

**PERCEIVED IMPACT OF SUBSTANCE ABUSE ON MENTAL HEALTH
AMONG UNDERGRADUATES IN PUBLIC UNIVERSITIES IN ANAMBRA
STATE**

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Abstract

This study investigated the perceived impact of substance abuse on mental health among undergraduate students in public universities in Anambra State. Five research questions and two null hypotheses guided the study. The study adopted a descriptive survey research design. The population comprised of 75,358 undergraduate students in public universities in Anambra State. A sample of 400 undergraduate students determined using the Taro Yamane formula was selected using multistage sampling techniques. A researcher-developed questionnaire titled "the perceived Impact of Substance Abuse on Mental Health Questionnaire (IPSAMHQ)", was validated by three experts in Health Promotion and Public Health Education and Educational Foundation (Measurement and Evaluation), while its reliability was established using the Kuder-Richardson Formula 20 (KR-20), which yielded reliability coefficient of 0.86 and Cronbach's Alpha with an overall coefficient of 0.83, indicating that the instrument was reliable for the study. Data was collected through direct administration to respondents by the researcher and three research assistants and was analyzed using SPSS version 27.0. Frequency counts, percentages, mean and standard deviation answered the research questions, while independent samples t-test was used to test the hypotheses at the 0.05 level of significance. Alcohol (88%), energy drinks (83%), pain relievers (77%), tobacco (71%), caffeine (67%) and cannabis (66%) were perceived by undergraduates as commonly used substances. The overall frequency of use was rare (cluster mean = 1.31). The study also found that substance abuse was perceived to have impact on students' mental health. Furthermore, the findings indicated there was no statistically significant difference in the perceptions of male and female undergraduate students, as well as undergraduate students across different academic levels, regarding the perceived impact of substance abuse on mental health. The study recommended that University health education programmes should provide regular, education on the consequences of alcohol, tobacco, cannabis etc and also provide counselling and referral for students experiencing psychological distress or problematic substance use.

Keywords: Substance abuse, mental health, perception, undergraduates, public universities.

Introduction

Substance abuse among young people and university students has become an increasing public health concern because of its potential consequences for psychological and emotional wellbeing. Globally, approximately 296 million people used psychoactive substances in 2021, with alcohol, cannabis, opioids, stimulants and tobacco among commonly used substances (UNODC, 2023). According to previous studies, persistent substance abuse has also been associated with depression, anxiety, emotional instability, cognitive dysfunction and other mental health problems among young adults (Onwurah, Barnaby, Alozie, Ikegulu, and Ogbunugwor, 2024). In Africa, substance abuse among university students is a growing concern, with alcohol, cannabis, tobacco, tramadol and codeine-containing medications reported among substances commonly abused by young people. Substance abuse among African university students has been associated with stress, frustration, emotional distress and academic pressure (Adu, Gbedemah, and Kwaku, 2021). Studies in West Africa have further linked alcohol and cannabis use with depressive and anxiety symptoms among university students (Adongo *et al.*, 2024). In Nigeria, the National Drug Law Enforcement Agency reported increasing abuse of alcohol, cannabis, tramadol, codeine-containing syrups, methamphetamine and other psychoactive substances among Nigerian youths (NDLEA, 2023). Studies among Nigerian undergraduates have also identified peer pressure, curiosity, emotional frustration, stress and social influence as factors associated with substance abuse.

Within Anambra State, concerns about substance abuse and mental health among undergraduates have increased alongside the availability of psychoactive substances and social pressures within tertiary institutions. Studies in Southeastern Nigeria have reported the use of alcohol, cannabis, tramadol and prescription medications among university students (Eze, Ndukwe, and Nwafor, 2023). Studies such as Anierobi, Nnaemeka, ikenwa and Enechukeu (2025) examined substance

abuse as a predictor of psychological and social wellbeing among university students in Anambra State.

