# SUBSTANCE ABUSE AS A PREDICTOR OF VIOLENT TENDENCIES AMONG UNIVERSITY UNDERGRADUATES IN SOUTHWESTERN NIGERIA

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## ABSTRACT

Violence among university students is a growing social concern with significant psychological, academic, and societal implications. This study examined substance abuse as a predictor of violence tendencies among undergraduates in Southwestern Nigeria, with a focus on Federal University Oye-Ekiti (FUOYE), Federal University of Technology Akure (FUTA), and Federal University of Agriculture, Abeokuta (FUNAAB). The ex post facto research design was employed in study which involves a sample of 300 undergraduate students, selected using a multistage sampling technique across

the three universities. Data were collected using a structured questionnaire, including the DAST-10 for substance abuse and the Buss-Perry Aggression Questionnaire for violence tendency. Descriptive statistics, independent t-tests, and regression analyses were employed to test the hypotheses at a 0.05 significance level. Result revealed a significant gender in violence tendency among undergraduates, with female students reporting higher violence tendency than male students ($t(298) = -2.41$, $p < .05$). Substance abuse significantly predicted violence tendency ($\beta = .44$, $t = 8.36$, $p < .05$), accounting for 19% of the variance ($R^2 = .19$). Furthermore, gender and substance abuse jointly and significantly predicted violence tendency, explaining 22% of the variance in violent tendencies among undergraduates ($R^2 = .22$, $F(3,296) = 27.82$, $p < .05$). This shows the multidimensional interplay of demographic and behavioural factors in shaping violence tendencies among undergraduates. The study contributes context-specific evidence to the growing literature on university violence, emphasizing the importance of integrating substance abuse prevention, gender-sensitive interventions, and psychosocial support in campus safety strategies.

**Keyword:** violent tendencies, substance abuse, undergraduates, violence, aggression

## INTRODUCTION

The issue of violence is arguably one of the most persistent and complex social problems facing humanity in the twenty-first century. The implications of violence are far-reaching and have profound effects on public health and social stability and development. Violence is expressed in a variety of forms and is a major concern for the safety and well-being of individuals across diverse contexts. The term 'violence', according to the World Health Organization (WHO, 2002), is described as the intentional use of physical force or power, threatened or actual, against a person or group of persons or oneself, which results in or has a high likelihood of resulting in injury, death, psychological harm, or deprivation. It shows that there is a clear expression of the multidimensional nature of violence, which includes both physical and psychological components.

Violence is often related to the concept of aggression and anger, which is often the antecedent to violent behaviour. A violent tendency is the inclination or predisposition of an individual to commit acts of aggression when provoked or in certain circumstances. This is shaped by an array of internal predispositions as well as external environmental influences. Studies have shown that people with high violence tendencies are more inclined to conduct acts that threaten interpersonal relationships and academic environments, as well as societal harmony (Haskan & Yıldırım, 2012). Among university undergraduates, violence tendency can be manifested through physical altercations, bullying, and cult activities, as well as other forms of antisocial behaviour, hence creating a serious menace to the safety as

well as academic productivity of the student population. Violence within the context of this study is therefore described as a physical and behavioural expression of aggression and includes acts such as hitting, injuring, or inflicting harm on others.

Apart from its social and psychological effects, violence is a major economic drain in the world. The economic implications of dealing with healthcare, law, and other social services in relation to acts of violence are tremendous. Statistics show that these economic implications are many times higher than what is needed to implement measures of preventing and controlling acts of violence (WHO, 2022; CARE, 2018). The current statistics on the economic impact of violence, according to the Global Peace Index (2023), show that there is a decline in peacefulness in the world, and the economic impact is measured in trillions of dollars. This has led to the consideration of the aspect of preventing violence in global development, where the Sustainable Development Goals (SDGs) include a peaceful and inclusive society.

Violence is caused by a combination of several factors which results from a process where the individual's biology, psychology, and environment work together in some way. This process can be best explained using the social ecological model of violence, which indicates that "violence is a product of interactions of influences at different levels – individual, relationship, community, and societal" (Krug et al., 2003).

Within this framework, substance abuse has been identified as a critical behavioural risk factor that significantly increases the likelihood of violent outcomes. 'Substance abuse' refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs, which alter cognitive functioning, impair judgement, and reduce behavioural inhibition (NIDA, 2017).

One of the social issues related to substance abuse is particularly widespread among university students due to their high level of autonomy, peer effects, and exposure to new social environments. The use of substances such as alcohol, cannabis, opioids, and stimulants has been associated with a broad range of negative consequences. From a behavioural viewpoint, the psychopharmacological effects of these substances can enable violent behaviours due to effects such as disinhibition, cognitive impairments, and impulsivity (Collins, 2017; Fagan, 2018). Furthermore, long-term substance use can cause neurochemical and psychological effects that increase the risk of violence in users.

