



**DRUG INVOLVEMENT AMONG UNDERGRADUATE STUDENTS: AGE AND GENDER DIFFERENCES**

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**Abstract**

This study investigated drug use among undergraduate students, with a focus on age and gender disparities. Two research questions and hypotheses guided the study. The study employed a survey research design. A sample of 360 students were selected using multi-stage random sampling technique from a population of 47,233 undergraduate students of Nnamdi Azikiwe University, Awka and Chukwuemeka Odumegwu Ojukwu University, Igbariam campus Anambra State. The instrument for data collection was the adolescent drug involvement scale. Data collected were analyzed using descriptive and inferential statistics. Mean scores were utilized to answer the research questions while t-test was used to test the hypothesis at significant level of 0.05. The result of the findings revealed that there are no significant age differences in undergraduate students' drug involvement and that male undergraduate students are more involved in drug than female. It was recommended among others that there should be the implementation of a gender-sensitive prevention Programmes that will cater for the unique needs and vulnerabilities of the different genders.

**Keywords:** Drug involvement, undergraduate students, age and gender differences

## **Introduction**

Drug involvement among undergraduate students has emerged as a significant concern for educational administrators, the broader society, and public health stakeholders. Students engage in drug use for a variety of reasons, including peer pressure, the need to cope with or escape stress and anxiety, curiosity, and the desire to experiment, among others. Drug is an effective substance in the life of living things, to cure sickness and make life healthy. Despite its beneficial therapeutic purposes, it is being abused by a good number of people especially the youths. They use it illegally and unlawfully, hence the persistent call to address the issue of drug involvement especially among the youth.

Drug involvement refers to the harmful or hazardous use of psychoactive substances including alcohol and illicit drugs. Psychoactive substances use can lead to dependence syndrome, a cluster of behavioural, cognitive and physiological phenomena (WHO, 2014). In other words, the use of psychoactive substances can lead to a strong desire to consume drugs, difficulties in controlling their use, and continued use despite harmful consequences. Moreover, users of psychoactive substances are vulnerable to giving a higher priority to drug use than to other activities and obligation, experience increase tolerance and sometimes a physical withdrawal state (Oshikoya, 2012). Drug involvement and addiction is one of the most serious and rapidly growing phenomena, producing many terrible impacts on health, behaviour, and the country's economy globally (Alebachew, et al 2019). Drug involvement is prevalent across Nigeria's six geopolitical zones. Such drugs include tobacco, Indian hemp, cocaine, morphine, heroine, alcohol, ephedrine, madras, caffeine, glue, barbiturates, and amphetamines (Oshikoya & Ili, 2016).

A report by the United Nations Office on Drug and Crime in Nigeria indicates that 14.4% (14.3 million) of people aged between 15-64 years abuse drugs (UNODC, 2018). The statistical analysis of the findings of a 2015 nationwide survey of 10,609 respondents showed that alcohol is the drug with the highest prevalence rate, whereas cannabis is the most abused illicit drug (Adamson, Ogunlesi, & Morakinyo, 2015). Drug abuse in Nigeria is prevalent across educational levels and reaches down to the secondary school level (Idowu, Aremu, and Olumide 2018). The South-West, a zone of serious concern that comprises Ekiti, Lagos, Ogun, Ondo, Osun and the Oyo States, is reported to have the highest prevalence of drug and substance use (22.4% or 4,382,000 users) especially in Lagos and Oyo state according to a 2018 report by the United Nations Office on Drug and Crime. This zone is followed by the South-South, South-East, North-East, North-West and North-Central zones (UNODC, 2018).

People are involved in drug use irrespective of gender and age. Gender is defined as socially determined roles that vary across cultures and over time (National Institutes of Health, 2017). Males have historically been the subject of a disproportionate amount of study on substance use disorders (SUDs). Men and women differ in a variety of biological, psychological, and social ways, which could have an impact on how SUDs develop, persist, and are, treated (Mincer, 2023). Gender differences in drug involvement in Nigeria reflect the distinct patterns and prevalence. Generally, men in Nigeria exhibit higher rates of drug involvement compared to women. Research on substance misuse among Rwandan teens found that males (67.03%) had higher rates than females (36.92%) (Kanyoni et al. 2015).

