

## Relationship between University Type, Religious Affiliation, and Substance Use among University Students in Kwara State, Nigeria

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### Abstract

*The issue of substance use and abuse poses obstacles, which are very tragic to students' aspirations, the prospects of their families, and the government's socioeconomic support for education in Nigeria. This study examines the relationship between University type, religious affiliation, and substance use, which are considered social behaviour factors. The study draws on Social Learning theories as its foundational framework. The study sample was nine hundred (900) derived from the study population of the selected universities in Kwara State totalling 53,000. Data analysis methods were descriptive statistical techniques, Cramers' V, Pearson Chi-square, and Probability Regression analysis. The findings indicate that the type of university ownership (federal, state, public, individual, organization, e.g., faith-based) has an impact on the rate of substance abuse among the selected university students. Furthermore, findings from the probit model further showed that parental religious affiliation has a significant impact on students' decision to engage in substance abuse, whether due to peer pressure, experimentation, or environmental factors, they may encounter in the future. Therefore, it is recommended that local, state and federal governments organize special community initiatives to support both parents and their children in understanding the profound consequences of substance use, as it is done in highly religious affiliations*

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**Keywords:** Substance abuse; University-Type; Parental-Religion; Illegal-drugs; Sociology

### 1 Introduction

Just like their counterparts world, university education in Nigeria plays a crucial role in promoting social, economic, and technological development on both national and international scales. This role encompasses four fundamental aspects: establishing knowledge foundations, nurturing human capital, disseminating and applying knowledge, and preserving knowledge. Its significance goes beyond merely imparting job-related skills; it also aims to prepare individuals to become active and valuable contributors to their communities and societies. This twofold purpose ensures the well-being of individuals within society and enhances their

capacity to make significant contributions to its socioeconomic progress (Rasak et al., 2023).

Obtaining a university degree certificate necessitates a comprehensive network of support for any student throughout their academic journey. This support, encompassing social, economic, emotional, and mental aspects, comes from various sources, including parents, religious communities, university authorities, government, and fellow students, particularly those with a positive mindset. The success of this endeavour relies on the mutual interaction between these factors and the student's ambition for achievement (Odesanmi et al., 2023). Shek et al, (2020) observed that numerous factors have been associated with substance abuse among

university students in Nigeria and the World both theoretically and in practice. This study explores the relationship between substance abuse and university type, religious affiliation (parental religiosity), which are considered as social behavior factors. Social behaviour in this context is viewed from two perspectives: pro-social behaviour and antisocial behaviour. Pro-social behaviour involves the establishment of rules and regulations at home (family environment), and on-campus (school environment), to guide children and students in conformity to the needed normative patterns of their religion and of the larger society. This involves parental awareness of their children's activities, and by extension, the influence on the university setting, where university managers gain knowledge about their students through positive socialization processes, monitoring practices, expectations in students' academic performance, and disciplinary measures. Such factors act as protective measures, promoting positive development in achieving a university degree and preventing vices such as substance abuse in students. They convey behavioural norms and reduce students' exposure to risky environments, making them less likely to engage in substance abuse (Odesanmi, 2023). Shek et al. (2020) observed that numerous factors had been associated with substance abuse among university students in Nigeria and the World both theoretically and in practice. This study explores the relationship between substance abuse and university type, and religious affiliation (parental religiosity), which are considered social behaviour factors. Social behaviour in this context is viewed from two perspectives: pro-social behaviour and antisocial behaviour. Pro-social behaviour is observed in children whose parents and university managers are committed to their well-being, show love and affection, practice what they teach morally and socially, and wish for their children and students to emulate their lifestyle, including religious practices (Odesanmi, 2023). On the contrary, anti-social behaviour involves the interference or manipulation of children's lives, starting at home and continuing at school, through emotions, feelings, and thoughts. This manipulation employs tactics such as guilt induction, love withdrawal, shaming, manipulation of emotional security, and dismissing children or students' perspectives. Unlike pro-social behaviour, anti-social behaviour communicates to students that their thoughts, emotions, feelings, or even their very selves are unacceptable. This undermines students' sense of efficacy and autonomy, resulting in an unhealthy self-concept and maladjustment, which, in many cases, leads to substance abuse (Costa et al., 2019). Parents,

university faculties, and staff exhibiting this type of behaviour often have a carefree personality, and some may even engage in drug abuse openly in front of their children or students, sexual harassment, and physical victimization among others.

WHO (2020) defines substance abuse as the excessive use of psychoactive drugs, such as pain medication, and alcohol. Du et al. (2020) define substance abuse as the excessive and harmful use of a drug, resulting in negative impacts on both the individual and society. Taking a broader view, Anderson (2022) characterizes substance abuse as the compulsive and chronic usage of drugs, regardless of whether they are legal or illegal when such use is unnecessary from a medical standpoint, disregards professional advice, violates legal regulations, goes against social norms, or involves excessive consumption, even if such behaviour is socially accepted. Based on the aforementioned definitions, substance abuse encompasses the improper use of various substances, including social drugs, prescribed medications, and illicit drugs, with detrimental effects. Tsvetkova and Antonova (2013) assert that this definition includes all aspects of substance usage by students, ranging from the quantity, frequency, and types of drugs used, to the settings, people involved, and circumstances surrounding their consumption. People engage in such usage to seek pleasure, experience a high, improve performance, in specific situations, or alter their perception of reality (Dillion, 2020).

