

# Drug and substance abuse among university students

Juliana Mulaa Namada (✉ [juliesimonis@yahoo.com](mailto:juliesimonis@yahoo.com))

United States International University-Africa <https://orcid.org/0000-0002-2361-0173>

James Ngari Karimi

United States International University-Africa

---

## Research

**Keywords:** Drugs, Drug Abuse, Mentorship, Peer Pressure, Substance, Substance Abuse, Students, Student Performance, USIU-Africa

**Posted Date:** October 26th, 2021

**DOI:** <https://doi.org/10.21203/rs.3.rs-966829/v1>

**License:** © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

## Research objective:

The main objective of the study was to explore drug and substance abuse among university students. Specifically, the study sought to investigate factors influencing drug and substance abuse and find out the effect of drug and substance abuse on university students.

## Methods:

The study adopted mixed method approach. Triangulation was used in data collection both questionnaires and focus group discussions were used to collect data. Multistage sampling was used to get representation from all the five schools within the university. In each school, cluster sampling was while at programme level, simple random sampling was used. Snowball sampling technique was used to identify the drug and substance abusers who were now targeted for interviews in focus group discussions. Quantitative data was analyzed using descriptive and inferential statistics. Qualitative data was analyzed using common theming method.

## Results:

The study established three factors which influence drug and substance abuse among university students. The factors in order of significance are peer pressure, student residence and family background of the students. In terms of influence of drugs and substances, they impair student judgement, affect quality of sleep, and lowers the performance of students both in class and outside class.

## Conclusions and Recommendations:

The study concluded that the social groupings which generate peer pressure, the type of accommodation for the students and family influence on students need to be considered in student mentoring to effectively manage the menace of drug and substance abuse. The study recommends a turn round strategy by the university in dealing with drug and substance abuse menace to improve performance retention and completion rates.

# Background

Drug and substance abuse is one of the most vexing and pervasive problems that most universities are grappling with in as far as administration and management of universities is concerned. The consequences on the students are disastrous and devastating. This has been aggravated by the rapid social and technology changes which have had a corrupting influence on the students in the university. Drug abuse is a real threat to the students; parents; universities and the economies. Globally countries rely on the valuable youth potential that is being robbed by drugs. Drug and substance abuse is a global problem, whose prevalence has remained unabated amongst youths [ 10]. Substances include pain relievers, stimulants, tranquilizers, sedatives, and all four drug classes combined [26]. Drugs are

substances that is used to prevent, diagnose, treat, or relieve symptoms of a disease or abnormal condition.

Research has consistently reported that drug and substance abuse behaviors among students in higher learning institutions is commonly linked to already perceived norm practices amongst age mates. [11] identified factors such as peers and media influence, need to release stress, desire to enjoy the drug, accessibility of drugs, desire to experiment, influence from guardians and siblings, poor parenting, having trouble in school are key factors influencing drug and substance abuse. Further, having a problem with the police and unemployment have been reported in most studies to be factors contributing to drug and substance abuse among youth aged between 17 to 28 years old with peer and social media influence being reported as the most influential factor. Colleges and Universities student's social groups include people of the same age group and similarly minded which cause a strong peer pressure effect. Experts describe age 17 to 28 years old as the age of "window of vulnerability" because most youth are influenced into drug and substance abuse by their peers. The desire of social acceptance and the phobia of being sidelined and rejected by fellow peers has been proved to be a contributing factor to drug and substance abuse among youth [30]. [16] found out that drug awareness had helped some of the students involved in this study stop abusing drugs.

Drug and substance abuse has impacted negatively on the academic, social, psychological, economical, and physiological development among the abusers [31]. It is a matter of grave concern to educational stakeholders, medical practitioners, sociologists, religious leaders, counselors, and parents thus needing urgent attention. Studies have established a high prevalence of drug and substance abuse among the youths. [35] National Campaign Against Drug Abuse (NACADA) have come up with prevention strategies to reduce the prevalence [28, 18]. However, the strategies have not reduced the number of taking drugs. It is against this background that this paper seeks to factors influencing drugs and substance abuse and find out the effects which drugs and substance abuse has on university students. In essence, this research contributes to realization of two sustainable development goals of health and wellbeing and quality education.

## Literature Review

### Factors affecting Drug and Substance Abuse

Peer pressure is one of the key factors affecting drug and substance abuse. World Drug report indicated that drug users seek approval from their peers to join their habit as a way of seeking acceptance [20]. Majority of the students in universities and colleges are surrounded by their peers who are experimenting for recreational purposes. This factor is further fueled by the desire to experience something unique. Students in universities are normally in the process of exploring different aspects of their lives in a new environment, it is common for them to dig deep into drug and substance experimentation. Being away from their friends and families creates a need to fit in with majority of them feeling the best way to fit is to be like rest of the students, attend parties organized in school, get drunk and high. The lack of guardian

monitoring and supervision provides unlimited freedom to most university students to act or behave as they please, making them vulnerable to try out drugs. [24] found out that drug and substance abuse was more prevalent among students in third year and fourth year as compared to those in first and second year. This was because majority of the first-year students lacked exposure to freedom and drug and substance abuse and was aware they were in a Christian University environment.

Upbringing plays a major role in drug and substance use and abuse. [25] noted that the more members of a household who engage in drug and substance abuse, the greater the chances that the younger members of that family students will engage in drug and substance abuse. Parents are not only role models for their children's behavior, but also older siblings have an impact to their younger siblings by involving them in drug and substance abuse activities such as getting them alcohol, beer or a pack of cigarettes [9]. According to a study done in a Christian university, majority of the respondents involved in drug use and substance abuse had witnessed their fathers using alcohol and abusing other drugs implying that parents drug use and substance abuse was also a major influential factor to drugs and substance abuse in their children especially as they are experiencing their youth. It also indicated that, parents are neglecting their responsibilities in raising the youth leaving them to influence their characters and behaviors through the media.

