

**PREVALENCE AND PATTERN OF PSYCHOACTIVE SUBSTANCE USE AMONG
SECONDARY SCHOOL STUDENTS IN BENIN METROPOLITAN AREA**

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BENIN CITY

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**IN PARTIAL FUFILMENT OF THE REQUIREMENT OF THE AWARD OF
BACHELOR'S DEGREE (BNsc)**

OCTOBER, 2025.

DECLARATION

This is to declare that this research project titled "**PREVALENCE AND PATTERN OF PSYCHOACTIVE SUBSTANCE USE AMONG SECONDARY SCHOOL STUDENTS IN BENIN METROPOLITAN AREA**" was carried out by **ATAMAN MARGARET EGHONGHON**. It is solely the result of my work except where acknowledged as being derived from other person(s) or resources.

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CERTIFICATION/APPROVAL

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(EXTERNAL EXAMINER)

DEDICATION

This work is dedicated to Almighty God, the source of all knowledge and wisdom and to my beloved parents, Mr and Mrs Ataman for their unwavering support, love, and encouragement throughout my academic journey.

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My sincere gratitude goes to Almighty God for his grace, strength, mercy, love and kindness upon my life throughout the period of my study and for making this research work a success. I am glad to acknowledge and appreciate the Dean of the Faculty of Nursing Science, Prof F.U Okafor, the Head of Department of Nursing Science; Prof(Mrs) C. E Omorogbe, my project supervisor Mrs C.C Edo-Osagie for the support, guidance and advice throughout this research study. May the Almighty God continue to bless you and your family. My special thanks goes to my course adviser; Mrs. N.E Oyana, as well as all my lecturers; Prof. F.U. Okafor, Prof(Mrs) C. E. Omorogbe, Prof. (Mrs). R. E Esewe, Prof. (Mrs). J.A. Afemikhe, Prof (Mrs) C. Enuke, Sr. J. N. Chukwurah, Mrs C. C. Edo-Osagie, Dr T. A. Ehwareme, Mrs. E. N. Oyana, Mrs. R. Lawal, Mrs Ikhuobase, Mrs F.Esebanme and Mr. Aragua and all other non-academic staff and lecturers for their immense contribution towards my academic growth. I am glad to be under your guidance. Thank you for all your tremendous advice and for the knowledge you have instilled in me.

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ABSTRACT

This study examined the prevalence and pattern of psychoactive substance use among secondary school students in Benin Metropolitan Area, Edo State, Nigeria. A descriptive cross-sectional research design was adopted for the study. The target population consisted of senior secondary school students from selected public secondary schools, with a sample size of 331 respondents selected using simple random sampling technique. Data were collected using a self-structured questionnaire and analyzed using descriptive statistics and chi-square tests.

Findings revealed that the prevalence of psychoactive substance use among the respondents was 15.4%, while the majority (84.6%) reported no history of substance use. The most commonly used substances identified were tramadol (6.3%), alcohol (6.0%), and codeine (3.0%). In terms of usage pattern, a higher proportion of students reported occasional use (6.3%), while others used substances daily or weekly (4.5% each). The study also showed that substances were mainly obtained from friends, schoolmates, and street vendors.

The study concluded that psychoactive substance use exists among secondary school students in Benin Metropolis, with identifiable patterns and influencing factors. It is therefore recommended that schools, families, and government agencies strengthen preventive strategies through health education, counseling services, and stricter control of substance accessibility among adolescents.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Millions of individuals worldwide are impacted by substance use and misuse, which greatly contributes to social, economic, and public health issues. Due to its disastrous effects on individuals, families, and communities, the growing use of psychoactive substances by teenagers and young adults has garnered significant attention worldwide (World Health Organisation [WHO], 2022; United Nations Office on Drugs and Crime [UNODC], 2023). This global threat is not exclusive to developed countries but is quickly spreading throughout developing nations, including Nigeria, where young people are highly exposed to risk factors like unemployment, peer pressure, inadequate parental supervision, and urbanisation.(Abosede et al.2022, Jatau et al.2021)

Since ancient times, psychoactive drugs have been a significant part of human culture (Abosede et al., 2022). Osalusi et al. (2022) define psychoactive substance abuse as "a maladaptive pattern of use indicated by continued use despite knowledge of having a persistent or recurrent social, occupational, psychological, or physical problem that is caused or exacerbated by the recurrent use in situations in which it is physically hazardous." Psychoactive substances like alcohol, tobacco, cocaine, heroin, cannabis (Indian hemp), and cigarettes (nicotine) are among the most often abused substances in the world. Alcohol continues to be the most popular drug in Nigeria (Osalusi et al., 2022).

According to UNODC (2022) and Assad Bio-Sya et al. (2022), adolescents and students in secondary and tertiary institutions face peer pressure, academic stress, and greater freedom from parental authority during their growth period. Emotional instability, curiosity, and the need for independence are characteristics of adolescence, a crucial developmental stage. People frequently experiment with novel behaviours during this time, such as using psychoactive substances. Adolescents are especially susceptible to substance use and dependence due to their propensity for taking risks, peer pressure, media exposure, and lack of parental supervision (Oshodi et al., 2019). If this experimentation is not controlled, it can quickly turn into habitual use and ultimately addiction.

Adolescent's behavior is greatly influenced by their school environment. Substance abuse frequently flourishes in schools that lack adequate supervision, counseling services, and moral guidance. Many pupils get drugs from their friends or from illicit street vendors who are close to the school. Students find it challenging to resist temptation due to the influence of friends who glamorize drug usage and their ignorance of the repercussions (Eze et al., 2021). Additionally, the entertainment industry and social media frequently present substance use as a sign of maturity or a sophisticated lifestyle, which encourages impressionable youth to engage in this activity.

Abuse of psychoactive substances has wide-ranging effects. Drug use can physiologically affect brain function, lead to mental health issues, and raise the chance of mishaps and injuries (WHO, 2022). Socially, it damages connections between people and increases the likelihood of violence, school dropouts, and juvenile delinquency. Families and the healthcare system bear a significant financial burden. Former users may have addiction, unemployment, or criminal behavior in adulthood as a result of the long-term impacts (Afolabi et al., 2022). It is critical to determine

the incidence of substance abuse, frequent substances used, and the behavioral patterns linked to the practice given the concerning increase in substance misuse among secondary school students. Comprehending these trends can help legislators, educators, and medical professionals create successful intervention programs targeted at education, preventive, and rehabilitation. Therefore, this study seeks to examine the prevalence and patterns of psychoactive substance abuse among students of secondary schools in Benin Metropolis.

1.2 STATEMENT OF PROBLEM

One of the most important social and health issues facing the world today is the use of psychoactive substances, particularly among young adults and adolescents. The United Nations Office on Drugs and Crime (UNODC, 2023) estimates that 296 million individuals between the ages of 15 and 64 used drugs at least once in 2021, a 23% rise over the ten years prior. Over 30 million years of healthy living are lost each year owing to substance use disorders, primarily as a result of alcohol, cannabis, and opiate use, according to the World Health Organization (WHO, 2022). Studies show that teen substance usage is alarmingly on the rise throughout Africa. According to Peltzer et al. (2021), 19% of teenagers in South Africa had used at least one psychoactive substance. In a similar vein, Ongwae et al. (2020) found that more than 60% of secondary school students in Kenya had tried with substances like alcohol, marijuana, or inhalants, primarily as a result of curiosity and peer pressure. These trends indicate that teen drug use is growing in importance as a public health issue throughout the continent. The issue has gotten to unsettling proportions in Nigeria. According to the National Drug Law Enforcement Agency (NDLEA, 2022), 14.3 million Nigerians between the ages of 15 and 64 use psychoactive substances, with young people making up the biggest percentage. Additionally, 32% of Lagos State secondary school students reported experimenting with alcohol, tramadol, or

cannabis, according to Abosede et al. (2022). In a different study, Okafor and Nwosu (2021) discovered that Benin City secondary school pupils regularly used drugs like marijuana, cigarettes, and codeine for social acceptance, excitement, or stress reduction.

