

Risky Sexual Behaviour Among Adolescents in Semi-Urban Settlements in Ibadan, Nigeria: The Role of HIV/AIDS Knowledge and Emotional Intelligence

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DOI: <https://dx.doi.org/10.51244/IJRSI.2026.130200190>

Received: 05 March 2026; Accepted: 07 March 2026; Published: 20 March 2026

ABSTRACT

This study examined the level of risky sexual behaviour among adolescents in semi-urban settlements in Ibadan, Nigeria, and explored the relationship between knowledge of HIV/AIDS, emotional intelligence, and risky sexual behaviour. A descriptive correlational design was adopted with a sample of 200 in-school adolescents. Data were analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis. Findings revealed a moderate level of risky sexual behaviour among the respondents (weighted mean = 2.53). Significant negative relationships were found between knowledge of HIV/AIDS and risky sexual behaviour ($r = -.24, p < .05$), and between emotional intelligence and risky sexual behaviour ($r = -.31, p < .05$). A significant positive relationship also existed between knowledge of HIV/AIDS and emotional intelligence ($r = .38, p < .05$). The regression analysis showed that knowledge of HIV/AIDS and emotional intelligence jointly predicted risky sexual behaviour, explaining 49.6% of the variance ($R = .704, R^2 = .496; F(2,197) = 82.41, p < .05$). Emotional intelligence emerged as the stronger predictor. The study concludes that both HIV/AIDS knowledge and emotional intelligence significantly influence adolescents' risky sexual behaviour. It is recommended that adolescent health programmes integrate HIV/AIDS education with emotional intelligence and life-skills training to promote safer sexual decision-making.

Keywords: risky sexual behaviour, adolescents, HIV/AIDS knowledge, emotional intelligence, Nigeria.

INTRODUCTION

Risky sexual behaviour (RSB) among adolescents remains a significant public health concern globally, particularly in developing countries where it contributes to unintended pregnancies, sexually transmitted infections (STIs), including HIV/AIDS, and various social challenges. Adolescence is a critical developmental stage characterized by increased curiosity, experimentation, and vulnerability to peer influence, which may increase the likelihood of engaging in risky behaviours. In Nigeria, adolescents constitute a large proportion of the population, making their sexual and reproductive health an important public health priority.

National demographic data indicate that early sexual initiation is relatively common among Nigerian youths. According to the Nigeria Demographic and Health Survey (NDHS), a substantial proportion of young people initiate sexual activity during adolescence. The survey reports that about 57% of women aged 25–49 had their first sexual experience before the age of 18, suggesting that early sexual exposure is widespread across the country (NDHS, 2018; NDHS, 2024). Early sexual debut often occurs without adequate knowledge of reproductive health and protection methods, which may increase adolescents' vulnerability to risky sexual practices and their associated health consequences.

Adolescents living in semi-urban settlements may face unique environmental and social influences that heighten their exposure to risky sexual behaviour. Semi-urban communities, such as those surrounding Ibadan in Oyo State, are often characterized by rapid population growth, shifting cultural norms, and increased exposure to mass media and peer pressure. At the same time, these areas frequently experience limited access to comprehensive sexuality education and youth-friendly reproductive health services compared to major urban centres. This combination of social exposure and limited health resources may contribute to behaviours such as early sexual initiation, multiple sexual partnerships, and inconsistent condom use among adolescents.

Empirical studies conducted among Nigerian secondary school students indicate that a considerable proportion of adolescents are sexually active during their school years. For example, cross-sectional surveys have shown that approximately one-third of sampled students reported having engaged in sexual intercourse, suggesting that sexual activity is not uncommon among in-school adolescents. Early sexual engagement exposes adolescents to a range of risks, including unintended pregnancy, school dropout, and sexually transmitted infections. These risks may be particularly pronounced in semi-urban communities where adolescents may have limited access to reproductive health information and services.

Despite increasing attention to adolescent sexual and reproductive health, there remains limited research focusing specifically on risky sexual behaviour among adolescents in semi-urban settlements in Ibadan. Many national and regional studies present aggregated findings without adequately distinguishing between urban, rural, and semi-urban contexts. As a result, the unique social and environmental dynamics influencing adolescents in semi-urban communities are often overlooked. Understanding these contextual influences is important for developing targeted interventions aimed at reducing risky sexual behaviour and improving reproductive health outcomes among adolescents.

