



GOVERNMENT OF BERMUDA

Department for National Drug Control

NATIONAL SCHOOL SURVEY 2019

Report of the Survey of Middle and Senior School Students
on Alcohol, Tobacco, Other Drugs, and Health



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NATIONAL SCHOOL SURVEY 2019

**Report of the Survey of Middle and Senior School Students
on Alcohol, Tobacco, Other Drugs, and Health**

FOREWORD

“An ounce of prevention is worth a pound of cure.” – Benjamin Franklin

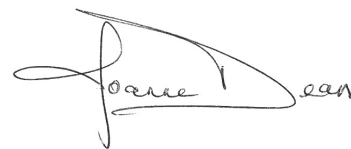
Perhaps no social problem has proven more clearly appropriate for and in need of the application of research and reporting than that of substance abuse. Substance-abusing behaviours are often hidden from public view, can change rapidly and frequently, and are of great importance to the well-being of the Island, especially amongst the most vulnerable groups in our community. The use of drugs, particularly among young people, has remained fairly stable over the past four years. The vast majority of middle school students have never tried alcohol, marijuana, or illicit drugs, as expected, teens in high school are more likely to try substances.

The Government of Bermuda has been studying the drug phenomenon for several years. In 2003, 2007, 2011, and 2015, surveys were conducted among a similar cohort of young people on the Island. The National School Survey (NSS) is the longest ongoing surveillance programme of alcohol and substance use and other health-related behaviours among middle and high school students, ages 12 to 18 (adolescents), in Bermuda. This 2019 report represents the fifth report of a school survey among this population of students in Bermuda. In measuring changes in substance use and levels of risk and protection over time, this survey series provides a unique contribution to substance use research, policy, and prevention in this age group.

The NSS 2019 tracks changes in substance use related to the characteristics and attitudes of adolescents who use them, the conditions of use, and the policy and legislative contexts of substance use. The findings provide an evaluation of the effects of past substance use policies, and an indication of the current and future needs of adolescents in Bermuda. As a result, the NSS findings have important implications for public policy and potential programme development.

In this report, we analyze changes in substance use between 2015 and 2019 and examine these trends by sex, grade level, and socio-economic status. In each survey year of the survey, spanning 2003 to present, over 7,000 middle and highschool students, ages 12 to 18, have participated in the NSS. Students within the target population who were not at school on the day of the survey were excluded from participating. Participants answered questions about their lifetime and current use of tobacco, alcohol, marijuana, and other substances. Unlike other standardised surveys, the NSS also measures the level of risk and protection experienced by this age cohort.

Central to the success of the NSS is the support of schools, school boards, and the active collaboration with the Department of Education. The Department for National Drug Control (DNDC) team would like to take this opportunity to thank all those persons (administrators, principals, teachers, counsellors, students, and parents) who have contributed to the success of this, the fifth National School Survey.



Joanne Dean, M.A., B.Sc., BSN, ICADC, CCS
Director
Department for National Drug Control
May, 2020

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NOTES, SYMBOLS, AND ABBREVIATIONS

Readers should note that all prevalence proportions presented in the accompanying tables are rounded to one decimal place. A point (.) is used to indicate decimals. Where ‘-’ appears it does not mean that no one has used the drug, rather it means that in this category no respondent reported use. Details and percentages in tables do not necessarily add to totals on account of rounding. The data contained in this report are themselves subject to future revision. Other symbols and abbreviations used are as follows:

NS	Not Stated
..	Not applicable
...	Not available
-	A magnitude of zero or less than half the unit employed
%	Percent
ATOD	Alcohol, Tobacco, and Other Drugs
CASA	National Center on Addiction and Substance Abuse
CDC	Centers for Disease Control and Prevention
CICAD	Inter-American Drug Abuse Control Commission
CSAP	Centre for Substance Abuse Prevention
DNDC	Department for National Drug Control

EXECUTIVE SUMMARY

About the Survey

The National School Survey 2019 of Middle and Senior Schools on Alcohol, Tobacco, Other Drugs (ATODs) and Health, was a collaborative effort between the Department for National Drug Control and the Department of Education. The survey was implemented to continue to monitor and study changes in the use of licit and illicit substances; monitor trends in the prevalence and frequency of drug use; examine the prevalence and frequency of antisocial behaviours; determine changes in the levels of risk associated with ATOD use, delinquency, and other problem behaviours in adolescents; and to discover the levels of protective factors that help guard against those behaviours.

The survey questionnaire comprised two sections: 1) ATOD Consumption and 2) Risk and Protective Factors. Section 1 of the questionnaire was adopted from the Inter-American Drug Abuse Control Commission (CICAD) School Survey questionnaire, while section 2 of the questionnaire was adopted from the Communities That Care Youth Survey, which was developed by the Centre for Substance Abuse Prevention (CSAP) of the US Department of Health and Human Services. Questions related to synthetic drug use, and vaping were also added.

Survey implementation occurred during the week of October 7th to 11th, 2019, during one class period (approximately 50 minutes) and recorded an 83.6% response rate, down by 2.3% from 2015.

Demographic Profile of Survey Respondents

The target population comprised all students in grade levels M2 through S4 (12 to 18 years), attending public, private, and home schools on the Island. In total 2,764 students (51.2% females, 46.7% males) completed the self-administered questionnaire; the majority of whom considered themselves as Black (48.7%).

Alcohol, Tobacco, and Other Drug Use

- **Fewer students have experimented with substance use:** Just over half (52.8%) of the students have reported use of at least one drug in their lifetime, down from seven in 10 students in 2015.
- **Trying marijuana and alcohol have decreased:** The experimentation with energy drinks (51.8%) and alcohol (45.2%) have decreased since 2015 (61.1% and 52.6%, respectively). Similarly, there were fewer students who have tried marijuana (18.3%), inhalants (10.2%), and cigarettes (5.2%) in 2019 in comparison to the students in 2015 (26.2%, 15.1%, and 12.0%, respectively). Other lifetime prevalence ranges from a low of 0.5% for poppers and GHB to a high of 4.4% for cannabis resin.
- **Current use of substances was most prevalent among older students:** Current alcohol use for all respondents ranges from a low of 2.2% among M2 students to a high of 27.9% among S2 and S4 students; for marijuana, from a low of 0.7% among M2 students to a high of 17.5% among S3 students; and for cigarettes, from a low of 0.5% among M2 students to a high of 3.9% among S2 and S4 students.
- **Gender differences were apparent:** In both the lifetime and current reference periods, males were more likely to use cigarettes (6.5% and 2.1%) and inhalants (10.0% and 2.3%), along with other illegal drugs (1.9% and 1.2%); while alcohol use was more prevalent among females (49.5% and 14.3%). Marijuana use was higher for females (18.5% versus males 17.8%) in the lifetime reference period whilst males had higher current use in 2019 (8.2% versus females 7.0%).

- **No delayed or earlier age of initiation:** The average age of first use remained similar to four years ago, ranging from nine years for inhalants to fourteen years for cannabis resin, cocaine, ecstasy, and hashish. Alcohol use began around 12 years, cigarette use at 13 years, and marijuana use began around 14 years, on average. Females initiated substance use earlier than males with the exception of their later use of inhalants (at 9 years) and marijuana (at 14 years).
- **Students mostly get alcohol and marijuana from friends:** Slightly less than half (46.6%) of the current users of alcohol have reported that they usually get it from a “friend” and that they most often drink at “other social events” (35.6%), at “home” (34.2%), or at “a friend’s house” (19.5%). Nearly half (48.6%) of the lifetime marijuana users indicated that they usually get it from a “friend” and that they most often use it “at a friend’s house” (27.1%) or “at home” (18.0%).
- **Students were passengers in motorized vehicles operated by persons under the influence:** Nearly one in 10 students (8.7%) indicated that he/she has been on a bike driven by someone who had been drinking alcohol; with a higher proportion (27.9%) of students who indicated the same about being in a car.
- **Second-hand smoking is prevalent in homes and in vehicles:** Just under one in seven students (14.0%) has reported that someone smoked tobacco products in their home at least one day in the past week, and almost one in every 13 students (7.6%) said the same about someone smoking in a vehicle.
- **Non-medical prescription drug use was very low:** Overall, lifetime prevalence of tranquilizers was reported at 0.8% and stimulants at 0.9%; while current use was indicated at 0.4% for tranquilizers and 0.7% for stimulants. These proportions were notably lower than in 2015.
- **Mixing energy drinks with alcohol decreased:** Energy drinks consumption declined in 2019, in both the lifetime (13.6%) and current use (19.7%) periods (18.1% and 26.0% in 2015).
- **Alcohol and marijuana are easily accessible; students are being offered to buy or use these substances:** About one in seven (14.9%) students were offered to buy or use marijuana in the past 30 days, whilst 16.8% of the students were offered to buy or use alcohol during the 30 days prior to the survey. Nearly one in five students (19.1%) were curious to try an illegal drug, whilst almost one in 10 (9.0%) reported that the opportunity to try an illicit drug would be taken, if presented.
- **Smoking cigarettes is perceived to be most harmful:** The majority of students (94.6%) perceived “smoking cigarettes frequently” to be the most harmful behaviour in terms of health risk when compared to alcohol or marijuana use; whereas “smoking marijuana sometimes” is perceived to be harmful by 75.6% of survey respondents. This finding is similar to 2015.
- **Belief that drugs are in school or surrounding area and students engage in illicit behaviour; although not personally evident:** The majority of students believe that there are drugs in the area surrounding or next to their school (43.6%) or at their school (37.0%). While there is the belief that students bring, try, or deal drugs at their school (38.2%) or outside the school (35.2%), fewer students reported personally seeing a student selling or giving drugs (14.8%) or using drugs at school or in an area surrounding the school (21.5%).
- **Parents disapprove substance using behaviours and convey dangers; but there is room for improvement:** Students reported that the majority (86.0%) of their parents will reportedly get upset if they catch their children coming home tipsy or drunk, with 87.3% getting upset if parents find out that students are smoking marijuana; however, just over three in five (63.1%) of the respondents said that they have not had a serious conversation about the dangers of drugs with their parents/guardians.
- **There are friends who will not disapprove nor convince another to stop smoking marijuana:** While most students said that all or some of their friends would try to convince them to stop or

disapprove of them smoking marijuana, there was one-third (33.2%) of students who indicated that no friend will do so.

Risk and Protective Factor Profile

- ↪ A range of percentile scores¹ were observed across the 13 protective factor² scales ranging from 50 to 86, with an average score of 69.
- ↪ The three highest proportions for protective factors were for *Family Rewards for Prosocial Involvement* (86), *Interaction with Prosocial Peers* (76), and *School Opportunities for Prosocial Involvement* (76).
- ↪ The three lowest proportions on the protective factor scales were for: *Community Opportunities for Prosocial Involvement* (50), *Religiosity* (54), and *Belief in Moral Order* (64).
- ↪ The range of percentile scores on the 25 risk factor³ scales was 2 to 58, with an average score of 21.
- ↪ The three highest proportions on the risk factor scales were: *Sensation Seeking* (58), *Transitions and Mobility* (58), and *Peer Rewards for Antisocial Behaviour* (38). These factors were similar to those observed as highest risk in the 2015 survey.
- ↪ The lowest proportions of risk factor scales were: *Gang Involvement* (2), *Perceived Availability of Handguns* (4), and *Parental Attitudes Favourable to ATOD Use* (5).

Outcome Measures

- ↪ In addition to protective and risk factors, students were assessed on a variety of outcome measures, such as depression, carrying a handgun, and other antisocial behaviours.
- ↪ Across grade levels, percentile scores for *Treatment* for behavioural issues and/or alcohol or drugs range from a low of 14 among M2 students to a high of 20 among S2 and S4 students.
- ↪ Scores for *Depression* range from a low of 27 among M2 students to a high of 60 among S2 students.
- ↪ Across all grades, the three most prevalent antisocial behaviours were for the categories “*Suspended from School*” (11.3%), “*Stolen Something Worth More than \$5*” (10.4%), and “*Taking Something from a Store and Not Paid For It*” (9.4%).

Relationships with Alcohol, Tobacco, and Other Drug Use

- ↪ Of the 421 students who indicated that getting marijuana would be “*very easy*”, majority (62.2%) of them used marijuana in their lifetime. A similar relationship existed with current users reporting that 84.7% of students indicated that it would be “*very easy*” and “*sort of easy*” to get marijuana.
- ↪ There were 873 students who indicated that it would be “*easy*” to get marijuana and alcohol.
- ↪ Of the 249 students who reported that, “*yes*”, they would try an illicit drug if given the opportunity, 73.0% of them used marijuana in their lifetime while 25.7% did not. A similar relationship existed with current users, indicating that 53.3% reported that “*yes*” they would try an illicit drug, while 29.1% stated they would not.
- ↪ Students indicated that where they were curious to try an illicit drug, the chances of them smoking marijuana when they were adults increased.

¹ Percentile scores range from 0 to 100. For example, a score of 75 indicates that 75% of respondents reported a lower score and 25% reported a higher score. It is better to have lower risk factor scale scores and higher protective factor scale scores.

² Characteristics that are known to decrease the likelihood that a student will engage in problem behaviours (substance abuse, depression and anxiety, delinquency, teen pregnancy, school dropout, or violence). They encompass family, social, psychological and behavioural characteristics.

³ Characteristics in the community, family, school, peer, and individual’s environments that are known to increase the likelihood of a student engaging in problem behaviours.

- There were 100 current alcohol users who indicated that it is not at all wrong for someone their age to drink alcohol or use illicit drugs. Similarly, of current marijuana users, there were 104 of them who said there was nothing at all wrong with someone their age smoking marijuana.
- Relationships were noted between marijuana and alcohol use and students who had a family member who had a severe alcohol or drug problem.
- Fifty-eight students admitted seeing a health professional in the past 12 months for alcohol and/or drug- related problems, as well as indicating having a family member who had severe alcohol and/or problems.

CHAPTER 1

Introduction



1.1 Background 3

1.2 Objectives 4

1.3 Survey Limitations 4

1.1 Background

The National School Survey 2019 of Middle and Seniors Schools on Alcohol, Tobacco, Other Drugs (ATODs) and Health, was a collaboration between the Department for National Drug Control and the Department of Education. The year 2019 marked the fifth round of a school-based survey among Bermuda's young people. The four previous surveys, administered in 2003, 2007 utilised the *Communities That Care* programme of the Center for Substance Abuse Prevention (CSAP) in the office of the United States Government's Substance Abuse and Mental Health Services Administration (SAMHSA).

Surveys administered in 2011, 2015 and the current survey are a combination of the school survey developed by the Inter-American Drug Abuse Control Commission (CICAD) and the Communities That Care Youth Survey, which was designed to help communities plan and implement successful prevention programmes and target middle and senior school students within public, private, and home schools who were between 12 to 18 years old. For the third time, group home schools have been included.

The following report describes the administration and results of the survey in addition to recommendations for programme and policy formation and reform. The findings are presented in three separate sections: 1) ATOD prevalence of use, 2) risk and protective factors, and 3) outcome measures.

1.1.1 The Use of School Surveys

There are many traditional methods (face-to-face or telephone interviews) and new technologies (web-based or computer assisted interviewing) used to survey populations. According to the United Nations Office on Drugs and Crime (UNODC), school surveys continue to be the most efficient and frequently used method to collect information on alcohol, tobacco, and drug use prevalence⁴.

Several benefits associated with this assessment method are usually provided. Firstly, given the current economic challenges facing our community, an advantage of school surveys is that they are cost-effective and relatively easy to conduct. Appropriate schools and classes are usually easily selected and students are available in the classroom during the school day. Instead of contacting randomly selected individuals, it is possible to reach a large number of students in one session.

Secondly, research shows that youths are less likely to disclose drug use at home than at school, whether in a household face-to-face interview or over the telephone.⁵ Students also indicate that data collection in school is more confidential than answering a questionnaire or being interviewed at home, where parents may be present in the next room.

Thirdly, an added benefit of school surveys is that the mode of data collection is relatively easy to standardise and control. If students trust school staff, teachers, or other members of staff, such as school nurses, they can administer the questionnaires to the students.⁶

The fact that students represent age groups in which the onset of different substance use is likely to occur, makes them an important group to monitor the prevalence rates of such use over time. This provides additional support for the use of school surveys to study ATOD consumption.

Finally, the response rate in school surveys is usually high. This rate in most studies is equal to the number of students present in class on the day of data collection; refusals are uncommon in most surveys. It is therefore not uncommon for school surveys to have a response rate of over 90%, while other forms of epidemiological surveys often have a response rate of 70% or less.⁷

⁴ United Nations Office on Drugs and Crime. (2003). *Conducting School Surveys on Drug Abuse. Global Assessment Programme on Drug Abuse Toolkit Module 3*. p. 5. <http://www.unodc.org/documents/GAP/GAP%20Toolkit%20Module%203%20ENGLISH.pdf> (accessed November 28, 2011).

⁵ Ibid. p. 6.

⁶ T. Bjarnason. (1995). Administration mode bias in a school survey on alcohol, tobacco and illicit drug use. *Addiction*, 90(4), 555-560. p. 558.

⁷ D. A. Dillman, G. Phelps, R. Tortora, K. Swift, J. Kohrell, J. Berck, & B. L. Messer. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, 38, 1-18. p. 15.

1.2 Objectives

The National School Survey 2019 serves several purposes. Among them is to study changes in the use of licit and illicit substances; monitor trends in the prevalence and frequency of drug use; examine the prevalence and frequency of antisocial behaviours; determine changes in the level of risk associated with ATOD use, delinquency, and other problem behaviours in adolescents; and discover the levels of protective factors that help guard against those behaviours. In recent years, Bermuda has experienced changes in public opinion toward alcohol, tobacco, and other drug use. Much of our current upheaval in attitudes is concentrated in today's youth. As the drug market changes, so must the ability to track and monitor new phenomenon. As such, this report presents information on vaping and marijuana products that were not present in previous rounds of the NSS.

The findings presented in this report are useful to the DNDC, its stakeholders, and policy makers at all levels of government to: improve drug abuse prevention and intervention programmes, understand the risk and protective factors most in need of attention in the community, track new drug use phenomenon, monitor progress toward national health goals, and encourage healthy drug-free lifestyles among Bermuda's youth.

1.3 Survey Limitations

The National School Survey 2019 provides descriptive data on the what, who, where, and when of self-reported behaviours in four major categories. The questions of why and how cannot be answered by this survey.

By definition, a school survey is a study of youth enrolled in the educational system of a particular country. There are, of course, some disadvantages associated with school surveys. One of the most obvious disadvantages relates to the target population. Previous surveys of the adult Bermuda population⁸ demonstrated that when adults are asked about their alcohol and drug use, they tend to underestimate their consumption. There are many reasons for this; one of which is social desirability or the tendency of respondents to give answers that they think are either consistent with researchers' expectations or that will make them look better in the eyes of the researchers. By contrast, young people may overestimate their drinking habits, for example, if they feel that drinking is associated with adult behaviour or is expected by their friends. The risk of receiving inaccurate responses is probably higher if the data collection setting is less formal, that is, if students think that classmates might be able to see their responses. There is strong evidence from many studies, however, that data collected through school surveys have a high level of reliability and validity. To minimise the effects of overestimation, a very large population frame was utilised. Additionally, consumption questions were asked in a variety of ways as a means of confirming previous responses. As this survey was based on self-reported data, the results should therefore be interpreted with caution.

Furthermore, the data can only be generalised to the population that is defined in the representative sample: public, private, and group home school students in grades M2 to S4. Students who were absent on the day of survey administration and special education classes are not represented. Also, youths who dropped out of school were not included. It is important to note, that students outside the middle and senior school system can be expected to differ from students within the educational system, not only in terms of prevalence rates of alcohol and drug use, but also in terms of social and economic status. Additionally, among those students absent from school and those who have dropped out of school, it is likely that a higher proportion of individuals would be taking drugs or drinking alcohol. Non-response to survey items may also present a limitation, as it could be a source of bias in the survey.

⁸ Department for National Drug Control (2013). *National Household Survey 2013*. Government of Bermuda; Department for National Drug Control (2017). *2017 National Household Survey*. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda. Government of Bermuda.

There were little to no setbacks in the administration of the survey. All participating schools were expected to administer the survey during the week of October 7th to 11th, 2019; however, there was one school that requested to complete the survey the following week. Literacy issues posed a challenge to a few students in completing the questionnaire on their own; and, therefore, teachers were permitted to verbally read the survey questions aloud.

Lastly, the survey results are presented as a proportion by grade level and overall. A determination, therefore, of causal links between ATOD use and antisocial behaviours or sub-group variations in substance use were not assessed. Additionally, no comparisons were made of poly drug use.

CHAPTER 2

Methodology



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Survey Design

The 2019 round of the National School Survey was administered during the week of October 7th to 11th to middle and senior school students in Bermuda. The survey design is briefly described in the sections below and in Figure 2.1.

2.1 Population Coverage

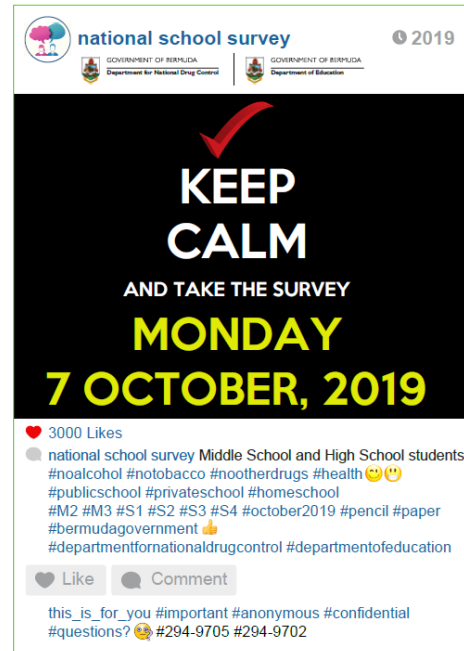
The survey targeted 3,305 students, enrolled in 24 schools (six public schools, six private schools including one special school, and 11 home schools); in two school phases: (1) middle school grade levels M2 and M3 (excluding M1) and (2) senior school grade levels S1 to S4 (see *Appendix B*). According to the Department of Education, these were the operational schools for the 2019/2020 academic year. The six public schools comprise of two senior schools and four middle schools. This is the third time that the National School Survey was conducted among home schools. Students' ages in the M2 to S4 grades correspond to approximately 12 to 18 years, although there were some students who were 10 to 11 years old and a 19-year-old student within these grades (see *Appendix A*).

The entire M2 to S4 student population was targeted for the survey since full coverage is known to eliminate sampling error and to provide data on all the students in the target population. In this way, a low margin of error was obtained, that is, $\pm 1\%$, and high confidence. This is the range, or confidence interval, in which the average population opinion is expected to lie.

