



# Phenomenology of Substance Use Among School-Going Adolescents in Botswana

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## Abstract

**Background:** Increased rates of alcohol and drugs abuse has been noted among secondary school students in Botswana.

**Objectives:** We conducted nine student focus groups to elicit motivations for substance use as well as risk and mitigating factors.

**Methods:** Participants were purposely sampled from among 2,227 secondary school students surveyed regarding drug/alcohol use in secondary schools. Students were selected for focus group participation based on their scores on the alcohol use and dependency inventory tool (AUDIT) and self-reported risk factors for alcohol/drug use.

**Results:** Students reported that alcohol/drugs are readily available at school and at home. A prominent theme among substance users was inadequate support from parents, who they describe as uncomfortable and unwilling to talk about common issues faced during adolescence, including alcohol/drug use.

**Conclusions:** We identified opportunities to improve the current situation such as renewing efforts to restrict alcohol availability and focusing on parent-child communication interventions.

**Keywords:** Africa, Botswana, Alcohol, Drugs, Adolescents, Student, Support Protection

## 1. Background

Both the global school-based health survey (GSHS) and the youth risk behaviour surveillance survey conducted by the Botswana Ministry of Education and Skills Development indicate a high percentage of secondary school students use alcohol and other drugs (“illicit substances”) early in their lives (1,2). Alcohol use at an early age has detrimental effects on health, well-being, and development. Alcohol and marijuana use are associated with poorer functioning in tests of memory, attention, cognitive control, and IQ (3). Students who use alcohol are at higher risk of psychological distress and are at increased risk for mental health disorders and alcohol-related problems later in life (4,5). Furthermore, illicit substance use is associated with an increase in other risky behaviours, including early sexual debut, unprotected sex, drunk driving, violence and truancy (6-10).

We previously conducted a survey of 2,227 secondary

school students in Botswana aimed to determine risk and protective factors of illicit substance use among adolescents in this context (another article under review). Jessor’s problem behavior theory (PBT) was used as a conceptual framework to describe risk and protective behaviours at the individual, family, and community levels (7). In the PBT model, three domains of protection (models, controls and support) and three domains of risk (models, opportunity and vulnerability) account for variability in adolescent health behaviors (see Box 1). The model has been validated in sub-Saharan Africa and provides a framework through which culturally specific risk and protective factors for alcohol and drug use among Botswana (people of Botswana) can be examined (11).

Focus groups were conducted to further elucidate the complexities of how risk and protective factors play out in adolescents’ lives. This study was conducted in response to the Botswana Ministry of Basic Education’s desire to understand why illicit substance use is increasing among

**Box 1.** Coding Structure, Abbreviated

Codes and Sub-Codes
<b>Risk factors</b>
<b>Vulnerability risk</b>
Abuse
Poor economic support
Lack of parental monitoring
<b>Models risk</b>
Poor peer modelling
Poor family modelling
Exposure to detrimental media or pop culture
<b>Opportunity risk</b>
Drugs or alcohol easily available
Have money to spend
<b>Enhancement</b>
Believe substance use is fun
Believe substance use increases social confidence
Curiosity regarding substance use
<b>Protective factors</b>
<b>Models protection</b>
Positive family modelling
Positive role model
Personal knowledge of consequences
<b>Support protection</b>
Peer closeness
Parental closeness
Beneficial counselling
<b>Social controls protection</b>
Family monitoring
School attachment (academic expectations)
Extracurricular activities
<b>Individual controls protection</b>
Religiosity
Goals for future
High self-esteem

Batswana secondary school students, with the goal of obtaining the adolescents' perspectives on public health interventions that would be most likely to serve as effective mitigators. Key themes from the focus groups are discussed in this manuscript.

## 2. Methods

### 2.1. Participants

Adolescents were purposely sampled from among 2,227 secondary school students who had completed a 72-item cross-sectional survey regarding illicit substance use at 19 secondary schools in Botswana's capital city,

Gaborone, and three surrounding villages (Lobatse, Molepolole and Mochudi) from January 2013 to March 2013. Students were selected for focus group participation from 3 of the participating schools on the basis of their scores on the alcohol use and dependency inventory tool (AUDIT) (12) and self-reported risk factors for alcohol/drug use (11). Participants were classified as non-hazardous drinkers (AUDIT score of 2 to 7), hazardous drinkers (AUDIT score  $\geq$  8), and resilient non-drinkers (AUDIT < 2 and risk factor scores in the highest quartile) (13).

