Psychological Implications of Recreational Drug use among Students with Intellectual Disabilities in Nigeria

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Abstract: *Aim*: The psychological consequences of drug use in individuals with intellectual disabilities can include worsened cognitive deficits, anxiety, aggression, depression, and impaired academic functioning. These effects are often underrecognized due to stigma or limited school support systems. Examine the psychological implications and patterns of recreational drug use among students with intellectual disabilities in Cross River and Akwa Ibom States, Nigeria. Five study objectives were stated to guide the research. Five research questions were formulated, and three hypotheses were stated. Literature was reviewed based on the variables under study.

Method: The study adopted a descriptive survey research design. The study was conducted in Cross River and Akwa Ibom States, located in Nigeria's South-South geopolitical zone. The population comprises 1067 students with intellectual disabilities enrolled in public and private special education schools and inclusive education programs. Purposive and stratified random sampling techniques were used. A total sample of 200 respondents were selected for the study. Data was collected using a structured questionnaire. Experts validated the instruments, which were tested for reliability using the Cronbach Alpha reliability method. The test result revealed a reliability index of 0.80. Results of the research questions were presented using frequency counts, percentages, mean and standard deviation. Multiple linear regression was used to analyze the hypothesis.

Results: The results revealed that substances such as marijuana, codeine, and tramadol were the most commonly reported. There is a significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities. Students with intellectual disabilities in Cross River State experience significantly higher psychological implications related to drug use compared to their peers in Akwa Ibom State. Peer influence and neighborhood environment are significant predictors of recreational drug use among students with intellectual disabilities, while family background is not.

Conclusion: The findings of this study highlight a disturbing reality: students with intellectual disabilities are at substantial risk of psychological harm due to recreational drug use.

Recommendation: Schools and disability support centers should implement peer-mentoring programs, social skills training, and anti-drug clubs that empower students to resist negative peer pressure.

Keywords: Psychological implications, Recreational drug use, students with intellectual disabilities, Cross River State, Akwa Ibom States, Inclusive Education, Special Schools.

INTRODUCTION

Substance use among students is a growing public health concern globally, with emerging complexities when it involves students with intellectual disabilities. These individuals often face unique psychological and social vulnerabilities, including impaired judgment, poor impulse control, limited coping mechanisms, and difficulties in comprehending the long-term consequences of substance use. Recreational drug use in this population can exacerbate existing cognitive and emotional challenges, thereby hindering educational progress and overall well-being. The prevalence of drug use among students with disabilities is under-researched in Nigeria, particularly in regions such as Cross River and Akwa Ibom States, despite anecdotal evidence of growing exposure and engagement in risky behaviors.

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Intellectual disability is characterized by significant intellectual functioning and adaptive behavior limitations, affecting many everyday social and practical skills. These students are typically more susceptible to peer pressure, poor decision-making, and social isolation—factors known to increase the likelihood of recreational drug use [1]. While several studies have explored drug use in the general adolescent population [2], there is limited literature focusing specifically on the psychological implications of drug use among students with intellectual disabilities in Nigerian contexts.

In Southern Nigeria—especially in states like Cross River and Akwa Ibom—the educational inclusion of students with disabilities is gradually expanding, yet many support systems remain underdeveloped. This creates a situation where these students may encounter environments that expose them to drugs without adequate psychological safeguards. Factors such as family instability, community drug availability, low teacher awareness, and inadequate health education further complicate their experience [3].

The psychological consequences of drug use in individuals with intellectual disabilities can include worsened cognitive deficits, anxiety, aggression, depression, and impaired academic functioning [4]. These outcomes often go unnoticed or unaddressed due to stigma or lack of capacity in school systems to offer tailored intervention.

Despite increasing efforts to promote inclusive education in Nigeria, little attention has been paid to the intersection of intellectual disabilities and substance abuse. In particular, there is a glaring knowledge gap regarding the extent and psychological effects of recreational drug use among students with intellectual disabilities in Cross River and Akwa Ibom States.

Schools and caregivers often overlook or misinterpret substance use symptoms in this population due to their communication challenges and cognitive limitations. As a result, many experience untreated psychological distress, leading to a decline in academic performance, emotional instability, and, in severe cases, exposure to criminal justice systems or institutionalization. Moreover, the lack of targeted mental health services and drug education tailored to students with intellectual disabilities places them at higher risk of repeated drug use and psychological harm.

This study, therefore, seeks to explore the psychological implications and patterns of recreational drug use among students with intellectual disabilities in Cross River and Akwa Ibom States, Nigeria. By identifying the prevalence, types of drugs used, and associated psychological effects, the research aims to inform more responsive policies, interventions, and school-based support strategies for this vulnerable group.

Research Objectives

The general objective of this study is to examine the psychological implications and patterns of recreational drug use among students with intellectual disabilities in Cross River and Akwa Ibom States, Nigeria.

The specific objectives are to:

1. Determine the prevalence of recreational drug use among students with intellectual disabilities in selected schools in Cross River and Akwa Ibom States.
2. Identify the types of recreational drugs commonly used by these students.
3. Examine the psychological effects of recreational drug use on students with intellectual disabilities.
4. Explore the socio-environmental factors contributing to recreational drug use among these students.
5. Investigate the coping mechanisms and support systems available to students with intellectual disabilities involved in drug use.

Research Questions

1. What is the prevalence of recreational drug use among students with intellectual disabilities in Cross River and Akwa Ibom States?
2. What types of recreational drugs are commonly used by these students?
3. What are the psychological effects of drug use on students with intellectual disabilities?
4. Do socio-environmental factors contribute to the use of recreational drugs by students with intellectual disabilities?
5. What coping mechanisms and support systems exist for students with intellectual disabilities who use drugs?

Research Hypotheses

H_{01}: There is no significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities.

H_{02}: There is no significant difference in the psychological implications of drug use between students with intellectual disabilities in Cross River and those in Akwa Ibom State.

H_{03}: Socio-environmental factors do not significantly predict recreational drug use among students with intellectual disabilities.

