

Exploring differences in academic motivation of secondary school students using and not using psychoactive substances in Buhweju District, Uganda

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ABSTRACT

Motivation happens to be one of the most important aspects that help students achieve their academic goals. However, certain maladaptive behaviours, like psychoactive substance use, can potentially dilute its achievements. The purpose of the study was to assess the differences in motivation among students who use psychoactive substances and those who do not. A cross-sectional design was employed involving 350 secondary school students from eight randomly and purposively selected schools in Buhweju District. Data was collected using a self-administered semi-structured questionnaire, processed and analysed using the Statistical Package for Social Scientists (SPSS, *V. 27*). The analytical strategy used t-tests of independent samples. There was no statistically significant differences in intrinsic academic motivation between the psychoactive drug use group, ($M = 46.3$, $SD = 6.2$) and the non-psychoactive drug using group ($M = 45.7$, $SD = 7.1$), $t_{(343)} = 0.8$, $p = 0.420$. Similarly, there was no statistically significant differences in extrinsic academic motivation between the psychoactive drug use group, ($M = 34.7$, $SD = 4.4$) and the non-psychoactive drug using ($M = 34.9$, $SD = 4.0$), $t_{(343)} = -0.293$, $p = 0.770$. However, respondents who reported psychoactive drug use had significantly higher levels of amotivation ($M = 37.0$, $SD = 6.3$) compared to those who did not ($M = 34.7$, $SD = 6.8$), $t_{(343)} = 3.28$, $p = 0.001$. Both Intrinsic and extrinsic academic motivation did not differ significantly between secondary school students who engage in psychoactive drug use and those who do not. Students who engage in psychoactive drug use exhibited higher levels of amotivation compared to non-

psychoactive drug users. Schools should develop motivational enhancement programs to support students with higher amotivation levels and reduce their likelihood of turning to psychoactive drug use and strengthening teacher-parent collaboration to ensure early identification and support for the amotivation at-risk students.

Key words: *Academic Motivation, secondary school students, Psychoactive drug use, Buhweju, Academic, Uganda*

INTRODUCTION

Globally, psychoactive drug use among adolescents has emerged as a matter of concern, impacting various aspects of their lives (Vuksanović et al., 2023). Substance abuse among adolescents, pose a serious threat to educational outcomes like reducing grades and learner disengagement from school activities (Oluwafunmilayo et al., 2022). Academic motivation is one of the aspects influenced by substance use, as the drugs used, affect student's cognitive functions (Wade et al., 2009; Grigson & Twining, 2002). Robinson, (2021) defines psychoactive drugs, as substances that directly affect the central nervous system, causing alterations in the psychological and/or the behavioral processes, including thinking, feelings, perceptions, behavior, and consciousness. Psychoactive substance use has been identified as major disruptors in educational settings, including learners' motivation (Mothibi, 2014). According to Cofer & Petri, (2025), motivation refers to forces acting either on or within a person to initiate behavior. It is a 'driving force' through which people strive to achieve their goals and fulfil a need or uphold a value (Mullins, 2002). Amotivation is defined as a state in which an individual lacks the intention or willingness to engage in a particular activity (Deci & Ryan, 2000)

Studies have shown that psychoactive drug use contribute to the differences in academic motivation that do exist among secondary school students. Substance use significantly affect students' engagement, focus and performance in academic settings (Volkow et al., 2019; Mallett et al., 2017). Studies by Ramey and Regier (2019) and Volkow et al. (2019) reveal that psychoactive drug use detrimentally affects cognitive functions like memory and attention, leading to decreased academic motivation. Similarly, Ilter (2021) found that among eighth-graders from middle schools in Turkey, use of psychoactive drugs and in the same study, substance use accounted for 15% of the total variance in academic motivation.

