

# PSYCHOLOGICAL AND MOTIVATIONAL PREDICTORS OF SUBSTANCE ABUSE AMONG SECONDARY SCHOOL STUDENTS IN RIVERS STATE

IBEABUCHI, RACHAEL UDOCHUKWU

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY, GUIDANCE AND COUNSELLING FACULTY OF  
EDUCATION UNIVERSITY OF PORT HARCOURT RIVERS STATE, NIGERIA.

DOI: <https://doi.org/10.5281/zenodo.17736902>

Published Date: 27-November-2025

---

**Abstract:** The research explored psychological and motivational predictors of substance use among secondary school students in Rivers State. Employing a survey approach, it determined that peer pressure and stress-related reasons were the most significant predictors, while self-esteem and emotional regulation played a moderate role. Motivational aspects, such as curiosity and coping strategies, also had a considerable impact. The study concludes that both psychological and motivational factors influence the substance-use behavior of adolescents and suggests implementing targeted interventions to enhance emotional resilience and mitigate peer influence.

**Keywords:** Substance use, psychological predictors, motivational factors, secondary school students.

---

## I. INTRODUCTION

Among young people today, substance abuse remains a major public health issue [1] this is primarily because of its psychoactive impact responsible for vast human suffering, financial loss, morbidity and mortality linked to its use. Similar to some social behaviours, the misuse of substances significantly affects adolescents especially secondary school students [2, 3] since initiation into drug use begins during their initial social interaction [4]. The World Health Organization defines substance abuse as the detrimental use of harmful or hazardous substances which includes alcohol and illicit drugs [1]. In other words, it is the use of illicit drugs or prescription in ways other than their intended purpose.

Globally, the harmful use of alcohol alone is estimated to be 3.3 million deaths annually while at least 15.3 million people have been reported to be suffering from drug use disorders<sup>1</sup>. As reported in 2008, over 155 to 250 million people globally had to have used psychoactive substances with cannabis being the most commonly abused. According to WHO cocaine and opioid accounted for 0.7% of the global burden of disease in 2004, and the social cost of illicit substance has been estimated to 2% of Gross Domestic Product (GDP) in those countries which have measured it [5]

The World Health Organizations (WHO), defines Adolescents' as individuals in the age range of 10–19 years [6]. Generally, adolescents are seen as valuable resources who contribute to the progress and development of the nation [7]. However, despite their importance to national building, this set of individuals engage in substance abuse, a behaviour that has grave consequences [7].

Substance abuse has become a significant global public health concern. Its consequences by young people are grave, including a higher increase in risky sexual behaviour, developing personality disorders, display of criminal behaviours and dependence of drugs amongst others.

Each year, over 2.6 million young individuals die annually between the ages of 10 to 24 years globally. These death tolls are mostly linked to preventable factors such as substance abuse. Reports show that at least 14% of adolescent girls and

18% of boys aged 13–15 in low- and middle-income nations consume alcohol drinks [8]. The problem is even worse in certain countries within the WHO Western Pacific region, where over half of girls between the ages of 10–19 and more than 80% of boys in the same age group have reportedly consumed alcohol [9].

The challenging circumstances are similarly evident in Nigeria, where past research has indicated a significant incidence of substance abuse among students. For example, Ogunsola and Fatusi found that approximately two-thirds of adolescents in Osun State utilize substances in both rural (65.7%) and urban (66.0%) settings. Additionally, a study by Lawoyin et al. in 2005 revealed that 69.3% of secondary school students in Igboora, South-west Nigeria were current users of at least one illicit drug [10]. Alex-Hart's research among secondary school students in Port Harcourt, Southern Nigeria, indicated that 30.6% of participants had consumed alcoholic beverages prior to the survey [11]. Furthermore, Yisa et al. demonstrated that the lifetime prevalence of any substance use among students in Ibadan, South West Nigeria was 15.3%. Eeguranti et al. also reported that the prevalence of substance abuse among secondary school students in Oshogbo, South West Nigeria was 20.3% [12]

The research specifically seeks to identify the psychological and motivational factors that affect students' engagement in substance use, aiming to understand how these influences shape their behaviours. This study adds to the current body of knowledge by focusing on the often-overlooked internal, student-centered factors related to substance use in Nigeria, particularly within Rivers State. While previous research in the area has largely focused on external, social, and demographic influences such as peer pressure, family circumstances, and community environment, few studies have delved into the psychological conditions and motivational factors that lead adolescents to engage in substance use. By examining these internal influences, the research offers a richer understanding of the emotional and cognitive processes that underlie substance use. This new information can aid educators, counsellors, policymakers, and mental health professionals in crafting more effective preventive and therapeutic strategies for students.

