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ABSTRACT

Drug abuse threatens and tends to derail these noble strides by demotivating the students in learning and subsequently ruining school growing children that the government intends to rely on in driving the economy to the next level. Despite the overwhelming intervention

DRUG ABUSE ON ACADEMIC
PERFORMANCE OF BASIC
SCIENCE STUDENTS, IN RIVERS
STATE.

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Introduction

Background of the Study

human central nervous system (CNS) and its components have been so compacted and hidden by nature in such a way that is sacred from interference by either excess use of liquid, solid and gaseous materials. And so any attempt to temper or disorganize its naturality by omission or commission, deliberately or indeliberately, decently or indecently affects the psychic of the human nature which is an axiomatic facts and its result is to Trigger abnormal behavior of the concerned.

Far from been correct, some people delve into this nefarious act which results into the alteration of their biochemistry through the aid of drug



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strategies by the Government, non-governmental organization (NGOs), religious organizations, and many other keen stakeholders to curb the problem of drug abuse especially among the youths, the number of school growing youths being sucked into drug abuse seems to be escalating daily. The purpose of this study is to assess the effect of drug abuse on participation in learning among science students in Rivers State, Nigeria. The study used descriptive survey design combining both qualitative and quantitative research strategies. The research targeted all the form three students and their respective school principals in the three education zones of the state which are Rivers West, Rivers East and Rivers central. Nine schools of the three education zones in Rivers State were sampled. Purposive sampling was used in the selection of the nine schools and their respective principals. From each selected school, 20 Form three students were selected using systematic sampling technique. Questionnaires were used for data collection, hence data was obtained from the field it was coded and analyzed by computer using a statistical software SPSS (Statistical Package for Social Sciences). On the basis of findings, the study concludes that all the principals had experienced cases of drug abuse from students in their respective schools. About (87.5%) of the principals kept records of those students engaging in drug abuse. The study concluded that most of the schools offered guidance and counselling to the students and that most of the students had attended guidance and counselling against drugs abuse in their schools. Alcohol was the frequently abused drug in the schools as expressed with a mean of 2.632. The study concluded that drug abuse among the students caused dropping out of schools, strained relationship with other students, lack of interest in studying, low concentration span and declining grades. The study concluded

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that anxiety, headache, feeling sleepy, confusion and vomiting were serious effects of drug abuse among students and that the students have friends who take drugs. The study recommends that all schools should set up guidance and counselling offices facilitated by professionals to counsel students who indulge in drug abuse. Parents and teachers should discourage students and be firm in ensuring that the students do not take alcohol which is the most abused in the schools. The parents should also ensure that they do not give so much money to their children and if they do so they should ensure that the money is put into constructive use.

Keyword: Drug abuse, effect academic performance, science students.

abuse which they claim that the sole aim is to alleviate an impending problem by making them to forget an ugly issue around them and sleep off the issue. The said issue or problem in this research work, noticed them as callous rascalians, whether these drug abuse make them to sleep or forget their problems this paper reviews that it has a salubrious, futuristic effects on their academic performance of the recipients.

The history of human race has also been the history of drug abuse (Maithya, 2009). In itself, the use of drugs does not constitute an evil; infact some drugs have served as a medical blessing. (Maithya, 2009) Since, time immemorial, earliest times, herbs, roots, bark, leaves have been used to relieve pain and help control diseases. History tells us that the Chinese used Opium as a cure of dysentery before the 18thcentury. European countries such as Britain and Holland were



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known to exchange opium growth in their colonies for tea and silk with China (United Nations, 2015). Unfortunately, certain drugs that initially produce enticing effects, such as sense of feeling good, elevation, serenity and power have evolved into a problem of dependence and abuse.

Despite the overwhelming intervention strategies by the Government, religious organizations, non-governmental sectors and many other keen stakeholders have tried to curb the problem of drug and substance abuse especially among the youths, the number of school going youths being suck into drug abuse seems to be escalating day by day. The government for instance has placed education at the centre of the social pillar of vision 2030 that intents to make Rivers State a high level income state. To show its commitment it has highly subsidized secondary school education thus boosting access and retention rates in the system, all these intervention strategies have had huge cost implications on the tax-payer including the opportunity cost. Drugs abuse menace should therefore be given the attention it deserves if the intentions of this hefty investment in education are to bear fruits. Rivers State like any other state in the country experiences internal inefficiencies in the school system such as declining academic performance; apathy in learning activities and subsequent drop out in schools as demonstrated in the background to the study. The fact that there is no known study in the region that has ever sought to address the problem of drug abuse in secondary schools from a justification of the current study that seeks to establish the effects of drug abuse on academic performance of basic science students in Rivers State.



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Statement of the problem

Drug abuse is a global problem that poses a great danger to the lives of individuals, society and political instability and insecurity in many countries (United Nations, 2018). According to the United Nations (2005), the use of illicit drugs has increased throughout the world and the major world trend is the increasing availability of many kinds of drugs among ever widening spectrum of consumers. The major concern is that children seem to be targeted as the new market for the drug industry globally.

Drugs abuse has become the focus of research and preventive activities in the developed countries for decades. A study carried out by the London School of Economics in 1980 on students learning behaviour revealed a relationship between drug abuse and poor academic results (Otieno, Balswick & Norland, 1994). Africa has not been spared from the abuse of drugs by the youths. The continent, over recent years has experienced an upsurge in the production, distribution and consumption of drugs with the youths and young adults being mostly affected.

Africa has huge young and vulnerable populations which has become the target market for the illicit drug industry. This constitutes 56% of the population aged between (13-20) years, which constitute secondary school students. In Ethiopia it was reported that 82 per cent of the street children in Addis Ababa use some kinds of drug (United Nations, 2013). Besides, the threat of increasing consumption of illicit drugs amongst the young people and children, which South Africa is becoming a major trans-shipment point in the international drug trade as well as a major producer according to Gilberto Gerra (2013), the



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chief of drug and preventive health branch of the United Nations office on drugs and crime pointed out that West Africa is completely weak in terms of boarder control, undermanned ports and the big drug cartels from Colombia and Latin America have chosen Africa as a way to reach Europe. The United Nations official (Gerra) added that when a country becomes a transit point it immediately becomes a consumption country.