2.2 Data Collection

At the beginning of the planning process, early in 2019, the Ministry of Education was informed of the opportunity to collaborate, yet again, on the National School Survey as was done in 2011 and 2015. School principals and administrators were formally notified at the end of the 2018/2019 academic year, of the scheduled survey, the staff and time requirements of the schools; and were asked to inform the DNDC of their school's participation and liaison. Of the 30 schools on record, only 24 indicated their interest to be part of this initiative. The six schools which did not participate are four home schools with few students whose administrator did not consent to them participating in the survey, one private special school with students who did not have the cognitive ability to respond to the survey, and one public middle school that was shut down in June 2019. Though this school building was closed, it is important to note, that the students were still incorporated in the survey as they were captured in other public middle schools across the island.

Data collection for the survey was carried out from Monday, October 7th to Friday, October 11th; with all schools participating during this designated period. Each school conducted the survey across all classes on the same day and at the same time to reduce contamination of responses. The paper and pencil method was utilised to capture the self-reported responses.



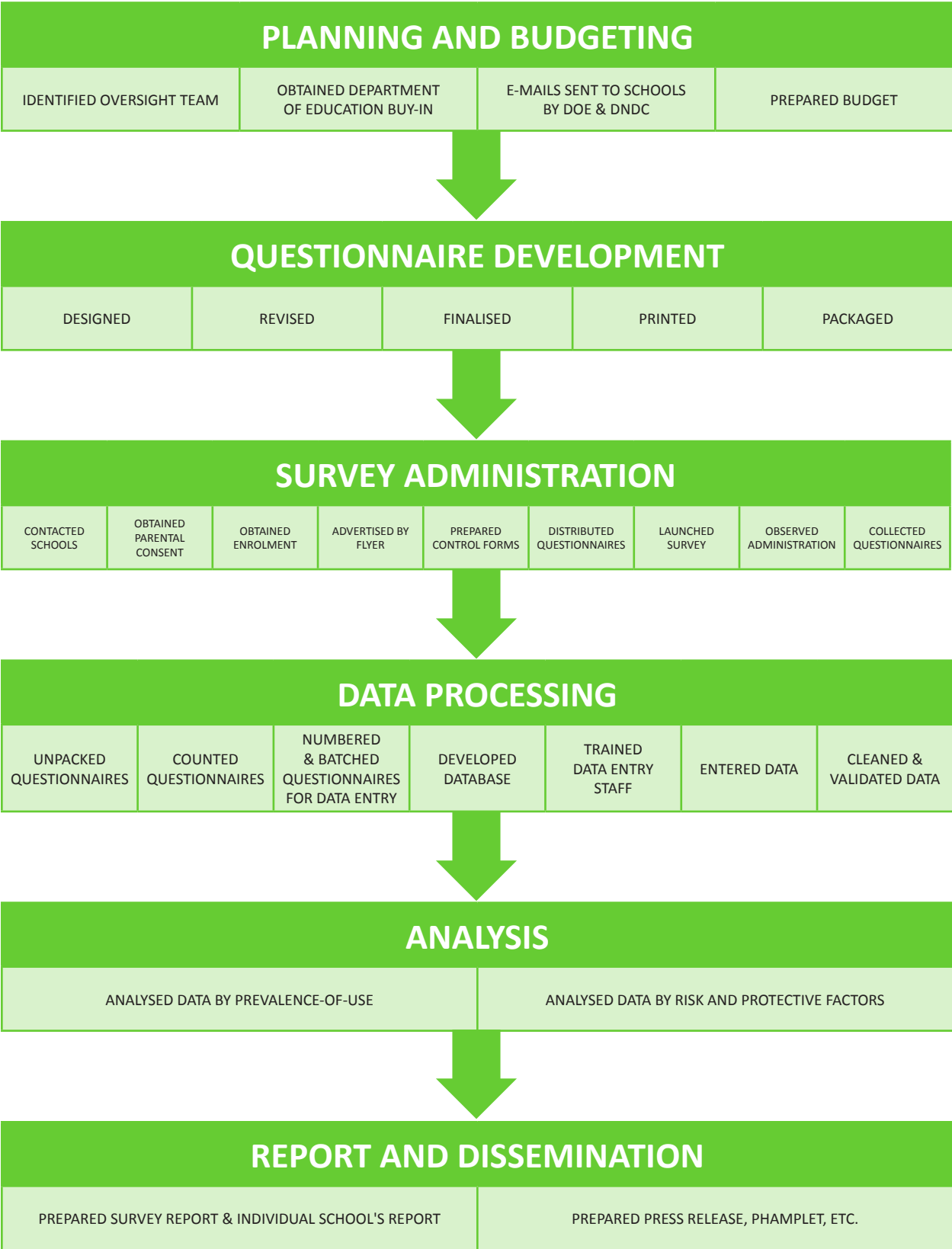


Figure 2.1. Survey design steps.

Supervision and Control

The project team for the survey consisted of staff from the DNDC, who worked closely with an assigned contact person (school survey coordinator) from within each school. The DNDC was mainly responsible for planning the survey, printing the questionnaires, providing logistical assistance to school survey coordinators, analysing the survey results, and preparing the survey reports. In addition, there was a team of trained observers who had oversight at the various schools and classrooms during the administration of the survey. Their main responsibility was to ensure that teachers were not involved in any way with students' responses and to provide any technical assistance on the questionnaire items should there have been any issues raised by the students.

2.2.1 Questionnaire Design and Testing

Instrument

The questionnaire comprised of two sections (see Appendix F). Section 1 of the questionnaire was adopted from the Inter-American Drug Abuse Control Commission (CICAD) School Survey questionnaire, which is a standardised instrument commonly used among Organisation of American States (OAS) Members and Caribbean countries for their National School Surveys. This part of the questionnaire contained the basic demographic questions and questions that measure reported ATOD consumption.

Section 2 of the questionnaire was adopted from the Communities That Care Youth Survey, which was developed by the Centre for Substance Abuse Prevention (CSAP) of the US Department of Health and Human Services. This section contained questions measuring a variety of risk and protective factors (RPFs) by using groups of survey items or indicators, which are called scales. It should be noted that some of the risk factors are measured with more than one scale. For the purposes of this survey and for ease of understanding by the target audience, the specific terminologies of the scales were not used in grouping the questions. There were four main domains for each of the risk and protective factors: Community, Family, School, and Peer-Individual, in addition to Outcome Measures, such as depression and antisocial behaviours including fighting, getting suspended from school, and selling drugs. The domains, scales, and outcome measures are delineated in Table 2.1.

All of the questionnaire items were pre-coded with the exception of two open-ended questions relating to school and age.

Table 2.1
Risk and Protective Factor Scales and Outcome Measures

Domains		Scales	
	RISK FACTORS	PROTECTIVE FACTORS	
Community	1. Low Neighbourhood Attachment	1. Opportunities for Prosocial Involvement	
	2. Community Disorganisation	2. Rewards for Prosocial Involvement	
	3. Transitions and Mobility		
	4. Perceived Availability of Drugs		
	5. Perceived Availability of Handguns		
	6. Laws and Norms Favourable to Drug Use		
	7. Laws and Norms Favourable to Handguns		
Family	1. Family History of Antisocial Behaviour	1. Attachment	
	2. Poor Family Management	2. Opportunities for Prosocial Involvement	
	3. Family Conflict	3. Rewards for Prosocial Involvement	
	4. Parental Attitudes Favourable Toward ATOD Use		
	5. Parental Attitudes Favourable to Antisocial Behaviour		
School	1. Poor Academic Performance	1. Opportunities for Prosocial Involvement	
	2. Lack of Commitment to School	2. Rewards for Prosocial Involvement	
Peer-Individual	1. Rebelliousness	1. Rewards for Prosocial Involvement	
	2. Gang Involvement	2. Interaction with Prosocial Peers	
	3. Favourable Attitudes Toward ATOD Use	3. Belief in Moral Order	
	4. Favourable Attitudes Toward Antisocial Behaviour	4. Prosocial Involvement	
	5. Sensation Seeking	5. Religiosity	
	6. Peer Rewards for Antisocial Involvement	6. Social Skills	
	7. Friends' Use of Drugs		
	8. Friends' Delinquent Behaviour		
	9. Intention to Use		
	10. Early Initiation of Drug Use		
	11. Low Perceived Risks of Drug Use		
Outcome Measures	1. Depression		
	2. Treatment		
	3. Antisocial Behaviours		

New Survey Items

Additional items were added to the questionnaire from previous rounds of the survey, while a few were removed. In Section 1 of the questionnaire, one question was added on the amount of cigarettes bought; seven questions were included on vaping; while a number of new illicit (synthetic) substances were added to expand the assessment of the consumption of illegal drugs; and one question was added on the types of marijuana products used. In Section 2, one question was added on whether the student has seen a health professional for alcohol, drug, emotional, or behavioural problems. A number of questions were removed such as: two regarding consumption of energy drinks; one on binge drinking; and the sexual health section, which included five questions. No pretesting of the questionnaire was done for this round of the survey as the questionnaire was very much similar to the one used in the last survey with the exception of the few additional questions, which were taken from standardised questionnaires used by other Caribbean and North American countries.

2.2.2 Survey Administration

Consent

Students' participation in the survey was voluntary, but subject to the consent of a parent or guardian. Permission for students to participate in the survey was obtained through a passive consent procedure (that is, a parent or guardian of each student signs and returns the consent form only if refusing to allow the child to participate; otherwise, permission is considered to be granted). This method was chosen over the active consent procedure as it was thought that the survey participation rate would not be seriously affected in this way. A passive consent form was sent to the school's contact person to be given to each student. The form was accompanied by a letter to the parent or guardian explaining the purpose of the survey, the anonymity and confidentiality of their child's participation, that non-participation will have no effect on the child's grades, among other relevant information. Students had one week in which to return the form to the school. In total, 97 students did not receive consent to participate in the survey according to the response forms returned to the DNDC at the completion of the survey.

Pre-Administration

Enrolment numbers were obtained from each school in order to obtain an accurate count of the number of questionnaires to be printed. The questionnaires were packaged in envelopes and boxes, accompanied by relevant control forms and instructions for the survey Administrators. These were delivered to the schools prior to each school's scheduled survey administration date.

In addition, the schools were provided with a flyer about the survey. They were asked to place it on their notice boards or send it by e-mail to the students and/or their parents to remind them of the survey or to use any other suitable means for students' attention.

Administration

The survey was administered in the classroom solely under the supervision of the teacher and required approximately one class period (50 minutes) to complete. In some instances, the administration extended a little beyond the one class period, for which the schools were accommodating. Most schools administered the survey during the advisory, home room, or assembly hall period. Each school's contact person received an approximate number of questionnaires in envelopes to match their enrolment at that time. Each classroom teacher was then given an estimated number of questionnaires for the students in attendance on that day for that class period along with the Instructions for Survey Administrators.

The teachers reviewed the instructions with their students. The instructions informed the students that there were no right or wrong answers. The instructions also explained the skip patterns and one example of a question (on parents' marital status) that may have posed difficulty and the meaning of the associated

response categories. Both the teacher and the written instructions on the front of the questionnaire assured students that the survey was anonymous and confidential. Students were then asked to complete the survey and reminded to place the completed questionnaire in the envelope, which can be sealed to preserve confidentiality.

Student cooperation was generally good. The general pattern of behaviour was for initial comments and levity on the topic of the survey, but then the majority of students worked seriously on completing the questionnaire.

Staff of the DNDC and its trained representatives observed the administration of the survey in all of the schools during the week to answer any questions that might have arisen.

The school's contact person gathered all of the questionnaires as well as completed the control forms for resubmission to the DNDC.

Post Administration

The completed questionnaires were uplifted by the DNDC. They were retrieved from the envelopes, counted, numbered, and batched for data entry. All discrepancies in the count and the numbers indicated by the schools were queried and reconciled.

2.3 Data Quality

Response Rate

Of the target population, a total of 2,764 students responded to the survey, accounting for a response rate of 83.6% (see Appendix B). This represents a decrease in the response rate by 2.6% from the 2015 round of the survey.

Of the 11 home schools, four did not participate in the survey. These schools were of the view that with their small population, confidentiality and anonymity cannot be guaranteed or the administrators simply did not want their students to participate. In addition, there were non-responses due to parents who did not consent to their child's participation in the survey, students being absent or away from school on the day of the survey, or students returning blank questionnaires.

Validation

A proportion of approximately 10% (276) of the questionnaires were validated to allow for any possible data entry errors to be corrected. In addition, checks were made for exaggeration and these were excluded from the data set; for example, number of days of drug use greater than 31 days or age beyond a reasonable expected number of years. Another validation check was done to eliminate responses on patterns of drug use that were logically inconsistent; for instance, if a student reported that he or she had used a drug in the past 30 days, but had never used this drug in his or her lifetime.

Missing Data

Imputations were not made for missing answers since it would be difficult to ascribe responses founded on self-report. Hence, missing data was treated as "not-stated" and comprised part of the total response.

2.4 Data Processing

Responses to the survey questions were captured directly onto the questionnaire by the respondents. Data entry was undertaken, by the DNDC, with trained external staff performing this function. Steps were taken to ensure confidentiality and reliability of the process and outcome. The process spanned approximately 12 weeks (one week for recruitment, training, and setup of the data entry screen; three weeks for manual data entry; and eight weeks for data validation, cleaning, and documentation of the data entry steps and

anomalies). No coding of the questionnaire was required since the questionnaire was pre-coded. To guard against transcription errors, care was taken in entering the responses from the paper questionnaires, into the computer. Microsoft Excel was used on individual computers for data entry, which was integrated into SPSS for data processing. The captured data file was then cleaned and 10% (approximately 276) of the questionnaires were validated.

The DNDC staff then performed the data analyses for this report. This included the generation of appropriate tables and descriptive statistics for inclusion in this final report.

2.5 Data Analysis

Analyses were done by sections: ATOD Use; Risk and Protective Factors; Outcome Measures; and Relationships with ATOD Use. The results of the survey are presented in two ways: (1) for each surveyed grade level and (2) for the overall surveyed population. Measurement of each of these is elaborated in the respective sections. In some instances, the results are also presented by the sex of the respondent (see Chapter 3.1) and by public and private school disaggregation (see Appendix E).

Since students in grades M2 through S4 participated in this survey, this includes the full range of grade levels in the schools surveyed. As such, the overall survey results can be interpreted as representing the attitudes and behaviours of the student population as a whole. It is important to keep in mind, however, that scores averaged across the full range of grade levels included in this report can mask problems within individual grades. In trying to make comparisons to normative data it is important to examine the data grade by grade in addition to looking at combined statistics for all grade levels. For many items there is typically a great deal of difference between grades or sex. For example, M2 grade level alcohol use is typically much lower than S4 grade level alcohol use. Hence, only paying attention to the overall alcohol use statistic would mask these grade differences in alcohol usage.

Frequencies of count (number) and percent were generated for all variables. Basic descriptive analyses were carried out for all variables under the ATOD section. Descriptive statistics, such as the mean, mode, and range, were also derived and used in the analysis.

For the risk and protective factor analysis, average scores (proportions) were computed for each scale used to measure the respective domain. Each of the risk and protective factor scores are measured on a scale of 0 to 100. A score of 50 is the normative average for the scales. A low score indicates the relative absence of the risk or protective factor. A high score indicates an elevated level of that risk or protective factor. Because risk factors are associated with an increased likelihood of alcohol and drug use, and other problem behaviours, lower scores on risk factors are desirable. Conversely, because protective factors are associated with a decreased likelihood of problem behaviours, a higher score on the protective factors is desirable. For ease of data interpretation and reporting, some variables required reverse coding and recoding. In regards to the risk and protective scales, new variables were created to allow for estimation of the level of protection or risk.

In addition to a complete profile of risk and protective factor levels, substance use, and other behaviour prevalence rates, analyses were also done by public versus private school comparisons on ATOD use (see Appendix E). Summary results from the two previous rounds of the survey are also included in Appendices C and D of this survey report for trend analysis. Each school's results will also be analysed and compared to the national averages in separate reports prepared for each school. Normative comparisons of this type are one of the best ways of identifying the strengths a school can build on and weaknesses that must be addressed.

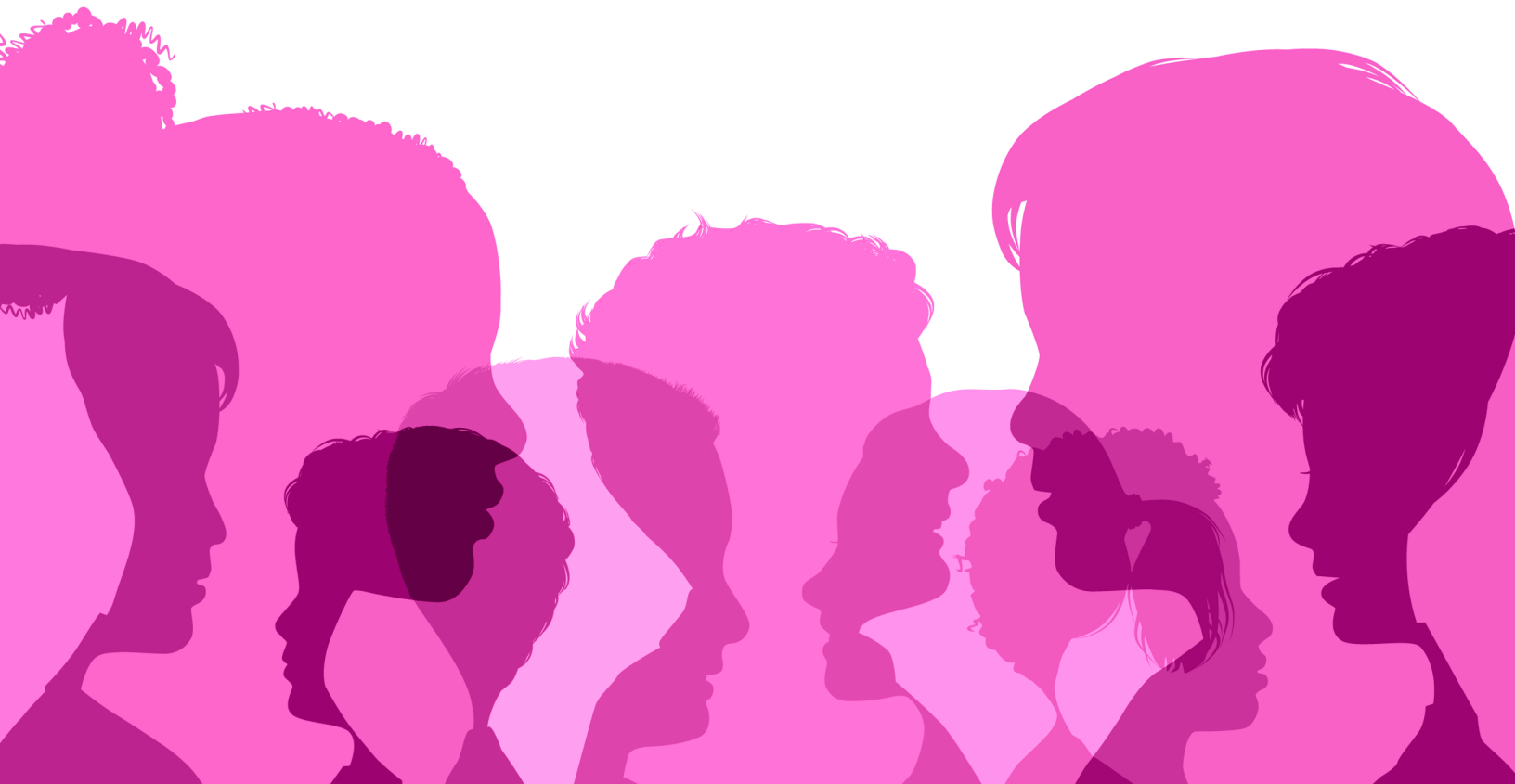
In the interest of minimising the additional burden of data collection required from schools and preserving fast turnaround times for processing and reporting, overall statistics in this report are presented without grade weighting since analysis of previously collected data has shown that in schools where the grade

levels are well represented the unweighted results are either the same or within a point or two of the weighted results.

IBM SPSS v. 23 software was used for the analysis of survey data. Charts were created in Microsoft Excel and tables and text were prepared in Microsoft Word.

CHAPTER 3

RESULTS ATOD Use



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3.1.1 Introduction and Measurement

In this survey, drug consumption is measured by a set of survey questions that can be found in Section 1 of the questionnaire, which are similar to questions generally used to study drug consumption by middle and senior school students, regionally and internationally. Energy drinks consumption is measured by a set of four questions. (See Appendix F).

This section presents the results of the consumption of alcohol, tobacco, and other drugs (ATODs), as well as energy drinks. The findings on the use of other drugs – apart from marijuana – such as cocaine, ecstasy, crack, and a number of synthetic drugs can be used by prevention planners as an overall gauge of “hard” drug use. Also included in this section is the prevalence of use of drugs such as inhalants, tranquilizers, and stimulants. These results are presented for both lifetime and current use (last 30-days) of ATODs and energy drinks, disaggregated by sex and grade level of student, with relevant tables and charts included to illustrate the number and proportion of students who have reported use of these substances. Lifetime prevalence of use, that is, whether the student has ever used the drug, is a good measure of student experimentation. Past 30-days prevalence of use, that is, whether the student has used the drug within the last month, is a good measure of current use. Current use is obtained from filtering students who have indicated lifetime use and who then have indicated recent use; and is reported as a proportion of all survey respondents. In addition, this section also examines age of first use. Further, this section shows the results of students’ perception of harm in consuming ATODs and ease of obtaining these substances. In addition to the standard lifetime and current use prevalence of alcohol, perception of risk, ease of availability, and the use of vaping were also measured.

TECHNICAL NOTES

What is Prevalence?

The terms prevalence refers to the proportion of a population who has used a drug over a particular time period. In this population survey of middle and senior school students, prevalence is measured by asking students to recall their use of drugs. Typically, the three most widely used recall periods are: lifetime (ever used a drug), last year (used a drug in the last twelve months), and last month (used a drug in the last 30 days).

Lifetime prevalence: the proportion of survey respondents who reported ever having used the named drug at the time they were surveyed; that is, at least once. A person who records lifetime prevalence may – or may not – be currently using the drug. Lifetime prevalence should not be interpreted as meaning that people have necessarily used a drug over a long period of time or that they will use the drug in the future.

Last year (past 12 months) prevalence: the proportion of survey respondents who reported using a named drug in the year prior to the survey. For this reason, last year prevalence is often referred to as recent use; and also classified as lifetime prevalence.

Last month (past 30 days) prevalence: the proportion of survey respondents who reported using a named drug in the 30-day period prior to the survey. Last month prevalence is often referred to as **current use**; and also classified as lifetime and recent prevalence. A proportion of those reporting current use may be occasional (or first-time) users who happen to have used in the period leading up to the survey – it should therefore be appreciated that current use is not synonymous with regular use.