Previous research suggests that knowledge of HIV/AIDS may influence adolescents' sexual behaviour; however, findings remain inconsistent. While some studies indicate that increased knowledge about HIV transmission and prevention is associated with safer sexual practices, other studies suggest that knowledge alone may not necessarily lead to behaviour change. For instance, a community-based survey among Ugandan adolescents found that HIV knowledge was not significantly associated with sexual behaviour after controlling for other factors (Nakato et al., 2025). Similarly, studies among Nigerian and Ghanaian youths report mixed findings regarding the relationship between HIV/AIDS knowledge and risky sexual behaviour. These inconsistencies suggest that although knowledge is important, it may not be sufficient to reduce risky behaviours without the influence of other psychosocial and contextual factors.

Another psychosocial factor that may influence adolescents' sexual decision-making is emotional intelligence (EI). Emotional intelligence involves the capacity to perceive, process, and manage emotional information effectively (Akintayo et al. 2024). Recent research emphasizes that high EI serves as a primary protective factor against adolescent risk-taking; for instance, Mestre et al. (2024) found that adolescents with strong emotional regulation skills demonstrate significantly higher resilience to peer influence, particularly in socialmedia-driven environments. Furthermore, longitudinal data from O'Connor et al. (2025) suggests that high EI correlates with improved executive functioning, allowing youth to better navigate complex interpersonal scenarios and opt for healthier sexual health outcomes. This aligns with findings by Zhu & Ma (2024), which link emotional clarity to a decrease in impulsive sexual decision-making and a higher likelihood of practicing safe behaviours. For example, recent studies suggest that adolescents with stronger emotional regulation and self-control skills are less likely to engage in unsafe sexual practices and are more likely to adopt protective behaviours such as consistent condom use and refusal of unsafe sexual encounters (Diekedie & Kayode, 2026). However, evidence regarding the relationship between emotional intelligence and risky sexual behaviour is not entirely consistent. Some studies have reported non-significant or even positive relationships between certain dimensions of emotional intelligence and risky behaviours. Research conducted among Nigerian youths found that some aspects of emotional intelligence were positively associated with risky sexual and health behaviours, suggesting that emotionally aware adolescents may still engage in risk-taking depending on social and contextual influences (Okeke et al., 2022). Furthermore, a systematic review and meta-analysis concluded that the relationship between emotional intelligence and risk behaviours varies depending on how emotional intelligence is conceptualised, measured, and influenced by sociocultural factors (Sánchez-López et al., 2022).

Given these mixed findings and the limited research focusing on adolescents in semi-urban communities, it is important to investigate the role of HIV/AIDS knowledge and emotional intelligence in shaping adolescents' sexual behaviour in this context. Understanding how these factors influence risky sexual behaviour will provide important insights for designing effective educational and psychosocial interventions aimed at promoting safer sexual decision-making among adolescents.

THEORETICAL FRAMEWORKS

This study is premised on the integration of the Health Belief Model (HBM) and the Emotional Intelligence (EI) framework, which together provide a comprehensive lens for understanding adolescents' risky sexual behaviour. The HBM posits that engagement in health-promoting behaviours is influenced by individuals' perceptions of susceptibility to a health threat, perceived severity of the consequences, perceived benefits of preventive action, perceived barriers to action, cues to action, and self-efficacy (Rosenstock et al., 1988). Applied to adolescent sexual behaviour, the model suggests that knowledge of HIV/AIDS alone may not lead to safer sexual practices unless adolescents perceive themselves as vulnerable to infection, recognize the seriousness of potential outcomes, believe that preventive behaviours (e.g., condom use, abstinence) are effective, and feel confident in their ability to adopt these behaviours.

Complementing this cognitive perspective, the EI framework emphasizes adolescents' ability to perceive, understand, regulate, and manage emotions effectively (Mayer et al., 2016). Higher EI enables adolescents to manage peer pressure, control impulses, and make reasoned decisions in emotionally charged situations, which may reduce engagement in risky sexual behaviour. Integrating EI with HBM constructs, adolescents' perception of risk (susceptibility and severity) and confidence in preventive actions (self-efficacy) may be moderated by their emotional skills: for example, an adolescent who understands the risks of unprotected sex (HBM) but cannot regulate emotional impulses or manage peer influence (EI) may still engage in risky sexual behaviour. Conversely, adolescents with high EI may translate HIV/AIDS knowledge into safer practices by controlling impulses, communicating assertively, and making deliberate decisions even in high-pressure social contexts.