According to the United Nations (UN) statistics 2013, 37,000 people in Africa die annually from diseases associated with drug abuse. The UN estimates that their are 28 million drug users in Africa (United Nations, 2013). An International conference on drug abuse in Kampala 2013 reported that young people in consumption countries were the most vulnerable section of the population, especially those in the period of early and late adolescence who are mostly unable to resist peer pressure and start experimenting with drugs in schools or even outside schools. The international conference on drug abuse in Kampala (2013) advocated for an immediate strong invention to reverse the trend.

State of Drug Abuse in Rivers State

In Rivers State, reports of young peoples' lives ruined by alcohol and drugs are rampant. The youths, especially, are vulnerable to the vice owing to peer pressure, media influence, poor guidance and role modelling (Kikuvi, 2009). This has taken root in schools leading to the high school drop outs and idleness. Drug consumption has led to unrest and widespread destruction of life and property in schools. Rivers was ranked among the top States of Nigeria notorious for



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consumption of narcotics by the United Nations International Drug Control Programme (World report, 2005).

In the course of this research, I sampled twelve (12) secondary schools in Rivers State four (4) from each educational zones as: Rivers west, Rivers East and Rivers central. Without the notice of the students and their teachers (2021), I realized that the ragolis water/coke which males and females students carry to classes in pretense of that they are thirsty, they drink it, it is purely white lies. Rather what is inside the ragolis water is tramadol, as to keep them high as they foolishly claim this is one of the states of drug abuse in Rivers State which is intendum with UN World report of (2005). This information was confirmed in the Integrated Science research laboratory of Ignatius Ajuru University of Education Port Harcourt (IAUE) after been tested with the collected samples from students of various schools in the three educational zones of the state, source: Nwala, L. field work (2021).

According to a National survey on the magnitude of alcohol and drug abuse conducted by National Campaign Against Drug Abuse (NACADA) (2012), the abuse of alcohol in the country is worrying. The facts and figures from this report indicate that 13 per cent of teenagers in the 10 to 11 years of age bracket have used an intoxicating substances mostly alcohol followed by cigarettes. In the 15 to 24 years bracket, a worrying 11.7 per cent are currently hooked in to alcohol, while 6.2 per cent are regular users of Tobacco products, of this group, 4.7 per cent chew Miraa (khat) while 1.5 per cent smokes bhang. Regrettably this age brackets constitutes secondary school going-age. The sad reality presented by the figures and facts in NACADA'S 2012 survey on drugs that is 14.8 per cent of the respondents aged



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between10 to 14 years old are completely oblivious of the risks associated with drug abuse. These statistics underline the need to educate our young people on dangers of alcohol and drug abuse. A number of studies have found a clear and consistent association between drug abuse and school achievement. This practice is not only a determinant to school success and motivation in learning but also a psychological and physical well-being among adolescents (Abot, 2005). The initiation into drug abuse in the early stages of life of the adolescents is positively associated to increased risk of early school dropout, an involvement in deviant adolescent behaviours and behavioural problems into adulthood, which are manifestation in learning among secondary school students (Abot, 2005).

If left unaddressed, escalating rate of drug abuse puts the country at a risk of losing generations as well as underdevelopment owing to the diversion of resources to address among others; basic needs for uneducated and unskilled youths, dependent young adults, increased health care needs among the youths abusing alcohol and drugs, the cost of policing will also be high due to crimes resulting from idleness and youths drinking habits, all those compounded will go a long way in frustrating the attainment of the Millennium Development Goals (MDGs). Specifically the Education for All (E.F.A) goal, and the vision 2030 which envisages making Rivers state industrial and high-level income state will be miraged.

Drug Abuse and Motivation to Learn

Motivation is something that energizes, directs and sustains behaviour; it keep students moving and points to them in a particular



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direction. Students' motivation is reflected in personal investment and in cognitive, emotional and behavioural engagement in school activities (Fredrick et al., 2010). Virtually all students are motivated in one way or the other. One student may be keenly interested in classroom subject matter and seek out challenging course work, participate actively in class discussions and earn high marks; another student may be more concerned with the social side of school, interacting with classmates frequently, attending extracurricular activities almost every day. Still another may be focused on athletics, excelling in physical education classes.

Motivation increases student's time on task which is an important factor affecting their learning achievement (Brophy, 1988) a motivated student makes a concerted effort to understand classroom material. The more motivated students are, the more they want to be accepted and respected by peers. Students who have little interests in academic achievement are at high risk of dropping out before they graduate from high school. Yet another student perhaps due to undetected learning disability or negative peer pressure and consequently indulgence in drug abuse may exhibit withdrawal syndrome, a shy temperament and uncoordinated behaviour. Such a student may be motivated to avoid academics, social situations or athletic activities, pursue school tasks apathetically with an ultimate result of declining performing in academics. According to Ryan et al (2011) indicators of motivation in participation in school related activities include among of time spent on homework, rate of homework completion achievement of high grades, school



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attendance and perceptions of the connectedness to school, teachers and peers.

Data available at the State Education office at Rivers State show that in 2012 alone, 16 students from 5 secondary schools were an agenda for discussion in several District Education Board meetings facing eminent expulsion. Again during sports and other out of school activities, it is common to meet students taking alcohol or being suspended for having taken drugs. In a recent Education Day, the State Education Officer urged that liquor licences of those who sell beer to students, be cancelled by the relevant authority. It is against this backdrop that the current study sets out to study the effects of drug abuse on participation in learning in Rivers State of Nigeria County with a view of suggesting intervention measures to salvage the drug abuse menace in our Nigeria Secondary Schools.

Purpose of the Study

The purpose of this study was to assess the effect of drug abuse on academic performance of basic science students in Rivers State.

Objectives of the Study

The specific objectives of the study sought to:

- i) Identify the commonly abused drugs in secondary schools in Rivers State.
- ii) Establish the causes of drug abuse among secondary school students' in Rivers State.
- iii) Establish the prevalence of drug abuse among secondary school students of Rivers State.



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iv) Establish the effects of drug abuse on academic performance of basic science students in Rivers State.