### 2.2. Procedure

Nine focus groups of 7 - 10 students, totaling 75 students, were facilitated using a semi-structured focus group guide with open-ended questions regarding risk and protective factors for student alcohol/drug use, effects of alcohol/drugs on student lives, how students cope with risk factors for use, and opinions on how best to prevent student illicit substance use. One focus group in each of the 3 categories (non-hazardous drinkers, hazardous drinkers, and resilient non-drinkers) was enrolled at each of the 3 schools. Focus groups were facilitated by trained research assistants affiliated with the University of Botswana and took place during the students' study hall period, lasting between 60 - 75 minutes. Groups were held in English and/or Setswana, depending on students' language preferences. To protect student confidentiality, teachers and school administrators were not allowed in the classroom during focus group discussions. Transcripts were audio-recorded, transcribed, and translated into English (if needed) for analysis. Transcripts were checked for accuracy against the audio recordings by a person other than the transcriptionist. When translation from Setswana into English was necessary, a bilingual researcher reviewed the accuracy of the translation. In addition, a senior researcher reviewed the English transcription and sent queries back to the transcription/translation team when any aspects of the conversation required clarification.

### 2.3. Data Analysis

A codebook was structured to guide content analysis based on Jessor's problem behavior theory (PBT) including vulnerability risk, models risk, and opportunity risk; and models protection, support protection, social controls protection, and individual controls protection (7, 11). Codes were added when themes arose that did not fit within the PBT framework. For example, 'enhancement' was included within the risk factors category alongside the PBT-based codes (See Box 1). The preliminary codebook was discussed and revised by consensus of multiple researchers who were familiar with the transcripts.

**Table 1.** Description of Participants<sup>a</sup>

Participant Classification	Participants	Female	Age <sup>b</sup>	AUDIT Score <sup>c</sup>
Non-hazardous drinkers	27	15 (56)	17 (16 - 18)	5 (2 - 6) <sup>d</sup>
Hazardous drinkers	25	15 (60)	17 (17 - 18)	15 (11 - 17) <sup>e</sup>
Resilient non-drinkers	23	7 (30)	17 (16 - 18)	0 (0 - 0)
<b>Total</b>	<b>75</b>	<b>37 (49)</b>	<b>17 (16 - 18)</b>	<b>5 (0 - 11)</b>

<sup>a</sup>Values are expressed as No., No. (%) or median (IQR)

<sup>b</sup>Ages were classified as 15, 16, 17, 18, or 19+. All individuals who indicated 19+ are classified as 19 in this Table.

<sup>c</sup>Possible AUDIT scores range from 0 to 40.

<sup>d</sup>One participant with an AUDIT score of 0 was mistakenly placed in a non-hazardous drinking group instead of a resilient non-drinking group.

<sup>e</sup>One participant was mistakenly placed in a hazardous drinking group although this participant did not reach the AUDIT threshold for hazardous drinking.

Culturally distinct concepts were discussed between Botswana and foreign researchers to clarify cultural differences. The QSR NVivo10 program was used for coding and analysis. Two researchers independently coded all interviews and coding differences were discussed and resolved with the senior investigator.

### 3. Results

Participant characteristics are outlined in [Table 1](#). Of the 88 students selected, 75 (85%) participated. The 13 students who did not participate had extracurricular conflicts that prevented them from attending the sessions.

Concepts highlighted below were repeated during most of the nine focus group interviews. Few new themes arose in a minority of groups. All themes represented in [Box 1](#) arose during the discussion. Those that were identified by the focus group participants as being most salient are highlighted below. Participants in all groups reported that illicit use is a problem among their peers. Students expressed that the ease with which adolescents can obtain alcohol and drugs, both inside and outside of school; and insufficient support, guidance, and monitoring from their parents were central factors contributing to the use of illicit substances among their peers. Adolescents also described both individual- and social-level factors that contribute to substance use, including the use of alcohol or drugs to cope with academic, social, or economic stresses. Curiosity and peer pressure were also cited as common reasons for substance use. In addition, the use of alcohol and marijuana by adults, in celebrations/gatherings, contribute to their use being perceived as a social norm.