In Africa, psychoactive drug usage among secondary school students is progressively impacting their academics by creating differences in their academic motivation levels. Substance misuse in Africa has become particularly alarming when it comes to learners' academic motivation, considering the continent's unique educational challenges that have persisted for decades (Adelekan et al., 1992; Flisher et al., 2003; Dada et al., 2016). Evidence indicates that these setbacks increase the use of psychoactive drug by students

in schools consequently resulting into differences in their academic motivation and occasionally driving such students towards amotivation and disengagement (Adelekan et al., 1992; Adeyemo, 2018). Palen, (2008) found a connection between students' frequent smoking and feelings of boredom with class work and an amotivation experience. The lack of intrinsic motivation and engagement in academic pursuits is exacerbated by psychoactive drug use, leading to poorer educational outcomes. Understanding the variations in academic motivation among learners who use psychoactive drugs and those who do not, is critical in establishing specific interventions in the African context (López et al., 2021). For example, it is estimated that 12.1% of secondary school students in Nigeria use psychoactive drugs, indicating the need for targeted measures (Vanyukov et al., 2012). Similarly, in South Africa, learners who use psychoactive drugs exhibited substantial variations in academic motivation compared to non-drug user peers and this was noticed mostly among learners from the socio-economically disadvantaged background. (Reddy et al., 2018).

The prevalence of psychoactive drug use among secondary school students in East Africa is gaining more attention due to its adverse effects on academic motivation. For instance, a study conducted in Kenya by Mbugua et al. (2017), revealed that learners' motivation differed significantly between drug users and non-users. Similarly, according to Murigi, (2020), academic motivation of students in secondary schools differ among drug users and non-users. Drug users exhibited strained relationship with other students, disinterest in learning activities, truancy and reduced concentration span while non-drug users showed interest in academic matters, could concentrate for generally an extended time and had cooperation and good rapport with their fellow students resulting into academic motivational differences between the two groups of students. Muteti and Kamenderi, (2019) explored the secondary school students' drug use behavior in 77 secondary schools in Kenya and highlighted how secondary schools in Kenya are not drug free zones. The authors hinted on how the use of these drugs by students brought about differences in their academic motivation and consequently future educational pursuits (Muteti & Kamenderi, 2019).

Uganda like any other East African county, also still grapples with the use of psychoactive substances by secondary school students that has been cited to have significant implications on their academic motivation. The Ministry of Education and Sports, has acknowledged the existence of differences in academic motivation among users and non-drug users in her schools (Ministry of Education and Sports, Uganda, 2020; Kihumuro et al., 2022). It is upon this background that this study aimed at exploring the difference in academic motivation among secondary school students in Buhweju district, Uganda who use psychoactive drugs and those who do not with objectives of the study being to; examine the differences in intrinsic academic motivation across psychoactive drug use among secondary school students, establish the differences in extrinsic academic motivation across psychoactive drug

use among secondary school students and assessing the differences between psychoactive drug use and amotivation among secondary school students in Buhweju District.

METHODOLOGY

This section delineates the methodological rigour utilized in collecting data so as to ensure that the study objectives were fulfilled. It begins by detailing the locale setting, research design justifying its choice for this specific study. The subsequent parts describe the population, sampling strategy, data collection instrument and their validation and finally it addresses the data management and analysis techniques.

Settings

The study was conducted in secondary schools of Buhweju district in Ankole sub-region in Southwestern Uganda. The district borders Rubirizi district in the west and northwest, Mbarara district to the east, Bushenyi district in southwest, Ibanda district to the northeast and Sheema district in the southeast. The district has its administrative unit located in Nsiika town council. The district comprises of twelve secondary schools, out of which seven are government aided and five are private, with a student population of 3,862 overall. (District Education Office, 2023). Buhweju is a predominantly rural district with a poor road network due to the hilly terrain, high poverty levels, youth unemployment, limited educational possibilities, and inadequate healthcare facilities. The population majorly rely on subsistence agriculture with coffee and tea as the main cash crops and small-scale gold mining using rudimentary means. The study's focus was to assess the differences in motivation among students who use psychoactive substances and those who do not. The study was carried out in eight months, from September 2023 to April 2024.