Research Questions

- i. What are the commonly abused drugs by science students in secondary schools in Rivers State?
- ii. What are the causes of drug abuse among secondary school science students in Rivers State?
- iii. How prevalent is drug abuse among secondary school science students in Rivers State?
- iv. What are the effects of drug abuse on academic performance of basic science students in Rivers State?

Research Hypotheses

- **HO**₁: There is no significant difference between commonly abuse drugs and academic performance of science students in Rivers State.
- **HO₂:** There is no significant difference between the causes of drug abuse and academic performance of science students in Rivers State.
- HO₃: There is no significant difference in drug abuse prevalent and academic performance of science students in Rivers State.
- **HO**₄: There is no significant effect of drug abuse on the academic performance of basic science students in Rivers State.

Significance of the Study

i) The findings are expected to yield significant empirical data and information on the effect of drug abuse on academic performance and school participation of learners.



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- ii) The findings are expected to help the ministry of education officials in understanding the causes of drug abuse among science students and other students also assist to develop intervention strategies.
- iii) The study is likely to add to the body of knowledge in the area of drug abuse in Rivers State that may be utilized by other researchers.

REVIEW OF RELATED LITERATURE INTRODUCTION

This chapter covered a review of literature related to the study. The chapter covered the following: Family background and drug abuse, peer pressure and drug abuse, availability of drugs and drug abuse, school environment and drug abuse, socio-economic background and drug abuse, age and drug abuse, category of school and drug abuse and the effects of drug abuse on participation in learning among secondary school students.

Apart from the above mention citations, there are other independent variables that accelerate drug abuse in our society and elsewhere. These variables are family background, peer pressure, gender, drug availability, religious inclination of the people, age of the students, category of school and it environment, socio-economic background of parents.

Family Background and Drug Abuse

The family especially the parents are the child's basic socializing agents, indicates that a child gains his or her first standard of behaviour from the teaching of parents and other grown-up persons around. She further argues that if a child observes a disjuncture between parents teaching and practice, it creates doubt, which is carried into adolescence, giving rise to deviant behaviour. Eggert



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(2001) associates delinquency, for example alcohol and marijuana abuse with laxity, inconsistent or abusive parental discipline. Indeed Ndetei (2004) noted that the family setup of a child influences his or her habits. If a child is borne of a drug addict then there is a likelihood of the same habits being transferred. He further notes that this is why there is high rate of drug abuse at the coastal region of Kenya where over 150,000 inhabitants of Nyali are drug addicts, prompting some villagers to form vigil groups to eject visitors out of the villages.

Abot, (2005) is among researchers who have looked at issues related to the family and use of drugs among the youths. In his Rapid Situation Analysis in Nigeria, he found that being male in unstable family was associated with high risk for drug abuse. He also notes that in Nigeria, cannabis abusers tend to be young men including students, who have been deprived parental supervision and warmth when they were young. Kikuvi (2009) says that adolescents with drug abusing parents experience a higher rate of parental and family problems than adolescents whose parents do not abuse drug. This may cause poor parents child attachment, which may in turn lead to lack of commitment to convectional activities thereby at times leading to adolescent drug taking. Imbosa (2002) adds that youths with poor home support tends to seek support and understanding elsewhere. Many find affection, understanding and support in the lifestyle of a drug abuse subgroup.

Effects of Drug Abuse on Academic Performance of Science Students

Young people who persistently abuse drug often experience an array of problems, including academic difficulties, health-related problems, poor peer relationship and involvement with the juvenile justice system. Additionally, there are consequences for family members, the



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community and the entire society like conflict between friends, family breakdown, violence, gangerism, drug trafficking etc.

Declining grades, absenteeism from school and other activities and increased potential for dropping out of school are problems associated with adolescent drug abuse. Hawkins, Calatano and Miller (1992) had research finding that low level of commitment to education and higher truancy rates appear to be related to drug use among adolescents. Again drugs abused effect the brain, this result in major decline in the functions carried out by the brain (Abot, 2005). Drugs affect the student's concentration span, which is drastically reduced and boredom sets in much faster than for non-drug users. The student will lose interest in school work including extra curriculum activities. Most of the psychoactive drugs affect the decision making process of the students, creative thinking and the development of the necessary life and social skills are stunted. They also interfere with the awareness of an individual's unique potential and interest thus affecting their career development (Kikuvi, 2009).

Cognitive and behavioural problems experienced by alcohol-and Drugusing youths may interfere with their academic performance and also present obstacles to learning for their classmate (United Nations, 2005). Drug abuse is associated with crime maintenance of an orderly and safe school atmosphere conducive to learning. It leads to destruction of school property and classroom disorder.

Drug abuse have far reaching ramifications, for instance, according to the survey by NACADA (2012) with a sample of 632 children, it was found out that 6% have ever engaged in sex while on drugs (7.3% for boys and 4.4% for girls). The median age at sexual debut being estimated at 11 years. An assessment of the situation during the first sexual intercourse indicates that 30% had sex unwillingly. Further, about 20% were given incentives to lure them in to sexual act, with a

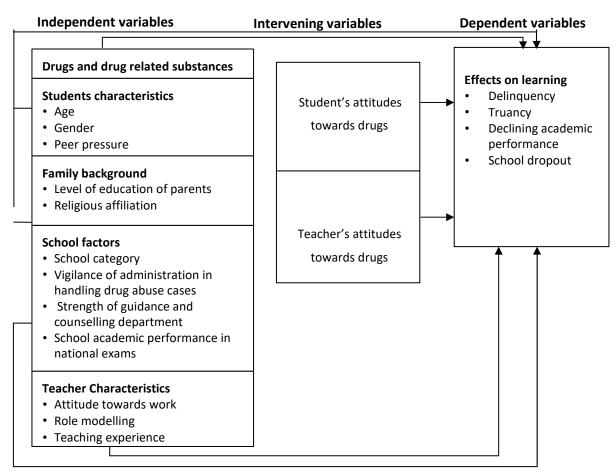


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further 8% reporting having taken drugs before their first sexual encounter. This early introduction into illicit sex goes a long way in impacting negatively on their self-esteem, exposing them to dangers of early pregnancy contracting STD and AIDS, declining academic performance and ultimately dropping out of school altogether (Maithya, 2009).

