



FACTORS INFLUENCING ALCOHOL USE AMONG SECONDARY SCHOOL ADOLESCENTS IN MAKURDI LOCAL GOVERNMENT AREA, BENUE STATE, NIGERIA.

Ijiga Abutu Gabriel¹, Onyowoicho Mary Agada², Obi Ekpeme Gabriel³,
and Akpe Tavershima (Ph.D.)⁴.

Emails:

¹gabrielijigal@gmail.com; ²maryagada070@gmail.com;
³profekpeme@gmail.com; ⁴tatakpe@yahoo.com

Cite this article:

Ijiga, A. G., Onyowoicho, M. A., Obi, E. G., Akpe, T. (2026), Factors Influencing Alcohol Use among Secondary School Adolescents in Makurdi Local Government Area, Benue State, Nigeria. International Journal of Public Health and Pharmacology 6(1), 136-146. DOI: 10.52589/IJPHP-2XEQO757

Manuscript History

Received: 18 Mar 2026

Accepted: 20 Apr 2026

Published: 16 May 2026

Copyright © 2026 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *Introduction: Alcohol consumption among adolescents remains a significant public health concern globally and in Nigeria. Early alcohol exposure is associated with increased risks of dependency, risky behaviors, and adverse health outcomes. Understanding the contextual factors influencing alcohol use among secondary school students is critical for developing targeted prevention strategies. Methodology: A descriptive cross-sectional study was conducted among 386 students selected from 14 secondary schools using a multistage sampling technique. Data was collected using a pretested, self-administered questionnaire with a reliability coefficient (Cronbach's alpha) of 0.81. The Data was analyzed using IBM SPSS version 21. Descriptive statistics were computed, and Pearson's Chi-square test was used to examine associations between school type and reported influencing factors at a significance level of $p < 0.05$. Result: Respondents were predominantly female (50.5%) and aged 13–14 years (36.0%), with 91.7% attending private schools. Curiosity (31.9%) was the most frequently reported factor influencing alcohol use, followed by availability of alcohol (21.5%) and peer influence (14.0%). Affordability (5.2%), cultural influence (5.7%), and media influence (2.6%) were less frequently reported. A statistically significant association was found between school type and reported influencing factors ($\chi^2 (6) = 14.909, p = 0.021$). Conclusion: Individual curiosity and environmental accessibility appear to be key drivers of alcohol use among secondary school adolescents in Makurdi LGA. School-based health education programs, strengthened regulation of alcohol sales to minors, and community-level engagement strategies are recommended to mitigate underage drinking.*

KEYWORDS: Adolescents, Alcohol use, Influencing factors, Nigerian Students, Secondary school students.



INTRODUCTION

Wine, beer, spirits, and a host of locally brewed substances all include alcohol—a colourless, flammable liquid produced by the fermentation of yeast, sugars, and starch. Alcohol is a substance with toxic effects mainly on the central nervous system; it is metabolized primarily by the liver (Ijiga & Akpe, 2025). Alcohol use and abuse among secondary school students is a growing topical issue of public health concern globally. Early alcohol exposure is linked to brain anomalies, anti-social and delinquent behaviours, and health hazards (Mertille, 2018; Osonuga et al, 2019). Alcohol use before the age of 18 is a major risk factor for alcohol dependence and abuse in adulthood (Lisdahl et al., 2020). Most secondary school students fall within the age bracket (<18).

Evidence suggests that alcohol use among secondary school students is significant. Finan et al. (2020) reported that about 51% of secondary school students have consumed alcohol at one point in time. A study conducted among public secondary school adolescents reported that palm wine (27.8%), wine/champagne (27.3%), and ordinary beer (18.8%) were the most commonly consumed alcoholic beverages, indicating a high prevalence of alcohol use among students (Obi & Akpenna, 2015). Eniojukan and Chichi (2014) reported a prevalence rate of 21% among junior secondary school students. Ijiga and Akpe (2025), in a more recent study in Makurdi, Benue State, found that 42.5% of secondary school students had engaged in alcohol use or abuse, with alcoholic wine (26.9%) being the most consumed alcoholic beverage. Other alcoholic beverages reported were Beer (13.5%) and Spirits (2.1%).

Despite the efforts of all the tiers of the Nigerian Government, law enforcement agencies, and school authorities to stem the tide of the unwholesome incidence of underage drinking, alcohol remains readily available to many secondary school students, and especially youths between the ages of ten and twenty-five (Ogunsola et al., 2020). Several interrelated factors, often referred to as drivers, impact alcohol use and abuse among secondary school students. These include peer pressure or influence, negative role models, socioeconomic conditions, media influence, cultural norms, curiosity, and social conformity, among others.