3.1.2 Overall Prevalence

Students were asked to report if they “*have ever consumed any of these substances...*” and “*when was the first time you have tried...*”. Their negative responses (“*no*” or “*never*”) to these questions provide the number and proportion of students who reported that they have never used any of the drugs surveyed. Overall, 52.8% (1,460) of all survey respondents have reported use of at least one drug in their lifetime. This includes the use of all legal and illegal drugs listed in Table 3.1.1, excluding energy drinks.

ATOD prevalence for all students, M2 through S4, is presented in Figures 3.1.2 and 3.1.3 and the overall results columns of Tables 3.1.1 and 3.1.2. As these results show, students recorded the highest lifetime prevalence-of-use for energy drinks (51.8%), alcohol (45.2%), marijuana (18.3%), and inhalants (10.2%). Other lifetime prevalence ranges from a low of 0.5% for poppers and GHB to a high of 5.2% for cigarettes.

Students reported the highest current prevalence-of-use for energy drinks (19.2%), alcohol (13.2%), and marijuana (7.6%). Other current use prevalence ranges from a low of 0.2% for heroin to a high of 2.2% for inhalants.

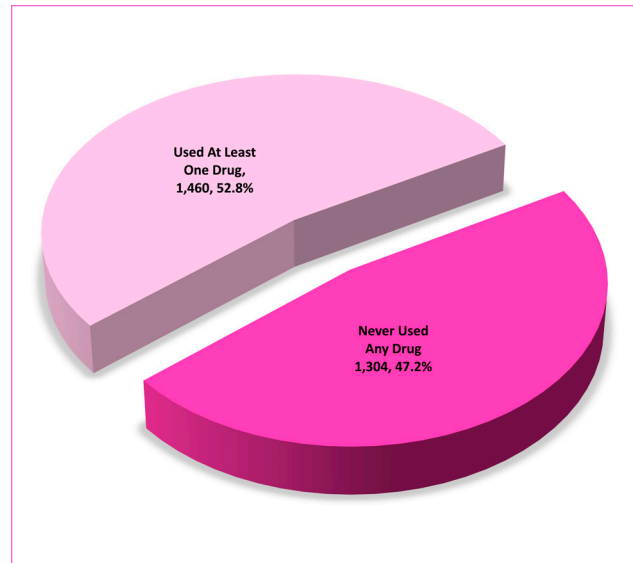


Figure 3.1.1. Drug use by survey respondents.

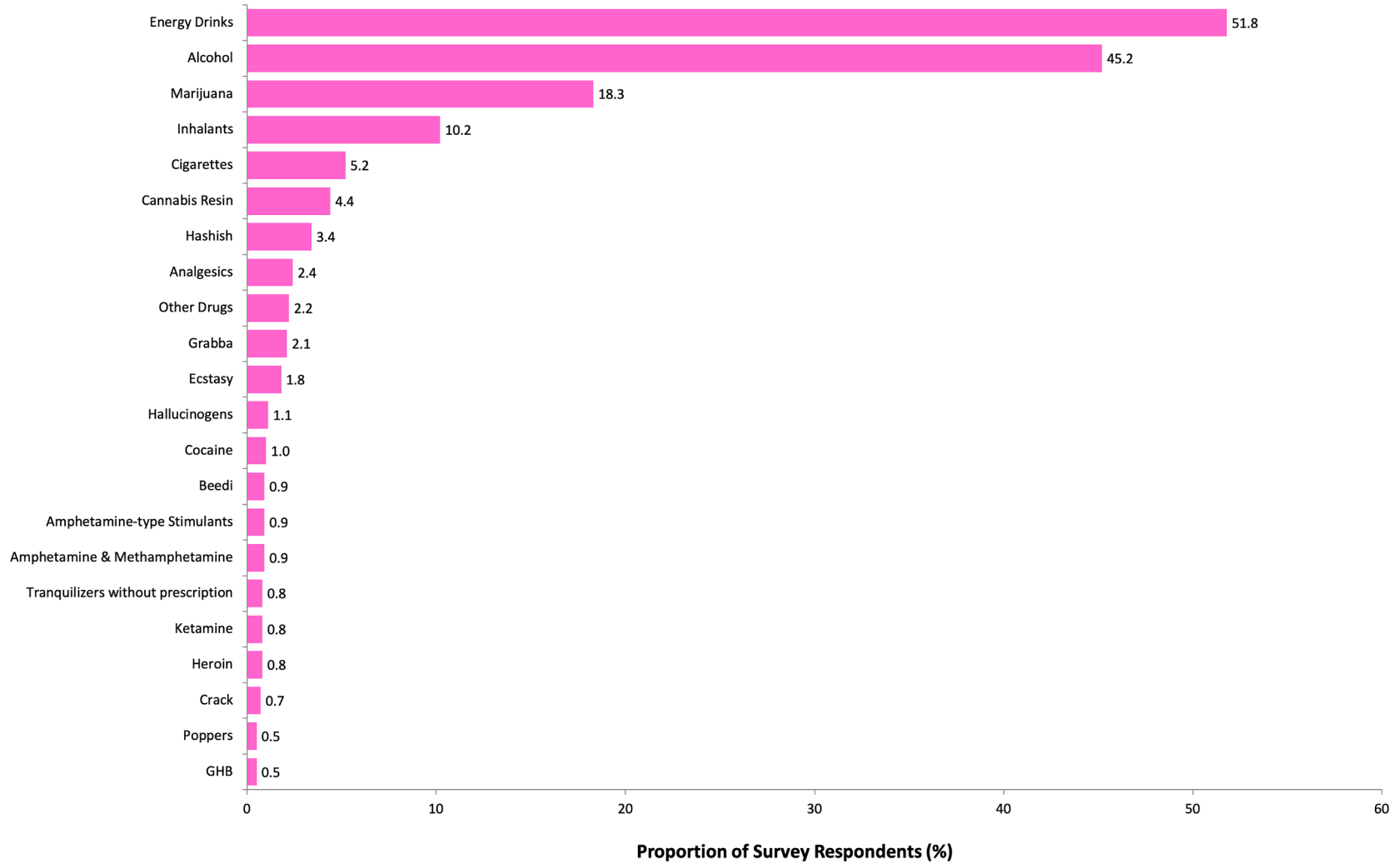


Figure 3.1.2. Lifetime use of ATODs and energy drinks for survey respondents.

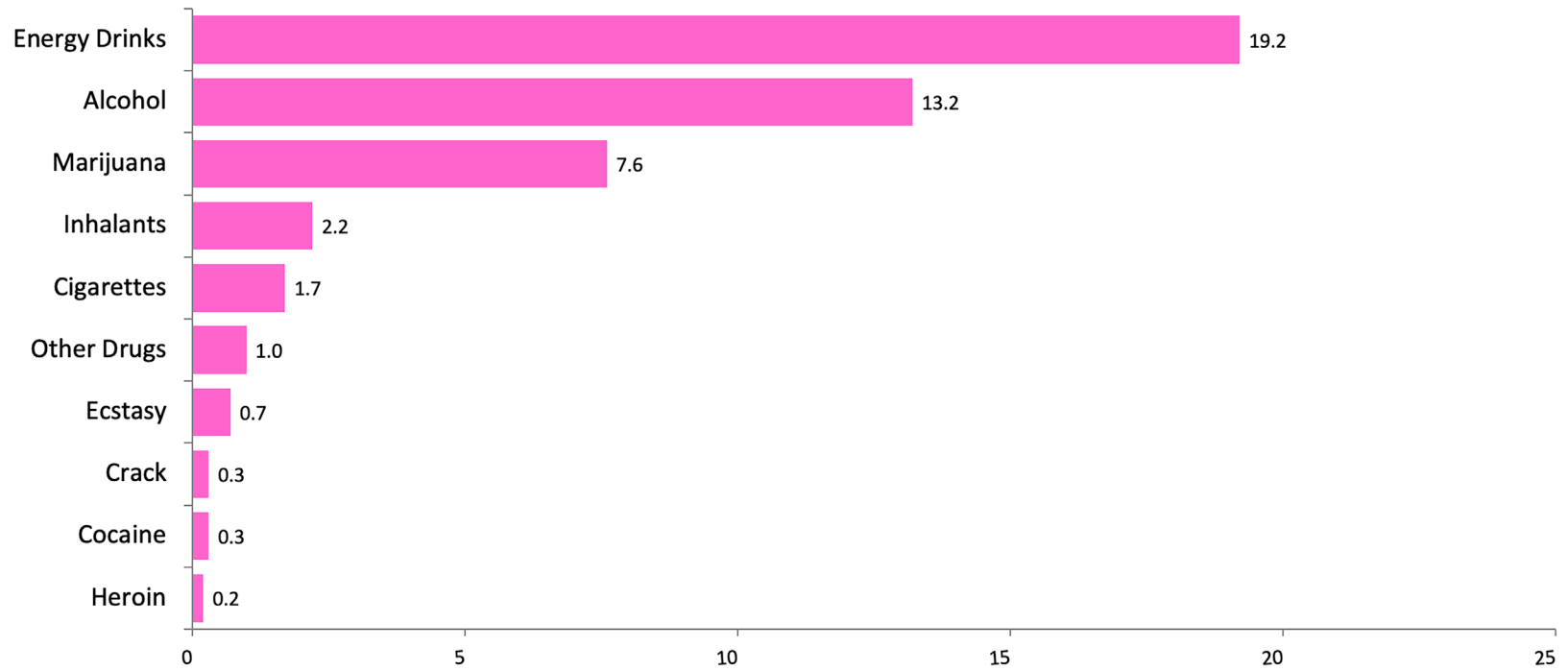


Figure 3.1.3. Current use of ATODs and energy drinks for survey respondents.

Lifetime Use

Table 3.1.1

Lifetime Use⁹ of ATODs and Energy Drinks by Grade Level of Survey Respondents

Substance	Grade Level ¹⁰														Overall (n = 2,764)	
	M2 (n = 590)		M3 (n = 499)		S1 (n = 479)		S2 (n = 469)		S3 (n = 382)		S4 (n = 337)		NS (n = 8)			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
LEGAL DRUGS	177	30.0	205	41.1	252	52.6	286	61.0	235	61.5	225	66.5	2	25.0	1,382	50.0
Alcohol	132	22.0	174	34.9	230	48.0	267	56.9	224	58.6	219	65.0	2	25.0	1,248	45.2
Cigarettes	8	1.4	15	3.0	16	3.3	26	5.5	39	10.2	41	12.2	-	-	145	5.2
Inhalants	64	10.8	52	10.4	61	12.7	53	11.3	33	8.6	19	5.6	1	12.5	283	10.2
ILLEGAL DRUGS¹¹	16	2.7	14	2.8	44	9.2	76	16.2	66	17.3	58	17.2	-	-	274	9.9
Amphetamines & Methamphetamines	1	0.2	-	-	4	0.8	8	1.7	5	1.3	6	1.8	-	-	24	0.9
Amphetamines-type Stimulants	-	-	-	-	-	-	7	1.5	8	2.1	10	3.0	-	-	25	0.9
Analgesics	1	0.2	5	1.0	6	1.3	21	4.5	16	4.2	18	5.3	-	-	67	2.4
Beedi	2	0.3	2	0.4	5	1.0	6	1.3	7	1.8	2	0.6	-	-	24	0.9
Cannabis Resin	2	0.3	1	0.2	12	2.5	35	7.5	41	10.7	30	8.9	-	-	121	4.4
Cocaine	3	0.5	-	-	2	0.4	8	1.7	7	1.8	7	2.1	-	-	27	1.0
Crack	3	0.5	-	-	1	0.2	9	1.9	4	1.0	3	0.9	-	-	20	0.7
Ecstasy	4	0.7	1	0.2	3	0.6	16	3.4	8	2.1	18	5.3	-	-	50	1.8
GHB	1	0.2	-	-	1	0.2	5	1.1	4	1.0	2	0.6	-	-	13	0.5
Grabba	2	0.3	1	0.2	6	1.3	19	4.1	17	4.5	12	3.6	-	-	57	2.1

⁹ Students responding to “ever” consuming the substance (asked of all survey respondents).

¹⁰ Percentages are computed with the number as a proportion of the grade level total.

¹¹ “Illegal drugs” also include “Other drugs”.

Hallucinogens	1	0.2	-	-	2	0.4	16	3.4	6	1.6	6	1.8	-	-	31	1.1
Hashish	1	0.2	-	-	5	1.0	34	7.2	30	7.9	24	7.1	-	-	94	3.4
Heroin	1	0.2	1	0.2	3	0.6	8	1.7	5	1.3	4	1.2	-	-	22	0.8
Ketamine	1	0.2	2	0.4	5	1.0	9	1.9	4	1.0	1	0.3	-	-	22	0.8
Marijuana	13	2.2	22	4.4	71	14.8	120	25.6	145	38.0	135	40.1	-	-	506	18.3
Poppers	-	-	1	0.2	-	-	6	1.3	5	1.3	2	0.6	-	-	14	0.5
Tranquilizers without prescription	-	-	1	0.2	2	0.4	9	1.9	7	1.8	4	1.2	-	-	23	0.8
Other Drugs	11	1.9	7	1.4	14	2.9	21	4.5	6	1.6	3	0.9	-	-	62	2.2
Energy Drinks	220	37.3	206	41.3	277	57.8	278	59.3	236	61.8	214	63.5	1	12.5	1,432	51.8

Current Use

Table 3.1.2
Current Use ¹²of ATODs and Energy Drinks by Grade Level of Survey Respondents

Substance ¹³	Grade Level ¹⁴												Overall (n = 2,674)	
	M2 (n = 590)		M3 (n = 499)		S1 (n = 479)		S2 (n = 469)		S3 (n = 382)		S4 (n = 337)			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
LEGAL DRUGS	36	6.1	35	7.0	61	12.7	98	35.0	92	24.1	98	35.0	422	15.3
Alcohol	13	2.2	32	6.4	49	10.2	94	27.9	87	22.8	94	27.9	365	13.2
Cigarettes	3	0.5	5	1.0	7	1.5	13	3.9	12	3.1	13	3.9	48	1.7
Inhalants	22	3.7	3	0.6	13	2.7	6	1.8	6	1.6	6	1.8	62	2.2
ILLEGAL DRUGS¹⁵	5	0.8	10	2.0	30	6.3	59	17.5	70	18.3	59	17.5	228	8.2
Cocaine	2	0.3	-	-	1	0.2	4	1.2	1	0.3	-	-	8	0.3
Crack	2	0.3	-	-	-	-	4	1.2	-	-	1	0.3	7	0.3
Ecstasy	1	0.2	-	-	1	0.2	6	1.3	2	0.5	9	2.7	19	0.7
Heroin	1	0.2	-	-	1	0.2	2	0.6	-	-	2	0.6	6	0.2
Marijuana	4	0.7	7	1.4	25	5.2	57	16.9	67	17.5	57	16.9	210	7.6
Other Drugs	2	0.3	4	0.8	6	1.3	7	1.5	5	1.3	4	1.2	28	1.0
Energy Drinks	63	10.7	72	14.4	113	23.6	72	21.4	86	22.5	72	21.4	532	19.2

¹² Of students who responded to “ever” consuming the substance, and reported use in the past 12 months, who then have consumed it in the “past 30 days” (asked only of all lifetime and recent users but reported as a proportion of all survey respondents).

¹³ Survey did not measure current use of cannabis resin, hashish, hallucinogens, poppers, analgesics, beady, ketamine, GHB, amphetamine-type stimulant, amphetamines and methamphetamines, and grabba.

¹⁴ Percentages are computed with the current use number as a proportion of total grade level survey respondents for each substance.

¹⁵ “Illegal drugs” also include “Other drugs”.

3.1.3 Lifetime and Current Prevalence by Grade Level of Respondent

ATOD prevalence for individual grade levels is presented in Tables 3.1.1, 3.1.2, and Figure 3.1.4. Typically, prevalence-of-use of most substances increases as students advance to higher grades. However, inhalant use provides an exception to this pattern, often peaking during the late middle school or early high school years. This may be because inhalants are relatively easy for younger students to obtain. The survey results show that current alcohol use for all survey respondents ranges from a low of 2.2% among M2 students to a high of 27.9% among S2 and S4 students. Current use of marijuana ranges from a low of 0.7% among M2 students to a high of 17.5% among S3 students; while for cigarettes, current use ranges from a low of 0.5% for M2 students to a high of 3.9% for S2 and S4 students, and inhalant current use ranges from a low of 0.6% for M3 students to a high of 3.7% for M2 students.

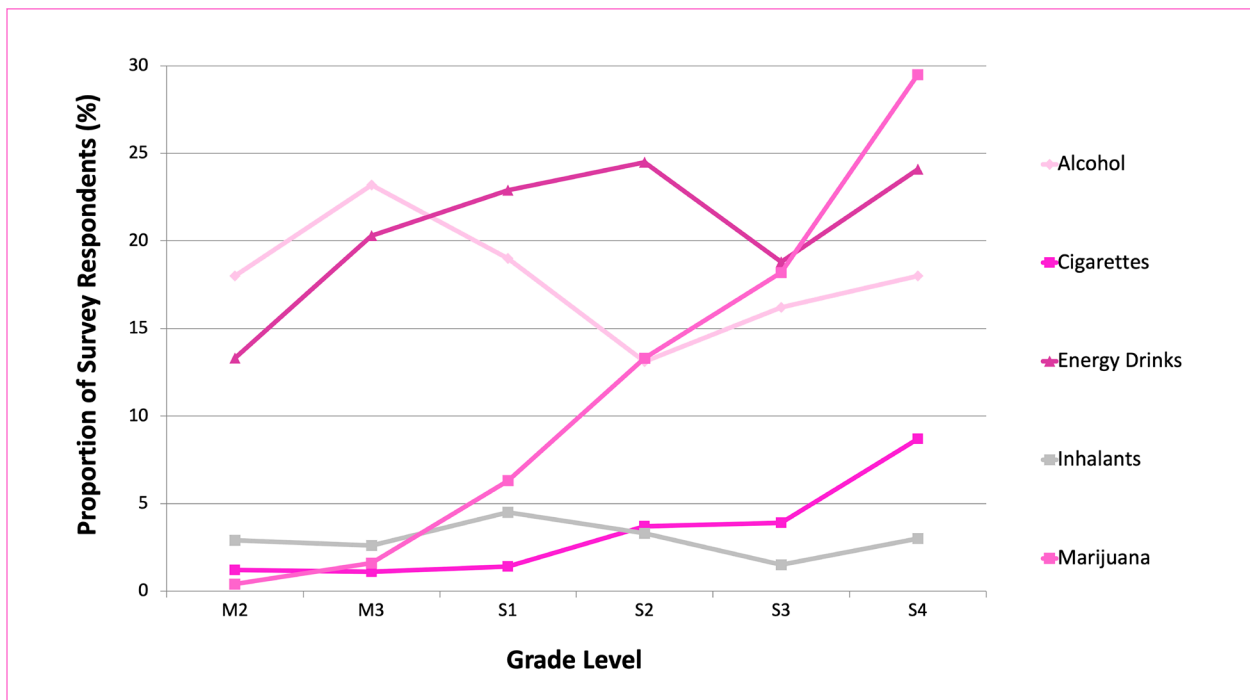


Figure 3.1.4. Current use of selected substances by grade level of survey respondents.

3.1.4 Lifetime and Current Prevalence by Sex of Respondent

- The results in Table 3.1.3 show that there were more males who reported the use of energy drinks (57.1%), cigarettes (6.5%) and illegal drugs, such as cannabis resin (6.0%), cocaine (1.3%), ecstasy (2.3%), hashish (4.3%), heroin (0.9%) and other drugs (2.4%) for the lifetime use reference period. In terms of current use, there were also more male users of crack (0.3%), ecstasy (0.9%), heroin (0.4%), inhalants (2.3%), and other drugs (1.2%).
- Alcohol use was more prevalent among females for both lifetime (49.5%) and current (14.3%) use reference periods.
- Marijuana prevalence was slightly higher for females (18.5% versus 17.8% for males) at the lifetime use reference period, whereas males recorded higher prevalence-of-use in the current reference period (8.2% for males versus 7.0% for females).

Table 3.1.3
Lifetime and Current Use of ATODs and Energy Drinks by Sex of Survey Respondents

Substance	Lifetime Use (%)				Current Use (%)			
	Male (n = 1,292)	Female (n = 1,414)	NS (n=58)	Total (n = 2,764)	Male (n = 1,292)	Female (n = 1,414)	NS (n=58)	Total (n = 2,764)
Alcohol	39.9	49.5	53.4	45.1	11.5	14.3	24.1	13.2
Cannabis Resin	6.0	2.6	10.3	4.4	..	..	..	..
Cigarettes	6.5	4.2	3.4	5.2	2.1	1.4	1.7	1.7
Cocaine	1.3	0.6	1.7	0.9	0.3	0.3	-	0.3
Crack	0.8	0.6	3.4	0.7	0.3	0.2	-	0.3
Ecstasy	2.3	1.2	5.2	1.7	0.9	0.4	3.4	0.6
Energy Drinks	57.1	46.8	55.2	51.8	23.8	15.3	15.5	19.2
Hashish	4.3	2.3	8.6	3.4	..	..	..	..
Heroin	0.9	0.7	1.7	0.8	0.4	0.1	-	0.2
Inhalants	10.0	10.5	10.3	10.2	2.3	2.1	3.4	2.3
Marijuana	17.8	18.5	24.1	18.3	8.2	7.0	19.0	7.6
Other Drugs	2.4	2.1	3.4	2.2	1.2	0.8	1.7	1.0

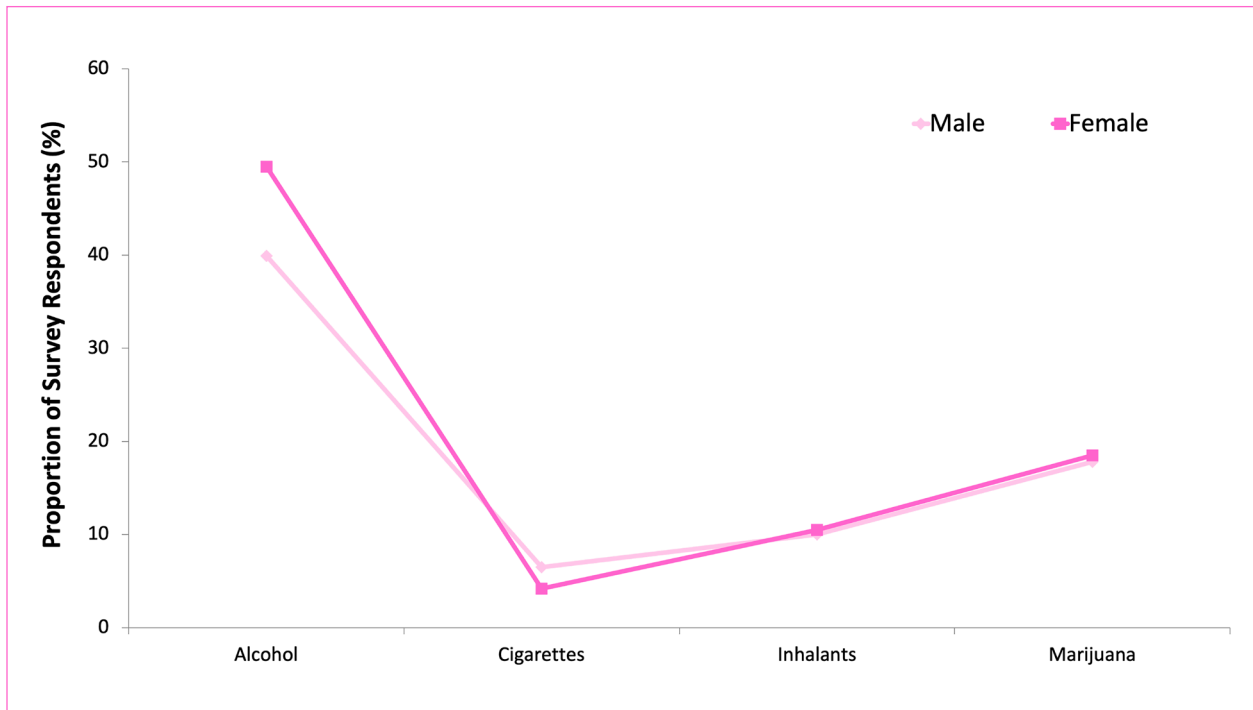


Figure 3.1.5. Lifetime use of selected substances by sex of respondent.