Therefore, this study conceptualizes risky sexual behaviour as a function of both cognitive and psychosocial factors, proposing that HIV/AIDS knowledge (cognitive awareness) and emotional intelligence (emotional regulation and competence) jointly influence adolescents' sexual decision-making. By integrating the HBM and EI, this study moves beyond a purely rational-actor model, acknowledging that adolescent sexual health is determined not only by what they know (Cognitive Beliefs) but by how they feel and manage those emotions (Emotional Competence) during critical social interactions.

Purpose of Study

The study examined the level of risky sexual behaviour among adolescents in semi-urban settlements in Ibadan, Nigeria, and investigated the relationship, joint contribution, and relative influence of knowledge of HIV/AIDS and emotional intelligence on risky sexual behaviour.

METHODOLOGY

Research Design

This study adopted a descriptive survey research design of the correlational type to examine the level of risky sexual behaviour among adolescents and to investigate the relationships and predictive contributions of selected independent variables—knowledge of HIV/AIDS, social media usage, and emotional intelligence—on risky sexual behaviour. The descriptive aspect of the design allowed for the systematic collection and summarization of data regarding adolescents' sexual behaviours, while the correlational component enabled the examination of associations and predictive relationships between the independent and dependent variables. The choice of a correlational survey design was appropriate because it facilitates the exploration of naturally occurring relationships between cognitive and psychosocial factors and risky sexual behaviour without manipulating any variables. This design also allows for quantitative analysis using statistical techniques such as Pearson Product-

Moment Correlation (PPMC) and multiple regression analysis, which are suitable for testing the research questions guiding the study.

Participants

The study involved 200 in-school adolescents from semi-urban settlements in Ibadan, Oyo State, Nigeria. Among the participants, 80 (40%) were male, while 120 (60%) were female. The age of participants ranged from 13 to 19 years, with a mean age of 16.2 years (SD = 1.8), reflecting a typical adolescent population.

Regarding educational level, 90 (45%) were enrolled in junior secondary school, while 110 (55%) were in senior secondary school. In terms of parental occupation, 70 (35%) of the adolescents reported that their parents were engaged in informal businesses (e.g., trading, small-scale entrepreneurship), 90 (45%) reported that their parents were in semi-skilled occupations (e.g., artisans, clerical workers), and 40 (20%) indicated that their parents were in professional or skilled occupations (e.g., teachers, nurses, civil servants).

Most adolescents, 150 (75%), lived with both parents, while 40 (20%) lived with a single parent and 10 (5%) lived with other relatives. These demographic characteristics offer insight into the socio-economic and familial contexts of the participants, which may influence patterns of risky sexual behaviour among adolescents in semi-urban Ibadan.

Sample Size Determination

The sample size for this study was determined using Yamane’s (1967) formula for calculating sample size from a finite population. The formula is expressed as:

N

$$n = \frac{1}{1 + N(e)^2}$$

Where:

n = required sample size

N = total population of the study e = level of precision (margin of error), usually set at 0.05 for a 95% confidence level.

Using a population of 400 in-school adolescents within the selected semi-urban schools in Ibadan, the sample size was calculated as follows:

$$n = \frac{400}{1 + 400(0.05)^2}$$

$$n = \frac{400}{1 + 400(0.0025)}$$

$n =$

$1 + 1$

400

$n =$

2

$n = 200$

Thus, a sample size of 200 adolescents was considered adequate for the study. The selected sample size ensured sufficient representation of the target population and provided adequate statistical power for the correlation and regression analyses conducted in the study.

Procedure for Data Collection

Permission to conduct the study was obtained from the appropriate school authorities and local education offices in the selected semi-urban settlements of Ibadan, Nigeria. Prior to data collection, the purpose of the study was explained to the respondents, and informed consent was obtained from the adolescents' parents or guardians, as well as assent from the adolescents themselves, in accordance with ethical research guidelines. A total of 200 adolescents were selected using a multistage sampling technique. In the first stage, five semi-urban settlements in Ibadan were randomly selected. In the second stage, schools within these settlements were purposively selected based on accessibility and willingness to participate. Finally, students within the selected schools were randomly chosen to participate in the study. Data were collected using structured self-report questionnaires that included measures of risky sexual behaviour, HIV/AIDS knowledge, and emotional intelligence. Respondents were provided with clear instructions and assured of the confidentiality and anonymity of their responses. The questionnaires were administered face-to-face in classroom settings under the supervision of the researchers to ensure understanding and completeness. Completed questionnaires were collected immediately, checked for completeness, and coded for analysis using SPSS. The data collection process was conducted over a period of three weeks to accommodate school schedules and ensure adequate participation.