[27] found out that social media and cultural identity in drug and substance use and abuse among African and African American university students to follow musicians and rappers for fan-bases. The Hip-hop genre of music with African American was found to influence the black culture. People abuse drugs and substances with most of the music videos clearly depicting the use of alcohol and cannabis sativa. African American culture therefore is believed to influence the use of drugs and other substances especially through social media in different ways such as the presence of drug and substance abuse on television. Majority of the students perceive these celebrities as role models. Modeling plays an important role in learning of a new behavior hence they tend to copy their attitudes, beliefs, habits, and behaviors including drug use and substance abuse.

Having trouble in school, exams and lack of tuition fees have been proved to cause stress to university and college students. Students believe that the best way to relieve the stress and forget the negative thoughts is to use drugs and substances. University students who try to balance between course workload and part time jobs are most likely rely on drugs as a coping mechanism. Despite the course work overload, part time jobs, attachments, internships, and practicums long hours, it has been noted that majority of the students in the health and science schools have more pessimistic attitudes leading them to be prone and vulnerable to drug and substance abuse [8]. Anxiety and uncertainties of becoming adults among majority of the students in higher learning institutions was also found to be a leading cause of the youth engaging in drug and substance abuse. This was due to the everyday challenges faced in life and the problems that come with it such as new responsibilities and financial freedom. Loneliness because of abandonment either by a parent, girlfriend, boyfriend or friends brought about drug and substance abuse as a means to escape the constant pain and hurt of being abandoned. Students

still dealing with child trauma such as neglect, physical, sexual and emotional abuse are most likely to engage in drug and substance abuse.

The environment surrounding the universities plays a major role in drug and substance abuse. The availability and ease of access of these drugs was also found to be a major influential factor in Drug and substance abuse. [24] noted that easy access to drugs creates an environment that easily enables the onset of drug and substance abuse and enhances the increased use of these substances. Easy access to drug and other psychoactive substances reduces the barriers to acquiring these substances which in turn lead to potential substance use and abuse. The availability of alcohol outlets such as stores and bars selling liquor, beer, and wine among other drugs has been linked to a higher alcohol consumption rate among college students and adults living within that proximity. [19] noted that visual exposure to these drugs and other psycho active substances either through advertisements, promotions and marketing are common at different alcohol outlets lead to craving of these substances leading to potential use and abuse. Residing in neighborhoods associated with higher level of alcohol sales and consumption is found to be a stimulating factor in potential alcohol and substance abuse as compared to neighborhoods with ease of access to places of worship, libraries and after school programs.

The residence of the university students was also an influential factor in drug and substance. [15] established that drug and substance abuse is rampant in many of the students who resided in private hostels outside campus. this group of students confessed to alcohol and substance abuse as compared to those who resided with their parents who came in as the second majority while the students that resided in university hostels reported the lowest levels of engaging in drug and substance abuse [22]. This was a result of private hostels outside school do not uphold strict rules and regulation on drug and substance abuse within their premises as compared to the university hostels. Landlords avoid the risk of losing their tenants by enforcing strict rules and regulations on them and thus these students are free to exercise their freedom in the use and abuse of drugs and other substances is practiced.

The role of religion was also stated as a significant factor in drug use and substance abuse. Some researchers established in their findings that alcohol was commonly used in religious ceremonies among the orthodox Christians while “khat” was used for prayers among the Muslim religious leaders [1]. Some of the students saw this as a way in which religious leaders are promoting the use and abuse of these substances. However, evidence-based studies have found out that majority of the students in spiritual universities are less likely to be involved in drug and substance abuse. Faith is believed to protect both young men and women from drug use and substance abuse. A lot of research studies show that faith among young people acts as a powerful obstruction towards drug and substance abuse.

## **Effect of Drug and Substance Abuse**

The use of psychoactive substances among university students is a major global public health problem. The prevalence of substance abuse has been reported to be on the rise in countries throughout the world such as Iran and Brazil and in some African countries such as Nigeria, Ghana and Ethiopia [2]. Although the substance of choice used by learners may not be similar in all areas, there are some substances that

are common at a global scale, and these include alcohol, cigarette, dagga or marijuana or cannabis and cocaine [21].

Drug abuse is a growing social problem which endangers abuser's health and productivity. Every abused drug influences the abuser in the short term or long term. A user's mental abilities such as judgment are severely impaired by use of drugs in addition to exposure of the user to addiction and diseases' [6]. Drugs and substance abuse can alter a person's thinking and judgment, leading to health risks, including addiction, drugged driving, and infectious disease.

The high prevalence of substance use is a major concern for public health because it carries significant health risks. It also contributes to social problems such as crime and violence, with students who use substances being more likely to experience violent acts and being involved in criminal activities [2]. Students who use substances often experience injuries in road accidents and fights, which are sometimes fatal. Substance use is also associated with risky sexual behaviours, scholastic problems like dropping out of school, and physical and mental health problems that include depressive symptoms. Substance use carries significant health risks to learners and increases both morbidity and mortality. Blood-borne infections such as hepatitis C and HIV have been reported to be common amongst people who use injectable drugs [30]. Substance use also contributes to risky sexual behaviour because sexual inhibition is negatively affected by the effects of the substances used.