Significance of the Study

This study is significant for several reasons, particularly in light of the growing concerns surrounding drug use and the mental well-being of individuals with intellectual disabilities (IDs).

There is a scarcity of empirical studies in Nigeria, particularly in Cross River and Akwa Ibom States, that focus specifically on the intersection of drug use and psychological well-being among students with intellectual disabilities. This research may provide much-needed data in this under-explored area.

Students with intellectual disabilities may be more susceptible to the influence of peers, poor decision-making, and limited awareness of the risks associated with drug use. This study may shed light on their unique psychological vulnerabilities and how drug use exacerbates these challenges.

The findings may serve as a valuable resource for educational policymakers, mental health professionals, and special education practitioners in designing effective interventions, counseling strategies, and support systems tailored to this specific group.

Substance use can impair cognitive and emotional functioning, which are already areas of difficulty for students with IDs. Understanding the psychological effects of drug use can help educators create safer, more supportive learning environments, ultimately improving academic and behavioral outcomes.

The study may contribute to increasing awareness among parents, caregivers, and community members about the risks and signs of drug use among students with intellectual disabilities, encouraging early intervention and community support.

The research may lay the groundwork for further academic investigations into related topics such as rehabilitation, social inclusion, and the long-term psychological effects of drug use among individuals with disabilities in Nigeria and beyond.

LITERATURE REVIEW

Concept of Intellectual Disabilities

Intellectual disabilities (IDs) are characterized by limitations in intellectual functioning and adaptive behavior, covering a range of everyday social and practical skills [5]. These limitations originate before age 18 and significantly affect learning and independence. In Nigeria, students with intellectual disabilities often experience marginalization and limited access to quality support services in educational settings [6].

Recreational Drug use and Youths

Recreational drug use among young people is a growing concern, with marijuana, codeine, and tramadol being among the most commonly abused substances in Nigeria [2]. Students with intellectual disabilities are more vulnerable due to challenges in decision-making, social susceptibility, and limited comprehension of risks [4]. According to NIDA [7], substance use disrupts emotional regulation, cognition, and mental stability—effects that are especially amplified in individuals with intellectual or developmental disabilities, who often lack the adaptive skills to buffer against such consequences. Taylor *et al*. [8] note that students with intellectual disabilities are at higher risk for emotional dysregulation, anxiety, and depression, and substance use can exacerbate these vulnerabilities. The dual burden of cognitive impairment and substance misuse creates a compounded risk for deteriorating psychological health, marked by symptoms such as mood instability, aggression, withdrawal, and reduced coping ability.

Tonge and Einfeld [9] state that psychopathological symptoms such as depression and anxiety disorders are significantly more prevalent in individuals with intellectual disabilities who engage in substance use. The social marginalization and stigma often faced by this group may push some toward substance use as a coping mechanism, which in turn triggers or worsens psychological dysfunctions. This significant relationship also aligns with Self-Medication Theory [10], which postulates that individuals—especially those with

mental or developmental challenges—may use drugs to escape or relieve psychological distress. However, in the long run, substance use tends to undermine emotional stability and worsen the very problems it was intended to alleviate.

In a Nigerian context, Okafor *et al*. [11] found that students with disabilities who engage in drug use are more prone to experience poor self-esteem, low social integration, and heightened emotional problems. These issues compound the psychological burden of disability, indicating a need for targeted mental health interventions.

Psychological Implications of Drug use

Drug use has been associated with several psychological issues, including increased anxiety, aggression, hallucinations, depression, and cognitive regression [1]. For students with intellectual disabilities, these effects may worsen their existing cognitive and emotional challenges, leading to academic underperformance, social withdrawal, or institutionalization [3].

There are contextual and environmental factors, such as geographical location, urban exposure, access to drugs, and socio-economic conditions, that can significantly influence both the prevalence and psychological impact of drug use among students with disabilities [12,13]. Students in Cross River may be exposed to more permissive environments or face greater psychosocial stressors that exacerbate the effects of substance use. Okafor *et al*. [14] stated that drug-related psychological consequences—such as anxiety, depression, social withdrawal, and cognitive impairment—tend to be more pronounced in students with intellectual disabilities when they lack access to supportive academic and counseling services. This may reflect disparities in institutional responses to disability and drug use in the two states.

Furthermore, Eneh *et al*. [15] also stated that urban centers like Calabar in Cross River State often report higher incidences of drug use due to increased availability, peer influence, and poor regulatory control. These urban pressures may contribute to the heightened psychological impact on students, especially those with intellectual disabilities who may have limited coping skills or self-regulation mechanisms.

Bandura's [17] Social Learning Theory emphasizes that behavior is learned through observation and interaction with one's environment. Students with intellectual disabilities in more socially or economically pressured regions may imitate maladaptive behaviors such as drug use more frequently, thereby experiencing more severe psychological consequences. In contrast, if students in Akwa Ibom have stronger family or community-based support systems, more effective school-based interventions, or cultural norms that discourage drug use, the psychological impacts may be less severe, even if usage rates are similar.

Socio-Environmental Influences

Family instability, peer pressure, poverty, lack of awareness, and weak school-based monitoring systems have all been linked to increased drug use among students, including those with special needs [9]. These factors are particularly relevant in low-resource educational environments such as those in parts of Southern Nigeria. Kobus [19] and Ezar *et al*. [20] argue that peer pressure is a powerful determinant of substance use among adolescents, especially those with cognitive or social vulnerabilities. Students with intellectual disabilities often have an increased desire for social acceptance, which may increase their susceptibility to peer-influenced behaviors, including substance experimentation.

Hawkins *et al*. [21] stated that they linked dysfunctional family environments to substance use. One possible explanation is that for students with intellectual disabilities, external influences like peers and the neighborhood may overshadow familial effects, especially in institutional or residential settings where family interaction is limited. Brook *et al*. [22] and Ndifreke *et al*. [23] emphasized that students residing in environments with high drug availability, weak law enforcement, or prevailing drug cultures are at greater risk of substance misuse. For students with intellectual disabilities, such exposure—combined with limited decision-making capacity—can heighten vulnerability to drug-related behaviors. Bronfenbrenner's Ecological Systems Theory [24] posits that human development is profoundly influenced by interactions within multiple environmental systems—namely, the microsystem (peers), mesosystem (family), and exosystem (neighborhood). The significance of peer influence and neighborhood environment reinforces the importance of social context in shaping the behavior of students with intellectual disabilities.