The National Drug Control Master Plan (2021–2025) and school-based sensitization programs are examples of ongoing interventions, but the prevalence of psychoactive substance use among Nigerian teenagers is still rising. While some young people underestimate the possibility for addiction, many are nonetheless ignorant of the long-term health, academic, and social repercussions of substance use. Control measures have also been less successful because to lax enforcement, social permissiveness, and easy access to drugs.

The researcher's personal experience further underscores this concern. During the researcher's psychiatric posting at Idowina Psychiatric Hospital in Benin City, many of the patients admitted were young students whose mental health disorders such as depression, anxiety, and psychosis were traced to drug use. This firsthand observation revealed the growing reality of substance abuse and its devastating effects on young people and their families.

A significant information gap about the frequency and pattern of psychoactive substance use among secondary school students in Benin Metropolis is highlighted by these concerning trends and firsthand observations. Local-level data is still hard to get by, despite the existence of national and regional statistics. Developing focused preventive programs requires an understanding of the particular substances used, their frequency, and the reasons underlying their use. Therefore, this study seeks to determine the prevalence and pattern of psychoactive substance use among secondary school students in Benin Metropolis, in order to guide evidence-based interventions that can help reduce the rising problem of drug abuse among adolescents.

1.3 Objectives of the Study

The aim of this study is to assess the prevalence and pattern of psychoactive substance use among secondary school students in Benin City.

1.3.1 Specific Objectives

The specific objectives of the study are to:

1. Determine the prevalence of psychoactive substance use among secondary school students in Benin City.
2. Identify the patterns of psychoactive substance use among secondary school students in Benin City.
3. Determine the factors associated with psychoactive substance use among secondary school students in Benin City.

1.4 Research questions

1. What is the prevalence of psychoactive substance use among secondary school students in Benin City?
2. What are the common patterns of psychoactive substance use among secondary school students in Benin City?
3. What factors are associated with psychoactive substance use among secondary school students in Benin City?

1.5 Research Hypothesis

Ho: There is no relationship between prevalence of psychoactive substance use and age among secondary students in Benin City

1.6 Scope of the Study

This study is focused on assessing the prevalence and pattern of psychoactive substance use among secondary school students in Benin City, Edo State. The study is limited to selected public and private secondary schools within Benin Metropolis, which covers Egor, Ikpoba-Okha, and Oredo Local Government Areas of Edo State. The study targets students in senior secondary classes (SS1 to SS3) who are within the adolescent age group, as they are more likely to be exposed to peer pressure and experimentation with psychoactive substances.

1.7 Significance of the Study

Government Policy and Intervention: The study gives the government vital information about the prevalence of psychoactive substance use among students, allowing for the creation of focused policies and initiatives to treat young substance misuse, enhance public health, and lessen related societal effects.

School Support and prevention Initiatives: The study provides schools with information that can direct the development of early detection systems, counseling services, and preventive education programs to identify and assist kids who are at risk of substance misuse, thereby promoting a better school environment.

Family Awareness and Guidance: The findings from this study can help by encouraging more effective parenting techniques, honest communication, and supportive family situations that can lower the likelihood of substance misuse, the findings can help families better understand the factors influencing their children's substance use.

1.8 Operational definition of terms

Prevalence: The proportion or percentage of secondary school students in Benin City who have used psychoactive substances at least once in their lifetime, within the past month, or over a defined time period.

Pattern: The frequency, regularity, and types of psychoactive substances used by secondary school students in Benin City, including the typical sequence of substances used (e.g., alcohol, tobacco, cannabis) and the factors associated with the use.

Substance: Any chemical or compound that can be ingested or inhaled by an individual, potentially altering their mental state, behavior, or physical condition. This includes both legal substances (e.g., alcohol, tobacco) and illegal substances (e.g., cannabis, cocaine).

Psychoactive substance: Any substance that, when consumed, has a direct effect on the central nervous system and alters the user's cognitive, emotional, or behavioral state. This includes substances such as alcohol, tobacco, cannabis, stimulants (e.g., cocaine), and depressants (e.g., opioids).

Secondary students: Students enrolled in secondary schools typically ranging from ages 12 to 18, who are either in the first, second, or third year of their secondary school education

CHAPTER TWO

LITERATURE REVIEW

This chapter presents review of literature to this work on Prevalence and Pattern of Psychoactive substance use. It will be reviewed under the following sub topics; conceptual review, theoretical review and empirical review.

2.1 CONCEPTUAL REVIEW

2.1.1 GENERAL OVERVIEW OF PSYCHOACTIVE SUBSTANCES

Alcohol, amphetamines, cannabis, cocaine, and opioids are examples of psychoactive drugs, which are a wide class of substances, both natural and synthetic, that mainly act in the brain and modify normal nervous system functions, such as mood, perception, and cognition (da Silva et al., 2021). A person's influence on the central nervous system causes a range of changes, including variations in mood, behavior, consciousness, thoughts, and emotions. Psychoactive substances may have unexpected effects even though these changes might be advantageous or desired (Jenna Fletcher, 2023).

2.1.2 CLASSIFICATION OF PSYCHOACTIVE SUBSTANCES

Psychoactive drugs are divided into different classes based on their pharmacological effects.

HALLUCINOGENS :

A unique class of psychoactive drugs known as hallucinogens can change a person's perceptions, ideas, mood, and sense of reality (W. Kristin, 2021). Agonism of the serotonergic 5-HT_{2A} receptors, which are crucial for mood and perception, is their main mode of action (De Gregorio et al., 2021). These drugs can be synthetic (like lysergic acid diethylamide [LSD]) or natural

(like psilocybin in mushrooms, mescaline in peyote and San Pedro cactus, and DMT in ayahuasca and jurema) (Nichols, 2020; Johnson et al., 2022). Psychedelics, often known as hallucinogens, are occasionally used therapeutically to treat mental health conditions such as depression, anxiety, and cognitive impairment (Carhart-Harris et al., 2021; De Gregorio et al., 2021). They cause hallucinations, perceptual distortions, and altered perceptions of time and space, which are frequently referred to as "trips" (Reece & Stitt, 2024; Studerus et al., 2020). Depending on the user's mental state and surroundings, negative effects like fear, paranoia, panic, and loss of control are also frequent, even though users may seek out pleasant sensations like euphoria and heightened awareness (Johnson et al., 2022; Carhart-Harris et al., 2021).

Table 1.1 Commonly Used Street Names of Hallucinogenic Substances (Kristin Waters, 2021).

SUBSTANCES	COMMONLY USED NAMES
Indolamines: Simple tryptamines; Psilocybin	Magic Mushrooms, Shrooms, Mushrooms, Little Smoke, Purple Passion
DMT	Businessman's Trip, Dimitri
Indolamines : Ergolamines ;	
LSD	Acid, Blotters, Blotter Acid, Dots, Mellow Yellow, Window Pane, Yellow Sunshine
Lysergic acid amide (LSA)	Elephant Creeper, Wooly Morning Glory, Glories, Heavenly Blue, Pearly Gates, MG seeds, Flying Saucers
Phenalkylamines;	
Mescaline	Buttons, Cactus, Mesc, Peyoto
Mixed serotonin and dopamine reuptake inhibitors and releasers;	
MDMA	Molly, Ecstasy, Adam, Beans, Biscuit, Clarity, Disco Biscuit, E, Eve, Go, Hug Drug, Lover's Speed, Peace, STP, X, XTC
NMDA receptor antagonists;	
Phencyclidine	Angel, Angel Dust, Hog, Ozone, Rocket Fuel, Shermans, Embalming Fluid, Purple Rain
Dextromethorphan	Dex, Poor Man's PCP, Robo, Skittles, Triple C, Velvet

STIMULANTS:

According to Docherty and Alsufyani (2021), stimulants are psychoactive drugs that raise activity in the central and peripheral nerve systems, resulting in increased energy, alertness, and mood elevation. These medications, which are frequently synthetic, are occasionally altered from pre-existing substances and unregulatedly released into the recreational drug market (Rudin et al., 2021). They produce stimulating and euphoric effects by interacting with monoaminergic neurotransmitters, such as norepinephrine, dopamine, and serotonin, by acting on their transporters (NET, DAT, and SERT) (Rudin et al., 2021). However, there are a number of immediate and long-term negative consequences of stimulants, such as visual abnormalities, temperature dysregulation, and cardiovascular strain (Docherty & Alsufyani, 2021). Body weight, tolerance, dosage, and usage technique all affect how severe these effects are (Khaskayar et al., 2023).

