Socio-demographic correlates of psychoactive substance consumption among secondary school adolescents in a remote district of Buhweju, Uganda

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ABSTRACT

Consumption of psychoactive substances remains one of the hot-button debate of the 21st century. Many puzzles regarding consumption of psychoactive substances have been captioned in the correlates of the phenomenon. The purpose of the study was to establish the relationship between socio-demographic characteristics and psychoactive drug use. The data was collected using a Self-administered, semi-structured questionnaire. The data collected was processed and analysed using the Statistical Package for Social Scientists (SPSS V. 27). Logistic Regression was the main data analysis technique. The study was conducted among 08 randomly and purposively selected schools in Buhweju District. The study population was secondary school students. 350 students were recruited for the study. The response was by filling out the questionnaire. It was established that students affiliated with the Anglican religion exhibited higher odds of psychoactive drug use, as compared to their counterparts in the Roman Catholic Religion, (OR = 1.6; 95% CI = 1.00, 2.4, p = 0.049). The results were significant. No observation of peers consuming psychoactive substances also demonstrated elevated odds of engaging in psychoactive drug use (OR = 1.9; 95% CI = 1.19, 2.9, p = 0.006), indicating unique and varying risk factors among students. Students affiliated with the Anglican dominion had higher odds of consumption of the psychoactive substances, as compared to other dominions. Observation of peers who consumed the substances was on a significant risk for consumption of such substances.

Keywords: *Socio-demographics, school adolescents, students, substance use, knowledge of peer drug use, students in Uganda*

INTRODUCTION

The consumption of psychoactive substances among secondary school students has become a hot-button debate of the twenty-first century. Consequently, exploration into the connection between the consumption of

psychoactive substances and students' socio-demographic characteristics is a global concern, especially in developing economies. The connection between the two phenomena has been sparked by the growing concerns regarding correlates of psychoactive substance consumption in educational environments (Oluwafunmilayo, John, Olabode, Blessing, Manirambona, Vicerra, & Lucero-Prisno, 2022). A psychoactive substance is a chemical substance that changes a person's perception, mood, thinking and memory or behaviour by changing the body's biochemistry and consequently awareness of the environment around him/her (Grigson, & Twining, 2002; Wade, Hides, Baker, & Lubman, 2009). In this context, consumption of psychoactive substances denotes the use of such substances to the extent that influences their mental processes like perception, consciousness, cognition, mood and emotions (World Health Organization [WHO], 2020).

The impact of the psychoactive substances on the consumers maybe mild or severe, depending on the amount consumed and the consumer's nature. Alcohol, tobacco and Mirra (mirungi/khat) were the psychoactive substances considered in the study. This study explores about these substances, following sources reporting their wide usage (Kupi, 2019; Mutumi, 2013). Moreover, these substances' consumption is deeply ingrained in the African cultural, social, or traditional practices (Ssewanyana, Mwangala, Marsh, Jao, Van Baar, Newton, & Abubakar, 2020). For instance, chewing of khat is a common phenomenon in some African cultures (Chekole, Mihretu, & Teferra, 2020).). Further, the consumption of alcohol and smoking of tobacco have their own historical and cultural significance among users worldwide (Westermeyer, 2005; Mandelbaum, 1965).

Globally, the consumption of psychoactive substances has been recognized as a pervasive issue, especially among adolescents, impacting their ability to function cognitively and academically (Lund, Breen, Flisher, Kakuma, Corrigall, Joska & Patel, 2010). Further, consumption of psychoactive substances negatively impacts young people's general well-being. Therefore, the consumption of psychoactive substances among adolescents has been recognized as a significant global public health phenomenon, posing potential threats to their normal psychological, physiological, and social functioning (United Nations Office on Drugs and Crime [UNODC], 2020).

