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# Relationship between psychoactive substance use and sexual risk behaviour among Adolescents in some senior secondary schools in Abakaliki Metropolis of Ebonyi State.

**Sylvester O. Okenyi*[1], EzeruigboChinwe FS[2]**
[1]Dept. of Educational Foundations, ESUT Enugu.
[2]Dept of Nursing, EBSU Abakaliki, NIGERIA

***Corresponding Author:**
Sylvester O. Okenyi
Email: okenyisylve@hotmail.com

**Abstract:** The focus of this study was to examine extent of psychoactive substance use among the respondents, determine the respondents' perceived intended benefit of substance use, determine sexual risk practices among the respondents and establish whether psychoactive substances used by the respondents influence respondents' sexual risk practices. A descriptive survey design was used. A sample size 0f 361 respondents were drawn from six schools and 354-item questionnaire was used to collect data. Simple stratified random sampling technique was used to select the respondents. The data collected were tabulated and analyzed using percentages. The findings showed that the most common psychoactive use among these respondents were; Marijuana: (37.50%), Alcohol: (26.56%), Tobacco/cigarette smoking: (17.19%). 16.67% use psychoactive substances to read and pass examination as intended benefit, 8.85% use it to boost confidence, 10.94% use it to keep awake, and 7.25% use it to feel free with members of opposite sex, 25.52% use it to be able to make friends with members of opposite sex and 19.27% reported that they use it to enjoy sex, 36.71% has multiple sexual partner and 39.49% does not use condom while having sex, 35.82% had multiple sexual partner after using psychoactive substance, 60.45% did not use condom while having sex after psychoactive substance. The most significant finding of the study was that there is relationship between psychoactive substance use and sexual risk behavior. Based on this, recommendations were made to stakeholders. Areas of further research were also recommended.
**Keywords:** Psychoactive, drugs, adolescents. Marijuana, substance, sexual risk.

## INTRODUCTION

Adolescence is the period between 12 and 18 years. The onset of puberty marks the beginning of adolescence. Puberty is the culmination of the physical changes that lead to sexual maturity [22]. Adolescence is the bridge between childhood and adulthood. It is a stage in development marked by amazing spurts in physical, cognitive and social development. Sometimes, the sudden burst in all aspects of development, especially the altered body, overwhelms the adolescent. More interestingly, these characteristics make them more prone to social unrest [23]. This situation is compounded by the current globalizing world. The spread of mass media, increased international migration, economic and political crisis, global violence and increasing access to psychoactive substances such as alcohol and various forms of drugs [1]. Adolescence presents many concerns as young people test their limits and develop their own social networks, often in an attempt to express their independence. Many adults express concerns about adolescent experimentation with psychoactive substances that are illegal.

Psychoactive substances/drugs in this sense are chemical substances that affect the brain functioning, causing changes in behavior, mood and consciousness [2]. Psychoactive substance use occurs in all societies, but the consequences of substance use vary depending upon the level and context of use as well as individual susceptibility. It is used by humans for a number of different purposes to achieve specific ends [2].These substances can be used therapeutically to treat both physical and psychological disorders; they are also used recreationally to alter mood, perceptions and consciousness [3]. Many psychoactive substances however, are abused, that is, used excessively, despite health risks or negative consequences. These adolescents give many reasons for going on drugs According to John [4], some of these reasons include: desire to experiment, fear of failure, frustration, weight control, social recognition, desire to excel, peer group interaction and to avoid being nervous. In most cases, adolescents get information concerning psychoactive drugs from wrong persons. Because most adolescents lack information from parents and teachers, majority of them rely on the mass media such as television, movies

and, pornographic materials and computer network which cannot be restrained [1]. The alteration of mood, consciousness and change in behaviour by psychoactive substances is very significant because both sex and drugs activate the same area of brain and there is some evidence that problem associated with psychoactive substance may be associated to sexual behavior [24] which could lead to sexual risk practices.