The usage of stimulants may result in fatalities as well as severe peripheral and central side effects. However, due to the novelty of stimulant use and the lack of clinical studies, associated negative effects are sometimes only partially investigated (United Nations Office of Drugs and Crime, 2020). The brain is particularly susceptible to poisoning due to its high metabolic activity and low potential for regeneration (Kiyatkin, 2020). The high energy requirement in the form of glucose originates from energy-intensive brain processes such synaptic transmissions and axonal transport (Pawlik et al., 2022).

DEPRESSANTS:

These medications are used to reduce stress. They usually cause the person to lose consciousness. People who are melancholy, disappointed, disheartened, rejected, or frustrated

tend to use this kind of substance. Other users of this substance include young individuals and recent graduates who have been unemployed for a long period, persons who have lost their jobs, and youngsters who have experienced rejection from their family. Most people forget about their troubles after taking it. Tramadol and codeine, which are present in cough syrups and other prescription drugs, are the most often used depressants in Nigeria.

OPIOIDS:

Due to a substantial increase in overdose mortality, roughly 75% of drug-related deaths in 2020 were related to opioids—opioid use is a serious worldwide health concern. The overprescription of painkillers such as OxyContin, heroin use, and fentanyl-laced medications, which increased addiction and mortality, were the first three waves of the crisis (Albores-García & Cruz, 2023). Opioids are powerful analgesics used in medicine to treat pain, but long-term usage causes tolerance, addiction, and dependence. They primarily affect μ -opioid receptors, which results in both pain alleviation and side effects such as nausea, constipation, and respiratory depression (Paul et al., 2021; Wootten et al., 2021). Essentially, because of their physiological adverse effects and addictive nature, opioids present serious hazards even though they are useful for managing pain (Katz et al., 2021; Kumar et al., 2020).

CANNABINOIDS:

Cannabinoids, a chemically diverse class of new psychoactive substances (NPSs), target the endocannabinoid system and have a variety of effects that are comparable to but stronger than those of cannabis, including elevated mood, relaxation, and hunger stimulation. For the past ten years, cannabinoids have dominated the NPS market in the US and Europe. While some of these effects have been studied for therapeutic purposes, their anticipated stronger psychoactive effects

compared to cannabis and decreased risk perception have led to an increase in their recreational use (Roque-Bravo et al.,2023).

Despite the fact that users often seek for feelings of relaxation, exhilaration, and disinhibition, SC use is significantly associated with a wide spectrum of acute and long-term negative effects. Adverse effects usually appear minutes to hours after use and may last for several hours. These reactions are mostly caused by toxic metabolites, drug interactions, and hazardous combustion byproducts (Alzu'bi et al., 2024). The symptoms affect a number of systems:

Neurological: Users may experience hallucinations, convulsions, agitation, disorientation, short-term memory loss, and psychotic episodes. Third-generation fluorinated SCs (like 5F-ADBINA) have been shown to cause hypothermia and motor impairment in animal studies (Alzu'bi et al., 2024).

Cardiovascular: hypertension, tachycardia, and in extreme cases, myocardial infarction or stroke are common side effects.

Pulmonary: Common lung damage conditions that often require oxygen support are pneumothorax and pneumomediastinum.

Renal and Hepatic: Acute renal damage and liver toxicity have been directly linked to substances like XLR-11.

Digestive; Nausea, vomiting, and cannabis hyperemesis syndrome are other symptoms. Because cannabinoid receptors are widely distributed throughout the body, cannabinoids can impact almost all major organ systems. According to Roque-Bravo et al. (2023), the

cardiovascular, neurological, digestive, dermatological, pulmonary, hepatic, and ophthalmological systems are frequently targeted.

2.1.3 UNDERSTANDING SUBSTANCE USE DISORDER AMONG ADOLESCENTS IN SECONDARY SCHOOL

Adolescence is a crucial time for biological, psychological, and social development. Substance misuse and its detrimental effects are also more prevalent during this period. Adolescents are more likely to experience the negative long-term effects of substance use, including mental health issues, poor academic performance, substance use disorders, and an increased likelihood of developing an alcohol or marijuana addiction. Over the past few decades, there has been a considerable shift in the kind of illegal substances that people consume (Nath et al., 2022). 5.6% of people between the ages of 15 and 26 reported taking drugs at least once in 2016, according to Nawi et al. (2020). The usage of psychoactive substances is a widespread issue. Alcohol and illicit drugs are major issues for urgent care and public health, which is why kids and teens visit emergency rooms frequently. It's common knowledge that younger people use drugs more frequently than older adults. Particularly among young men between the ages of 15 and 30, drug usage is rising in a number of Association of Southeast Asian Nations nations. According to the 2013 Global Burden of Disease report, substance addiction is becoming a bigger problem for teenagers and young people. Early substance misuse increases the likelihood of later-life behavioral, social, physical, and health issues. Recreational drug use is another underestimated factor that increases childhood morbidity and mortality. One of the detrimental consequences of teen substance use is the higher chance of addiction for those who start drinking, smoking, or using drugs before the age of 18 (Nath et al., 2022). Furthermore, most individuals with substance use problems begin using substances in their youth (Kulak & Griswold, 2019).

Childhood trauma has been linked to suicidal thoughts and attempts. The precise mental behavior that mediates the link between childhood trauma and adult suicidal thoughts and attempts is still unknown. According to recent studies, teens are facing suicidal thoughts, psychiatric illness symptoms such as anxiety, mood, and conduct disorders, and various forms of child maltreatment such as emotional neglect, physical punishment, and sexual abuse, all of which contribute to children's propensity for alcohol. Drug-using students are more prone to commit crimes, including bullying and violent behavior. On the other hand, it has been linked to social disorder, abnormal behavior, and association with hostile groups(Nath et al., 2021).

2.1.4 COMMONLY USED PSYCHOACTIVE SUBSTANCE AMONG ADOLESCENTS IN SECONDARY SCHOOL

ALCOHOL:

Adolescence is a critical period of brain development marked by the fast expansion of white matter and the reorganization of grey matter. Drinking too much alcohol during this time might impair decision-making, impulse control, and motor coordination, which raises the likelihood of mishaps and inappropriate social conduct (Nath et al., 2021). Adolescents are more susceptible to the detrimental effects of alcohol because it affects brain regions that develop later, such as the frontal cortex, which is in charge of higher-order cognitive and emotional regulation (Lees et al., 2020). Additionally, research shows that young adults (18–25 years old) are more than twice as likely as older persons to acquire alcohol use disorder (AUD) (Fletcher, 2021). Teens who have experienced trauma, particularly those who have survived sexual assault, are more likely to drink alcohol, binge drink, and acquire AUD as a coping mechanism(Dyar & Kaysen, 2023).

CANNABIS/MARIJUANA:

Cannabis, sometimes known as marijuana, continues to be one of the most widely used illegal psychoactive substances among teenagers worldwide especially in developing nations. Long-term or heavy use of it is linked to cognitive impairments such learning, working memory, and attention problems (Nath et al., 2021). The medication modifies the endocannabinoid system, interfering with reward, emotion, and executive functioning processes that have a role in the emergence of mental health conditions such depression and anxiety (Connor et al., 2021).

