

# Illicit Drug Use among Adolescents: A Public Perception of Influencing Factors in Owerri, Nigeria

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## Research

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# Abstract

## Background

Illicit drug use among adolescents has become a public health concern which cuts across all social strata. This study explored the public perception of factors that influence illicit drug use among adolescents in Owerri, Nigeria.

## Methods

A descriptive cross-sectional research design was used. The study adopted a mixed-method approach comprising quantitative and qualitative methods and was carried out in Owerri metropolis of Imo State, Nigeria. The research instruments used for data collection were questionnaires and in-depth interview guide. The target population comprised adults 18 years and above residing in the area of interest at the time of the study. For the qualitative method, a total of 10 communities were selected randomly by balloting and availability sampling was employed in the selection of respondents. Respondents for the qualitative method were purposively selected.

## Results

In the quantitative study, just over half of the respondents, from across the three areas in Owerri metropolis, asserted that peer influence, emotional/relationship problems, wanting to feel 'high' are factors influencing adolescent consumption of illicit drugs whereas the qualitative study found family background, 'unique' experience such as the death of a loved one etc. as factors influencing adolescents' illicit drug use. The quantitative results showed that persons with a higher level of education are more likely than those with a lower level of education to perceive a significant difference in drug use between in – school and out – of – school adolescents.

## Conclusions

Peer influence, emotional/relationship problems and the influence of media (especially the social media), among several other identified reasons, are perceived by the public as factors that influence adolescents' use of illicit drugs. Some of the factors identified by the public are either not supported by evidence or are against evidence. As a means to curb some of these factors, the communities, schools and universities should formulate contextual policies to prevent drug use and should also hold seminars for parents and families to alert them early to the symptoms of drug use in their children.

## Background

Recent trends indicate that the use of drugs has dramatically increased worldwide (1–4). It has been estimated that (in 2011) between 3.6% and 6.9% of persons aged 15 to 64 years across the globe have used an illicit drug in the preceding year (5). World Health Organization (6) reported that every year, about 320, 000 young people between ages of 15 and 29 years die annually from alcohol and drug use, i.e., 9% of all the deaths in that age category and 15.3 million persons have drug use disorders. The global disease burden attributable to illicit drugs is estimated at 5.4% (7).

Illicit drugs use (such as heroin, marijuana, etc.) particularly by adolescents, globally has been a public concern (8, 9). This is due to the potential short and long-term adverse effects or consequences associated with their use on the well-being of those who use drugs and the larger society (9). For instance, the use of marijuana by adolescents has been associated with an increased risk of a range of negative health outcomes, including future depression, anxiety

disorders (10, 11), fatal automobile collisions (10, 12), accidental injuries, chronic bronchitis, and respiratory infections (10, 13).

Across the globe, there have been pointers to factors that influence adolescents' involvement in drug use. Some of the factors listed as reasons for adolescent involvement in illicit drug use are peer pressure, friends-do-it, sexual prowess, curiosity, boldness, enhanced spirit performance, social influence, psychological stress, pleasure, and inadequate knowledge of the harmful consequences etc. (14–17). Ndu, Ndu, Olarewaju and Somoye (18) added lack of self-confidence, search for excitement, experimentation and conduct problems.

A study by Ibebuike (19) sought to determine the rate of substance used, and adverse effects amongst senior secondary school students of Eziachi, Orlu, Imo state. The study found that the majority of them used substances due to peer pressure, while for others it is due to academic adjustment, social and psychological factors. The most common reasons given for substance use was to have a feeling of belonging, followed by “to increase morale” and to have pleasure, to be awake because it is cheap and is always available. Other systems currently available to gauge drug use levels and trends, such as the national household survey of drug use estimating the drug use in the total population have not been performed in Imo State till date (20).

Researchers are paying increasing attention to the issue of illicit drug use in Nigeria (14, 15, 21, 22). However, most of these studies ignored the public perception of illicit drug use among youths. Considering that the public has an important role to play in an attempt to reduce the rate of illicit drug use, how they perceive illicit drug use among youths must be ascertained. Moreover, how the public perceives an issue may reveal the level of attention it gets and the best strategies of addressing it. Because perception is shaped by things such as previous experience, cultural expectations, motivations, moods, needs and attitudes (23, 24), ignoring it on issues that require modifying public policy or public behaviour, may lead to the failure of technically good innovations. It is against this backdrop that this study focuses on exploring the public perception of factors influencing illicit drug use among adolescents in Owerri metropolis.