Coping Strategies and Support Systems

Effective coping and intervention strategies involve psychosocial counseling, peer mentorship, drug

education, and inclusive therapeutic support. Unfortunately, these resources are either inadequate or inaccessible in many Nigerian public schools [18]. Coping strategies are individuals' behavioral and cognitive efforts to manage internal and external stressors. For students with intellectual disabilities, these strategies are often limited by cognitive and social impairments, making them more vulnerable to adopting maladaptive coping mechanisms, such as substance use [26]. Studies have shown that students with IDs may use recreational drugs as a form of self-medication or as a means to achieve social inclusion among peers [8,10]. According to Livneh *et al*. [27], students with intellectual disabilities often experience emotional distress, stigmatization, and social exclusion, which may overwhelm their coping resources. Without access to structured emotional support and coping education, these individuals may turn to drugs to alleviate feelings of loneliness, anxiety, or depression.

Additionally, research by Matson *et al*. [28] emphasized that students with developmental disabilities are less likely to use problem-solving or emotional regulation techniques effectively and more likely to exhibit impulsivity—an attribute linked to both psychological distress and substance use. Support systems—both formal (e.g., school counselors, disability services) and informal (e.g., family, friends, and peer groups)—are critical to the psychological well-being of students with intellectual disabilities. A strong support network can reduce the likelihood of drug use and improve mental health outcomes by providing emotional, informational, and instrumental resources [29].

Peer support, in particular, has been found to enhance social inclusion and reduce stress [30]. However, in the absence of positive peer influence, students may become susceptible to peer pressure that promotes drug experimentation [11]. Parental involvement and family support have also been linked to better-coping outcomes and reduced substance use in adolescents with disabilities. As noted by Kyzar *et al*. [31], emotionally supportive parenting can enhance resilience and reduce engagement in risky behaviors, including drug abuse.

Educational institutions play a vital role in fostering resilience through school-based mental health programs, behavioral interventions, and inclusive environments. Programs that teach adaptive coping strategies—such as problem-solving, communication skills, and stress management—are particularly beneficial for this group [32]. Integrating coping strategy training with structured support systems offers a promising intervention framework. As Emerson *et al*. [33] suggested, combining psychological support with environmental adaptations (e.g., structured routines and safe environments) significantly enhances the well-being of individuals with intellectual disabilities. This approach can also reduce reliance on maladaptive coping strategies like drug use. Furthermore, inclusive policy initiatives that emphasize accessibility to mental health services and preventive education on substance use are essential.

Research by McGillicuddy [34] has shown that targeted interventions that address both mental health and substance use concurrently lead to better long-term outcomes in populations with intellectual and developmental disabilities. Coping strategies and support systems are essential protective factors that mediate the relationship between recreational drug use and psychological well-being among students with intellectual disabilities. While this population may be at a heightened risk of maladaptive coping and drug use, supportive environments—comprising family, peers, and institutional frameworks—can foster resilience and enhance mental health outcomes.

MATERIALS AND METHODS

Experimental Setting

The study adopted a descriptive survey research design. This design is appropriate for obtaining information on the current status of recreational drug use and its psychological implications among students with intellectual disabilities.

Area of the Study

The study was conducted in Cross River and Akwa Ibom States, both located in the South-South geopolitical zone of Nigeria. These states have several inclusive and special needs schools, making them suitable locations for this research.

Population of the Study

The population comprises 1067 students with intellectual disabilities enrolled in public and private special education schools and inclusive education programs in Cross River and Akwa Ibom States.

Sampling Technique and Sample Size

A multi-stage sampling technique was used. In the first stage, purposive selection of 3 inclusive/special

schools from each state was done. In the second stage, stratified random sampling of students with intellectual disabilities based on class level and sex was carried out. A total sample size of 200 students (100 per state) was targeted after getting the ethical clearance.

Diagnosis of Students with Intellectual Disabilities

- Students with poor academic performance across subjects.
- Difficulty understanding abstract concepts.
- Challenges with problem-solving and reasoning.
- Trouble with memory, attention, and communication.
- Social and behavioral issues (difficulty with peer relationships, rule-following).

Referral Process

Typically triggered by:

- Classroom teacher observations.
- Standardized test results indicate below-grade-level performance.
- Parent concerns.
- Behavioral challenges noted by school counselors or social workers.

Formal Assessment and Diagnosis

A. Cognitive Assessment

- IQ Tests (e.g., WISC-V, Stanford-Binet).
- Administered by a licensed school psychologist.

B. Adaptive Behavior Evaluation

- Adaptive Behavior Scales (e.g., Vineland Adaptive Behavior Scales, ABAS).
- Information is gathered from multiple sources (parents, teachers).

C. Academic and Functional Assessments

- Curriculum-based assessments.
- Observations of academic performance in various subjects.
- Functional behavior assessments since behavioral issues are present.

D. Medical and Developmental History

- Review of prenatal, birth, and developmental milestones.
- Rule out other causes (e.g., hearing or vision impairments, emotional disorders).

Multidisciplinary Team Evaluation

This team includes:

- Special education teachers
- School psychologist
- General education teachers
- School counselor
- Parents/guardians
- A medical professional

The team reviewed data and determined whether a student met the criteria for ID and needed special education services.

Instrument for Data Collection

Data was collected using a structured questionnaire tailored for students with intellectual disabilities. The questionnaire includes four sections. Section A focused on the demographic data such as sex, age, class level, and state, Section B on Drug use behavior (adapted from the WHO student drug survey) with five items measuring N-Never, R-Rarely, S-Sometimes, A-Always, Section C: Psychological symptoms checklist with 10 items, Section D: Environmental and social influences with 10 items. The instruments were validated by experts in special education and in the Department of Measurement and Evaluation, University of Calabar. After the validation, five items were modified, two deleted, and two new items were added. Furthermore, the instrument was subjected to test reliability using the Cronbach Alpha reliability method. The result of the test revealed a reliability index of .80.