Alcohol abuse and addiction can also lead to destructive behavior such as driving under the influence of alcohol and domestic violence. The side effects of alcohol abuse include the hangover, in which headaches, nausea, and vomiting continue after a drinker is no longer actually intoxicated or experiencing the alcohol high. Weight gain and high blood pressure can result from repeated overconsumption of alcohol, and long-term overconsumption of alcohol can raise the risk of depression, liver damage, cancer, depression of the immune system, reduced sexual performance. Alcohol use can also have serious consequences for expecting and breastfeeding mothers and their babies, including fetal alcohol syndrome.

Drugs can disrupt a person's ability to think and communicate rationally, or even to recognize reality, sometimes resulting in bizarre or dangerous behavior. Hallucinogens and dissociative drugs which have street names like acid, angel dust, and vitamin K, distort the way a user perceives time, motion, colors, sounds and self. Ayahuasca is a hallucinogenic tea made in the Amazon from a DMT-containing plant (*Psychotria viridis*) along with another vine (*Banisteriopsis caapi*) that prevents the natural breakdown of DMT in the digestive system, thereby enhancing serotonergic activity. Ayahuasca cause emotions to swing wildly and real-world sensations to appear unreal, sometimes frightening. Dissociative drugs like Phencyclidine (PCP) ketamine, dextromethorphan, and *Salvia divinorum* may make a user feel out of control and disconnected from their body and environment.

Cocaine is a powerfully addictive stimulant drug made from the leaves of the coca plant native to South America. Its short-term effects include narrowed blood vessels; enlarged pupils; increased body temperature, heart rate, and blood pressure; headache; abdominal pain and nausea; euphoria; increased

energy, alertness; insomnia, restlessness; anxiety; erratic and violent behavior, panic attacks, paranoia, psychosis; heart rhythm problems, heart attack; stroke, seizure, coma.

Marijuana is also called weed, herb, pot, grass, bud, ganja and Mary Jane. Marijuana is made from the hemp plant, *Cannabis sativa*. Marijuana impairs short-term memory and judgment and distorts perception; it can impair performance in school or at work and make it dangerous to drive. It also affects brain systems that are still maturing through young adulthood, so regular use by teens may have negative and long-lasting effects on their cognitive development, putting them at a competitive disadvantage and possibly interfering with their well-being in other ways. Also, contrary to popular belief, marijuana can be addictive, and its use during adolescence may make other forms of addiction more likely. Short-term effects include enhanced sensory perception and euphoria followed by drowsiness/relaxation; slowed reaction time; problems with balance and coordination; increased heart rate and appetite; problems with learning and memory and anxiety.

Substance use tends to peak between the ages of 18 and 25 years with university students being at higher risk for the vice if compared to non-college peers. Alcohol use amongst university students was a major public health disquiet. Substance use among college and university students was likely to interfere with their studies and as result their career development ends in jeopardy. Majority of the studies done on alcohol and drug abuse in low and middle-income countries have.

This has an impact on the students' learning activities. Drug abuse leads to poor class attendance and poor performance that sometimes led to discontinuation from the university. The cases of alcohol abuse were many substances abuse particularly use of marijuana (bhang) had been linked to mental health problems. Participants in this study confirmed witnessing students with mental disorders which after follow-up was established to be associated with the intake of bhang. They gave an example of a student who was rescued after attempted suicide because of the effects of bhang. Rape cases, sodomy and physical assaults were among other effects resulting from drug abuse.

## **Methodology**

Mixed method study design comprising qualitative and quantitative methods was used for the study. The study adopted descriptive survey design which is useful when collecting information about people's attitudes, opinions, and habits. The study targeted students in all the schools in the university. They were preferred since it was assumed drug and substance abuse at the university has been rampant in the near past. The respondents were sampled from the 5 school of business, school of humanities, school of science and technology, school of pharmacy, school of communication and cinematics. Cluster sampling design was adopted for this study where both day scholars and boarding students were considered in both settings. The clusters were also in terms of part time students and full-time categories of students residing on campus and off campus. The sampling frame comprised of all registered students in Spring Semester 2018. Simple random sampling was used so that every student was targeted for data collection. Snowball technique was used in order to identify the drug and substance abusers who were

now targeted for interviews in focus group discussions. Quantitative data was analyzed using descriptive statistics and exploratory factor analysis. The results were presented in tables, graphs, and figures while qualitative data was done using common theming method.

## **Results And Findings**

### **Response Rate**

The study targeted 723 students from all the schools. The total number of the targeted students who returned the questionnaires were 612. Therefore, the response rate for the study was 84.6% which was a good response rate. Alongside the questionnaires, a total of 9 focus group discussions were held from different schools within the university. The highest percentage of students came from the Chandaria School of Business (CSOB) which is the biggest school in the university while the lowest number came from the School of Pharmacy and Health Sciences (SPHS) which was the smallest and had just been created.

### **Factors affecting Drug and Substance Abuse**

The first objective focused on factors which affect drug and substance abuse. The analysis was done using three faced approaches. The first step involved descriptive analysis where mean, standard deviation, KMO and Bartlett's tests were carried out. The second step involved factor rotation where the factor loadings were established, lastly, extraction of the factors with eigen values above the threshold.



Table 1  
Descriptive of Factors Drug and Substance Abuse

<b>Descriptive Statistics</b>			
	<b>Mean</b>	<b>Std. Deviation</b>	<b>Analysis N</b>
Drugs are used to obtain desired effects	3.1350	1.64953	612
Drugs are used to change experiences	3.1409	1.54022	612
Physiological intolerance	3.1409	1.45377	612
Previous experience of drug	3.1742	2.73162	612
The setting for use influence drug abuse	3.0196	1.67555	612
Susceptibility of the time of use	3.0020	1.37556	612
The residence affects drug abuse	3.0744	1.47074	612
Peer pressure influences	3.2485	1.59867	612
Moral upbringings affect use of drugs	3.1918	1.52958	612
Amount of money at student disposal	3.1213	1.53551	612
Family background affect drug use	3.1546	1.50996	612
Misplaced priority affects drug use	3.1663	1.54340	612

The average mean across all the factors ranged between 3.0 - 3.2 which implies that the respondents seem to agree with different factors affecting the use of drugs and substance abuse. However, in terms of deviation, in terms of previous experience affecting drug and substance abuse the respondents had varying views which deviated from the mean by 2.7. This implies that on this factor ideas from the respondents varied significantly.