## Research Objective

- To ascertain the factors that influence adolescent drug use from the perspective of the public.

### *Research Questions*

1. What are the factors that influence illicit drug use among adolescents?
2. Would adolescents still consume illicit drugs if they knew the possible consequences?
3. Is there a difference in drug use between in-school adolescents and out-of-school adolescents?

### *Hypotheses*

1. There is no significant difference in the proportion of males and females who will perceive that adolescents would consume illicit drugs even if they knew the possible consequences.
2. There is a significant difference in the educational level of respondents who will perceive a significant difference in drug use between in – school and out – of – school adolescents.

## Theoretical framework

Social Learning Theory (by Albert Bandura in 1977) was adopted for this study. Social Learning Theory holds that behaviour is influenced by environmental factors, not just psychological or cognitive factors. Thus, Social Learning

Theory assumes that behavioural, psychological and environmental factors combined, influence the development of specific behaviours. In other words, what people are exposed to or observe could make all the difference in their lives. The theory is also relevant in exploring the role of the public (as an aspect of the environmental factor) towards these expectations and possible outcome i.e. what the public is exposed to (in terms of knowledge on adolescent drug use). Sex and educational level are characteristics that could affect the public's perception of the subject matter.

## **Methods**

### **Study design and study area**

A descriptive cross-sectional research design was used. The study adopted a concurrent mixed-method approach comprising quantitative and qualitative methods and Imo state, and her 27 local government areas in Imo state were the area of study. However, only three that makeup Owerri metropolis were used for the study. The three local government areas that makeup Owerri metropolis include Owerri West, Owerri North and Owerri Municipal. The choice of this study area arose from the fact that there are documented [see background] and undocumented reports of illicit drug use among young people in the region.

### **Study population and selection of study participants**

The study population consisted of members of the public aged 18 years and above, residing in Owerri metropolis at the time of the study. The projected (from the 2006 Nigerian Population Census) figures show that 403,425 people reside in Owerri metropolis. Specifically, Owerri North constitute 176,334; Owerri west constitute 101,754 while Owerri-municipal constituted 125,337.

To ensure that Owerri metropolis' urban and rural communities and their respondents were truly represented in the population, a cluster sampling procedure was adopted. The justification for this is because Owerri metropolis has a considerable landmass and it will be difficult and expensive to cover such a vast area. The communities that comprise each local government was represented with numbers and these numbers written on individual pieces of paper folded and shuffled (selection by balloting). They were selected one after the other randomly until the desired figure was reached. A total of 10 communities were selected randomly in all. Simple random sampling technique of balloting without replacement was used to determine which communities get picked from the LGAs. Using Taro Yamane formula for determining the finite population and the sample size derived for the study was 624. In the four communities that were selected from Owerri West, 200 respondents were randomly selected. In the five communities that were selected from Owerri North, 220 respondents were randomly selected. In the one community that was selected from Owerri Municipal, 204 respondents were randomly selected. Information was collected from students living in off-campus hostels, people in offices, markets and people found on the street all of whom meet the age category for the study. The lead author trained 2 researchers who participated in data collection.

### **Instruments of data collection**

The research instruments used for data collection were questionnaires and in-depth interview guide. The questionnaire contained semi-structured questions. The questionnaire was developed based on the objective of the study. The questionnaire elicited information on the respondents' perception of factors influencing adolescents' involvement in illicit drug use, and consequences of these factors as well as strategies to curb illicit drug use among adolescents. The questionnaires were distributed to respondents in their homes, on the street at their places of employment. The distribution was based on the availability of the respondents and they must meet the study criteria to.

The interview guide contained structured questions on adolescent drug use, factors influencing their involvement as well as strategies to curb them. A total of 16 respondents were purposively selected for Key Informant Interviews (KIIs) which were in-depth in nature. Three respondents from a Psychiatric unit at Owerri (a representative of the office of the director [RepOD], a doctor and a nurse), by virtue of their profession as medical and health personnel, the researchers believe that they would be well informed of the issue under investigation. A representative of the social welfare, at Owerri [RepSW], was also selected because it was believed that he would possess knowledge about deviant behaviours of young people in the metropolis. These 4 respondents were interviewed in their respective offices. Also, twelve other respondents (four from each local government area) comprising of an elder statesman and woman, youth leaders and other influential community leaders were selected for the in-depth interview. Among these 12 KII respondents, 9 were interviewed at their homes while 3 were interviewed in a bar of their choosing. The rationale for their selection was based on the assumption that they are knowledgeable about the subject matter and how it plays out in their respective communities.