Design

The study employed the cross-sectional research design to investigate about the differences in academic motivation among secondary school students who use psychoactive drugs and those who do not. This design enabled us to collect much data at one point in time (Cummings, 2018; Sekaran & Bougie, 2010). In addition, the design was relatively faster, thereby saving time and making the entire process cost-effective and affordable to conduct and ensuring timely production of findings (Ray, 2020; Spector, 2019; Sekaran & Bougie, 2010).

Population

The study population comprised of both genders in secondary schools within Buhweju District. The study area had 3,862 students in 12 secondary schools, where 7 are government aided while 5 are privately owned (District Education Office, 2023). Government-aided secondary schools are secondary educational institutions funded and regulated by government and adhere to state policies and regulations to ensure that secondary education is accessible and affordable to all secondary school-age going children.

In contrast, Private schools, are financed and solely operated by private entities such as individuals, organizations, or corporations without direct financial support from the government. While they manage their own affairs, private schools still abide to government set policies and regulation that are universal to all educational institutions

The 12 secondary schools were first divided into two discrete strata according to a pertinent attribute-school ownership that is government aided or privately owned schools. Simple random sampling was then used to choose schools from each stratum. Eight schools in all were chosen, guaranteeing that each stratum was represented proportionately. The lottery method was used to select schools within each stratum where the school names were written on pieces of paper, put in a tin, shaken, and the names of the eight schools were chosen randomly without replacement. Eight schools made 67% of Buhweju's total number of schools and this figure was deemed acceptable because it exceeded 50% considered acceptable for statistical analysis (Mugenda & Mugenda, 2003).

Sampling of Students

From the 3862-target population, a sample of 350 participants was selected using the Krejcie & Morgan table of sample determination at a 95% confidence interval and margin of error 5 (Krejcie & Morgan, 1970). Probability sampling was employed in sampling of the participants.

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. Of the 350 participants, the following were the number of students drawn from respective classes.

Table 1: Student sample size per class

Class	Student population
S2	129
S3	149
S4	58
S5	03
S6	11

From table 1 above, 336 participants were drawn from Ordinary level (S2 to S4) while 14 from Advanced level (S5 to S6). Senior 1 class did not take part in the study as learners had not yet reported at schools for term one. After proportionating the students according to individual school populations, simple random sampling was applied in selecting the participants from each of the schools. Use of 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.

Instruments

A structured questionnaire was administered among students and used to gather data on the differences in academic motivation among secondary school students who use psychoactive drugs and those who do not. A questionnaire was used because it was relatively cheap to administer and able to collect responses from many people spread over, with minimum errors and a high level of confidentiality (Mazhar et al., 2021; Fife-Schaw, 2020). Questionnaires were used as they could generate much data from the many secondary school students in the shortest period as possible (Kothari, 2004). The questionnaire used was adapted by the researcher from that developed by Barkoukis et al. (2008) with a content validity index of 0.905 and consisted of three sections containing the motivation variables; intrinsic motivation, extrinsic motivation and amotivation.

The first section presented an 11-item survey on the intrinsic academic motivation scale and required indicating the participants' extent to which they agreed with the given statements using a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) by ticking in the appropriate box and this scale had an internal consistency (Cronbach's alpha) of 0.81. Another section presented an 8-item survey on extrinsic motivation scale which was also measured on a 5-point Likert scale and required participants to indicate their extent to which they agreed with the given statements using a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) by ticking in the appropriate box and this scale had an internal consistency (Cronbach's alpha)

of 0.78. The last section presented 11-items for measuring amotivation as adapted from Barkoukis et al. (2008), where participants were to indicate the extent to which they agreed with the given statements using a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree) by ticking in the appropriate box. This particular scale had an internal consistency (Cronbach's alpha) of 0.80.

Psychoactive drug use was measured using a modified 3-item psychoactive drug use scale adapted from Muoti, (2014) with a reliability Cronbach's alpha of 0.78. Psychoactive drug use was measured on a dichotomous question scale that is Yes (1), No (0).