#### 3.1. Availability of Alcohol and Drugs

Participants reported that illicit substances are accessible in their communities from a variety of sources. Schools themselves often serve as access points. Students commented on the presence of marijuana both on campus and

immediately outside school yards. For example, one participant described “ladies who sell snacks, fat cakes and matches” just outside the school from whom students can also buy drugs (19+ female). Some students smoke marijuana during school, creating a distracting environment for others:

...behind class you will find guys smoking, at the toilets... I don't know where they put the things, but you will find that they smoke... and it affects us, especially us who have classes at the back... (17-year-old female)

...when you pass between classes or at the toilets you can smell...marijuana and cigarettes. That is disturbing to some kids because they can end up sick because the smoke from drugs. (19+ female)

While some students did describe punishments for being caught with alcohol or drugs on campus, others reported that teachers fear that students “will become abusive” if drugs are reported. Thus, teachers may be aware of the presence of drugs in school buildings, but avoid addressing the issue directly. Most students expressed the opinion that strictly enforced policies restricting drugs in schools has the potential to prevent some adolescents from using. The introduction of random or routine searches in schools was suggested. Students stressed that new anti-drug policies would only succeed if they were better-enforced than existing laws. One student described having witnessed policemen smoking marijuana with students (16-year-old female). Many expressed that the government must do better at preventing alcohol from being sold to underage adolescents and at enforcing laws against using and selling drugs.

Students described how alcohol and drugs are among the most common things their peers' extra money will go toward. When participants were asked if a part-time job may serve as a protective factor, most expressed the belief that jobs that are not needed to provide for living essentials would just provide adolescents more money to buy alcohol or drugs. Students who do not have jobs frequently receive “pocket money” from parents.

Although the students were attending public schools and for the most part were not from affluent families, they said that illicit substances were often affordable enough for purchase using money they receive from their parents. Adolescents are able to obtain alcohol and drugs from commercial retailers despite being under age because many bars and stores do not check for identification. In cases in which stores do check for age, participants described being able to obtain alcohol from adults:

...some adults can be very irresponsible. You can ask them to buy you alcohol. They will go into the shop and get it for you. They say under 18's like us are not allowed (in liquor stores). Yet one goes and buys it for us. They say 'it's OK as long as it's not my child; it's fine.' (17-year-old female)

Drugs and alcohol are available elsewhere in the community as well. One participant described the covert availability of drugs at a restaurant. Others described how their peers can access their parents' alcohol and drugs without them noticing, or access the alcohol and drugs brewed or grown at shebeens (unlicensed establishments or private homes selling alcohol):

...you find that at homes, we can buy that, at the shebeen. There it's sold and children are allowed... You steal, you go out there and sell to your friends. And it's all spreading. Your friend buys and you go and give (it to) your friend who also takes it and sells it and you find that there is a lot of it. (16-year-old female)

One participant reported being recruited to sell at school:

The person (an employee of a liquor store) just sells it to you without shame. When they know that I go to (the school) and then she gives me a bundle of marijuana saying 'sell for me at school because I know there is a lot of market there.' (16-year-old female)

### 3.2. Lack of Support Protection

The second common theme that emerged in the discourse was a lack of support protection: willingness and availability of parents to support their children emotionally; the willingness and availability of parents to act as sources of guidance for their children; and the ability for parents to establish an open and honest relationship with their children. Adolescents expressed that those who lack support protection are more likely to be pressured into using alcohol and drugs. When asked why parents do not more readily provide guidance regarding alcohol and drugs, students described that parents may not feel comfortable talking about these issues. The following quotation about sex was used as an analogy to the lack of discussion about alcohol and drugs:

We were taught that parents aren't supposed to talk to children about sex; it's a norm that we know... It's very

hard to find a situation in which your parents just sit you down and tell you that, 'My child, when it comes to sex, you're going to experience this and that. The changes in your body are going to be like this. You're going to pass this stage and all that. You're going to have so many boyfriends...' ...So, I'd say it's very important for us to make a very strong connection with our parents and they should also be taught... ...maybe a TV advert, or something, or maybe a PTA meeting, someone will just take out their questions and say, 'Parents learn to just sit their children down and see the issues that they know even affect them.' (17-year-old male)

Participants believed that parents think that if they discuss sensitive topics such as alcohol, drugs, and sex, adolescents will be more likely to try them. However, the youth thought the opposite was likely true. In addition to not providing their children with guidance when it comes to sensitive topics such as alcohol and drug use, students described how some parents have authoritarian parenting styles that decrease the children's comfort with approaching them. They verbalized that when parents are overly strict in response to their children's wrongdoings, children are less likely to talk with their parents about their troubles.

