



Accessibility Of Substances, Accommodation Status & Extracurricular Activities' Influence On Undergraduates In Kenya

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Summary

INTRODUCTION

Institutional factors such as; Accessibility of Substances, Accommodation status, Extracurricular activities etc., had the capacity to influence and modify a student's behaviour by exposing or protecting them from substance use. The purpose of this study was to find out, to what extent these factors influence some undergraduate students into substance use in Kenya.

METHODOLOGY

Descriptive cross sectional survey and qualitative research designs were used for this study. Self - administered questionnaires were distributed to 1500 participants who were selected using Multistage Sampling Technique from 12 chartered universities with twelve university counsellors in Kenya were also interviewed.

RESULTS

The type of accommodation was a factor that determined the current use of Substance among undergraduates. High prevalence of Substance use was reported within students residing in hostels outside the universities. Accessibility of substance ($\beta = .25$, $p=.000$) and extracurricular activities ($\beta = .13$, $p<.001$) were strong predictors of Substance use. Alcohol, tobacco and cannabis were easily accessible and their use was higher compared to other types of Substance use. Students who were engaged in extracurricular activities had lower risk of Substance use in colleges. University counsellors who were interviewed agreed that the Institutional factors played a vital role in determining the use of Substance among undergraduates.

CONCLUSIONS

Accessibility of Substance, type of Accommodation and Student engagement in extracurricular activities plays a major role in determining the undergraduate student's use of Substance in our modern Institutions. Majority of Parents / Guardians whose students reside outside the universities need to collaborate with the private accommodation facility caretakers to curb Substance use in our institutions.

Some university students use their external connection mainly outside the university to get substances for personal use and also as a source of income.

The main source of substances in the university environment is fellow students

Key words: Institutional Factors, Substance Use, Accessibility, Type Of Accommodation, Extracurricular Activities, And Undergraduate Students.

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Introduction

Institutional factors for example : Accommodation, Extracurricular activities etc. have the capacity to influence and modify students' behaviour by exposing or protecting them from substance use. Globally, studies reveal an increase in Substance use among undergraduates [1-3].

In Kenya, where a number of Institutions of higher learning is visionary, Drug abuse, Substance use etc. is equally a growing challenge.

This necessitated the need for this study to find out, to what extent these factors influence some undergraduate students into Substance use in Kenyan Institutes of higher learning.

University students who indulged in Substance use were likely to experience challenges that became a barrier to their studies. Substance use impairs cognitive ability and distorts judgement, thus leading to poor academic performance, involvement in crime, violence, and risky behavior among university students [4, 5].

Substance use among university students was as a result of the interplay of multiple factors. Some originating from family setups and others nurtured at the university. Institutional factors can create an environment that could protect students from indulging in substance use.

From previous studies worldwide, institutional factors such as Students' Accommodation, Accessibility of Substance use, Institutional Policies, and Students' participation in extracurricular activities for example sports, religious and community initiatives, seem to play a major role in determining a student's use of substance or not [6 - 9].

Some studies have looked at individual factors relating to high-risk substance use among students from a different perspective.

Accessibility

Accessibility could contribute or create a conducive environment that influenced substance use. In Kenya, studies have reported that availability and accessibility of substance contributes to the high prevalence [10 - 12].

The construction of Pubs, Beer Dens and other Alcoholic Beverages in our institutions of higher learning, makes it easy for any student to access this commodity that ruins their lives forever. This makes the students vulnerable to all types of crime to get these substance.

Accommodation

Students' type of residence was another factor that determined the vice [13]. The environment in which the young people live, for example, in university hostels, outside - campus residence or with parents influenced undergraduates to substance use.

Accommodation, in particular number of roommates in the university hostels and availability of the substance in the hostels could influence the student's use of substances.

A study conducted by a Journal of Addiction, 2016 revealed that, students who lived with their families or relatives were less receptive to indulgence in substance use in Sudan [14].

Universities with poor or deplorable recreational facilities such as sports, gym and other places where students could relax after classes, had a high substance use prevalence as compared to well-equipped universities [15].

Every institution of higher learning is therefore expected to provide adequate sporting facilities which may act as a buffer against substance use for students.

Another study conducted by International Journal of Business and Social Science, in 2011, revealed that public universities did not provide adequate sporting facilities compared to private universities in Kenya. Sporting was one of the most effective student's activity that provided a better option against substance use. [16]

However, some studies indicate that participation in sports may be equally a risk factor for alcohol consumption among undergraduates [17-18].