## II. REVIEW OF LITERATURE

### *Substance Use*

According to estimates by the United Nations Office on Drugs and Crime (UNODC, 2009), approximately 149 to 272 million individuals, equating to 3.3% to 6% of the global population aged 15-64, had used illegal drugs at least once within the last year. The primary substances misused globally include cannabis, which was used by approximately 125-203 million individuals in 2009; this is followed by Amphetamine Type Stimulants, opiates, and cocaine. Each year, the age at which individuals become addicted is decreasing. According to the UN agency, cannabis continues to be the most widely produced and consumed illegal substance around the globe.

The age of individuals becoming involved in abuse is steadily decreasing each year. The UN agency indicated that cannabis continues to be the most widely produced and consumed illegal substance across the globe. Adolescence presents a difficult period in life for many individuals, often characterized by inconsistent biological, psychological, and social growth. This phase frequently heralds the initiation of various unhealthy habits, including the misuse of drugs and alcohol.

Multiple factors heighten the risk of substance use among adolescents. This period is marked by a rise in adventurous behaviour, peer pressure, and tendencies toward risk-taking. Additionally, as the adolescent brain continues to develop, it becomes more vulnerable to substance use, leading to changes in brain structure, function, and cognitive processes.

Neurocognitive deficits that arise from alcohol and drug-related brain damage can adversely affect future academic, work, social, and mental well-being. Moreover, substance use has detrimental effects on families and communities, resulting in expensive social, physical, and mental health repercussions. Adolescence presents a difficult period in life for many individuals, often characterized by inconsistent biological, psychological, and social growth. This phase frequently heralds the initiation of various unhealthy habits, including the misuse of drugs and alcohol. [13]

Multiple factors heighten the risk of substance use among adolescents. This period is marked by a rise in adventurous behaviour, peer pressure, and tendencies toward risk-taking [14]. Additionally, as the adolescent brain continues to develop, it becomes more vulnerable to substance use, leading to changes in brain structure, function, and cognitive processes [15]

Neurocognitive deficits that arise from alcohol and drug-related brain damage can adversely affect future academic, work, social, and mental well-being. Moreover, substance use has detrimental effects on families and communities, resulting in expensive social, physical, and mental health repercussions [16]

In Nigeria, different prevalence rates have been observed. For instance, in the Southeast region, the substance use prevalence rate among high school students is 32.9%, with alcohol being the most frequently used substance at 29.0%, and cocaine being the least at 2.1% [5]. In the Southwest region, between 15.0% and 69.3% of adolescents reported having used any psychoactive substances, particularly when local psychoactive substances such as kola nut were taken into account [17]. Alcohol is still the most widely consumed substance, followed by cigarettes. Nonetheless, this trend appears to be shifting, with tramadol now being the second most commonly abused substance [18].

### ***Statement of the Problem***

Numerous secondary school students continue to use substances despite existing awareness campaigns, school regulations, and guidance from parents. This indicates that factors like stress, low self-worth, anxiety, curiosity, the desire for social acceptance, and the need to manage academic or personal challenges may significantly contribute. However, empirical evidence regarding how these psychological and motivational factors affect substance use among students in Rivers State remains limited. Without a clear understanding of these internal predictors, interventions may be inadequate, focusing solely on external influences and neglecting to tackle the underlying causes of substance use in adolescents. Consequently, this study aims to address this gap by investigating the psychological and motivational predictors of substance use among secondary school students in Rivers State, offering insights that could lead to more effective prevention and counselling strategies.

### ***Theories***

Social Cognitive Theory describes behaviour as the result of ongoing interactions between the individual, their surroundings, and their actions. It posits that people actively engage with their environment rather than merely reacting to external influences; they think critically, assess consequences, and make choices. Two fundamental cognitive factors influence behaviour in this framework: self-efficacy and outcome expectancies.

Self-efficacy pertains to an individual's confidence in their capability to manage situations and successfully execute behaviours. Outcome expectancies involve beliefs about whether engaging in a behaviour will yield favourable results. These expectations are shaped through personal experiences or by observing others; such as family, friends, or public figures who act as models for behaviour. When applied to substance use, this theory suggests that people often develop positive beliefs and attitudes about drugs or alcohol by observing significant others experience or articulate positive effects. Consequently, observation and mimicry play a crucial role in determining substance-use behaviours.