Outcome Measures

Risky sexual behaviour among adolescents was measured using a self-report questionnaire adapted from the Sexual Risk Behaviour Scale (SRBS) (Jemmott et al., 1998). The instrument assesses engagement in sexual activities that increase the risk of HIV infection, sexually transmitted infections (STIs), and unintended pregnancy. The scale includes 10 items addressing behaviours such as early sexual debut, multiple sexual partners, inconsistent or non-use of condoms, and substance use before sexual activity. Responses are rated on a 4-point Likert scale ranging from 1 (Never) to 4 (Always), with higher scores indicating greater engagement in risky sexual behaviour. The SRBS has demonstrated good psychometric properties. Internal consistency reliability has been reported with Cronbach's alpha values ranging from .78 to .85, and construct validity has been supported by significant correlations with sexual health knowledge, peer norms, and self-efficacy for condom use (Jemmott et al., 1998; Odu et al., 2021). The instrument has also been adapted for use in Nigerian adolescent populations, confirming its cultural relevance. In this study, a total score was computed by summing responses across all items, with higher scores reflecting higher levels of risky sexual behaviour.

Emotional intelligence (EI) was measured using the Schutte Emotional Intelligence Scale (SEIS) (Schutte et al., 1998), a widely used self-report instrument based on the ability model of EI (Salovey & Mayer, 1990). The SEIS assesses emotional competencies across four domains: emotion perception, understanding, regulation, and utilisation. It consists of 33 items rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater emotional intelligence. Sample items include: "I know when to speak about my personal problems to others" and "By looking at facial expressions, I can recognize the emotions people are experiencing" (Schutte et al., 1998). The SEIS demonstrates strong psychometric properties. Internal consistency reliability is high, with Cronbach's alpha coefficients ranging from .87 to .90, and test-retest reliability over a two-week period has been reported at .78. The scale also shows convergent validity, correlating with constructs such as mood repair, optimism, and impulse control, supporting its capacity to capture meaningful emotional competencies relevant to decision-making and self-regulation (Schutte et al., 1998). In this study, the total EI score was computed by summing all items, with higher scores reflecting higher emotional intelligence. The SEIS provides a reliable and valid measure for examining the role of EI in adolescents' engagement in risky sexual behaviour.

Further, adolescents' knowledge of HIV/AIDS was measured using a structured self-report questionnaire adapted from the HIV Knowledge Questionnaire (HIV-KQ-18) developed by Carey and Schroder (2002). The HIV-KQ-

18 is a brief, psychometrically validated tool designed to assess fundamental understanding of HIV transmission, prevention, and misconceptions among adolescents and young adults. It consists of 18 items with true/false/don't know response options, where correct responses are scored as 1 and incorrect or "don't know" responses are scored as 0. The total score ranges from 0 to 18, with higher scores indicating greater HIV/AIDS knowledge. Sample items include: "A person can get HIV from kissing someone on the cheek." "Using a condom correctly every time during sex reduces the risk of HIV infection." The HIV-KQ-18 demonstrates strong psychometric properties, including internal consistency reliability with Cronbach's alpha values ranging from .75 to .89 across adolescent samples and evidence of construct validity through correlations with HIV preventive behaviours and sexual risk reduction (Carey & Schroder, 2002; DiClemente et al., 2008). The scale has also been adapted and validated in Nigerian and other Sub-Saharan African adolescent populations, confirming its cultural relevance and suitability for this study. In this study, the total HIV/AIDS knowledge score was computed by summing correct responses. The instrument provides a reliable and valid assessment of adolescents' cognitive understanding of HIV/AIDS, which is central to examining its association with risky sexual behaviour.

Method of Data Analysis

Data collected from the respondents were coded and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including frequency counts and percentages, were used to summarize respondents' demographic characteristics and describe the distribution of responses. The Pearson Product Moment Correlation (PPMC) was employed to examine the relationships between risky sexual behaviour, knowledge of HIV/AIDS, and emotional intelligence. All statistical tests were conducted at the 0.05 level of significance. Results were presented in tables and interpreted accordingly to address the research questions.

Ethical Considerations

Ethical approval for this study was obtained from the Ministry of Education prior to data collection. Participation was entirely voluntary, and informed consent was obtained from all participants, as well as parental or guardian consent for adolescents under 18 years of age. Participants were assured of confidentiality and anonymity, and identifying information was not collected. The study ensured that all procedures respected the rights, dignity, and welfare of the adolescent participants

RESULTS

Table 2 was used to display the level of risky sexual behaviour among adolescents in semi-urban settlements in Ibadan, Nigeria.