Table 2  
KMO and Bartlett's Test of Factors affecting Drug and Substance Abuse

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.937
Bartlett's Test of Sphericity	Approx. Chi-Square	3748.581
	df	66
	Sig.	0.000

The KMO and Bartlett's Test shown above indicates sampling adequacy of .937 against a threshold of .500 which is very good. Test of sphericity is significant at 0 .000. This implies that the sampling of

students at in all the schools were adequate for the study. Further the results were significant.

Table 3  
Factor Extraction of Factors affecting Drug and Substance Abuse

<b>Total Variance Explained</b>						
Component	<b>Initial Eigenvalues</b>			<b>Extraction Sums of Squared Loadings</b>		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.786	56.547	56.547	6.786	56.547	56.547
2	.875	7.289	63.836	.875	7.289	63.836
3	.749	6.241	70.077	.749	6.241	70.077
4	.696	5.802	75.879			
5	.556	4.634	80.514			
6	.463	3.859	84.373			
7	.442	3.683	88.056			
8	.367	3.054	91.111			
9	.343	2.861	93.972			
10	.290	2.420	96.392			
11	.235	1.961	98.353			
12	.198	1.647	100.000			
Extraction Method: Principal Component Analysis.						

From the Table 3 above, three factors were extracted all with Eigenvalues above 0.7 which is normally the threshold. In total the three factors had 70.077 of the total variances of all the factors. This implies that the three factors which were extracted account for 70% of factors which affect drug and substance abuse among the students.

The scree plot shown indicates that one factor was 6.786 while the other two factors considered in the analysis were 0.875 and 0.749 which were rounded up to a whole number of 1. Therefore, only three factors out of a total number of 12 factors accounted for the considered variance among the factors which affect drug and substance abuse among the students.

Table 4  
Rotated Component Matrix of Factors affecting Drug and Substance Abuse

ROTATED COMPONENT MATRIX <sup>A</sup>	Component		
	1	2	3
Drugs are used to obtain desired effects (experience something uncommon)	.368	.785	.255
Drugs are used to change one's experiences	.271	.801	.267
Individual physiological intolerance leads to consumption of drugs	.359	.575	.400
Previous experience of drug influence drug abuse	-.025	.329	.707
The setting for use influence drug abuse	.314	.258	.653
Susceptibility of the time of use influence drug abuse	.490	.203	.675
The residence affects drug abuse	.530	.114	.648
Peer pressure influences drug abuse	.580	.568	.312
Moral upbringings affect use of drugs	.717	.347	.152
Amount of money at student disposal affect drug use	.731	.263	.217
Family background affect drug use	.790	.216	.265
Misplaced priority affects drug use	.698	.448	.201
<i>Extraction Method: Principal Component Analysis.</i>			
<i>Rotation Method: Varimax with Kaiser Normalization.</i>			
<i>a. Rotation converged in 8 iterations.</i>			

The rotated component matrix was able to identify three categories of factors with various components which had loadings greater than 0.5. Factor one had six components which were student's residence, peer pressure, moral upbringing of the students, the amount of money at the student's disposal, family background and misplaces priorities on the part of the student. The second factor had four components which included a desire to experience something different, desire to change once's experiences, physiological intolerance, and peer pressure. The third factor had four components among them previous experience in drugs, the setting for use of drugs, susceptibility of time available and student residence.

Table 5  
Description of factors affecting Drug and substance Abuse

Factor Description		Aspects of the Factor
<b>Factor 1</b>	Family background and upbringing of the student.	• Moral upbringings affect use of drugs.
		• Amount of money at student disposal affect drug use
		• Family background affect drug use
		• Misplaced priority affects drug use
		• Peer pressure.
<b>Factor 2</b>	Individual character of the student	• Drugs are used to obtain desired effects (experience something uncommon)
		• Drugs are used to change one's experiences
		• Individual physiological intolerance leads to consumption of drugs
		• Peer pressure
<b>Factor 3</b>	Previous experience/ Environment of the student	• Previous experience of drug influence drug abuse
		• The setting for use influence drug abuse
		• Susceptibility of the time of use influence drug abuse
The residence of the students and peer pressure cross loaded both in factor one and factor two. This implies that the two most important considerations of drug and substance abuse.		

## Qualitative Data on Factors affecting Drug and Substance Abuse

Peer pressure and upbringing came out strongly from all the focus group discussions as among the key factors affecting drug and substance abuse. In terms of peer pressure, students sought to fit into specific social groups for a sense of belonging and communal. They pointed out that social life, friendship, and companionship were among key considerations of students engaging in illicit behavior. Some added that trends of the moment, curiosity and simply wanting to try something new were among the key drivers. Students who were joining campus from different homes also felt a sense of too much freedom away from home especially those coming from a very sheltered places and those who had been closely monitored by parents and guardians.

Economic status of families and upbringing were mentioned as key catalysts to drug and substance abuse. Some of the students confessed having been brought up by absentee parents who were busy making money and not creating enough time for their children. Such parents to compensate for the

absence gave lots of money to the students more than what was required for the campus upkeep. The result is that students used extra money to buy drugs and other illicit substances because affordability was not an issue. The students also had too much time coming in between the classes and the whole weekends. This factor was cited in cases where the students did not engage in extracurricular activities organized on campus instead getting engaged into drug and alcohol abuse.