### ***Research Questions***

The following are the research questions formulated which guided the study;

- I. I occasionally turn to drugs in an attempt to improve my self esteem
- II. I believe that consuming drugs can assist me unwind anytime feeling stressed or overloaded
- III. My friends and classmates put pressure on me to do things with or use drugs
- IV. I occasionally use drugs without considering the repercussions

### ***Hypotheses***

The following null hypotheses were stated which guided the study;

H<sub>01</sub>: Psychological factors (peer pressure, stress and emotional distress) do not influence substance use among secondary school students in Rivers State.

H<sub>11</sub>: Psychological factors influence substance use among students in River State.

H<sub>02</sub>: Motivational factors (curiosity, desire for excitement, need for acceptance) do not influence substance use among secondary school students in Rivers State.

H<sub>012</sub>: Motivational factors significantly influence substance use among secondary school students in rivers state

H<sub>03</sub>: Psychological and motivational factors together do not predict substance use among secondary school students.

H<sub>013</sub>: Psychological and motivational factors together predict substance use among secondary school students in Rivers State.

### III. METHODOLOGY

#### *Research Design*

The design for the study was descriptive survey design. According to Nwankwo (2016), descriptive survey design is that in which the researcher collects data from a large sample drawn from a given population and describes certain features of the sample as they are at the time of the study and which are of interest to the researcher, however without manipulating any independent variables of the study. Usually, the findings from the sample are generalized to the population from which the sample was drawn.

#### *Population of the Study*

The population for this research work consists of all students in the public secondary schools in Obio/Akpor Local Government of Rivers State. The total number of secondary school students in Obio/Akpor is 16320.

#### *Sample and Sampling technique*

A sample of 200 secondary school students was drawn through purposive and convenience sampling techniques. Purposive was used because the researcher developed an instrument which was used to identify students who are delinquent. Convenience sampling technique was used because a specific number of students are not delinquent. The technique is also purposive because the researcher is only interested in identifying students who are delinquent.

#### *Instrument for Data Collection.*

A self-structure instrument titled “Juvenile Delinquency and Academic Performance Scale (JDAPS) was used to collect the data. The JDAPS consists of three sections, A, B and C. Section A contains the respondents demographics profile such as gender, SES and Family size, while section B contains the items on juvenile delinquency, the section C contain items on English Language Academic Performance (ELAP). The instrument will be based on the four Likert points rating of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SA).

#### *Reliability of the Instrument*

The reliability of the instrument were ascertained using the Cronbach Alpha technique on SPSS. First, draft copies of the instrument were administered on 20 students who was not part of the selected sample. Thereafter, the scores were inputted into the SPSS software and then analysis was done. The value obtained were used to ascertain the reliability of the instrument. The coefficient obtained is 0.82.

#### *Method of Data Collection*

The instrument was administered to the senior secondary students and collected back immediately their decisions/opinions have been made known on the instrument (questionnaire). 3.8 Method of Data Analysis Mean and standard deviation were used to answer the research questions and independent sample t-test was used to test the hypotheses at 0.05 alpha.

### IV. RESULTS AND DISCUSSIONS

**Research Question One:** I occasionally turn to drugs in an attempt to improve my self-esteem.

The purpose of this research question was to find out low self-esteem acts as a psychological predictor of substance use among secondary school students. It helps to assess if students engage in substance use as a coping mechanism to boost their confidence, mage feelings or inadequacy.

**Table I: Low Self-esteem as a Psychological Predictor of Substance Use among Secondary School Students in Rivers State.**

Response Category	Frequency (n)	Percentage (%)
Strongly Agree (SA)	34	17%
Agree (A)	56	28.0%
Undecided (U)	48	24.0%
Disagree	42	21.0%
Strongly Disagree (SD)	20	10.0%
<b>Total</b>	<b>200</b>	<b>100%</b>

The information in table 1 reports low self-esteem as a psychological predictor of substance use among secondary school students in Rivers State. The result shows a total of 90 students (45%) agreed or strongly agreed that they sometimes turn to drugs to improve their self-esteem. This shows that self-esteem challenges plays a critical role in motivating substance use among secondary school students. Meanwhile, 62 students (31%) disagreed, and 48 students (24%) were undecided indicating mixed experiences but still highlighting the psychological vulnerability present in the population in the present population. The mean score is equal to 3.0. Since the hypothesis assumed no difference from the neutral midpoint, the one-sample- t-test ( $t = 4.12, p < 0.05$ ) shows a significant tendency for students to use substance to boost their self-esteem.