Sexual risk behaviours in this sense are the sexual characteristics which increase people's chances of experiencing adverse health consequences, particularly of HIV infection and STDs. Sexual activity in general is associated with various risks including: unprotected penetrative sexual intercourse, unwanted pregnancies, rape, and multiple sexual partnerships and relationship [4]. Many adolescent characteristics are attributed to physical changes called "raging hormone". Partially because of this, young adolescents are generally less equipped than adults to make sound decisions and anticipate consequences of sexual behavior [5].The adverse health consequences associated with sexual behaviour, such as the sexual transmission of HIV infection and other sexually transmitted diseases (STDs), have global implications [6]. According to Des- Jarlais [7], psychoactive substance use has a critical role in mediating sexual risk behaviour.

The relationships between substance use and sexual risk behaviour has emphasised two key factors: Firstly, psychoactive substance use may influence levels of sexual activity and the propensity for sexual activity, and secondly, psychoactive substance use may influence sexual risk perception and condom use Stimson [8]. Psychoactive substance use like alcohol and outcomes are major public health concerns worldwide. Etiologically, psychoactive substance like alcohol influences sexual risk behaviours through direct psychoactive effect on cognitive processes, including reasoning skills sexual arousal and desire, inhabitation, judgement, and sense of responsibility, which are moderated by individual expectations, drinking environment, socioeconomic/cultural characteristics of a community [9].

Susan, Calmlin, and Emet [10]. The concern in this study therefore, is to seek to establish if there is a relationship between psychoactive substances use and sexual risk behaviour among adolescents in senior secondary schools in Abakaliki metropolis of Ebonyi state.

**Statement of problem**

The observed rising incidence of antisocial behaviours ranging from absences in school, school dropout, snatching of mobile phones, involvement in armed robbery, unprotected penetrative sexual intercourse, unwanted pregnancies, rape, and multiple sexual partnerships etc among adolescent in senior secondary schools in Abakaliki metropolis of Ebonyi state have raised a lot of concerns among stakeholders in the state.Teachers, parents of schooling adolescents, employers of out- of- school adolescents are complaining of the strange phenomenon [11] Researchers [12, 13] have noted that much of substance use and sexual behaviour among adolescent take place in secondary schools. The incidence of substance use and sexual behaviour among students is high. It has been suggested that drug and alcohol use during adolescence is almost always a social experience and a learned behaviour. According to WHO [14], 500 million people who are alive today will eventually die of smoking-related diseases, including cancers, heart disease and respiratory diseases. Almost all regular smokers take up the habit by the age of 18. Cigarette smoking is one of the most common addictive behaviours amongst adolescents and this group is easy prey.In the light of the situation described above,the present researchers were motivated to find out if there is a relationship between psychoactive substances use and sexual risk behaviour among adolescents in Senior Secondary schools in Abakaliki Metropolis of Ebonyi state.

**The following research questions guided the study**

- What kinds of psychoactive substance are used by the respondents?
- What are the intended benefits of the respondents who engage in the use of psychoactive drugs?
- What are the sexual risk practices among the Respondents?
- Does the use of psychoactive substances affect adolescents' sexual risk practice?

**Psychoactive substances Use and Sexual Risk Behaviour: Evidence from Research**

A lot of studies have been made on psychoactive substance use and sexual risk behaviours among adolescents. A study by Ljubotina [15] on prevalence and risk factors of substance use among urban adolescents showed that 28% of 864 seniors in higher school consume tobacco daily, 59% consume alcohol occasionally and 2% smoke marijuana on daily basis. Another research conducted by Isaac & Adegboyega [16] on psychoactive substance consumption and awareness of health effects among students in tertiary institutions in Ekiti state Nigeria indicated that among 480 students,47.9% consume alcohol, 43.8% take caffeine and 20.0% take marijuana, 11.0% take cocaine and 8.5%take morphine.