Substance refers broadly to a chemical or compound that can alter physical or psychological functioning when introduced into the body. Psychoactive substances act on the brain and may modify mood, perception, cognition or behaviour (WHO, 2023). Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (WHO, 2023). In the context of this study, substance abuse is considered in relation to substances that students may use in ways perceived as harmful or excessive. The substances considered include alcohol, tobacco, cannabis, opioids, stimulants, inhalants, caffeine, sedatives, methamphetamine, pain relievers and energy drinks. Energy drinks and caffeine were included because caffeine is a stimulant and energy drinks commonly contain caffeine; excessive or problematic consumption may be associated with adverse effects such as sleep disturbance, anxiety and restlessness.

Mental health refers to a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn and work well, and contribute to their community (WHO, 2022). Among university students, mental health may be reflected in emotional stability, clear thinking, decision-making, sleep, coping ability, psychological wellbeing and academic functioning. Mental health difficulties may manifest as anxiety, depression, hopelessness, psychological distress, social withdrawal, sleep disruption and impaired concentration.

Mental health is particularly important among university students because the university environment exposes them to various academic, social and personal demands. Students are often required to adjust to new learning environments, manage academic responsibilities, develop social relationships and make decisions concerning their future (WHO 2024). These demands may affect their emotional and psychological wellbeing, especially when adequate coping resources are lacking. Maintaining good mental health is therefore essential for students to cope effectively with the demands of university life, maintain positive relationships and participate

meaningfully in academic and social activities. WHO emphasizes that mental health is fundamental to individual and collective functioning and therefore requires promotion and protection across the life course (WHO, 2024 and Onwurah, Nwachukwu, Ogbunugwor, Ude, Nworie and Ezeugo 2025).

The impact of substance abuse on mental health is multidimensional. Substance abuse may be perceived as producing short-term effects such as temporary relaxation, mood improvement, confidence or euphoria, but it may also be associated with anxiety, emotional instability, hopelessness, reduced clear thinking, mental fatigue, impaired decision-making, social withdrawal, psychological distress, stress, sleep disruption, depression, reduced psychological stability and worsening of existing mental health problems (Eka, Onwurah, Olebuezie, and Emeagui, 2020). Dependence may further reinforce repeated use and make it difficult for a person to stop using a substance. The present study therefore focuses on students' perceptions of these mental health effects rather than claiming to clinically diagnose mental disorders or establish a causal effect.

Perception is the way an individual interprets, understands or forms an opinion about a phenomenon based on available experiences and information (Mutiso *et al*, 2022). In this study, perceived impact refers to the respondents' opinions about the extent to which substance abuse affects mental health. Thus, the findings describe what undergraduate respondents perceive about the mental health consequences of substance abuse. Although Nigerian studies have examined substance use, prevalence, depression and other mental health outcomes, limited attention has been given to the perceived mental health impact of commonly abused substances among undergraduates in public universities in Anambra State. For example, studies such as Anierobi, Nnaemeka, ikenwa and Enechukeu (2025) examined substance abuse as a predictor of psychological and social wellbeing among university students in Anambra State, but not perception. Thus, the need to comprehensively investigate the impact of substance abuse on mental health as perceived by undergraduate students in public universities in Anambra State.

Research Questions

This study provided answers to the following research questions:

1. What are the commonly abused substances among undergraduate students in public universities in Anambra State?
2. What is the frequency of use of commonly abused substances among undergraduate students in public universities in Anambra State?
3. What are the impacts of substance abuse on mental health as perceived by undergraduate students in public universities in Anambra State?
4. What are the impacts of substance abuse on mental health as perceived by male and female undergraduate students in public universities in Anambra State?
5. What are the impacts of substance abuse on mental health as perceived by undergraduate students across different academic levels in public universities in Anambra State?