These studies have shown a significant and crucial relationship between sports and alcohol consumption in institutions of higher learning. The type



of sport can influence students' substance use. Sponsors of some of the competitive games who were mostly alcohol brewers, could sell their products at subsidized prices giving a chance to those students who had not gotten a taste a free will.

By using the sports occasions in the campus, was creating a wider market for all sorts of substance use, drug and alcohol abuse for posterity. This makes the brewers stock or increase their stock in college canteens without caring where these students will get the money to purchase.

Eventually, the rise of student drop-out was born due to circumstances, that were created by misuse of school fees to certify a students addiction.

Team and competitive sports positively associated with high alcohol consumption were:

1. Football
2. Rugby
3. Weight lifting

Peer pressure played a significant role of influencing team members to consume alcohol to proof their unity [19-21].

As institutions of higher learning, students were encouraged to participate in sports, while reserving the sensitivity and awareness of the risky substance use.

The need to train participants on Self-discipline and Institutional Peer Pressure Educators need to develop strategies that would prevent substance use among sports groups.

The changing environment in Kenyan universities which was caused by growing demand for higher education, has led to an increase in the student population in all universities. The education sector has been affected directly and experienced increased enrolment in basic education, leading to increased enrolment in the higher education institutions [22 -24].

This drastic growth has led to the restraint on available facilities and withdrawal of essential services that were associated with universities such as free food, free accommodation within the university, and attention given to the few students on campus.

This has resulted in the inclusion of affordable cheap accommodation in the vicinity of the university colleges where Substance was easily available and the university administration could not be in control of such facilities.

The drastic growth could also be attributed to the change in education system from the 7 - 6 - 3 to 8 - 4 - 4. The entry age has gone down to 17 or 18 years old from 20 or 21 years old, indicating, we had a younger population of students compared to what we had in the 1980s.

This means that there was need to provide supervision and guidance to the young students who are enrolling in universities at an early age. There have been major changes in university environment where institutional factors play a big role of determining students' future.

Factors mentioned in this study have the capacity to influence and modify the students' behaviour, by exposing or protecting them from substance use. An information gap exists on the influence of institutional factors in respect to undergraduates' use of Substance in Kenya.

It is also not clear why, despite the fact that most institutions of higher learning have well-established counselling departments, the problem of Substance use continues to be high among students. Most studies that were conducted in Kenyan universities on institutional factors were not related to substance use and the few that were related to substance use only explored sports as a determining factor of substance use [25, 16].

Therefore, institutional factors have not been fully explored in universities in Kenya. This study examined the influence of accessibility, type of residence and student involvement in extracurricular activities on substance use.

Methodology

Study Design

The study employed a cross sectional survey and descriptive qualitative design. The self-administered questionnaire was distributed to 1500 students to assess the prevalence of substance use and the influence of institutional factors. The university student counsellors



were interviewed to get their views and opinions about how the institutional factors influenced student's substance use.

The study was conducted in twelve chartered public and private universities, which were selected from urban, suburban and rural environments in five selected regions of Kenya. These regions were Coast, Western, Central, Rift Valley, and Eastern regions.

The twelve universities were selected from ten counties across the country. The names of the universities were withheld because of the sensitivity of the subject area of study therefore, PUB stood for public universities and PRI stood for private universities.

The private universities were selected on the basis of sponsorship that is religious-sponsored institutions and the non- religious-sponsored institutions of higher learning in the five regions of Kenya.

The seven public universities thus included University

PUB A, PUB B, PUB C, PUB D
PUB E, PUB F, PUB G
and five private universities thus included
PRI A, PRI B, PRI C, PRI D and PRI E.

Population and sample size

The target population was 451,081 undergraduate students, where 390,456 were in chartered public universities and 60,625 in chartered private universities. The sample size was 1500 participants who were selected using Multi - Stage Sampling Technique from seven public and five private universities in Kenya.

Questionnaire

The first part of the questionnaire had questions on social economic demographic information. The second part measured the prevalence of substance use and the third part influence of accessibility of Substance, student's residence and student's engagement in extracurricular activities on students' use of substance.

Substance accessibility by students within the university was measured using Likert-type Scale. The respondents were asked "How difficult do you think it would be for you to get a substance within the university if you wanted?" The responses ranged

from (1=impossible to 5=very easy). Accessibility of substances was measured against current use of substances by students.