According to the National Drug Law Enforcement Agency (NDLEA) (2018), proportionally more men than women have used drugs in Nigeria in the past year - one in four drug users in Nigeria is

a woman. While men are 7 times more likely than women to use cannabis, the gender difference in the non-medical use of pharmaceutical opioids - such as tramadol, codeine, and morphine, tranquilizers and cough syrups containing codeine or dextromethorphan is less pronounced. NDLEA further stressed that men are also more likely than women to be high-risk drug users, including those who inject drugs. In 2016, over 10% of girls and 15% of boys in Sweden were reported using drugs within the previous 12 months (CAN, 2016).

Previous studies showed that men had higher prevalence of Alcohol Use Disorder AUD, Tobacco Use Disorder TUD and Cannabis Use Disorder CUD compared to women at most ages (Grant *et al.*, 2015; Schulte *et al.*, 2009). Prevalence of AUD peaked in the twenties (32% for men at age 25 and 24% for women at age 22) and then decreased steadily by age, with very few men or women reporting AUD past age 75. TUD peaked in the mid-twenties for both men (32% at age 27) and women (23% at age 26); rates then decreased until around age 38, increased until about age 46, and then decreased steadily throughout later midlife and older adulthood. For both men and women, rates of CUD were highest at age 18 (13% men; 7% women), declined steeply through age 30, and then remained at a low rate at the remaining ages. For OUD, rates generally declined with age, but a crossover occurred; men had higher prevalence than women in young adulthood (22–28), and women had higher prevalence than men at older ages (68–77) (National center for biotechnology, 2017). It is worrisome that individuals irrespective of gender and age involve themselves in drug use despite the debilitating consequences it could have on them.

The consequences of drug involvement can be severe and devastating, affecting various aspects of an individual's life, including: physical health, mental health, relationships (Strained relationships with family and friends, social isolation and divorce), career and education (job loss, reduced

productivity and dropout from school), and financially (Kieling et al. 2011). These consequences can vary depending on the individual, the drug(s) being involved in, and the severity of the addiction. Oyakhilome (2010) asserts that the many reasons why youths may engage themselves in drug involvement include peer pressure, curiosity, coping mechanism, pleasure seeking, low self-esteem, and family dynamics. According to Patterson et al. (2014), excessive Drug and alcohol use can result in intoxication, an increased risk of unprotected or unwanted sex, accidents, violence and criminality, self-harm, and suicide. Drug and alcohol use among young people may also be linked to a number of physical, psychological, and social repercussions. Early adolescent drug use can also interfere with the process of maturing into adulthood and hinder the completion of education. It can also raise the risk of family and relationship issues, social exclusion, mental illness, criminality, and more severe substance abuse issues in later life (Becker et al., (2012). It is important to note that these factors can interact with each other in complex ways, and may vary across individuals and contexts. Understanding these factors can help in developing effective prevention and intervention strategies. In the view of these consequences, government has made several efforts to curb the incidence of drug involvement.

In Nigeria, the laws against drug involvement are primarily governed by the National Drug Law Enforcement Agency (NDLEA) Act and the Psychotropic Substances Act. Some key provisions of the laws include the prohibition of the cultivation, production, importation, exportation, and possession of illegal drugs (NDLEA, 2013). Additionally, there are specific laws and regulations governing drug use and possession, including the NDLEA Act which criminalizes the possession, sale, and distribution of illegal drugs, with penalties ranging from 5-20 years imprisonment. The Psychotropic Substances Act regulates the use and possession

of controlled substances. Food and Drugs Act regulates the sale and distribution of food and drugs, including prescription and over-the-counter medications.

Despite the efforts of the various Nigerian tiers of Government and the National Drug Law Enforcement Agency (NDLEA) to stem the tide in the country, there has been a consistent rapid rise in the number of cases of drug involvement especially among young adolescents (10-24 years)(NDLEA, 2013). According to Hasimu, Amasu & Lim (2014), there is an indication that 65 percent of high school students used drugs to have good time, 54 percent wanted to experiment to see what it is like, 20–40 percent used it to alter their moods. In addition to laws and regulations, Nigeria has made other efforts to curb drug involvement which include public awareness campaigns, NDLEA and other organizations also conduct campaigns to educate the public about the dangers of drug involvement. Government and private enterprises provide treatment and rehabilitation services for drug addicts. This programme focusses on preventing drug abuse, providing support for addicts, promoting healthy lifestyles, and collaborating with international organizations. Nigeria works with organizations like the United Nations Office on Drugs and Crime (UNODC) to combat drug trafficking and abuse. National drug law enforcement agency and police receive training to enhance their capacity to combat drug trafficking and related crimes (UNODC, 2018). Drug- demand reduction programs also aim at reducing drug demand. Efforts are made to gather data and conduct research on drug abuse and trafficking in order to form policies, interventions and collaboration with civil society organizations. More so, there are partnerships with NGOs and community support groups to enhance drug prevention, treatment, and rehabilitation exercise. These efforts aim to address drug involvement from multiple angles, including prevention, treatment, enforcement, and community engagement.