Methods

Descriptive survey research design was adopted for the study. The study was carried out in Anambra State, Nigeria, one of the five states in the South-Eastern region of Nigeria. The state is bounded by Delta State to the west, Imo State and Rivers State to the south, Enugu State to the east, and Kogi State to the north, with Awka as its capital. Anambra State has a high level of educational activities and hosts several tertiary institutions, including public universities that attract students from different socio-economic and cultural backgrounds. The study focused on the two public universities in the state, Nnamdi Azikiwe University (NAU), Awka and Chukwuemeka Odumegwu Ojukwu University (COOU), Igbariam. The population consisted of 75,358 regular undergraduate students (2024/2025), with Nnamdi Azikiwe having 53,707 students (source: registry department, 2024) and COOU having 21,651 students (source: academic planning unit, 2024). A sample size of 400 was determined using the Taro Yamane formula, which was proportionately allocated to both schools with NAU having 286 students and COOU having 114 students, after which respondents were selected through multistage sampling technique. Data were

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collected using a self-developed questionnaire titled Impact of Substance Abuse on Mental Health Questionnaire (ISAMHQ). The questionnaire consisted of four sections. Section A obtained demographic information. Section B contained Yes/No items on commonly abused substances. Section C measured frequency of use on a five-point scale: Never (00-1.00), Rarely (1.01-2.00), Sometimes (2.01-3.00), Often (3.01-4.00), and Always (4.01-5.00). Section D measured perceived mental health impact on a four-point scale: Strongly Disagree (1), Disagree (2), Agree (3), and Strongly Agree (4). The instrument was validated by three experts in the Faculty of Education. Its reliability was established using Kuder-Richardson 20 (KR-20) for the dichotomous items (section B) which yielded a coefficient of 0.86 and Cronbach's alpha for the Likert-scale sections which yielded coefficients of 0.80 for section C and 0.82 for section D.

An overall reliability coefficient of 0.83 was gotten for the Cronbach alpha. The instrument was administered directly to the respondents by the researcher with the help of trained research assistants. However, after retrieval and checking for completeness, only 392 copies out of 400 were found suitable for analysis. Data were analysed using SPSS version 27.0. Frequency and percentage were used to answer Research Question 1, while mean and standard deviation were used for Research Questions 2-5. Independent samples t-test was used to test the two null hypotheses at 0.05 level of significance. For the commonly abused substances, a response of 50% or more was interpreted as commonly abused. For the four-point perceived-impact scale, a criterion mean of 2.50 was used; means of 2.50 and above indicated agreement. For hypothesis testing, p-values less than or equal to 0.05 led to rejection of the null hypothesis, whereas p-values greater than 0.05 led to non-rejection.

Results

Table 1: Frequency and Percentages on the commonly abused substances among undergraduate students in public universities in Anambra State (n=392)

Which of these do you think are the commonly abused substances among undergraduates	Yes		No	
	Freq	(%)	Freq	(%)
1. Alcohol	364	(88)	46	(12)
2. Tobacco	277	(71)	115	(29)
3. Cannabis	258	(66)	134	(34)
4. Cocaine	83	(21)	309	(79)
5. Opioids	222	(57)	170	(43)
6. Stimulants	154	(39)	238	(61)
7. Inhalants	103	(26)	289	(74)
8. Caffeine	264	(67)	128	(33)
9. Sedatives	70	(18)	322	(82)
10. Methamphetamine	78	(20)	314	(80)
11. Pain relievers	302	(77)	90	(23)
12. Energy drinks	327	(83)	65	(17)

The responses of respondents in table 1, showed that most of the substances listed above are perceived as commonly abused by the respondents. The most abused substances being Alcohol-88%, energy drinks-83%, pain relievers-77%, tobacco-71%, caffeine-67% and cannabis-66%. While sedatives, cocaine, and methamphetamine are the least abused

Table 2: Mean responses on the frequency of use of commonly abused substances among undergraduate students in public universities in Anambra State (n=392)