In a research conducted by Oshikoya & Alli [17] on perception of drug abuse amongst Nigerian undergraduates it was shown that among 807 respondents, 42.0% of students use psychoactive substances to keep them awake and alert, to read and

pass examination accounted for 32.7%, 28.6% of drug use was to make them feel happy/high, to induce sleep accounted for 19.6%, to boost confidence accounted for 17.7%, to get out of depression accounted for 29.8%, to cope with life problems accounted for 27.1% and 26.3% of intention of psychoactive substance use among these student was to reduce stress. While in another research conducted by Annabel, John &Johan [18] on understanding reasons for drug use among young people it was found out that among 364 respondents, 96.7% of psychoactive substance use , the aim was to achieve relaxation, to become intoxicated accounted for 96.4%, to enhance activity accounted for 88.5% and 86.8% of psychoactive substance use was aimed at alleviating depressed mood.

Consumption of these psychoactive substances could expose most of the users especially adolescents to many sexual risk practices that may endanger their health. In a research conducted by Gail [19] on sexual behaviour of adolescents in Nigeria: a cross sectional survey of secondary school students, shows that among 383 of respondents 57.1% of male students and 48.3% of female students said they had had more than one sexual partner 43.2% reported a history of a sex with a person of the same sex, 24.5% of male had reported of having been forced to have intercourse and 26.9% reported of not forced. In another research conducted by Rojas [20], on substance use and sexual risk behaviour among adolescent Detainees, shows that among 455 respondents, 12.5% engaged in anal intercourse and 48% engage in unprotected sexual intercourse. Doku [21], revealed that, substance use and risky sexual behaviours among sexually experienced Ghananian youth, among 1195 youths,31% had multiple sexual partners, and only 2.4% use condom while 98.4% do not normally use condom during intercourse after the use of psychoactive substances. It is clear from the studies reported above that psychoactive substances use influences sexual risk practices. Do we have similar situation in Abakaliki, a relatively less sophisiticated urban metropolis with a dominance of middle and lower income population?

## RESEARCH METHODOLOGY

### Design

Research design employed in this study is descriptive survey.. This method describes phenomena as they occur and was found suitable to study the relationship between the use of psychoactive substance and sexual behaviour among adolescent in Abakaliki metropolis in Ebonyi state. The study was carried out among senior secondary school students in five secondary schools in Abakaliki metropolis of Ebonyi State. These schools consist of 3 government owned secondary schools and 2 private secondary schools.

### Population of the study

The study population comprised senior secondary class 1-3 students in the selected secondary as highlighted above. The total population of the students from different school is 3569. This population was chosen because it contained the adolesecentswho would have come in contact with various substances while in school. From the population a simple stratified random sampling technique was adopted to avail all the students opportunity to participate in this research. Based on this, a sample size of361students was used for the study.An appropriate sample for each stratum was determined by the use of Bowley's population allocation: it reads:

nh = Sample or unit for each stratum
n = total samples size
Nh = population for each stratum
N = total population

### Inclusion criteria

The inclusion criteria were all students in senior secondary classes (SS1-SS3) between the ages of 12-19 in the schools usedas shown in the Table below.

### Instrument for data collection

The instrument used for data collection in this research is questionnaire. The questionnaire is made up of two sections (sectionA and B) and is well structured to obtain information based on the research questions. This instrument is made up both open and closed questions in section B. it is written in simple English for easy understanding by students of different intelligence quotient.

### Validation of instrument

The questionnaire being the tool in this research was presented to relevant experts in the area for face validitation.

### Reliability of the instrument

This questionnaire was tested via a pilot study done in a secondary school of comparable standard but not in the list selected.All technical questions were modified which were discovered to be difficult for students to answer and were re-presented again to experts for re-validation before using on the sampled respondents.

## METHOD OF DATA COLLECTION

Data collection was done directly by the researchers with the help of some of the staff in the respective schools used. The principals of these schools assigned a staff to supervise administering of questionnaires. Yes or no was written on piece of paper and was folded. Students that picked 'yes' were used. Questionnaire were distributed to students who picked 'yes' and who were between the ages of 12-19 years after oral consent has been sorted from students. Two nursing students assisted the researchers to administer

the questionnaire. The data collection took seven days (each day for each school). All questionnaires were retrieved from students.