In the USA for example, consumption of psychoactive substances among adolescents is a growing concern (National Institute on Drug Abuse [NIDA], 2022). A survey in the USA shows that around 35% of high school students had engaged in the consumption of illicit drugs (Miech, Patrick, Keyes, O'Malley, & Johnston, 2021). In European countries like the United Kingdom, early initiation of alcohol and cannabis consumption among young people has been a centre of attention (European Monitoring Centre for Drugs and Drug Addiction [EMCDDA], 2020). The

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) consistently monitors substance use trends, with varying prevalence rates among secondary school students in different countries, such as Spain, where nearly 25% of the adolescents had consumed illicit psychoactive substances (EMCDDA, 2020; Martín-Sánchez, Brizzi, González del Castillo, Cantó Blázquez, González Jiménez, Aguilo Mir, & Lázaro del Nogal, 2018). In South Korea, correlates such as academic pressure have been implicated in contributing to high rates of psychoactive substance consumption (Lee, 2008). The situation in Japan does not differ, as concerning increase in the misuse of prescription drugs has been reported (Berry, Takakura, Bresee, & Melmed, 2020). The Middle East, such as Lebanon and Jordan also grapple with increasing rates of psychoactive substance consumption among students (Karam, Ghandour, Maalouf, Yamout, & Salamoun, 2010). Besides, the global landscape concerning the consumption of psychoactive substances and their association with adolescents' demographic characteristics has attracted the attention of researchers, policymakers, and educators (Igwe et. al., 2009). As highlighted by Johnston et. al. (2023), the Monitoring the Future (MTF) study, conducted annually by the University of Michigan among U.S students in 8th, 10th, and 12th grades, exemplifies global attention on psychoactive substance use among adolescents and its link to demographic characteristics. This long-term project tracks drugs like alcohol, and tobacco use among U.S. students, analyzing trends and the influence of factors like age, gender, socioeconomic status, and geographic location. Such analyses provide critical data, informing public health strategies and educational programs.

The African context indicates a concerning rise in psychoactive drug use among secondary school students (Fatoye, & Morakinyo, 2002). For instance, evidence indicates a 12.1% prevalence rate of psychoactive substance consumption among secondary school students in Nigeria (Adeyemo, 2018; Vanyukov, Tarter, Kirillova, Kirisci, Reynold, Kreek, 2012). The obvious correlates like poverty and insufficient physical resources have been implicated as contributing significantly to the vulnerability of African students towards consumption of psychoactive substances (Adelekan, Abiodun, Obayan, Oni, & Ogunremi, 1992; Fatoye, & Morakinyo, 2002). Consumption of psychoactive substances among African adolescents has been reported to be influenced by other antecedents such as socio-economic, cultural, and other socio-demographic factors. For example, in South Africa, a study conducted by Reddy et al. (2018) highlighted the impact of socio-economic factors on substance abuse among adolescents. The study found that students from disadvantaged socio-economic backgrounds were more vulnerable to engaging in substance abuse.

The prevalence of psychoactive drug use among secondary school students in Uganda is particularly of great concern, with 38% of

adolescents in secondary schools abusing drugs (Vunni, 2021) especially in the middle of the debate regarding the driving factors of substance consumption (Volkow, Baler, Compton, & Weiss, 2014; Bugbee, Beck, Fryer & Arria, 2019).

Despite emphasis by Uganda's Ministry of Education and Sports on fostering a positive learning environment, the specific dynamics of the intersection between psychoactive drug consumption and learners' socio-demographic characteristics remain underexplored (Kihumuro et al. 2022). Therefore, this study aimed to address this gap, by providing insights about the complex relationship between psychoactive substance consumption and learners' socio-demographic characteristics in a remote district of Uganda.

The present study focused on selected socio-demographic correlates of psychoactive substance consumption. Considering socio-demographic characteristics helped in our understanding of some of the demographic predictors of psychoactive substance consumption. Moreover, assessing of socio-demographic characteristics helped in identifying potential risk factors associated with psychoactive substance consumption among secondary school students. In addition, insights into socio-demographic characteristics could also help in coining some tailored interventions related to substance use among different adolescent groups. Correlates like age, religion, class of study, as well as social norms and peer influences within the community, can contribute to the acceptability of drug use among students (Linton et al., 2018; Lund et al, 2010). Deepening our understanding of these dynamics is important in developing viable strategies necessary for addressing the growing concerns regarding psychoactive substance consumption among youngsters in schools.