S/N	Frequency of use	Mean	SD	Remark
1	Alcohol	2.02	1.332	Sometimes
2	Tobacco	1.30	1.297	Rarely
3	Cannabis	1.37	1.266	Rarely
4	Cocaine	.47	.845	Never
5	Opioids	1.36	1.305	Rarely
6	Stimulants	1.38	1.294	Rarely
7	Inhalants	.49	.983	Never
8	Caffeine	1.41	1.288	Rarely
9	Sedatives	1.34	1.305	Rarely
10	Methamphetamine	.34	.708	Never
11	Pain relievers	2.09	1.293	Sometimes
12	Energy drinks	2.13	1.242	Sometimes
	Cluster mean	1.31	1.180	

Mean range: 0.00 -1.00 = never, 1.01- 2.00 =rarely, 2.01- 3.00 = sometimes, 3.01- 4.00 = often, 4.01- 5.00 = always

Results presented in Table 2, with a cluster mean of (1.31) on the responses indicates that respondents rarely used the commonly abused substances within the last three months. The findings indicate that alcohol, energy drinks and pain relievers were used sometimes by the respondents within the last three months. Substances like cocaine, inhalants and methamphetamine were never used while other substances were rarely used. Overall, the frequency of use of commonly abused substances among undergraduates is rare.

Table 3: Mean responses on the impact of substance abuse on mental health as perceived by undergraduate students in public universities in Anambra State (n= 392)

S/N.	Perceived impact on mental health	Mean	SD	Remark
1.	Substance abuse increases anxiety among students	3.27	.870	Agree
2.	Substance abuse can make students feel relaxed temporarily	2.81	1.026	Agree
3.	Substance abuse leads to emotional instability	3.27	.865	Agree
4.	Substance abuse leads to feelings of hopelessness among students	3.20	.899	Agree
5.	Substance abuse improves student's mood temporarily	2.77	1.024	Agree
6.	Substance abuse reduces student's ability to think clearly	3.30	.834	Agree
7.	Substance abuse causes mental fatigue and low energy	3.22	.898	Agree
8.	Substance abuse affects student's decision making ability	3.20	.911	Agree
9.	Substance use can help students forget their problem	2.49	1.016	Disagree
10.	Substance abuse leads to social withdrawal among students	3.23	.861	Agree
11.	Students who abuse substances are more likely to experience psychological distress	3.20	.936	Agree
12.	Substance abuse negatively affects student's academic performance and mental wellbeing	3.27	.843	Agree
13.	Substance abuse increases stress levels in students	3.21	.930	Agree
14.	Substance abuse disrupts student's sleep patterns	3.30	.864	Agree
15.	Substance abuse gives students a temporary sense of confidence	3.20	.917	Agree
16.	Substance abuse contributes to depression among students	2.83	.980	Agree
17.	Substance abuse reduces students overall psychological stability	3.24	.878	Agree

18. Substance abuse worsens existing mental health problems	3.36	.807	Agree
19. Substance abuse can lead to dependence or addiction	3.19	.905	Agree
20. Substance abuse causes happiness and euphoria in students	3.26	.900	Agree
Cluster mean	2.98	.937	

Decision rule: mean < 2.50 = disagree, mean > 2.50 = agree

Table 3 shows that the respondents agreed that substance abuse has several negative impacts and little to no positive impact on mental health. All the items except one recorded mean scores above the criterion mean of 2.50. The cluster mean of 2.98 indicates that respondents generally agreed that substance abuse affects the mental health of undergraduate students in public universities in Anambra State with negative impact being more prominent

Table 4: Mean responses on the impact of substance abuse on mental health as perceived by male and female undergraduate students in public universities in Anambra State (n= 392)