## **Validity and reliability test of the instrument**

The face validation of the instrument was determined by subjecting the instrument to the scrutiny of experts in the field of Sociology from the Sociology/Anthropology of the University of Nigeria, Nsukka. The experts were allowed a free hand. The modifications and suggestions made by the experts were incorporated to produce the final copy of the instruments. A pilot study was conducted with 62 (10% of the study sample size) respondents chosen randomly from Okigwe LGA. This area has similar characteristics to the study area in terms of population and structure. The responses were coded and put into the computer using SPSS v21.

## **Data analysis**

The data from questionnaires were collated and coded manually and entries put into the computer. The data were analyzed with the Statistical Package for Social Sciences (SPSS version 21). The analysis employed descriptive statistics such as frequencies and percentages to present the characteristics of the research subjects. Chi-Square ( $\chi^2$ ) (goodness of fit and test of independence) was used to ascertain the differences among male and female respondents regarding their perception on whether adolescents would consume illicit drugs if they knew the possible consequences and whether there is a significant difference in the educational level of respondents who will perceive a significant difference in drug use between in – school and out – of – school adolescents. The hypothesis will also, offer further explanation to objectives 2 and 3. In analyzing the qualitative data, the researcher began with a careful transcription of the data. The transcripts derived from the in-depth interviews were read and coded with the Nvivo 11 software according to emerging themes. Thematic methods were used in the analysis of the qualitative data. The emerging themes were further grouped into major recurring themes and then analyzed accordingly. Salient illustrative quotes were then pulled out to complement and elucidate the quantitative data in reporting the results.

## **Results**

Out of the total of 624 questionnaires that were distributed in the course of the study, 535 questionnaires were properly filled and returned – showing a response rate of 85.7%. Specifically, 209 questionnaires were returned from respondents in Owerri North, 221 and 105 questionnaires in Owerri West and Municipal respectively.

### **Socio-Demographic data of the Respondents**

Table 1 highlights the distribution of respondents according to their sex, age, educational attainment, marital status and occupation.

**Table 1 Social demographic data of respondents**

<i>Socio-demographics</i>			
<i>Sex</i>	<i>No of Respondents</i>	<i>Percentage (%)</i>	
Male	255	47.7	
Female	280	52.3	
<i>Total</i>	535	100	
<i>Age of respondents</i>	<i>Male (%)</i>	<i>Female (%)</i>	<i>Total (%)</i>
18–27 years	110(43.1)	93(33.2)	203(37.9)
28–37 years	33(12.9)	101(36.1)	134(25.0)
38–47 years	60(23.6)	42(15.0)	102(19.2)
48–57 years	48(18.8)	41(14.6)	89(16.6)
58 years and above	4(1.6)	3(1.1)	7(1.3)
<i>Total</i>	255(100)	280(100)	535(100)
<i>Educational attainment</i>	<i>Male (%)</i>	<i>Female (%)</i>	
No formal education	12 (4.7)	44 (15.7)	
Primary school	22 (8.6)	47 (16.8)	
Secondary school	29 (11.4)	92 (32.9)	
N.C.E*	42 (16.5)	18 (6.4)	
OND/HND**	50 (19.6)	38 (13.5)	
B.Sc./B.Tech.	80 (31.4)	40 (14.3)	
Other (specify)	20 (7.8)	1 (0.4)	
<i>Total</i>	255 (100)	280 (100)	
<i>Marital status</i>	<i>Male (%)</i>	<i>Female (%)</i>	
Married	64(25.1)	127(45.4)	
Widowed	0(0)	23(8.2)	
Divorced	9(3.5)	10(3.6)	
Separated	19(7.5)	32(11.4)	
Single	163(63.9)	88(31.4)	
<i>Total</i>	255(100)	280(100)	
<i>Occupation</i>	<i>Male (%)</i>	<i>Female (%)</i>	
Unemployed	23(9.0)	42(15.0)	
Trading	77(30.2)	122(43.6)	