Substance abuse and violent relationships have been explained using different theoretical models. According to the psychopharmacological model, the direct effects of intoxication can lead to violent behaviour. The economic-compulsive model indicates that people can engage in criminal behaviour to obtain the resources needed to sustain the abuse. According to the systemic model, violence is related to the context in which drug distribution occurs. It is related to the illicit drug markets, which involve the enforcement of the law using violent means (Goldstein, 2018). These models indicate the complex relationship between substance abuse and violent behaviour. It is both direct and indirect.

Empirical studies across different contexts have consistently demonstrated a significant relationship between substance abuse and aggressive or violent behaviour. Research indicates that individuals who abuse psychoactive substances are more likely to engage in violent acts due to the effects of substances on impulsivity, aggression, emotional regulation, and behavioural inhibition (Darke et al., 2010; Deitch et al., 2019; Miczek et al., 1994). Studies have further shown that substance abuse is associated with both reactive and proactive forms of aggression, as well as a cyclical relationship between substance use, aggression, and victimisation (Gázquez et al., 2016; Scoppetta et al., 2025). Within the Nigerian context, evidence points to a growing prevalence of substance abuse among university students, particularly involving alcohol, marijuana, and prescription drugs, with significant associations reported between substance use and antisocial behaviours such as aggression, misconduct, and other deviant behaviours (Aguocha et al., 2021; Olanrewaju et al., 2022; Aroyewun et al., 2023).

Despite these findings, existing studies have largely focused on the prevalence and causes of substance abuse or violence separately, with limited attention given to the predictive relationship between substance abuse and violent tendency, particularly among university undergraduates in Southwestern Nigeria which has hindered the formulation of appropriate intervention strategies to curb violence in Nigeria's university population. In response to these gaps, the current study aims to contribute to the body of knowledge by presenting an analysis on substance abuse as a predictor of violence tendency among university undergraduates in Southwestern Nigeria. The specific objectives are to:

i. evaluate the predictive role of substance abuse on violence tendency and

ii. examine the moderating role of gender on the relationship between substance abuse and violence tendency.

**THEORETICAL FRAMEWORK**

**Social Learning Theory**

As presented by Albert Bandura (1977), the social learning theory has offered a significant perspective on the acquisition of violent behaviour through observational learning. The theory argues that human beings learn by observing others, imitating the behaviour of others, and internalising the consequences of such behaviour, especially when the behaviour is rewarded or not punished. In the context of violence, this theory has offered a new perspective on the acquisition of violence tendencies by replacing the biological perspective with a socially constructed perspective. Various studies have shown that exposure to violent behaviour, whether in the family, among peers, or in the media, has a significant impact on the acquisition of violence tendencies (Chukwuorji et al., 2020).

In relation to substance abuse, Social Learning Theory explains how drug use and associated violent behaviours are often learned within peer networks. University students frequently interact in social groups where substance use may be normalized, reinforced, or even glamorized. Through processes of imitation and reinforcement, individuals may adopt both substance use and aggressive behaviours as acceptable coping or social strategies. Furthermore, the disinhibiting effects of substances such as alcohol and cannabis can facilitate the enactment of previously learned aggressive scripts, thereby strengthening the link between substance abuse and violence tendency. This interaction suggests that substance abuse is not only a behavioural outcome of social learning but also a catalyst that activates learned violent responses under conducive conditions.

Gender differences in violence can also be interpreted through the lens of Social Learning Theory. Societal norms and cultural expectations often shape distinct behavioural patterns for males and females, with males more likely to be socialized into roles emphasizing dominance, assertiveness, and physical strength (Eze & Okonkwo, 2020). These gendered expectations are reinforced through observation of role models and institutional practices, leading to differential expressions of aggression. Additionally, the concept of reciprocal determinism highlights the dynamic interaction between personal factors, behaviour, and environment, suggesting that individuals both influence and are influenced by their social contexts. Consequently, Social Learning Theory provides a comprehensive explanation of how substance abuse, gender norms, and environmental exposure collectively shape violence tendency among undergraduates.

**General Strain Theory**

General Strain Theory (GST) is another theory put forward by Robert Agnew as a different way of viewing deviant and violent behaviours by considering the emotional and psychological processes involved in these behaviours. According to Agnew, individuals undergo a process of strain when they face adverse situations like failure in achieving a desired goal, loss of positive stimuli, and exposure to negative stimuli, which in turn lead to negative emotions like anger and eventually result in violent behaviours (Agnew, 1992). Unlike other theories of strain, which focus on economic strains, GST has a broader scope in considering various types of stressors in modern societies, including academic stress, interpersonal stress, and exposure to violence. These stressors are likely to occur in a university setting.