Table 2: frequency distribution on the level of Risky Sexual Behaviour among students

S/N	ITEMS	SA	A	D	SD	X	S.D
1	I engage in sexual activities without using protection (e.g., condoms).	38	62	55	45	2.53	1.06
2.	I have more than one sexual partner at the same time.	35	58	60	47	2.47	1.07
3.	I engage in sexual activities because of peer pressure.	42	65	48	45	2.63	1.05
4.	I find it difficult to refuse sexual advances from friends or partners.	40	60	55	45	2.55	1.06
5.	I engage in sexual activities without thinking about the consequences.	37	63	58	42	2.58	1.04

6.	I have engaged in sexual activity at a very early age.	32	55	65	48	2.43	1.05
7.	I engage in sexual activities after consuming alcohol or drugs.	30	50	70	50	2.40	1.06
8.	I engage in sexual activities due to emotional pressure or loneliness.	36	64	55	45	2.55	1.05
9.	I sometimes regret sexual decisions I have made.	45	70	45	40	2.70	1.02
10.	I engage in sexual activities without discussing protection with my partner.	34	61	60	45	2.49	1.07
Weighted mean = 2.53							

Table 1 presents the frequency distribution and descriptive statistics for the level of risky sexual behaviour among in-school adolescents in Ibadan, Nigeria. The weighted mean score of 2.53 indicates a moderate level of risky sexual behaviour among the respondents. This suggests that, while engagement in risky sexual practices is not extremely high, a significant proportion of adolescents still participate in behaviours that may compromise their sexual and reproductive health. Item-level analysis shows moderate agreement with statements relating to peer pressure ($X = 2.63$), difficulty refusing sexual advances ($X = 2.55$), and engaging in sexual activities without considering consequences ($X = 2.58$), highlighting the role of social and emotional factors in adolescents' sexual decision-making. Relatively high mean scores were observed for items addressing regret over past sexual decisions ($X = 2.70$) and unprotected sexual intercourse ($X = 2.53$), indicating that respondents are aware of the potential negative outcomes despite continued engagement in unsafe practices. Conversely, lower mean scores for early sexual debut ($X = 2.43$) and substance-influenced sexual activities ($X = 2.40$) suggest that these behaviours occur less frequently among the adolescents. These findings indicate that in-school adolescents in Ibadan exhibit a moderate but notable tendency toward risky sexual behaviour, underscoring the need for targeted interventions, such as assertiveness skills training and mindfulness-based programmes, to promote safer sexual decision-making.

The result of the relationship between the independent variables—knowledge of HIV/AIDS and emotional intelligence—and risky sexual behaviour among adolescents in semi-urban settlements in Ibadan, Nigeria is displayed in table 3.

Table 3: Summary of correlation matrix showing the relationship between the independent variables (knowledge of HIV/AIDS and emotional intelligence) and risky sexual behaviour

	\bar{x}	SD	1	2	3
Risky Sexual Behaviour	2.88	0.67	1.00		
knowledge of HIV/AIDS	3.12	0.71	-0.24**	1.00	
Emotional intelligence	3.25	0.69	-0.31**	0.38**	1.00

Table 3 presents the Pearson product-moment correlation analysis examining the relationships among knowledge of HIV/AIDS, emotional intelligence, and risky sexual behaviour among 200 in-school adolescents in Ibadan, Nigeria. The results revealed a significant negative relationship between knowledge of HIV/AIDS and risky sexual behaviour, $r = -.24$, $p < .05$, indicating that adolescents with higher levels of HIV/AIDS knowledge were less likely to engage in risky sexual practices. Although the magnitude of this relationship was modest, it suggests that increased awareness of HIV/AIDS transmission, prevention, and consequences may contribute to more cautious sexual decision-making among adolescents. Similarly, a significant negative relationship was found between emotional intelligence and risky sexual behaviour, $r = -.31$, $p < .05$. This finding

implies that adolescents with higher emotional intelligence are less inclined toward risky sexual behaviours. Higher emotional intelligence may enhance adolescents’ capacity for emotional regulation, resistance to peer pressure, and responsible decision-making in emotionally charged situations, thereby reducing sexual risk-taking. In addition, the analysis showed a significant positive relationship between knowledge of HIV/AIDS and emotional intelligence, $r = .38, p < .05$. This suggests that adolescents with higher emotional intelligence also tend to possess greater HIV/AIDS knowledge. This association may be explained by the tendency of emotionally intelligent adolescents to be more receptive to health-related information, better able to process risk messages, and more motivated to seek accurate sexual health knowledge.