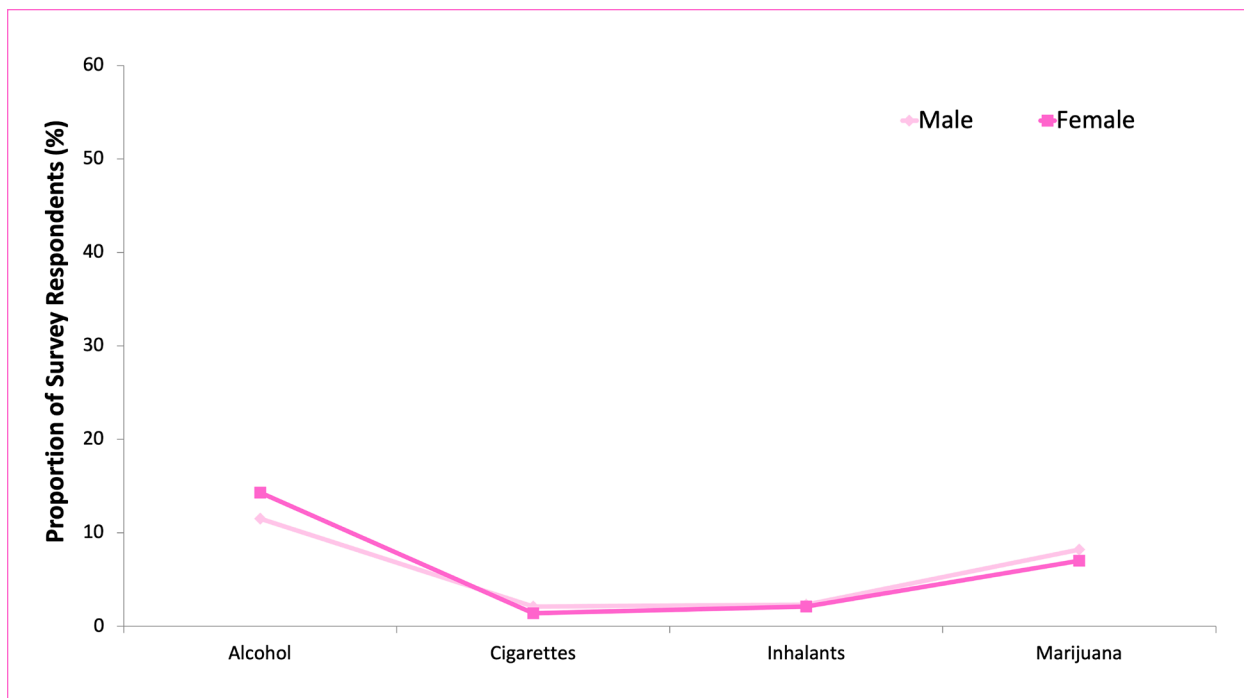


Figure 3.1.6. Current use of selected substances by sex of respondent.

3.1.5 Age of Onset

Using age-of-initiation data to coordinate the timing of prevention efforts can be an important tool for maximising programme effectiveness. For example, programmes delivered after the majority of potential drug users have already initiated the behaviour may have limited impact. Alternatively, very early intervention might prove less effective because it is not close enough to the critical initiation period.

Surveyed youths were asked to report how old they were when they used or tried the substances listed in Table 3.1.4 for the first time. Some of these drugs (alcohol, cigarettes, and marijuana) are generally considered to be the major gateway drugs, usually preceding the use of hard drugs.¹⁶ The average age of onset is based only on the ages of first use of students who reported ever engaging in the behaviour, that is, lifetime users. Table 3.1.4 presents the average age of onset students reported within each grade level, Figure 3.1.7 shows this for all lifetime users for each substance, while Figure 3.1.8 shows the average age of onset for a few selected substances by grade level of survey respondent. These survey questions form part of the risk factor scale *Early Initiation of Drug Use*. On the other hand, Table 3.1.5 and Figure 3.1.9 show the average age of onset by sex of survey respondent.

¹⁶ National Center on Addiction and Substance Abuse. (1994). National Study Shows “Gateway” Drugs Lead to Cocaine Use. In R. J. Hackett (Ed.), *Columbia University Record*, 20(4). Columbia University, NY: Office of Public Information. http://www.columbia.edu/cu/record/archives/vol20/vol20_iss10/record2010.24.html (accessed January 25, 2012).

Table 3.1.4
Average Age of Onset by Grade Level of Survey Respondents

Substance	Grade Level						Average Age of Onset (Years)	Number of Lifetime Users
	M2	M3	S1	S2	S3	S4		
Alcohol	9.5	10.5	11.5	12.0	13.1	14.0	12.0	1,248
Cannabis Resin	10.5	13.0	13.3	13.3	14.0	15.0	14.0	121
Cigarettes	10.3	10.6	11.4	12.0	13.4	14.6	12.9	145
Cocaine	11.0	...	12.0	12.0	14.8	15.9	14.0	27
Crack	12.0	...	14.0	11.8	14.5	14.3	13.2	20
Ecstasy	11.7	11.0	11.3	13.4	15.0	15.8	14.3	50
Hashish	6.0	...	12.5	13.5	14.4	15.3	14.1	94
Heroin	12.0	...	11.3	10.3	13.7	15.3	12.8	22
Inhalants	8.6	8.4	9.6	9.5	9.3	12.3	9.2	283
Marijuana	9.6	12.2	12.9	13.2	13.9	15.0	13.7	506
Other Drugs	8.5	10.8	11.3	12.8	8.3	13.5	11.2	62

- Age of initiation of drug use ranges from a low of 9.2 years for inhalants to a high of 14.3 years for ecstasy.
- Alcohol use began around 12.0 years, cigarette use at 12.9 years, and marijuana use at 13.7 years.
- Students in earlier grades like M2 began use of hashish (6.0 years), other drugs (8.5 years), alcohol (9.5 years) and cigarettes (10.3 years) much earlier than students in later grades.

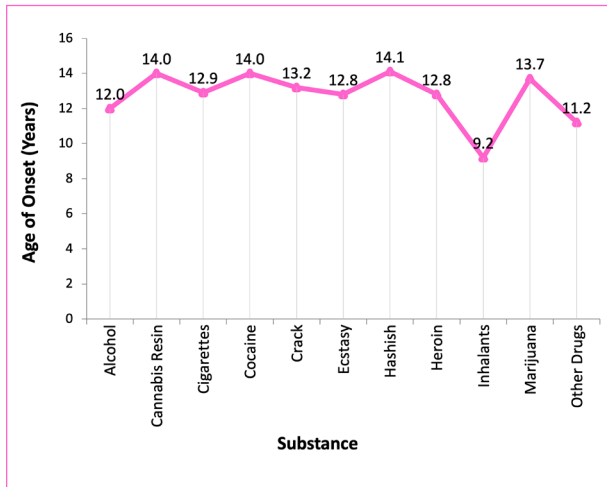


Figure 3.1.7. Current use of selected substances by sex of respondent.

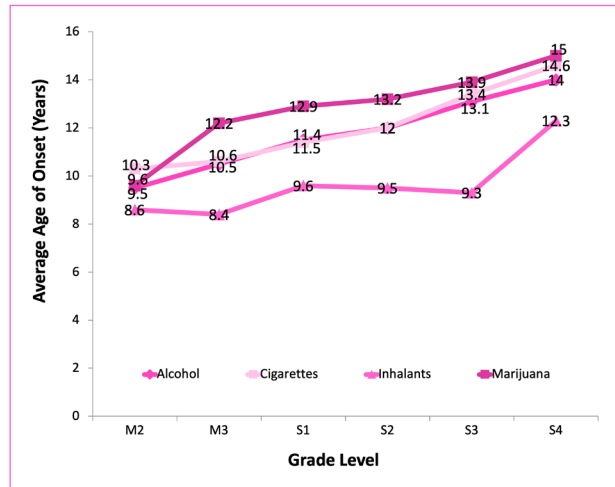


Figure 3.1.8. Average age of onset for all lifetime users of selected substances by grade level.

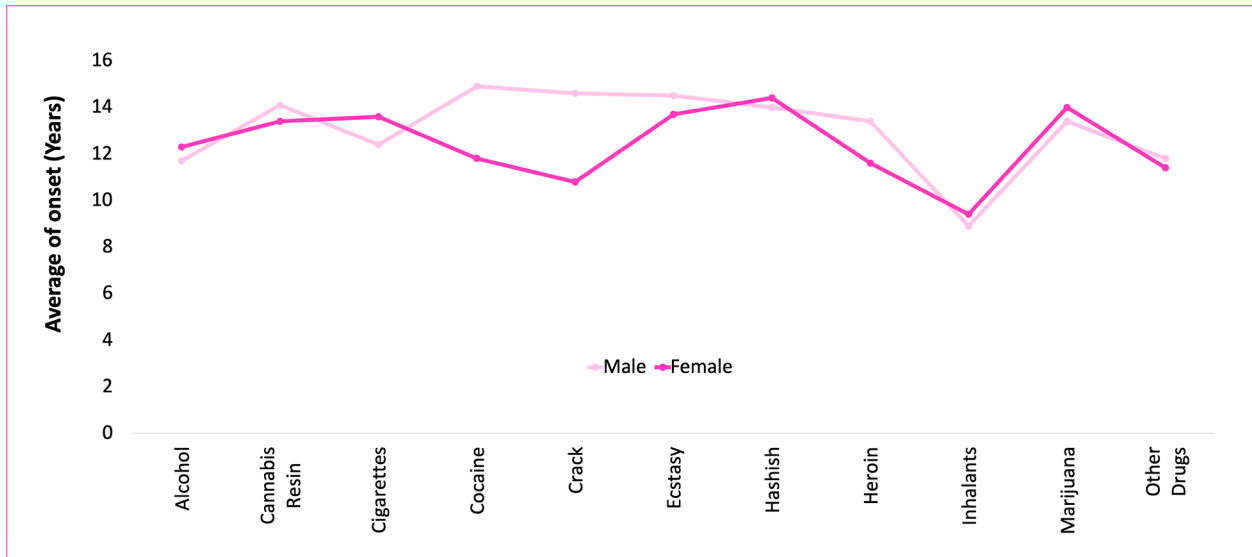


Figure 3.1.9. Average age of onset for all lifetime users for selected substances by sex of respondent

- For the majority of the substances, females initiated use earlier than their male counterparts.
- Males indicated first use of inhalants as early as 8.9 years old and use of cocaine as late as 14.9 years.
- Females began use of amphetamines and methamphetamines as early as 9.0 years old and use of hashish as late as 14.4 years.

Table 3.1.5*Average Age of Onset by Sex of Survey Respondents*

Substance	Male	Female
Alcohol	11.7	12.3
Amphetamine and Methamphetamine	14.4	9.0
Amphetamine-type stimulant	12.8	13.1
Analgesics	14.0	12.7
Beady	11.5	12.1
Cannabis Resin	14.1	13.4
Cigarettes	12.4	13.6
Cocaine	14.9	11.8
Crack	14.6	10.8
E-cigarettes	13.5	14.1
Ecstasy	14.5	13.7
GHB	11.7	11.0
Grabba	13.3	12.5
Hallucinogens	13.3	13.3
Hashish	14.0	14.4
Heroin	13.4	11.6
Inhalants	8.9	9.4
Ketamine	13.4	9.6
Marijuana	13.4	14.0
Other Drugs	11.8	11.4
Poppers	13.3	11.3
Tranquilizers without prescription	13.8	10.6

3.1.6 Consumption by Type of Drug

Alcohol

Alcohol, including beer, wine, and hard liquor, is the drug most often used by adolescents today. Research and similar surveys in the past have shown the pervasiveness of alcohol in middle and high schools.¹⁷ In comparison, the use of cigarettes, inhalants, or marijuana are less than half as prevalent as alcohol use. Given the national pattern, it is not surprising that alcohol is the most used drug among the surveyed age cohort in Bermuda. Studies have shown, that consuming alcohol lowers inhibitions and impairs judgment, exposing adolescents to serious dangers. Have difficulty at school. Adolescent drinking is associated with having trouble at school, including missing class and having low grades.¹⁸ This body of research has also shown that children who began alcohol use before age 15 are 5 times more likely to abuse alcohol by age 21. Other consequences include: risky sexual behaviours, poor school performance, and increased risk of suicide and homicide. As with alcohol use in general, binge drinking tends to become more pervasive as students grow older.

Lifetime and Current Use

- Lifetime prevalence of alcohol use ranges from a low of 22.0% for M2 to a high of 65.0% for S4 students. Overall, just under half (45.2%) of the survey respondents have reported using alcohol in their lifetime.
- Current prevalence (previous 30-days) of alcohol use ranges from a low of 2.2% for M2 students to a high of 27.9% for S2 and S4 students. Overall, 13.2% of the survey respondents have used alcohol in the past 30 days.

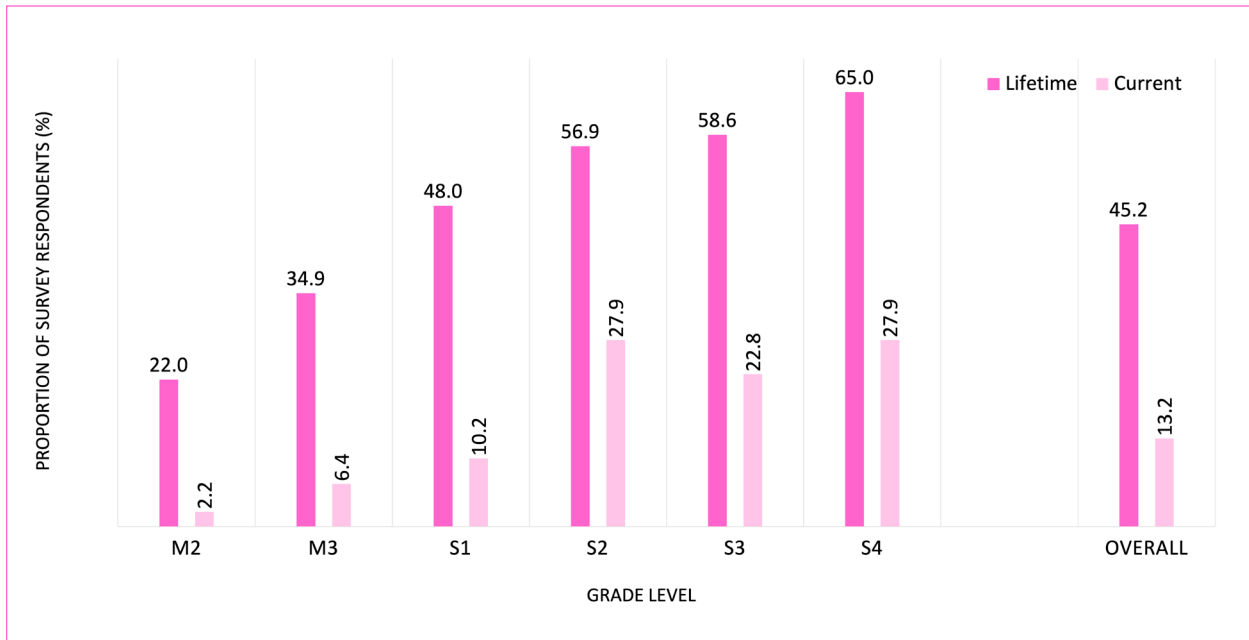


Figure 3.1.10. Lifetime and current use of alcohol by grade level of survey respondents.

¹⁷ L. D. Johnston, P. M. O'Malley, J. G. Bachman, & J. E. Schulenberg. (2012). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2011*. Ann Arbor: Institute for Social Research, The University of Michigan. <http://monitoringthefuture.org/pubs/monographs/mtf-overview2011.pdf> (accessed January 28, 2012).

¹⁸ Office of Adolescent Health. (2019). *Risks of Adolescent Alcohol Use*. <https://www.hhs.gov/ash/oah/adolescent-development/substance-use/alcohol/risks/index.html> (accessed May 15, 2020).

First Use

- Of the lifetime users, 780 initiated alcohol consumption “more than a year ago” (28.2% of all survey respondents), while 103 (consumed alcohol for the first time “during the past 30 days” (3.7% of all survey respondents). There were 21 students who reported lifetime use of alcohol, but who did not report when the consumption took place.

Table 3.1.6

First Use of Alcohol for Survey Respondents

First Use	Number	Percent
Never	1,352	48.9
During the past 30 days	103	3.7
More than 1 month ago, less than 1 year	344	12.4
More than a year ago	780	28.2
Not Stated	185	6.7
Total	2,764	100.0

Recent Use

- The majority (840) of lifetime users of alcohol, approximately seven out of every 10, have reported recent use of alcohol (use in the past 12 months). This corresponds to about three in ten or 30.4% of all survey respondents who can be considered as recent users.

Table 3.1.7

Alcohol Use in the Past 12 Months for Survey Respondents

Annual Use	Number	Percent (n = 2,764)
Yes	840	30.4
No	331	12.0
Not Stated	77	2.8
Total	1,248	45.2

Heavy Drinking

- On at least one day in the past month, 133 current users of alcohol have reported that they had too much to drink and got drunk (4.8% of all survey respondents). There were 14 current users who reported to have been drunk for more than half the month (0.5% of all survey respondents).

Table 3.1.8

Number of Days Current Users of Alcohol Drank too much and got Drunk

Days	Number	Percent (n = 2,764)
None	187	6.8
1 – 5 days	108	3.9
6 – 10 days	7	0.3
11 – 15 days	4	0.1
16+ days	14	0.5
Not Stated	45	1.6
Total	365	13.2

Location of Alcohol Use

- The majority of current users of alcohol reported that they most often drink at “other social events” (130), “home” (125), or at “a friend’s house” (71). This corresponds to 4.7%, 4.5%, and 2.6% of all survey respondents, respectively. Very few of these students have reported drinking alcohol on “the corner/block” (8) or at “school” (2).

Table 3.1.9

Location Where Current Users Most Often Drink Alcohol

Location	Number	Percent (n = 2,764)
At Home	125	4.5
At School	2	0.1
On the Corner/Block	8	0.3
At a Friend’s House	71	2.6
At Other Social Events	130	4.7
Other	23	0.8
Not Stated	6	0.2
Total	365	13.2

Source of Alcohol

- Slightly less than half (170) of the current users of alcohol have reported that they usually get it from “friends” (6.2% of all survey respondents). A significant number (76) of current users has reported “parents” as the source of their alcohol consumed (2.7% of all survey respondents). Very few current users have obtained alcohol from a “brother/sister” (10) or from a “street vendor” (5).

Table 3.1.10

Source of Alcohol for Current Users

Source	Number	Percent (n = 2,764)
Friend	170	6.2
Parents	76	2.7
Brother/Sister	10	0.4
Other Relative(s)	20	0.7
Street Vendor	5	0.2
Shop	34	1.2
Other	33	1.3
Not Stated	17	0.6
Total	365	13.2

Frequency of Use and Type of Alcoholic Beverage Consumed

- With reference to use in the past 30 days, the majority of students consumed beer, Guinness, breezers, and/or wickets “only in social events” (171) or on the “weekends” (55) (see Table 3.1.11). This corresponds to 6.2% and 2.0% of all survey respondents, respectively. Very few (11) current users of alcohol consumed these beverages daily (0.4% of all survey respondents).
- On the other hand, 164 of current users reported that they have “never” consumed wine in the past 30 days (5.9% of all survey respondents); although a considerable proportion of the students (112) who have consumed wine have done so “only in social events” (4.1% of all survey respondents).
- Likewise, a significant number of current users indicated that they have consumed hard liquor, such as rum, rum punch, vodka, and whiskey, “only in social events” (164) or have “never” had hard liquor (88). Overall, this represents 5.9% and 3.2% of all survey respondents, respectively. Only 12 current users reported daily use of hard liquor (0.4% of all students).

Table 3.1.11
Frequency of Use by Type of Alcoholic Beverage for Current Users

Frequency of Use	Type of Alcoholic Beverage					
	Beer, Guinness, Breezers, Wickets		Wine		Hard Liquor (Rum, Vodka, etc.)	
	Number	Percent (n = 2,764)	Number	Percent (n = 2,764)	Number	Percent (n = 2,764)
Daily	11	0.4	5	0.2	12	0.4
Weekends	55	2.0	23	0.8	56	2.0
Some week days	37	1.3	32	1.1	33	1.2
Only in social events	171	6.2	112	4.1	164	5.9
Never	77	2.8	164	5.9	88	3.2
Not Stated	14	0.5	29	1.0	12	0.4
Total	365	13.2	365	13.2	365	13.2

Second Hand Effects of Alcohol

- Although many students did not know whether or not they had ever ridden in a vehicle that was driven by someone who had been drinking alcohol, there were, however, 8.7% of students who said that they were on a bike ridden by such a person; and 27.9% said the same about being in a car.

Table 3.1.12
Respondents' Awareness of Vehicular Driver Being Under the Influence

Response	Have you ever ridden in a vehicle driven by someone who had been drinking alcohol?			
	Bike		Car	
	Number	Percent	Number	Percent
Yes	240	8.7	770	27.9
No	1,872	67.7	1,437	52.0
I do not know	243	8.8	353	12.8
Not stated	409	14.8	204	7.4
Total	2,764	100.0	2,764	100.0

Tobacco

NIDA-reported research identified nicotine as the main addictive ingredient in cigarettes. Nicotine use has been found to activate reward pathways and increases dopamine (feel good hormone) levels.¹⁹ However, other research indicates that smokers may continue smoking to keep high levels of dopamine in their body. Approximately, 90% of smokers start smoking by age 18. More than 6 million smokers under the age of 18 are projected to die prematurely from smoking related reasons. Recent findings suggest that tobacco use among youths may be as a result of biological reasons experienced during this period of increased vulnerability and not merely psychosocial reasons such as peer pressure. Public health researchers claim that cigarette smoking is the leading cause of preventable deaths in the United States.²⁰ After alcohol, tobacco or cigarettes is the most commonly used drug among adolescents, but its consumption has been on the decline since the late 1970s even though there are periods when it remained steady.