Among university students, the drugs most frequently implicated in substance abuse include Marijuana, Codeine, Amphetamine, Cough syrups, Alcohol, Tobacco/Nicotine, Solvent-cold path, Tramadol, Diazepam, Activan, Mandrax, Heroin, and Cocaine (Johnson et al., 2022). These substances were also considered for use in this study. However, the consequences of abusing any of these substances depend on various factors, such as the specific type of substance used, the method of administration, the individual's physiological characteristics, the dosage consumed, and the delivery method (Chan et al., 2019; Antonova, 2013).

Objectively, substance abuse is regarded as a significant social issue among university students in Nigeria. While the establishment of Nigerian universities grants these institutions the authority to address and tackle deviant behaviours, including interdisciplinary actions and formulating solutions to minimize such acts, there are limitations to their intervention. When a student's foundation is deeply affected by substance abuse, the university managers may find themselves with limited options for assistance because universities are not designed to be rehabilitation centres, although some faith-based

universities include this in their charity programs. The responsibility for addressing such issues primarily lies with the individual family of orientation, children or students involved, and their support network, as the adage goes, "charity begins at home."

The specific Objective of this study is to:

- i) Investigate the rate at which substances are consumed among students of public and private universities in Kwara State (university type).
- ii) Examine the influence of beliefs of highly parental religious affiliation on their children's use of substances among university students in Kwara State.

The research Hypotheses in null forms are  $H_0$ : There is no significant relationship between university types and substance abuse among students of the selected universities.

$H_0$ : There is no significant association between religiosity and the rate of substance abuse by university students.

## **2. Literature Review and Conceptual Framework**

### **2.1.1 Substance and Substance Abuse as Concepts**

Substances comprise a diverse range of drugs, spanning from prescribed medications like blood tonics and anti-malaria drugs to illicit street drugs like cocaine and ecstasy, along with easily obtainable social products such as tobacco and alcohol. These substances are categorized into several groups, including cannabis, sedatives, stimulants, dissociative drugs, narcotics, inhalants, and hallucinogens (Khan & Thomas, 2020).

NIDA (2020) defines substances as drugs that alter the functioning of the individual's body and mind, encompassing prescription medicines, social drugs, and illicit substances. Khan & Thomas (2020) and Tsvetkova & Antonova (2013) conceptualize substances as non-food natural or man-made chemicals (compounds or mixtures) that impact human thinking, memory, and behaviour.

However, from a sociological standpoint, the meaning of substances and the experience of using them are socially constructed by different societies. These definitions can vary significantly across societies and even among subgroups and subcultures within the same society (Hart & Ksir, 2022; Young, 1971). These definitions are rooted in long-established values associated with substance use and evaluations made over time.

It's essential to recognize that these social definitions and descriptions, regardless of their accuracy, hold considerable influence over individuals in real drug-taking situations. They significantly shape the perceived actions and effects of drugs (Young, 1971).

Individuals worldwide consume these substances for various reasons and through different methods (Kazanis, 2021). Consequently, the consequences of substances encompass complex aspects such as social, biological, medical, mental, physical, and psychological. However, social and contextual reasons play a prominent role, because, when any of these substances are abused, the consequence is not solely an individual problem but rather perceived as a broader social issue (Hart & Ksir, 2022).

Substance abuse can be understood as follows: When substances are used to treat illnesses, prevent diseases, improve health, alleviate pain and suffering, delay death, and facilitate a peaceful passing, following prescribed and lawful guidelines, it falls under the category of ordinary "substance use." However, any use of these substances that deviates from the directed, intended, normative, and legal purposes is termed 'substance misuse' (WHO, 2021; Rehab Med, 2021; Australian Government Department of Health, 2019). Drug misuse is a broad term used to describe various types of substance use that go against social, prescription, legal, or illegal norms (Arkell et al., 2022; UNODC, 2021). For example, using a substance more often or in larger amounts than recommended, even if it is a prescription medicine, without the intention to get high is substance misuse. Similarly, taking a substance prescribed for another person or using any substance in a different way against the supposed route of administration is also substance misuse (WHO, 2021; Giddens & Sutton, 2017). Substance abuse refers to the deliberate use of drugs in violation of general social values, norms, and laws within a particular social setting, to achieve self-desired outcomes that may lead to disastrous consequences (Rehab, 2021). WHO (2021) defines substance abuse as excessive use of psychoactive drugs, such as pain medications, alcohol, and illicit drugs. Engaging in substance abuse significantly increases the likelihood of developing a substance addiction. Addiction occurs when an individual continues to use a drug despite experiencing its adverse consequences. It is characterized by a compulsive need to regularly consume the substance to attain its social, psychological, or mental effects (Gearhardt & Schulte, 2021).