Although recent evidence suggests a rising rate of drug involvement in society, there is a lack of specific research focusing on South Eastern universities - particularly Nnamdi Azikiwe University, Awka, and Chukwuemeka Odumegwu Ojukwu University, Igbariam campus - regarding age and gender differences in drug involvement among undergraduate students. This study, therefore, aims to explore these differences.

### **Research Questions**

1. What is the specific age with high rate of drug involvement among undergraduate students?
2. How does gender differences influence undergraduate student drug involvement

### **Purpose**

The primary aim of this study is to investigate the impact of age and gender differences on student drug involvement. Specifically, the study was to:

1. To identify the specific age with high rate of drug involvement among undergraduate students
2. To analyze how gender differences influence undergraduate student drug involvement

### **Hypothesis**

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant gender difference in undergraduate students' drug involvement
2. There is no significant difference in age of undergraduate students' drug involvement

### **Method**

The study employed a survey research design, a sample of 360 students were selected using multi-stage random sampling technique from a population of 47,233 undergraduate students of Nnamdi Azikiwe University, Awka and Chukwuemeka Odumegwu Ojukwu University, Igbariam campus Anambra State to ensure the representation of age and gender differences.

The researcher employed the Cronbach's alpha test of reliability. Cronbach's alpha coefficient measures the internal consistency, or reliability of a set of survey items. Cronbach's alpha quantifies the level of agreement on a standardized 0 to 1 scale. Higher values indicate higher agreement between items. The reliability of the questionnaire was ascertained through pilot testing using 35 undergraduate students randomly selected from Paul University Awka Anambra State which is not part of the universities under study. The reliability coefficient indices for male undergraduate students is 0.989 and 0.755 for female undergraduate students.

The instrument for data collection was an adaptation of the Adolescent Drug Involvement Scale (ADIS) from Moberg & Hahm (1991). It has 13 items but was reduced to 11 items as a result of the expert recommendation during the validation process.

The researcher administered the 360 copies of the questionnaire to the respondents with the help of four research assistants who were adequately briefed on the purpose of the study, method of administration and collection of the instruments. The researcher requested them to distribute, explain and collect the instruments on the spot to avoid loss, misplacement or misunderstanding of the instruments. Data collected were analyzed using descriptive and inferential statistics. Mean scores were utilized to answer the research questions while t-test was used to test the hypotheses at significant level set at 0.05

## **Results**

Table 1: t-Test Analysis of Drug Involvement by Male and Female

Gender	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>Df</i>	Sig. (2-tailed)	Remark
Male	168	3.05	1.30				Significant
Female	142	2.63	1.38	2.741	308	.006	
Total	310	2.86	1.35				



Table 1 shows the t-test analysis of male and female students' involvement in drugs. t-test analysis revealed that male students ( $M = 3.05$ ,  $SD = 1.30$ ) had a significantly higher mean score in drug involvement than their female counterparts ( $M = 2.63$ ,  $SD = 1.38$ ),  $t(308) = 2.741$ ,  $p = 0.006$ .

Table 2: t-Test Analysis of Drug Involvement of Students

Gender	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Remark
15-19 Years	130	2.76	1.36	-1.031	308	.303	Not
20-24 Years	180	2.92	1.33				Significant
Total	310	2.86	1.34				

Table 2 shows the t-test analysis of students who are between 15-19 years and those who are between 20-24 years in drug involvement. t-test analysis revealed that students between 15-19 ( $M = 2.76$ ,  $SD = 1.36$ ) had a non-significantly lower mean score in drug involvement than their counterparts who are between 20-24 years ( $M = 2.92$ ,  $SD = 1.33$ ),  $t(308) = -1.031$ ,  $p = 0.303$ .