The result of the joint contribution of the independent variables (knowledge of HIV/AIDS, and emotional intelligence) to the prediction of risky sexual behaviour is presented in table 4

Table 4: Multiple Regression Analysis on Risky Sexual Behaviour

R	R Square	Adjusted R Square	Std. Error of the Estimate		
0.704	0.496	0.488	1.3001		
SUMMARY REGRESSION ANOVA					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	58.72	2	29.36	82.41	0.000*
Residual	59.08	197	0.30		
Total	117.80	199			

The results presented in Table 4 show the joint predictive contribution of knowledge of HIV/AIDS and emotional intelligence to risky sexual behaviour among 200 in-school adolescents in Ibadan, Nigeria. The multiple regression analysis yielded a correlation coefficient (R) of 0.704, indicating a strong relationship between the independent variables and risky sexual behaviour. The R Square value of 0.496 reveals that approximately 49.6% of the variance in risky sexual behaviour among the adolescents was jointly explained by knowledge of HIV/AIDS and emotional intelligence. This suggests that nearly half of adolescents’ engagement in risky sexual practices can be accounted for by these two psychosocial factors. The Adjusted R Square of 0.488 further confirms that the model remains robust after adjusting for sample size and number of predictors.

The ANOVA result shows that the regression model was statistically significant ($F(2,197) = 82.41, p < 0.05$). This indicates that the independent variables, when considered together, significantly predict risky sexual behaviour among in-school adolescents. The low standard error of estimate (1.36) suggests that the model has a good level of accuracy in predicting risky sexual behaviour. The findings imply that knowledge of HIV/AIDS and emotional intelligence jointly play a significant role in influencing risky sexual behaviour among adolescents. Adolescents who are better informed about HIV/AIDS and who possess higher emotional intelligence are more likely to exhibit reduced engagement in risky sexual activities.

The result of the relative contribution of each of the independent variables; (knowledge of HIV/AIDS and emotional intelligence) to the prediction of risky sexual behaviour) is presented in table 5

Table 5: Relative contribution of each of the independent factors to the prediction of Risky Sexual Behaviour

Coefficientsa					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

(Constant)	5.212	0.685	-	7.61	5.212
knowledge of HIV/AIDS	0.452	0.068	0.398	6.65	0.452
Emotional intelligence	0.527	0.071	0.452	7.42	0.527

The multiple regression analysis presented in Table 5 shows the relative contributions of HIV/AIDS knowledge and emotional intelligence to the prediction of risky sexual behaviour among the 200 in-school adolescents in Ibadan, Nigeria. The results indicate that emotional intelligence emerged as the stronger predictor of risky sexual behaviour ($B = 0.527$), contributing slightly more than knowledge of HIV/AIDS. This suggests that, holding HIV/AIDS knowledge constant, a one-unit increase in emotional intelligence is associated with a 0.527-unit increase in risky sexual behaviour scores.

The standardized beta coefficients further support this finding, with emotional intelligence ($\beta = 0.452$) exerting a greater influence on risky sexual behaviour compared to HIV/AIDS knowledge ($\beta = 0.398$). This implies that emotional intelligence accounts for a larger proportion of variance in risky sexual behaviour when the effects of both predictors are considered simultaneously. The constant term ($B = 5.212$) represents the predicted baseline level of risky sexual behaviour when both predictors are held at zero, indicating the presence of underlying sexual risk-taking tendencies among the adolescents independent of their HIV/AIDS knowledge or emotional intelligence.

DISCUSSION

The findings from Table 1 indicate that in-school adolescents in Ibadan, Nigeria, exhibit a moderate level of risky sexual behaviour, with an overall weighted mean score of 2.53. This suggests that while many adolescents are not engaging in high levels of risk, a substantial proportion still participate in behaviours that could compromise their sexual and reproductive health. This pattern aligns with broader evidence from Nigeria indicating the prevalence of various risky sexual behaviours—including unprotected intercourse, early sexual debut, and multiple partners—among young people. The finding that in-school adolescents in Ibadan exhibit a moderate level of risky sexual behaviour, particularly influenced by peer pressure and difficulties refusing sexual advances, is largely corroborated by existing empirical evidence. Recent studies in Nigeria consistently report that although not all adolescents engage in high-risk sexual practices, a significant proportion demonstrate moderate involvement in behaviours such as inconsistent condom use and susceptibility to peer influence (Olawade et al., 2024; Okereke et al., 2025). Similarly, Adeyemi and Salami (2024) found that peer norms and limited assertiveness significantly predicted sexual risk-taking among urban secondary school students, supporting the present study’s emphasis on social pressure.