• \*N.C.E. – National Certificate Examination \*\* OND- Ordinary National Diploma \*\*Higher National Diploma

<i>Socio-demographics</i>			
Business	145(56.9)	88(31.4)	233(43.6)
Civil service	4(1.5)	26(9.3)	30(5.6)
Other (specify )	6(2.4)	2(0.7)	8(1.5)
Total	255(100)	280(100)	535(100)
• *N.C.E. – National Certificate Examination ** OND- Ordinary National Diploma **Higher National Diploma			

Source: (Illicit drug use study 2018)

### **Factors Influencing Adolescents’ Involvement In Illicit Drug Use**

The information in Table 2 shows a multi-choice response of factors that respondents believe influence adolescents’ use of illicit drugs. Majority of the respondents (92.9%) chose peer influence. Other factors chosen are to feel ‘high’ (70.5%) and Emotional/relationship problem (82.6%), amongst others.

**Table 2 Factors influencing illicit drug use among adolescents**

<i>What are the factors that influence illicit drug use among adolescents? (multiple choice response)</i>	<i>Frequency (%)</i>
	<b>N = 535</b>
Peer influence	497 (92.9)
Emotional/relationship problems	442 (82.6)
To feel ‘high’	377 (70.5)
Others (to before better in competitions like sports and debates and to assimilate better and easier what they read)	91 (17)
<i>Source: Survey (2018) for Illicit Drug paper</i>	

### **If adolescents would consume illicit drugs if they knew the possible consequences**

Respondents views were sought on whether or not adolescents would consume illicit drugs (e.g., cocaine, weed, etc) if they knew the possible consequences. According to the data in Table 3, over half (58.3%) of the entire respondents disagreed that adolescents would consume illicit drugs (e.g., cocaine, weed, etc) if they knew the possible consequences; 34.6% agreed, while 7.1% indicated that they did not know the likely outcome.

**Table 3 *Would adolescents consume illicit drugs if they knew their consequences***

<i>Would adolescents still consume illicit drugs if they knew their consequences?</i>	<i>Frequency n (%)</i>
Yes	185(34.6)
No	312(58.3)
Don't know	38(7.1)
Total	535(100)
<i>Source: Survey (2018) for Illicit Drug paper</i>	

The information in Table 4 shows the sex-disaggregated distribution of respondents on reasons adolescents would consume illicit drugs (e.g., cocaine, weed, etc.) if they knew their possible consequences. The result shows that 42.2% of the entire study respondents believed that because it is difficult to change addictive behaviour, adolescents would continue to use illicit drugs even if they knew about the possible consequences.

**Table 4 *Reasons why adolescents would use illicit drugs if they knew their consequences***

<i>Reasons adolescents would consume illicit drugs despite knowledge of their effect</i>	<i>Frequency (%)</i>
Peer group influence	23(12.4)
Social comparisons	19(10.3)
A belief that consequences are over-exaggerated	34(18.4)
The belief that present feeling can't be compared to any latter consequences	27(14.6)
Addictive behaviours are difficult to change	78(42.2)
Youthful exuberance	4(2.2)
Total	185(100)
<i>Source: Survey (2018) for Illicit Drug paper</i>	

Respondents were asked to state whether there is a difference in drug use between adolescents who are in school and those who are not. In line with this, Table 5 shows that 51.4% stated that there is a difference in drug use between in-school and out-of-school adolescents. On the contrary, 37.4% of the respondents said there is no difference. However, 11.2% of the respondents did not know whether a difference exists.

**Table 5 *Is there a difference in drug use between in-school adolescents and out-of-school adolescents***

<i>Difference?</i>	<i>Frequency (%)</i>
Yes	275(51.4)
No	200(37.4)
Don't know	60(11.2)
Total	535(100)
<i>Source: Survey (2018) for Illicit Drug paper</i>	



# Hypotheses testing

## Hypothesis 1

There is a significant difference in the proportion of males and females who will perceive that adolescents would consume illicit drugs even if they knew the possible consequences.

This hypothesis was tested using analyzed data in Tables 1 and 3. To test this hypothesis, a chi-square ( $\chi^2$ ) test of independence and the statistical package (SPSS 21.0) were employed.