Student accommodation was determined by identifying where they stayed while studying. The type of student residence included students living at home with parents/relatives, in the hostels within the university, in hostels outside university, in a rental house staying with friends and in a rental house staying alone.

The different places of student residence was measured against the current use of Substance by students. Student support services were also measured using a Likert type scale. It measured student's level of engagement in sports, clubs and societies in relation to current use of Substance among students.

The university counsellors' opinion was gathered through in-depth interview. The scope of the interviews included establishing the influence of accessibility, student place of residence and student engagement in extracurricular activities and the role of the counsellors in mitigating substance use in universities.

Results

The demographic characteristic of the respondents revealed that

1. Male participants were 769 (53.5%)
2. Female participants were 653 (45.4%).

The respondents age ranged from 17 to 33 years, with the majority 1182 (89.2%) being in the age category of 17 to 24 years.

Second year students were slightly more	420 (29.2%)
Followed by first year students	376 (26.1%)
Fourth year and above were	357 (24.9%)
Third year	300 (20.9%)

Influence Of Accessibility Of Substance Use On Students

Alcohol, tobacco and *cannabis* were easily accessible, out of 1483 students 878(62.5%) indicated that tobacco, alcohol 984 (70.1%), *Khat* 866 (61.6%) and *Muguka* 788(56.1%) were easily accessible in both public and private universities as shown in (Table 1.)

Substances that were not easily accessible included cocaine 1147(82.3%), opioids, 1176 (84.5%) and *hallucinogens*, 1165(83.4%) suggested that, either it was difficult to access the substance or they did not know.



Table 1: Students' Response on Accessibility of Substance within the University

Substance	University Type	Difficult to get	I do not know	Easy to get	p-value
Tobacco	Public	81 (10.7%)	108 (14.2%)	571 (75.1%)	.000
	Private	175 (27.2%)	162 (25.2%)	307 (47.7%)	
Shisha	Public	148 (19.7%)	217 (28.9%)	387 (51.5%)	.000
	Private	184 (29.0%)	215 (33.9%)	236 (37.2%)	
Kuber	Public	152 (20.7%)	314 (42.8%)	267 (36.4%)	.000
	Private	193 (30.5%)	246 (38.9%)	194 (30.6%)	
Alcohol	Public	64 (8.4%)	79 (10.3%)	622 (81.3%)	.000
	Private	149 (23.4%)	127 (19.9%)	362 (56.7%)	
Cannabis	Public	156 (20.6%)	215 (28.4%)	387 (51.1%)	.000
	Private	208 (32.4%)	234 (36.5%)	199 (31.0%)	
Cocaine	Public	281 (37.1%)	309 (40.8%)	167 (22.1%)	.000
	Private	275 (43.1%)	282 (44.2%)	81 (12.7%)	
Amphetamine	Public	235 (30.9%)	399 (52.5%)	126 (16.6%)	.004
	Private	235 (39.0%)	292 (48.4%)	76 (12.6%)	
Inhalants	Public	213 (28.0%)	339 (44.5%)	209 (27.5%)	.003
	Private	227 (35.4%)	278 (43.4%)	136 (21.2%)	
Sedatives	Public	183 (24.1%)	359 (47.4%)	216 (28.5%)	.007
	Private	201 (31.5%)	283 (44.3%)	155 (24.3%)	
Hallucinogens	Public	231 (30.5%)	403 (53.2%)	124 (16.4%)	.086
	Private	227 (35.5%)	304 (47.6%)	108 (16.9%)	
Opioids	Public	264 (35.0%)	370 (49.1%)	120 (15.9%)	.302
	Private	249 (39.0%)	293 (45.9%)	96 (15.0%)	
Khat	Public	87 (11.4%)	128 (16.8%)	546 (71.7%)	.000
	Private	152 (23.6%)	172 (26.7%)	320 (49.7%)	
Muguka	Public	97 (12.7%)	164 (21.6%)	500 (65.7%)	.000
	Private	158 (24.6%)	197 (30.6%)	288 (44.8%)	



A comparison between accessibility of substance in public and private universities was done. There was a significant difference in mean of public universities

(M = 3.3373,
SD = .8443)

which was higher than private universities

(M = 2.9226,
SD = .99677) $t(1426) = t.511, p < .05$.