### **2.1.2 University Types**

Generally, a university is renowned as a global centre of excellence, dedicated to knowledge generation through teaching, learning, and research, led by the vice-chancellor and principal officers. It is undeniable that certain Nigerian universities are deeply committed to their social and spiritual responsibilities while striving to foster agents of

change and global leaders, producing exceptional graduates who passionately embody their alma mater's vision. This commitment has given rise to the establishment of faith-based universities in Nigeria, where religion plays a pivotal role in the day-to-day activities of students, staff, and faculties. University types include public universities and private universities. Public universities are owned by the state (federal and state governments), while private universities are owned by private individuals or individual organizations (for example, faith-based universities). Faith-based universities, especially among private institutions in Nigeria, derive their establishment and guiding principles from the Holy Bible or the Koran. While these universities prioritize the spiritual well-being of their students, they also take on a crucial role in combating substance abuse. They implement various measures, including regularly checking each student's substance levels upon school resumption, raising student awareness about the consequences of substance abuse, providing rehabilitation services, offering crisis counselling, and conducting mentorship programs. Additionally, faith-based universities organize seminars for both adults and youth in social places like churches to promote moral values in society, making a significant contribution to substance use prevention (Kabugi, 2019).

The journey to the university campus and its environs marks the first time for many students to venture beyond the safety and security of their family home as they step into college life. Upon arriving on campus, they undergo remarkable changes, expanding their knowledge, gaining independence, and transitioning into adulthood in a new environment. These opportunities, however, come with challenges, including increased responsibilities in their educational pursuits and easy access to substances either on or off-campus in certain university environments, which can lead to substance abuse and disrupt the college experience (Okafor, 2019).

In general, the type of university, including its policies, rules, and regulations, plays a determining role in the rate of substance abuse among students (Australian Government Department of Health And Aged Care. (2019).

Nevertheless, within an abnormal university environment, psychological control can erode students' sense of efficacy and autonomy, leading to an unhealthy self-concept and maladjustment, often resulting in substance abuse. On the other hand, protective factors such as promoting positive development through pro-social behaviour and instilling strong religious doctrines in the pursuit of a university degree help prevent vices in students by

conveying behavioural norms and reducing their exposure to risky environments. Consequently, such students are less likely to engage in substance abuse (Shek et al., 2020; Costa et al., 2019).

### **2.1.3 Religion Affiliation**

Furthermore, the quality of parental-student relationships plays a significant role in student substance use. In families with positive parent-child relationships, students tend to develop close bonds and maintain effective communication with their parents, which, in turn, helps prevent anti-social behaviours, including substance abuse. Conversely, in families with strained parent-child relationships, students may perceive their parents as "insensitive, unresponsive, hostile, rejecting, unaffectionate, or unsupportive." Such negative experiences may lead to students experiencing negative emotions or adopting maladaptive coping strategies, such as substance abuse. Studies have indicated that lower-quality parent-child relationships predict a higher likelihood of heavy substance use among students. Despite these findings, there are still several research gaps in the study of parental factors and university students' substance use. The fact here remains that, an integral part of every student is the family and the school (university) environments. Family environment, parental beliefs, and practices, and how each student imitates or models parental behaviour, have imparted on the student when away from home to school, place of work, and the larger society. According to Brooks et al. (2022), parental religious affiliation, and religiosity an important aspects of these beliefs and practices and, as such, contribute to shaping students' participation and beliefs in the role of God, religion, and prayer, in nearly every area of their life. This is tantamount to the overall high religiosity of most students in faith-based universities in Nigeria. The importance of God in one's life, prayer, and/or religion was associated with lower faith-based university students' performance in substance abuse.

### **2.1.4 Drug Culture among University Students**

Social influences and local cultural norms within schools are crucial factors that can shape substance use among students in both public and private universities (Golden & Earp, 2012). According to these scholars, when examining the issue of substance use, three distinct cultural traits come into focus.

Firstly, among undergraduates, there is a "tune-in" culture that is prevalent among students who seek social acceptance from their peers who engage in substance use. Tune in signifies listening to what other students are saying, being part of an ongoing

revolution, paying attention, and adopting a new way of living in the world based on love. It also entails harmoniously interacting with the world around oneself, externalizing and expressing newfound internal perspectives (Her, 2007). The desire for achievement and success gives rise to the "tune on" category. This group delves inward to activate their neural and genetic equipment, becoming attuned to various levels of consciousness and the specific triggers that engage them. They use substances to enhance their strength and cope with the demands of their tasks, such as academics and the school environment. "Tune on" also involves trying out the drugs that everyone is using, such as weed and LSD, and engaging with music like rock and protest songs (Golden & Earp, 2012).

The third group is the "dropout," comprising individuals who experiment with substances out of a natural curiosity to experience the physical sensations they offer. "Drop out" implies abandoning meaningless work, leaving behind a bland suburban life, breaking free from the "rat race," and embracing a life of freedom. It also entails a graceful process of detachment from involuntary or unconscious commitments, embracing self-reliance, discovering one's uniqueness, and committing to mobility, choice, and change. These individuals are thrillseekers and daydreamers.

Various factors contribute to the development of a culture of substance use among students. These factors include boredom, role modelling, personality development, the desire to be popular among peers, and the search for ultimate meaning, among others (Grusaukaite & Eijck, 2022).