**Data analysis**

The data collected via the questionnaire were analyzed using tables and percentages as shown below:

**Table-1: Distribution of Respondents based on their demographic characteristics N=354**

| Demographic characteristics | Frequency | Percentage (%) |
|---|---|---|
| **Age( years)** | | |
| 12-13 | 7 | 1.98 |
| 14-15 | 19 | 5.37 |
| 16-17 | 152 | 42.94 |
| 18-19 | 176 | 49.71 |
| **Total** | **354** | **100** |
| **Sex** | | |
| Male | 269 | 75.99 |
| Female | 85 | 24.01 |
| **Total** | **354** | **100** |
| **Level** | | |
| SS1 | 62 | 17.51 |
| SS2 | 151 | 42.66 |
| SS3 | 141 | 39.88 |
| **Total** | **354** | **100** |
| **Religion** | | |
| Christian | 191 | 53.95 |
| Moslem | 6 | 1.70 |
| Tradition | 157 | 44.35 |
| **Total** | **354** | **100** |

From the table above, 7(1.98%) of Respondents fall between the age of 12-13 years, 19(5.37%) are between the ages 14-15 years, 152(42.94%) are between the ages of 16-17 years, 176(49.71%) are between the ages of 18-19 years. 269(75.99%) are male and 85(24.01%) are female. 62(17.51%) are in SS1, 151(42.66%) are in SS2 and 141 are in SS3. 191(53.95%) are Christians, 6(1.70%) are Moslems and 157(44.35%) are traditionalists.

**Research question one: what kinds of psychoactive substances are used by the adolescents?**

**Table-2: Distribution of Respondents according to kind of psychoactive substances they use.N=192**

| Psychoactive substance used | Frequency | Percentage (%) |
|---|---|---|
| Alcohol | 51 | 26.56 |
| Caffeine | 28 | 14.58 |
| Tobacco/ cigarette smoking | 33 | 17.19 |
| Marijuana | 72 | 37.50 |
| Others | 8 | 4.17 |
| **Total** | **192** | **100** |

From the table above, 51(26.56%) use alcohol, 28(14.58%) use caffeine, 33(17.19%) use tobacco/ cigarette smoking, 72(37.50) use marijuana and 8(4.17%) use other psychoactive substances. Therefore, these Respondents use psychoactive substances such as: Alcohol, Caffeine, Tobacco & Cigarette, and Marijuana.

**Research Question two: What are the perceived intended benefits of psychoactive substance used by adolescents?**

**Table-3: Distribution of Respondents according to their perceived intended benefit of using psychoactive substances N=192**

| Intended benefit of psychoactive substance use | Frequency | Percentage(%) |
|---|---|---|
| To read and pass exam | 32 | 16.67 |
| To feel relaxed | 9 | 4.69 |
| To boost my confidence | 17 | 8.85 |
| To cope with school stress | 7 | 3.65 |
| To keep awake and alert | 21 | 10.94 |
| To induce sleep | 0 | 0.00 |
| To feel free with members of opposite sex | 14 | 7.27 |
| To be able to make friends with members of Opposite sex | 49 | 25.52 |
| To enjoy sex | 37 | 19.27 |
| To please my friends | 6 | 3.12 |
| **Total** | **192** | **100** |

From the table above, 32 (16.67%) of the Respondents take psychoactive substance to read and pass exam, to feel relaxed accounted for 9(4.69%), 17(8.85%) of substance use is to boost confidence, 7(3.65%) of substance use is to cope with school stress, 21(10.94%) of substance use is to keep and alert, to induce sleep accounted for 0.00%, to be feel free with members of opposite sex accounted for 14(7.27%), to be able to make friend with members of opposite sex accounted for 49(25.52%), to enjoy sex accounted for 37(19.27%) and to please friends accounted for 6(3.12%)

Thus, for the respondents, the perceived intended benefit of psychoactive substance use among them include taking it to: read and pass exam, feel relaxed, boost confidence, cope with school stress, keep awake and alert, feel free with members of opposite sex, be able to make friends with members of opposite sex, enjoy sex and to please their friends.