Lifetime and Current Use

- Lifetime prevalence of cigarette use ranges from a low of 1.4% for M2 students to a high of 12.2% for S4 students. Overall, 5.2% of the survey respondents have used cigarettes in their lifetime (see Figure 3.1.12).
- Current prevalence of cigarette use ranges from a low of 0.5% for M2 students to a high of 3.9% for S2 and S4 students. Overall, 1.7% of the survey respondents have smoked cigarettes in the past 30 days.

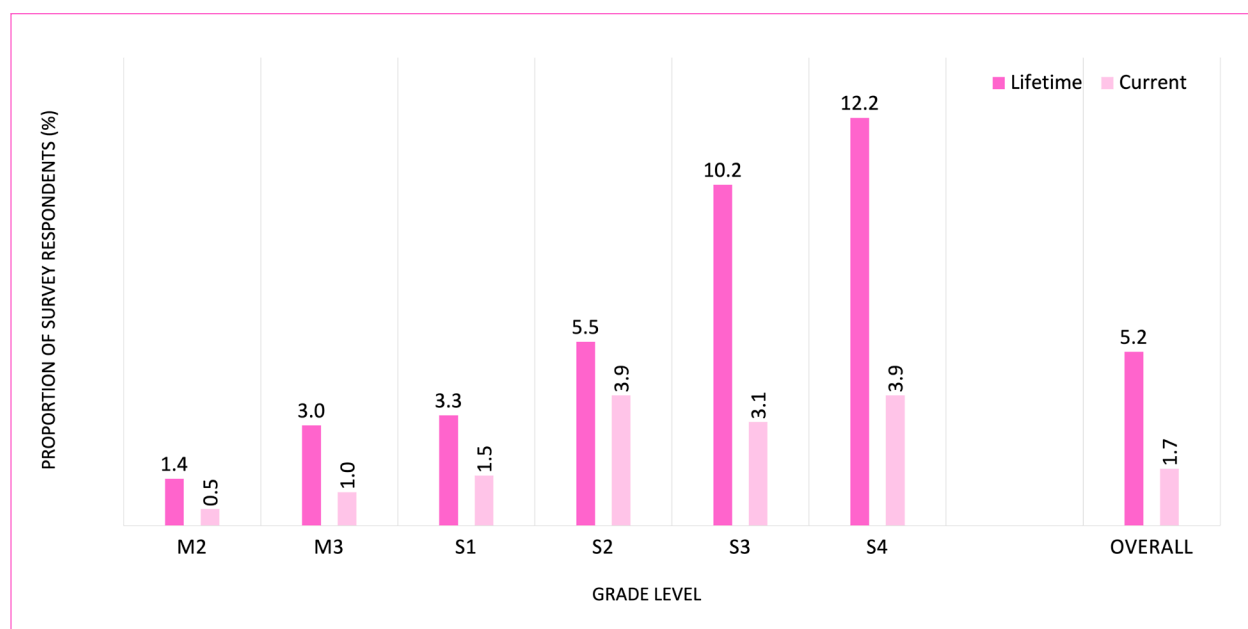


Figure 3.1.12. Lifetime and current use of cigarettes by grade level of survey respondents.

¹⁹ National Institute on Drug Abuse. (2011). *Topics in Brief: Tobacco Addiction*. <http://www.drugabuse.gov/publications/topics-in-brief/tobacco-addiction> (accessed January 28, 2012).

²⁰ L. D. Johnston, et al. (2012). p. 38.

First Use

- Of the lifetime users, most (80) initiated cigarette smoking “more than a year ago” (2.9% of all survey respondents), while nine students smoked cigarettes for the first time “during the past 30 days” (0.3% of all survey respondents). There were 27 students who reported lifetime use of cigarettes/tobacco, but who did not report when they first used this substance.

Table 3.1.13

First Use of Cigarettes for Survey Respondents

First Use	Number	Percent
Never	2,465	89.2
During the past 30 days	9	0.3
More than 1 month ago, less than 1 year	29	1.0
More than a year ago	80	2.9
Not Stated	181	6.5
Total	2,764	100.0

Recent Use

- Eighty-two of the lifetime users of cigarettes have reported smoking cigarettes in the past 12 months. This corresponds to 3.0% of all survey respondents.

Table 3.1.14

Cigarette Use in the Past 12 Months for Survey Respondents

Annual Use	Number	Percent (n = 2,764)
Yes	82	3.0
No	35	1.3
Not Stated	28	1.0
Total	145	5.3

Number of Cigarettes Smoked

- Just under four in five (38) current users of cigarettes have indicated that they smoked “1 to 5” cigarettes per day in the past month (1.4% of all survey respondents). Only three students reported smoking 11 to 20 cigarettes per day in the past month, while four students smoked “more than 20” cigarettes per day.

Table 3.1.15

Number of Cigarettes Smoked in a Day in the Past Month by Current Smokers

Cigarettes	Number	Percent (n = 2,764)
1 to 5	38	1.4
6 to 10	2	0.1
11 to 20	3	0.1
More than 20	4	0.1
Not Stated	1	0.0
Total	48	1.7

Location of Cigarette Smoking

- The majority of current cigarette users reported that they most often smoke “at a friend’s house” (17) and “at home” (9). Overall, this represents 0.6% and 0.3% of all students, respectively. One student reported smoking cigarettes at “school”; while eight students said they smoked “on the corner/block”.

Table 3.1.16

Location Where Current Users Most Often Smoke Cigarettes

Location	Number	Percent (n = 2,764)
At Home	9	0.3
At School	1	0.0
On the Corner/Block	8	0.3
At a Friend’s House	17	0.6
At Sporting Events	1	0.0
At Other Social Events	6	0.2
Other	5	0.2
Not Stated	1	0.0
Total	48	1.7

Source of Cigarettes

- Slightly over half of current users of cigarettes have reported that they usually get it from “friends” (26) and just under three in 10 said they got it from the “shop” (14). Overall, this corresponds to 0.9% and 0.5% of all survey respondents, respectively. Very few current smokers have obtained cigarettes from a “street vendor” (2), or “other relatives” (1).

Table 3.1.17

Source of Cigarettes for Current Users

Source	Number	Percent (n = 2,764)
Friend	26	0.9
Parents	1	0.0
Brother/Sister	-	-
Other Relative(s)	1	0.0
Street Vendor	2	0.1
Shop	14	0.5
Other	3	0.2
Not Stated	1	0.0
Total	48	1.7

Second Hand Smoking

- Just under one in seven students (14.0% or 388) reported that someone smoked tobacco products in their home at least one day in the past week (see Table 3.1.18).
- There were 6.4% (177) of the students who reported that someone smoked every day (seven days) of the past week in their home.
- Almost one in every 13 students (7.6% or 209) reported that someone smoked tobacco products in a vehicle at least one day in the past week (see Table 3.1.18).
- There were 1.7% (47) of the students who reported that someone smoked every day (seven days) of the past week in a vehicle.

Table 3.1.18*Respondents' Exposure to Second Hand Smoking in the Home and in a Vehicle*

Number of Days	How many of past 7 days did someone smoke tobacco products in home?		How many of past 7 days did someone smoke tobacco products in vehicle?	
	Number	Percent	Number	Percent
0 day	2,252	81.5	2,416	87.4
1 day	66	2.4	61	2.2
2 days	49	1.8	38	1.4
3 days	36	1.3	30	1.1
4 days	24	0.9	20	0.7
5 days	20	0.7	10	0.4
6 days	16	0.6	3	0.1
7 days	177	6.4	47	1.7
Not Stated	124	4.5	139	5.0
Total	2,764	100.0	2,764	100.0

Other Drugs

Vaping

In recent years vaping, through the use of e-cigarettes, has become an international public health crisis. This fairly new epidemic, known as vaping, is the inhaling of a vapor which is created by an electronic cigarette or other vaping devices. These battery-powered smoking devices contain cartridges that are filled with liquids such as: nicotine, flavorings, and other chemicals. The liquids are heated into a vapor which is then inhaled creating the term vaping.²¹ This being the first time that e-cigarettes and the prevalence of vaping in Bermuda are being reported, it is important that Bermuda continue to monitor the public health impact of e-cigarette vaping and adolescents. Research has shown that vaping among adolescents has increased over the past five years in the North American region as well as in England, causing concern that these trends will filter down to Bermuda with little knowledge on its correct effects.²² Bermuda, as with the rest of the world, must find the optimal regulatory balance that provides smokers with reasonable access to effective products, while restricting features of such products that appeal to adolescents. This should be the priority for tobacco control and for public health more specifically.

Lifetime Use

- Lifetime prevalence of vaping ranges from a low of 4.1% for M2 to a high of 41.2% for S4 students. Overall, slightly over one in five (22.0%) of the survey respondents have reported vaping in their lifetime.

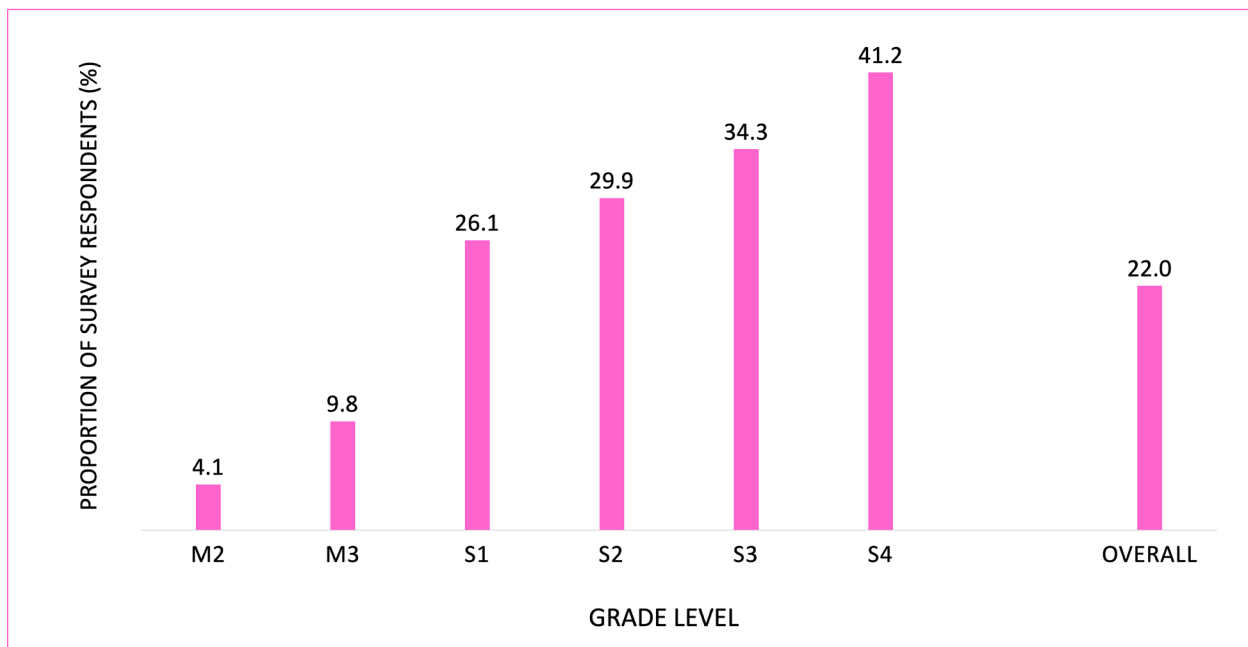


Figure 3.1.13. Lifetime use of vaping by grade level of survey respondents.

²¹ D. Hammond, J.L. Reid, V.L. Rynard, G.T. Fong, K.M. Cummings, A. McNeill et al. (2019). *Prevalence of Vaping and Smoking among Adolescents in Canada, England, and the United States: Repeat National Cross Sectional Surveys*. *BMJ* 2019; 365: 12219. <http://bmj.com/content/365/bmj.12219> (accessed February 3, 2020).

²² L.P. Gordon. (2019). *Vaping: What You Need to Know*. KidsHealth from Nemours. <http://kidshealth.org/en/parents/e-cigarettes.html> (accessed February 3, 2020).

Frequency of Use and Type of Substance Vaped

- With reference to use in their lifetime, the majority (197) of students used “just flavoring” in their vaping devices on one to two occasions, which represents 7.1% of all survey respondents. Fewer students (69) reported vaping “marijuana” on one to two occasions in their lifetime. Overall, this represents 2.5% of all survey respondents. There were 60 students who reported vaping “nicotine” on 40 or more occasions, which represents 2.2% of all survey respondents.

Table 3.1.19
Frequency of Use by Type of Substance Vaped for Lifetime Users

Frequency of Use	Type of Substance					
	Nicotine		Marijuana		Just Flavoring	
	Number	Percent (n = 2,764)	Number	Percent (n = 2,764)	Number	Percent (n = 2,764)
0 Occasions	224	8.1	329	11.9	100	3.6
1-2 Occasions	120	4.3	69	2.5	197	7.1
3-5 Occasions	44	1.6	32	1.2	87	3.1
6-9 Occasions	27	1.0	21	0.8	35	1.3
10-19 Occasions	27	1.0	24	0.9	36	1.3
20-39 Occasions	26	0.9	11	0.4	18	0.7
40 or more Occasions	60	2.2	39	1.4	52	1.9
Not Stated	80	2.9	83	3.0	83	3.0
Total	608	22.0	608	22.0	608	22.0

Access to Vaping Devices

- In terms of the level of difficulty in relation to students’ ability to access a vaping device, the majority (males 15.0% and females 13.2%) of the respondents indicated that they “*can’t say, drug unfamiliar*” (see Table 3.1.20).
- A significant number of male students (379 or 13.7%) reported that they would find it easy (“*fairly*” and “*very easy*”) to access a vaping device. Likewise, a large number of female students (453 or 16.4%) reported the same. On the other hand, more female students (261 or 9.4%) indicated that it would be difficult (“*very difficult*” and “*fairly difficult*”) to access a vaping device in comparison to their male counterparts (206 or 7.5%).

Table 3.1.20
Difficulty Level in Accessing a Vaping Device by Sex of Respondent

Difficulty Level	Male		Female	
	Number	Percent (n = 2,764)	Number	Percent (n = 2,764)
Probably Impossible	176	6.4	201	7.3
Very Difficult	88	3.2	103	3.7
Fairly Difficult	118	4.3	158	5.7
Fairly Easy	215	7.8	311	11.3
Very Easy	164	5.9	142	5.1
Can't Say, Drug Unfamiliar	415	15.0	364	13.2
Not Stated	116	4.2	135	4.9
Total	1,292	46.7	1,414	51.2

Marijuana

While it is clear that in many countries of the world marijuana or cannabis use is not as popular as alcohol and tobacco it is usually the first illegal drug, and is the most widely used illegal drug, used by teens around the world.²³ The average age of first use in many Western countries is around 14-15 years old. The average age of use among developing countries seems to be a bit older. While it is true that boys are more likely to use marijuana, alcohol, and tobacco than girls, the gap is closing in many countries. Further, street youths are more likely to use marijuana and more heavily than “mainstream” youth. A review of addiction studies show that use of cannabis in youth is related to one or more of the following: truancy, low self-esteem, delinquent behaviours (stealing, vandalism, etc.), having delinquent friends, hanging out on the streets in boredom, and other behavioural/mental health issues.²⁴

Lifetime and Current Use

- Lifetime prevalence of marijuana use ranges from a low of 2.2% for M2 students to a high of 40.1% for S4 students. Overall, 18.3% of the survey respondents (nearly one in every five) have used marijuana in their lifetime.
- Current prevalence of marijuana use ranges from a low of 0.7% for M2 students to a high of 17.5% for S3 students. Overall, 7.6% (almost one in every 13) of the survey respondents have used marijuana in the past 30 days.

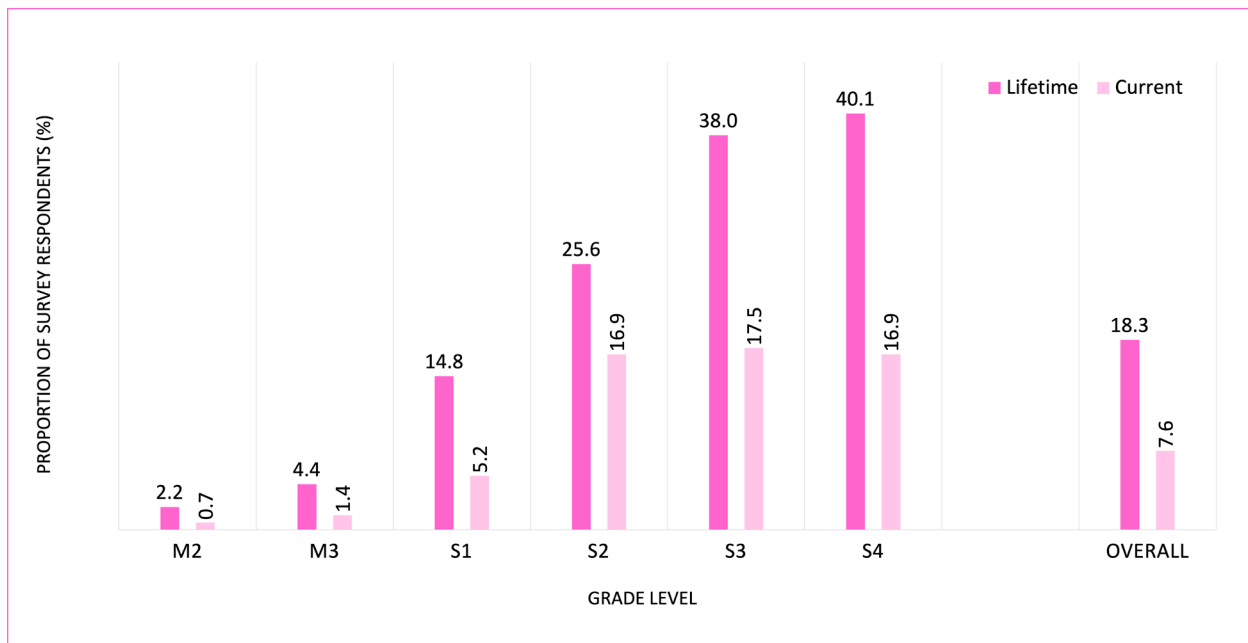


Figure 3.1.14. Lifetime use of vaping by grade level of survey respondents.

²³ The Global Youth Network. (Unknown). *Drug Trends. Cannabis: A Few Issues*. http://www.unodc.org/youthnet/en/youthnet_youth_drugs_trends_cannabis.html (accessed January 28, 2012).

²⁴ I. P. Spruit (Ed.). (2002). *Cannabis 2002 Report*. p. 20. Ministry of Public Health of Belgium. http://www.cpha.ca/uploads/portals/substance/Cannabis_report_2002.pdf (accessed January 28, 2012).

First Use

- Of the lifetime users, most (276) tried marijuana for the first time “*more than a year ago*” (10.0% of all survey respondents), while 48 students have tried it for the first time “*during the past 30 days*” (1.7% of all survey respondents). There were 69 students who reported lifetime use of marijuana, but did not state when they first used it.

Table 3.1.21

First Use of Marijuana for Survey Respondents

First Use	Number	Percent
Never	2,216	80.2
During the past 30 days	48	1.7
More than 1 month ago, less than 1 year	113	4.1
More than a year ago	276	10.0
Not Stated	111	4.0
Total	2,764	100.00

Recent Use

- The majority of lifetime users of marijuana (361) have reported using marijuana in the past 12 months. This corresponds to 13.0% of all survey respondents.

Table 3.1.22

Marijuana Use in the Past 12 Months for Survey Respondents

Annual Use	Number	Percent (n = 2,764)
Yes	361	13.0
No	64	2.3
Not Stated	81	2.9
Total	506	18.3

Frequency of Use

- The majority (124) of lifetime users have indicated using marijuana “*sometimes in the past 12 months*”. This represents 4.5% of all survey respondents. Only 2.5% of all survey respondents reported using marijuana “*only once*” and 1.3% who said “*daily*”.

Table 3.1.23

Frequency of Marijuana Use for Lifetime Users

Frequency of Use	Number	Percent (n = 2,764)
Only once	68	2.5
Sometimes in the past 12 months	124	4.5
Sometimes during the month	71	2.6
Sometimes during the week	65	2.4
Daily	37	1.3
Not Stated	141	5.1
Total	506	18.3

Location of Use

- The majority of lifetime marijuana users reported that they most often use it “at a friend’s house” (137), “at home” (91), or “at other social events” (55). Overall, this represents 5.0%, 3.3%, and 2.0% of all students, respectively. Very few of these students have reported using marijuana “at school” (5) or “at sporting events” (2).

Table 3.1.24

Location Where Lifetime Users Most Often Use Marijuana

Location	Number	Percent (n = 2,764)
At Home	91	3.3
At School	5	0.1
At the Corner/Block	47	1.7
At a Friend’s House	137	5.0
At Sporting Events	2	0.1
At Other Social Events	55	2.0
Other	17	0.6
Not Stated	152	5.5
Total	506	18.3

Source of Marijuana

- Nearly half of the lifetime marijuana users have reported that they usually get it from “friends” (246), while 49 students got marijuana from a “street pusher”. Overall, this corresponds to 8.9% and 1.8% of all survey respondents, respectively. Very few lifetime marijuana users have obtained the marijuana from their “parents” (7) or siblings (7).

Table 3.1.25

Source of Marijuana for Lifetime Users

Source	Number	Percent (n = 2,764)
Friend	246	8.9
Parents	7	0.3
Brother/Sister	7	0.3
Other Relative(s)	16	0.6
Street Pusher	49	1.8
Other	25	0.9
Not Stated	156	5.6
Total	506	18.3

Inhalants

Inhalants are household products which are either “sniffed” through the nose or “huffed” through the mouth, for example, paint, glue, diesel fuel. The effects are similar to getting drunk on alcohol but some experience something like hallucinations.²⁵ They can give an almost immediate high. Children are more likely to be users than adults. Poor children, school drop-outs, street children, and disengaged youths are more susceptible to inhalant use. Inhalants are often the first substance used by many children and adolescents because they are often the easiest drugs for them to obtain and not as costly as other drugs. Various studies around the world have shown that less than 10% of the general youth population has used inhalants. Inhalants are the only substance used by young people where use typically peaks in pre-adolescence and goes down through the teen years. The health consequences of inhalant use can be substantial. Reported long-term use effects include organ damage (liver, kidney, bone marrow, heart) and, in the case of gasoline sniffing, lead poisoning. Risk of injury or death is great with inhalant abuse. While continued inhalant abuse is in itself a serious concern, young inhalant abusers are at risk for getting involved in other harmful substance use.