Conceptual Framework

The figure 1 shows the likely relationships of drug, substance abuse and participation in learning among students. There are various variables that have an effect on learners that abuse drug and related substance.





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The conceptual framework presents independent variables such as drug and drug related substances, school factors, student's characteristics and teachers' characteristics. The independent variables and the intervening variables such as attitude towards drugs and teachers' attitudes towards drug have an effect on participation in learning among students as manifested in delinquency, truancy, declining academic performance and school dropout which are the dependent variables.

RESEARCH MEHODOLOGY

Introduction

This chapter dealt with research design, area of the study, target population, sample size, sampling procedures, research instruments, pilot study, instrument reliability, instrument validity, data collection procedures and data analysis techniques. A discussion of each aspect of the research methodology was given hereunder, beginning with research design.

Research Design

The study used descriptive survey design combining both qualitative and quantitative research strategies. Orodho (2009) notes that a survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals and it is the most frequently used method for collecting information about people's habits in a variety of education or social issues. Notes that descriptive survey research method of study is used to investigate educational problems and to determine and report the way things are or were. The study employed the survey design since the researcher intends to get the precise information and make conclusive results



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regarding the effects of drug and drug abuse on participation in learning and participation in school.

According to Mugenda and Mugenda (1999) the survey design is the best method available to social scientists who are interested in collecting original data for the purposes of describing a population which is too large to observe directly. The researcher combined both qualitative and quantitative approaches. Orodho (2009), notes that both approaches are complementary and where appropriate should be combined in such a way as to maximize their strengths and their limitations.

Target Population

Defines target population as the population to which researcher wants to generalize the results of the study. The research or targeted all the form three students and their respective school principals in the 30 selected secondary schools used in Rivers State. The form threes were targeted because they have been in school long enough as to be influenced by the school environment.

Sampling Procedures and Sample Size

Nine schools constituting 30% of the 30 schools in Rivers State were sampled, at least 10% of the target population is adequate, for science research. Purposive sampling was used in the selection of the nine schools and their respective principals. The researcher relied on her expert judgement to select schools that are representative or typical of the population. Orodho (2009) notes that purposive sampling is hand picking the cases to be included in the sample on the basis of one's judgement of the typicality. The schools were chosen on the following criteria, boys' boarding schools (1) girls boarding schools (2) mixed day and boarding schools (3) and mixed day schools. From each



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selected school, 20 Form three students will be selected using systematic sampling. The first 20 students in the school attendance register were used in the study. Orodho (2009) notes that the use of systematic sampling is quite common in education and science research where large populations are studied, when lists of the population members are available.

Research Instruments

The following research instruments were used to collect data in the study.

Questionnaires

Questionnaires were used for data collection because as Kiess and Bloomquist, (1985) observed, a questionnaire offers considerable advantage in administration; It represents an even stimulus potentiality to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. According to Orodho (2009) a questionnaire is a suitable method of data collection because;

- i. It has the ability to collect a large of information in a reasonably quick space of time.
- ii. Respondents 'anonymity ensures that they give honest answers.
- iii. Questions are standardized thus everyone gets the same questions.

a) School Principals questionnaire

The study used questionnaires designed by the researcher to collect information from nine school principals from the nine secondary schools selected. The researcher aimed at establishing whether there



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are cases of drug abuse in those schools. The questionnaire was used to seek information on the causes of drug abuse and the commonly abused drugs. The researcher also sought to know whether students who take drugs experience difficulties in learning and their general motivation towards learning.

b) Students' questionnaire

The researcher developed students' questionnaire to enable him to collect data from the students selected for the study. This sought data on; the age of the students, gender, religious affiliation, class, their parents' education level and occupation, whether they have taken or seen other students taking drugs in school, what make students take drugs, whether the students who take drugs are affected in learning.

Pilot Study

Before visiting the schools for data collection a pre-testing of the questionnaires was conducted using the two schools in the district but which were not included in the final sample. The aim of the pilot study was to determine accuracy, clarity and suitability of the research instruments and to check their validity and reliability.

Instruments' Reliability

Reliability is defined as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Orodho (2009) further notes that reliability of an instrument is the consistency in producing a reliable result. Piloting enabled the researcher to test the reliability of the instruments and also to familiarize herself with administration of the instrument.

Split-half technique of reliability testing was employed, where the test items were divided in to two halves, each half was scored



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independently of the other with items of the two halves matched on content and difficulty. A correlation coefficient was calculated using Pearson's formula;

Product Moment Correlation:

$$\Gamma = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)\}}}$$

Where Σ = Sum of X scores

 Σ = Sum of Y scores

 Σ = Sum of squared X raw scores

 Σ = Sum of squared Y raw scores

 Σ = Sum of the products of paired X and Y raw scores

N = Number of paired scores

Instruments' Validity

Validity shows whether the items measure what they are designed to measure (Borg and Gall, 1989). According to Wilkinson (1991), a pilot study helps to identify those items that could be misunderstood, and such items were modified accordingly thus increasing face validity. Expert opinions, literature searches and pretesting of open ended questions help to establish content validity. The researcher prepared the instruments in close consultation with his expert judgement which helped to improve content validity.

Data Collection Procedures

The researcher obtained an introduction letter from school and a research permit from the Ministry of Education (MOE). After which, the researcher booked an appointment with the sample schools through the head teachers to visit the schools and administer the questionnaires. The respondents were given instruction and assured of confidentiality after which there was enough time to fill in the questionnaires. The researcher then collected the filled- questionnaire

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within stipulated time as agreed with the respondents. The interview schedules were pre-arranged and appointments booked with the head teachers who were interviewed as the researcher fills in the details in the interview schedules.

Data Analysis Techniques

Once data was obtained from the field it was coded and analyzed with computer using a statistical software SPSS (Statistical Package for Social Sciences). It was then arranged and grouped according to relevant research questions, data was then summarized using distribution tables, bar graphs and pie charts for all items.

After data collection using questionnaires the obtained information was arranged and grouped according to the relevant research questions. The data was then organized, tabulated and analyzed in frequency table; ratios and percentages with the help of the statistical package for social sciences (SPSS) software. In data analysis percentages have a considerable advantage over more complex statistics.