**Research Question three: What are the sexual risk practices among theRespondents**

**Table-4: Distribution of Respondents according to their sexual risk practices N=79**

| Respondent sexual risk practices | Frequency | Percentage (%) |
|---|---|---|
| Injection of drug with needle used byanother | 2 | 2.53 |
| Multiple sexual partners | 29 | 36.71 |
| Having sex with person of the same sex | 0 | 0.00 |
| Having an anal sex | 0 | 0.00 |
| Not using condom while having sex | 47 | 59.49 |
| Others | 1 | 1.27 |
| **Total** | **79** | **100** |

From the table above, 2(2.53%) injected drug with needle used by another, 29(36.71%), had multiple sexual partners, 0(0.00%) had sex with person of the same sex, 0(0.00%) had anal sex, 47(59.49%) do not use condom while having sex, and other sexual risk practices accounted for 1(1.27%).

Thus, sexual risk practices among these Respondents include: injection of drugs with needle used by another, multiple sexual partners and not using condom while having sex.

**Research Question four: Does the use of psychoactive substances affect adolescents' sexual risk behavior?**

**Table-5: Distribution of Respondents according to sexual risk practices after the use of psychoactive substance N=134**

| Sexual risk behaviours practiced after using psychoactive substance | Frequency | Percent (%) |
|---|---|---|
| Injection of drug with needle used by another | 3 | 2.24 |
| Multiple sexual partner | 48 | 35.82 |
| Having sex with person of the same sex | 0 | 0.00 |
| Having an anal sex | 0 | 0.00 |
| Not using condom while having sex | 81 | 60.45 |
| Others | 2 | 1.49 |
| **Total** | **134** | **100** |

From the data gathered as documented in the table above, 3(2.24%) injected drug with needle used by another person after taking psychoactive substance, 48(35.82%) had multiple sexual partners, 0(0.00%) had sex with person of the same sex, 0(0.00%) had anal sex, 81(60.64%) did not use condom after taking psychoactive drug, while 2(1.49%) practiced other sexual risk behaviours.

Therefore, psychoactive substance use affects adolescent sexual risk practice since there isa general increase in numbers of respondents that used needle used by another person after taking psychoactive drug, multiple sexual partners, and non- condom use while having sex, compared with when these Respondents did not take psychoactive substance.

**DISCUSSION OF MAJOR FINDINGS**

The data collected and analyzed are discussed according to the objectives of the research.

**Psychoactive drug used among the respondents**

The result of the data collected as documented in the table two shows that 26.56% took alcohol, 14.58% took caffeine, 17.19% took tobacco/cigarette, 37.50% took marijuana and 4.17% used other psychoactive substances. Therefore, the use of marijuana among these students account for the highest psychoactive substance use. The use of alcohol is the next psychoactive substance highly used. Also tobacco use is high.

This finding differed a bit with that of the study conducted by Ljubotina [15] which reported that 59% of the respondents use alcohol, 28% took tobacco and only 2% smoke marijuana but in this research marijuana use accounted for the highest psychoactive substance use and next to it was alcohol use which accounted for 26.56%.. On the other hand, Isaac et al [16], a study done inEkiti state Nigeria on 480 students showed that 47.9% took alcohol 43.8% took caffeine and only 20.0% took marijuana but in this research marijuana use is 37.5% (72 of 142) which is higher than any other psychoactive substance use, and caffeine use was also small (14.58%), contrary to Isaac et al [16]'s 43.8%. The indications here are worrisome in the sense that the Abakaliki town as a metropolis has a population dominated by middle and low class dwellers.

**The perceived intended benefit of substance use, among respondents.**

The findings of this study as documented in Table above, shows that 16.67% used psychoactive substance to read and pass examination, 4.69% used it for relaxation, 8.85% used it boosting of confidence, and 3.65% used it to cope with stress, 10.94%. Used it to keep awake and alert, 7.29% used it to feel free with members of opposite sex, 25.52% used it to be able to make friends with members of opposite sex, 19. 27% used it to enjoy sex, 3.12used it to please their friends and zero percent, used it to induce sleep.