The growing legalization of cannabis in several wealthy nations may exacerbate Cannabis Use Disorder (CUD) by making more potent varieties more readily available at reduced prices. There are presently no licensed pharmacological therapies for CUD, despite the fact that cognitive-behavioral therapy (CBT), motivational enhancement therapy, and contingency management have demonstrated efficacy in lowering cannabis consumption (Connor et al., 2021). Additionally, studies reveal that early cannabis usage (before the age of 16) is linked to shorter reaction times and worse neurocognitive function, possibly as a result of disruption of brain maturation processes as synaptic pruning and myelination (Nath et al., 2021).

MDMA (ECSTASY/MOLLY):

This is commonly referred to as ecstasy or molly, MDMA (3,4-methylenedioxy-methamphetamine) is a synthetic psychoactive substance with both stimulant and hallucinogenic effects. MDMA stimulates the release of serotonin, dopamine, and norepinephrine, which affect mood, energy, and perception. It was first used in psychotherapy in the 1970s (Nath et al., 2021).

Additionally, the production of chemicals that increase feelings of empathy, intimacy, and affection is triggered by the rise in serotonin, which frequently causes users to feel emotionally linked to strangers. Although withdrawal symptoms, including anxiety, depression, confusion,

irritability, lack of appetite, and insomnia, can remain for many days following use, the drug's effects usually last three to six hours. Impulsivity, aggressive conduct, and cognitive deterioration might result from heavy or prolonged usage (Nath et al., 2021).

OPIUM:

In addition to being a big producer of illicit opium, India is a major drug user. In India, opium has a long history. The most prevalent behavioral changes include lack of motivation, depression, hyperactivity, lack of interest or concentration, mood swings or abrupt behavioral changes, confusion or disorientation, depression, anxiety, distortion of reality perception, social isolation, slurred or slow-moving speech, decreased coordination, loss of interest in once-enjoyed activities, stealing from family members, or engaging in other illegal activities. It is crucial to prohibit both production and consumption, with the exception of chemicals intended for medicinal purposes, because if a reasonably well-run nation like India cannot stop drug leaks, the problem must be of massive proportions (Nath et al., 2021).

COCAINE:

Cocaine is an extremely addictive drug that can cause a variety of illnesses, symptoms, and mental health issues. Among the symptoms include agitation, paranoia, delusions, hallucinations, hostility, and thoughts of suicide or murder. The medicine may cause them directly or indirectly by exacerbating mental problems that already existed. The use of cocaine in "crack" form is frequently linked to more severe and frequent symptoms. Cocaine can cause a variety of psychiatric symptoms and aggravate a number of mental diseases (Nath et al., 2021).

2.1.5 RISK FACTORS OF PSYCHOACTIVE SUBSTANCE USE

THE INFLUENCE OF PEERS

Peer pressure continues to be one of the main drivers of drug use among teens, particularly those enrolled in secondary schools. During adolescence, people's need for approval, acceptance, and a sense of belonging among their peer groups grows. In order to avoid rejection or ridicule, students who are surrounded by friends who take drugs are sometimes encouraged to do the same (Gheorghe et al., 2021).

FAMILY INFLUENCE:

Families have a big impact on adolescents' beliefs and actions, particularly their tendency to take drugs. Adolescents are more likely to experiment with drugs if they are raised in families where drug use is tolerated or where there is less parental supervision (Alzu'bi et al., 2024).

CURIOSITY AND EXPERIMENTATION:

Teenagers are naturally curious and often driven to try new activities, often without fully appreciating the consequences. Curiosity in the effects of psychoactive substances is one of the most frequent reasons secondary school pupils use drugs for the first time (Toxicity of Synthetic Cannabinoids, 2023).

STRESS AND EMOTIONAL PROBLEMS:

Stressful life circumstances, emotional difficulties, and mental health concerns all have a major impact on adolescent substance use. Secondary school students may be more likely to use drugs as a coping strategy due to societal difficulties, poverty, household responsibilities, and academic demands (World Health Organization, 2022).

THE INFLUENCE OF MEDIA AND SOCIAL MEDIA:

The influence of the media and, more recently, social media platforms on youth behavior cannot be overstated. On websites like YouTube, Instagram, and TikTok, substance use is often glamorized as safe, fashionable, or even a status symbol (Chukwu et al., 2023).

EASY AVAILABILITY OF DRUG:

Regular exposure to this type of content may cause teenagers to develop positive attitudes toward drugs, which may lower their sense of risk and raise their likelihood of using. The availability of psychoactive substances has a big impact on teens' use of them. Due to the expansion of unregulated drug markets and the relative ease of obtaining drugs like these, drug use among secondary school students has surged in urban locations like Benin City (AP NEWS, 2025).

POOR ACADEMIC PERFORMANCE:

Teenage substance use and scholastic difficulties are correlated in both directions. Students who struggle academically, are disengaged from school, or have learning challenges frequently turn to drugs as a coping strategy or as a way to vent their frustration (World Health Organization, 2022). A vicious cycle of declining academic results results from substance use, which further weakens cognitive abilities like memory, attention, and executive control. To make matters worse, students who experience alienation from school communities may turn to drug-using peer groups in an attempt to fit in. Drug use is therefore both a cause and an effect of poor academic performance.

LACK OF KNOWLEDGE AND AWARENESS:

Lack of knowledge and understanding about the dangers of psychoactive substances is a major contributing factor to teen drug usage. Students are exposed to false information since drug education is either nonexistent, out-of-date, or inadequate in many secondary schools (Toxicity of Synthetic Cannabinoids, 2023).

ENVIRONMENTAL AND URBAN FACTORS:

Higher rates of substance use among adolescents are a result of many issues brought about by urbanization, such as increased anonymity, decreased community relationships, and larger drug markets. Adolescents are regularly exposed to drug use in their surroundings in urban locations like Benin City, whether through open consumption, street vendors, or media representations (Alzu'bi et al., 2024).

PERSONALITY TRAITS:

Adolescents who possess certain innate personality qualities, such as high impulsivity, sensation-seeking, and risk-taking behavior, are more likely to use drugs. These characteristics affect how people view risk and reward, frequently causing them to put short-term enjoyment ahead of long-term repercussions (Gheorghe et al., 2021).

2.1.6 CONSEQUENCES OF PSYCHOACTIVE SUBSTANCE USE

Physical Health Repercussions:

Abuse of psychoactive substances is linked to negative physical health outcomes. According to a scoping analysis, benzodiazepines, opioids, and gabapentinoids are among the most often abused medications in Europe, resulting in poisonings, adverse reactions, ER visits, and fatalities

(Araújo et al., 2023). Furthermore, synthetic cannabinoids have acute neurological concerns due to their association with seizures and decreased consciousness (Pucci et al., 2021).

Effect on Mental Health and Cognitive Function:

Psychoactive chemicals have a substantial impact on mental health. A systematic evaluation found that synthetic cannabinoids have been connected to psychosis, mania, and severe mental illnesses (Onyeka et al., 2020). High-potency cannabis use has also been linked to an increased risk of psychosis, especially in teenagers and those with a genetic predisposition (Atumeyi et al. 2021).

Academic and Cognitive Performance:

Academic performance is negatively impacted by substance usage. A thorough evaluation of medical students found that substance usage significantly lowers productivity and academic performance (Nkporbu & Stanley, 2023). Similarly, University of Lagos undergraduates' academic activities and performance were found to be negatively impacted by the usage of psychoactive substances (Osalusi et al., 2023).

Quality of Life and Social Repercussions:

Users of psychoactive substances usually lead poor lives. A review found that drug users had worse health and quality of life outcomes than non-users (Bilaminu & Anokwuru, 2023). Additionally, psychoactive substance abuse has been connected to a number of social issues, such as low productivity, child abuse, sexual assault, and a lack of integrity (Atumeyi et al., 2021).