## Discussion

The issue of drug involvement among undergraduate students is a widespread concern that has been documented in various studies globally. Experimentation with drugs during adolescence is also a common occurrence. The researchers conducted this study to understand how gender and age contribute to differences in drug use. The major findings revealed that age does not lead to a significant difference in drug use among undergraduate students. This implies that whether an adolescent is younger or older, they are likely using drugs at a similar rate, indicating that even younger adolescents are already engaging in drug use at the same level as their older counterparts. This trend could be attributed to factors such as technological and internet advancements, which expose individuals to extensive information and awareness at a very early age.

Also at this age, they try so many new things for many reasons, including curiosity and desire to find out the effectiveness of a particular drug, to feel good, to reduce stress, or to feel grown up. Using alcohol and tobacco at a young age increase the risk of using other drugs later. These findings agree with one of the WHO's and the World Heart Foundation's data, which posit that in Nigeria, 22.1 percent of school youth age between 12 to 17 years use tobacco.

While age is often considered a significant factor in drug involvement, this study in contrary suggest that undergraduate students' age may not be as significant a predictor of drug involvement as previously thought. According to (Oguntayo et al., 2020), some other factors like monthly allowances; attitude towards drug abuse among others can create differences in deviant behaviour generally and not age. This agrees with the finding here which shows clearly that students between 15-19 ( $M = 2.76$ ,  $SD = 1.36$ ) had a non-significantly lower mean score in drug involvement than their counterparts who are between 20-24 years ( $M = 2.92$ ,  $SD = 1.33$ ),  $t(308) = -1.031$ ,  $p = 0.303$ .

In the same vein, the homogeneous drug use patterns across age groups were clearly shown in a 2020 study published in the Journal of Adolescent Health found that drug use patterns among college students were relatively homogeneous across different age groups (McCabe et al., 2020). The study surveyed over 3,000 college students and found that age was not a significant predictor of drug use. Likewise, similar risk Factors across age groups were captured in a 2022 study published in the Journal of Substance Use found that risk factors for drug involvement, such as peer influence and stress, were similar across different age groups (Wang et al., 2022). The study surveyed over 2,000 college students and found that age did not significantly impact the relationship between risk factors and drug involvement.

Regarding gender impact on the use of drugs among undergraduate students, we found that male drug involvement is higher than that of female. According to (Wagner et al., 2007) both genders displayed significant increases in the consumption of marijuana (22.3% to 27.1% for men and 12.9% to 16.9% for women), amphetamines (5.4% to 10.6% for men and 3.4% to 5.6% for

women), and inhalants (9.8% to 15.7% for men and 1.9% to 5.0% for women). Despite both increase, male are seen to be more involved. The greatest gender difference was also observed in consumption report which showed significant increases in male use of tobacco (19.6% to 23.5%), marijuana (15.8% to 20.5%), amphetamines (1.1% to 3.2%), and inhalants (4.0% to 7.9%). Although, the reasons as to why individuals engage in drug involvement remain varied and, in most instances, multiple irrespective of age and gender but must be noted that studies have shown that males have higher cases than female. This is the same in result of Adeyemo et al (2016) which found also that higher proportion of students involved in drugs are male students. This is not different from the assertion of Aguocha et al. (2021) who also agreed that more males used substances compared to females.

### **Conclusion**

This study examined how gender and age lead to the differences in the use of drugs involvement of undergraduate students. Major findings in the study revealed that age does not lead to significant difference in use of drug among undergraduates students. This means that age may not have a significant impact on drug involvement. The study suggests that male undergraduate students are more involved in drug than female undergraduate students as mostly assumed. This may be due to the societal expectations, gender roles and cultural norms around masculinity. It could be concluded that while gender may have consistent impact on drug involvement, gender may not.

### **Recommendations**

1. Institutions of higher learning and partner agencies should develop and implement gender-sensitive prevention programmes that will address the unique needs and vulnerabilities of the genders.

2. Institutions and Educational Psychologists should enhance stress management and coping skills which will provide undergraduate students with effective stress management and coping skills, such as mindfulness, meditation, and cognitive-behavioural therapy.
3. Universities should foster a supportive campus environment that encourage a culture of support and openness on campus, where students feel comfortable seeking help and discussing their struggles without fear of judgment.
4. Universities should provide access to counseling and mental health services ensuring that undergraduate students have access to confidential counseling and mental health services, including substance abuse treatment and support groups.
5. Educational Psychologists and mental health experts in universities should conduct regular research and assessment to better understand the prevalence and patterns of substance use among undergraduate students, including age and gender differences.

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