One significant aspect of substance culture is that children are exposed to drug propaganda through social and traditional ceremonies, social media, mass media (radio and television advertisements), movies, song lyrics, social rituals, and even involvement in cultism. Additionally, witnessing their parents consuming alcohol regularly and the general socialization process lead them to believe that meaningful relationships are impossible without the aid of substances.

Cultural factors are influenced by cultural identification and social learning. These contribute to the causes of substance abuse and its consequences among university students (Popov, 2017). Both public and private universities have elements of cultural drug traits within their social environments. However, students with pro-social foundations from home and those with sound religious doctrines, coupled with strong ambition and determination, are more likely to resist succumbing to this substance culture.

## 2.2 Theoretical framework

**2.2.1 Social Learning Theory** Bandura (1977) developed the Social Learning theory, which posits that the interplay between an individual, their environment, and their behaviour is a dynamic process that influences various facets of their reality simultaneously. Social learning theory explains how individuals learn to engage in substance abuse by outlining three key mechanisms: differential reinforcement, beliefs, and modelling. Various factors, including attention, motivation, attitudes, and emotions, influence these processes (Bandura, 1977; Akers, 2017). Each mechanism is further explained thus:

**Differential Reinforcement:** This opined that individuals teach others in substance engagement through reinforcements and punishment methods they provide for behaviour. Substance abuse is more likely to occur when individuals who engage in substance abuse are positively rewarded for such behaviour. The opposite is the case when such individuals experience negative rewards (consequences or punishments) (Akers, 2017; Conwell & Sutherland, 1988).

**Beliefs:** Individuals may be taught the beliefs that are favourable to substance abuse especially those that are not conversant with the social consequences of substances. These individuals systematically internalize the merits and the positive results of substances. In some cultures, their attitudes and behaviour also favour individual engagement in substances. These usually lead to an increased number of individuals engaging in substance abuse (Brenda & Charles, 1978).

**Modelling:** Behaviour is not only a function of reinforcement, beliefs, and punishments that individuals receive, it also involves the behaviour of those around them. This is because individuals often imitate or model the behaviour of others. Therefore, some people are more likely to engage in substance abuse if they observe significant others, such as peers or role models, engaging in such behaviours and if they perceive these behaviours as socially acceptable or desirable (Dillion, 2020).

By understanding these mechanisms and the influence of various factors, social learning theory provides insights into how individuals learn and adopt substance abuse behaviours

## 3. Methodology

**Study location;** The study location was Kwara State, with the state capital in Ilorin. It is one of the oldest states in the North-Central Region of Nigeria. The three universities selected were from University of Ilorin, Ilorin. Kwara State University Malete.

Landmark University, Omu-aran. All are located in Kwara State.

**Research design;** The study adopted a survey research design. The quantitative method was used to quantify certain variables, and interactions among themselves on the one hand, and between each other at the hand.

**Source of Data;** The study made use of primary data gathered from the field through questionnaires, and secondary data from journals, publications, and dailies among others.

**Study population;** The population for this study comprised undergraduate students in both Public and private universities in the selected universities in Kwara State totaling (53,000).

**Study sample and sampling technique;** The study sample was nine hundred (900) derived from the study population of the selected universities through Johnson and Gills (sampling size determination) and Salkind, (1977) recommendation. University of Ilorin (594), Kwara State University (254), and Landmark University (51).

**Inclusion/Exclusion criteria;** The study only made use of undergraduate students from 100-500 levels. Post-graduates, those University pursuing Diplomas, or lower certificates, and students with disability were excluded.

**Research method(s);** The study adopted both probability and non-probability methods, as it used a combination of purposive, stratified, and simple random sampling.

**Research instrument(s);** The main instrument used here was a questionnaire.

**Reliability and validity of Instruments;** The instrument for data collection has been considered valid and was used to measure variables that were intended to be measured.

**Methods of Data Collection;** The study adopted a combination of instruments (questionnaire and in-depth interview) for data collection to address the objective of the study.

**Data Analysis methods;** 72.4% of the sample size was used for the conducted data analysis using descriptive statistical techniques, Cramers' V, Pearson Chi-square, and Probability Regression analysis. The variables were measured in two types: "I have not abused substances before" represented

as 0, and "I have abused substances before" represented as 1. Furthermore, Probability Regression analysis was determined using the Probit model specification. Where Y is a binary variable (substance abuse or not). The model  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_{12} X_{12} + \mu$  with  $P(Y=1|X_1, X_2, \dots, X_{12}) = \Phi(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_{12} X_{12})$  is the population Probit model with multiple repressors  $X_1, X_2, \dots, X_{12}$  and  $\Phi(\cdot)$  is the cumulative standard normal distribution function.

**Ethical consideration;** Ethical permission was granted by Landmark University. The analyses reported were performed according to the relevant guidelines and regulations of all universities used in the study. Informed consent was also obtained from all respondents involved in the study

## 4. Findings

### 4.1 Socio-Economic and Demographic Characteristics of the Respondents

In this analysis, the simple percentage frequency distribution was employed. This includes Institution, sex, and age. Faculty, present level, residence, ethnic group, religious affiliation. The findings revealed that the majority of the respondents (93.4 per cent) were from Public Universities, while only 6.6 per cent were from Private Universities. Additionally, 57.8 per cent of the respondents were males, and 42.2 per cent were females. About two-thirds (66.9 per cent) of the respondents fell within the age range of 18 to 23 years, with a mean age of approximately 21.4 years and a median age of 20.9 years. The age range spanned 22 years.