A few participants described personally benefiting from parental guidance. In these instances, the participants' parents shared their first-hand experience with the consequences of hazardous alcohol or drug use:

My mum told me that when she grew up she was raising a very difficult time 'coz one day, back then she was drinking and uh, she met my dad....they did whatever and then she fell pregnant. She dropped out of school. So, she grew up like facing difficulty....she doesn't want me to go through the same thing and I agree with her that you know, I don't wanna face the same thing. (17-year-old female)

When asked what type of programming the Ministry of Education could implement to target the high usage of alcohol and drugs among adolescents, one participant stated:

...they should not be for teenagers only. Our parents need to be told seriously. (They need) to be given that sense that to talk to a child about this stuff, it's very important. Because that thing kills. (16-year-old female)

A role for teachers and guidance counsellors in teaching how to better cope with the stresses students experience was also suggested. However, several participants stated that it is difficult to talk with guidance counsellors because they perceive lack of confidentiality. Examples were provided of when counsellors discussed with teachers what students had told them. School-based 'disciplinary committees,' which consist of teachers and counsellors, were described by students as being both ineffec-

tive and as fostering environments of fear and distrust.

#### 4. Discussion

Students in our study population represented a cross-section of risk, from resilient non-drinkers to those who drink alcohol moderately to those whose use is clearly problematic. Across this spectrum, the adolescents verbalized that alcohol and drug use is a social norm in Botswana, and that their and their peers' usage is impacted to varying degrees by each of the factors identified in [Table 1](#). High rates of adolescent alcohol and drug use are particularly influenced by the availability of drugs and alcohol and the lack of support protection. The availability of alcohol and drugs within schools is particularly notable. The presence of illicit substances was said to cultivate an environment in which rules are not respected and students, even those who do not consume alcohol or drugs, are distracted.

As has been shown in settings outside Africa ([14](#), [15](#)), parents in Botswana were reported to be a primary source of alcohol for under-age youth. Sources in and around schools are also problematic. While drug-free school zones have been criticized in the U.S. for having minimal impacts on rates of drug use in young people while increasing the number of poor and minority individuals who get harsh prison sentences for drug offenses ([16](#)), such efforts might be more effective in other cultural contexts such as in Botswana. For example, where women commonly sell candy and food around school perimeters, those who have found it financially rewarding to concurrently sell marijuana might be easily dissuaded by systematic patrols to discover and stop such sales near schools.

Addressing other community sources of alcohol and drugs for adolescents may be harder to combat. However, school-based initiatives aiming to empower parents to effectively engage with their adolescents regarding alcohol and drugs might increase their resilience. Teaching authoritative parenting, an approach that may be demanding but that strives to be understanding and 'supportive rather than punitive' ([17](#), [18](#)) might also be successful. Emotional support and guidance from parents may help youth develop healthy coping mechanisms instead of alcohol and drug use. Adolescents are more likely to use alcohol or drugs if they are experiencing depressive symptoms and low self-esteem ([19](#)). Among South African adolescents environmental stressors have been linked to smoking and alcohol use both directly as well as indirectly through a measure of "low well-being" ([20](#)).

Positive parental support is inversely related to substance use because appropriate support reduces the impact of risk factors ([21](#)). Parent-adolescent interventions can increase sexual risk communication ([22](#)) and alleviate

adolescent depression ([23](#)). A review of parenting interventions in sub-Saharan Africa suggests that some interventions show promise in improving parent-child interaction which may hold promise for reversing increases in adolescent alcohol and drug use ([24](#)). Studies combining family and school interventions have been more effective than school interventions alone for limiting adolescent tobacco use ([25](#)).