Governmental and societal underage alcohol prevention and control measures, and alcohol-harm reduction strategies are possible by identifying and understanding the factors that contribute to underage alcohol use and abuse. Knowledge and understanding of the drivers of alcohol use and abuse by secondary school students will illuminate issues of students' abuse of psychoactive substances, and enable Governments, Educators, and Policymakers to design and implement targeted interventions that address the causes of alcoholism and nip it in the bud.

This study is therefore conducted to determine factors influencing alcohol use and abuse among secondary school adolescents in Makurdi Local Government Area of Benue State, Nigeria.



METHODOLOGY

Research Design: A cross-sectional descriptive design was employed for this study. The researchers measured both exposures and outcomes simultaneously.

Research Instrument and Data Collection

A self-developed, self-administered Alcohol Use and Abuse Questionnaire (AUAQ) was used for data collection. The tool, which was pretested, has a robust Cronbach's alpha score of 0.81. The tool was structured into sections: the respondents' demographic traits comprising School type, Gender, Age, Class, and Religion, and the factors influencing alcohol use and abuse with six (6) items. The items were designed as dichotomous questions (Yes/No) to ensure clear, direct, and unambiguous responses and the reduction of response bias regarding the factors influencing alcohol use and abuse.

Taro Yamane's formula of $n = \frac{N}{(1+N(e)^2)}$

was used to statistically determine a sample of 386, with a margin of error (e) = 0.05, and the population under study (N) = 11,188.

A multi-staged sampling technique was applied for this study. The sampling frame included only government-registered secondary schools, which were first stratified into public and private categories. Within the study area, private schools (270) constituted the majority of registered secondary schools, while public schools (22) were few. Proportionately, thirteen private schools and one public school were chosen by simple random sampling by balloting from each stratum. A prior visit was made to each of the 14 schools chosen to get the number of students in each school and class. This was to ensure that each school and class got a proportionate share of the 386 questionnaires.

The 14 secondary schools that were chosen received a proportional share of the sample size. Classes were further proportionally split (JSS1, JSS2, JSS3, SSS1, SSS2, and SSS3). The 'Alcohol Use and Abuse Questionnaire' was distributed in each class using simple random sampling after explaining the purpose of the study and providing instructions for its completion. Class hours and break periods were used to fill in the questionnaire. Students were assured that confidentiality would be maintained regarding information shared and were encouraged to provide truthful responses. All three hundred and eighty-six (386) copies of the questionnaire were filled out and collected on the spot by the researchers.

Method of Data Analysis

The collected data for this research were analyzed with the aid of the Statistical Package for Social Sciences (SPSS version 21). Pearson's chi-square was used to test the hypotheses with a significance level set at $p < 0.05$.

Ethical Clearance

Permission to carry out the survey was sought and obtained from the Schools' Ethics Committee, and Students' assent was obtained before the collection of data.



RESULT

Table 1: Demographic Characteristics of Respondents

Variable		Frequency	Percentage (%)
School	Public	32	8.3%
	Private	354	91.7%
Gender	Male	191	49.5%
	Female	195	50.5%
Age (Year)	10-12	82	21.2%
	13-14	139	36.0%
	15-16	103	26.7%
	17-18	62	16.1%
	18 above	0	0%
Class	JSS 1	66	17.1%
	JSS 2	69	17.9%
	JSS3	65	16.8%
	SSS 1	66	17.1%
	SSS 2	73	18.9%
	SSS 3	47	12.2%
Religion	Christianity	371	96.1%
	Muslim (Islam)	15	3.9%
	Others	0	0.0%

A total of 386 students participated in this study, with a 100% response rate. The count of the female respondents was more (50.5%) than that of the males (49.5%); substantially, 91.7% attended private school.

Most respondents were between the ages of 13 and 14 (36%), followed by those between the ages of 15 and 16 (26.7%). However, not a single pupil beyond the age of 18 was recorded. 17 percent, 17 percent, 16 percent, 17 percent, 18 percent, and 12 percent of responders came from the JSS 1 arm, the JSS 2 arm, the JSS 3 arm, the SSS 1 arm, the SSS 2 arm, and the SSS 3 arm, respectively. Most of the participants were Christians (96.1%), with 3.9% identifying as Muslims.