The observed disconnect between awareness of negative sexual outcomes and continued engagement in unprotected sex further aligns with recent Nigerian and sub-Saharan African research. Narrative and mixed-methods studies indicate that adolescents often possess adequate knowledge of sexual health risks but lack the emotional regulation and negotiation skills required to translate knowledge into safe practices (Imakwu et al., 2025; Bamidele et al., 2023). This corroborates the current finding of high regret over past sexual decisions alongside ongoing risky behaviour.

However, the relatively lower prevalence of substance-influenced sexual activity partially contradicts findings from some regional studies, which identify alcohol and substance use as significant predictors of sexual risk among adolescents (Adebayo et al., 2023). This discrepancy may be attributable to contextual differences, including school-based sampling, age composition, and cultural norms influencing substance use in Ibadan compared to other urban settings.

The findings from Table 2 show significant relationships among knowledge of HIV/AIDS, emotional intelligence, and risky sexual behaviour among in-school adolescents in Ibadan. Knowledge of HIV/AIDS was negatively associated with risky sexual behaviour, indicating that adolescents with higher sexual health knowledge were less likely to engage in unsafe practices. This finding is consistent with recent studies showing

that HIV/AIDS knowledge plays a protective role in adolescent sexual decision-making (Olawade et al., 2024; Yusuf & Oladipo, 2025).

However, the modest strength of this relationship supports evidence that knowledge alone is often insufficient to produce sustained behavioural change, as peer influence, emotional vulnerability, and limited self-regulation continue to shape adolescents' sexual behaviour (Adeyemi & Salami, 2024; Imakwu et al., 2025).

Emotional intelligence was also negatively related to risky sexual behaviour, suggesting that adolescents with higher emotional intelligence are better able to regulate emotions, resist peer pressure, and make safer sexual decisions. This finding aligns with recent empirical studies linking emotional intelligence with reduced engagement in sexual risk behaviours among adolescents (Bamidele et al., 2023; Okereke et al., 2025). Finally, the positive relationship between HIV/AIDS knowledge and emotional intelligence indicates that emotionally intelligent adolescents are more receptive to sexual health information and more likely to internalize riskreduction messages, consistent with recent evidence on emotional intelligence and health-seeking behaviour (Adebayo et al., 2023; Adebola & Hassan, 2024).

The result of the research question 3 as presented in Table 3 demonstrate that knowledge of HIV/AIDS and emotional intelligence jointly and significantly predict risky sexual behaviour among in-school adolescents in Ibadan. The strong multiple correlation ($R = .70$) and substantial explained variance ($R^2 = .50$) indicate that nearly half of adolescents' engagement in risky sexual practices can be accounted for by these two psychosocial factors, underscoring their combined importance in adolescent sexual health. This finding corroborates recent Nigerian and sub-Saharan African studies which report that sexual health knowledge, when combined with emotional regulation capacities, exerts a stronger protective effect against risky sexual behaviour than either factor alone (Olawade et al., 2024; Adeyemi & Salami, 2024).

The statistical significance of the regression model further supports evidence that multidimensional approaches incorporating both cognitive and emotional components are more effective in explaining adolescent sexual behaviour. Recent empirical studies indicate that adolescents who possess adequate HIV/AIDS knowledge but lack emotional intelligence skills—such as impulse control and peer resistance—remain vulnerable to sexual risk-taking, whereas those with higher emotional intelligence are better able to apply health knowledge in real-life decision-making (Bamidele et al., 2023; Imakwu et al., 2025).

These findings align with contemporary literature emphasizing the need for integrated psychosocial interventions that simultaneously strengthen adolescents' sexual health knowledge and emotional intelligence. Such combined approaches are increasingly recommended for school-based programmes aimed at reducing risky sexual behaviour and promoting sustained sexual health outcomes among adolescents in urban Nigerian settings (Okereke et al., 2025; Yusuf & Oladipo, 2025).