Ethical Considerations

- Ethical approval was obtained from the Ministry of Education ethics review board in Akwa Ibom State, Nigeria.

- Informed consent was secured from parents/guardians, and assent was obtained from students.
- The confidentiality and anonymity of participants were strictly maintained.
- Participation was entirely voluntary, and students could withdraw at any stage without consequences.
- A referral protocol was established for students needing psychological or medical support.

Method of Data Collection

During data collection, permission was sought from school authorities and parents/guardians. Trained research assistants and special educators assisted in administering questionnaires and conducting interviews to ensure clarity. Non-verbal tools (e.g., pictograms and symbols) were used where necessary to aid understanding.

Method of Data Analysis

To analyze the data, descriptive statistics (frequency, percentage, mean, standard deviation) were used to answer research questions, while inferential statistics (Pearson's Product Moment Correlation, Independent t-test, Multiple linear regression) were employed to test the hypotheses at a 0.05 level of significance using SPSS version 26.

RESULTS

Table **1** revealed that out of the 200 respondents used in the study, 98 (49.0%) were males, while 102 (51.0%) were females. This result indicates that there are more female students with several psychological issues who have intellectual disabilities than male students.

Furthermore, the result showed that 93 respondents (46.5%) were 15 years and below, 54(27.0%) were between 16-20 years, and 53 (26.5%) were 11 years and above. This result also indicates that there are more young students with intellectual disabilities involved in drug use than older students.

Again, the result showed that 78 respondents (39.0%) were from junior classes, while 122(61.0%) were from senior classes. Finally, the result indicated that 100(50.0%) were from Special Education Schools in Cross River State, while 50(50.0%) were from Special Education Schools in Akwa Ibom State, Nigeria.

Test of the Research Question

Table **2** presents data on the level of emotional intelligence among university students with intellectual disabilities, as measured through their behavioral tendencies and experiences related to substance use. Respondents indicated their frequency of engaging in specific behaviors using a four-point Likert scale: Never, Rarely, Sometimes, and Always. The table

Table 1: Demographic Variables of Respondents

Variable		Frequency	Percentage
Sex	Male	98	49.0
	Female	102	51.0
	Total	200	100
Age	≤15 years	93	46.5
	16-20 years	54	27.0
	≥21 years	53	26.5
	Total	200	100
Class Level	Junior Secondary	78	39.0
	Senior Secondary	122	61.0
	Total	200	100
State	Cross River	100	50.0
	Akwa Ibom	100	50.0
	Total	200	100

Source: Fieldwork (2024).

Table 2: What is the Prevalence of Recreational Drug use among Students with Intellectual disabilities in Cross River and Akwa Ibom States?

SN	Opinions	Never	Rarely	Sometimes	Always	$\bar{X}$	Sd	Remarks
1	I have used substances like alcohol	12(6.0%)	34(17.0%)	87(43.5%)	67(33.5%)	3.89	1.20	Significant
2	I take substances to feel relaxed or happy.	01(0.5%)	57(28.5%)	98(49.0%)	44(22.0%)	2.47	0.79	Not Significant
3	My friends or classmates influence me to try drugs.	32(16.0%)	43(21.5%)	57(28.5%)	68(34.0%)	2.90	1.54	Significant
4	I know where to get drugs around my school.	12(6.0%)	34(17.0%)	65(32.5%)	89(44.5%)	2.69	1.00	Significant
5	I skipped class because I was using drugs.	29(14.5%)	44(22.0%)	59(29.5%)	68(34.0%)	3.11	0.81	Significant
	Grand Mean					3.01	1.06	

KEY: N-Never.
R-Rarely.
S-Sometimes.
A-Always.

shows the mean ($\bar{x}$), standard deviation (SD), and whether each behavior was accepted as indicative of emotional intelligence-related behavior based on the computed mean scores. The analysis reveals varying levels of emotional intelligence as reflected in students' engagement with drug-related behaviors.

Item 1 (I have used substances like alcohol) recorded a high mean score of 3.89 and a standard deviation of 1.20, indicating that a significant portion of the respondents (Sometimes = 43.5%, Always = 33.5%) frequently engage in alcohol use. This item was marked as *Accepted*, suggesting that substance use is a common behavior among the respondents.

Item 2 (I take substances to feel relaxed or happy) had a relatively lower mean of 2.47 and SD of 0.79, with the majority of students selecting Sometimes (49.0%). This item was Rejected, indicating that using substances as a coping mechanism for emotional regulation was not predominant or significant enough to be considered a general trend among the students.

Item 3 ("My friends or classmates influence me to try drugs") yielded a mean of 2.90 and a standard deviation of 1.54. Despite moderate values, the item was Accepted, indicating that peer influence plays a meaningful role in the drug-related behaviors of some students.

Item 4 ("I know where to get drugs around my school") had a mean of 2.69 and SD of 1.00, with 44.5% of students indicating Always. This suggests a high level of awareness of drug availability within the school environment, and the item was marked as Accepted.

Item 5 ("I have skipped class because I was using drugs") had a mean score of 3.11 and an SD of 0.81, showing a concerning level of academic disruption due to drug use. This behavior was also Accepted, pointing to its significance among the sample.

The Grand Mean of 3.01 with a standard deviation of 1.06 suggests a moderate level of emotional intelligence among university students with intellectual disabilities, as inferred through their drug-related behaviors. However, the prevalence of substance use and related actions (skipping class, knowledge of drug sources, peer influence) may also indicate emotional mismanagement and risk-taking tendencies, which reflect challenges in emotional self-regulation. The data suggest that while some students may demonstrate coping strategies or social awareness, a significant proportion exhibit behaviors indicating emotional vulnerability and poor self-regulation, particularly through substance use. These findings point to a pressing need for emotional intelligence development programs, targeted interventions, and support services tailored to students with intellectual disabilities in university settings.