Regarding their academic backgrounds, 52.8 per cent of the respondents were enrolled in non-natural sciences colleges/faculties, while 47.2 per cent were in natural sciences colleges/faculties. Furthermore, 16.6 per cent of the respondents were in the 100 level of study (freshmen), while the majority (83.4 per cent) were in the 200-500 levels. Living arrangements varied, with 56.0 per cent of the respondents living off-campus, and 44.0 per cent residing on campus. The study also found that 60.1 per cent of the respondents identified as Yoruba, while 39.9 per cent were from non-Yoruba ethnic backgrounds (e.g., Hausa, Igbo, etc.). Moreover, the majority (57.2 per cent) practised Christianity and other religions, while 42.8 per cent practised Islam. For more detailed information on the respondents' social demographic characteristics, it is shown in Table 1

**Table 4.1.** Distribution of respondents by socio-demographic characteristics

<b>Independent Variables</b>	<b>F(n)</b>	<b>%</b>
<b>Name of Institution</b>		
University of Ilorin	382	58.6
Kwara State University	227	34.8
Landmark University	43	6.6
<b>Sex</b>		
Male	377	57.8
Female	275	42.2
<b>Age</b>		
Less than 18 years	73	11.2
18-23 years	436	66.9
24-29 years	117	17.9
30-35 years	25	3.8
More than 36 years	1	.2
<b>Faculty/College</b>		
Administration, Management, Business and Social Sciences	187	28.7
Agriculture	61	9.4
Arts or Humanities	72	11.0
Education	56	8.6
Engineering	82	12.6

**Continuation of Table 4.1.** Distribution of respondents by socio-demographic characteristics

<b>Independent Variables</b>	<b>F(n)</b>	<b>%</b>
Law	29	4.4
Medicine or Health	71	10.9
Pure & Applied Sciences or ICT	94	14.4
<b>Level of Study</b>		
100 Level	108	16.6
200 Level	181	27.8
300 Level	161	24.7
400 Level	153	23.4
500 Level	49	7.5
<b>Residence</b>		
Off-campus	365	56.0
On-campus	194	29.7
Shuffling between campus and off-campus	93	14.3
<b>Ethnicity</b>		
Hausa	125	19.2
Igbo	98	15.0
Yoruba	392	60.1

Others such as Ebira, Ijaw, Urhobo, Igbira, igarra, Efik, Nupe	37	5.7
<b>Religious affiliation</b>		
Christianity	352	54.0
Islam	279	42.8
Traditional	21	3.2

**Descriptive statistics of Socio-Demographic variables in the Probit model**

Thirteen variables (substance abuse, institutional type, sex, age, academic discipline, academic level, residence, ethnicity, religious affiliation, family type, home status, parents’ occupation, and parents’ average monthly income) were included in the probit model. Out of the 13 variables, only ‘substance abuse’ was the dependent variable while the remaining 12 variables were used as independent variables in the model. All 12 variables had 2 outcomes which were coded 0 and 1. Specifically, respondents who had abused substance were coded as ‘1’ while those who had not abused stance were coded as ‘0’. For institutional type, three universities were investigated and these universities were categorized into private (0) and public (1) universities. Private universities represented Landmark University, while public universities represented both University of Ilorin and Kwara State Universities. Respondents’ sexes were represented as Female (0) and Male (1).

Respondents who had not attained legal age status of 18 years represented 0 and those who had attained legal age status of 18 years and above represented 1. Academic discipline had two categories – nonnatural sciences such as Faculties of Administration, Management, Business and Social Sciences, Arts or Humanities, Education, as well as Law; and natural sciences such as Faculties of Agriculture, Engineering, Medicine/Health as well as Pure and Applied Sciences / ICT. These two categories represented 0 and 1 respectively. For academic level, freshmen (representing 100L students) were coded 0, and satellites (representing 200L students and above) were coded 1, while for ethnicity, non-Yoruba ethnic groups such as Hausa, Igbo, etc., were coded 0 and Yoruba were coded 1. In terms of religious affiliations, non-Islam religion was coded 0 while Islam religion was coded 1

**Table 2** Descriptive statistics of Socio-Demographic variables in the Probit model

<b>Independent Variables</b>	<b>F(n)</b>	<b>%</b>	<b>Code</b>
<b>Institution type</b>			
Private Institution	43	6.6	1
Public institution	609	93.4	0
<b>Sex</b>			
Female	275	42.2	0
Male	377	57.8	1
<b>Age</b>			
Less than 18 years	73	11.2	0
18 years and above	579	88.8	1
<b>Academic discipline</b>			
Non-natural sciences	344	52.8	0
Natural sciences	308	47.2	1
<b>Academic Level</b>			
Freshmen	108	16.6	0
Satellites	544	83.4	1
<b>Residence</b>			
Off-campus	365	56.0	0
On-campus	287	44.0	1

Ethnicity			
Non-Yoruba such as Hausa, Igbo, etc	260	39.9	0
Yoruba	392	60.1	1
Religious affiliation			
Non-Islam such as Christianity and Traditional	373	57.2	0
Islam	279	42.8	1

Source: Researchers' fieldwork, 2022.