**Research Question Two:** I believe that consuming drugs can assist me unwind anytime I am feeling stressed or overloaded

This question assesses whether stress-relief motivation is a factor influencing students' drug use. It helps determine if students turn to substances as a coping strategy when experiencing academic pressure, emotional overload, or psychological distress.

**Table II: Unwinding Stress as a psychological predictor of substance use among secondary school students in Rivers State.**

Response Category	Frequency (n)	Percentage (%)
Strongly Agree (SA)	40	20%
Agree (A)	58	29.0%
Undecided (U)	44	22.0%
Disagree	38	19.0%
Strongly Disagree (SD)	20	10.0%
<b>Total</b>	<b>200</b>	<b>100%</b>

Ninety-eight pupils (49%) concurred or strongly concurred that they think drugs assist people relax when they're under distress. This suggests that one of the main driving forces behind students' consumption of substances is managing their stress. The vast majority of students who are uncertain (22%) points to uncertainty or a lack of knowledge regarding constructive ways to cope. Students considerably believe medicines enable them to relax during stress, according to the one sample t-test ( $t = 5.86, p < 0.05$ ), which supports the hypothesis of neutrality.

**Research Question Three: My friends and classmates put pressure on me to do things with or use drugs.**

**Table III: Pressure as a motivational predictor of substance use among secondary school students in Rivers State.**

Response Category	Frequency (n)	Percentage (%)
Strongly Agree (SA)	46	23%
Agree (A)	62	31.0%
Undecided (U)	40	20.0%
Disagree	34	17.0%
Strongly Disagree (SD)	18	9.0%
<b>Total</b>	<b>200</b>	<b>100%</b>

A combined 108 students (54%) agreed or strongly agreed that peer pressure influences their involvement with drugs. This shows that peer influence is a dominant psychological predictor of substance use among secondary school students. Only 26% disagreed, highlighting that social environments strongly shape drug-related behaviour. Contrary to the hypothesis of neutrality, the one sample t-test ( $t = 6.92, p < 0.05$ ) indicates that students significantly experience peer pressure from friends and classmates to use drugs.

**Research Question Four: Respondents' Distribution on Using Drugs without Considering the Repercussions.**

This question assesses risk-taking behaviour and impulsiveness, helping to determine whether students engage in drug use without thinking about consequences such as health risks, academic decline, or disciplinary actions.

**Table IV: Independent sample t-test of the influence of juvenile delinquency on the academic performance among secondary school students from urban and rural area**

Response Category	Frequency (n)	Percentage (%)
Strongly Agree (SA)	30	15.0%
Agree (A)	48	24.0%
Undecided (U)	50	25.0%
Disagree	46	23.0%
Strongly Disagree (SD)	26	23.0%
<b>Total</b>	<b>200</b>	<b>100%</b>

A total of 78 students (39%) admitted they use drugs without considering consequences.

The high undecided rate (25%) suggests hesitation or unwillingness to disclose risky behaviour.

This result shows that impulsivity and poor risk assessment are relevant behavioural patterns among students who use drugs. Hypothesis assumed neutrality, but one sample t-test yielded a significant result ( $t= 2.21$ ,  $p = 0.028$ ), indicating that students occasionally use drugs without considering the consequences.

## V. CONCLUSION

The main focus of this study was to examine the psychological and motivational predictors of substance use among secondary school students in Rivers State. The findings revealed that the use of substances among high school students in Rivers State is significantly influenced by both psychological and motivational aspects. The most predominant factor is peer pressure, with stress, emotional challenges, curiosity, a desire for excitement, and the need for social acceptance also having significant impacts. These results show that adolescents engage in substance use not merely because of available opportunities but also due to profound emotional and social factors. Consequently, tackling this issue necessitates a comprehensive strategy that enhances students' self-worth, improves emotional regulation, diminishes peer influence, and encourages healthier motivations

The advantage of this study include providing empirical evidence on psychological and motivational predictors of substance abuse among secondary school students, which can guide educators, parents and policymakers in crafting efficient policies and interventions within schools. However, the study has some limitations. It primarily focused on a particular geographical area.