METHODOLOGY

This section expounds the strategies and rigour used to obtain reasonable results. In this section, the rigour with which achievement of the milestones and accomplishment of different tasks have been presented. By considering the elements described below, we offer a systematic and detailed plan that was executed in obtaining the study outputs.

Study Settings

The study was confined to secondary schools in Buhweju, a district in Southwestern Uganda. Buhweju District is a constituent part of the Ankole sub-region, with Nsiika as its principal town, bordering with districts of Rubirizi to the west and northwest, Ibanda to the northeast, Mbarara to the east, Sheema to the southeast, Bushenyi to the southwest. Conceptually, the study centred on determining the socio-demographic correlates of consumption of alcohol, tobacco and Mirra/mirungi/khat) among secondary school students. The study was conducted over eight months, from September 2023 up to April 2024.

Study Design

The study was anchored on a cross-sectional design to investigate socio-demographic correlates like gender, age, class of study, religion and observation of peer psychoactive drug consumption of select psychoactive substances. This design enabled the collection of a large quantity of data at one point in time (Sekaran & Bougie, 2010; Sekeran, 2003). Further, with this design, time was saved during the respective processes, making it cost-effective in meeting the study objectives (Sekaran &Bougie, 2010).

Population

The population was students, both girls and boys in secondary schools within Buhweju District. The study population comprised 3,862 students in 12 secondary schools, where 7 are government-aided while 5 are privately owned (District Education Office, 2023). Government-aided schools are secondary educational institutions that receive significant funding and support from the government and are subject to government regulations and policies governing education institutions, to ensure that education is accessible and affordable to a broad section of the population.

Private schools, on the other hand, are funded and managed entirely by private individuals, organizations, or corporations without direct financial support from the government. Although private schools self-regulate, they are bound by government policies and regulations governing educational institutions. Out of the 12 secondary schools, eight were selected using a stratified random sampling technique which ensured fair representation of both public and private schools. First, the schools were categorized into two strata based on ownership and then, a proportional number of schools from each stratum were selected using simple random sampling. The schools were chosen using the lottery method, where names were written on pieces of paper, placed in a tin, shaken, and the names of the eight schools picked randomly without replacement. According to Mugenda & Mugenda, (2003), any sample above 50% of the total sampled site is statistically considered viable. The selected eight schools made up 67% of the total number of schools in Buhweju and since this number was higher than 50%, it was considered acceptable.

Sampling of Students

From a study population of 3862, a sample of 350 participants was selected using the Krejcie & Morgan table of sample determination (Krejcie & Morgan, 1970). The confidence level was 95% and the margin of error was 5. Probability sampling was employed in sampling of the participants to partake in the study. In probability sampling, proportionate sampling was applied in selecting the number of participants from different schools, depending on each school's population. That was to ensure that the overall, final sample was representative of the different demographic characteristics across the entire population. %. Out of

the 350 participants, 129,149,58,03,11 were drawn from classes S2, S3, S4, S5 and S6 respectively, with 330 participants from the ordinary level and 14 from the advanced level. After proportionating the students according to individual school populations, simple random sampling was applied in selecting the participants from each of the schools. The use of a simple random sampling method ensured that each individual in a school was accorded an equal and independent chance of being selected. With that, the resulting data could be generalizable to the broader population in the school (Fink, 2003). Of the 350 individuals in the sample size, 150 were females and 200 were males.

Instrument

A structured questionnaire was administered among students and used to gather data on socio-demographic characteristics and consumption of psychoactive substances. A questionnaire was used because it was relatively cheap to administer and was able to collect responses with minimum errors and a high level of confidentiality (Fife-Schaw, 2020). Psychoactive substances in the questionnaire included alcohol, tobacco and Mirra/khat/mirungi. An item borrowed from Muoti, (2014) was used to measure psychoactive substance use. It was stated as: "For the past 12 months, have you Consumed alcohol (beers, *kwete*, spirits, *akariga*, *omunansi*, over-the-counter wines, tonto, alcoholic *kombucha*, *mukomboti*), Smoked tobacco or Chewed miraa (mirungi/khat) and participants were to select between "yes" and "no" as the responses.