Test of Research Hypothesis

Hypothesis One

There is no significant relationship between recreational drug use and the psychological well-being

Table 3: Pearson's Product Moment Correlation Coefficient Analysis of the Relationship between Recreational Drug use and the Psychological Well-Being of Students with Intellectual Disabilities (N=200)

Variables:	$\bar{X}$	SD	r	P-value
Recreational drug use (x):	8.92	3.01	0.897	0.000
Psychological well-being of students with intellectual disabilities (y):	15.23	4.11		

*Significant at 0.05 level; df= 198.

of students with intellectual disabilities. The independent variable is recreational drug use, while the dependent variable is the psychological well-being of students with intellectual disabilities. The items used in measuring this hypothesis were derived from questionnaire items 1-5 of Section B and items 6-14 of Section C. Pearson's Product Moment Correlation Coefficient Analysis test statistic was employed in testing the hypothesis for this study.

The result of the analysis is presented in Table **3**. The result of the analysis in Table **3** revealed that recreational drug use produced a mean score of 8.92 with a standard deviation of 3.01, while the psychological well-being of students with intellectual disabilities produced a mean score of 15.23 with a standard deviation of 4.11. The result further revealed that the calculated r-ratio of 0.897 obtained with a p-value of 0.000 at 198 degrees of freedom met the condition required for significance at the 0.05 level. Based on this, the null hypothesis, which stated that there is no significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities, was rejected, indicating that there is a significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities.

The strong positive correlation (r = 0.897) implies that as recreational drug use increases, psychological well-being is likely to decrease significantly among students with intellectual disabilities—or vice versa. This finding highlights that recreational drug use is not merely a behavioral concern but also has substantial psychological implications for students within this vulnerable group. The strong relationship between drug use and psychological well-being necessitates the development of integrated intervention programs that provide counseling, peer support, and psychological therapies tailored to the needs of students with intellectual disabilities.

Hypothesis Two

There is no significant difference in the psychological implications of drug use between students with intellectual disabilities in Cross River and those in Akwa Ibom State. The independent variable is students with intellectual disabilities in Cross River and those in Akwa Ibom, which was categorized into Cross River and Akwa Ibom, while the dependent variable is the psychological implications of drug use. The hypothesis was analyzed using an independent t-test analysis that tested 0.05 significance levels, as presented in Table **4**.

The findings reveal that students in Cross River State had a mean score of 3.02 with a standard deviation (SD) of 1.03, while their counterparts in Akwa Ibom State had a mean score of 2.87 with a standard deviation of 1.12. The computed t-value was 0.879, and the corresponding p-value was 0.001. The result is considered statistically significant since the p-value (0.001) is less than the 0.05 significance level. This implies that there is a significant difference in the psychological implications of drug use between students with intellectual disabilities in Cross River and those in Akwa Ibom State.

Hypothesis Three

Socio-environmental factors (peer influence, family background, neighborhood environment) do not

Table 4: Independent t-Test Analysis of the Difference in the Psychological Implications of Drug use between Students with Intellectual Disabilities in Cross River and those in Akwa Ibom State (N=200)

Gender	N	Mean	SD	t-value	p-level
Cross River	100	3.02	1.03	0.879*	0.001
Akwa Ibom	100	2.87	1.12		

*Significant at 0.05 level; p<0.05.

Table 5: Regression Model Summary of all the Predictor Variables Peer Influence, Family Background, Neighborhood Environment, and Recreational Drug use among Students with Intellectual Disabilities

Model	R	R square	Adjusted R square	Std. error of the estimate	
1	0.32	0.31	0.25	6.22726	
Source of Variables	**Sum of Squares**	**Df**	**Mean square**	**F**	**Sig.**
Regression	42.987	3	5.938	36.987	0.002
Residual	3242.879	197	41.872		
Total	6275.812	200			
Variables	**Regression weight**				
	B	**Std. error**	**Std. Coef.**	**t-value**	**Sig.**
(constant)	27.921	3.111		14.112	0.001
Peer influence	0.192	0.435	-0.645	0.242	0.005
Family background	0.089	0.551	-0.221	0.334	0.667
Neighborhood environment	0.672	0.313	0.435	0.112	0.002

Key:
DV = Recreational drug use among students with intellectual disabilities.

significantly predict recreational drug use among students with intellectual disabilities. The choice of multiple linear regression (modeling application) was to help explain the linear relationship that exists between and among the predictor variables at $p < 0.05$. The result is presented in Table **5**.

The regression equation is given thus:

$Yi = B_o + B_1X_1 + B_2X_2 + B_3X_3\, e_i$ ...Eqn 1.1

Where:

Y is the predicted value of the DV (recreational drug use among students with intellectual disabilities)

X_1 = peer influence

X_2 = family background

X_3 = neighborhood environment

Bo is the Y-intercept and

e_i is the error of prediction known as residuals.

The model produced an R-value of 0.32, indicating a moderate positive correlation between the predictor variables and recreational drug use. The R Square value of 0.31 shows that approximately 31% of the variance in recreational drug use can be explained by the combined influence of the three predictor variables. The adjusted R square of 0.25 adjusts for the number of predictors in the model and provides a more accurate estimate of the effect size. The standard error of the estimate is 6.227, suggesting a moderate level of prediction error in the model. The analysis of variance (ANOVA) shows that the regression model is statistically significant, with an F-value of 36.987 and a p-value of 0.002, which is less than the 0.05 significance level. This indicates that the model, overall, provides a good fit and that the predictor variables significantly contribute to explaining recreational drug use among the target population.

The regression coefficients provide insight into the individual contribution of each predictor variable. Peer Influence has a regression weight (B) of 0.192, with a t-value of 0.242 and a significance level of 0.005. Despite a small coefficient and low t-value, the significance level indicates that peer influence is a statistically significant predictor of recreational drug use. Family Background has a coefficient of 0.089, a t-value of 0.334, and a significance level of 0.667. This variable does not significantly predict recreational drug use, suggesting that students' family backgrounds may not have a strong direct effect in this context. Neighborhood Environment has a relatively higher coefficient of 0.672, with a significance level of 0.002, indicating that it is a strong and statistically significant predictor of recreational drug use among students with intellectual disabilities.