Lifetime and Current Use

- Lifetime prevalence of inhalant use ranges from a low of 5.6% for S4 students to a high of 12.7% for S1 students. Overall, 10.2% of the survey respondents have used inhalants in their lifetime (see Figure 3.1.15).
- Current prevalence of inhalant use ranges from a low of 0.6% for M3 students to a high of 3.7% for M2 students. Overall, current inhalant use is prevalent among 2.2% of all survey respondents.



Figure 3.1.15. Lifetime and current use of marijuana by grade level of survey respondents.

²⁵ World Health Organization. (1999). *Volatile solvents abuse: A global overview*. Substance Abuse Department Geneva, Switzerland: World Health Organization. p. 54. http://www.unodc.org/pdf/youthnet/trends_five.pdf (accessed January 28, 2012).

First Use

- Of the lifetime users, most (137) tried inhalants for the first time “*more than a year ago*” (5.0% of all survey respondents), while 46 students have tried it for the first time “*in the past 30 days*” (1.7% of all survey respondents). There were 73 students who reported lifetime use of inhalants, but who did not report when they first used it.

Table 3.1.26

First Use of Inhalants for Survey Respondents

First Use	Number	Percent
Never	2,438	88.2
In the past 30 days	46	1.7
More than 1 month ago, less than 1 year	27	1.0
More than a year ago	137	5.0
Not Stated	116	4.2
Total	2,764	100.0

Recent Use

- Similar to the other substances previously discussed, most lifetime inhalant users (102) were also recent users of this drug. This corresponds to 3.7% of all survey respondents. In contrast, 77 of the lifetime users of inhalants have reported not using inhalants in the past 12 months (2.8% of all survey respondents).

Table 3.1.27

Inhalant Use in the Past 12 Months for Survey Respondents

First Use	Number	Percent (<i>n</i> = 2,764)
Yes	102	3.7
No	77	2.8
Not Stated	104	3.8
Total	283	10.2

Frequency of Use

- The majority (33) of recent users who responded to this survey item have indicated using inhalants “*sometimes in the past 12 months*”. This represents 1.2% of all survey respondents. Only six students or 0.2% of all survey respondents reported daily use of inhalants.

Table 3.1.28

Frequency of Inhalant Use for Lifetime Users

Frequency of Use	Number	Percent (<i>n</i> = 2,764)
Only once	30	1.1
Sometimes in the past 12 months	33	1.2
Sometimes during the month	9	0.3
Sometimes during the week	19	0.7
Daily	6	0.2
Not Stated	186	6.7
Total	283	10.2

Other Illegal Drugs

Cocaine

- Lifetime prevalence of cocaine use ranges from a low of 0.4% for S1 students to a high of 2.1% for S4 students. Overall, 1.0% of all survey respondents have used cocaine in their lifetime.
- Current prevalence of cocaine use by survey respondents is low, with 0.2% for S1 students to a high of 1.2% for S2 students. Overall, 0.3% of all survey respondents have used cocaine in the past 30 days.

Crack

- Lifetime prevalence of crack use ranges from a low of 0.2% for S1 students to a high of 1.9% for S2 students. Overall, 0.7% of all survey respondents have used crack in their lifetime.
- Current prevalence of crack use by survey respondents is low, with 0.3% for M2 and S4 students to 1.2% for S2 students. Overall, only 0.3% of all survey respondents have used crack in the past 30 days.

Ecstasy

- Lifetime prevalence of ecstasy use ranges from a low of 0.2% for M3 students to a high of 5.3% for S4 students. Overall, 1.8% of all survey respondents have used ecstasy in their lifetime.
- Current prevalence of ecstasy use by survey respondents is low, ranging from a low of 0.2% for M2 and S1 students to a high of 2.7% for S4 students. Overall, only 0.7% of all survey respondents have used ecstasy in the past 30 days.

Heroin

- Lifetime prevalence of heroin use ranges from a low of 0.2% for M2 and M3 students to a high of 1.7% for S2 students. Overall, 0.8% of all survey respondents have used heroin in their lifetime.
- Current prevalence of heroin use by survey respondents is low, ranging from a low of 0.2% for M2 and S1 students to a high of 0.6% for S2 and S4 students. Overall, only 0.2% of all survey respondents have used heroin in the past 30 days.

Cannabis Resin

- Lifetime prevalence of cannabis resin use ranges from a low of 0.2% for M3 students to a high of 10.7% for S3 students.
- Overall, 4.4% of all survey respondents have used cannabis resin in their lifetime.

Hashish

- Lifetime prevalence of hashish use ranges from a low of 0.2% for M2 students to a high of 7.9% for S3 students.
- Overall, 3.4% of all survey respondents have used hashish in their lifetime.

Other

- Lifetime prevalence of “other” drug use (apart from those drugs previously mentioned) ranges from a low of 0.9% for S4 students to a high of 4.5% for S2 students.
- Overall, 2.2% of all survey respondents have reported use of some “other” drug (including Adderall, among others) in their lifetime.
- Current prevalence of “other” drug use ranges from a low of 0.3% for M2 students to a high of 1.5% for S2 students.
- Overall, only 1.0% of all survey respondents have indicated use of some “other” drug in the past 30 days.

Synthetic Drugs

Synthetic drugs have risen in popularity all over the world, especially among teens and young adults. In comparison to other substances they are cheap and mimic the effects of popular street drugs. The composition of synthetic drugs are continually being altered to avoid federal laws, making it hard to determine what substance is actually in the packages being sold. Due to the ever changing composition, there is no true way to investigate the long-term effects. It is important to note, that these drugs are dangerous and potentially lethal. Unfortunately too many teens are trying synthetic drugs. Research shows that 17 percent of teens in the United States have tried designer drugs, and one in nine high school seniors have used synthetic marijuana²⁶. In the designer drug industry it's not about the welfare of our youth, or the quality and research behind the product, rather it's all about the money and this multibillion-dollar industry is booming. Designer drugs are often manufactured in an underground unsterile laboratory overseas or in someone's basement just down the street.

With all of the dangers associated with synthetic designer drugs, one may wonder what the popularity is with teenagers; what makes these drugs so attractive. Unlike, many other substances, synthetic drugs often go undetected in drug tests and are relatively cheap and easy to get. While agencies such as, the Drug Enforcement Agency (DEA) continue to add synthetic chemicals to Schedule I of the Controlled Substance Act in the United States, the laws are difficult to enforce because drug manufacturers are continuously altering the chemical compositions to skate around the laws.

Grabba

- Grabba is the slang term for unprocessed tobacco leaves.²⁷
- Lifetime prevalence of Grabba use ranges from a low of 0.2% for M3 students to a high of 4.5% for S3 students.
- Overall, 2.1% of all survey respondents have used Grabba in their lifetime.

Amphetamines and Methamphetamines

- Lifetime prevalence of amphetamines and methamphetamines use ranges from a low of 0.2% for M2 students to a high of 1.8% for S4 students.
- Overall, 0.9% of all survey respondents have used amphetamines and methamphetamines in their lifetime.

Amphetamine- type Stimulant

- Lifetime prevalence of amphetamine-type stimulant use ranges from a low of 1.5% for S2 students to a high of 3.0% for S4 students.
- Overall, 0.9% of all survey respondents have used amphetamine-type stimulant in their lifetime.

GHB

- Lifetime prevalence of GHB use ranges from a low of 0.2% for M2 and S1 students to a high of 1.1% for S2 students.
- Overall, 0.5% of all survey respondents have used GHB in their lifetime.

Ketamine

- Lifetime prevalence of ketamine use ranges from a low of 0.2% for M2 students to a high of 1.9% for S2 students.

²⁶ Lohmann C. Raychelle. (2019). *Lethally High: Teenagers and Synthetic Drugs*. <https://www.rehabs.com/pro-talk/lethally-high-teenagers-and-synthetic-drugs/> (accessed May 15, 2020).

²⁷ Jamaican Patwah. (2020). *Definitions of "Grabba"*. <https://jamaicanpatwah.com/term/Grabba/1372#.XsvjDLpFzN8> (accessed May 25, 2020).

- Overall, 0.8% of all survey respondents have used ketamine in their lifetime.

Beedi

- Beedi is a thin cigarette or mini-cigar filled with tobacco flake²⁸.
- Lifetime prevalence of beady use ranges from a low of 0.3% for M2 students to a high of 1.8% for S3 students.
- Overall, 0.9% of all survey respondents have used beady in their lifetime.

Analgesics

- Lifetime prevalence of analgesics use ranges from a low of 0.2% for M2 students to a high of 5.3% for S4 students.
- Overall, 2.4% of all survey respondents have used analgesics in their lifetime.

Poppers

- Poppers are a liquid drug that can be inhaled such as amyl nitrate, butyl nitrate²⁹.
- Lifetime prevalence of poppers use ranges from a low of 0.2% for M3 students to a high of 1.3% for S2 and S3 students.
- Overall, 0.5% of all survey respondents have used poppers in their lifetime.

Hallucinogens

- Lifetime prevalence of hallucinogens use ranges from a low of 0.2% for M2 students to a high of 3.4% for S2 students.
- Overall, 1.1% of all survey respondents have used hallucinogens in their lifetime.

²⁸ Wikipedia (2020). *Beedi*. <https://en.wikipedia.org/wiki/Beedi> (accessed May 25, 2020).

²⁹ Leonard, J. (2020). *Is Amyl Nitrate Safe?* <https://www.medicalnewstoday.com/articles/324000> (accessed May 25, 2020).

Prescription Drug Use

In recent years the non-medical use of prescription drugs (controlled substances which cannot be legally bought or sold without a doctor’s prescription) has emerged as a major public health issue. Studies on youth drug abuse prevalence data, have reported increases in the un-authorized use of prescription drugs.³⁰ This trend is particularly troubling given the adverse health consequences related to prescription drug abuse, which include addiction and physical dependence, and the possibility of overdose.

Despite these concerns, researchers are still in the early stages of developing measures to accurately assess the prevalence of prescription drug abuse. If anonymity is ensured, most students will honestly and accurately report their use of alcohol, tobacco, marijuana, and other easily recognised categories of illicit drugs. The measurement of prescription drug use, however, is more complex. There are many prescription medicines that are subject to abuse, making it impossible to present an exhaustive list. Also, respondents may have difficulty identifying the names of prescription drugs they have used, and may have difficulty distinguishing between prescription and over-the-counter medications.

With these challenges in mind, this round of the survey asked two sets of questions – one set specific to tranquilizer use (for example, Valium, Xanax) and another set asked about stimulant use (for example, Ritalin, Adderall, pseudoephedrine). These two categories are among the most likely to be abused along with pain relievers. Each set of questions was accompanied by examples of some of the best known drugs within that category and which are usually most commonly used by students. The behaviour reported in this section excludes any use under medical supervision.

Tranquilizers

Lifetime and Current Use

- Lifetime use of tranquilizers (without medical prescription) ranges from a low of 0.2% for M3 students to a high of 1.9% for S2 students. Overall, 0.8% of all survey respondents have used tranquilizers without medical prescription in their lifetime (see Table 3.1.29).
- Current use of tranquilizers (without medical prescription) ranges from a low of 0.3% for M2 and S4 students to a high of 1.5% for S2 students. Overall, current use of tranquilizers without medical prescription is prevalent among 0.4% of all survey respondents (see Table 3.1.30).

Table 3.1.29

Lifetime Use of Prescription Drugs by Grade Level of Survey Respondent

Substance	Grade Level						Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	
	%	%	%	%	%	%	
Tranquilizers	-	0.2	0.4	1.9	1.8	1.2	0.8
Stimulants	0.5	0.5	1.0	2.1	2.4	5.0	0.9

³⁰ L. D. Johnston, et al. (2012). p. 6.

Table 3.1.30*Current Use of Prescription Drugs by Grade Level of Survey Respondent*

Substance	Grade Level						Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	
	%	%	%	%	%	%	
Tranquilizers	0.3	-	-	1.5	-	0.3	0.4
Stimulants	0.2	0.2	0.2	0.9	1.3	2.1	0.7

Stimulants

Lifetime and Current Use

- Lifetime prevalence of stimulant use (without medical prescription) ranges from a low of 0.5% for M2 and M3 students to a high of 5.0% for S4 students. Overall, 0.9% of all survey respondents have used stimulants without medical prescription in their lifetime.
- Current prevalence of stimulant use (without medical prescription) ranges from a low of 0.2% for M2, M3, and S1 students to a high of 2.1% for S4 students. Overall, current use of stimulants without medical prescription is prevalent among 0.7% of all survey respondents.

Energy Drinks

Consumption of energy drinks (beverages with caffeine content ranging from 50 mg to 505 mg per can or bottle³¹) appear to be prevalent among today's youths. Popular brands such as Red Bull, Monster, SoBe, etc., all target young consumers. Also increasing in popularity is the practice of mixing alcoholic beverages with energy drinks. Research has shown that individuals who have a high frequency of energy drink consumption are at increased risk of engaging in episodes of heavy drinking and developing alcohol dependence.³² In addition, research has highlighted the dangers of combining energy drinks with alcohol.³³ The subsequent sections will show the prevalence and frequency of energy drink use, situations for which energy drinks are used, and the means by which energy drinks are obtained for both lifetime and current (last 30 days) use.

Lifetime and Current Use

- Lifetime prevalence-of-use of energy drinks ranges from a low of 37.3% for M2 students to a high of 63.5% for S4 students. Overall, slightly over half (51.8%) of the survey respondents have reported using energy drinks in their lifetime.
- Current prevalence-of-use of energy drinks ranges from a low of 10.7% for M2 students to a high of 23.6% for S1 students. Overall, about one-fifth (19.2%) of the survey respondents have used energy drinks in the past 30 days.

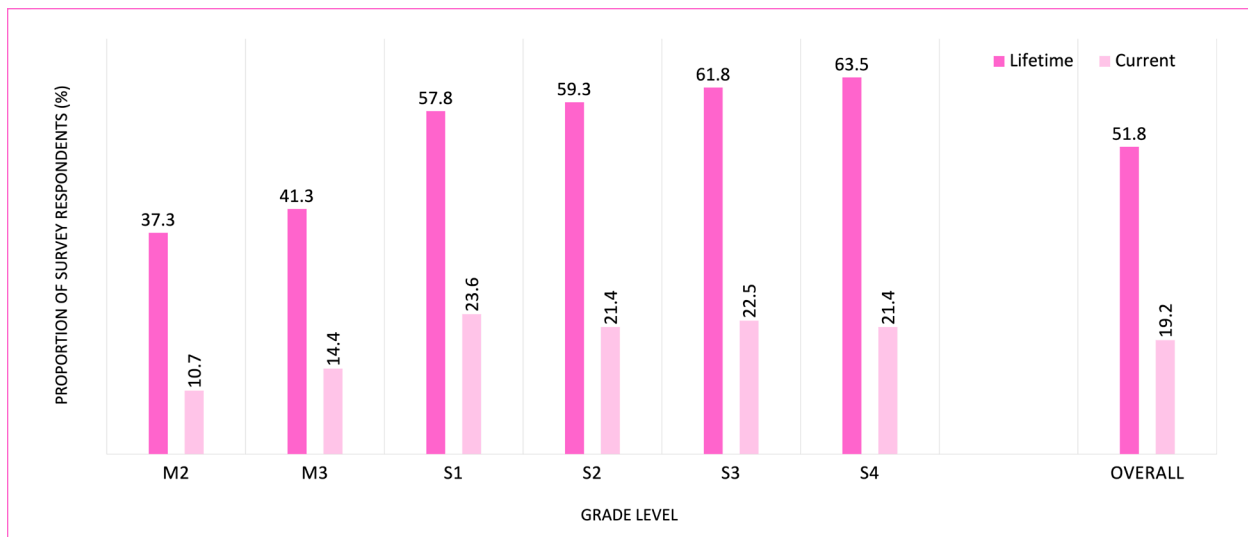


Figure 3.1.16. Lifetime and current use of energy drinks by grade level of survey respondents.

³¹ C. J. Reissig, E. C. Strain, & R. R. Griffiths. (2009). Caffeinated energy drinks – a growing problem. *Drug and Alcohol Dependence*, 99(1–3), 1–10. p. 1. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2735818/pdf/nihms90556.pdf> (accessed January 23, 2012).

³² A. M. Arria, K. M. Caldeira, S. J. Kasperski, K. B. Vincent, R. R. Griffiths, & K. E. O'Grady. (2011). Energy Drink Consumption and Increased Risk for Alcohol Dependence. *Alcoholism: Clinical and Experimental Research*, 35, 365–375. doi: 10.1111/j.1530-0277.2010.01352.x. p. 365. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3058776/pdf/nihms-240328.pdf> (accessed January 18, 2012)

³³ Reissig, et al. (2009) p. 6; A. M. Arria, K. M. Caldeira, S. J. Kasperski, K. E. O'Grady, K. B. Vincent, R. R. Griffiths, & E. D. Wish. (2010). Increased alcohol consumption, nonmedical prescription drug use, and illicit drug use are associated with energy drink consumption among college students. *J Addict Med*, 4(2), 74–80. doi:10.1097/ADM.0b013e3181aa8dd4. p. 3. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2923814/pdf/nihms115856.pdf> (accessed January 23, 2012); M. C. O'Brien, T. P. McCoy, S. D. Rhodes, A. Wagoner, & M. Wolfson. (2008). Caffeinated cocktails: Energy drink consumption, high-risk drinking, and alcohol-related consequences among college students. *Academic Emergency Medicine*, 15(5). 453–460. p. 453. <http://onlinelibrary.wiley.com/doi/10.1111/j.1553-2712.2008.00085.x/pdf> (accessed January 23, 2012).

Circumstances of Use

Most students (666 or 46.5%) who reported that they have used energy drinks in their lifetime indicated that they used these drinks “before or after sporting activity”. This corresponds to 24.1% of all survey respondents or nearly one in every four students. Approximately 35.3% (505) of lifetime users consumed energy drinks “while hanging out”, whereas, only 15.9% (228) reported that they used energy drinks “while studying”. Similar circumstances of use have been reported by current users of energy drinks where 342 or 64.3% of current users consume energy drinks “before or after sporting activity”, while 267 or 50.2% use these drinks “while hanging out”. Only 160 (30.1%) of current users consumed energy drinks “while studying”. Overall, in terms of all survey respondents, this corresponds to 12.4% of students who reported using energy drinks “before or after sporting activity”, 9.7% “while hanging out”, and 5.8% “while studying”.

Table 3.1.31
Circumstance of Use of Energy Drinks for Lifetime and Current Users

Lifetime Users (n = 1,432)			
Circumstance of Use	Yes	No	Not Stated
While studying	228	733	471
Before or after sporting activity	666	425	341
While hanging out	505	516	411
Current Users (n = 532)			
Circumstance of Use	Yes	No	Not Stated
While studying	160	233	139
Before or after sporting activity	342	104	86
While hanging out	267	149	116

Prevalence of Combining Energy Drinks with Alcoholic Beverages

Table 3.1.32 shows that of those students who have consumed energy drinks in their lifetime, the majority (75.0%) have not consumed a mixture of these drinks with alcoholic beverages; whereas, over one in every ten (13.6%) of these students has consumed a mixture (see Figure 3.1.17). This therefore means that 7.1% of all survey respondents (195 of 2,764) have consumed a mixture of energy drinks with alcoholic beverages in their lifetime.

Similarly, of the current users, 73.3% have not consumed a mixture, while about one-fifth (19.7%) have reported mixing energy drinks with alcoholic beverages and consuming these mixtures (see Figure 3.1.18). This corresponds to 3.8% of all survey respondents (105 of 2,764) who consumed a combination of energy drinks and alcoholic beverages.

Table 3.1.32
Prevalence of Combining Energy Drinks with Alcoholic Beverages

Frequency of Use	Lifetime Users		Current Users	
	Number	Percent	Number	Percent
Yes	195	13.6	105	19.7
No	1,074	75.0	390	73.3
I don't know	68	4.7	32	6.0
Not Stated	95	6.6	5	0.9
Total	1,432	100.0	532	100.0

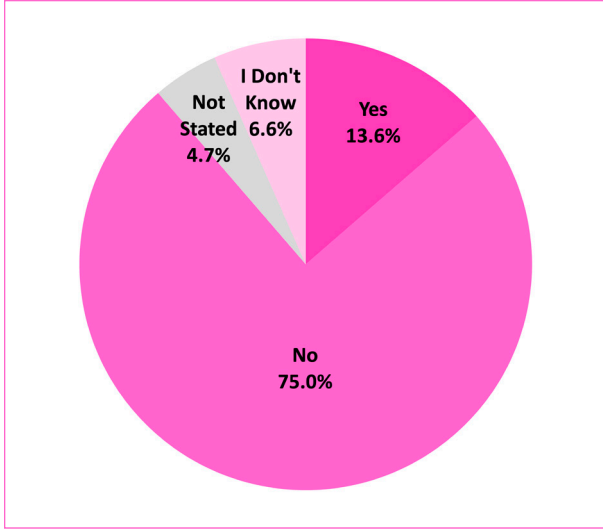


Figure 3.1.17: Prevalence of combining energy drinks with alcoholic beverages among lifetime users of energy drinks.

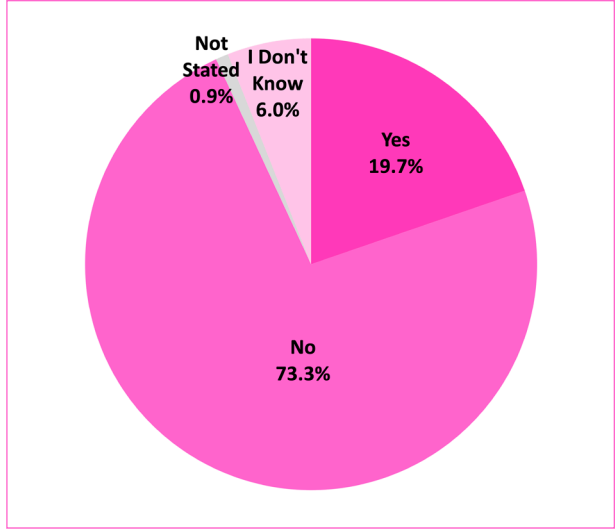


Figure 3.1.18: Prevalence of combining energy drinks with alcoholic beverages among current users of energy drinks.

3.1.7 Access to Drugs

- Apart from alcohol, which is legal for persons 18 years or older; marijuana seemed to be the easiest drug to obtain as indicated by 35.4% of all student respondents.
- Most students reported that heroin (26.8%) and crack (25.9%) are the drugs most “impossible to obtain”.