The surrounding environment around campus was one of the key factors leading to drug and substance abuse. The university is surrounded by many has many entertainment outlets, eateries, service bureaus, formal hotels saloons and barber shops where the illicit products are being sold. The students noted that these places around the university are open early each day. They do both the formal business and the illicit businesses of selling and supplying drugs to the students. The student access these places at their own discretion from morning, evenings, in between classes and during weekends. Bad grades and failure to perform well in class was cited as one of the factors which cause stress and anxiety among the students. The stress makes them use drugs and substances to momentarily forget the problems while on the other hand driving them to addiction.

## **Effect of Drugs and Substance on Students**

The second objective focused on the effect drug and substance abuse on the students. The analysis was done through descriptive statistics where mean, standard deviation and the 5-point Likert scale percentages. The findings were presented in Table 6 as shown.

Table 6  
Descriptive Statistics of the effect of Drugs on the students

<b>Descriptive Statistics</b>			
	N	Mean	Std. Deviation
Users' mental judgement is severely impaired	612	3.1228	1.63926
Addiction exposes the users to diseases	612	3.1874	1.61419
Drug abuse impairs persons thinking	612	3.1821	1.63196
Drug abuse potentially harm unborn baby and pregnancy	612	3.2674	1.72495
Impairment in attention, processing speed and sleep	612	3.1862	1.62200
Drug abuse increases risk of sexually transmitted infections	612	3.1385	1.61450
Drug abuse impairs participation and engagement in life	612	3.1800	1.59518
Drug abuse affects person's ability to think and communicate	612	3.1780	1.62458
Impairs performance in school, at work and to drive	612	3.2866	1.64267
Affects brain systems that are still maturing	612	3.1151	1.66064
Negative and lasting effects on their cognitive development	612	3.1875	1.64303
Drug users have negative and long-lasting effects on their cognitive development	612	3.1960	1.61249

As per the Table 6, the descriptive results indicated that there are very clear indications of what the effects of drug have on the students. This can be shown by the means presented on the Table of range 3.12 to 3.28. The most outstanding effect was "impairs performance in school, at work and, make it dangerous to drive" with a mean of 3.286 and "drug abuse potentially harm unborn baby and affect other pregnancy related issues" with a mean of 3.267 respectively. The other questions also raised very fundamental inferences with mean of 3.1 and above.

Table 7  
Likert Scale Output of effects of Drug and Substance abuse among Students

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Users' mental judgement	29.4%	8.1%	15.8%	14.2%	32.5%
Addiction exposes the users to diseases	25.8%	11.1%	15.2%	14.1%	33.8%
Drug abuse impairs persons thinking	27.8%	8.6%	14.6%	15.6%	33.4%
Drug harm unborn and pregnancy issues	29.8%	7.5%	10.7%	10.2%	41.8%
Impairment of speed and sleep quality	26.6%	10.3%	14.4%	15.1%	33.5%
Drug abuse increases diseases	27.5%	9.7%	16.1%	14.8%	31.9%
Drug abuse impairs engagement in life	25.0%	11.6%	16.5%	13.9%	32.9%
Impairs thinking, communication	27.3%	9.2%	14.9%	15.4%	33.2%
Impairs performance in school, work	26.1%	8.4%	14.2%	13.5%	37.8%
Affects brain systems	30.4%	7.2%	16.8%	11.5%	34.0%
Negative and long-lasting effects on their cognitive development	27.3%	10.4%	13.5%	14.0%	34.9%

52.0% strongly agreed that "Drug abuse potentially harm unborn baby and affect other pregnancy related issues" 51.3% agreed that drugs "Impairs performance in school, at work and, make it dangerous to drive". 49.0% drugs impair a person's thinking capabilities. 49.0% drugs have negative and long-lasting effects on their cognitive development of students. 48.6% drugs impair thinking and communication. On the other hand, a small percentage of respondents between 10.7% and 17.5% had neutral observations which is also a worrying trend and shows ignorance of the situation languishing students in the university.

## Qualitative Data on effects of Drug and Substance Abuse on Students

From the focus groups, the results reveal that the effects of substance abuse on the student's touches on affecting their physical, mental, emotional health. Most of the students tend to miss classes, do not submit assignments, and isolate themselves from the universities activities which make them end up in dropping from school. Other effects include low self-esteem, violence, short attention span, hallucination, and low thinking capacity which all this affect their well-being and consequently leads to higher rates of university drop out or take longer to complete.

## Discussion Of The Findings

The study established that family background and upbringing are among the main factors which influence drug and substance abuse. These findings were like a study investigating the relationship between drug use and substance abuse and quality of sleep among colleges and university students in Yemen and Saudi Arabia [5]. The researcher found out that cultural factor plays a significant role in drug use and substance abuse. The influence through celebrities and famous people on social media was found to be strong among students in colleges and universities.

This study established that previous experiences including family upbringing and role modelling during initial growth periods influence usage of drugs and substances. A study by [37] found out that parental love, quality time, consistency and role modeling were mentioned in a study as fundamental in defining a youth's involvement in drug and substance abuse. Children from separated households are more prone to various vices in the society such as drug and substance abuse because majority of them have lacked parental care and supervision from an early age. The study further revealed that lack of maternal support, monitoring and communication have been significantly linked to heavy drinking and drunkenness among adolescents.