DATA ANALYSIS AND INTERPRETATIONS Introduction

This chapter presents analysis of the data on the effects of drug abuse on participation in learning among science students. The chapter also provides the major findings and results of the study and discusses those findings and results against the literature reviewed and study objectives. The data is mainly presented in frequency tables, means and standard deviation.

Response Rate

The study targeted 180 Form Three students and their respective 9 (nine) school principals in nine selected secondary schools in Rivers



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State. However, only 8 (eight) head teachers and 132 Form Three (3) students responded and returned their questionnaires contributing to 74.07% response rate. According to Mugenda and Mugenda (1999) a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent; therefore, this response rate was adequate for analysis and reporting.

Reliability Analysis

Prior to the actual study, the researcher carried out a pilot study to pretest the validity and reliability of data collected using the questionnaire. The pilot study allowed for pre-testing of the research instrument. The results on reliability of the research instruments are presented in Table 4.1.

Table 4.1: Reliability Coefficients

Scale	Cronbach's	Number of
	Alpha	Items
Drugs and drug related	0.784	15
substances		
Students characteristics	0.849	8
Family background	0.735	10
School factors	0.746	13
Teacher Characteristics	0.823	7

The reliability of the questionnaire was evaluated through Cronbach's Alpha which measures the internal consistency. The Alpha measures internal consistency by establishing if certain item measures the same construct. Cronbach's Alpha was established for every objective in order to determine if each scale (objective) would produce consistent results should the research be done later on. The findings of the pilot



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study shows that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Mugenda and Mugenda, 2003).

Demographic Data of Students (Student Characteristics)

This section comprises the demographic information of the respondents including the age and gender of the respondents.

Age of the Respondents

The findings on age by various age brackets of the respondents are presented in Table 4. 2.

Table 4.2: Age of the Respondents

	Frequency	Percentage
10-12 years	0	0.0
13-15 years	0	0.0
16-18 years	123	93.2
19-21 years	8	6.1
21 years and above	1	0.8

Total 132 100.0

The analysis in Table 4.2 indicates that, 93.2% of the respondents were between 16-18 years, 6.1% were between 19-21 years and 0.8% was 21 years. This is in line with the normal expected age for Form Three (3) students.

Gender of students

The findings on the gender of the respondents are presented in Table 4.3.



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Table 4.3: Gender of the Respondents

	Frequency	Percentage
Male	77	58.3
Female	55	41.7

Total 132 100.0

The analysis in Table 4.3 indicates that 58.3% of the respondents were male and 41.7% were female. This is in line with the education trend in Kenya where there are more male students' enrolments in secondary schools than female students.

Family Background

This section has given the findings on the family background as indicated by whom the students live with and the religion of the respondents.

People who stayed and lived with students

The findings on which the students live with are represented in Table 4.4.

Table 4.4: Who the Students Live With

	Frequency	Percentage
Parents	108	81.8
Guardian	9	6.8
Relatives	15	11.4

Total 132 100.0

The analysis in Table 4.4 indicates that 81.8% of the respondents lived with their parents, 11.4% lived with their relatives and 6.8% lived with guardians. Students can take to drug abuse depending on the commitment of the person they live with to look out on their activities



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at home and away from home and the friends that the students keep. This is in line with Ndetei (2004) who noted that the family setup of a child influences his or her habits. If a child is borne of a drug addict then there is a likelihood of the same habits being transferred.

Religion of the Respondents

The findings on the religion of the respondents are represented in Table 4.5.

Table 4.5: Religion of the Respondents

	Frequency	Percentage
Catholic	61	46.2
Protestant	69	52.1
Muslim	2	1.7
T. (.)		

Total 132 100.0

The analysis in Table 4.5 indicates that 52.1% of the respondents are Protestants, 46.2% of the respondents are catholic and 1.7% of the respondents are Muslim. This can be attributed to the fact that there are many protestant churches in the area.

School Factors

This section has focused on school factors such as school category, steps that schools take on students found taking drugs, guidance and counselling against drugs attendance in schools and the expected school performance.

The findings on the category of school of the respondents are presented in Table 4. 6.

Table 4. 6: Category of School

	Frequency	Percentage
Boarding School	18	13.6



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Day School	55	41.7
Day and Boarding School	59	44.7
Total	132	100.0

The analysis in Table 4.6 indicates that 44.7% of the respondents were in day and boarding school, 41.7% were in day schools and 13.6% were in boarding schools.

Commonly Abused Drugs

The first objective of the study sought to find out the frequency of drug abuse in schools and the frequency of certain drugs in the schools. The findings on the frequency of drug abuse in schools are indicated in Table 4.7 as indicated by the students.

Table 4. 7 Frequency of drug abuse in schools

	Frequency	Percentage
Very frequently	0	0.0
Frequent	14	10.6
Moderately frequent	25	18.9
Not frequent	84	63.6
I do not know	9	6.8

Total 132 100.0

The analysis in Table 4.7 indicates that 63.6% of the respondents indicated that the frequency of drug abuse in schools was not frequent, 18.9% indicated that frequency of drug abuse in schools was moderately frequent, 6.8% indicated that they did not know frequency of drug abuse in schools. According to the principals the drugs that are frequently used in schools are presented in Table 4.8.



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Table 4. 8 Frequency of Various Drugs Use in School

	Mean	Standard Deviation
Alcohol (beer)	2.632	1.414
Tobacco	2.122	0.500
Bhang	2.106	1.113
Miraa (Khat)	2.064	0.645
Glue	1.321	0.587
Kuber	1.254	0.753
Opium	1.153	0.506
Cocaine	1.123	1.003
Gasoline	1.008	0.682
Heroin	1.002	0.577

According to the results in Table 4.8, the respondents indicated that alcohol was frequently used in the schools as indicated by a mean of 2.632. The respondents also indicated that tobacco, bhang, miraa were fairly frequently used as expressed by a mean of 2.122, 2.106 and 2.064 respectively. In addition the respondents indicated that glue, kuber, opium, cocaine, gasoline and heroin were not used as expressed by a mean of 1.321, 1.254, 1.153, 1.123, 1.008 and 1.002 respectively.

The findings indicate that alcohol was frequently used in the schools and this can really affect the performance of the students especially the ones engaging in it because their concentration in class may be affected by the aftermaths of alcohol taking such as hangover.