S/N Perceived impact on mental health (Gender)	Male (n= 200)			Female (n= 192)		
	Mean	SD	Remark	Mean	SD	Remark
1. Substance abuse increases anxiety among students	3.26	.881	Agree	3.29	.860	Agree
2. Substance abuse can make students feel relaxed temporarily	2.84	1.033	Agree	2.78	1.020	Agree
3. Substance abuse leads to emotional instability	3.29	.870	Agree	3.24	.861	Agree
4. Substance abuse leads to feelings of hopelessness among students	3.18	.906	Agree	3.23	.892	Agree
5. Substance abuse improves student's mood temporarily	2.79	1.015	Agree	2.74	1.035	Agree
6. Substance abuse reduces student's ability to think clearly	3.23	.845	Agree	3.36	.819	Agree
7. Substance abuse causes mental fatigue and low energy	3.21	.872	Agree	3.23	.926	Agree
8. Substance abuse affects student's decision making ability	3.19	.951	Agree	3.21	.869	Agree
9. Substance use can help students forget their problem	2.51	1.040	Agree	2.47	1.050	Disagree
10. Substance abuse leads to social withdrawal among students	3.19	.882	Agree	3.28	.839	Agree

11. Students who abuse substances are more likely to experience psychological distress	3.11	.994	Agree	3.30	.862	Agree
12. Substance abuse negatively affects student's academic performance and mental wellbeing	3.25	.821	Agree	3.29	.867	Agree
13. Substance abuse increases stress levels in students	3.14	.960	Agree	3.28	.894	Agree
14. Substance abuse disrupts student's sleep patterns	3.30	.896	Agree	3.30	.832	Agree
15. Substance abuse gives students a temporary sense of confidence	3.12	.959	Agree	3.28	.865	Agree
16. Substance abuse contributes to depression among students	2.91	.970	Agree	2.75	.987	Agree
17. Substance abuse reduces students overall psychological stability	3.26	.840	Agree	3.22	.918	Agree
18. Substance abuse worsens existing mental health problems	3.33	.827	Agree	3.40	.786	Agree
19. Substance abuse can lead to dependence or addiction	3.18	.901	Agree	3.20	.911	Agree
20. Substance abuse causes happiness and euphoria in students	3.33	.868	Agree	3.19	.930	Agree
Cluster mean	3.13	.917		3.15	.901	

Decision rule: mean < 2.50 = disagree, mean > 2.50 = agree

Table 4 shows the mean responses of male and female undergraduates on the perceived impact of substance abuse on mental health. The respondents agreed with the statement, as their mean ratings with the exception of one exceeded the criterion mean of 2.50. Overall, the cluster mean for both groups indicate that both male and female undergraduates perceived that substance abuse has significant impacts on mental health.

Table 5: Mean responses on the impact of substance abuse on mental health as perceived by undergraduate students across different academic level in public universities in Anambra State (n= 392)

S/N	Perceived impact on mental health (Academic level)	100 level (n= 232)			400 level (n= 160)		
		Mean	SD	Remark	Mean	SD	Remark
1.	Substance abuse increases anxiety among students	3.27	.871	Agree	3.28	.870	Agree
2.	Substance abuse can make students feel relaxed temporarily	2.88	1.044	Agree	2.71	.993	Agree
3.	Substance abuse leads to emotional instability	3.27	.881	Agree	3.26	.843	Agree
4.	Substance abuse leads to feelings of hopelessness among students	3.19	.911	Agree	3.23	.883	Agree