Table 3.1.33
Ease of Access to Drugs by Proportion of Survey Respondents

<i>(n = 2,764)</i>					
Ease of Access	Alcohol	Marijuana	Cocaine	Crack	Heroin
	%	%	%	%	%
Easy	63.0	35.4	5.5	4.9	4.6
Difficult	13.7	22.3	25.4	22.5	19.0
Impossible to Obtain	5.5	10.9	24.6	25.9	26.8
Don't Know	16.5	30.2	43.1	45.3	48.1
Not Stated	1.2	1.3	1.5	1.4	1.5

- About one in seven (14.9%) students reported that he/she was offered to buy or consume marijuana in the last 30 days, while 9.9% had this offer within the last year. In comparison, 16.8% of the students were offered to buy or use alcohol during the 30 days prior to the survey and 16.3% had this offer within the year.
- The majority of students reported that they have “never been offered” to buy or consume any of the drugs for which they were questioned.

Table 3.1.34
Last Offer to Buy or Use Drugs by Proportion of Survey Respondents

<i>(n = 2,764)</i>					
Last Offer to Buy or Use	Alcohol	Marijuana	Cocaine	Crack	Heroin
	%	%	%	%	%
During the last 30 days	16.8	14.9	1.1	0.8	1.0
More than a month ago, but less than a year ago	16.3	9.9	1.7	0.7	0.6
More than a year ago	8.9	4.7	1.3	1.0	0.9
I have never been offered	56.4	69.0	94.0	95.7	95.8
Not Stated	1.6	1.6	1.9	1.8	1.8

- When students were asked about their curiosity to try an illicit drug, 65.3% reported “No”, while 19.1% or nearly one in five students said “Yes”.
- When asked if they would try an illicit drug if given the opportunity, 71.3% said “No”, whereas only 9.0% or nearly one in 10 students indicated “Yes”.

Table 3.1.35
Proportion of Survey Respondents Curious About Trying or Seizing Opportunity to Try Illicit Drugs

<i>(n = 2,764)</i>		
Responses	Curious	Seize Opportunity
	%	%
No	65.3	71.3
Not sure	14.5	18.3
Yes	19.1	9.0
Not Stated	1.1	1.4

3.1.8 Perception of Health Risk

Perception of health risk is an important determinant in the decision-making process young people consider when deciding whether or not to use ATODs. Research has shown a consistent negative correlation between perception of health risk and the level of reported ATOD use.³⁴ That is, generally when the perceived risk of harm is high, reported frequency of use is low. Evidence also suggests that perceptions of risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns.³⁵ Table 3.1.36 shows the proportion of students at each grade level and overall for the survey who perceived various risks as “harmful”. Harmful, in this instance, is taken to be the sum of the ratings “slightly harmful”, “moderately harmful”, and “very harmful”. Table 3.1.37 and Figure 3.1.19 present the prevalence for all of the survey’s respondents who assigned their perception of the risk level of harm to various drug use behaviour that occur either “sometimes” or “frequently”. These survey items form the risk factor scale Low Perceived Risks of Drug Use.

Table 3.1.36
Percentage of Survey Respondents by Grade Level Who Reported Perception of Health Risk

Health Risk	Grade Level*							Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	NS (n = 8)	
	%	%	%	%	%	%	%	
Drinking alcoholic beverages frequently	93.1	94.4	91.9	93.2	88.2	91.1	75.0	92.2
Getting Drunk	91.2	94.0	90.8	87.8	87.2	86.4	50.0	89.8
Smoking cigarettes frequently	95.3	97.8	94.6	94.5	91.9	93.2	75.0	94.6
Smoking marijuana sometimes	87.1	90.0	78.7	67.0	59.4	60.5	50.0	75.6
Smoking marijuana frequently	89.0	94.0	84.8	78.0	74.8	73.3	75.0	83.3

- The majority of students (94.6%) perceived “smoking cigarettes frequently” to be the most harmful behaviour when compared to alcohol or marijuana use, where “smoking marijuana sometimes” is perceived to be harmful by 75.6% of the respondents.
- The rating of “Getting drunk” as being harmful ranges from a low of 86.4% by S4 students to a high of 94.0% by M3 students.
- The harmful risk rating of “Smoking marijuana frequently” ranges from a low of 73.3% by S4 students to a high of 94.0% for M3 students.

³⁴ J. Bejarano, G. Ahumada, G. Sa´nchez, N. Cadenas, M. de Marco, M. Hynes, & F. Cumsille. (2011). Perception of risk and drug use: An exploratory analysis of explanatory factors in six Latin American countries. *The Journal of International Drug, Alcohol and Tobacco Research*, 1(1), 9–17. p. 16. <http://www.idatjournal.com/issues/Perception%20of%20Risk%20and%20Drug%20Use%20An%20Exploratory%20Analysis%20of%20Explanatory%20Factors%20in%20Six%20Latin%20American%20Countries.pdf> (accessed February 10, 2012).

³⁵ L. D. Johnston, et al. (2011). p. 345.

Table 3.1.37
Perception of Health Risk by Proportion of Survey Respondents

<i>(n= 2,764)</i>						
Health Risk	Not Harmful	Slightly Harmful	Moderately Harmful	Very Harmful	Don't Know	Not Stated
	%	%	%	%	%	%
Smoking cigarettes sometimes	1.9	13.3	43.0	36.9	3.3	1.6
Smoking cigarettes frequently	1.0	1.4	8.0	85.2	2.9	1.4
Drinking alcoholic beverages frequently	2.5	13.9	31.8	46.5	3.6	1.8
Getting drunk	3.5	13.7	26.9	49.2	4.8	2.0
Taking tranquilizers/stimulants without medical prescription sometimes	1.5	4.0	24.1	55.4	13.0	2.0
Taking tranquilizers/stimulants without medical prescription frequently	1.2	1.9	7.6	73.8	13.0	2.5
Inhaling solvents sometimes	1.7	9.9	32.7	37.3	16.2	2.3
Inhaling solvents frequently	1.8	3.9	13.8	62.0	15.2	3.3
Smoking marijuana sometimes	16.8	19.4	25.4	30.8	5.6	2.0
Smoking marijuana frequently	9.2	11.9	17.6	53.8	5.4	2.1
Consuming cocaine sometimes	1.2	3.4	19.7	68.5	5.1	2.1
Consuming cocaine frequently	1.2	0.8	4.1	86.9	5.2	1.8
Consuming crack sometimes	1.2	2.5	17.1	69.9	7.4	2.0
Consuming crack frequently	1.1	0.9	4.2	84.0	7.7	2.0
Consuming ecstasy sometimes	1.7	4.3	16.9	55.0	19.6	2.5
Consuming ecstasy frequently	1.3	1.4	6.8	68.7	18.5	3.2
Inhaling second hand cigarette smoke	3.2	25.1	27.8	35.4	6.3	2.2
Inhaling second hand marijuana smoke	14.3	19.8	23.5	32.2	8.3	1.9

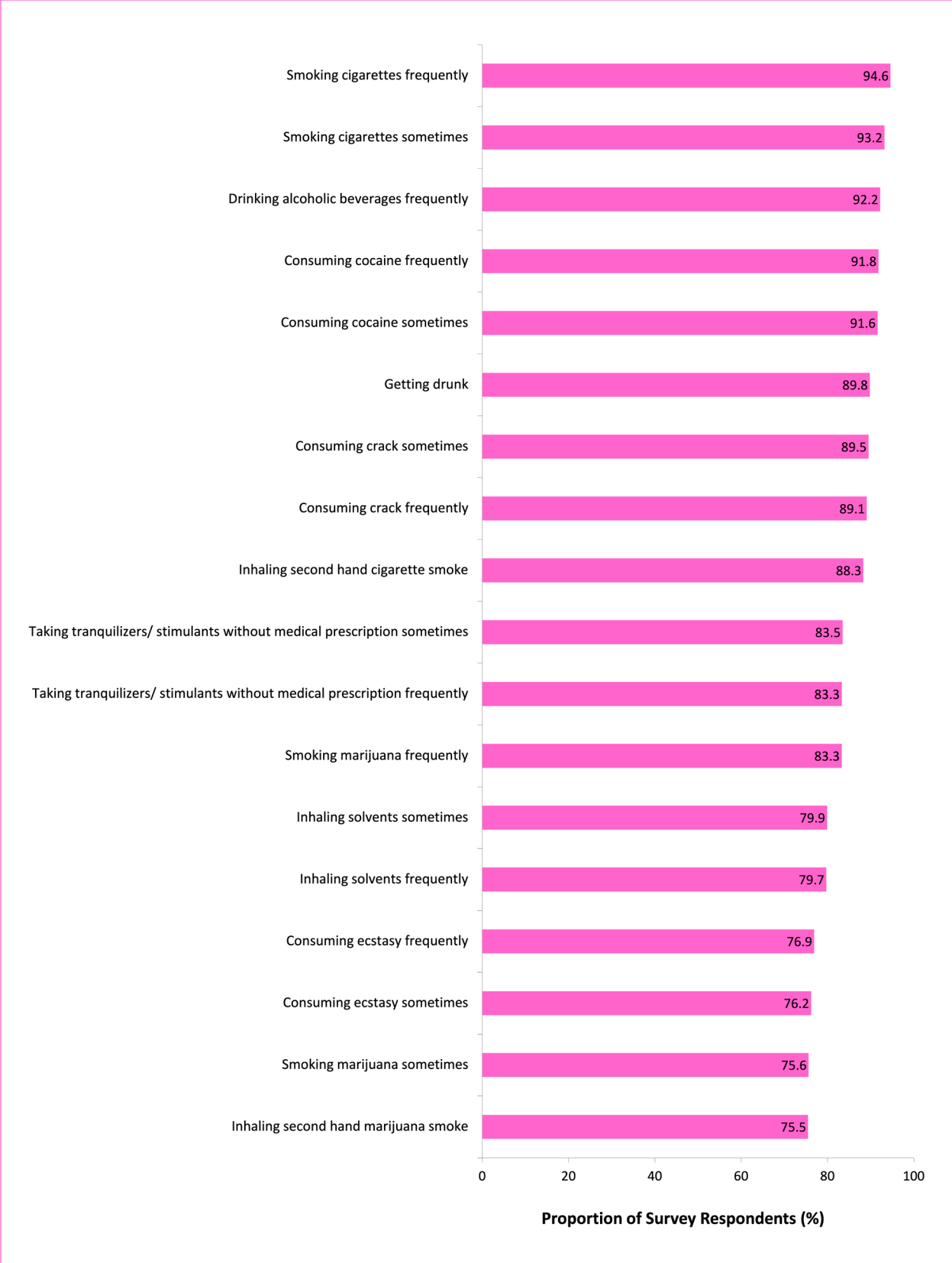


Figure 3.1.19. Harmful rating of health risk behaviours by survey respondents.

3.1.9 Perception of Drug Use at School or in Surrounding Area

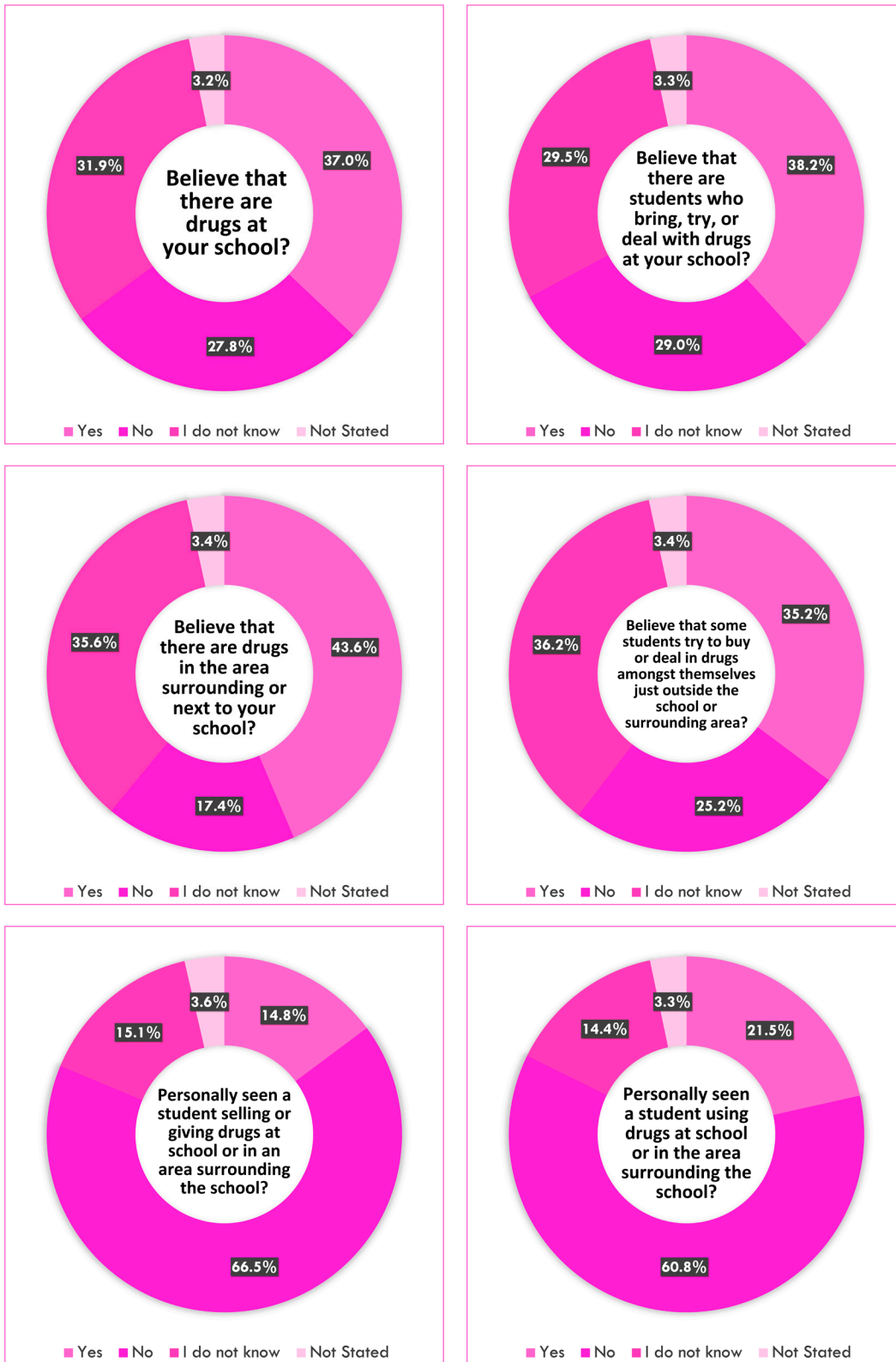


Figure 3.1.20. Perception of drug use at school, outside the school, or in surrounding area.

- Figure 3.1.20 shows that slightly over two in five students (43.6%) believe that there are drugs in the area surrounding or next to their school.
- Just over one-third of the students believe that there are drugs in their school (37.0%); believe that there are students who bring, try, or deal with drugs at their school (38.2%); and believe that some students try to buy or deal in drugs amongst themselves just outside the school or surrounding area (35.2%).
- Fewer students, about one in seven, reported personally seeing a student selling or giving drugs (14.8%) and about one in five (21.5%) reported seeing a student using drugs at school or in an area surrounding the school.

3.1.10 Reaction & Involvement of Parents/Guardians

- When students were asked about their parents’/guardians’ reaction if they were to get caught coming home tipsy or drunk, the majority (58.8%) of them reported that their parents/guardians will be “*extremely upset*”. An additional 16.6% and 10.6% indicated that their parents/guardians will be “*very upset*” or “*somewhat upset*”, respectively.
- Similarly, 67.9% of the students said that their parents/guardians will be “*extremely upset*” if they found out they were smoking marijuana; with an additional 10.5% and 8.9%, whose parents/guardians will be “*very upset*” or “*somewhat upset*”.
- There were about four percent of the respondents who indicated that their parents/guardians will not be upset in either situation; with approximately five to seven percent who had no idea of their parents’/guardians’ reaction.

Table 3.1.38
Perception of Parents’/Guardians’ Reaction to Respondent’s Behaviours by Proportion of Survey Respondents

Responses	Catches you coming home tipsy or drunk		Find out you are smoking marijuana	
	n	%	n	%
Extremely upset	1,626	58.8	1,878	67.9
Very upset	460	16.6	290	10.5
Somewhat upset	293	10.6	246	8.9
Not upset	98	3.5	106	3.8
No idea	191	6.9	147	5.3
Not applicable	1	0.0	1	0.0
Not Stated	95	3.4	96	3.5
Total	2,764	100.0	2,764	100.0

When students were asked if they have ever had any serious conversations with any of their parents/guardians about the dangers of drug use, just over three in five or 63.1% have reported that they have in fact had this conversation. In contrast, nearly three in ten of the respondents (29.7%) have never had a serious conversation with their parents/ guardians regarding the dangers of drugs use.

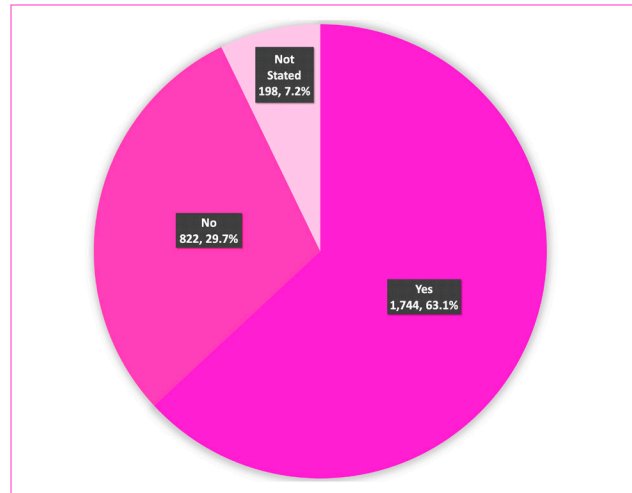


Figure 3.1.21: Proportion of respondents who have had a serious conversation about the dangers of drugs with parents/guardians.

3.1.11 Reaction of Close Friends to Marijuana Use

- While roughly four in ten students indicated that “all” (42.1%) or “some” (37.0%) of their friends will try to convince them to stop if they knew that they were smoking marijuana, there was about one in five students (17.1%) who reported that “none” of their friends will try to convince them to stop.
- Likewise, 16.6% of the students, or nearly one in five, said that “none” of their friends would disapprove if they knew they were smoking marijuana. On the other hand, about two in five students indicated that “all” (42.8%) or “some” (35.9%) of their friends would, in fact, disapprove.

Table 3.1.39

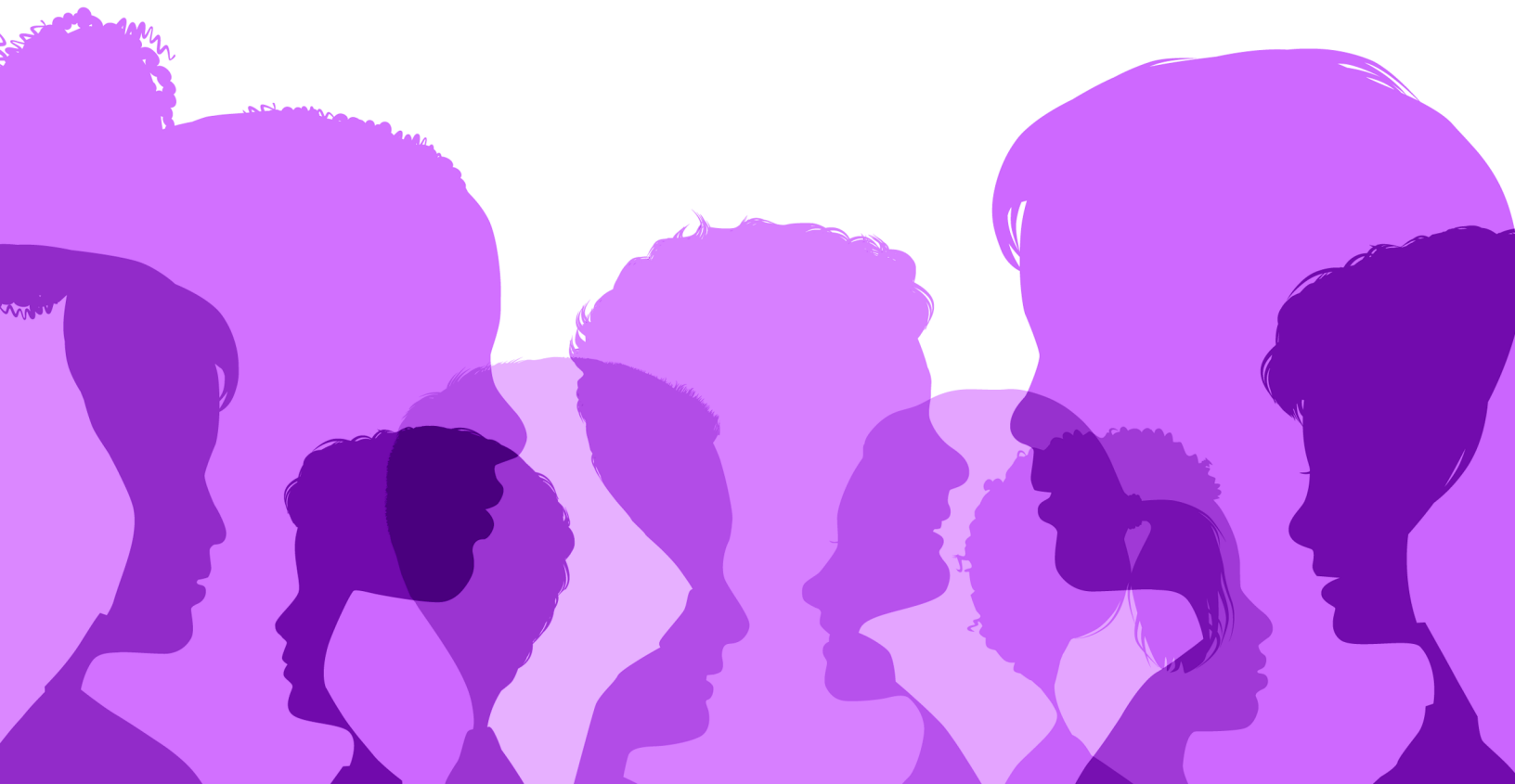
Close Friends’ Reaction to Marijuana Use by Proportion of Survey Respondents

Responses	If they knew you were smoking marijuana, how many of them would try to convince you to stop?		If they knew you were smoking marijuana, how many of them would disapprove?	
	n	%	n	%
All	1,164	42.1	1,183	42.8
Some	1,024	37.0	993	35.9
None	472	17.1	459	16.6
Not Stated	104	3.8	129	4.7
Total	2,764	100.0	2,764	100.0

CHAPTER 3.2

RESULTS

Risk and Protective Factors



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3.2.1 Overall Results

Overall risk and protective factor scale scores are presented in Figures 3.2.1 and 3.2.2. These results provide a general description of the prevention needs of M2 through S4 students as a whole.