Data Management and Analysis

The data collected using the questionnaires was entered into a computer Software-Statistical Package for Social Sciences (SPSS V.27) for analysis. Each item in the questionnaire was appropriately coded, sorted based on key variables, and to ensure accuracy, the dataset was checked for duplicate entries, and any duplicates found were removed to prevent skewed results. In addition, a complete check of typos, errors, reverse coding, wrong entries and missing values was done. Missing data was identified using SPSS's missing value analysis. It was found out that the missing values were extremely small less than 5% of the sample and therefore could not affect the inferences made from the findings of the study (Hair et al., 2010). Accordingly, the researcher dropped the missing values from the analysis since they could not affect the generalizability of the findings.

Analysis of data from the questionnaires was by both descriptive and inferential statistics. The descriptive analysis involved calculating percentages and frequencies, while the inferential analysis was conducted using an independent t-test. These methods allowed the identification of the differences that exist among the variables, facilitating generalization and drawing conclusion.

RESULTS

Response rate

The study intended to collect data from 350 respondents but out of the 350 copies of the instrument, distributed, 343 were returned, resulting in a response rate of 97.4%. This rate surpasses the 70% rule of thumb typically considered adequate for further analysis in survey research (Kothari, 2004). It is data from these 343 returned questionnaires that was used for further analysis.

Respondents' demographic information

Table 2 below presents the findings on the demographic characteristics of the study respondents. It describes the composition of a cohort of 343 based on three demographic characteristics-gender, parental status and age. The findings showed that the cohort was predominantly male 56.3% with 193 individuals compared to 150 females (43.7%). Additionally, the sample was composed of most individuals who were non-orphans 83.1% (285) with a smaller proportion of 3.8% (13) being double orphans. The vast majority of the respondents were aged between 16-18 age bracket (74.1%, n=254) and a small proportion of 09 (2.6%) aged 22 and above.

Table 2: Demographic information of respondents (N=343)

Bio-data		Frequency	Percent
Gender	Female	150	43.7
	Male	193	56.3
Parental status	Non-orphan	285	83.1
	Single orphan	45	13.1
	Double orphan	13	3.8
Age (years)	13-15	32	9.3
	16-18	254	74.1
	19-21	48	14.0
	22 and above	09	2.6

Descriptive statistics of study variables

Intrinsic academic motivation (IAM), extrinsic academic motivation (EAM), and amotivation (AM) display to a large extent skewness and kurtosis values falling within acceptable limits (skewness around ± 1 , as shown in Table 3 below. These distributions, while not perfectly normal, are deemed suitable for statistical analyses assuming normality based on common cutoffs for skewness and kurtosis.

Table 3: Descriptive statistics of study variables (N =343)

Variable	Minimum - Maximum	Mean \pm SD	Skewness	Kurtosis	Normality
IAM	15.0 - 55.0	46.0 \pm 6.5	-1.1	2.0	Normal
EAM	17.0 - 40.0	34.8 \pm 4.3	-1.0	0.9	Normal
AM	19.0 - 52.0	36.1 \pm 6.6	-0.1	0.1	Normal

Differences in intrinsic academic motivation among secondary school students who use psychoactive drug and those who do not

A T-test was conducted to assess the differences in intrinsic academic motivation (IAM) among secondary school students who use psychoactive drug use and those who do not. The mean intrinsic motivation scores for respondents who reported psychoactive drug use ($M = 46.3$, $SD = 6.2$) were higher than those who did not ($M = 45.7$, $SD = 7.1$) were compared. However, there was no statistically significant difference in intrinsic academic motivation between the psychoactive drug use group ($M = 46.3$, $SD = 6.2$) and the non-psychoactive drug use group ($M = 45.7$, $SD = 7.1$), $t(343) = 0.8$, $p = 0.420$ as shown in table 4 below.