Causes of Drug Abuse in Schools

The second objective sought to establish the causes of drug abuse among students. The findings on the extent to which various factors influence students to abuse drugs as expressed by students are indicated in Table 4.9.



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Table 4. 9 Extent to which various factors influence students to abuse drugs

Factors	Mean	Standard Deviation
Stress at home	2.834	0.822
Availability of money to buy drugs	2.621	0.546
Family background for example parent	2.564	0.757
also drinks		
Peer pressure	2.453	0.655
School failure	2.325	0.655
Influence by mass media	1.048	0.708
To keep me awake so as to read more	1.009	0.572

The findings summarized in Table 4.9 show that, the respondents indicated that stress at home such as lack of school fees, availability of money to buy and family background, parent also drinks were influential to the students abuse of drugs as expressed by a mean of 2.834, 2.621 and 2.564 respectively. The respondents also indicated that peer pressure and school failure were moderately influential to the students abuse of drugs as expressed by a mean of 2.453 and 2.325 respectively. In addition, the respondents indicated mass media and students' desire to stay awake so as to read more were not influential to the students' abuse of drugs as expressed by a mean of1.048 and 1.009 respectively. This is in line with Kaguthi (2004) who argues that poverty tends to be a characteristic of social deviants including drug abusers. This is what comes to be called economic explanation of deviant's behaviour.

Further students were asked to relate statements on the likely reasons why students abuse drugs. The results on their responses to various statements on drug abuse are summarized in Table 4.10



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Table 4. 10 Agreement of the students with various statements on drug abuse

	Mean	Standard Deviation
Some of my friends take drugs	4.567	0.757
I use drugs because of home problems	4.235	0.655
I know about drugs from my friends	4.124	0.655
I take drugs because my parents also take	3.973	0.708
Many students are involved on one drug or another	3.671	0.764
	2.570	0.546
I use drugs to cope with stress	3.578	0.546
I take drugs to belong to my friends	3.346	0.804
I take drugs to gain strength	1.564	0.822

The findings summarized in Table 4.10 show that, the respondents strongly agreed some of their friends take drugs as expressed by a mean of 4.567. The findings also show that the respondents agreed they use drugs because of home problems, they know about drugs from their friends, they take drugs because their parents also take, many students are involved in one drug or the other drug and that they use drugs to cope with stress as indicated by a mean of 4.235, 4.124, 3.973, 3.671 and 3.578 respectively. The study also found out that the respondents were undecided on taking drugs in order to be accepted by their friends as expressed by a mean of 3.346. Further the study found out that the respondents disagreed that they take drugs to gain strength as expressed by a mean of 1.564.

Additional information on school factors that cause students to abuse drugs is contained in Table 4.11. This information was elicited from students. The study sought to find out the agreement level with the



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contribution of various school factors to drug abuse among students. The results are indicated in table 4.11 as expressed by the students.

Table 4. 11: Contribution of various school factors to drug abuse

School Factors	Mean	Standard
		Deviation
Poor role modelling by teachers	4.391	0.679
Failure in school academic performance	4.002	0.524
Conflict between students and teachers?	3.873	1.414
Perceptions of approval of drug using behaviour	3.277	1.247
Ineffective classroom teaching	3.217	0.545
Poor communication between students and the	2.764	0.576
administration		

The analysis in Table 4.11 show that, the respondents agreed that poor role modelling by teachers, failure in school academic performance and conflict between students and teacher contributed to drug abuse among students as expressed by a mean of 4.391, 4.002 and 3.873 respectively. The respondents were undecided on the contribution of perceptions of approval of drug using behaviour, ineffective classroom teaching and poor communication between students and the administration to drug abuse among students as expressed by a mean of 3.277, 3.217 and 2.764 respectively. The findings correlate with Kandel (1980) who argued that school environment also plays a part in deviant behaviour including drug abuse. School activities are a focal point for adolescents` behaviour.

Dishion et al (1999) posits that some school risk factors that can influence students to drug and substance abuse are: inappropriate classroom behaviour such as aggression and impulsivity, academic



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failure and poor social copping skills. King'ala (2000) noted that how the school administration manages student's affairs may lead to drug abuse. High handedness, harsh treatment, lack of freedom and student's failure to have their grievances addressed creates stress which can lead to abuse of drugs.

The study also wanted to find out the views of the respondents about the factors in the community that lead or enhance the taking of drugs by students in the schools. The respondents indicated that factors such as drugs are readily available in the community; when parents take drugs too; poor companies in the village may influence some students to take drugs especially in holidays, some families sell the drugs, some bars are built near the schools, drug peddling in the community and some bar attendants allow under age students to enter the bars.

The students recommended that the government should ensure that bars do not sell alcohol to under age persons; parents should be stricter with their children and monitor their activities, parents should ensure that their children maintain friends who are not into drug abuse, parents should also talk and counsel their children about the dangers of drug abuse and the effects associated with the same, teachers should give advices to the students, there should be an improvement in guidance and counselling sector, students should avoid bad company, there should be spiritual guidance to students from teachers, priests and pastors about drugs and their effects.

Table 4. 13 Records of those students engaged in drug abuse

	Frequency	Percentage
Yes	7	87.5
No	1	12.5
Total	8	100



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The analysis on Table 4.13 indicate that, majority of the respondents (87.5%) kept records of those students engaging in drug abuse and 12.5% of the respondents did not keep records of those students engaging in drug abuse.

Finally principals were requested to approximate the number of students that were involved in (Drug taking). The findings on the approximate number of students engaging in drug abuse are indicated in Table 4.14

Table 4. 14 Approximate number of students engaged in drug abuse

	Frequency	Percentage
Most	0	0
Average	2	25
Few	6	75
None	0	0
Total	8	100

According to the findings on Table 4.14, majority of the respondents (75%) indicated that the approximate number of students engaged in drug abuse was few while 25% of the respondents indicated that the approximate number of students engaged in drug abuse was average.

Effects of Drug Abuse in Schools on participation in learning

The fourth objective sought to find from students the likely effects of drug abuse on students' participation in learning. The findings on the effects of drugs abuse on participation in learning among students in the schools are indicated in Table

4.15 as expressed by the principals and students.