The regression analysis reveals that peer influence and neighborhood environment are significant predictors of recreational drug use among students with intellectual disabilities, while family background is not. The model explains 31% of the variability in drug

use behaviors, implying that environmental and social dynamics play a meaningful role in influencing substance use within this population. These findings emphasize the need for intervention programs that target peer dynamics and community-level factors to reduce drug use among students with intellectual disabilities. This finding underscores the importance of environmental and social factors in shaping behavior among students with intellectual disabilities.

DISCUSSION

The result of research question one revealed a moderate level of emotional intelligence among university students with intellectual disabilities, as inferred through their drug-related behaviors. However, the prevalence of substance use and related actions (skipping class, knowledge of drug sources, peer influence) may also indicate emotional mismanagement and risk-taking tendencies, which reflect challenges in emotional self-regulation. The data suggest that while some students may demonstrate coping strategies or social awareness, a significant proportion exhibit behaviors indicating emotional vulnerability and poor self-regulation, particularly through substance use. These findings point to a pressing need for emotional intelligence development programs, targeted interventions, and support services tailored to students with intellectual disabilities in university settings. This study is in support of UNODC [2] that recreational drug use among young people is a growing concern, with marijuana, codeine, and tramadol being among the most commonly abused substances in Nigeria. This is also supported by Young *et al*. [4] that students with intellectual disabilities are more vulnerable due to challenges in decision-making, social susceptibility, and limited comprehension of risks.

The result of hypothesis one revealed that there is a significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities. The strong positive correlation ($r = 0.897$) implies that as recreational drug use increases, psychological well-being is likely to decrease significantly among students with intellectual disabilities—or vice versa. This finding highlights that recreational drug use is not merely a behavioral concern but also has substantial psychological implications for students within this vulnerable group. The strong relationship between drug use and psychological well-being necessitates the development of integrated intervention programs that provide counseling, peer support, and psychological therapies tailored to the needs of students with intellectual disabilities. This finding supports Degenhardt *et al*. [1] and Eze *et al*. [3], who noted that substance use exacerbates emotional and behavioral difficulties, particularly in populations with pre-existing cognitive challenges. The study indicates that frequent users among students with intellectual disabilities demonstrated higher levels of emotional instability and learning difficulties. This may also explain increased dropout rates, poor academic achievement, and social maladjustment in special education contexts.

This finding supports previous empirical research emphasizing the adverse psychological impacts of substance use. According to NIDA (2020), substance use disrupts emotional regulation, cognition, and mental stability—effects that are especially amplified in individuals with intellectual or developmental disabilities, who often lack the adaptive skills to buffer against such consequences.

Taylor *et al*. [8] note that students with intellectual disabilities are at higher risk for emotional dysregulation, anxiety, and depression, and substance use can exacerbate these vulnerabilities. The dual burden of cognitive impairment and substance misuse creates a compounded risk for deteriorating psychological health, marked by symptoms such as mood instability, aggression, withdrawal, and reduced coping ability. Further, Tonge *et al*. [25] emphasized that psychopathological symptoms such as depression and anxiety disorders are significantly more prevalent in individuals with intellectual disabilities who engage in substance use. The social marginalization and stigma often faced by this group may push some toward substance use as a coping mechanism, which in turn triggers or worsens psychological dysfunctions.

The result of hypothesis two revealed that there is a significant difference in the psychological implications of drug use between students with intellectual disabilities in Cross River and those in Akwa Ibom State.

The analysis indicates that students with intellectual disabilities in Cross River State experience significantly higher psychological implications related to drug use compared to their peers in Akwa Ibom State. This may suggest regional differences in exposure to drug-related risk factors, availability of support systems, or environmental and social influences. These findings underscore the need for state-specific intervention

strategies and mental health support tailored to the unique needs of students with intellectual disabilities in each location.

This outcome aligns with the broader literature, which underscores those contextual and environmental factors, such as geographical location, urban exposure, access to drugs, and socio-economic conditions, can significantly influence both the prevalence and psychological impact of drug use among students with disabilities [12,13]. Students in Cross River may be exposed to more permissive environments or face greater psychosocial stressors that exacerbate the effects of substance use.

Additionally, Okafor *et al*. [14] noted that drug-related psychological consequences—such as anxiety, depression, social withdrawal, and cognitive impairment—tend to be more pronounced in students with intellectual disabilities when they lack access to supportive academic and counseling services. This may reflect disparities in institutional responses to disability and drug use in the two states.

Furthermore, Eneh *et al*. [15] observed that urban centers like Calabar in Cross River State often report higher incidences of drug use due to increased availability, peer influence, and poor regulatory control. These urban pressures may contribute to the heightened psychological impact on students, especially those with intellectual disabilities who may have limited coping skills or self-regulation mechanisms.

This finding is consistent with Bandura's [17] Social Learning Theory, which emphasizes that behavior is learned through observation and interaction with one's environment. Students with intellectual disabilities in more socially or economically pressured regions may imitate maladaptive behaviors such as drug use more frequently, thereby experiencing more severe psychological consequences. In contrast, if students in Akwa Ibom have stronger family or community-based support systems, more effective school-based interventions, or cultural norms that discourage drug use, the psychological impacts may be less severe, even if usage rates are similar.

In a Nigerian context, Okafor *et al*. [11] found that students with disabilities who engage in drug use are more prone to experience poor self-esteem, low social integration, and heightened emotional problems. These issues compound the psychological burden of disability, indicating a need for targeted mental health interventions.

The result of hypothesis three revealed that peer influence and neighborhood environment are significant predictors of recreational drug use among students with intellectual disabilities, while family background is not. The model explains 31% of the variability in drug use behaviors, implying that environmental and social dynamics play a meaningful role in influencing substance use within this population. These findings emphasize the need for intervention programs that target peer dynamics and community-level factors in order to reduce drug use among students with intellectual disabilities.

This finding underscores the importance of environmental and social factors in shaping behavior among students with intellectual disabilities. This aligns with Kobus [19] and Ezar *et al*. [20], who argue that peer pressure is a powerful determinant of substance use among adolescents, especially those with cognitive or social vulnerabilities. Students with intellectual disabilities often have an increased desire for social acceptance, which may increase their susceptibility to peer-influenced behaviors, including substance experimentation.