This study found that drug and substance abuse lead to impairment in attention, processing speed and sleep quality. The findings resonate with [29] who observed that there is a significant evidence of sleep disorders and poor sleep quality among university students. Most of the sleep disorders are mostly linked to tobacco use and poor performance. They further explained that poor sleep quality had a significant effect on the level of drug use and abuse among University students. Students who did not use drugs had a higher quality of sleep compared to students who used drugs who had poor quality of sleep more often. Some students in recent studies have confessed to taking stimulants such as Adderall, Ritalin, Dexedrine, Concerta, and Stratera to enhance their academic performance.

This study established that drug and substance abuse impair performance in school, at work and, makes it dangerous to drive. In agreeing with the findings [4] noted that drug use and abuse these stimulants medications for both academic and recreational functions. For academic functions students believe that stimulants medication enables them to improve their GPA through helping them study and stay alert for long hours, enhance their concentration, and focus and increase their energy level. For recreational function College and University students it enables them to get rid of fatigue and improve their social awareness

The findings of the research indicate that indeed drug and substance abuse affect students at USIU Africa and from other research done in other regions globally there is a great corroboration of these findings. In this study, the results indicate that drug abuse impairs performance in school, at work and, make it dangerous to drive, there is a great potential for Drug abuse potentially harm unborn baby and affect other pregnancy related issues. These findings are reflected by research conducted by [23] who asserts that drug abuse to students is tantamount to poor performance as the objectives of education to students are over run by aggressive behavior, violence and withdrawal. It becomes impossible for such students to concentrate on studies or even interact with fellow students or lecturers



On the other hand, drug and substance abuse increases risk of sexually transmitted infections among the students which end up making them risk their young lives. As well, drug abuse impairs participation and engagement in life, affects person's ability to think and communicate rationally, recognize reality sometimes resulting in dangerous behavior. These results have a bearing from the research done by [3] who reported that drug abuse increases the risk of sexually transmitted infections.

## **Conclusions And Implications For Practitioners**

In a nutshell, this study therefore, concludes that peer pressure and the residences of the students were found to be major factors influencing drug and substance abuse among USIU-Africa students. Drug and substance abuse of drug by the students directly affects and impairs academic abilities of the students which limit their academic performance. For most students who use drugs, their maturity is affected and keeps them engaged in deviant peer groups as others move on to more normative groups, thus having a long-term direct effect on educational attainment. The study would recommend multi-approach to curb this vice from the parents, lecturers, peers, counselors to follows preventive interventions aimed at improving academic engagement and broaden their focus beyond drug use in students. Community and family risk factors should also be targets of intervention.

The university needs to come up with mechanisms of dealing with peer pressure amongst students to reduce instances of drug and substance abuse. The university need to partner with parents and accommodation providers around campus to tighten the rules governing student accommodation as a way of reducing the menace. Counseling education should be heightened in campuses to revive those who have already been engaging in the act and the government should strictly enforce its existing laws through NACADA against drug abuse through its regulatory agencies.

## **Abbreviations And Acronyms**

**CSOB** - Chandaria School of Business

**DMT** - A powerful hallucinogenic drug

**PCP** - Phencyclidine drug

**NACADA** - National Campaign against Drug Abuse

**USIU-Africa** - United States international University Africa

**SPHS** - School of Pharmacy and Health Sciences

## **Declarations**

**Ethics approval and consent to participate**

- The Proposal for this research work was reviewed and approved by USIU-Africa, Institutional review Board. The certification number is USIU-AFRICA/IRB/ 172-2018
- Ethics review committee is the ethics board of United States International University Institutional-Africa (USIU-Africa) Review Board

### Consent to participate in the study

(below is a sample of consent form given to respondents)

**TITLE OF THE STUDY:** Drug and Substance abuse among University Students: A case of USIU – Africa.

### PRINCIPAL INVESTIGATOR

Name: **Juliana Mulaa Namada**

Department: **USIU Chandaria School of Business**

### Purpose of the Study:

The main objective of the research will be to analyse the effect of drug and substance abuse on university students at USIU-Africa.

### VOLUNTARY PARTICIPATION AND CONFIDENTIALITY

Your participation in this study is voluntary, and your responses to this survey will be anonymous. Please do not write any identifying information on this questionnaire.

### CONSENT

I have read and understood the information provided and I wish to participate. I voluntarily agree to take part in this study.

Tick the box below about the position you take to participate in the study:

Yes

No

### Thank You

### Consent for publication

- Not Applicable

### Availability of data and materials

- The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

### **Competing interests**

- There are no competing interests from the researchers and the authors of this manuscript.

### **Funding**

- This project was funded internally by United States International University-Africa where both the researchers work.

### **Authors' contributions**

- The authors of this manuscript have contributed equally to the research and the manuscript from the beginning to the level where we are now submitting for publication.