Thus, to be able to make friends with members of opposite sex (25.52%) outweighs other reasons why adolescents use psychoactive substances for. The next to making friends with members of opposite sex was to enjoy sex (19.27%), also to read and pass exam accounted for high percentage.

This result also slightly differs with that of Oshikoyaet al [17]. In the study, respondents used drugs mainly to keep awake and alert (42.15%) but in this, to make friend with members of opposite sex is mainly the reason (25.52%) for psychoactive substance use and 19.25% of psychoactive substance use was to enjoy sex. However, to read and pass exam was one of the highest reported reasons for psychoactive substance use among these adolescents. Also in this study, none of the students used psychoactive substance to induce sleep but Oshikoya et al. reported in their finding that 19.6% use psychoactive substance to induce sleep. A curious reason that seems to go against reasonability.

**Sexual risk practices among the Respondent.**

The result of the research shows that 79(21.88%) of 354 respondents had engaged in sexual risk behaviour. 2.53% practiced injection of drug with the needle used by another person, 36.71% had multiple sexual partners, 59.49% did not use condom while having sex, 1.27% accounted for other sexual risk

behaviours and zero per centhave never had sex with person of the same sex or practiced anal intercourse.

Thus, not using condom while having sex is mainly the sexual risk practiced among these adolescents. Also, having multiple sexual partners accounted for high percentage.

This research is similar with the research conducted by Doku [21] which indicated that 31% had multiple sexual partners and only 2.4% used condom. In addition, Rojas [20] reported that 48% of Respondents engaged in unprotected sexual intercourse. Conversely, in this research no Respondent reported of having had anal intercourse or having had sex with the persons of the same sex but according to Rojas [20] 12.5% of 455 Respondents engaged in anal intercourse. Cultural differences seem to be at play here. In Ebonyi state in general such practices are still considered an abomination.

**Influence of psychoactive substance use on sexual risk practices**

From the result of this research, 2.2% inject drug with needle used by another person after using psychoactive substance, 35.82% reported that they had multiple sexual partners after taking psychoactive substance, 60.45% reported of not using condom after taking psychoactive substance.

Therefore, not using condom while having sex, injection of drug with needle used by another and multiple sexual partners increased after taking psychoactive substance compared to the frequency of sexual risk practices before taking psychoactive substance.

In this research, not using condom while having sex remains the main sexual risk practices among these adolescents after taking psychoactive substance. This is in agreement with Doku [21] which maintained that psychoactive substance stimulates the same place in the brain where coitus stimulates. It also reported that 97.6% did not normally use condom during intercourse.

This study also agrees with Cooper [9] that psychoactive substance like alcohol influences sexual risk behaviour through direct psychoactive effect on cognitive process including reasoning skills, sexual arousal and desire which are moderated by individual expectations, drinking environment, socioeconomic/cultural characteristics of a community.

## CONCLUSION

Adolescents psychoactive substance use in the studied area is worrisome. Great numbers of them take; marijuana, alcohol, tobacco/cigarette smoking. Majority of the respondents reported of engaging in different sexual risk behaviours before taking psychoactive substance and this practice is higher after taking psychoactive substance. The inference here tends to indicate that there is a significant relationship between psychoactive substance use and sexual risk behaviour among adolescents.

## RECOMMENDATIONS

Based on the findings of this research the researchers recommend the following:

- Teachers, health professionals especially the government should intensify campaign against psychoactive substances use among adolescents via; schools and social media.
- Government should introduce sex education in secondary schools.
- Bye- laws should be established by government especially in the state and local government level against psychoactive substance used among adolescents and the defaulters should be punished accordingly.

## SUGGESTIONS FOR FURTHER RESEARCH

- Research should be extended to more secondary schools mostly in the rural areas and compare the outcome.
- Research should also be extended to tertiary institutions to evaluate the impact of the psychoactive substance use, sexual risk behaviour on academic performance of the young star of this country.

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