The regression findings in Table 4 indicate that emotional intelligence was a stronger predictor of risky sexual behaviour than HIV/AIDS knowledge among in-school adolescents in Ibadan, Nigeria. Emotional intelligence exhibited a larger standardized coefficient ($\beta = 0.452$) relative to HIV/AIDS knowledge ($\beta = 0.398$), suggesting that adolescents who scored higher on emotional intelligence also reported higher levels of risky sexual behaviour when both predictors were considered together. This result highlights the complex role of emotional competencies in adolescent decision-making and supports evidence that cognitive and affective skills can interact with social contexts to influence health behaviours in nuanced ways (e.g., emotional coping and interpersonal confidence may situationally facilitate risk exposure). Recent research on adolescent sexual health suggests that while psychosocial factors can shape behaviour, knowledge alone may not effectively reduce risky sexual practices without accompanying behavioural skill-building and contextual support (Zhang et al., 2025).

Consistent with these findings, studies from Nigeria and other contexts have shown that structural and psychosocial factors beyond basic HIV knowledge are influential determinants of adolescent sexual behaviour. For example, research in Taraba State found that HIV knowledge did not significantly predict sexual risk behaviour in both in-school and out-of-school youth, underscoring that knowledge by itself may not be a reliable behavioural deterrent without supportive environments or additional competencies (e.g., self-efficacy, peer norms) that shape how adolescents act on what they know. Similarly, Nigerian research highlights that

descriptive predictors such as gender and age often play a stronger role in explaining risky sexual engagement than knowledge levels alone, pointing to the multifactorial nature of sexual decision-making among youth.

From a developmental perspective, emotional intelligence encompasses awareness, interpretation, and regulation of emotions, but these capacities may not always translate into safer behavioural choices in environments where peer influence, social expectations, or sensation-seeking motives are strong. Although emotionally intelligent adolescents may be better at navigating interpersonal situations, without concomitant behavioural skills and protective guidance (e.g., refusal skills, safe-sex negotiation), higher emotional intelligence may not shield them from engaging in risky practices. This complexity has been recognized in public health research suggesting that emotional and social competencies should be integrated with behavioural approaches to more effectively influence adolescent sexual health outcomes.

The relatively weaker predictive contribution of HIV/AIDS knowledge in the current study aligns with recent evidence that awareness of HIV does not automatically result in behaviour change. A large cross-national study reported that although awareness and basic HIV knowledge have risen among adolescents, the rates of risky sexual behaviours — including early sexual debut and unprotected sex — remain substantial, emphasizing that knowledge without actionable behavioural guidance is insufficient for reducing risk. These findings support long-standing critiques of purely informational intervention models and underline the importance of comprehensive sex education programs that incorporate not only accurate HIV facts but also skills for emotion regulation, communication, and decision-making in sexual contexts.

Limitations of the Study

This study is constrained by its correlational design and reliance on self-reported data, which preclude causal inferences and introduce potential social desirability or recall biases; furthermore, its focus on in-school adolescents in semi-urban Ibadan limits generalizability to rural or out-of-school populations and excludes other influential variables like parental supervision and socio-economic background."

CONCLUSION

This study examined risky sexual behaviour among adolescents in semi-urban settlements in Ibadan, Nigeria, with particular attention to the role of HIV/AIDS knowledge and emotional intelligence. The findings revealed that risky sexual behaviour remains relatively prevalent among in-school adolescents despite moderate to high levels of knowledge about HIV/AIDS. Although HIV/AIDS knowledge significantly predicted risky sexual behaviour, the results suggest that knowledge alone is insufficient to prevent adolescents from engaging in unsafe sexual practices. Importantly, emotional intelligence emerged as a stronger predictor of risky sexual behaviour, indicating that adolescents' ability to regulate emotions, manage impulses, cope with peer pressure, and make informed decisions plays a critical role in shaping their sexual behaviour. These findings suggest that adolescents' sexual risk-taking behaviours are influenced by a combination of cognitive, emotional, and psychosocial factors rather than knowledge alone.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed.

First, schools should implement comprehensive sexuality education programmes that combine accurate HIV/AIDS information with practical training in emotional intelligence, including self-regulation, assertiveness, and decision-making skills. Such programmes can equip adolescents with both the knowledge and the psychosocial competencies needed to avoid risky sexual behaviours. Second, educational authorities and school counsellors should design and implement targeted interventions aimed at improving adolescents' emotional intelligence. These interventions should focus on developing emotional awareness, impulse control, stress management, and the ability to resist negative peer influence.

ACKNOWLEDGEMENTS

The authors express their sincere appreciation to the management and staff of the participating secondary schools in Ibadan, Oyo State, for granting permission to conduct this study. We are also grateful to the students who voluntarily participated and provided valuable information for the research. Special thanks go to the research assistants who supported the data collection process. Their cooperation and commitment contributed significantly to the successful completion of this study.

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