The socio-demographic characteristics in the questionnaire included age, gender, class of study and religious affiliation. In addition to these variables, another item regarding the observation of peers consuming psychoactive substances was included. To that end, an item was asked: "Have you observed any of your classmates or other students in school consuming substances like alcohol, tobacco, or *mirungi/khat*, which can change one's body system and affect their mental processes like perception, consciousness, cognition, mood and emotions?" The participants were required to select between "yes" and "no" as responses. The items on demographic characteristics include indicating the participants' age by ticking the appropriate box and the age ranges were 10-12 years, 13- 15 years, 16- 18 years, 19-21 years, and 21 years and above. Another item was; what is your gender and respondents were to choose from male, female or others. The other item was about religious affiliation whether respondents belonged to Roman Catholic, Anglican, Islam or others. These are the main religious denominations in Uganda. The last item was about the class of study and respondents were to state their respective classes as senior two up to senior six.

Data Management

The data from questionnaires was entered into the computer for analysis using the Statistical Package for Social Sciences (SPSS V.27). Each questionnaire item

was coded appropriately, with responses assigned numerical values where applicable. The dataset was sorted by key variables for logical organization, cleaned by removing duplicates and correcting entry errors, and missing data identified coded using SPSS's missing value analysis.

The data was securely stored in password-protected files and encrypted databases thereby preventing unauthorized access, ensuring confidentiality and privacy of participants' information. Access was restricted to authorized personnel only, and all identifying information was anonymized to protect participant identities. In addition, regular backups were performed to prevent data loss, and the dataset was retained only for the duration necessary to complete the research, after which it was securely deleted in accordance with ethical guidelines.

Ethical Consideration

Ethical clearance was obtained from the Mbarara University of Science and Technology Research Ethics Committee (REC), reference number MUST-2023-1286. Further permission was obtained from the District Education Officer Buhweju to access the premises of each secondary school in the district; and for selection of secondary school students to partake in the study.

Data Analysis

Data from the questionnaires was analyzed using both descriptive and inferential statistics. Descriptively, the analysis involved calculating percentages and frequencies. Inferential statistics were logistic regressions. These enabled us to adduce associations among the variables and according to Flower & Lawrence, (2022), it allowed generalisation and conclusion.

RESULTS

In this section, the findings of the study are reported. The study findings have been presented in response to the objective set earlier on in this paper. The key results are presented in Tables in a logical sequence, starting with the most basic of the results.

Response rate

The questionnaires were given to 350 students. Of the 350 questionnaires distributed, 343 questionnaires were returned giving a response rate of 97.4%. The number exceeded the 70% cutoff considered sufficient for additional examination in survey studies (Draugalis et al., 2008).

Sample Characteristics

Among the 343 secondary school students enrolled, the majority were males, 56.3% (n = 193); aged 16-18 years, 74.1% (n = 254); belonged to the Roman Catholic dominion, 59.5% (n = 204); and reported having ever observed peers consume psychoactive substances, 63.0% (n = 216). Further, most students were in senior three, 43.4% (n = 149).

Table 1: Characteristics of respondents (N = 343)

Characteristics		Frequency	Percent
Gender	Male	193	**56.3**
	Female	150	43.7
Age (years)	13-15	32	9.3
	16-18	254	74.1
	19-21	48	14.0
	≥22	9	2.6
Class of study	Senior 2	126	36.7
	Senior 3	149	43.4
	Senior 4	55	16.0
	Senior 5	2	0.6
	Senior 6	11	3.2
Religion	Catholic	204	59.5
	Protestant/Anglican	133	38.8
	Islam	6	1.7
Peer psychoactive drug use observation	Yes	216	63.0
	No	127	37.0

Association between socio-demographic characteristics and consumption of psychoactive Substances

In bivariate analyses, the Anglicans had 1.6 times higher odds of consuming psychoactive substances as compared to their Roman Catholic Counterparts (OR = 1.6, 95% CI [1.00, 2.4], p = 0.049). After adjusting for potential confounding factors, the odds remained statistically significant, with Anglicans showing 1.7 times higher odds of psychoactive substance use relative to Roman Catholics (AOR = 1.7, 95% CI [1.1, 2.7], p = 0.026). Individuals who did not observe their peers use psychoactive drugs demonstrated significantly higher odds of psychoactive drug use compared to their counterparts who did the observation, in both crude and adjusted analyses.