2.2 THEORITICAL FRAMEWORK

This paradigm uses Social Learning Theory (SLT) to explain the existence of the research problem under investigation. SLT claims that imitation, modeling, and observation are how people pick up behaviors like substance abuse. The study will investigate how interactions in the student's social environment lead to the start and continuation of substance use by using SLT.

2.2.1 SOCIAL LEARNING THEORY

In 1977, Albert Bandura created the concept of social learning. According to Bandura, learning is influenced by motivation, attention, attitudes, and emotions and occurs through modeling, imitation, and observation. This theory explains how learning is impacted by the interaction of cognitive and environmental elements (Cherry, 2022). People learn when they observe the consequences of the acts of others. Bandura's theory extends beyond behavior theory, which maintains that all behaviors are acquired through conditioning, and cognitive theory, which considers psychological elements like memory and attention (Overskeid, 2018). Social Learning Theory (SLT) is probably the most important theory of learning and development in existence today. It is based on many of the core concepts of traditional learning theory.

According to Bandura & Walters (1977), people can observe behavior either directly through social contacts with other people or indirectly through media. Behaviorists contend that all learning arises from direct experience with the environment through a process of association and reinforcement, notwithstanding Bandura's view that direct reinforcement cannot explain any kind of learning (Overskeid, 2018). Bandura's theory of social learning adds social components to the notion that people can learn new behaviors and information by merely observing the actions of others, in contrast to behavioral learning theory, which maintains that all learning results from

associations created through conditioning, reinforcement, and punishment (Fryling et al., 2011). This type of theory can explain a wide variety of behaviors, including some that are often not described by conventional learning theories of learning (Cherry, 2022). According to Bandura's theory of social learning, people pick up knowledge through interaction and observation.

2.2.2 CONCEPT OF SOCIAL LEARNING THEORY

Essential Concepts of Social Learning and Key Success Factors for SLT. SLT is based on three key concepts. First, the idea that people may learn by watching is known as observational learning. Second, the idea that this process is heavily influenced by the internal mental state is known as intrinsic reinforcement. Thirdly, this approach recognizes that knowing something does not ensure that it will lead to behavioral changes and follow modeling, according to Cherry (2022).

1.Observational learning: One of the most famous psychological studies ever conducted used a doll called Bobo. Bandura demonstrated how kids observe and imitate the actions of others. In the Bandura study, kids saw adults mistreating Bobo's dolls. Children start to mimic aggressive behaviors they saw earlier when they are permitted to play in rooms with Bobo dolls (Do, 2011). According to Cherry (2022), Bandura identified three fundamental models of observational learning in 1977: A direct model is one in which real people act out or demonstrate a behavior. Symbolic models are those in which fictional or real-life characters exhibit certain behaviors in books, films, TV shows, or online media. verbal educational model, in which a behavior is described and explained. It is evident that participation in an activity by others is not even necessary for observational learning. We can learn by reading, hearing, or observing the activities of characters in books and movies, as well as by listening to podcasts or other spoken instructions (Bajcar & Björbel, 2018).

2. Important Mental Conditions to Understand: According to Bandura, learning is influenced by a variety of external factors, including environmental reinforcement and behavior (Cherry, 2022). According to Bandura that external factors, environmental reinforcement are not the only factors influencing learning and behavior (Cook & Artino Jr, 2016). The mental state and motivation of a person play an important role in determining whether a behavior is learned or not.

3. Learning Doesn't necessarily Lead to Change: When a new behavior is demonstrated, learning can frequently be seen right away. When teaching a youngster to ride a bicycle, for instance, you may rapidly assess whether learning has taken place by having the child ride the bike on their own (Cherry, 2022). However, learning can occasionally occur even though it may not be evident right away. Behaviorists hold that learning results in long-lasting behavioral changes, however observational learning demonstrates that humans can acquire new knowledge without displaying novel behaviors (Fryling et al., 2011).

2.2.3 APPLICATION OF SOCIAL LEARNING THEORY TO THE USE OF PSYCHOACTIVE SUBSTANCES

Students are more prone to emulate their friends or role models when they see them using drugs and reaping benefits like relaxation, confidence boosts, or social acceptability. Social and emotional incentives linked to substance usage serve as reinforcements that promote the behavior's repetition. For instance, a student may be inspired to engage in similar actions in order to reap the same benefits if they see their peer using drugs and receiving attention or social approval. Since behaviors that produce desired results are more likely to be repeated, reinforcement—whether positive or negative is an essential part of SLT. The possibility that a student will continue using drugs is increased by positive reinforcement, such as the enjoyment

that comes from using drugs or the social advantages of being a part of a group. Negative reinforcement, on the other hand, can also result in pupils using drugs to cope with stress, anxiety, or unpleasant feelings.

Furthermore, peer groups have a particularly strong influence during adolescence. Students may take up habits they might not otherwise engage in, such as substance usage, because of a desire to blend in, get acceptance, or belong to a group. The urge to fit in increases if a student's peer group or social circle normalizes substance usage. Students may feel pressured to use drugs in such settings in order to preserve social acceptance or avoid social rejection. Peer pressure can take two forms: direct, where peers openly promote substance use, and indirect, where students feel pressured to use drugs just to fit in because students are more prone to mimic actions they see in their close social circles, the social learning process is heavily reliant on these group dynamics. The way that students view substance usage is also greatly influenced by the media.

Substance abuse is also portrayed through the media in films, TV series, and social media as glamorous, rebellious, or a necessary component of social life. The adoption of substance use habits is further explained by the idea of modeling, in which students mimic the actions of those they look up to. Students frequently admire athletics, celebrities or older siblings as role models and may mimic the behaviors they observe in these individuals. Students may view substance use as a desirable or even acceptable conduct when these role models use drugs. The influence is expected to be greater the more students relate to the role model. This modeling process encompasses broader societal standards and values in addition to the immediate social environment. Students' attitudes and behaviors can be greatly influenced by celebrities, sports, and media figures who openly take drugs or support particular lifestyles.

2.3 EMPIRICAL REVIEW

The purpose of this empirical review is to assess previous research done by various researchers related to this study. It also identifies research gaps that require further investigation. The empirical review of the study would be discussed under the following heads.

2.3.1 Empirical Review on the prevalence of Psychoactive Substance Use Among Secondary Students

Vellozo et al. (2023) studied the incidence of psychoactive substance use in public schools in a municipality in the São Paulo Metropolitan Area, Brazil. Using a cross-sectional study methodology, the researchers gathered information from 1,460 randomly selected students between the ages of 10 and 19 using self-report questionnaires; 49% of the participants were male. Teenagers consume psychoactive substances at a significant rate, according to the report. Analgesics (51%), alcohol (48.8%), tobacco (37.3%), and tranquilizers (30.8%) were the most often used substances during the previous month. Marijuana (23.1%), anabolic steroids (22.6%), ecstasy (21.6%), amphetamines/stimulants (15.3%), phencyclidine (13.4%), cocaine/crack (12.9%), inhalants/solvents (12.6%), opiates (11.5%), hallucinogens (11.4%), and other unidentified drugs (16.2%). This indicates that psychoactive substance use is relatively widespread among adolescents in the sample.

Ochlen(2022), in his study adopted a multiple case study design within a qualitative research approach to explore the prevalence and associated factors of psychoactive substance use among secondary school students. Data were collected from four public secondary schools in Tanzania. A total of 116 participants were involved through semi-structured interviews with heads of schools, focus group discussions (FGDs) with students and teachers, and documentary reviews. Purposive sampling was used to select the schools and participants. The study found that the most commonly used psychoactive substances among secondary school students were cannabis

(marijuana), cigarettes, and alcohol, as confirmed across all four schools studied. In addition, some students also reported the use of cocaine, shisha, spirits, and Valium. Data collected from FGDs and interviews consistently showed that cannabis, cigarettes, and alcohol were most frequently mentioned, suggesting a high prevalence of these substances due to their wide availability and low cost in Dar es Salaam.