### **Acknowledgements**

The authorship was with the two contributing authors only

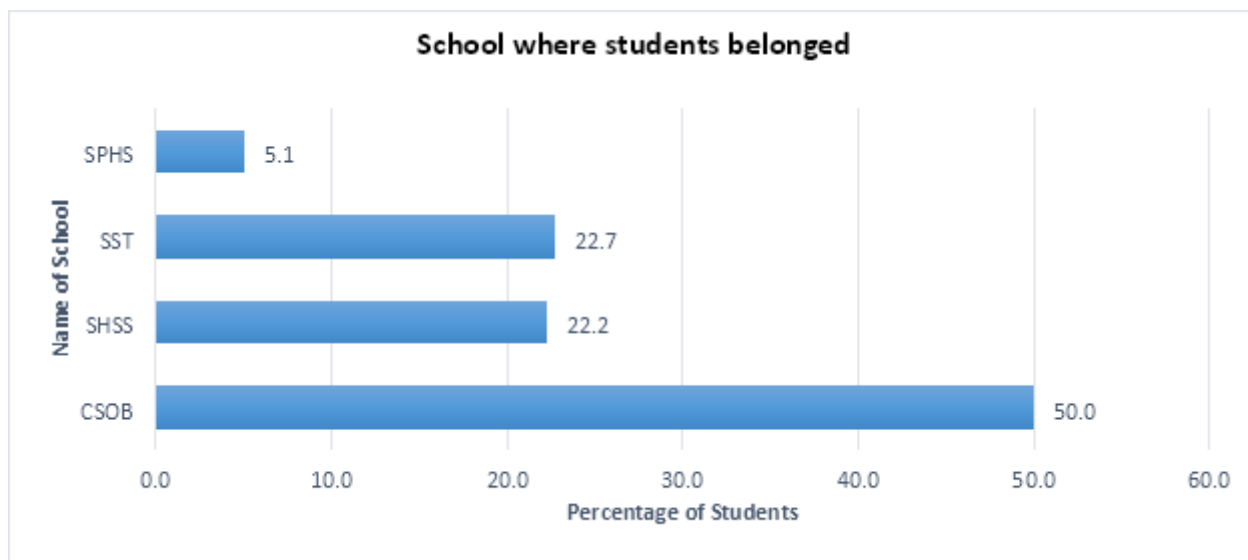
## **References**

1. Asgedom TT. (2017). *Substance abuse among undergraduate students at a university in Ethiopia* (Doctoral dissertation, Doctoral thesis, UNISA).
2. Birhanu AM, Bisetegn TA, Woldeyohannes SM. High prevalence of substance use and associated factors among high school adolescents in Woreta Town, Northwest Ethiopia: multi-domain factor analysis. *BMC Public Health*. 2014;14(1):1–11.
3. Bryan AD, Schmiede SJ, Magnan RE. Marijuana use and risky sexual behavior among high-risk adolescents: trajectories, risk factors, and event-level relationships. *Dev Psychol*. 2012;48(5):1429.
4. Webb EM, Noar SM. Illicit use of prescription ADHD medications on a college campus: a multimethodological approach. *J Am Coll Health*. 2008;57(3):315–24.
5. Fadhel FH. Exploring the relationship of sleep quality with drug use and substance abuse among university students: a cross-cultural study. *Middle East Current Psychiatry*. 2020;27(1):1–9.
6. Gust SW, McCormally J. National Institute on Drug Abuse International Program: improving opioid use disorder treatment through international research training. *Current Opinion in Psychiatry*. 2018;31(4):287.
7. Hamdan-Mansour AH. Depression, Hostility and Substance use among university students in Jordan. *Mental Health Substance Use*. 2009;2(1):52–63.
8. Hamdan-Mansour AM, Razeq A, AbdulHaq NM, Arabiat B, D., & Khalil AA. Displaced Syrian children's reported physical and mental wellbeing. *Child Adolesc Mental Health*. 2017;22(4):186–93.

9. Hawkins JD, Arthur MW, Catalano RF. Preventing substance abuse. *Crime Justice*. 1995;19:343–427.
10. Hurst T. (2019). World drug report. *The Encyclopedia of Women and Crime*, 1–2.
11. Ikoh MU, Smah SO, Okwanya I, Clement UA, Aposhi ZA. Factors affecting entry into drug abuse among youths in Lafia metropolis: implications on security. *Sage Open*. 2019;9(1):2158244018823428.
12. Jacobus J, Bava S, Cohen-Zion M, Mahmood O, Tapert SF. Functional consequences of marijuana use in adolescents. *Pharmacology Biochemistry Behavior*. 2009;92(4):559–65.
13. Kaigwa LM. (1998). *Substance Abuse: A Study of Student's Knowledge Attitudes and Practices at two Universities in Nairobi, Kenya*.
14. Kangas BD, Branch MN. Effects of acute and chronic cocaine administration on titrating-delay matching-to-sample performance. *J Exp Anal Behav*. 2012;97(2):151–61.
15. Kasundu B, Mutiso MM, Chebet PS, Mwirigi P. Factors contributing to drug abuse among the youth in Kenya: A Case of Bamburi Location. *Elixir International Journal*. 2012;46:8259–67.
16. Kiriru A. (2018). Effect of awareness on substance abuse among university students in a selected private university in Kenya. *African Research Journal of Education and Social Sciences*, 5(2).
17. Krause M, Zhu Y, Huhn M, Schneider-Thoma J, Bighelli I, Nikolakopoulou A, Leucht S. Antipsychotic drugs for patients with schizophrenia and predominant or prominent negative symptoms: a systematic review and meta-analysis. *Eur Arch Psychiatry Clin Neurosci*. 2018;268(7):625–39.
18. Maithya RW. (2009). *Drug abuse in secondary schools in Kenya: Developing a programme for prevention and intervention* (Doctoral dissertation, University of South Africa).
19. Mennis J, Stahler GJ, Mason MJ. Risky substance use environments and addiction: a new frontier for environmental justice research. *International Journal of Environmental Research Public Health*. 2016;13(6):607.
20. Merz F. United Nations Office on Drugs and Crime: World Drug Report 2017. *SIRIUS-Zeitschrift für Strategische Analysen*. 2018;2(1):85–6.
21. Morojele NK, Parry CDH, Brook JS. Substance abuse and the young: Taking action. *MRC Research Brief*. 2009;6:1–4.
22. Musyoka CM, Mwayo A, Donovan D, Mathai M. (2020). Alcohol and substance use among first-year students at the University of Nairobi, Kenya: *Prevalence and Patterns*. *Plos One*, 15(8), e0238170.
23. Ndegwa AM. Factors influencing Alcohol Use among University Students in a Kenyan University. *African Journal of Clinical Psychology*. 2017;1:102–17.
24. Nkonge JK. Factors Influencing Drug and Substance Abuse among the Youth In Kenya: A Case Study of Likii Sublocation. Laikipia East Sub-County; 2017.
25. O'Donnell J, Hawkins JD, Catalano RF, Abbott RD, Day LE. Preventing school failure, drug use, and delinquency among low-income children: Long-term intervention in elementary schools. *Am J Orthopsychiatry*. 1995;65(1):87–100.