Table 4: The differences in intrinsic academic motivation among secondary school students who use psychoactive drug and those who do not (N = 343)

Psychoactive Drug Use	N	Mean	SD	t	df	p-value
Yes	213	46.3	6.2			
No	130	45.7	7.1	0.8	341	0.420

Differences in extrinsic academic motivation among secondary school students who use psychoactive drug and those who do not

A T-test was conducted to examine the differences in extrinsic academic motivation among secondary school students who use psychoactive drug use and those who do not. The mean extrinsic academic motivation scores for respondents who reported psychoactive drug use ($M = 34.7$, $SD = 4.4$) and those who did not ($M = 34.9$, $SD = 4.0$) were compared. There was no statistically significant difference in extrinsic motivation between the psychoactive drug use group ($M = 34.7$, $SD = 4.4$) and the non-psychoactive drug use group ($M = 34.9$, $SD = 4.0$), $t(343) = -0.293$, $p = 0.770$ as shown below in table 5.

Table 5: The differences in extrinsic academic motivation among secondary school students who use psychoactive drug and those who do not (N = 343)

Psychoactive Drug Use	N	Mean	SD	t	df	p-value
Yes	213	34.7	4.4			
No	130	34.9	4.0	-.293	341	0.770

Differences in amotivation levels among secondary school student drug users and non-drug users.

A t-test was conducted to explore the differences in amotivation levels among secondary school drug users and non-drug users. The mean amotivation scores for respondents who reported psychoactive drug use ($M = 37.0$, $SD = 6.3$) and those who did not ($M = 34.7$, $SD = 6.8$) were compared. Respondents who reported psychoactive drug use had significantly higher levels of amotivation ($M = 37.0$, $SD = 6.3$) compared to those who did not ($M = 34.7$, $SD = 6.8$), $t(343) = 3.28$, $p = 0.001$ as highlighted in table 6 below.

Table 6: The differences in amotivation levels among secondary school student drug users and non-drug users. (N = 343)

Psychoactive Drug Use	N	Mean	SD	t	df	p-value
Yes	213	37.0	6.3			
No	130	34.7	6.8	3.28	341	0.001*

DISCUSSION

The aim of the study was to assess the differences in motivation among students who use psychoactive substances and those who do not use. 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.

The findings of study showed that no statistically significant difference existed in intrinsic motivation (IM) between secondary school students in Buhweju district who reported using psychoactive drugs and those who do not. Intrinsic motivation which Legault (2016) defines as engaging in behaviors for inherent satisfaction or enjoyment is essential for personal growth and psychological well-being (Ryan & Deci, 2017). These results imply that although drug use did not significantly reduce intrinsic motivation in this context, it is nevertheless critical to monitor and encourage adolescents' intrinsic motivation as a deterrent to substance use (Ryan & Deci, 2021). Literature backs up the notion that different internal factors like personal goals and self-image, can affect and individual's intrinsic motivation (Pink, 2022; Singer et al., 2002). The situation demands targeted programs which help students who face substance use risks to develop internal motivators that lead to positive behavior. The initiatives play a crucial role in developing students' resilient motivational systems which enable them to make healthy choices and achieve positive development

The independent T-test results showing no statistical difference between psychoactive drug users and non-users in extrinsic academic motivation scores among secondary school students, allows drawing of specific conclusions. The decisions of adolescents about psychoactive drug use are heavily influenced by extrinsic motivational factors such peer pressure and social approval according to (Volkow, 2019; Sheldon, 2010).

Whereas the study results show no statistical difference, previous studies indicate that extrinsically motivated students become more likely to use drugs for social validation and stress management (Kalat & Shiota, 2012; Volkow, 2019). The prevention of psychoactive drug use among adolescent students requires programs that develop intrinsic academic motivation since this type of motivation stems from personal development and authentic interest (Aslam, 2020). Students need sensitization about drug use dangers and also learn alternative stress management techniques while schools create spaces that encourage individual growth and self-empowerment (Patrick & Schulenberg, 2011; Gillison et al., 2019).