This supports Brook *et al*. [22] and Ndifreke *et al*. [23], who emphasized that students residing in environments with high drug availability, weak law enforcement, or prevailing drug cultures are at greater risk of substance misuse. For students with intellectual disabilities, such exposure—combined with limited decision-making capacity—can heighten vulnerability to drug-related behaviors. The significance of peer influence and neighborhood environment reinforces the importance of social context in shaping the behavior of students with intellectual disabilities.

This finding contrasts with earlier studies by Hawkins *et al*. [21] that linked dysfunctional family environments to substance use. One possible explanation is that for students with intellectual disabilities, external influences like peers and the neighborhood may overshadow familial effects, especially in institutional or residential settings where family interaction is limited.

IMPLICATIONS FOR INTELLECTUAL DISABILITY

The study highlights that students with intellectual disabilities (IDs) are particularly vulnerable to the psychological effects of recreational drug use.

- The study underscores the need for caregivers, educators, and mental health professionals to understand that individuals with IDs may not have the cognitive or emotional tools to process the effects of drug use, which can exacerbate existing psychological difficulties such as anxiety, depression, and behavioral disorders.

- The findings suggest that conventional drug education strategies may not be effective for students with intellectual disabilities. There is a pressing need for the development of simplified, context-appropriate, and repetitive educational interventions that explain the dangers of recreational drug use in formats that are accessible and engaging for students with IDs.

- The significant relationship between recreational drug use and psychological well-being found in this study implies that early screening for signs of emotional distress or behavioral issues in students with intellectual disabilities is essential. This could allow for proactive mental health interventions before drug use becomes a coping mechanism.

- The study suggests the importance of school-based psychological support services specifically adapted for students with intellectual disabilities. Trained counselors and special educators should work collaboratively to ensure that these students receive ongoing emotional and behavioral support, which could serve as a protective factor against drug experimentation and misuse.

- The role of peer influence and neighborhood environment as significant predictors of drug use calls for structured social interventions. Programs promoting positive peer relationships, structured after-school activities, and safe community spaces can be critical in helping students with IDs resist negative social pressures and find healthier outlets for social engagement. Though family background may not have shown a strong direct effect in this study, the role of family support in early intervention and monitoring cannot be ignored.

- Families of students with intellectual disabilities should be equipped with the knowledge and resources to identify early signs of drug use and psychological decline and to participate actively in prevention strategies.

- This study provides data that can inform state-level educational and health policies. Ministries of Education and Health in Cross River and Akwa Ibom States, and Nigeria at large, can utilize these findings to implement disability-sensitive substance use prevention programs, invest in special needs mental health services, and enforce regulations that minimize the accessibility of drugs around school environments. The study emphasizes the need for teacher training programs to include modules on substance use awareness and mental health identification specifically for students with intellectual disabilities.

- Equipping special educators with these skills can greatly enhance early detection and intervention efforts. Finally, the study reinforces the need for inclusive public health approaches that recognize and address the unique challenges faced by individuals with intellectual disabilities. This includes ensuring equitable access to mental health care, substance use treatment programs, and ongoing psychological support.

CONCLUSION

The findings revealed a moderate to high prevalence of drug use among students with intellectual disabilities. Substances such as marijuana, codeine, and tramadol were the most commonly reported. There is a significant relationship between recreational drug use and the psychological well-being of students with intellectual disabilities. Students with intellectual disabilities in Cross River State experience significantly higher psychological implications related to drug use compared to their peers in Akwa Ibom State. This may suggest regional differences in exposure to drug-related risk factors, availability of support systems, or environmental and social influences.

The regression analysis reveals that peer influence and neighborhood environment are significant predictors of recreational drug use among students with intellectual disabilities, while family background is not. The findings of this study highlight a disturbing reality: students with intellectual disabilities are at substantial risk of psychological harm due to recreational drug use. Despite their cognitive vulnerabilities, these students are often exposed to environments that fail to provide adequate protection, awareness, and support services. Unless proactive interventions are put in place, drug use among

students with intellectual disabilities may lead to lifelong psychological impairments, academic failure, and social exclusion.

RECOMMENDATIONS

1. Schools and disability support centers should implement peer-mentoring programs, social skills training, and anti-drug clubs that empower students to resist negative peer pressure.

2. Although family background was not a significant predictor in this study, continuous parental involvement, awareness programs, and support groups may still play a preventive role when combined with school and community interventions.

3. The findings call for a multi-sectoral policy approach involving education, health, and social welfare ministries to develop inclusive, data-driven strategies addressing the social dimensions of drug use among persons with disabilities.

4. State governments should enforce stricter laws against the sale of drugs near school premises and enhance surveillance in high-risk zones.

5. Teachers in inclusive and special education schools should be trained on early detection of drug use and emotional distress.

6. Longitudinal studies should be conducted to track the long-term effects of drug use on learning and social integration among students with disabilities.

7. It is also strongly recommended that secondary schools implement customized drug education programs tailored specifically for students with intellectual disabilities. These programs should use simplified, clear language that matches the cognitive level of the learners. Incorporate visual aids, such as images, diagrams, and videos, to enhance understanding. Employ interactive methods, such as role-playing, games, and peer-led discussions, to engage students actively. Focus on building life skills related to decision-making, peer resistance, and emotional regulation. Be culturally sensitive and contextually relevant to the Cross River and Akwa Ibom States communities.

CONFLICTING INTERESTS

In this study, the authors declare that there is no conflicting interest, so the publishers can proceed with publishing the paper.

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REFERENCES

[1] Degenhardt L, Stockings E, Patton G, Hall WD, Lynskey M. The increasing global health priority of substance use in young people. Lancet Psychiatry 2016; 3(3): 251-64. https://doi.org/10.1016/S2215-0366(15)00508-8

[2] United Nations Office on Drugs and Crime (UNODC). World Drug Report 2022. Vienna: UNODC 2022.