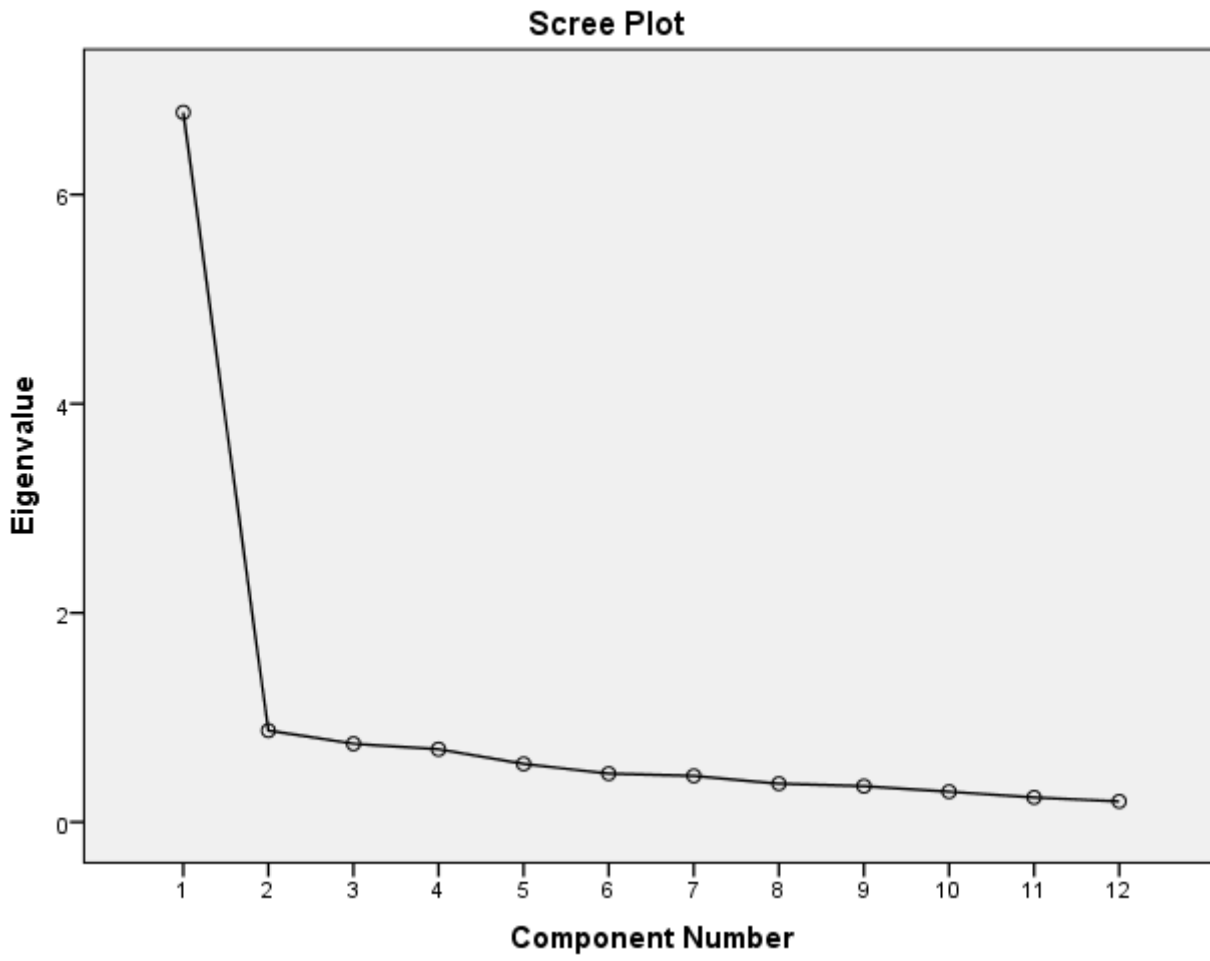
26. Oluwoye OA, Merianos AL, Nabors LA. Nonmedical use of prescription drugs and peer norms among adolescents by race/ethnicity. *Journal of Substance Use*. 2017;22(2):199–205.
27. Oluwoye OA. The Influence of Social Media and Culture on Substance Use among African and African American Male College Students. *A Journal on Black Men*. 2017;6(1):59–75.
28. Ronoh KC. (2014). *Effectiveness of drug and substance abuse prevention programs in selected public and private universities in Kenya*. Nairobi: Unpublished Phd Thesis.
29. Schlarb AA, Friedrich A, Claßen M. (2017). Sleep problems in university students—an intervention. *Neuropsychiatric Disease and Treatment*, 13, 1989.
30. Somani S, Meghani S. Substance abuse among youth: A harsh reality. *Emerg Med (Los Angel)*. 2016;6(330):2.
31. World Health Organization. *Approaches to treatment of substance abuse* (No. WHO/PSA/93.10). World Health Organization; 1993.
32. World Health Organization. *World Drug Report 2018: Global overview of drug demand and supply. Latest trends, cross-cutting issues*; 2018.
33. Yusuf FA. Factors influencing substance abuse among undergraduate students in Osun State, Nigeria. *African Research Review*. 2010;4(4):330–40.

## Figures



**Figure 1**

Student Participation per School.



**Figure 2**

Scree plot of Factors affecting Drug and Substance Abuse