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Table 4. 15: Principals reports on Effects of drugs abuse on participation in learning among students in the schools

Effects Mean		Standard Deviation
School drop out	3.424	0.298
Strained relationship with other	3.005	0.464
students		
Lack of interest in studying	2.789	0.457
Low concentration span	2.594	0.493
Declining grades	2.578	0.49
Lack of interest in extra curriculum	2.387	0.298
activities		
Theft	2.354	0.493
Bullying	1.647	0.661
Truancy	1.231	0.298

The results on the effects of drugs abuse on participation among students in the schools in Table 4.15 indicate that the effect of drugs abuse on participation in learning among students in the schools was severe on school dropout, strained relationship with other students, lack of interest in studying, low concentration span and declining grades as expressed by a mean of 3.424, 3.005, 2.789, 2.594 and 2.578 respectively. The study also found that effect of drugs abuse on participation in learning among students in the schools in terms of interest in extra curriculum activities, theft and bullying as expressed by a mean of 2.387, 2.354 and 1.647 respectively was low. In addition the study found out that effect of drugs abuse also included truancy as expressed by a mean of 1.231. These findings correlate with those of Hawkins, Calatano and Miler (1992).



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More information on the influence of drug abuse on participation on learning was provided by students. The results on the effects of drug abuse experienced by the students are summarized in Table 4.16.

Table 4. 16 Effects of drug abuse experienced by the students

	<u> </u>	-
Effect	Mean	Standard Deviation
Anxiety	3.042	0.781
Headache	2.786	0.971
Sleepy	2.643	0.789
Confused	2.574	0.876
Vomiting	2.546	1.113
Nervousness	2.423	1.457
Red eyes	2.236	1.124
Lack of co-ordination	2.202	1.157
Tiredness / fatigue	2.096	0.678

The results on the effects of drug abuse experienced by the students in Table 4.16 indicate that anxiety, headache, sleepy, confused and vomiting were serious effects of drug abuse that the respondents experienced as expressed by a mean of 3.042, 2.786, 2.643, 2.574 and 2.546 respectively. In addition, the study found out that nervousness, red eyes, lack of co-ordination and feeling tired were moderate effects of drug abuse as indicated by a mean of 2.423, 2.236, 2.202 and 2.096 respectively. This is in agreement with United Nations (2005) view that cognitive and behavioural problems experienced by alcohol-and Drugusing youth may interfere with their academic performance and also present obstacles to learning. Again drugs abused effect the brain; this result in major decline in the functions carried out by the brain. According to Abot (2005) drugs affect the students' concentration span, which is further drastically reduced setting in boredom sets in much faster than for non-drug and substance abusing students. The



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student who abuses drugs is likely to lose interest in school work including extra curriculum activities.

Steps that schools take on students found taking drugs

The study found out that all the schools suspended students found taking drugs. The study also found that 5 schools (62.5%) offered guidance and counselling to the students found taking drugs and 3 (37.5%) schools referred the student to counselling elsewhere.

Attendance of guidance and counselling against drugs in schools by students

The findings on the attendance of guidance and counselling against drugs in schools by students are represented in Table 4.17.

The principals of schools were asked to indicate the steps they used to deal with students who were involved in drug taking. Their responses are contained in Table 4.17

Table 4.17 Attendance of guidance and counselling against drugs by students

	Frequency	Percentage
Attended	88	66.7
Not Attended	44	33.3
Total	132	100.0

The analysis in Table 4.17 indicates that 66.7% of the respondents had attended guidance and counselling against drugs in their schools while 33.8% of the respondents had not attended guidance and counselling against drugs in their schools.

Expected school academic performance in national exams by school principals

The findings on the expected school academic performance by the principals in national exams are indicated in Table 4.18 as indicated by the principals.



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Table 4. 18Expected school academic performance by principals in national exams

	Frequency	Percentage
Grade A	0	0.0
Grade A-	0	0.0
Grade B+	0	0.0
Grade B	0	0.0
Grade B-	0	0.0
Grade C+	4	50.0
Grade C	2	25.0
Grade C-	2	25.0
Grade D+ and below	0	0.0
Total	8	100.0

The analysis in Table 4.18 indicate that 50% of the respondents expected academic performance of their schools in national examinations to be Grade C+ and a tie of 25% of the respondents expected that the school academic performance in national examinations of their school would be between grade C+ and C- The findings showed that the respondents expected that most of their students would achieve a grade C plus (C+) and below. These results suggest that principals were aware that drug abuse is not associated with achievement of good grades of B plus (B+) and above.

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The chapter provides the summary of the findings from chapter four, and it also gives the conclusions and recommendations of the study based on the objectives of the study. The objective of this study was



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to assess the effect of drug abuse on academic performance of basic science students in Rivers State.

Summary

The study found out that most of the students (81.8%) lived with their parents.

Most of the students (93.2%) were between the ages 16-18 years. Most of the Most of the student families' religion (52.1%) was protestant. The study found out that all the schools suspended those student found taking drugs. The study also found that most schools (62.5%) offered guidance and counselling to the students. Most of the students (66.7%) had attended guidance and counselling against drugs in their schools. The study also found out that most of the principals (50%) expected their school academic performance in national examinations in their school to be Grade C+. Most of the students (24.2%) indicated that they expected a B+ at KCSE. The study also found out that most of the students (37.1%) aspired for a Bachelor's degree level of education.

The study found out that all the principals had experienced cases of drug abuse by students in their schools. Majority of the principals (87.5%) kept records of those students engaging in drug abuse. The approximate number of students engaged in drug abuse were few as indicated by 75% of the principals. Most of the principals invited specialists to talk to students on dangers of drug abuse. The study also found out that alcohol was frequently used in the schools as indicated by a mean of 2.632. The study also found out that stress at home e.g. lack of school fees, frustrations at home e.g. family breakup, conflict with parents; availability of the drugs e.g. availability of money to buy; and family background e.g. parent also drinks were influential to the students abuse of drugs as expressed by a mean of 2.834, 2.751, 2.621



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and 2.564 respectively. The effect of drugs abuse on participation among students in the schools was moderate on school dropout, strained relationship with other students, lack of interest in studying, low concentration span and declining grades as expressed by a mean of 3.424, 3.005, 2.789, 2.594and 2.578 respectively. Most of the students (63.6%) indicated that drug abuse in the schools was not frequent.