Result of the Factors Influencing alcohol consumption

Table 2: Factors that Influence Alcohol Use and Abuse

Questions	No (Frequency)	%	Yes (Frequency)	%
Do you happen to drink or get drunk because of your friend?	332	86	54	14
Do you happen to drink or get drunk because alcohol is affordable?	366	94.8	20	5.2
Do you happen to drink or get drunk because alcohol is easily available	303	78.5	83	21.5



Do you happen to drink or get drunk because of media influence?	376	97.4	10	2.6
Do you happen to drink or get drunk because of culture?	364	94.3	22	5.7
Do you happen to drink or get drunk because of curiosity?	263	68.1	123	31.9

The factors in Table 2 that were found to influence student alcohol use are listed. The most common reason given is curiosity (31.9%), followed by availability (21.5%), and then social pressure (14%). Impact of the media (2.6%), financial implications (5.2%), and cultural significance (5.7%) ranked last. Many factors influencing students' alcohol use were substantially different across groups ($\chi^2 = 14.909$, $p = 0.021$).

Table 3: Pearson Chi-square test to determine if there is a significant difference between schools and the factors of use and abuse of alcohol

	Questions	School	
		Public	Private
		Count	Count
FACTORS	Do you happen to drink or get drunk because of your friend?	11	45
	Do you happen to drink or get drunk because alcohol is affordable?	4	16
	Do you happen to drink or get drunk because alcohol is easily available?	8	75
	Do you happen to drink or get drunk because of media influence?	0	12
	Do you happen to drink or get drunk because of culture?	1	21
	Do you happen to drink or get drunk because of curiosity?	15	109

Pearson Chi-Square Tests

		School
FACTORS	Chi-square	14.909
	df	6
	Sig.	.021
Results are based on nonempty rows and columns in each innermost subtable.		
*. The Chi-square statistic is significant at the 0.05 level.		

The Pearson Chi-Square test, as shown in Table 3, was used to determine whether or not there is a statistically significant difference in the factors that influence alcohol use and abuse among educational institutions. The preceding result displays the Pearson Chi-Square $\chi^2 (6) = 14.909$, $p = 0.021$. The Chi-square statistic is significant at the 0.05 level of analysis. Therefore, there may be a substantial link between the substance abuse element and school.



Summary of Findings

1. Factors Influencing alcohol consumption

- Curiosity (31.9%) is the major factor influencing alcohol consumption among secondary school students in Makurdi LGA, followed by availability (21.5%) and peer influence (14%).
- Cultural influence (5.7%), affordability (5.2%), and media influence (2.6%) contribute minimally to alcohol use and abuse among secondary school students in Makurdi LGA.
- There may be a substantial link between substance abuse factors and school.

DISCUSSION

This study examined factors influencing alcohol use among secondary school adolescents in Makurdi LGA, Benue State. The findings indicate that curiosity was the most frequently reported factor associated with alcohol consumption, followed by the availability of alcohol and peer influence. These findings highlight the interplay between individual-level motivations and environmental determinants in shaping adolescent drinking behaviors. This is in line with a study by Olaniyi and Jimoh (2021), which stated that alcohol use is also associated with peer influence and environmental variables.

Curiosity emerging as the leading factor (31.9%) suggests that experimentation and developmental exploration play a substantial role in adolescent alcohol use. Adolescence is characterized by increased sensation-seeking behavior, identity formation, and risk-taking tendencies, which may predispose young people to experiment with substances, including alcohol. This aligns with psychosocial theories of adolescent behavior, particularly social learning theory, which posits that behaviors are influenced by observation, modeling, and internal motivations. Early experimentation may increase the risk of repeated use and progression to problematic drinking patterns in later life.

Availability of alcohol (21.5%) as the second most reported factor underscores the role of environmental accessibility in facilitating underage drinking. Despite existing regulations in Nigeria restricting alcohol sales to minors, enforcement appears inadequate. Easy access to alcohol within communities, especially around schools, may normalize consumption and reduce perceived risk among adolescents. This finding reinforces evidence from previous studies in Nigeria and other low- and middle-income countries, where weak regulatory enforcement contributes to youth alcohol exposure. A systematic literature review by Ekpenyong et al. (2024) clearly identified the availability of alcohol as a contributing factor to adolescent alcohol use in Nigeria.