The unadjusted odds ratio showed that individuals who did not observe their peers use psychoactive drugs had 1.9 times higher odds of the outcome (OR = 1.9, 95% CI [1.19, 2.9], p = 0.006). After adjustment for gender in the multivariate model and including variables with p<0.2 the association remained robust, with individuals who did not observe their peers

use psychoactive drugs having 2.1 times higher odds of the outcome (AOR = 2.1, 95% CI [1.3, 3.4], p = 0.002).

Table 2: Association between sociodemographic characteristics and psychoactive drug use (PDU) (N = 343)

Characteristics No, 195 (56.9)		PSU (N = 343) Yes, 148 (43.1)		COR(95%CI)	P	AOR(95%-CI)	p
Gender	female	81 (41.5)	69 (46.6)	1			
	male	114 (58.5)	79 (53.4)	0.8(0.5-1.3)	0.340	0.7(0.4-1.1)	0.147
Age (years)	13-15	14 (7.2)	18 (12.2)	1			
	16-18	146 (74.9)	108 (73.0)	0.6 (0.27-1.2)	0.144	0.5 (0.2-1.1	0.093
	19-21	30 (15.4)	18 (12.2)	0.5 (0.19-1.2)	0.101	0.4(0.1-1.1)	0.070
	≥22	5 (2.6)	4 (2.7)	0.6 (0.14-2.8)	0.532	0.5(0.1-3.0)	0.443
Religion	Catholic	125 (64.1)	79 (53.4)	1			
	Protestant/Anglican	67 (34.4)	66 (44.6)	1.6 (1.00-2.4)	0.049*	1.7(1.1-2.7)	**0.026***
	Islam	3 (1.5)	3 (2.0)	1.6 (0.31-8.0)	0.580	1.5(0.3-8.2)	0.63
Class	Senior 2	71 (36.4)	55 (37.2)	1			
	Senior 3	80 (41.0)	69 (46.6)	1.1 (0.69-1.8)	0.659	1.3(0.8-2.2)	0.356
	Senior 4	38 (19.5)	17 (11.5)	0.6 (0.30-1.1)	0.109	0.7(0.3-1.4)	0.303
	Senior 5	1 (0.5)	1 (0.7)	1.3 (0.08-21.1)	0.858	1.0(0.0-26.9)	0.983
	Senior 6	5 (2.6)	6 (4.1)	1.6 (0.45-5.3)	0.488	2.9(0.7-12.4)	0.148
Peer Observation of PSU	Yes	135 (69.2)	81 (54.7)	1			
	No	60 (30.8)	67 (45.3)	1.9 (1.19-2.9)	0.006**	2.1(1.3-3.4)	**0.002****

**p <0.05. **p<0.01.*

Discussion

The study aimed to establish the socio-demographic correlates of psychoactive substance consumption among secondary school students. Using a cross-sectional design and a structured, self-administered questionnaire to collect data, quantitative data were obtained and analysed using both descriptive and inferential statistics.

Our study revealed two significant findings regarding psychoactive substance use among students in Buhweju District. First, students affiliated with the Anglican Dominion exhibited higher odds of using psychoactive substances, as compared to their Roman Catholic counterparts. Secondly, students who did not observe their peers consuming psychoactive substances were more likely to engage in psychoactive substance use than students who observed their peers consuming substances. These results provided a detailed understanding of the concept of substance use in this context and laid a foundation for comparison with existing literature in other various studies.

Consistent with findings from Zainob et al. (2021), who explored substance involvement among secondary school students in Lagos Mainland, Nigeria, the study underscores the role of socio-demographic factors such as religion in shaping substance use behaviours. Zainob et al. (2021) highlighted significant associations between age, gender, religion, ethnicity, class, and school with substance involvement, aligning with our observation of Protestants exhibiting higher odds of psychoactive drug use (PDU) compared to Catholics. This suggests that religious affiliation may influence substance use patterns differently across regions.