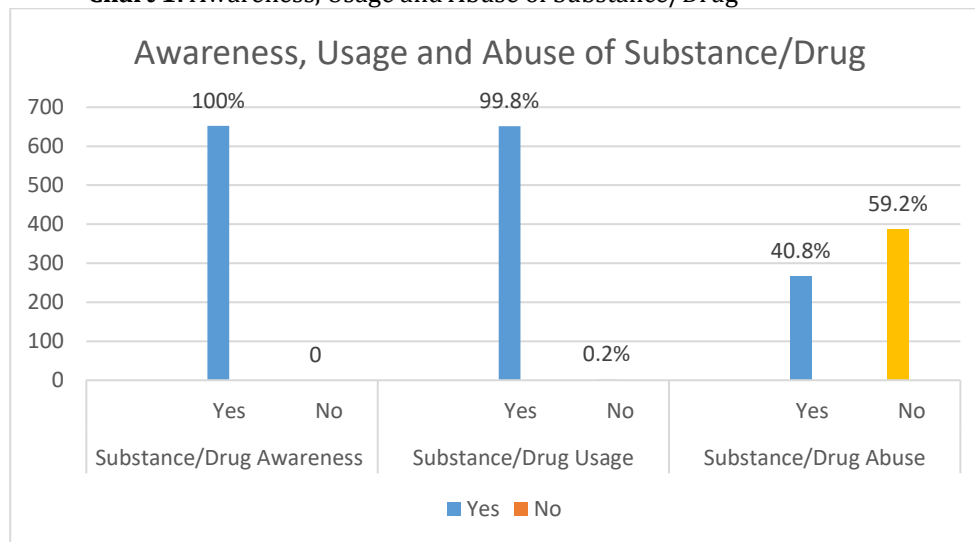
#### 4.2 Awareness, Usage and Abuse of Substance/Drug

This section focuses on the awareness, usage, and abuse of substances/drugs, and the results are presented in Chart 4.1. The findings revealed that all respondents (100.0 per cent) were aware of one kind of substance/drug or another. Additionally, almost all of them (99.8 per cent) had used some form of substance/drug, with only one respondent reporting no prior usage. However, it was found that the majority of respondents (59.2 per cent) had not

abused substances/drugs before the survey was conducted. Conversely, 40.8 per cent of the respondents had reported prior substance/drug abuse. The variable measurement, in two types, was based on this awareness of usage and abuse: "I have not abused substances before" represented as 0, and "I have abused substances before" represented as 1. It was assumed that both categories held equal importance

This is shown in Chart 1

Chart 1: Awareness, Usage and Abuse of Substance/Drug



Source: Researcher's fieldwork, (2022)

#### 4.3 Association between Substance/Drug Abuse and Socio-Demographic Characteristics

This section focuses on exploring the relationship between substance/drug abuse and the sociodemographic characteristics of the respondents. The results of the cross-tabulation and hypotheses testing between these characteristics and substance/drug abuse are presented in Table 2. Substance/drug abuse is taken as the base for analyzing respondents' socio-demographic characteristics. The table displays the Cramer's V, Pearson chi-square value ( $\chi^2$ ), degree of freedom (df), and statistical probability (p) to facilitate appropriate statistical decisions.

The findings indicated that the majority of respondents who had abused substances (57.5 per cent) were from the University of Ilorin, followed by 39.5 per cent from Kwara State University, and only 3.0 per cent from Landmark University. Although the association between substance/drug abuse and the name of the tertiary institution was not strong (as evidenced by Cramer's V = 0.134), the association was statistically significant based on Pearson ChiSquare hypothesis testing ( $\chi^2(2) = 11.656$ ,  $p < .05$ ). In addition, respondents' religious affiliation was found to have a statistically significant association with substance/drug abuse, as indicated by the Pearson Chi-square value [ $\chi^2(2) = 14.562$ ,

p<.05]. However, the association was considered weak based on the Cramer's V value of 0.149. Notably, the findings revealed that 45.1 per cent of those who had abused substances/drugs identified

as Christians, 51.5 per cent identified as Muslims, and 3.4 per cent identified with Traditional religion.