Peer influence (14.0%) was also identified as a notable factor. Adolescents are highly susceptible to peer norms and social conformity pressures. Association with peers who consume alcohol can increase the likelihood of experimentation and continued use. Although peer influence ranked third in this study, its role remains significant given that peer networks often serve as immediate social environments where substance use behaviors are initiated and



reinforced. This is in line with a study by Olaniyi and Jimoh (2021), which stated that alcohol use is also associated with peer influence and environmental variables.

Interestingly, media influence (2.6%) and affordability (5.2%) were among the least reported factors. While global literature frequently identifies alcohol marketing and pricing as influential determinants of adolescent alcohol use, the relatively low reporting in this study may reflect contextual differences or limited self-awareness among respondents regarding indirect influences. It is also possible that media exposure operates subtly through normalization rather than explicit persuasion. The Affordability of alcohol, reported to be the least variable influencing alcohol use among secondary school adolescents in this study, strongly correlates with studies by Osarenren et al. (2025), which reported access to cheap alcohol as the least variable influencing alcohol use among In-school adolescents.

The statistically significant association between school type and influencing factors suggests that contextual differences between public and private schools may shape the dynamics of alcohol use motivations. However, the disproportionate representation of private school students in the sample limits the extent to which firm conclusions can be drawn regarding institutional differences.

Overall, the findings suggest that alcohol use among adolescents in Makurdi LGA is driven by a combination of individual curiosity and environmental exposure rather than purely economic or cultural factors. This multidimensional pattern indicates that prevention efforts must move beyond singular strategies and adopt comprehensive approaches targeting individual knowledge, peer networks, and structural access points.

CONCLUSION

In the current study, curiosity (31.9%) consistently ranked first among the variables affecting alcohol intake in the schools investigated, followed by availability of alcohol (21.5%) and peer pressure (14%). The least significant among the other categories were media impact (2.6%), cost (5.2%), and cultural influence (5.7%). A statistically significant association was found between school type and reported influencing factors ($\chi^2(6) = 14.909, p = 0.021$).

RECOMMENDATIONS

1. There is a need for educational institutions to develop and implement alcohol education programs to inform adolescents about alcoholism and associated health risks.
2. Regulations restricting the availability of alcohol to minors should be strengthened and enforced, especially in communities surrounding schools.
3. Positive role models should be leveraged and promoted to discourage peer-engendered alcohol experimentation.
4. Parents and faith-based institutions should be involved as key players in underage drinking prevention efforts by keeping a close watch on their wards.



5. Early intervention targeting secondary school students aged 13 to 18 years is recommended.
6. Continuous research and program evaluation are recommended to ensure context-effective prevention and control measures.

ABOUT THE AUTHORS

- **Ijiga Abutu Gabriel**
(B.Sc. Zoology, M.Sc. Public Health Science)
- **Onyowoicho Mary Agada**
(B. Pharm, MSc. Public Health Science)
- **Obi Ekpeme Gabriel**
(B.Sc., MHM., M.Sc., PMDpro, Ph.D. in-view)
- **Akpe Tavershima**
(R.N., B.SC, MHM., Ph.D., MNTM, MNIM, FIHSAN)

REFERENCES

- Abiona, O., Oluwasanu, M., & Oladepo, O. (2019). Analysis of alcohol policy in Nigeria: multi-sectoral action and the integration of the WHO “best-buy” interventions. *BMC Public Health*, 19 (1), 1-9.
- Abubakar, A. U. et al. (2021). “Knowledge of health effects and determinants of psychoactive substance use among secondary school students in Sokoto Metropolis, Nigeria”. *PanAfrican Medical Journal (PAMJ)*; Vol. 40 No. 109. Pp. 1-12
- Adebayo, D. (2019). A worrying development in alcohol usage among Nigerian secondary school pupils. *Journal of Clinical Research in Nigeria*.
- Adegboyega, J.A. (2017). “Alcohol abuse and tobacco use among secondary school students in Ekiti State, Nigeria”. *International Journal of Education and Research*.
- Agofure, O., Okandeji-Barry, O., & Odijimogho, S. (2020). Prevalence of Alcohol Consumption among Primary and Secondary School Adolescents in Obiaruku Community in Delta State, Southern Nigeria. *African Journal of Biomedical Research*, 23 (1), 35-40.
- Akers, R. (2017). *Social learning and social structure: A general theory of crime and deviance*. New York, NY: Routledge.
- Bugbee, B.A., Beek, K.H., Fryer, C.S., & Arria, A.M. (2019). Substance use, academic performance, and academic engagement among high school seniors, *Journal of School Health*, 89(2), 145-156.
- Chege, R., Mungai, P., & Orese, S. (2017). An investigation of the factors contributing to drug and substance abuse among the youth in Kenya: a survey of select rehabilitation centres in Mombasa County. *International Journal of Public Health*, 1(5), 53-70.