The prevalence of psychoactive substance use among pupils in a government secondary school in Ilorin, Kwara State, Nigeria, was investigated by Oluwafumilayo et al. in 2022. Out of the 81% sample size, 33.7% of students acknowledged using psychoactive substances, according to the results. The most often used drugs were found to be alcohol and tramadol. The survey also found that students between the ages of 15 and 19 had a higher prevalence of substance use than students in other age groups. This indicates a high rate of substance usage among teenagers, a demographic that is especially susceptible to peer pressure and the accessibility of these drugs. The results are consistent with earlier research that shows high rates of substance use during adolescence, a time when risky behavior and experimentation are common.

2.3.2 Empirical Study On Patterns of Psychoactive Substance Use Among Secondary

Students

According to Hoots (2023), a research conducted in the US revealed some significant changes in high school students' substance use trends between 2019 and 2021. The decline in substance use among particular racial and ethnic groupings was one obvious trend. Both White and Hispanic students reported lower lifetime and current marijuana use. All three racial and ethnic groups White, Hispanic, and Black students also saw a decline in lifetime alcohol consumption. Furthermore, despite lifetime inhalant usage increased, White students reported less binge

drinking in 2021 than in 2019. Hispanic students had lower lifetime usage of cocaine, synthetic marijuana, and ecstasy. The lifetime use of heroin, cocaine, and methamphetamine declined among Black pupils. These alterations point to a broad trend of substance use. 35.1% of students who said they now used alcohol, marijuana, or prescription opioids said they used two or more substances. In particular, 30.2% of people who used any substance reported using alcohol and marijuana together, making them the most frequently used substances. Co-use of alcohol and prescription opioids (7.9%), marijuana and prescription opioids (6.7%), and all three substances together (4.8%) were reported by smaller groups. Analysis of survey data from the Youth Risk Behavior Survey (YRBS), which was gathered in 2019 and 2021, revealed the patterns mentioned. Oluwafunmilayo et al.'s (2022) study in Illorin, Kwara state, found important trends in substance usage based on demographic characteristics. The odds ratio for tobacco use among secondary students was 2.306 (95% CI: 1.733-3.068; $p < 0.001$). Additionally, the likelihood of using any kind of psychoactive substance was higher among male students. These trends imply that gender and age have a significant influence on how teenagers take drugs. The results emphasize how crucial it is to take these aspects into account when developing programs for substance use prevention and intervention.

2.3.3 Empirical Study On Risk factors of Psychoactive Substance Use Among Secondary Students

Ling et al. (2023) summarizes findings from eleven observational studies that employed cross-sectional survey methods to investigate risk factors for psychoactive substance use among secondary students in Southeast Asia. Male gender was identified as a risk factor in 70% of the studies (seven out of ten). Additionally, older age, urban school location, and Malay and Sabah/Sarawak Bumiputera ethnicity (with 2.25 times larger probabilities) were associated with

increased use. Traumatic childhood experiences, such as emotional, physical, and sexual abuse, parental separation, and household incarceration, have been linked to a 6.7% incidence of e-cigarette use. Parental and peer influences were important; in half of the cases, peer influence alone was associated with 2–12 times increased study probabilities. Poor information and misunderstandings about e-cigarettes, such as the notion that they are less harmful or aid in quitting smoking, were found in 40% of the studies. Cigarette smoking was found to be a risk factor in 70% of the studies, and drinking alcohol increased the chance of using e-cigarettes. Finally, 20% of the research indicated that having sufficient funds to purchase e-cigarettes and being easily accessible were enabling factors. Ochleng (2022) conducted a study in Tanzania and discovered several factors that affect secondary school students' use of psychoactive substances. Peer pressure, which occurs when friends push or encourage students to try with or regularly use drugs, has been identified as a major impact. The familial setting was another crucial element.

2.4 SUMMARY OF LITERATURE REVIEW

The use of psychoactive substances by secondary students is a complicated issue influenced by theoretical, empirical, and conceptual perspectives. Conceptually, teens use substances like alcohol, tobacco, and marijuana for a variety of reasons, such as peer pressure, curiosity, a need for social approval, or as a coping mechanism for stress or emotional difficulties. Teenagers are particularly prone to substance experimentation, often without fully understanding the long-term repercussions. Teenage years are critical for social and emotional development, and this is when these behaviors are most prevalent. According to research, substance use is more prevalent among some groups, particularly among teenagers who live in places where substances are more readily available or attend schools with low academic attainment. Students who take drugs to

obtain acceptance or fit in often have using patterns that are affected by their friends. Empirical research indicates that early substance use is strongly linked to detrimental outcomes, including poor academic performance, mental health issues, and a higher likelihood of participating in additional dangerous activities, such as persistent substance abuse and criminal involvement. Theoretically, Social Learning Theory (SLT) provides a useful framework for understanding how drug use begins in adolescence. According to SLT, teenagers are influenced by watching and copying the actions of those around them.

CHAPTER THREE

RESEARCH METHODOLOGY

This section described the methods and procedures to be used in the study. It will be discussed under the following headings, research design, study area, population target, sample size and sampling techniques, instrument for data collection, validity/reliability of the instrument, method of data collection, method of data analysis and ethical consideration.

3.1 Research Design

A descriptive cross-sectional study design was utilized to assess the prevalence and pattern of psychoactive substances use among secondary students in Benin Metropolitan Area. A cross-sectional design was particularly suited for this research as it allowed for the collection and analysis of data from a specific population at a single point in time, assessing the prevalence and pattern of psychoactive substance use among secondary students.

3.2 Research Setting

This study was conducted in Edo State. Edo state created from Bendel state in 1991 has a population of roughly 8,000,000 (National Population Commission NPC, 2022) estimate. The capital city is Benin city. The state is made up of five ethnic groups of Edo, Owan, Esan, Afemai and Akoko Edo distributed in 18 local government area. The Benin Metropolitan Area, which covers both the city core and adjacent urban areas of Benin City, the capital of Edo State, Nigeria. This area is made up of numerous local government areas (LGAs), including Oredo, Ikpoba-Okha, Egor, which combined form the metropolitan area. These districts are characterized by a combination of urban infrastructure, educational institutions, and varied socio-economic origins. Within these LGAs, there are various secondary schools public and private serving a wide spectrum of student demographics. For example, Oredo LGA, which covers the city core, has roughly 13 public secondary schools, whereas Ikpoba-Okha has around 21 public schools, Egor has about 12 public schools. These schools vary in terms of resources, student demographics, and educational standards. These LGA's has multiple towns/villages.

3.3 Target Population

This is the group of individuals that the researcher wants to generalise the findings of the study to. This study will target senior secondary school students which are purposively selected. The study was carried out among senior secondary students in Oba Akenzua secondary school and Uselu secondary school Uselu.

Oba Akenzua Secondary School

Oba Akenzua Secondary School is a well-established co-educational institution named in honor of Oba Akenzua II, a former Oba of Benin. It has a long-standing history of academic and extracurricular achievements. The school is situated along Uselu-Lagos Road and is easily accessible via major transport routes. It features multiple classroom blocks, administrative offices, a science laboratory, and a library, although like many public schools, it faces infrastructural challenges such as overcrowded classrooms and limited access to digital learning tools. The school population includes both junior and senior secondary students, offering a wide demographic for educational research, especially studies focusing on adolescents and youth.

Uselu Secondary School

Uselu Secondary School is another notable government-owned institution located in the same area sharing similar characteristics with Oba Akenzua. It caters for a large student population and offer both primary and secondary education. The school environment reflects typical features of public schools in urban Nigeria with basic educational infrastructure, a committed teaching staff, and a curriculum aligned with the Nigerian Educational Research and Development Council (NERDC) guidelines. Despite resource limitation, the school remains active in community engagement and educational development programs, making it a valuable site for research involving students, teachers or health and educational interventions.

The target population for this research consist of public senior secondary students from Oba Akenzua secondary school, Benin-city and Uselu Secondary School, Uselu, Benin City, Edo State, which have a target population of 1215.