5. Substance abuse improves student's mood temporarily	2.77	1.031	Agree	2.77	1.017	Agree
6. Substance abuse reduces student's ability to think clearly	3.25	.827	Agree	3.36	.842	Agree
7. Substance abuse causes mental fatigue and low energy	3.21	.865	Agree	3.23	.947	Agree
8. Substance abuse affects student's decision making ability	3.18	.939	Agree	3.23	.870	Agree
9. Substance use can help students forget their problem	2.51	1.052	Agree	2.47	1.038	Disagree
10. Substance abuse leads to social withdrawal among students	3.21	.878	Agree	3.27	.837	Agree
11. Students who abuse substances are more likely to experience psychological distress	3.15	.971	Agree	3.27	.881	Agree
12. Substance abuse negatively affects student's academic performance and mental wellbeing	3.28	.830	Agree	3.26	.863	Agree
13. Substance abuse increases stress levels in students	3.20	.933	Agree	3.22	.929	Agree
14. Substance abuse disrupts student's sleep patterns	3.33	.866	Agree	3.25	.861	Agree
15. Substance abuse gives students a temporary sense of confidence	3.14	.948	Agree	3.29	.864	Agree
16. Substance abuse contributes to depression among students	2.84	1.006	Agree	2.82	.944	Agree
17. Substance abuse reduces students overall psychological stability	3.24	.842	Agree	3.24	.930	Agree
18. Substance abuse worsens existing mental health problems	3.33	.820	Agree	3.41	.788	Agree
19. Substance abuse can lead to dependence or addiction	3.19	.890	Agree	3.19	.928	Agree
20. Substance abuse causes happiness and euphoria in students	3.31	.881	Agree	3.19	.926	Agree
Cluster mean	3.14	.914		3.15	.902	

The results shown in table 5 indicates that both 100 level and 400 level undergraduate students agreed that substance abuse has an adverse impact on mental health, as their cluster mean scores were above the criterion mean of 2.50

Table 6: T-test analysis on the significant difference in the impact of substance abuse on mental health as perceived by male and female undergraduate students in public universities in Anambra State

Variable	Group	N	Mean	SD	t	df	p-value	Decision
Substance impact score	Male	200	62.82	4.026	-1.467	390	0.143	not significant accepted
	Female.	192	63.42	.027				

Decision rule: $p < 0.05$ = significant (rejected), $p > 0.05$ = not significant (accepted)

The analysis in table 6 shows that the p-value (0.143) is greater than the 0.05 level of significance, therefore, the null hypotheses stating that there is no significant difference in the perceived impact of substance abuse on mental health between male and female undergraduate students in public universities in Anambra State is accepted.

Table 7: T-test analysis on the significant difference in the impact of substance abuse on mental health as perceived by undergraduate across different academic levels students in public universities in Anambra State

Variable	Group	N	Mean	SD	t	df	p-value
Decision							
Substance impact score	100 level	232	62.96	3.977	-.918	390	0.359 not
	400 level	160	63.34	4.113			accepted

Decision rule: $p < 0.05$ = significant (rejected), $p > 0.05$ = not significant (accepted).

The analysis in table 7 shows that the p-value (0.359) is greater than the 0.05 level of significance, the null hypotheses is accepted. Therefore, there is no significant difference in the impact of substance abuse on mental health as perceived by undergraduate students across different academic levels in public universities in Anambra State.

Discussion

The findings revealed that alcohol was the most commonly abused substance among undergraduate students in public universities in Anambra State, followed by energy drinks, pain relievers, tobacco, caffeine and cannabis. This suggests that readily accessible and socially acceptable substances may be more commonly abused by students than less accessible substances such as cocaine and methamphetamine. The finding is consistent with Ene and Ochiaka (2023), who reported alcohol, tobacco and marijuana among commonly abused substances among undergraduates in selected Southwestern Nigerian universities, while cocaine and other hard drugs were less commonly used. However, the finding differs from Wada (2021), who reported tobacco and cannabis among the most commonly abused substances among 286 undergraduates in Katsina State, with cough syrup exceeding alcohol. The differences

may be due to geographical location, institutional setting, availability of substances, cultural practices and characteristics of the respondents.

The findings further revealed that the overall frequency of use of commonly abused substances was rare, indicating that respondents generally rarely used the listed substances during the previous three months. This means that although some substances were perceived as commonly abused, regular use was not widespread among the respondents. The finding is consistent with Ajayi and Somefun (2020), who reported a median frequency of six days of drug use during the previous month among current users, indicating relatively low frequency. However, the finding differs from Aguocha (2021), who reported higher frequency of alcohol use, including substantial lifetime and past-year use, with tobacco and cannabis also frequently used. These differences may result from variations in the substances examined, period covered, geographical setting, respondent characteristics and instruments used to measure frequency.