The study found out that anxiety, headache, sleepy, confused and vomiting were serious effects of drug abuse that the students experienced as expressed by a mean of 3.042, 2.786, 2.643, 2.574 and 2.546 respectively. The students strongly agreed that some of their friends take drugs as expressed by a mean of 4.567. Further, the study found out that poor role modelling by teachers, failure in school academic performance and conflict between students and teacher contributed to drug abuse among students as expressed by a mean of 4.391, 4.002 and 3.873 respectively.

Conclusions

On basis of the findings, the following conclusions have been made. These include:

- 1. All the principals had experienced cases of drug abuse by students in their schools. Majority of the principals (87.5%) kept records of those students engaging in drug abuse.
- 2. All the schools suspended students who were found taking drugs.
- 3. The study concluded that most of the schools offered guidance and counselling to the students and that most of the students had attended guidance and counselling against drugs in their schools.



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- 4. The principals expected their school academic performance in national examinations in their school to be Grade C+ and the students expected they will attain a grade of B+ in KCSE.
- 5. Alcohol was the frequently abused drug in the schools as expressed with a mean of 2.632.
- 6. Stress at home for instance lack of school fees, frustrations at home, family breakup, and conflict with parents; availability of the drugs, availability of money to buy; and family background for example the parent also drinks contributed to the students' abuse of drugs.
- 7. The study concluded that drug abuse among the students caused dropping out of school, strained relationship with other students, lack of interest in studying, low concentration span and declining grades.
- 8. The study concluded that anxiety, headache, feeling sleepy, confused and vomiting were serious effects of drug abuse that the students and that the students have friends who take drugs.

Finally the study concluded that poor role modelling by teachers, failure in school academic performance and conflict between students and teacher contribute to drug abuse among students.

Recommendations

The study recommends that:

1. All schools should set up guidance and counselling offices facilitated by professionals to counsel students who indulge in drug abuse. This will help take care of the students with emotional needs that they wish to share in confidence but lack the platform to do so and in return end up turning to drug abuse.



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Principals also should invite specialists often to talk to students on dangers of drug abuse.

- 2. Parents and teachers should discourage and be firm in ensuring that the students do not take alcohol which is the most abused in the schools.
- 3. Parents should handle their issues like breakups in a better manner to avoid hurting the children and avoid conflict with the children which can lead to them engaging in drug abuse.
- 4. The parents should also ensure they do not give so much money to their children and if they do so they should ensure that the money is put into constructive use. The fact that some students have access to a lot of money tempts them to buy drugs.
- 5. Parents and teachers should monitor the company that the students keep to ensure they do not involve themselves with students or non-students who abuse drugs.
- 6. That teacher should set a good example to the students. They should avoid going to school when they are drunk or using other drugs in the presence of the students. They should also work to have better Relationships with the students.

Suggestions for Further Research

A similar study could be carried out in other states to find out whether the same results will be obtained so as to allow for generalization of results.

REFERENCES

Eggert, L. L.; Thompson, E. A.; Herting, J. R., AND Randall, B. P. (2001). Reconnecting Youth to prevent drug abuse, School Dropout, and Suicidal Behaviours among High – Risk Youth. Oxford United States of America.

Elizabeth, B. R.; Susan, L. D, & Suman, A. R. (2003). Preventing Drug Use among children and adolescents . A research – Based Guide for parents, Education and community leaders Second Edition. New York. United States of America.



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FEB., 2022 EDITIONS, INTERNATIONAL JOURNAL OF:

SOCIAL HEALTH AND MEDICAL RESEARCH VOL.8

- Fredrick J. A., Alfeld, C., Eccles, J. (2010). Developing and Fostering Passion in Academic and Non-Academic Domains. Gifted children Quarterly 54 (1).
- Imbosa, M. (2002). An Investigation into Strategies Used in Addressing Drug Abuse Problems. A Case Study of Nairobi Provincial Boys' Secondary Schools. M.E.D Research Project Report. Kenyatta University.
- Kaguthi, J. (2004). Youth in Peril: Alcohol and Drug Abuse in Kenya. Nairobi: Baseline Survey Report.
- Kikuvi, R. N. (2009). Determination of Juvenile Delinquency Development among Pupils in Machakos Rehabilitation Schools. Unpublished Maters Degree Thesis. Kenyatta University.
- Kingala, Y. M. (2000). Mismanagement of Education which results in violence and chaos, a paper presented at an African Convention of Principals, St. Stithian College, South Africa.
- Kithi, N. (2007). Drug Peddlers Warned of Citizen Arrest. Nairobi: Nation Media Group.
- Kombo, D. K. & Tromp, D. L.A (2006). Proposal and Thesis Writing: An
- Introduction. Nairobi: Paulines Publications Africa. "American Educational Journal.
- NACADA (2007). Report Situation Assessment of Drug and Substance Abuse in Nairobi.
- NACADA (2012). A National Survey on the Magnitude of Alcohol and Drug abuse in Kenya Nairobi.
- Ndetei, M. (2004). United Nations Office on Drugs and Crimes: A Study on the Linkages between Drug Abuse, Injecting Drug use and HIV/AIDS in Kenya. New York. WHO Publication.
- Ngesu, I. M, Ndiku, J. & Masese, S. (2008). Drug Dependence and Abuse in Kenya Secondary Schools; Strategies for Intervention. Educational Research and Review. Vol. (10).
- Orodho, J. (2009). Elements of Education and Social Science Research Methods. Kenezja Publisher, Maseno, Kenya.
- Republic of Kenya (2006). National Institute on Drug Abuse and University of Michigan. Monitoring the Future Study Drug Data Tables.
- Ryan, A. M. & Patrick, H. (2001). The Classroom Social Environment and Changes in adolescents University Press.
- United Nations UN (2015). The United Nations and Drug Abuse Control. UN Publication, Vienna.
- United Nations (2018). World Drug Report. New York: Oxford University Press.
- United Nations (2005). World Drug Report. New York: Oxford University Press.
- United Nations (2013). World Drug Report. New York: Oxford University Press.