The findings from the interviews with university counsellors on accessibility of substances confirmed, that within the university premises including hostels there was minimal accessibility despite some universities having staff common rooms where alcohol was sold.

Furthermore, the interview confirmed that substances were smuggled in the institutions through untouchable students who colluded with security officers evade thorough security checks in the main gate.

Similarly, students accessed substances outside the university in the kiosks or the many pubs surrounding the universities.

Below are some of the counsellors' responses which are presented in form of excerpt:

University Student Counselor PRI B:

It is very difficult for students to get substances within the university.

*This is because of
The checks done at the entrance,
The main gates to hostel,
The library, Administration block
and The impromptu checks
conducted in the Hostels.*

*Students residing within the university
are very secure.*

University Student Counselor PUB D:

*Initially, we had a Bar(Pub) for students
They could access alcohol easily
It was very cheap than outside campus
Everything you can expect in
an ordinary bar was available.*

*Right now we have a club house
which sells expensive ones.
This reduces accessibility of alcohol
within the university.*

*Most students get substances from
outside the university in places such as;
The Bus Terminus outside the gate
or from The Slum nearby.*

*We have Drug Peddlers inside
The consumption does not seem to be going low,
yet we are strictly checking at the gate.*

*It is alleged they hide them very well
In food staffs.....
Even between the books.*

*Someone suggested that,
The only way to curb this menace
and substances are not smuggled in,
is to use sniffer dogs at all the gates,
but this is rarely used.*

*It has to be a routine for
universities to use sniffer dogs
to control students and staff
from the smuggling of substance,
alcohol and drugs
into institutions of higher learning.*

*As most students say,
All substances enters through the gate.*

Students' Accommodation

Apparently, it was discovered that, only a small population of students resided in the university hostels 479 (33.8%).

A majority of the students resided outside the university approximately 938 (66.2%), some resided in hostels outside the university 230(16.2%), some rental houses staying alone 298 (21.0%), others rental houses staying with friends 254 (17.9%). others staying at home with parents or relatives.

Those who were living at home with parents were 132 (9.3%) as shown in **(Table 2)**.



Table 2: Students' Accommodation

Type of residence	Frequency	Percent
Home living with parents	132	9.3
Hostel in the university	479	33.8
Hostel outside the university	230	16.2
Rental living with friends	254	17.9
Rental living alone	298	21.0
Others	24	1.7
Total	1417	100.0

Table 2 reveals that, majority of the students resided outside the university. Some resided in hostels outside the university, others in rental houses staying alone and others in rental houses staying with friends. Also there were others staying at home with parents.. The study discovered that, only a small population of students resided in the university hostels approximately 479 (33.8%).

This could be explained by the fact that university accommodation was limited due to the growing enrollment of students in these Institutions continuously

Therefore, majority of the 938 (66.2%) students in this study, resided outside the university. This means that, Institutions of higher learning, can only be in control of the 479 (33.8%) who resided in the university hostels.

The highest percentage of lifetime users was as follows;

165 (43.2%), students resided in hostels outside the university. 117(41.3%), resided in rental houses alone. 93 (35.9%), resided in rental houses staying with friends. While 99 (30.3%) resided in university hostels an finally 17 (23.9%) stayed at home with parents .

In comparison, the highest percentage of current users, there were: 115 (38.6%), students residing in rental houses staying alone. Then, 82(35.7%) residing in hostels outside the university. While 85(33.5%), resided in rental houses staying with friends and 134 (28.0%)

resided in the university hostels. Finally 30(22.7%) resided at home with parents.

The common factor for both current and lifetime users was that; those residing at home with parents were the least Substance users, least alcohol and drug abusers.

This could proof that, there were restrictions and supervision in homes, which is unambiguous factor that determines the use of substance use, alcohol and drug abuse among students in Universities.

The findings confirmed that, **Tobacco** and **Shisha** were mostly consumed by students residing in university hostels placing tobacco at 41.2%, **Shisha** at 41.9%. Students staying in rental houses but alone , consuming Tobacco were 31.4%, and those consuming **Shisha** were 23.7%.

Kuber was regularly consumed by;

- (30%), of students staying in rental houses with friends.
- (30%), of students staying in rental houses but alone.
- (20%) students staying in hostels outside the university
- (20%).students staying in hostels in the university

Alcohol consumption was highly consumed by students at:

- Hostels in the university (29.6%),
- Rental houses stying alone (24.3%)
- Rentals staying with friends (19.5%).