Table 3.1 Number of students in each school

School	Number of students
Oba Akenzua Secondary School	438
Urelu Secondary School, Urelu	777
Total	1215
Source: Both School	

3.4 INCLUSION CRITERIA

- Adolescents who fall between age range 11yrs–20years
- Students that belong to SS1–SS3 class

3.5 Sample Size and Sampling Techniques

The sample size comprised of 331 respondents which was randomly drawn from the population.

The simple random sampling technique was employed in selecting the sample. The sampling technique involved selecting a particular student and skipping others to select the 4th and so on.

This method is deemed appropriate in order to ensure equal representation of the population characteristics and thus eliminating bias. The sample size was gotten from the total population of one thousand two hundred and fifteen (1215), using Taro Yamane, (1967) formula as shown below.

$$n = \frac{N}{1+N(d)^2}$$

N = population size

D = level of precision (confidence interval)

N = 1215

D = 0.05

Thus $n = 1215 / 1 + 1215(0.05)^2$

$n = 1215 / 1 + 1215 \times 0.0025$

$n = 1215 / 1 + 3.0375$

$n = 1215 / 4.0375$

$n = 331$

Table 3.2 Sample size determination for each school

School to be sampled	Population	Number of students to be sampled	Approximate number of students to be sampled
Oba Akenzua Secondary School	438	$(438 \div 1215) \times 331$	119
Uselu Secondary School, Uselu	777	$(777 \div 1215) \times 331$	212
Total	1215		331

3.6 Instrument for Data Collection

The research instrument used in collecting data for this study is a self-developed questionnaire which was formulated based on the research questions. The questionnaire consists of three (3) sections designed by the researcher: section A of the questionnaire will cover the socio-demographic data while section B will cover the Prevalence of Psychoactive Substance use. Section C will cover the pattern of psychoactive substance use. Section D will cover factors influencing substance use. The research instrument will be made up of a total of 331 questionnaire items that will contain both open and closed-ended questions.

3.7. Validity

The questionnaire and the checklist as the instruments will be constructed and submitted to three experts for validation; public health experts, clinical psychologists, and education specialists for validation to ensure it accurately measured psychoactive substance use among secondary school students.

3.8 Reliability

Reliability of the instrument will be ascertained through test and retest method. This will be done by administering the instrument on 33 participants who are not part of the study and after a day; the same instrument will be used for the second time on the participants. The two results will be collated and the coefficient of the variability will be obtained using Cronbach Alpha. A Cronbach alpha coefficient >0.7 will be considered reliable.

3.10 Method of Data Collection

The researcher will employ a research assistant who will work with the researcher to administer the questionnaire and retrieve the completed questionnaires. The aim of the research will be explained verbally in English to the attendees.

3.11 Ethical Considerations

Ethical approval will be collected from the Edo State Ministry Of Education, Benin City. Students will supply their own assent, and parents or guardians will receive comprehensive information sheets and must grant formal approval for their children to participate. Students are free to stop participating at any time without facing any repercussions. All questionnaires will be coded with unique identifiers rather than names to ensure confidentiality, and reports will not contain any personal information.

3.12 Data Analysis

Data collected will be screened for completeness and analyzed using SPSS version 20. To ascertain the prevalence and trends of psychoactive substance use, descriptive statistics including frequency, percentage, mean, and standard deviation will be employed. The relationship between psychoactive substance usage and demographic characteristics will be evaluated using the Chi-square test, with $p < 0.05$ serving as the threshold for statistical significance.

CHAPTER FOUR

DATA ANALYSIS, TESTING OF HYPOTHESIS AND ANSWERING OF RESEARCH QUESTION

4.0 INTRODUCTION

The data analysis, hypothesis testing and answering of the research question were done in this chapter using responses obtained from the questionnaires administered to students in the selected secondary schools. A total of 331 questionnaires were distributed to the respondents, duly filled and returned.

4.1 Data Analysis

This data analysis is presented in this section such that the demographic variables were presented in this section such that the demographic variables were presented first before the research objectives were looked into, followed by the hypothesis testing.

4.1.1 Demography of Respondents

The demographic variables that pertained to this study and which the questionnaires assessed were age, marital status, and religion. Table 4.1 show the demographic distribution of the respondents with respect to the afore-listed demographic variables.

Table 4.1: Socio-demographic characteristics of respondents

Variables	Attributes	Frequency	Percentage
Age (Years)	14-16	191	57.7
	17-19	140	42.3
Gender	Male	150	45.3
	Female	181	54.7
Religion	Christianity	303	91.5
	Muslim	28	8.5

n=331 respondents

The table above showed socio-demographic characteristics of respondents. Majority (57.7%) of the respondents are within 14-16 years, majority (91.5%) of the respondents are Christians.

4.2 Prevalence of Psychoactive Substances Use

Table 4.2: Table showing the prevalence of psychoactive substance use

Prevalence of Psychoactive substances use	Frequency (percentage)
Have you ever used any psychoactive substances?	
Yes	51(15.4%)
No	280(84.6%)

Data from this table showed that majority 280(84.6%) have not used psychoactive substance while 51(15.4%) have used psychoactive substance.

Table 4.3: Patterns of psychoactive substance use**(N=331)**

	Frequency
Which one(s) have you used? (Tick all that apply)	
Alcohol	20(6.0%)
Tramadol	21(6.3%)
Codeine	10(3.0%)
How often do you currently use any psychoactive substance?	
Daily	15(4.5%)
Weekly	15(4.5%)
Occasionally	21(6.3%)
Where do you usually get these substances from? (Tick all that apply)	
Friends	25(7.6%)
Street vendors	10(3.0%)
Schoolmate	16(4.8%)

Table 4.3 showed the pattern of psychoactive substance use, 21(6.3%) have used tramadol, 21(6.3%) use it occasionally and 26(7.9%) got it from schoolmate.

Table 4.4: Factors influencing psychoactive

ITEMS Remark	SA	A	D	SA	–	x
1 I use psychoactive substance because of family influence	86(26.0)	121(36.5)	66(20.0)	58(17.5)	2.64	
2 I use substance to relieve stress or emotional pain	130(39.3)	93(28.1)	48(14.5)	60(18.1)	2.71	
3 Substance use helps me cope with academic pressure	148(44.7)	94(28.4)	70(21.1)	19(5.7)	2.55	
4 Media makes substance use look attractive or normal.	58(17.5)	33(10)	150(45.3)	90(27.2)	2.32	
5 Substance are easily accessible in my neighborhood.	130(39.3)	93(28.1)	48(14.5)	60(18.1)	2.71	
6 I feel more confident after using psychoactive substances.	148(44.7)	94(28.4)	70(21.1)	19(5.7)	2.58	
Overall					2.59	Factor

Factor = Mean score > 2.50

The table above showed respondents response on factors influencing psychoactive substance use.

The table indicate that in all the items assessing factors, only items 4 gave a mean score indicating not a Factor. The other items showed factors. This indicates that family influence, stress, academic pressure, accessibility of psychoactive substance use.

Test of Hypothesis

The hypothesis was tested using chi-square to examine if there is a relationship between the variables.

Hypothesis I:

Ho: There is no significant relationship between the prevalence of psychoactive substance use among secondary school students and their age.

The Chi-square test analysis on the respondents' prevalence of psychoactive substance use and their age shows ($X^2 = 15.884, P < 0.05$). The result shows a P value of 0.0006, which is greater than the critical P value of 0.05. Hence we accept the alternate hypothesis which states that there is a significant relationship between the respondents' prevalence of psychoactive substance use and their age.

Table 4.5: Relationship between the prevalence of psychoactive substance use and their age

		Prevalence of psychoactive substance use		Chi-square Value (χ^2)	p-value
		Yes	No		
1	Age				
	Less than 24 years	37	134	15.884	0.0006
	24 years and above	60	100		

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

This chapter presents discussion of the major findings, implications of the findings, limitations of the study, suggestions for further studies, summary, conclusion and recommendations of the study.