The findings of our study, which highlighted that students affiliated with the Anglican Dominion exhibit higher odds of using psychoactive drugs compared to their Roman Catholic counterparts, align with and add depth to the existing literature on the role of religious affiliation in substance use behaviors. A study by Demir-Dagdas and Child (2019) underscores the significant impact of religious involvement on substance use, which provides a useful framework for interpreting our results. Demir-Dagdas and Child (2019) found that membership in religious organizations generally correlates with given levels of use of substances such as alcohol, tobacco, and marijuana among young adults. However, our study expounds on this understanding by revealing a differential impact within specific religious affiliations - namely, Anglican versus Roman Catholic with Anglicans exhibiting high substance use levels.

One possible explanation for our findings is that the cultural and doctrinal differences between Anglicanism and Roman Catholicism may influence the behaviours and social norms related to substance use. The Anglican Church, with its diverse and often more liberal attitudes towards social issues, might provide a less stringent environment regarding substance use compared to the Roman Catholic Church, which traditionally

holds more conservative views on such matters. (Schlegel, & Sanborn, 1979). This cultural context within religious groups can shape individual behaviors and attitudes towards psychoactive substances.

The protective religious affiliation beliefs found in the Demir-Dagdas and Child (2019) study suggest that interventions aimed at reducing substance use might benefit from promoting religious participation. Specifically, fostering environments within religious groups that emphasize the negative consequences of substance use could be beneficial. For Anglican communities, where higher odds of psychoactive substance use are observed, targeted interventions that strengthen the community's stance against substance use could help mitigate these behaviors. Our study also extends the existing literature by highlighting the specific differences in substance use behaviors between students affiliated with Anglican and Roman Catholic dominions. The findings underscore the significant role that religious affiliation plays in shaping healthier lifestyles and behaviors, particularly regarding substance use among young adults.

Igwe et al (2009) offer a comprehensive analysis of substance use patterns among secondary school students in Enugu, Nigeria. Their study highlights a substantial rate of substance abuse, with 33.7% of respondents reporting use, primarily of alcohol. Notably, their findings underscore early initiation into substance use based on their religious affiliation. This aligns with our observation that student affiliation with different religious dominions can influence substance use patterns, suggesting that cultural or institutional factors may play a role in shaping these behaviours. The higher odds of psychoactive substance use among Anglican students compared to Roman Catholic students could be reflective of differing community norms or support systems associated with these religious affiliations. This distinction warrants further exploration to understand how religious and cultural contexts influence substance use behaviors. For instance, religious teachings and community support might impact substance use differently, affecting how students perceive and engage in these behaviors.

Furthermore, Tekesa's (2020) cross-sectional study among Ethiopian secondary school students highlighted significant differences in alcohol abuse scores among religious groups. Although our study did not only examine alcohol abuse across religious affiliations, the findings underscore the importance of considering cultural and religious contexts in substance abuse prevention efforts. The religious affiliation patterns of substance use identified by Tekesa (2020) also resonate with our observation of higher odds of PSU among students of the Anglican dominion emphasizing the need for tailored interventions that address religious affiliation-specific factors. This study in Buhweju contributes to valuable insights into the socio-demographic

determinants of substance use among adolescents in Uganda. By addressing gaps identified in previous literature and aligning with findings from diverse regional contexts, these study findings underscore the necessity for targeted interventions that consider religious influences on psychoactive drug use behaviours. These insights are crucial for developing effective strategies aimed at reducing substance abuse and promoting the well-being of adolescents in Ugandan hard-to-reach settings.

Our study finding which identified students who did not observe their peers consuming psychoactive substances as being more likely to engage in psychoactive substance use than their colleagues who observed their peers consuming psychoactive contradicts the qualitative insights by Rukundo, Kibanja and Stevens, (2017) that emphasized peer pressure being a predominant influencer of psychoactive substance use among Ugandan adolescents. This reflects the complex interplay of peer dynamics and individual decision-making processes in substance use behaviours. However, as noted by Rukundo et al. (2017), there remains a notable gap in quantitative research to complement qualitative insights, urging for comprehensive approaches that integrate both methodologies to enhance understanding and inform effective intervention strategies.