Based on the results of our study, secondary school students in Buhweju District who use psychoactive drug were found having high amotivation levels compared to non-psychoactive drug users. These findings established a foundation for comparison with previous research in other studies and offered a thorough understanding of the concept of psychoactive drug use in this context

Amotivational syndrome has been linked to cannabis use (Martinotti et al., 2014). This is in agreement with the current study findings that secondary school students in Buhweju who use psychoactive drugs are more amotivated than those who do not. According to Borges et al. (2016), when compared to non-users, cannabis users exhibit discernible increase in amotivation, which is frequently accompanied by other symptoms. Furthermore, students who use psychoactive substances like cannabis for five years or longer, show higher levels of amotivation (Sussman et al., 2020). Cannabis-related amotivation can potentially cause negative impact on individual's chances in life (Volkow & Baler, 2014).

Our study findings corroborate with those of Benka, (2017) who explored whether individuals known to use alcohol showed amotivation compared to non-users using 560 university students, as informants who knew the participants well. They reported that those who had used alcohol frequently had a remarkably higher mean amotivation level ($M = 0.79$) than among those who had not consumed alcohol in the past year ($M = -0.12$) and those who had drunk alcohol less often ($M = -0.36$).

These findings imply that the amotivation observed among psychoactive drug-using students in Buhweju District may be, in partly, one of the many effects of psychoactive substances like alcohol, which has been found to diminish motivation. The potential for alcohol-related amotivation to negatively impact students' academic performance and overall life prospects is a significant concern. Given that amotivation can severely lessen a student's engagement with their academic pursuits and future goals, the effects of psychoactive drug use on student motivation call for further research and focused interventions meant to lower psychoactive substance use among students in this district. Therefore, the high amotivation levels among psychoactive drug-using students in Buhweju might not only be a local phenomenon but also align with a more general psychological research that links psychoactive substance use

with motivational deficits, particularly in the context of alcohol use (Benka, 2017).

Johnston et al. (2012) express concern about high school students using drugs to impair their thinking and learning capacities. Recognizing amotivational syndrome as a diagnosable disorder requires careful observation (Mottonen, 2016). However, Williams et al. (2007) note that there is no standardized set of symptoms for clinicians to identify the amotivational syndrome; instead, it is considered a feature of certain substance use disorders and may also be present in individuals with schizophrenia.

The current study findings that secondary school students in Buhweju District who use psychoactive drugs had more amotivation compared to non-users, contrasts with the results of Inzlicht et al. (2024), who reported minimal negative effects on motivation among chronic cannabis users. Their study indicated that chronic cannabis use had limited impact on overall motivation of an individual, with only a slight reduction in introjected motivation (Inzlicht et al., 2024). The discrepancy between our results and those of Inzlicht et al. (2024) may be attributed to the developmental stage of adolescents, who might experience more pronounced motivational declines from psychoactive drug use compared to adults. This divergence in results call for further investigation on how the different types of psychoactive substances and usage patterns affect motivation across different age groups.

The common symptoms of amotivational syndrome, such as apathy, emotional numbness, detachment, indifference, blunted emotions, withdrawal from activities, and difficulty concentration difficulties teased out by Khalil et al. (2016), are similar to those of depression. The overlap of symptoms with depression emphasized by Cox and Crimin (2019), as well as Clancy (2016) suggests that individuals who believe they have amotivational syndrome may be in actual sense struggling with depression instead. Stopping psychoactive substance use may relieve some symptoms, though guidance from a physician before taking any advised, or medical adjustments is key (Deci & Ryan, 2008).

Amotivational syndrome is linked with both prescribed and illicit substances, as well as other psychiatric, neurocognitive, or addictive disorders (Khali & Md Syed, 2016). Volkow and McLellan (2016) argue that a swift change in the relationship with alcohol and other drugs can be beneficial, with advanced programs for healing from amotivation and associated traits. Treatment options, including telehealth services for opioid use disorder, are highlighted by Rastegar, & Fingerhood, (2020) and the National Institute on Drug Abuse [NIDA], (2020). Potential causes of amotivational syndrome extend to SSRI antidepressants, with empirical studies suggesting that a significant proportion of individuals prescribed these medications may experience apathy or emotional indifference (Rovai et al., 2013). Illicit substances, especially chronic, heavy cannabis use, and methamphetamine use disorder, are also linked to amotivational symptoms (Volkow & Baler, 2014; Center for Substance Abuse Treatment, 2015). Pre-existing mental health conditions, such as bipolar disorder, depression, mood

disorders, and schizophrenia, further relate with amotivation (NIDA, 2020).