Cannabis was commonly consumed by students at:

Hostels in the university (31.5%)
Rental houses Staying alone (29.2%).

Khat was mostly consumed by ;
27.3% of students residing in hostels outside the campus
21.2%. of students in rental houses staying with friends
27.3% of students staying in rental houses but alone

Muguka was regularly consumed by;

43.8% of students residing in hostels outside the university.
25%. of students staying in rental houses but alone.

From the in depth interviews with the university counsellors, it was evident that institutions, especially private universities, were in control of the university hostels only. The institutions have put strict measures to control the use of substance through frequent checks by Security Officers, Hostel Warders or the Dean of Students Affairs.

However, they were not in full control of the student use of substances, because of the freedom in universities.

In most university hostels, there was a minimum of four students who share a room. The counsellors reiterated that, majority of the students (60%) resided outside the university compounds. This posed a challenge since the administration was not in control of accommodation outside the university.

Significantly, influential towards the students use of substance. The excerpt below outlines some of the comments that highlighted students' place of residence and how university hostels are managed.

University Student Counselor PRI A:

*Majority of students reside
Outside their colleges making it
difficult for
The university administration to
Be in full control of these students.*

*Those who reside in the
University hostels are about 35%*

*And the hostel environment is 95%
Safe from substance use for students
Due to security checks.*

*Presence of Janitors and housekeepers
With their private monitoring
of the students movements*

*The university hostels are shared
By four students in one room.
Peer counselling can not be overlooked*

University Student Counselor PUB D:

*We have many students outside
The university than inside.*

*They stay around
Four to eight in a room.
For the eight, it is a risk factor
Because you find some of them
On substance use, alcohol
And drug abuse*

*Then,
Those not using the substance
Who cannot disclose their roommates'
State of affairs.*

*Unfortunately there is the risk of them
Getting lured
Either by force or will to try on
Whatever others are doing.*

*Initially, when roommates were
Their brothers'keeper,
Things were different.*

*If a student found a roommate
Was using substance,
They would report the case
But now
When they are eight,
We do not get such reports.*

Student's Engagement In Extracurricular Activities

Student engagement in sports, religious activities, clubs and society was measured and findings were outlined on (Table 3).



Table 3: Current Substance Use Based on Accommodation and University

Type of accommodation	Private university	Public university	Total (%)	P-value
Hostel outside the university	29 (6.5%)	53 (11.9%)	82 (18.3%)	.152
University hostel	32 (7.2%)	102 (22.8%)	134 (30.0%)	.000
Rental housing living alone	54 (12.1%)	61 (13.6%)	115 (25.7%)	.022
Rental house living with friends	36 (8.1%)	49 (11.0%)	85 (19.15%)	.001
Home living with parents	14 (3.1%)	16 (3.6%)	30 (6.7%)	.371
Others	0 (0.0%)	1 (0.2%)	1 (0.2%)	.722
Total	165 (36.9%)	292 (63.1%)	457(100.0%)	

Table 3 show a majority of those who had used substances in the past three months were in public universities. The highest percentage stayed in university hostels, followed by those who stayed in rental houses and those staying in hostel outside the university rental houses with friends. The least users were those who were living with parents.

In private universities, majority of the respondents who had used substance in the past three months stayed in rental houses alone or with friends, they were followed by respondents staying in the university hostel and the least were the respondents living with parents.

This meant that, the type of residence determine student use of substances. Hostels outside the university are a risk factor for substance use because of limited supervision while university accommodation and home are a protective factor resulting from supervision.

Those staying in the university hostels or rented hostels outside the institution were likely to be influenced by their peers to either use a substance or abstain. This was shown by a study conducted in a private Christian university in Kenya which proved that students staying on campus or outside accommodation, promoted harmful alcohol use compared to those living with their parents.

This is attributed to lack of adult monitoring and supervision which allowed the students to use the freedom as they so wished [30]

Peer pressure influence motivates students to try out new things which would not be allowed by the parents or relatives such as alcohol and other substances [31]

This is supported by a (2010) study, which assert that, peer norms may be particularly salient within a collegiate population. Students find themselves situated within a peer-dominated environment, with less frequent contact with parents, siblings or other previous reference groups[32].