5.1 Demographic Variables

The findings on demographic characteristics revealed that the respondents were not fairly distributed among different age groups with majority falling between ages 20-24 years who constituted 45.3% of the total population while 15.1% are above 30 years. The implication of age of respondents to this study was informed by the supposition that older people may have gained more knowledge which is gained with age and practice, and thus are more assertive, mature and self-reliant. The quest for personal and professional empowerment, prompt them to resolve to gain more knowledge.

5.2 Discussion of Major Findings.

5.2.1 Explore the prevalence of psychoactive substance use .

The result on the prevalence is quite revealing, from the respondents' responses, the prevalence of psychoactive substance use among students is 15.4%. This indicates that the prevalence of psychoactive substance use is low. This is in contrast with a study by Samar et al., (2021) study which indicated high prevalence of psychoactive substance use. This is also in line with a study by Zhao et al., (2020) which reported low prevalence of psychoactive substance use.

5.2.2 Patterns of Psychoactive Substance Use

The findings from the study revealed that 6.3% have used tramadol, 6.3% use it occasionally and 27.9% got it from schoolmate. This in contrast with a study by Okeke et al., (2023) which revealed that majority of the students use codeine.

5.2.3 Factors Influencing Psychoactive Substance Use

The results of this study show that factors influencing the use of psychoactive substances include family influence, stress, academic pressure, availability of psychoactive substances, and confidence. This is consistent with a research by Mesfin et al. (2023) that found that family influence and stress have an impact on the use of psychoactive substances. Samar et al.'s (2021) study, which found that peer and family influence had an impact on the use of psychoactive substances, further supports this.

5.3 Hypotheses

There is a relationship between the respondents' prevalence of psychoactive use and their age.

Results from this study showed a significant relationship, the calculated P value is 0.0006 which is less than the critical value which is 0.05, as it may be due to the fact that the older people may have gained more experience which is gained with age and practice, and thus are more assertive, mature and self-reliant.

5.4 Limitation of the Study

The study was conducted in just few schools in Benin metropolis and this is due to funds to finance the research, so the level of knowledge of the whole students in the schools was not collected.

5.5 Implication of Findings

Nursing Practice: The findings from this study have important ramifications for nursing practice, especially in educational and community health contexts. The discovery that psychoactive substance abuse is highly prevalent and exhibits a variety of patterns among secondary school students emphasizes the necessity of nurses taking a proactive role in early detection and intervention. In addition to providing basic counseling and conducting routine screenings for substance use behaviors, school health nurses should be trained and assigned to recommend students for specialist treatment as needed.

Furthermore, community and public health nurses can play a critical role in developing and implementing preventive programs tailored to adolescents. These programs may include peer-led support groups, awareness campaigns, and parent-student education sessions focused on the risks and consequences of substance abuse. Nurses should also advocate for policies within schools that support a drug-free environment and collaborate with teachers and administrators to promote healthy coping mechanisms among students.

Nursing Education: The findings point to the urgent need for undergraduate and graduate nursing curricula to include instruction on teen substance addiction. Common psychoactive substances, start risk factors, and prevention and intervention techniques must all be taught to student nurses. Future nurses will be better prepared to handle these issues in their professional practice if school

health nursing, adolescent psychology, and substance abuse counseling are included in nursing programs. To build the clinical judgment and communication skills required for working with adolescents, simulation-based learning and case studies on substance addiction scenarios should be included. Practicing nurses should participate in ongoing professional development programs that support these skills and keep them informed about new developments in teen drug use.

Nursing Research: The findings open several avenues for further nursing research. There is a need for longitudinal studies to examine the long-term effects of early psychoactive substance use on the health, academic performance, and psychosocial development of secondary school students. Future research can also explore the effectiveness of specific nursing-led interventions in reducing substance use and promoting healthy behaviors in school settings.

In addition, qualitative research can provide deeper insights into the personal, familial, and societal factors influencing substance use among adolescents in Benin Metropolis. Such studies would inform the development of culturally appropriate and context-specific interventions. Nursing researchers should also explore interventional strategies that integrate behavioral theories, technology (e.g., mobile health), and peer support systems in addressing substance abuse among youth.

5.6 Suggestions for further studies

The study was limited to only prevalence and patterns of psychoactive substance abuse among students of selected secondary schools in Benin metropolis. It is therefore recommended that this study should be replicated in other states or geopolitical zones, private and state universities so that generalization of findings may be possible.

5.7 Summary of the study.

The study was conducted to assess the prevalence and patterns of psychoactive substance abuse among students of selected secondary schools in Benin metropolis. The objectives of the study were to determine the prevalence of psychoactive substance use among secondary school students in Benin City, to explore the patterns of psychoactive substance use among secondary students, in Benin City and to examine the factors associated with psychoactive substance use among secondary school students in Benin City. A descriptive cross-sectional survey was used for the study. . The subjects of the study consisted of three hundred and thirty one students in the selected secondary schools, Edo State. A researcher constructed questionnaire was administered to students and 331 questionnaires were retrieved. Data was analyzed using descriptive statistics- frequency and percentages. Pearson chi-square was used to test for relationship between prevalence of psychoactive substance use and their age

The study showed that the prevalence rate of psychoactive substance use is 15.4%, most of the students use tramadol occasionally and family influence, stress, academic pressure, accessibility of psychoactive substance and feeling of confidence are all factors influencing psychoactive substance use.

5.8 Conclusion

Based on the findings of this study the following conclusions were made.

The prevalence rate of psychoactive substance use was low.

Most of the students use tramadol occasionally and family influence, stress, academic pressure, accessibility of psychoactive substance and feeling of confidence are all factors influencing psychoactive substance use.

There was a significant relationship between the prevalence of psychoactive substance use and their age.

5.9 Recommendations

Based on the finding from the study, the following recommendations are made

Firstly, including thorough school-based drug education programs into the curriculum should be a top priority for legislators and school officials. These courses should provide students with accurate information regarding psychoactive substances and their negative effects while also being age-appropriate and culturally respectful. Secondary schools must also set up functional school health services, staffed by qualified nurses or counselors who can identify students who are at risk, offer assistance or treatment referrals, and provide preventive education. To further discourage drug use in the classroom, schools should establish and implement stringent policies. This entails putting in place regular surveillance, student mentoring, and tight cooperation with neighborhood security services to keep an eye on and deal with drug availability close to school grounds.

For Nurses and other medical professionals, regular student-focused sensitization programs should be led by school and community health nurses. These programs should employ interactive sessions to debunk drug use stereotypes and encourage healthy coping mechanisms. Additionally, nurses should involve parents in family health workshops to increase parental involvement in the wellbeing of adolescents and raise understanding of the early warning signs of substance addiction.

In terms of nursing education, Institutions should update their curricula to include more in-depth information on school health nursing, substance use prevention, and adolescent mental health.

Placements in schools and youth-focused clinics should expose nursing students to real-world practice by allowing them to take part in early intervention techniques and health promotion initiatives. In addition to producing pertinent evidence, encouraging nursing students to conduct community-based projects or research on youth substance addiction might pique their interest in public health advocacy.

Furthermore, this study emphasizes the need for transdisciplinary and more focused nursing research on teen substance abuse. The deeper emotional, environmental, and cultural elements influencing drug use among students in Benin Metropolis should be studied by researchers. To find best practices and modify evidence-based tactics that are suitable for the local community, it is also essential to assess the efficacy of present school-based treatments.

Finally, adolescent health programs need to be actively supported and funded by both governmental and non-governmental organizations (NGOs). Campaigns for public health should be created to engage students and their families using a variety of media platforms, neighborhood gatherings, and peer outreach initiatives. To address the issue of young people abusing psychoactive substances, cooperative collaborations between schools, healthcare facilities, and youth development groups should be encouraged.

Together, these efforts can create an environment that discourages usage of drugs and promotes the health, safety, and academic success of adolescents in Benin Metropolis.

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