasts emotional adjustment but also serves as an important moderating variable when faced with negative social experiences. The message is clear: enhancing peer inclusiveness and positive group processes in schools and communities can be an effective intervention approach for preventing social media addiction and adolescent mental health promotion in environments like Ibadan.

Hypothesis 4: A structural equation model comprising peer acceptance, peer pressure, childhood neglect, cyber-stalking, and depression will not significantly explain the variance in social media dependence among adolescents in Ibadan.

Table 5: Model Fit Indices and Explained Variance for the Structural Equation Model

Model Fit Index	Value	Recommended Threshold
Chi-square (χ²)	327.41	_
Degrees of freedom (df)	142	_
χ^2/df	2.31	< 3.00 (acceptable)
Comparative Fit Index (CFI)	0.957	≥ 0.95 (good fit)
Tucker–Lewis Index (TLI)	0.944	≥ 0.90 (acceptable/good)
Root Mean Square Error of Approximation (RMSEA)	0.051	≤ 0.06 (good fit)
Standardised Root Mean Square Residual (SRMR)	0.042	≤ 0.08 (good fit)
R ² for Social Media Dependence	0.49	_

Source: Authors own compilation



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The model fit the data extremely well, as all fit measures were above recommended cutoffs: $\chi^2/df = 2.31$, CFI = .957, TLI = .944, RMSEA = .051, and SRMR = .042. The model explained approximately 49% of the variance in dependence on social media ($R^2 = 0.49$), indicating high explanatory power. Every relationship between peer pressure, childhood neglect, cyber-stalking, and depression on one hand, and social media dependence on the other hand, was significant, while peer acceptance had a significant negative path, again supporting its protective role. Because the overall model significance and good model fit are clear, the null hypothesis (H_{04}) is rejected, and adolescent social media dependence in the Ibadan context is significantly predicted by the hypothesised structural equation model.

The structural model presents a theoretically and contextually valid explanation for teen social media addiction, especially when contextualised in Nigerian teens' socio-emotional environments. Its capacity to fit within risk as well as protective variables is a sign of a well-balanced and ecologically valid model. Peer relations, household life, emotional health, and cyber-aggression in the form of cyber-stalking converge in a holistic model that captures the real-world complexity of urban African youth lives. The inclusion of peer acceptance as a resilience buffer offers a welcome counterpoint not offered by previous unidirectional models, illustrating how resilience can emerge from social connectedness in the very presence of adversity. This serves to reinforce the role of peer support interventions that are community-based and positive school climates in shaping healthier digital behaviours.

The model design also highlights the interdependence between offline adversity and online maladjustment. By positioning depression as a key emotional pathway through which social and familial stressors are behaviourally manifest, the model underscores the psychological processes that are normally obscured in the rhetoric of technology overuse. Particularly, the inclusion of cyber-stalking as an online threat that is grounded in interpersonal trauma modernises the model, acknowledging that emotional disturbance is no longer a product of face-to-face interaction alone. This evolution is particularly important in low- and middle-income countries where digital safety mechanisms are weak and emotional coping resources are limited.

Ecological systems theory (EST) looks at adolescents' environments in layers: within their families, with their friends, and in school. These characteristics of the microsystem involve social influences that shape behaviours. The structural equation model examining family, peer, and school characteristics identified that peer pressure, parental neglect, and peer cyber-stalking create emotional vulnerability, which drives the propensity to use social media for emotional regulation. Depression mediated this association. Peer acceptance, or being accepted, highlighted that peer acceptance was a protective factor in the microsystem. Adolescents who received acceptance were less likely to feel socially disconnected or distressed and thus felt less rely on social media or an online context to protect their social status. Peer acceptance also interacted with peers' behaviours. The mesosystem subsumes the family-school-peer interactions and boundaries that also attenuate peer risk influences through positive peer interactions. EST



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provides a lens to explore how microsystems, such as peer acceptance, influence, other peers' behaviours and the nature of its relationship to social media use, driving future research towards building support systems in positive peer relations, which will buffer some of the emotionally negative social experiences influencing addiction and dependence experiences.

This formulation is consistent with and supported by current empirical evidence. For instance, Edet *et al.* (2022) demonstrated that childhood adversity in Nigerian adolescents predicted not only depression but also psychological withdrawal and maladaptive coping behaviour. Similarly, Quadri, Omopo, and Ukpere (2025) showed with the use of a structural equation modelling approach that peer, parental influences, and trauma collectively conditioned adolescent drug abuse in Ibadan adolescents. These results lend validity to the conclusion that integrative models are successful in explaining adolescent risk behaviour and support the applicability of the current model for the facilitation of localised mental health interventions, digital literacy curricula, and public health policy for adolescent well-being.

5. Conclusion

This study identified that peer acceptance, peer pressure, neglect in childhood, cyber-stalking, and depression have an impact on social media addiction among in-school adolescents in Ibadan. With a structural equation modelling approach, it was determined that peer acceptance was a protective factor, whereas the other factors were risk indicators linked directly and indirectly with excessive use of social media, that is, through depression's mediation effect. The model was a strong explanation, accounting for much of the variation in social media dependence. These findings underscore the significance of taking offline social-emotional experience and digital stressors into account when attempting to account for adolescent behaviour in Nigeria.

Despite the strengths of this research, some limitations must be pointed out. First, the cross-sectional design limits causal inference between predictors identified and social media addiction. Secondly, reliance on self-report data could have allowed for social desirability bias or recall error. Thirdly, in-school adolescents as the target population in only one urban setting (Ibadan) limits the generalisability of findings to out-of-school adolescents or adolescents in rural areas. Finally, cyber-stalking was measured as a general experience, not differentiated by type, severity, or platforms used, and this may limit the extent of comprehension of online threats.

Based on the findings, schools and mental health professionals must offer high-quality peer support schemes and social settings that ensure adolescents feel safe within the realm of accepting peers. Countermeasures to social media addiction must also encompass provision to treat underlying emotional issues, primarily depression. Parents must be encouraged, teachers sensitised, and stakeholders in digital policy must be sensitised to the ramifications of neglecting children. Cyber-stalking for adolescent digital



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behaviour. Finally, safety education in the digital world and trauma-informed counselling should be integrated into school curricula to decrease offline as well as online risk factors.

Future studies should adopt longitudinal designs for a better understanding of the causal and temporal links among social experiences, emotions, and social media addiction. Qualitative elements should be included in the studies to investigate adolescents' lived realities in relation to cyber-stalking and emotional coping online. Extending the study to out-of-school youths and rural youths would increase the representativeness. Other research can also investigate possible moderating roles of gender, socioeconomic status, or parental monitoring on the determination of digital behaviour. Researchers can also apply and verify more culturally applicable tests for investigating cyber-related behaviours in Nigerian environments.

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