##### 4.1. Limitations

The most significant limitation of this study is the potential for social desirability bias. We sought to mitigate this in several ways. Because inter-generational conversations about alcohol and drugs are not well-accepted in Botswana, our focus group facilitators were trained undergraduate students from the University of Botswana, with whom students were more likely to relate and feel comfortable talking about these subjects. With the anticipation that students would be most comfortable speaking about alcohol and drug use among peers with similar experiences and practices, we formed focus groups based on shared risk groupings, without informing adolescents of the selection criteria. We also noted that students spoke more freely when groups were dominated by their gender, and thus switched to single gender groups after the first two focus group discussions. Lastly, we assured students that their answers would be kept confidential from parents, teachers and school administrators. Since funding limitations guided the number of focus groups we were able to perform, we did not aim to continue data collection until there was clear saturation of themes. Another limitation to the study is that we were unable to obtain participant feedback on our findings.

##### 4.2. Conclusions

The availability of alcohol and drugs and the lack of support protection are among the most prevalent risk factors facing school-going youth in Botswana. Renewing efforts to restrict alcohol availability and focusing on parent-child communication interventions may be highest yield in this context.

##### 4.3. Human Subjects Approval Statement

This study was approved by the Institutional Review Board at the University of Pennsylvania (Protocol # 817106) and the Botswana Ministry of Education (MOE). A waiver of informed consent was granted. Verbal permission from school administrators and student assent was required for participation.

**Table 2.** Summary of Examples of Students' Perspectives on Effective Interventions

Theme and Sub-theme	Illustrative Quotes from Students
<b>Availability of alcohol and drugs</b>	
Restricting presence of drugs in schools	In school... I don't see anything happening... behind class you will find guys smoking, at the toilets, they are smoking. It's like they encourage it. Isn't it? Maybe someone could be waiting at the gate, searching them before going to classes... (17-year-old female)
Enforcing underage drinking laws and drug laws	I think they shouldn't allow people aged 21 to get in a bar because you are still a teenager and you will tell your peers that that place was fun. There are lots of sporting activities which kids are advised to participate in. Those selling liquor should be strict about the age restriction. (19+ female)
Restricting access to alcohol and social norms at home or community locations	Some children do not struggle to get (drugs and alcohol) because sometimes at home, you can find that your uncle or your father smokes or drinks alcohol, so they just leave it there, and you will easily get access to those you see. (16-year-old female) I just feel like being raised in an environment, like maybe you have a shebeen, it means that as you grow you see people drinking and you also end up adapting to those drinking habits. (15-year-old female)
<b>Lack of support protection</b>	
Improving parent-child communication on sensitive subjects	I think parents have to take a stand in this... I think parents should just play a bigger role. They should be the first people to guide their children. When a child gets in this stage of teenagehood, you should sit with them. You should... always talk to your child. (17-year-old female) We shouldn't do (alcohol/drug education programs) in school only... They should reach parents too so that they are taught how to communicate with their children so that they are free to tell you that... so that they can advise you. (16-year-old female) Parents should also stop being too strict because when a parent is too strict, the child doesn't feel free to talk to the mother or father. They end up being afraid of them. So, every time when they get into the bedroom they don't say this and that happened. They just lock themselves up in the bedroom. In the morning, they go to school and do drugs and don't have time to talk to them. (17-year-old female)
Ensuring the confidentiality of guidance counsellors	In school when we say something then (the counsellor knows) things that can hurt you, and then he, let's say he's counselled you on them. He then says them in front of people. Embarrassing!" (17-year-old male)
<b>Other school-based policies</b>	
Improving ineffective education campaigns in schools	They have been... placing boards all over the school and saying 'cool boys don't do drugs' and all that. Moderator: Do they work? (Laughter) The thing is those boards just like you find them written in school. Like the other day I was reading it, saying 'cool boys don't take drugs.' A person then tells me I'm a worm; I'm stupid when I don't use drugs. (17-year-old male) I think the best solution would be a motivational talk from a person who experienced what peers have gone through, who's a living example, who has gone through drug abuse and alcohol abuse, who came up from nothing to something. I think that would really motivate them to quit or something. (17-year-old male)
Reforming ineffective school-based disciplinary committees	A disciplinary committee. Yeah, when I talk about it, I become very hot. Um, actually these people like, they are trying to control it by observing us. They will observe you like if at any chance they find you, someone might have possibly seen you at a party where there's alcohol involved. They'll actually call you and then whip you like five in the bum. They're trying to correct that, just to make it right, trying to make us scared. No, I don't want to be caught...>Moderator: Is that a deterrent? Does it stop kids from using drugs and alcohol, or does it make kids more careful about not being caught? -It doesn't stop them. (17-year-old male)

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## Footnotes

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