- Di, A.I., Bell, R.L., Adams, Z.W., & Hulvershorn, L.A. (2017). Gender differences in risk factors for adolescent binge drinking and implications for intervention and prevention. *Frontiers in psychiatry*, 289.
- Ekpenyong MS, Jagun H, Stephen HA, Bakre AT, Odejimi O, Miller E, Nyashanu M, Bosun-Arije SF. Investigation of the prevalence and factors influencing tobacco and alcohol use among adolescents in Nigeria: A systematic literature review. *Drug Alcohol Depend*. 2024 Mar 1; 256:111091. doi: 10.1016/j.drugalcdep.2024.111091. Epub 2024 Feb 1. PMID: 38340401.
- Eniojukan J.F, & Chichi R.M, (2014). Substance Abuse among Adolescents: Prevalence and Patterns of Alcohol Use in Benue State. Nigeria. *Journal of Pharmacy*.
- Etyang M., & Winga M., (2021). "The Prevalence, Causes and Impacts of Drug Use and Abuse on Performance Indicators Among Secondary School Students in Kenya's Teso South Constituency". *European Journal of Science*.
- Eze, N.M., Njoku, H.A., Eseadi, C., Akubue, B.N., Ezeanwu, A.B., Ugwu, U.C., & Ofuebe, J.I. (2017). Alcohol consumption and awareness of its effects on health among secondary school students in Nigeria. *Medicine*, 96(48).
- Federal Ministry of Health, National Strategic plan of action on prevention and control of non-communicable diseases, 2017.
- Finan, L.J., Lipperman-Kreda, S., Grube, J.W., Balassone, A., & Kaner, E. (2020). Alcohol marketing and adolescent and young adult alcohol use behaviours: a systematic review of cross-sectional studies. *Journal of Studies on Alcohol and Drugs. Supplement*, (s19), 42-56.
- Ijiga, A. G, & Akpe, T. (2025). Prevalence and Pattern of Alcohol Use and Abuse Among Secondary School Students in Makurdi LGA of Benue State, Nigeria. *African Journal of Social Sciences and Humanities Research* 8(4), 80- 91. DOI: 10.52589/AJSSHRVUO87SC
- Lisdahl, K.M., Sher, K.J., Conway, K.P., Gonzalez, R., Ewing, S.W.F., Nixon, S.J., ... & Heitzeg, M. (2020). "Adolescent brain cognitive development (ABCD) study overview of substance use assessment methods". Erratum.
- Mason, M.J., Zaharakis, N.M., Rusby, J.C., Westling, E., Light, J.M., Mennis, J., & Flay, B. R. (2017). *A longitudinal study predicting adolescent tobacco, alcohol, and cannabis use by behavioral characteristics of close friends' psychology of addictive behaviors*, 31(6), 712.
- Mehanovic, E., Virk, H.K., Ibanga, A., Pwajok, J., Prichard, G., Van der Kreeft, P., ... & Unplugged Nigeria Coordination Group. (2022). Correlates of alcohol experimentation and drunkenness episodes among secondary-school students in Nigeria. *Substance abuse*, 43(1), 371-379.
- Mettile, T. T. (2018). Cognitive Dissonance Theory and Alcohol Awareness Messages: College Student Reactions. A thesis submitted in Partial Fulfillment of the Requirements for the Master of Science Degree in Communication. The University of Wisconsin – Whitewater
- Muthigani (2017). Effects of Drug Abuse on Students' Discipline in Public Secondary Schools in Mbeere South District, Kenya.
- Nelson, E. U. E. (2018). Alcohol consumption and related problems: Treatment and policy responses in Nigeria. *Journal of Substance Use*, 23(4), 339-344.
- Nelson, E.U.E. (2018). Alcohol consumption and related problems: Treatment and policy responses in Nigeria. *Journal of Substance Use*, 23(4), 339-344.