There was high level of consensus on all the factors in regard to students support services;

*I would attribute low levels
Of substance use prevalence in
Our university
To the strong spiritual support
through the
Chaplaincy office,
C.U and YCS’,*

*I am actively involved
In university religious activities’,
‘Our university has*



a wide range of sports which help us utilize leisure time constructively'

'I am actively involved in co-curricular activities of our university'.

However, on the p-value test of significance, only one factor

'I would attribute low levels of substance use prevalence in our university to the strong spiritual support

through the chaplaincy office, C.U and YCS' at p=.05.

Alcohol, *cannabis* and tobacco as substances of use by students were significantly different based on student's engagement in extracurricular activities.

Alcohol,

The ANOVA results were: $F(2, 1293) = 14.654, p < 0.05.$

Cannabis,

The ANOVA results were: $F(2, 1260) = 4.386, p < 0.05.$

Tobacco,

The ANOVA results were: $F(2, 1271) = 4.212, p < 0.05.$

This means that students' involved in extracurricular activities statistically influenced the alcohol, *cannabis* and tobacco groups. Sincerely a determining factor for alcohol, *cannabis* and tobacco use.

University student counsellors interviewed in both public and private universities agreed that students' involvement in some extracurricular activities was an ambiguous measure.

The activities included Peer Counselling, Students Involvement in mobilizing other students to participate in substance use awareness campaign.

Student's participation in the mentorship programs of new students and during orientation at the beginning of each semester are protective measures.

The following activities were found to be effective in curbing substance use;

- a. Religious activities,
- b. Social Societies,
- c. Drama
- d. Music.

However, the university students counsellors had different opinion about student involvement in competitive sports, such as football, rugby and basketball.

They that sports was associated with students' use of substance since those who participate in national tournaments were given allowances which would lead to the consumption of alcohol.

They reiterated that most teams and their supporters drink and smoke during tournaments both in the university and external activities. In such institutions the university student counsellors reported high prevalence of alcohol use. Below are some responses from the counsellors;

University Student Counsellor PRI A:

We are somehow different whereby attending chapel services is compulsory.

We have sporting facilities and the students make use of them.

We encourage those recovering from substance use to participate in games.

Chaplain is the spiritual leader in the institution and we work together. Students have many choirs.

They normally preach. We have our outreach campaigns, we have rallies and most students are engaged church activities.

The chaplain has a budget so he can invite visitors to come and talk about drugs in the church.

On Wednesdays and Thursday, we have specific assemblies.



*There is an assembly for the whole campus,
Assembly for ladies,
There is assembly for men.*

*The chaplain can think of any
Topic and invite any of us
In the counselling department
or invite somebody from outside.*

*The counselling services are
used by the students.*

*At the beginning of the semester
when the new students come,
one tent is for ladies and
the other for men.*

*These are for sensitizing students
about our counselling offices.*

*We are given a budget as
a counselling department so
we are able to engage
students in many activities.*

*In a semester we are given
two to three days to
have a talk on issues of drugs.*

University Student Counsellor PUB F:

*We organize games.
We work with clubs and student
leaders.*

*We regularly have sports week
in line with drugs and
alcohol fighting symposiums.*

We arrange for walks

*Most likely students take drugs
when they go for football or
rugby tournaments. We do have
C.U., S.D.A,*

*Catholics and Muslims are
active and vibrant against the vice.*

*Religious activities discourage
students from using substances
which in itself
is a safeguarding measure.
They keep students very busy
and they do not have idle moments
to engage in substance use.*

Discussion

Institutional factors played crucial role in determining the students' use of substances. The findings revealed that substances that were perceived to be easily accessible were also the regularly used substances among the students.

This included alcohol, tobacco, *khat* and *muguka*. These substances are among the legal substances therefore readily available and affordable.

The implication of the perceived ease of these substances would lead to more use of the same. There was a significant relationship between the ease of access of substances and substance use.

A study conducted in the USA [27] in the year 2014 revealed that, 14.4% of the youth who reported that *cannabis* was easily accessible had used *cannabis* in the past month. Indicating that, the substances that were perceived to be easily accessible were alcohol, tobacco and *cannabis*.

This is in line with a study conducted in the West Bank University in Palestine reporting that, 1142(83%) of the respondents agreed that tobacco is easily accessible, 835(60%) and 625(45%) respondents agreed that alcohol and illicit substances were easily accessible [28].