Substance abuse is also viewed in GST as a maladaptive coping mechanism that is utilised in response to strain. When an individual does not have an adaptive coping mechanism or support from others, substance abuse may be utilised to overcome emotional distress or to escape from a stressful reality. This maladaptive coping mechanism may even lead to an increase in behavioural problems due to the negative influence of substance abuse on an individual's judgement, self-control, and impulsivity, which may lead to violent behaviour. Gender also tends to play a significant moderating role within the GST framework by influencing how individuals perceive and respond to strain. Research suggests that males are more likely to externalize negative emotions such as anger through aggressive or violent actions, whereas females tend to internalize stress, leading to outcomes such as anxiety or depression (Eze et al., 2024). This gender pattern of emotional expression implies that the impact of substance abuse on violence tendency may vary across gender groups.

**Hypotheses**

1. There will be a significant difference in violent tendencies between male and female undergraduates.
2. Substance abuse will significantly predict violent tendencies among undergraduates.
3. Gender and substance abuse will jointly significantly predict violent tendencies among undergraduates.

## METHODS

### Design

This study employed the ex post facto research design. It is considered appropriate for this study because it helps examine the relationships among variables that cannot be manipulated by the researcher. The design allows for the investigation of cause-and-effect associations based on existing conditions, making it particularly suitable for behavioural and social science research. This design is justified both on ethical and practical grounds because it would be inappropriate to experimentally induce substance abuse or violent behaviour among participants (Kerlinger & Lee, 2000).

### Population and Sample

The study was conducted among undergraduate students in three universities in Southwest Nigeria.

A sample of 300 undergraduate students was selected for the study using a multistage sampling technique. The use of multistage sampling was considered appropriate because the target population was geographically dispersed across several universities and academic units, making it difficult to obtain a complete sampling frame of all undergraduates in Southwestern Nigeria.

At the first stage, three federal universities were purposively selected: Federal University Oye-Ekiti (FUOYE), Federal University of Technology, Akure (FUTA), and Federal University of Agriculture, Abeokuta (FUNAAB). These institutions were selected because they are federally owned universities located in different states within Southwestern Nigeria and attract students from diverse socio-cultural, economic, and ethnic backgrounds. Furthermore, the institutions differ in their academic orientation, with FUOYE being a conventional university, FUTA being technology-oriented, and FUNAAB being agriculture-focused. This diversity was considered important in enhancing the representativeness of the sample and increasing the likelihood of capturing variations in substance abuse and violent tendencies among undergraduates.

In the second stage, faculties and departments within each university were selected using simple random sampling. This approach ensured that students from different academic disciplines had an equal chance of being included in the study, thereby reducing selection bias and improving the representativeness of the sample.

In the third stage, participants were recruited from the selected departments using convenience sampling. This method was adopted because it facilitated access to eligible respondents who were

available and willing to participate in the study. A total of 100 undergraduate students were selected from each university, resulting in an overall sample size of 300 participants.

**Instruments**

Data for this study were collected using a structured questionnaire composed of three sections (A–C), designed to measure demographic characteristics, substance abuse, and violence tendency.

*Section A: Demographic Characteristics*

This section captured participants' background information, including age, gender, level of study, relationship status, and religious affiliation. It also included items assessing prior exposure to violence. These variables were used to describe the sample and examine potential interactions with the core study variables.

*Section B: Substance Abuse*

In this study, substance abuse was operationalised as the misuse of psychoactive drugs and was measured using the Drug Abuse Screening Test (DAST-10). Although substance abuse is a broader concept that may include alcohol and tobacco use, the present study focused specifically on drug-related substance use problems as assessed by the DAST-10. The DAST-10 is a standardized 10-item self-report instrument designed to identify drug-related problems (excluding alcohol and tobacco). Each item is scored dichotomously (Yes = 1, No = 0), yielding a total score ranging from 0 to 10. Higher scores indicate greater severity of drug-related problems. The DAST-10 has demonstrated strong psychometric properties, with reported Cronbach's alpha coefficients ranging between 0.86 and 0.92, indicating high internal consistency. It has also shown good constructs validity and reliability across different populations, including university students, making it appropriate for this study.