**Table 2.** Distribution of respondents by association between substance/drug abuse and socio-demographic statistics.

Socio-demographic characteristics	Substance Abuse		Cramer's V	Chi-square
	Yes	No		
<b>Type of Institutions</b>			0.134	$\chi^2 = 11.656$ df = 2 $p = 0.003$
University of Ilorin (Federal)	153 (57.5)	229 (59.3)		
Kwara State University (State)	105 (39.5)	122 (31.6)		
Landmark University (Private)	8 (3.0)	35 (9.1)		
Hausa	55 (20.7)	70 (18.1)		
Igbo	51 (19.2)	47 (12.2)		
Yoruba	142 (53.4)	250 (64.8)		
Others such as Ebira, Ijaw, Urhobo	18 (6.8)	19 (4.9)		
<b>Religion</b>			0.149	$\chi^2 = 14.562$ df = 2 $p = 0.001$
Christianity	120 (45.1)	232 (60.1)		
Islam	137 (51.5)	142 (36.8)		
Traditional	9 (3.4)	12 (3.1)		
Monogamous	168 (63.2)	295 (76.4)		
Polygamous	98 (36.8)	91 (23.6)		
<b>Total</b>	<b>266 (100.0)</b>	<b>386 (100.0)</b>		

**Researcher's fieldwork, (2022).**

**Association between Substance/Drug Abuse and Socio-Demographic Characteristics Using Probit Model**

Probit regression analysis was conducted to predict the probability of substance abuse (or non-abuse) among respondents using 8 predictors: institutional type, sex, age, academic discipline, academic level, residence, ethnicity, and religious affiliation. The Pearson Chi-square goodness-of-fit test demonstrated a relationship among the variables, indicating their suitability for analysis ( $\chi^2(639) = 9520.377, p < .001$ ).

The findings revealed that 7 variables (institutional type, age, academic discipline, academic level, residence, ethnicity, and religious affiliation) significantly predicted the probability of substance abuse or non-abuse, with a 95 per cent level of significance. Positive estimates indicated that an increase in the predictor (e.g., from 0 to 1) led to an increase in the predicted probability of substance abuse (from 0 to 1), and vice versa for non-abuse.

Conversely, negative coefficients indicated that an increase in the predictor resulted in a decrease in the predicted probability of substance abuse and vice versa for non-abuse

Specifically, the coefficient for institutional type is 0.200, indicating that a change in institutional type (from public school to private school) decreases the predicted probability of drug abuse. This implies that students from public institutions have a higher probability of substance abuse compared to students from private institutions. In other words, being in public institutions increases the predicted probability of substance abuse, while being in private institutions decreases the probability of substance abuse.

The coefficient for sex is 0.021, which means that being male increases the predicted probability of drug abuse while being female decreases the probability of substance abuse. However, this difference was not statistically significant at the 95% level of significance ( $p > 0.05$ ).

Furthermore, religious affiliation was found to have a significant impact, with Muslim students having a lower predicted probability of abusing substances compared to non-Muslim students (estimate of 0.025,  $p < 0.05$ ).

The associated p-values for each of the predictor variables are less than 0.05. Hence, the rejection of null hypotheses for each of the variables and conclude that the regression coefficients for (institutional types and religious affiliations) are found to be statistically different from zero in the model.

finding conforms with the Australian Government Department of Health And Aged Care. (2019) in the literature reviewed. To these scholars, the types of universities determine the policies, rules, and regulations, which play a determining role in how the rate of substance abuse among students. This is also supported theoretically by the differential reinforcement model, when Akers, (2017) emphasizes that individuals are more likely to

**Table 3:** Probit regression analysis of socio-demographic predictors of drug abuse

Parameter	Estimate (SE)	Z	95% Confidence Interval	
			Lower Bound	Upper Bound
Institutional type	-.200*** (.024)	-8.188	-.248	-.152
Sex	.021 (0.011)	1.955	.000	.041
Religious affiliation	-.025* (0.011)	-2.231	-.046	-.003
Intercept	-2.202*** (0.033)	-67.574	-2.235	-2.169

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . Model  $\chi^2(639) = 9520.377$ ,  $p < .001$ .

Source: Researcher's fieldwork, (2022).

#### 4.4 Testing of Hypotheses

##### 4.4.1 Hypothesis 1

H<sub>0</sub>: There is no significant relationship between institutional types and substance abuse in the selected universities.

Decision Rule:

Level of Significance =  
0.05 Cramer's V = 0.134

$\chi^2 = 11.656$  df = 2  $p =$

0.003 H<sub>0</sub>: is accepted

At the 0.05 level of significance, the null hypothesis asserts that "There is no significant relationship between university types and substance abuse in the selected universities". The null hypothesis was rejected since the tabulated chi-square is lower than the computed chi-square. Thus, it can be concluded from the data that there is a considerable association between university type and substance abuse among the students of the selected universities.

By using the probit model, findings further showed that university type statistically predicted the probability of drug abuse ( $B = -0.200$ ,  $p < 0.05$ ). This implies that students in public universities have a higher probability of substance abuse. However, students in private universities (faith-based) have a lower probability of abusing substances. The reason for this may be; that public universities are full of students from different religious backgrounds with different religious values, beliefs and attitudes, while students from faith-based institutions usually have the same religious doctrinal beliefs and values. This

engage in substance abuse if they receive positive reinforcement or rewards for such behaviour.

Conversely, if they experience negative consequences or punishments, they are less likely to engage in substance abuse. In the same vein, Dillion, (2020) in the role of modelling in social learning theory opined that through observation and imitation of significant others, individual behaviour is determined. In any institution where engaging in substance abuse is perceived as socially acceptable and desirable, there is usually a tendency for individual students to engage in substance abuse.