Regarding the perceived impact of substance abuse on mental health, the findings showed that students generally agreed that substance abuse affects mental health. Respondents perceived that it may increase anxiety, emotional instability, depression, while also reducing clear thinking, decision-making ability and psychological stability and worsening existing mental-health problems. At the same time, respondents recognized temporary perceived effects such as relaxation, improved mood, confidence and happiness. This may be explained by the effects of psychoactive substances on mood, cognition and emotional regulation, as well as the use of substances as a means of coping with psychological distress, consistent with the Self-Medication Theory (1980). The finding agrees with Sydney-Agbor, Ebeh and Onyeonu (2018), who identified substance abuse as a factor associated with mental well-being among undergraduates in Eastern Nigeria. However, the finding differs from Alatishe (2022), who found no statistically significant association between problematic alcohol use and depression among undergraduates in Southwest Nigeria. This difference may be attributed to differences in the outcome measured and type of

substance examined. The university therefore needs to strengthen mental-health education, counselling and early support for students experiencing substance-related psychological difficulties.

The findings showed that both male and female students agreed that substance abuse affects mental health, with no statistically significant difference between their mean ratings. This suggests that male and female students generally shared similar perceptions of the psychological consequences of substance abuse. The finding is similar to Wada (2021) and Tesfaye, Derese and Hambisa (2014), who reported substance use among both male and female students and indicated recognition of its harmful effects. However, it differs from Adewuya *et al.* (2006), who reported gender differences in substance use and depressive symptoms among Nigerian university students. These differences may be explained by variations in geographical setting, substance-use patterns, mental-health outcomes and methods used to assess gender differences.

Based on academic level, the findings revealed that both 100-level and 400-level students agreed that substance abuse affects mental health, and the difference between their mean scores was not statistically significant. This suggests that students at both the beginning and later stages of university education generally have similar perceptions of the mental-health consequences of substance abuse. The finding is related to Aguocha *et al.* (2021), who found that academic level was not a significant determinant of substance use after adjustment for other factors. However, it differs from Anyanwu, Nnagha, Ogar and Hemen (2025), who reported variations in substance-use patterns, psychological stress or psychological effects across academic levels. These differences may be related to variations in academic demands, institutional environments, geographical locations, study populations and outcomes measured. Overall, the findings indicate that although substance use was generally reported at a low frequency, students recognized its potential negative effects on mental health, making continued prevention, counselling, awareness and early-support services important across the university population.

Conclusion

Based on the findings, alcohol, energy drinks, pain relievers, tobacco, caffeine, cannabis and opioids were identified as commonly abused substances by the respondents, with alcohol having the highest percentage. The overall frequency of use of the listed substances was low, although alcohol, pain relievers and energy drinks were used sometimes. Undergraduate students generally agreed that substance abuse has adverse effects on mental health, including anxiety, emotional instability, reduced clear thinking, psychological distress, stress, sleep disruption, depression and reduced psychological stability. No significant difference was found in perceived impact between male and female students or between 100-level and 400-level students. The study therefore concludes that undergraduate students generally perceived substance abuse as having adverse implications on mental health.

Recommendations

1. University health education programmes should provide regular, evidence-based education on the mental health consequences of alcohol, tobacco, cannabis, prescription medicines, energy drinks and other psychoactive substances.
2. University counselling and student-support services should strengthen early identification, confidential counselling and referral for students experiencing psychological distress or problematic substance use.
3. Health educators and university authorities should emphasize practical coping strategies for academic, financial and social stress so that students are better equipped to manage challenges without relying on harmful substance use.