*Section C: Violence Tendency*

This study operationalised violence as a person's inclination towards being aggressive in his thoughts, emotions, and actions which would raise the probability of his committing violence. Hence, the BPAQ instrument served as the proxy for measuring violent tendency. The BPAQ consists of 29 items measuring four dimensions of aggression: physical aggression, verbal aggression, anger, and hostility. Responses were rated on a 5-point Likert scale ranging from 1 ("Extremely uncharacteristic of me") to 5 ("Extremely characteristic of me"). Total scores were computed by summing item responses, with higher scores indicating greater levels of aggression. The BPAQ has demonstrated strong reliability, with

internal consistency coefficients ranging from 0.72 to 0.89, and has been widely validated in both clinical and non-clinical populations.

**Ethical Considerations**

For this study, strict adherence to the ethical principles of research involving human subjects is ensured. Specifically, the study received ethical approval from the Directorate of Research and Development, Ekiti State University, Ado-Ekiti. The subjects were made aware of the purpose of the research, the objectives, and the procedures. Their consent was sought before the research. The subjects were not forced in any way to participate in the research. They were made aware of the freedom to pull out of the research at any stage. No information that could identify the subjects was sought. The information from the subjects was kept confidential. The variables of the research were sensitive in nature. The variables included substance abuse and exposure to violence. The subjects were made aware that there were neither right nor wrong answers.

**Procedure for Data Collection and Analysis**

Data for this study were collected through the direct administration of questionnaires to undergraduate students in the selected universities. Following the selection of participants through the specified sampling procedures, the researcher visited the various faculties and departments included in the study and approached students in lecture halls, departmental premises, and other designated student gathering areas. The purpose and objectives of the study were clearly explained to the participants, and they were assured of the confidentiality and anonymity of their responses. Participation was entirely voluntary, and informed consent was obtained from each respondent before the questionnaire was administered. Participants were also provided with clear instructions on how to complete the questionnaire and were encouraged to respond honestly to all items.

The questionnaires were administered and collected personally by the researcher to ensure a high response rate and enhance the quality of the data obtained. During the administration process, the researcher remained available to provide clarification on any aspect of the questionnaire that participants found difficult to understand, while ensuring that such clarifications did not influence their responses. Respondents completed the questionnaires individually and returned them immediately after completion. The immediate retrieval of completed questionnaires helped to minimise non-response, reduce the likelihood of missing data, and prevent loss or contamination of the research instruments. In addition,

each questionnaire was checked upon collection to ensure that all relevant sections had been properly completed.

Data collected were coded and analyzed using the IBM SPSS Statistics. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize demographic characteristics and key study variables. Inferential statistical techniques were employed, specifically, simple Linear Regression Analysis was conducted to determine the predictive influence of substance abuse on violence tendency. Moderation Analysis using Multiple Regression was performed to assess the moderating effect of gender on the relationship between substance abuse and violence tendency. All statistical tests were conducted at a 0.05 level of significance, and results were presented using tables, coefficients, and appropriate interpretations to facilitate understanding.

## RESULTS

**Hypothesis 1:** There will be a significant influence of gender on the violence tendency of undergraduates.

**Table 1: Summary of Independent Sample t-test of gender violence tendency undergraduates**

| DV | Gender | N | Mean | Std | df | *t* | *p* |
|---|---|---|---|---|---|---|---|
| **Violence tendency** | Male | 185 | 93.38 | 16.60 | 298 | -2.41 | <.05 |
| | Female | 115 | 98.25 | 17.72 | | | |

Table 2 above revealed that there was a significant gender difference on violence tendency of undergraduates t(298) = -2.41 p<.05). Female participants reported higher violence tendency (Mean = 98.25; SD = 17.72) compared to their male counterparts (Mean = 93.38; SD = 16.60) who reported lower violence tendency of undergraduates. The hypothesis was accepted.

**Hypothesis 2:** Substance abuse will significantly predict violent tendencies among undergraduates.

**Table 2: Simple linear regression showing the influence of substance abuse on the violence tendency of undergraduates**

| Predictor variable | SE | *β* | t | R | $R^2$ | F | *p* |
|---|---|---|---|---|---|---|---|
| (Constant) | 5.091 | | 10.475 | | | | .00 |
| | | | | .436 | .190 | 69.96 | |

| | | | | |
|---|---|---|---|---|
| Substance abuse | .300 | .436 | 8.364 | .00 |

The simple linear regression in Table 3 shows that substance abuse significantly influences the violence tendency of undergraduates (β = .44, t = 8.36, p<.05). The contribution of substance abuse in explaining the variance in the violence tendency of undergraduates was 19% ($R^2$= 0.19), and F(1, 298) = 69.96, p<.00, indicated that the model was significant.) As a result, the hypothesis is therefore accepted.