- Nesi, J., Rothenberg, W.A., Hussong, A.M., & Jackson, K.M. (2017). Friends' alcohol-related social networking site activity predicts escalations in adolescent drinking: mediation by peer norms, *Journal of Adolescent Health*, 60(6), 641-647
- Nwobi, N. L.; Uzoekwe, H. E.; Ofojebe, E. and Nwana, U. C. (2022). "Counselling Strategies for Reducing Substance Abuse Among Secondary School Students in Ogidi Education Zone of Anambra State". *International Journal of Contemporary Education Research*; Vol. 21 No. 8. Pp. 100-112.
- Obi, E. G, & Akpenna D. D. (2015). The Effect of Alcohol on the Mental Health of Adolescents in Makurdi Public Secondary Schools. *Contemporary Journal of Empirical Research*, 1(2).
- OBI, Z. C. (2019). "Awareness and Usage of Substances among Public Secondary School Students in Anambra State, Nigeria: Implications for School Administrators". *Global Journal of Education, Humanities and Management Sciences (GOJEHMS)*; Vol. 1 No.2. Pp. 255 – 265
- Ogunsola, S. O.; Fajemisin, E. A.; Aiyenuro, A. E.; and Tunde, A. A. (2020). "Experiences and Projections for Drug Abuse Sensitization and Eradication Among Youths in South West, Nigeria". *J Alcohol Drug Depend Subst Abus*, Vol. 6. Iss. 1. Pp. 1-6.
- Olaniyi, A. A., & Jimoh, S. (2021). Factors Associated with Alcohol Consumption among Adolescents in Selected Secondary Schools in a Local Government Area of Oyo State, Southwest, Nigeria. *International Journal of Child Health and Nutrition*, 10(4), 162–170. <https://doi.org/10.6000/1929-4247.2021.10.04.4>
- Osarenren, N., Nwadinigwe, I. P., & Ilugbuhi, M. M. (2025). Prevalence of Alcohol Consumption and Factors Influencing Alcohol Abuse Among In-School Adolescents in Lagos State, Nigeria: Implications for Prevention Interventions. *Rima*, 4(1).
- Osonuga, A. A., Ogunmoroti, B. D., Osonuga, A., & Da'costa, A. (2019). Alcohol use among secondary school students in Nigeria: A worrisome trend. *New Nigerian Journal of Clinical Research*, 8(14), 54.
- Saether, S.M.M., Knapstad, M., Askeland, K.G., & Skogen, J.C. (2019). Alcohol consumption, life satisfaction, and mental health among Norwegian college and University students. *Addictive behaviours reports*, 10, 100216.
- Samuel A., George O., Ogbun N., Agaba O., & Yisa, M. (2022). "Opinions of Students and Teachers on Drug Abuse among Senior Secondary Schools in Zaria Education Zone, Kaduna State, Nigeria". *African Journal of Health, Safety and Environment (AJHSE)*; Vol. 1 No.2.
- Satinsky, E.N., Kakuhikire, B., Baguma, C., Rasmussen, J.D., Ashaba, S., Cooper-Vince, C.E., ... & Tsai, A.C. (2021). Adverse childhood experiences, adult depression, and suicidal ideation in rural Uganda: A cross-sectional, population-based study. *PLoS Medicine*, 18(5), e1003642.
- Tolani, O. G., Ajao, & Ezekiel O. (2021). "Predictors of Substance Abuse Among Adolescents in Selected Secondary Schools in Abeokuta South Local Government, Ogun State, Nigeria". *Euro Afro Studies International Journal (EASIJ)*; Vol. 3, Iss. 5. Pp. 66-78
- Trucco, E.M. (2020). A review of psychosocial factors linked to adolescent substance use. *Pharmacology Biochemistry and Behaviour*, 196, 172969.
- Tsitsimpikou, C., Tsarouhas, K., Vasilaki, F., Papalexis, P., Dyllis, G., Choursalas, A.... & Bacopoulou, F. (2018). Health risk behavior among high school and university adolescent students. *Experimental and therapeutic medicine*, 16(4), 3433-3438.



-
- Vigna-Taglianti, F., Mehanovic, E., Alesina, M., Damjanovic, L., Ibanga, A., Pwajok, J.... & Unplugged Nigeria Coordination Group, (2021). Effects of the “Unplugged” school-based substance use prevention program in Nigeria: A cluster randomized controlled trial. *Drug and alcohol dependence*, 228, 108966.
- Weaver, S., & Turri, J. (2018). Personal identity and persisting as many, *Oxford Studies in Experimental Philosophy*, 2, 213-242.
- World Health Organization (2018). Global status on alcohol and health, 2018. Geneva: World Health Organization, WHO Press.
- World Health Organization (2019). Global status report on alcohol and health 2018. World Health Organization