Substances such as *cocaine*, *heroin* and *hallucinogens* were not easily accessible within the university. This can be interpreted to mean that students are at lower risk of using these substances.

However there were a few students who agreed that it would be easy to get the substances inhalants 345(24.6%), *cocaine* 248 (17.8%), and *hallucinogens* 232 (16.6%).



This proves that such students were at higher risk of using substance compared to those who said it would be difficult to access the substances. I

Illicit substances such as *cocaine* and *heroin* have been reported at low use in universities which is attributed to unavailability at university or low reporting [29].

In Kenya, studies have reported that availability and accessibility of substance contributes to the high prevalence of substance use [11, 12].

Accessibility and availability of substance may contribute to an environment that will influence students' use of the substance.

A comparison between accessibility of substances in public and private universities was done. The t-test revealed a significant difference in mean of public universities

(M=3.3373,
SD=.8443)

Which was higher than private universities

(M=2.9226,
SD=.99677) $t(1426) = t.511, p < .05$.

This could have been attributed to the fact that, public universities were not as strict as private universities.

Therefore students perceive easy access of substances. This is in line with a study conducted in a public university in Brazil; the study revealed that substances were easily available in universities during entertainment events and parties organized by students within the institution [10].

In most public universities, campus bars and restaurants have alcohol and cigarettes available and students can purchase from such places with ease.

The main source of substances in the university environment is fellow students and peers [14]. Some university students use their external connection mainly outside the university to get substances for personal use and also as a source of income.

The findings are in line with the report from the university counsellors; they reported that in most public universities, campus bars and restaurants had alcohol and cigarettes available. Studies have shown that there is a positive relationship between availability of alcohol outlets and students' alcohol consumption.

One study reported, that university students organize entertainment events and parties within the institution where substances are available. This opportunity exposes non-users to new friends who may introduce them to substance use [10].

The findings revealed that a majority of students resided outside the university that is; 938 (66.2%). Those who were residing at home with their parents were 132 (9.3%). Only a small population of the students resided in the university hostels ie, 479 (33.8%).

This was in line with a study conducted by Gudo and colleagues to explore student's residence both on campus and out of campus in Kenya.

It was reported that, due to the increase in student population, over 60% of students were non-residents with the majority staying in private hostels.

That posed a challenge to the university administration in implementing prevention strategies for Substance use. Most of the students who stayed outside the campus were likely to access cheap alcohol and other substances [15].

The highest percentage of students 115 (38.6%) who had used substances in the past three months, resided in rental houses but alone, followed by those students 82(35.7%), who resided in hostels outside the university campus. 85(33.5%) of students staying in rental houses with friends. 134 (28.0%) of students who resided in university hostels and lastly 30(22.7%) of those staying at home with parents.

Students residing at home with parents, were at low risk of using substances. This could have been attributed by fact that, there are restrictions and supervision in homes. This was one of the factors that determined the use of substance among students.

According to a Journal of Addiction, in 2016 students who stayed with parents or relatives were less indulged in substance use in Sudan [14].



It was also discovered that, more than 31% of students staying with either friends or alone used substance in the past 12 months. This shows accommodation status influences the use of substance among university students .

Engagement in extracurricular activities such as sports, clubs and societies influenced students Substance use.

The use of alcohol, *cannabis* and tobacco was significantly different based on students' engagement in extracurricular activities. This indicated that, students' engagement in extracurricular activities statistically influenced the alcohol, *cannabis* and tobacco groups.

Hence, the students' engagement in extracurricular activities is a determining factor for Substance use. Some studies claim that, participation in sports may be a risk factor for alcohol and other Substance use among university students. The studies have shown a significant relationship between sports and alcohol use [19-21].

Therefore, institution of higher learning need to be aware of the risk involved in students' participating in sports. The participants can be sensitized on the effects of substance use.

In this study majority of the students public universities were 518 (66.6%) and private universities were 431 (67.8%) dallied with the statement that 'Our university has a wide range of sports which help us utilize leisure time constructively'.

This contradict the findings of a study conducted in Kenya which reported that, public universities did not provide adequate sporting facilities [16].

Conclusion

Among the institutional factors Accessibility of Substance, student's Accommodation status that is; type of residence and student's Engagement in Extracurricular Activities have a more significant influence on the students' Substance use.

Universities should strive to provide accommodation for students and strengthen security checks to reduce accessibility and availability of substances. They should invest in extracurricular facilities and encourage students' participation.

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