**Table 6 Sex and perception on adolescents' consumption of illicit drugs if they knew the possible consequences**

<i>Respondents'</i> <b>sex</b>	<b>Would adolescents consume illicit drugs if they knew the possible consequences</b>		<b>Total</b>
	<b>Yes (%)</b>	<b>No (%)</b>	
Male	112(60.5)	132(42.3)	244(49.1)
Female	73(39.5)	180(57.7)	253(50.9)
Total	185(100)	312(100)	497(100)
$\chi^2 = 15.5, df = 1, N = 497, p < .001$			

## Source: Survey (2018) for Illicit Drug paper

From Table 6, it could be observed that of all the respondents who said that adolescents would consume illicit drugs even if they knew the possible consequences, the majority were males (60.5%) and the remaining 39.5% were females. On the other hand, more than half of the respondents who disagreed with this statement were females while the remaining 42.3% were males. This output suggests that there were more female than male respondents who did not think that adolescents would consume illicit drugs if they knew the possible consequences.

A further observation of the chi-square output shows a statistically significant difference in the proportion of male and female respondents regarding their perception of whether adolescents would still consume illicit drugs even if they knew the consequences ( $\chi^2 = 15.5; df = 1, N = 497, P < .001$ ).

## Hypothesis 2

There is a significant difference in the educational level of respondents who will perceive a significant difference in drug use between in – school and out – of – school adolescents.

The hypothesis was tested using analyzed data in Tables 1 and 5. The data in Table 1 were re-categorized with no formal education, primary school and secondary school being classified as belonging to a lower educational level (246 in all) and respondents in the other categories as those with a higher level of education (289 in all). Here, only 475 respondents' information was used for testing the hypothesis. To test this hypothesis, a chi-square ( $\chi^2$ ) test of independence and the statistical package (SPSS 21.0) were employed. This response is reflected in Table 7.

**Table 7 Educational levels and perception of difference in drug use between in-school adolescents and out-of-school**

<i>Respondents' Educational Levels</i>	<i>perception of drug use between adolescents who are in school and those who are not</i>		<i>Total</i>
	<i>Yes (%)</i>	<i>No (%)</i>	
High	175(71.4)	100(43.5)	275(57.9)
Low	70(28.6)	130(56.5)	200(42.1)
Total	245(100)	230(100)	475(100)
$\chi^2 = 36.9, df = 1, N = 497, p < .001$			

## Source: Survey (2018) for Illicit Drug paper

From Table 7, it could be observed that of all the study respondents who perceived a difference between adolescents who are in school and those who are not as regards their drug use, a greater majority (71.4%) were in the category of those with higher educational level, while the remaining 28.6% were in the category of those with lower educational level. On the other hand, majority of the respondents (56.5%) who perceived that there is no difference between adolescents who are in school and those who are not as regards their drug use were in the category of those with higher educational level, while the remaining 43.5% were in the category of those with lower educational level. Overall, more respondents with a higher level of education than those with a lower level of education perceived a difference between adolescents who are in school and those who are not as regards their drug use. A further observation of the chi-square output shows a statistically significant difference in the proportion of respondents with a higher level of education and those with a lower level perceived a difference between adolescents who are in school and those who are not as regards their drug use ( $\chi^2 = 36.9; df = 1, N = 497, P < .001$ ).

## Qualitative findings

### Reasons adolescents use illicit drugs

For the qualitative findings, reacting to this, respondents mentioned such factors as peer pressure, family background, emotional problems, major life events or unique experience (death of a loved one, affliction or misfortune), youthful exuberance, the need to feel 'high', mass media, personality factors, among others. Respondents were also asked to discuss how these factors impact on adolescents' choice of illicit drug use and behaviour. One of the respondents who described how emotional/relationship problems impact adolescents' choice of illicit drug use and behaviour had this to say:

*"... someone may feel that the economic realities are so harsh and thus insolvent and may experience depression. Depending on his/her ability to cope with the situation, such a person may take to illicit drugs as a temporary measure to forget about his/her environment" (RepOD).*

Another respondent who spoke extensively on how major life events or unique experience (death of a loved one, affliction or misfortune) can influence adolescents' illicit drug use opined that *"...some experience can cause a dramatic change in a persons' life to an extent that taking to drugs become the only escape route. For instance, a rape or incest victim may constantly take to drugs whenever she thinks of the horrific experience she had"*.