Our study revealed that students who reported not observing their peers consume psychoactive substances demonstrated elevated odds of engaging in psychoactive drug consumption. This finding is intriguing as it suggests that the absence of visible peers using psychoactive substances does not necessarily reduce an individual's possibility of engaging in such behavior. Instead, there exists other unique and varying factors are at play among students. Comparing these findings with those of Wu, Chong, Cheng, and Chen (2007), we observe both congruence and divergences. Wu et al. emphasize the critical role of peer influence on adolescent substance use, with a significant positive association between peer relationships and deviant peer behavior Adolescents surrounded by deviant peers are more likely to engage in substance use, underscoring the powerful impact peers can have on individual behaviors during adolescence.

However, our study diverges from this perspective by showing that even in the absence of observation of peers consuming psychoactive substances, students still exhibited higher odds of engaging in such behaviors. This could suggest several underlying mechanisms. One possibility is that in some cases, the absence of visible substance use among peers might provoke curiosity in students as they might engage in psychoactive substance use as an exploration of the unknown or as a way to differentiate themselves from their peers. This "forbidden fruit" effect can sometimes lead individuals to experiment with behaviors that are not openly discussed or observed in their immediate environment. Secondly,

such students who do not observe peers consuming substances might lack awareness of their negative consequences or perceive it as less risky, thus being more inclined to experiment with psychoactive drugs.

Additionally, other factors, such as family environment, media exposure, personal stressors, or individual psychological factors like depression, or anxiety, might play a more significant role than peer influence in these students' lives. For instance, a student who does not see peers using drugs might still be influenced by familial substance use or media portrayals that glamorize drug use. This indicates that perceived norms and actual behavior's might differ, and the lack of direct observation does not necessarily equate to a lack of influence. This underscores the complexity of adolescent substance use dynamics and suggests that interventions should also consider indirect influences and perceived norms.

Moreover, our finding that students who reported not observing peers consume psychoactive substances show increased odds of using these substances contrasts with Igwe et al.'s (2009) emphasis on peer influence. Igwe et al. report that a significant proportion of adolescents that engage in multiple substance abuse are often influenced by peer behavior. In our study, the lack of peer observation was associated with increased substance use, suggesting that students might perceive their substance use as less risky or more acceptable when they do not witness peer behaviors. This could indicate a discrepancy in perceived peer norms versus actual behaviors, which may influence substance use patterns. Both studies underscore the importance of addressing substance abuse through targeted interventions. Igwe et al. (2009) advocate for regular counseling in schools to mitigate the risks associated with early substance initiation and its adverse consequences. Similarly, our findings suggest that religious institutions and community support systems could play a critical role in shaping substance use behaviors. Tailoring interventions to account for religious affiliations and peer observation patterns could enhance their effectiveness.

While our study highlights the role of religious affiliation and peer non-observation in influencing substance use, it also points to the need for comprehensive strategies that consider both cultural and social factors. Addressing these aspects through educational and community-based interventions could contribute to more effective prevention and support mechanisms for adolescent substance consumption.

CONCLUSION

Students of the Anglican dominion reported higher odds of psychoactive drug consumption, as compared to Roman Catholics. Students who reported not observing peers consume psychoactive substances showed elevated odds of engaging in psychoactive substance consumption.

Recommendation

The results of the study could have spiritual implications and thus, in environments with a majority of Anglican students, schools could work collaboratively with religious leaders in desensitizing students about psychoactive drug consumption. Further, peer–to–peer counselling could be a possible strategy for reducing psychoactive drug consumption among students.

Competing Interests

There are no competing interests reported for this work.

Author Contributions

AR and YA together drafted the study concept. YA sought ethical clearance and did data collection. AR and YA did data analysis and drafting of the manuscript. AR wrote the final manuscript.

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