References

Adongo, D. W., Adedia, D., Benneh, C. K., Tandoh, A., Amekyeh, H., Ntelah, E. K., Nanga, S., Asmah, R. H., and Woode, E. (2024). Psychoactive substance use and associated factors among students in a Ghanaian tertiary institution. *Scientific African*, 24, e02250. <https://doi.org/10.1016/j.sciaf.2024.e02250>

- Adu, P., Gbedemah, R., and Kwaku, N. (2021). Substance use and mental health among university students in Africa. *African Journal of Drug and Alcohol Studies*, 70(3), 85-94.
- Aguocha, C. M., Uwakwe, R., Mgbeoji, M. C., Mgbeoji, C. C., and Nduka, A. C. (2021). Prevalence and correlates of substance use among undergraduate students in a Nigerian university. *Journal of Addiction Medicine and Therapeutic Science*, 7(1), 001-008.
- Alatishe, A. A. (2022). Problematic drinking and depression among undergraduate students in Southwest Nigeria. *International Neuropsychiatric Disease Journal*, 18(4), 31-40.
- Anierobi, E. I., Nnaemeka, G. U., Ikenwa, R. K., and Enechukwu, J. O. (2025). Substance abuse as a predictor of school outcomes and psychosocial wellbeing among federal university students in Anambra State. *Unizik Journal of Education Graduates*, 10(1), 32–41.
- Eka, J. E. Onwurah, C. C. Olebuezie, F. N. and Emeagui, E. C. (2020). Perception of Drug Use as a Correlate of Human Immune Deficiency Infection among Students of University of Uyo, Akwa Ibom State. *International Journal of Orange Technologies*, 2(7), 1 - 8.
- Eze, C. J., Ndukwe, C. D., and Nwafor, J. I. (2023). Psychoactive substance use among university students in South-Eastern Nigeria. *International Journal of Behavioural Science*, 14(2), 25-30.
- Ladi-Akinyemi, T. W., Okpue, A. P., Onigbinde, O. A., Okafor, I. P., Akodu, B., and Odeyemi, K. (2023). Depression and suicidal ideation among undergraduates in state tertiary institutions in Lagos Nigeria. *PLOS ONE*, 18(4), e0284955. <https://doi.org/10.1371/journal.pone.0284955>
- Mutiso, V. N., Ndeti, D. M., Muia, E. N., Musyimi, C., Osborn, T. L., Kasike, R., Onsinyo, L., Mbijjiwe, J., Karambu, P., Sounders, A., Weisz, J. R., Swahn, M. H., and Mamah, D. (2022). Prevalence and perception of substance abuse and associated economic indicators and mental health disorders in a large cohort of Kenyan students: Towards integrated public health approach and clinical management. *BMC Psychiatry*, 22(1), 191.
- National Drug Law Enforcement Agency. (2023). National drug use survey and situation report in Nigeria. Abuja: NDLEA.
- Onwurah, C. C., Nwachukwu, N. O., Ogbunugwor, A. U., Ude, C. A., Nworie, P. C., and Ezeugo, A. C. (2025). Mental health stressors and coping strategies among students of Nnamdi Azikiwe University, Awka. *Unizik Journal of Health Promotion and Education*, 1(1), 277–290.

- Onwurah, C. C., Barnaby, J., Alozie, I. O., Ikegulu, J. U., Ogbunugwor, A. U., and Onwunali, O. C. (2024). Perceived mental health impact of COVID-19 pandemic and health related quality of life among students Nnamdi Azikiwe University, Awka. *Journal of Guidance and Counselling Studies*, 8(1), 33–48.
- United Nations Office on Drugs and Crime. (2023). World Drug Report 2023. United Nations.
- Wada, Y. H., Khalid, G. M., Shitu, Z., and Ibrahim, U. I. (2021). Prevalence and impacts of psychoactive substance abuse amongst undergraduate university students in Katsina State, Nigeria. *Addiction & Health*, 13(4), 221–231.
- World Health Organization. (2022). World mental health report: Transforming mental health for all. World Health Organization.
- World Health Organization. (2023). Mental health gap action programme (mhGAP) guideline for mental, neurological and substance use disorders (3rd ed.). World Health Organization.
- World Health Organization. (2024). Global status report on alcohol and health and treatment of substance use disorders.