### ill adolescents use drugs if they knew the possible consequences?

Majority (81.3%) of the qualitative respondents averred that the knowledge of the consequences of drug intake cannot necessarily decrease its usage. To them, the instant gratification and the euphoria that come with drug use may encourage adolescents to rationalize illicit drug use. One of the respondents puts it this way:

*“Because adolescents perceive issues relating to the implications of illicit drugs on human lives as an abstract subject, they tend to justify the existence of drugs. Some of the adolescents go as far as arguing that illicit drug use is as old as man and because a pocket of people dies due to drug use, does not mean that it will kill everyone. One of the younger folks I counselled at a time, told me that drug kills people who are not smart at taking it. The implication is this: it is either the usage increases or stays the same way”* (Nurse).

Other respondents who perceived that the knowledge of the consequences of illicit drugs can influence adolescents to decrease their drug intake expressed the view that adolescents may find it very difficult to stop; however, they can decide to stop or reduce the intake if they are faced with pernicious situations. Bolstering this position, one of the respondents averred that: *“the crisis that comes with addiction and the whole withdrawal symptoms thing can make the knowledge of the consequences of illicit drugs meaningless”* (Youth leader, male).

## Discussion

The study examined the perception of the public on factors influencing illicit drug use among adolescents. Knowing the perception of the public would help inform policy makers on whether there is difference between what the public perceives about the subject matter and available evidence. Also, future steps that might be taken towards ameliorating this public health concern. From the findings, majority of the respondents considered peer influence as a leading factor influencing illicit drug use. This study is supported by evidence from other studies such as Ibebuike (19). Other factors are the desire to feel 'high', emotional/relationship problems and to cope with their academic problems or assimilate better, what they read (14–19,25). They also indicated that some of these adolescents use illicit drugs to help them cope with challenges such as harsh economic realities or the death of a loved one which could create a vacuum in their heart or traumatizing circumstances like rape (14–17). The respondents believe that when these adolescents use these drugs, it would temporarily put their mind at ease. The same thing goes for emotional/relationship problems. However for the peer influence factor that was frequently mentioned, underscores the influence of such a group on deviant behaviours. One of the reasons why peer influence has been perceived as an important factor during the stage of adolescence is perhaps due to its crucial role as an agent of socialization. Although the peer group was previously regarded as second only to the parents in socializing the child, the peer group currently equals the family in terms of influence over adolescents (26). Thus according to our study, the increasing influence of peer group on adolescent behaviour could be because *“adults and parents would not discuss certain sensitive issues, which the adolescents are curious about; adolescents are left to deal with these issues on their own. The ‘most experienced’ in the peer group usually takes the lead, gives advice and plays a parental role to other adolescents who are in desperate need of acceptance”*. Majority of the factors mentioned by the respondents are similar to findings on the subject. Thus showing in a way, that the public is aware of the actual factors that predispose adolescents to use drugs.

Now that we have known the factors that influence adolescent drug use as perceived by the public. It becomes imperative to know if they (public) think that availing them (adolescents) with information on the possible consequences of illicit drug use will curb their use of such drugs. March (27), suggested that appropriate knowledge can better avoid risks. However, more than half of the respondents don't think that the knowledge of the possible consequences will necessarily stop the use of these drugs. Some of the reasons they have for this perception are because, firstly, the instant gratification and euphoria that come with drug use might encourage adolescents to rationalize drug use. From their point of view, these adolescents believe that the fact that drug use kills some persons

does not mean it will kill everyone, in other words, consequences are over-exaggerated. Secondly, there is the issue of addiction. Changing the continual behaviour of drug use is difficult and if drug use becomes an addiction for these adolescents, knowledge of the consequences, later on, wouldn't change anything in terms of usage. Other reasons are that the present feeling of pain, emptiness, trauma etc. cannot be compared to any later consequences and the peer group influence with social comparison i.e. adolescents taking up drug use in order to feel belonged or accepted among their peers. However, more than half of the respondents believe that knowledge of the possible consequences can hinder these adolescents from using these drugs. The hypothesis tested shows that male respondents are more likely than female respondents to perceive that adolescents would consume illicit drugs even if they knew the possible consequences. While planning interventions or programme for adolescents who use drugs, there should be an equal representation of both males and females as uniform representation might go a long way to guarantee an efficient programme development. Most of the strategic positions in our society (especially in communities) are headed by men and if information comes from mostly them, it might not be very much gender inclusive.