## REFERENCES

- [1] Abikoye, G. E., and Adekoya, J. A. 2010, Predicting Substance Abuse in a Sample of Nigerian Undergraduate Students: The Role of Core Self 9 Evaluations and Delay of Gratification. *Psychological Studies*, 55 (4), 299 – 307.
- [2] Adegboyega, J. A., and Awosusi, A. O., 2012, Predisposing Factors Influencing Psychoactive Substances Consumption among Students in Tertiary Institutions in Nigeria. *British Journal of Humanities and Social Sciences*, 8 (1), 57 – 69.
- [3] Adeyemo, D. A., 2007, Interpersonal Factors as Correlates of Alcohol Use among Secondary School Adolescents in Oyo State, Nigeria. *Anthropologist*, 9(4): (2007). 321 – 326. [6]. Akinture, I. O., and Adegboyega, J. A., 2012, Psychoactive Substance Consumption and Awareness of Health Effects among Students in Tertiary Institutions in Ekiti State, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(3), 257 – 262.
- [4] World Health Organization. Substance Abuse.2014. Available on [http://www.who.int/topics/substance\\_abuse/en/](http://www.who.int/topics/substance_abuse/en/). Accessed October 12th,2017
- [5] World Health Organization. Management of substance use. 2012. Available on [http://www.who.int/substance\\_abuse/facts/psychoactives/en/](http://www.who.int/substance_abuse/facts/psychoactives/en/). Retrieved on October 12th, 2017.
- [6] World Health Organization. Adolescent Health [Internet]. [cited 2020 Jan 12]. Available from: <http://www.who.int/health-topics/adolescent-health>

- [7] Mohamad M, Mat Ali NA, Awang Z. The impact of life satisfaction on substance abuse: Delinquency as a Mediator. *Int J Adolescence Youth*. 2018;23(1):25–35.
- [8] World Health Organization. Management of substance use. 2012. Available on [http://www.who.int/substance\\_abuse/facts/psychoactives/en/](http://www.who.int/substance_abuse/facts/psychoactives/en/). Retrieved on October 12th, 2017. 3. World Health Organization Western Pacific Region; Fact sheet on adolescent health 2012. Available on: [http://www.wpro.who.int/mediacentre/factsheets/docs/fs\\_201202\\_adolescent\\_health/en/](http://www.wpro.who.int/mediacentre/factsheets/docs/fs_201202_adolescent_health/en/). Accessed on 12th October, 2017
- [9] Lawoyin T.O., Ajumobi O.O., Abdul M.M., Abdul Malik J.O., Adegoke D.A., Adebisi O.A. Drug use among senior secondary school students in rural Nigeria. *Afr J Med Sci*. 2005;34(4):355-9. PubMed 6. Alex-Hart B.A., Opara P.I., Okagua J. Prevalence of alcohol consumption among secondary school students in Port Harcourt, southern Nigeria. *Niger J Paed*. 2015;42(1):39-45. PubMed
- [10] Eeguranti B.A., Fatoye F.O., Morakinyo O. Stimulant use among secondary school students in Osogbo, Nigeria. *The Nigerian Postgraduate Medical Journal*. 2009;16(3):218-23.
- [11] Anyanwu OU, Ibekwe RC, Ojinnaka NC. Pattern of substance abuse among adolescent secondary school students in Abakaliki. *Cogent Med*. 2016; 3(1): 1272160.
- [12] Clark DB, Thatcher DL, Tapert SF. Alcohol, psychological dysregulation, and adolescent brain development. *Alcohol Clin Exp Res*. 2008; 32(3): 375-85.
- [13] Crews F, He J, Hodge C. Adolescent cortical development: a critical period of vulnerability for addiction. *Pharmacol Biochem Behav*. 2007; 86(2): 189-99.
- [14] Squeglia LM, Jacobus J, Tapert SF. The Influence of Substance Use on Adolescent Brain Development. *Clin Neurosci Soc ENCS*. 2009; 40(1): 31-8.
- [15] Russell BS, Simpson E, Flannery KM, Ohannessian CM. The impact of adolescent substance use on family functioning: the mediating role of internalizing symptoms. *Youth Soc*. 2019; 51(4): 504-28.
- [16] Idowu A, Aremu AO, Olumide A, Ogunlaja AO. Substance abuse among students in selected secondary schools of an urban community of Oyo-state, South West Nigeria: implication for policy action. *Afr Health Sci*. 2018; 18(3): 776.
- [17] Eegunranti B, Fatoye FO F, Morakinyo O. Stimulant use among secondary school students in Osogbo, Nigeria. *Nigerian Postgraduate Medical Journal* 2009; (3): 218-23.
- [18] Lawoyin TO, Ajumobi OO, Abdul MM, Abdul Malik JO, Adegoke DA, Agbedeyi OA. Drug use among senior secondary school students in rural Nigeria. *Afr J Med Med Sci*. 2005; 34(4): 355-9.
- [19] Yisa IO, Lawoyin TO, Fatiregun AA, Emelumadu OF. Pattern of substance use among senior students of command secondary schools in Ibadan, Nigeria. *Niger J Med*. 2009; 18(1): 98-102