**Hypothesis 3:** Gender and substance abuse will jointly significantly predict violent tendencies among undergraduates.

**Table 3: Summary of Multiple Regression Table Showing Gender and Substance Abuse jointly Predicting Violent Tendencies Among Undergraduates**

| Predictors | β | t | p | R | $R^2$ | F | P |
|---|---|---|---|---|---|---|---|
| **Gender** | .13 | 2.59 | <.05 | | | | |
| **Substance abuse** | .41 | 7.69 | <.05 | 0.47 | 0.22 | 27.82 | <.05 |

Table 4 shows that there was significant joint prediction of gender and substance abuse on the violence tendency of undergraduates, F(3,296) = 27.82, $R^2$ = 0.22; p<.05]. The $R^2$ =0.22 indicates that the independent variable of gender and substance abuse explained 22% variation in dependent variable. The hypothesis is therefore accepted.

## DISCUSSION

The findings on the influence of gender on violence tendency among undergraduates revealed a significant gender difference, with female students reporting higher violence tendency than their male counterparts. This finding may be attributed to the multidimensional nature of violence tendency as measured in the study. The instrument assessed not only physical aggression but also dimensions of anger, hostility, and verbal aggression which may be more reported by female students. In addition, this study alights with recent studies suggesting that traditional assumptions of higher male aggression may be shifting, particularly in contexts where females are increasingly exposed to environments that normalize or facilitate violent behaviour, such as peer networks and substance use contexts (Otambo et al., 2020; Eze et al., 2024). Also, the university environment may provide opportunities for both genders to express aggression in ways previously constrained by social norms, indicating the importance of examining gender-specific socialization and environmental exposure in understanding violence tendency among undergraduates.

On the predictive role of substance abuse in violence tends to be a tendency. The results of the regression analysis revealed that substance abuse was a significant predictor of violence tendency. It explained 19% of the variance. This is in consonance with other studies on violence tendency globally, including those in Nigeria, which have shown that the use of psychoactive substances such as alcohol, cannabis, and other prescription drugs often leads to poor judgment, disinhibition, and impulsivity, which are all facilitators of violence (Collins, 2017; Fagan, 2018; Deitch et al., 2019; Olanrewaju et al., 2022). The General Strain Theory (GST) situates the use of psychoactive substances in violence tendency among undergraduates in Southwestern Nigeria by showing that substance abuse is a coping mechanism for strains such as academic, social, or personal stresses. Furthermore, it amplifies feelings of aggression such as anger, which often leads to violence (Agnew, 1992).

Lastly, on the joint and predictive effect of gender and substance abuse on violence tendency. The results revealed that gender and substance abuse jointly explained 22% of the variance, with both factors independently contributing significantly. This synergistic effect underscores the interactive influence of demographic and behavioural factors in shaping aggression. Empirical studies suggest that substance use can amplify the influence of learned gendered behaviours on aggression, particularly in environments where peers normalise risky behaviours and exposure to violence is frequent (Eze & Okonkwo, 2020). Social Learning Theory and GST together provide a comprehensive framework for interpreting these results: substance abuse facilitates the enactment of previously learned aggressive scripts, while gender shapes the form and intensity of aggressive responses. This underscores the need for gender-sensitive interventions that address substance abuse and target maladaptive coping mechanisms to reduce violence tendencies in university populations.

## CONCLUSION

This study was an analysis of the multifaceted nature of violence tendency among university students in Southwestern Nigeria, which confirms the significance of gender and substance abuse as predictors of aggressive behaviour. From the findings, it is evident that female respondents exhibited higher levels of violence tendency compared to their male counterparts, which is contrary to the common belief that females are less aggressive compared to males. Furthermore, the significance of substance abuse as a facilitator of aggressive behaviour is evident in this research. By using the social learning theory and the general strain theory as theoretical underpinning of this research, this study provides a comprehensive analysis of the multifaceted nature of violence tendency among university students.

The implications of the above findings are vital for policy and practice in tertiary education settings. Therefore, universities are encouraged to use an integrated approach that focuses on the behavioural as well as the socio-demographic determinants of violence. This includes effective substance abuse prevention programmes and gender-sensitive counselling, as well as the promotion of prosocial peer networks. Furthermore, programmes that help students manage emotions, resolve conflicts, and provide support can help minimise the adverse effects of environmental and social stressors. It is therefore recommended that university officials and health educators, as well as policymakers, work together to develop programmes that help reduce substance abuse and promote prosocial peer influences, as well as provide safe environments. This not only helps reduce the prevalence of violent behaviour among the undergraduate student population but also enhances the productivity of the student population.

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