Furthermore, the study attempted to identify the categories of adolescents i.e. in - school (adolescents enrolled in a school) or out - of - school (adolescents not officially enrolled in any school) that are perceived (by the public) to be more involved in the use of drugs in Owerri metropolis. There is no perceived significant difference in drug use between the two categories, however, the hypotheses tested in this regard shows that those with a higher level of education are more than likely to perceive a difference. This could imply that education influences awareness. While it is possible that the public believes that it does not matter the categories of adolescents (whether in or out-of-school, rural or urban area, male or female, etc.) that use drugs, when it comes to illicit drugs use, they believe that both categories are almost same. However studies show that usage varies significantly across groups. There are studies that show these differences (25). Thus showing a difference between their perception and what is found in available evidence.

Finally, according to the Social Learning theory, behaviour is influenced by environmental factors, not just psychological or cognitive factors. In the current study, all of the perceived factors represent either or all of the concepts developed in the social learning theory. For instance, while peer pressure could be representative of the environmental factors, emotional problems or youthful exuberance, and wanting to feel 'high' could be representative of the behavioural factors, psychological factors and how/what they expect to feel, respectively. We cannot talk about environmental factors without talking about the public and their perception of things. To address the increasing rate of illicit drug use, the public has a crucial role to play. From this study, some of the opinions of our respondents differ from evidence. This could be detrimental to implementation of drug use related programmes. Therefore, sensitization and prevention programmes are necessary to re-inforce what they already know and inform them on what they don't know (28). The public comprise of parents and community leaders. If they are mis-informed, it will impact on adolescent behaviour. Thus, reinforcing the reason why their ideas should be ascertained and sensitized. This theory can also serve as resource tools in the development of intervention strategies in tackling drug problems, especially among adolescents. Also, the study has helped to offer more insight into the Socio-cultural theories of drug dependence/use (29). People's socio-cultural beliefs determine the use/dependence on illicit drugs. The Igbo (the culture of the respondents) abhor illicit drug use (with the exception of alcohol) (29). It is an act they frown at. The socio-cultural beliefs of respondents could be one of the main factors that informed their opinion on the subject matter.

### **Study limitations**

The study only focused on the public's perception of factors that influence the drug use of adolescents. It, however, did not discuss the public's perception of adolescents' choice drugs, consequences or the strategies to curbing this behaviour.

## Conclusion And Recommendation

Peer influence, emotional/relationship problems, the influence of media (especially the social media), youthful exuberance, wanting to feel 'high' among several other identified reasons are perceived by the public as factors that influence adolescents' use of illicit drugs. More particularly, peer pressure was perceived by a majority of the respondents as a major factor and it was also identified as rivalling the family in terms of influence.

To develop policies that will be more efficient in tackling the issue of drug use among adolescents, the understanding of the public on the subject matter needs to be ascertained. Therefore, through the public:

- A social environment should be created which would discourage drug use, with the community, schools and universities, educating children at a very early age (primary school level on the dangers of drug use and the value of life.
- Finally, the communities, schools and universities should formulate policies to prevent drug use and should also hold seminars for parents and families to alert them early to the symptoms of drug use in their children.

## Abbreviations

**KIIs** - Key Informant Interviews

**RepOD** - Representative of the Office of the Director

**RepSW** - Representative of the Social Welfare

**SPSS** – Statistical Package for Social Sciences

**N.C.E.** – National Certificate Examination

**OND** - Ordinary National Diploma

**HND** - Higher National Diploma

## Declarations

### ***Ethic Approval and consent to participate***

The study was approved by the ethics committee of the department of Sociology/Anthropology, University of Nigeria, Nsukka. Each participant was given a consent form to sign showing their consent to participate in the study.

### ***Consent for publication***

Not applicable.

### ***Availability of data and materials***

The datasets used and/or analyzed during the current study are available from the lead author on reasonable request.

### ***Competing interest***

The authors declare that there are no competing interests.

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## ***Authors' contribution***

OOU conceived the topic and prepared the first draft. EN guided the creation of the topic and also reviewed and made strategic inputs to the paper, section by section until the final draft. AO and UNP reviewed and made strategic inputs to the paper. All authors read and approved the final manuscript.

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OOU has a M.Sc. in Medical Sociology from University of Nigeria, Nsukka. AO has a M.Sc. and is a lecturer with the department of Sociology/Anthropology, University of Nigeria, Nsukka.

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