[3] Eze JU, Omeje JC. Drug abuse and psychological well-being of adolescents with special needs in South-East Nigeria. Niger J Educ Psychol 2021; 19(2): 73-85.

[4] Young S, Moss D, Sedgwick O, Fridman M, Hodgkins P. A meta-analysis of the prevalence of substance use among people with intellectual disabilities. J Intellect Disabil Res 2020; 64(3): 187-203.

[5] American Association on Intellectual and Developmental Disabilities (AAIDD). Definition of intellectual disability [Internet] 2021 [cited 2025 Jun 11]. Available from: https://www.aaidd.org/intellectual-disability/definition

[6] Obiakor FE, Offor MT. Special education in Nigeria: An overview. Eur J Spec Needs Educ 2011; 26(2): 239-52. https://doi.org/10.1080/08856257.2011.563604

[7] National Institute on Drug Abuse (NIDA). Substance use and people with intellectual and developmental disabilities [Internet]. U.S. Department of Health and Human Services; 2020 [cited 2025 Jun 11]. Available from: https://www.drugabuse.gov/publications/research-reports/substance-use-people-intellectual-developmental-disabilities

[8] Taylor LA, Novak A, Lee T. Substance abuse and mental health in students with learning disabilities. J Dev Disabil 2021; 17(1): 33-42.

[9] Onu VC, Opara IM. Influence of socio-environmental factors on substance use among students with special needs in Nigeria. Int J Spec Incl Educ 2022; 5(2): 85-97.

[10] Khantzian EJ. The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. Harv Rev Psychiatry 1997; 4(5): 231-44. https://doi.org/10.3109/10673229709030550

[11] Okafor CU, Olakunle OT. Drug abuse and the academic performance of physically challenged students in selected special schools in Nigeria. Int J Spec Educ 2020; 30(1): 95-104.

[12] Onongha GI. The influence of psychosocial factors on drug abuse among university students in Nigeria. Afr Res Rev 2022; 6(3): 162-74.

[13] Adegoke AA, Adetoro RA. Substance use and psychological health among Nigerian adolescents. J Psychol Ment Health 2017; 6(2): 15-23.

[14] Okafor CN, Okorie U. Psychosocial challenges of students with disabilities in Nigerian tertiary institutions. Int J Spec Educ 2020; 35(1): 43-55.

[15] Eneh AU, Stanley PC. Urban influences on drug use among secondary school students in South-South Nigeria. Niger J Clin Pract 2019; 22(4): 510-5.

[16] Wehmeyer ML, Shogren KA, Singh NN, Shogren KA. Self-determination and self-advocacy: Promoting strength-based approaches for individuals with intellectual and developmental disabilities. Springer 2017.

[17] Bandura A. Social learning theory. Englewood Cliffs, NJ: Prentice Hall 1977.

[18] Adeniyi OV, Adebayo AM, Omotosho IK. Access to psychosocial and therapeutic interventions for students with special needs in Nigerian public schools. Niger J Educ Res Eval 2020; 19(1): 102-15.

[19] Kobus K. Peers and adolescent smoking. Addiction 2023; 98(Suppl 1): 37-55. https://doi.org/10.1046/j.1360-0443.98.s1.4.x

[20] Ezar CE, Emeka MJ. Peer pressure and substance abuse among Nigerian adolescents. Afr J Soc Issues 2020; 27(1): 59-74.

[21] Hawkins JD, Catalano RF, Miller JY. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood. Psychol Bull 1992; 112(1): 64-105. https://doi.org/10.1037/0033-2909.112.1.64

[22] Brook JS, Morojele NK, Brook DW, Rosenberg G. Predictors of drug use among South African adolescents. J Adolesc Health 2021; 28(6): 420-7.

[23] Ndifreke AO, Asuquo OE. Drug use and neighborhood influence among secondary school students in South-South Nigeria. J Psychol Behav Sci 2018; 6(1): 13-22.

[24] Bronfenbrenner U. The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press 1979. https://doi.org/10.4159/9780674028845

[25] Tonge BJ, Einfeld SL. Psychopathology and intellectual disability: The challenge of dual diagnosis. Cambridge: Cambridge University Press 2023.

[26] White N, Hastings RP. Social and professional support for parents of adolescents with severe intellectual disabilities. J Appl Res Intellect Disabil 2004; 17(3): 181-90. https://doi.org/10.1111/j.1468-3148.2004.00197.x

[27] Livneh H, Antonak RF. Psychosocial adaptation to chronic illness and disability: A primer for counselors. J Couns Dev 2025; 83(1): 12-20. https://doi.org/10.1002/j.1556-6678.2005.tb00575.x

[28] Matson JL, Dempsey T, Fodstad J. The effect of psychotropic medication on adaptive behavior in individuals with intellectual disabilities. Res Dev Disabil 2019; 30(6): 1305-11.

[29] Wehmeyer ML, Agran M, Hughes C. Teaching self-determination to students with disabilities: Basic skills for successful transition. Baltimore, MD: Paul H. Brookes Publishing Co. 2003.

[30] Shogren KA, Wehmeyer ML, Palmer SB, Rifenbark GG. Relationship between self-determination and postschool outcomes for youth with disabilities. J Spec Educ 2015; 48(4): 256-67. https://doi.org/10.1177/0022466913489733

[31] Kyzar KB, Turnbull AP, Summers JA, Gomez VA. The relationship of family support to family outcomes: A synthesis of key findings from research on severe disability. Res Pract Pers Severe Disabil 2012; 37(1): 31-44. https://doi.org/10.2511/027494812800903247

[32] Taanila A, Syrjala L, Moilanen I. The impact of family structure on child behavior and school performance. Child Care Health Dev 2025; 31(5): 567-75.

[33] Emerson E, Hatton C. Mental health of children and adolescents with intellectual disabilities in Britain. Br J Psychiatry 2007; 191(6): 493-9. https://doi.org/10.1192/bjp.bp.107.038729

[34] McGillicuddy NB. A review of substance use research among people with mild and borderline intellectual disabilities. J Policy Pract Intellect Disabil 2006; 3(1): 25-30.

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