##### 4.4.2 Testing of Hypothesis 2 Decision

Rule:

Level of Significance = 0.05

Cramer's V = 0.149  $\chi^2 =$

14.562 df = 2  $p = 0.001$  H<sub>0</sub>:

is accepted

H<sub>0</sub>: There is no significant relationship between religious affiliation and the rate of substances being abused by university students.

Using a 0.05 threshold of significance, since the computed chi-square is smaller than the tabulated chi-square, the null hypothesis is rejected. Hence, it can be concluded from the data that religious affiliation among university students has a considerable impact on the rate of substance abuse. Similarly findings from the probit model further showed that parental religious affiliation may positively reduce the rate of substance abuse among

the selected university students as it statistically predicted the probability of drug abuse ( $B = -0.025$ ,  $p < 0.05$ ). This implies that students whose parents were religious have a lower probability of substance abuse than students whose parents were not religious who have a higher probability of abusing substances.

The findings are similar to Brooks, S. J., Tian, L., Parks, S. M., & Stamoulis, C. (2022) reviewed literature. To these scholars, parental religious affiliation, and their religiosity contribute to shaping students' participation and beliefs on the role of God, religion and prayer, in nearly every area of their life, which is tantamount to the overall high religiosity of most students in faith-based universities in Nigeria. These students therefore hold to the tenets of their religion, which forbid anti-social behavior, in which substance abuse is included. The findings are also by Shek, D. T., Zhu, X., Dou, D., & Chai,

W. (2020) role model, where they found a relationship between social control theory in the form of parental religious association and university student substance abuse. These are seen in the types of social behaviour exhibited by students toward prosocial or anti-social behaviour. For pro-social behaviour among these students, students can imbibe the rules and regulations that parents established to manage them, which yield adherence to religious behavioural norms and reduce the incidence of exposure to risky peer influence and environment, through religious values, beliefs and attitudes to substance use.

## 5. Discussions of Findings

Findings from this study confirmed the theoretical framework for the study, in which the theoretical positions of Social learning theory are made known in the context of the findings. The findings show that, in Nigerian universities, highly parental religiosity, and practices are imbibed by their children through reinforcement, beliefs, practices, and modelling (learning and observation). These are imparted to their life right from infancy through their youth (student) to adulthood (later in life). This proposition is supported by Akers, (2017); Conwell & Sutherland, (1988); and Bandura, (1977). Many of these parents send their children to private universities that back up their beliefs. Even when their children are in public universities, such students are seen differently from other students in behaviour and attitude related to parental religious affiliation (pro-social behaviour). The negative peer influence, stress, anxiety, frustration, and bullying among others are not able to stand in the way of change from pro-social to anti-social behaviour,

including substance abuse. In the same vein, the findings also bear with the subject of other studies on the subject matter of the study, and support other studies on the subject like Obafemi, Adaraniwon and Ajao (2022) who found the notable disparity exists in the levels of substance abuse and the types of substances abused among different university types. Their study reveals that public universities have the highest incidence of substance users, while private universities exhibit the lowest number of students engaging in drug and substance abuse. Brooks, S. J., Tian, L., Parks, S. M., & Stamoulis, C. (2022), also supported that parental religious affiliation and religiosity play a crucial role in shaping students' beliefs and practices, both on campus and out of campus.

## 6. Conclusion and Recommendations

The findings indicate that the type of university ownership (federal, state, public, individual, organization, e.g., faith-based) has an impact on the rate of substance abuse among students. There is a prevailing belief that faith-based universities are more conscious of the dangers of substance abuse in modern society among their students. As a result, these universities incorporate religious knowledge, doctrines, and legacies into their educational approach, through separate courses, student fellowships, sermons, student clubs, webinars, seminars, and other means, to discourage substance abuse. Consequently, substances become unappealing to the students.

The study also reveals a strong correlation between the influence of parental religious affiliation and the university type on students' decisions to engage in substance abuse, whether due to peer pressure, experimentation, or environmental factors, they may encounter in the future. Students from such backgrounds tend to adopt a drug-free lifestyle. To effectively combat substance abuse among university students, school management should recognize the connections between the school community, students' homes, and the social environment within the university. By doing so, they can implement better supervision, monitoring, and control measures to address substance abuse patterns. This comprehensive approach is expected to significantly reduce the prevalence of substance abuse within the university culture

Based on the findings, the following recommendations are provided:

Substance abuse in Nigerian public universities and privately owned universities should be thoroughly examined to address the factors that attract students to such behaviour. It is essential to implement

regular screening of students for substance abuse at the start of each new academic semester, which is similar to practices in some private (faith-based universities). Additionally, a dedicated substance abuse counselling unit should be established to connect theory with practical intervention, as many universities currently only address the issue of substance abuse in a theoretical manner.

Based on the findings of this study, it is evident that parental religiosity plays a significant role in the issue of substance abuse among university students. Therefore, it is recommended that special community initiatives be organized by local, state, and federal governments to support both parents and their children in understanding the profound consequences of substance abuse, as it is done in highly parental religious affiliations. This is because, in today's modern culture, traditional methods of socializing children have eroded, making religion a crucial option for fostering social, mental, physical, psychological, and spiritual development. Embracing religion as a valuable tool can help preserve beneficial norms and ensure the well-being of the present and future generations.

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