People with amotivational syndrome frequently report difficulties in their daily routines, relationships, personal and professional lives (Volkow & Morales, 2020). While professional treatment is recommended, coping mechanisms including using a support network and taking care of oneself to lower stress serve better (Matinotti et al., 2014; Reeve & Jang, 2023). It can be helpful to naturally reduce stress levels by taking care of issues as soon as they arise and including healthy activities like exercise and social interaction (Mottonen, 2016) in one's routine as well as building and sustaining a support network, contribute to good mood and general mental (Borges et al., 2016).

A longitudinal study conducted by Pacheco-Colón et al. (2021) among 401 adolescents aged 14-17 to investigate the impact of cannabis use on motivation using self-reports in five bi-annual assessments and latent growth curve modeling yielded contrary expectations in its findings among adolescent populations, where the study did not find a significant longitudinal relationship between cannabis use and overall decreased motivation in adolescents. Instead, cannabis use was associated with lower perceived value of education, which may have consequences for academic achievements. These findings are divergent with the ones of the current study as psychoactive substance use had statistical relationship with amotivation construct among students. However, the findings of this empirical longitudinal study demonstrate the complex nature of the relationship between adolescent's psychoactive drug use and academic motivation and warrants the use of different approaches to comprehend these constructs.

CONCLUSION

Based on the study objectives, the findings showed that there was a difference in the amotivation levels among secondary school student psychoactive drug users and psychoactive drug non-users in Buhweju District. We can therefore conclude that there is a potential link between drug use and differences in motivation levels among secondary school students. The finding implies how chemically robbing psychoactive drug use is to students' drive, ambition, and ability to derive pleasure from academic and personal achievements. It also indicates how psychoactive drug use and amotivation are intertwined phenomena in this student population, thereby shifting the focus from looking at psychoactive drug use as a standalone problem to understanding it as a key component in a broader syndrome of amotivation with severe consequences on academic success. The findings also showed that both intrinsic and extrinsic academic motivation did not differ significantly between secondary school students who engage in psychoactive drug use and those who do not within the district. These findings imply that intrinsic motivational factors may not be distinguishing factors in psychoactive drug use behaviors and also suggest that external

incentives or pressures may not strongly influence psychoactive drug use behaviors among students respectively. Longitudinal effects of the variables could be thought about in future studies to better understand how intrinsic and extrinsic academic motivation evolves in relation to psychoactive drug use over time, thereby informing prevention and treatment strategies in school settings. Additionally, combining qualitative approach with quantitative approach would uncover much insights into the subjective experiences shaping intrinsic and extrinsic motivation and their interaction with psychoactive substance use behaviors among adolescents.

RECOMMENDATION

Schools should create motivational enhancement programs such as personalized academic support, goal-setting workshops and peer mentorship to support students with higher amotivation levels and reduce their likelihood of turning to psychoactive drug use.

Schools should reinforce collaboration between teachers and parents to ensure early identification and help the amotivation at-risk students.

Schools should sensitize students about the risks associated with psychoactive drug use, promote healthy coping strategies, as well as foster environments that support personal development and self-determination.

Competing Interests

There are no competing interests reported for this work.

Author Contributions

The contents of this article are the findings of Yobu Asasira's Master of Education (M.Ed.) in Educational Psychology study. Dr. Aloysius Rukundo was the academic supervisor who assisted in conceptualizing the study.

Ethical Consideration

Ethical approval for the study protocol was obtained from the Mbarara University of Science and Technology Research Ethics Committee (REC) with reference number MUST-2023-1286. Additionally, permission was obtained from the District Education Officer of Buhweju to access all secondary school premises in the district and school administrators to select students for participation in the study in respective schools. Furthermore, informed consent and ascent forms were signed by the individuals who voluntarily participated in this study.

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