As Figure 3.2.1 shows, overall percentile scores across the 13 protective factor scales range from a low of 50 to a high of 86, with an average score of 69 (2015: low of 38 to a high of 91, average score of 70). As seen in both 2015 and 2019, the three lowest proportions were for the following protective factor scales: *Community Opportunities for Prosocial Involvement* (50), *Religiosity* (51), and *Belief in Moral Order* (64). All three of the lowest protective factors fall below the normative average of 69. While policies that target any protective factor could potentially be an important resource for students, focusing prevention planning in these areas could be especially beneficial. Students reported the three highest overall proportions for the following protective factor scales: *Family Rewards for Prosocial Involvement* (86), *Interaction with Prosocial Peers* (76), and *School Opportunities for Prosocial Involvement* (76). The three highest protective factors are above the normative score of 69. The higher scores reported by students in these areas represent strengths on which prevention programmes can build.

Comparisons Across Protective Factors

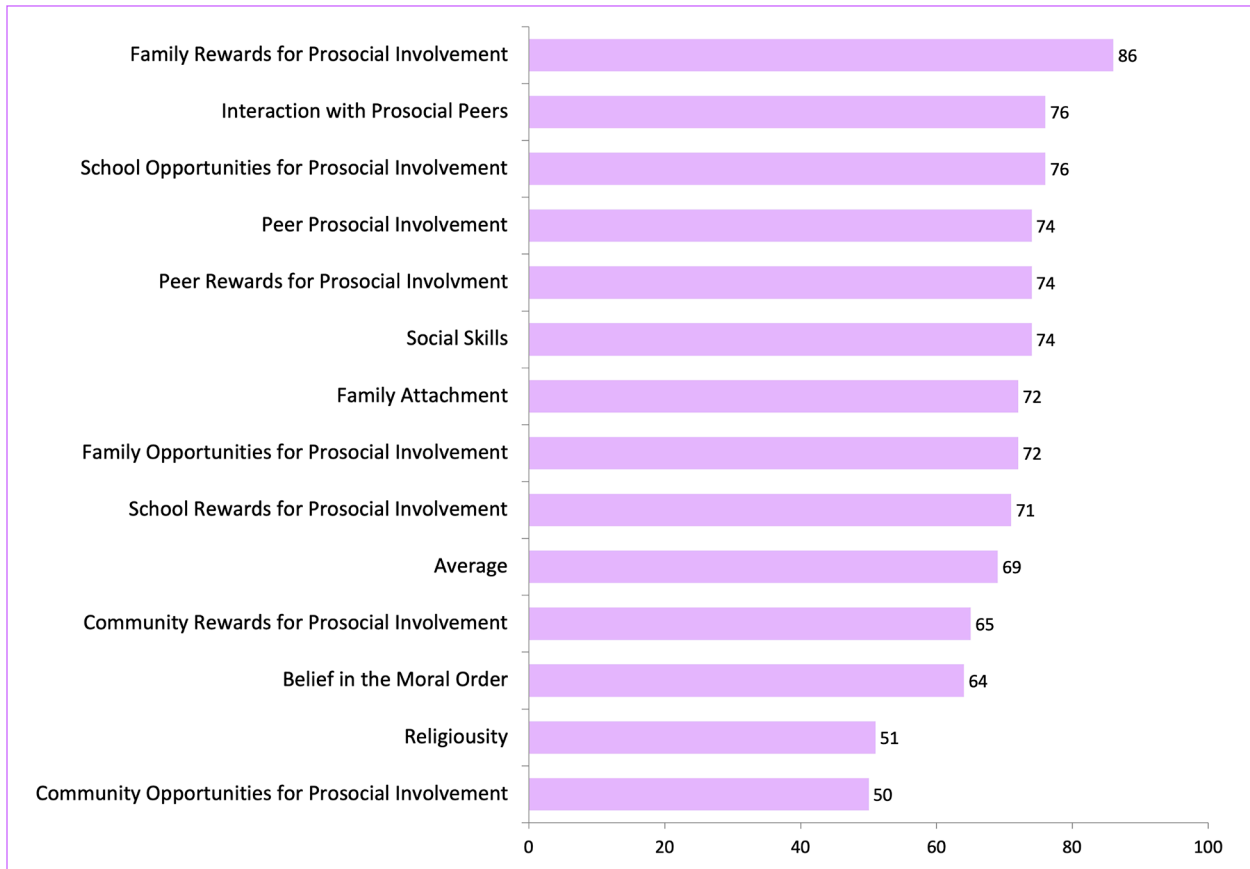


Figure 3.2.1. Overall protective factor scale scores.

As Figure 3.2.2 shows, overall scores across the 25 risk factor scales range from a low of 2 to a high of 58, with an average score of 21 (2015: low of 4 to a high of 69, average score of 24). Similar to 2015, the three highest risk factor scales are *Sensation Seeking* (58), *Transitions and Mobility* (58), and *Peer Rewards for Antisocial Behaviour* (38). These risk factors fall above the normative score of 21. Once again, while policies that target any risk factor could potentially be an important resource for students, directing

prevention programming in these areas is likely to be especially beneficial. The lowest risk factor scales are *Gang Involvement* (2), *Perceived Availability of Handguns* (4), and *Favorable Attitudes towards Antisocial Behaviour* (4). These risk factors fall below the normative score of 21. The lower scores reported by students in these areas represent strengths on which to build.

Comparisons Across Risk Factors

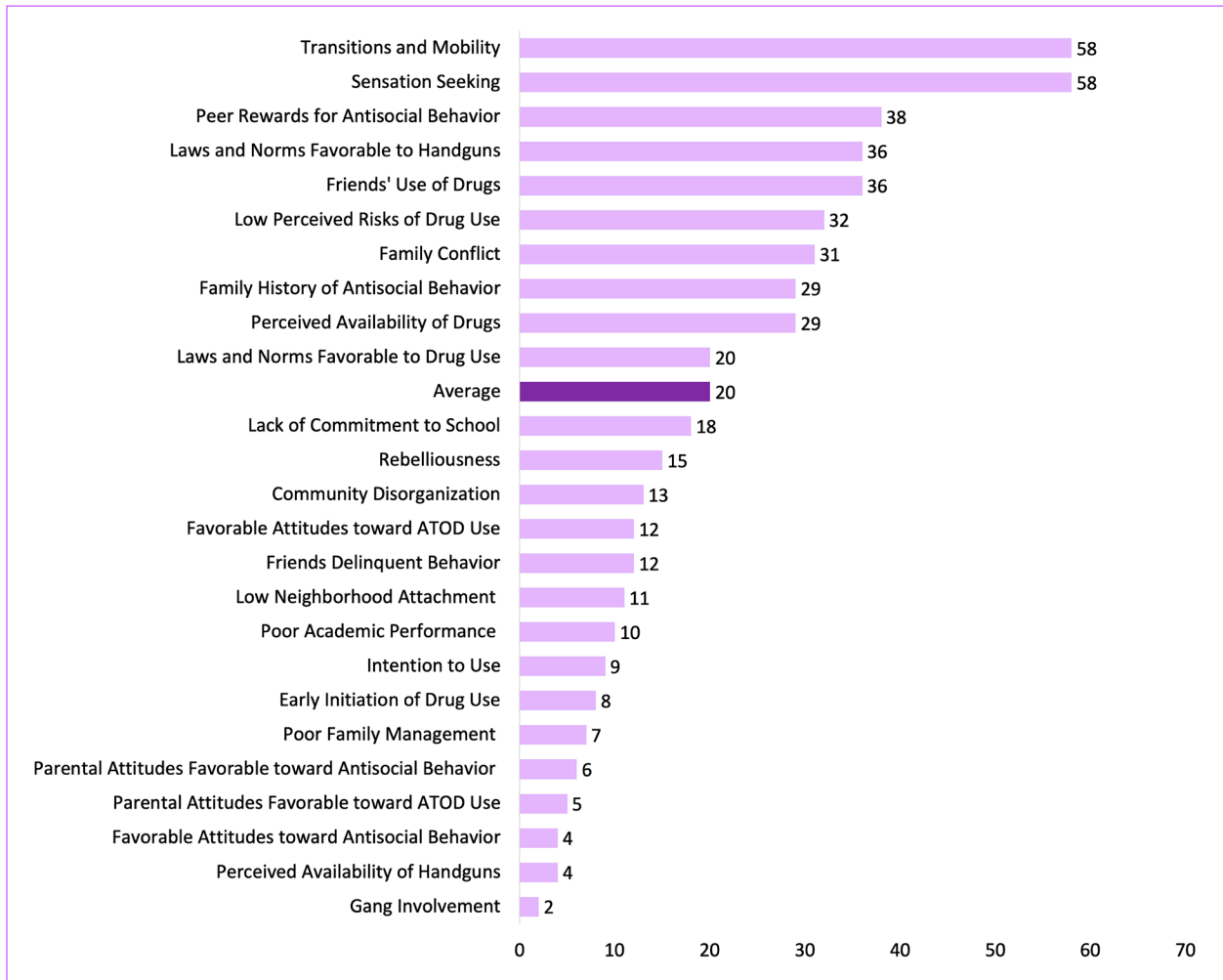


Figure 3.2.2. Overall risk factor scale scores

3.2.2 Grade Level Results

While overall scores provide a general picture of the risk and protective factor profile, they can mask problems within individual grades. Tables 3.2.1 and 3.2.2, as well as a series of graphs on the preceding pages, present individual-grade data for risk and protective factor scale scores. This detailed information provides prevention planners with a snapshot; revealing the risk and protective factor scales that are of greatest concern by grade level. It allows those prevention planners to focus on the most appropriate points in youth development for preventive intervention action – and to target their prevention efforts as precisely as possible.

Younger students tend to report different factors than older students as being the most elevated or suppressed, as seen in Tables 3.2.1 and 3.2.2. When it came to the three highest protection scales, M2 students reported highest levels for: *Family Rewards for Prosocial Involvement* (86), *Family Opportunity for Prosocial Involvement* (80), and *Family Attachment* (79). However, S4 students reported highest levels for: *Family Rewards for Prosocial Involvement* (86), *Interaction with Prosocial Peers* (80), and *Peer Prosocial Involvement* (80). On the other hand, M2 students reported their three highest levels of risk as *Transitions and Mobility* (61), *Sensation Seeking* (46), and *Family Conflict* (26). S4 students, on the other hand, reported their three highest levels of risk as *Sensation Seeking* (63), *Friends Use of Drugs* (62), and *Transitions and Mobility* (61).

Table 3.2.1
Protective Factor Scale Proportions¹ Reported by Survey Respondents, by Grade Level

		M2	M3	S1	S2	S3	S4
		%	%	%	%	%	%
Community Domain	Community Rewards for Prosocial Involvement	65	62	63	66	61	58
	Community Opportunities for Prosocial Involvement	44	50	50	49	53	57
Family Domain	Family Attachment	79	77	72	63	70	71
	Family Opportunities for Prosocial Involvement	80	74	75	67	68	69
	Family Rewards for Prosocial Involvement	86	85	88	83	87	86
School Domain	School Opportunities for Prosocial Involvement	77	75	80	74	75	76
	School Rewards for Prosocial Involvement	69	72	73	68	71	71
Peer and Individual Domain	Rewards for Prosocial Involvement	71	72	78	70	79	76
	Interaction with Prosocial Peers	69	72	79	75	79	80
	Belief in the Moral Order	69	42	76	68	65	66
	Peer Prosocial Involvement	65	70	78	75	79	80
	Religiosity	48	47	59	51	54	49
	Social Skills	70	72	80	73	75	73
Average		71	69	70	65	68	68

Note:

¹ Some scores are low because of the small number of responses to the survey items comprising the particular scale.

Table 3.2.2*Risk Factor Scale Scores¹ Reported by Survey Respondents, by Grade Level*

		M2	M3	S1	S2	S3	S4
		%	%	%	%	%	%
Community Domain	Low Neighbourhood Attachment	9	10	12	11	11	11
	Community Disorganisation	8	11	13	12	16	16
	Transitions and Mobility	61	63	43	62	61	61
	Perceived Availability of Drugs	11	16	24	33	42	50
	Perceived Availability of Handguns	2	3	4	3	7	6
	Laws and Norms Favourable to Drug Use	21	25	20	19	19	18
	Laws and Norms Favourable to Handguns	20	28	33	42	46	49
Family Domain	Family History of Antisocial Behaviour	18	21	27	33	41	37
	Poor Family Management	3	4	6	10	6	11
	Family Conflict	26	32	33	32	35	31
	Parental Attitudes Favourable toward ATOD Use	1	2	3	6	6	11
	Parental Attitudes Favourable toward Antisocial Behaviour	3	5	6	8	7	8
School Domain	Poor Academic Performance	7	6	12	13	12	12
	Lack of Commitment to School	15	15	14	22	27	14
Peer and Individual Domain	Rebelliousness	13	15	19	16	16	15
	Gang Involvement	1	1	2	3	4	4
	Favourable Attitudes toward ATOD Use	2	3	10	14	18	27
	Favourable Attitudes toward Antisocial Behaviour	2	2	6	6	4	5
	Sensation Seeking	46	50	61	62	63	63
	Peer Rewards for Antisocial Behaviour	15	27	41	46	51	49
	Friends' Use of Drugs	6	19	28	47	57	62
	Friends Delinquent Behaviour	5	8	11	15	17	16
	Low Perceived Risks of Drug Use	8	8	28	30	54	57
	Early Initiation of Drug Use	7	11	8	5	6	9
	Intention to Use	2	3	6	12	16	15
Average		12	15	19	23	26	27

Note:¹ Some scores are low because of the small number of responses to the survey items comprising the particular scale.

3.2.3 Protective Factors

Protective factors are characteristics that are known to decrease the likelihood that a student will engage in problem behaviours. They encompass family, social, psychological, and behavioural characteristics that can provide a buffer for young people and mitigate the effects of risk factors while promoting positive youth development. These factors fall into three categories – individual characteristics, bonding, healthy beliefs and clear standards. For example, bonding to parents reduces the risk of an adolescent engaging in problem behaviours. To develop these healthy positive behaviours, young people must be immersed in environments that consistently communicate healthy beliefs and clear standards for behaviour; that foster the development of strong bonds to members of their family, school, and community; and that recognise the individual characteristics of each young person (Social Development Strategy).

Below, each protective factor scale is described and the results are presented. Higher scores on the protective factor scales are preferred as they indicate greater levels of protection.

Community Rewards for Prosocial Involvement

Students who feel recognised and rewarded by members of their community are less likely to engage in negative behaviours, because that recognition helps increase a student’s self-esteem and the feeling of being bonded to that community. This protective factor is measured using the *Community Rewards for Prosocial Involvement* scale.

The protective factor *Community Rewards for Prosocial Involvement* is measured by a single scale using three survey items:

- ✓ There are people in my neighbourhood, or the area around where I live, who are proud of me when I do something well.
 - ✓ There are people in my neighbourhood, or the area where I live, who encourage me to do my best.
 - ✓ My neighbours notice when I am doing a good job and let me know about it.
- Across grade levels, percentile scores for Community Rewards for Prosocial Involvement range from a low of 58 among S4 students to a high of 66 among S2 students.
 - In 2015, across all grade levels, percentile scores for Community Rewards for Prosocial Involvement ranged from a low of 64 among S2 students to a high of 79 among M2 students.
 - Overall, students received a percentile score of 65 on the Community Rewards for Prosocial Involvement scale (score of 70 in 2015).

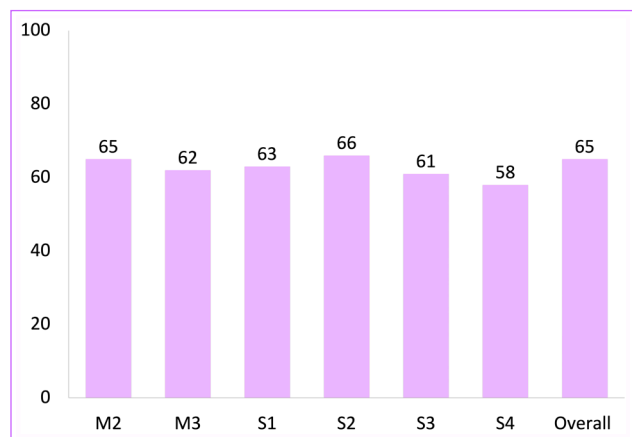


Figure 3.2.3. Community rewards for prosocial involvement scale by grade level and overall.

Community Opportunities for Prosocial Involvement

When students have the opportunity to make meaningful contributions to their communities they are less likely to get involved in risky behaviours. By having the opportunity to make a contribution, students feel as if they are an integral part of their community.

The protective factor *Community Opportunities for Prosocial Involvement* is measured by a single scale using five survey items:

- ✓ There are a lot of adults in my neighbourhood I could talk to about something important.
- ✓ Which of the following activities for people your age are available in your community:
 - Sports teams.
 - Boys and girls clubs.
 - Community clubs.
 - Community service.
- Across grade levels, percentile scores for Community Opportunities for Prosocial Involvement range from a low of 44 among M2 students to a high of 57 among S4 students.
- In 2015, across grade levels, percentile scores for Community Opportunities for Prosocial Involvement ranged from a low of 59 among S3 students to a high of 67 among S4 students.
- Overall, students received a percentile score of 50 on the Community Opportunities for Prosocial Involvement scale; a decrease from 2015, where the score was 63.

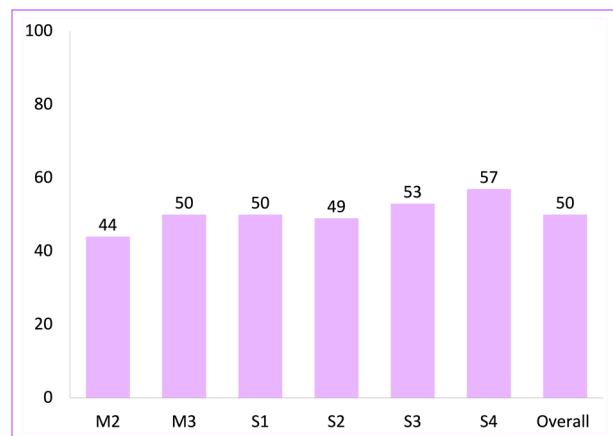


Figure 3.2.4. Community opportunities for prosocial involvement scale by grade level and overall.

Family Attachment

One of the most effective ways to reduce the risk of problem behaviours among young people is to help strengthen their bonds with family members who embody healthy beliefs and clear standards. Children who are bonded to family members who have healthy beliefs are less likely to do things that threaten that bond, such as using drugs, committing crimes, or dropping out of school. Positive bonding can act as a buffer against risk factors. If children are attached to their parents and want to please them, they will be less likely to threaten that connection by doing things that meet strong disapproval from their parents.

The protective factor *Family Attachment* is measured by a single scale using four survey items:

- ✓ Do you feel very close to your mother?
- ✓ Do you share your thoughts and feelings with your mother?
- ✓ Do you feel very close to your father?
- ✓ Do you share your thoughts and feelings with your father?

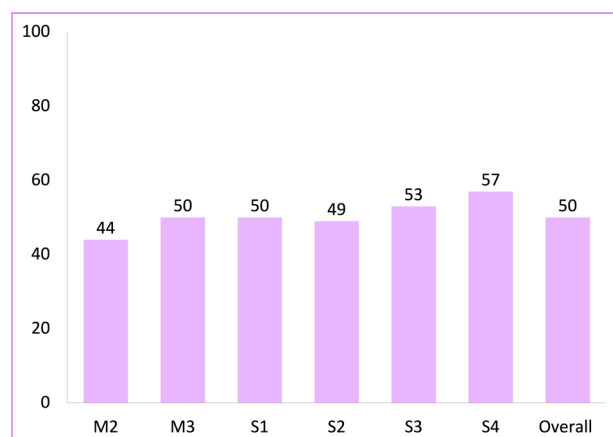


Figure 3.2.5. Family attachment scale by grade level and overall.

- Across grade levels, percentile scores for *Family Attachment* range from a low of 63 among S2 students to a high of 79 among M2 students.
- In 2015, across grade levels, percentile scores for *Family Attachment* ranged from a low of 75 among S4 students to a high of 89 among M2 students.
- Overall, students received a percentile score of 72 on the *Family Attachment* scale (score of 80 in 2015).

Family Opportunities for Prosocial Involvement

When students have the opportunity to make meaningful contributions to their families, they are less likely to get involved in risky behaviours. By having the opportunity to make a contribution, students feel as if they are an integral part of their families. These strong bonds allow students to adopt the family norms, which can protect students from risk. For instance, children whose parents have high expectations for their school success and achievement are less likely to drop out of school.

The protective factor *Family Opportunities for Prosocial Involvement* is measured by a single scale using three survey items:

- ✓ If I had a personal problem, I could ask my mom or dad for help.
- ✓ My parents give me lots of chances to do fun things with them.
- ✓ My parents ask me what I think before most family decisions affecting me are made.

- Across grade levels, percentile scores for *Family Opportunities for Prosocial Involvement* range from a low of 67 among S2 students to a high of 80 among M2 students.
- In 2015, across grade levels, percentile scores for *Family Opportunities for Prosocial Involvement* ranged from a low of 70 among S2 students to a high of 84 among M2 students.
- Overall, students received a percentile score of 72 on the Family Opportunities for Prosocial Involvement scale (score of 77 in 2015).

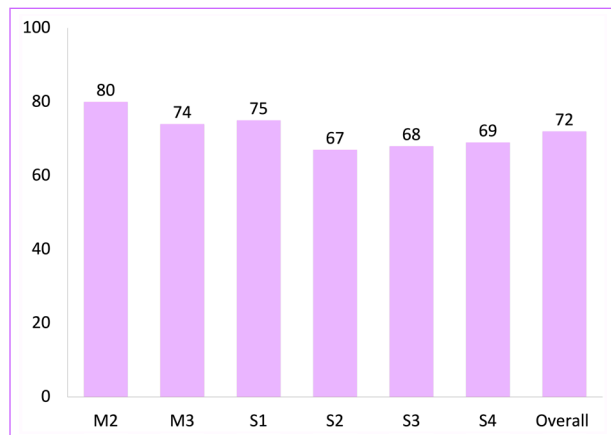


Figure 3.2.6. Family opportunities for prosocial involvement scale by grade level and overall.

Family Rewards for Prosocial Involvement

When family members reward their children for positive participation in activities, it helps children feel motivated to contribute and stay involved with the family, thus reducing their risk for problem behaviours. When families promote clear standards for behaviour, and when young people consequently develop strong bonds of attachment and commitment to their families, young people's behaviour becomes consistent with those standards.

The protective factor *Family Rewards for Prosocial Involvement* is measured by a single scale using four survey items:

- ✓ My parents notice when I am doing a good job and let me know about it.
- ✓ How often do your parents tell you they're proud of you for something you've done?
- ✓ Do you enjoy spending time with your mother?
- ✓ Do you enjoy spending time with your father?

- Across grade levels, percentile scores for *Family Rewards for Prosocial Involvement* range from a low of 83 among S2 to a high of 88 among S1 students.
- In 2015, across grade levels, percentile scores for *Family Rewards for Prosocial Involvement* ranged from a low of 81 among S3 students to a high of 94 among M2 students.
- Overall, students received a percentile score of 86 on the *Family Rewards for Prosocial Involvement* scale (score of 85 in 2015).

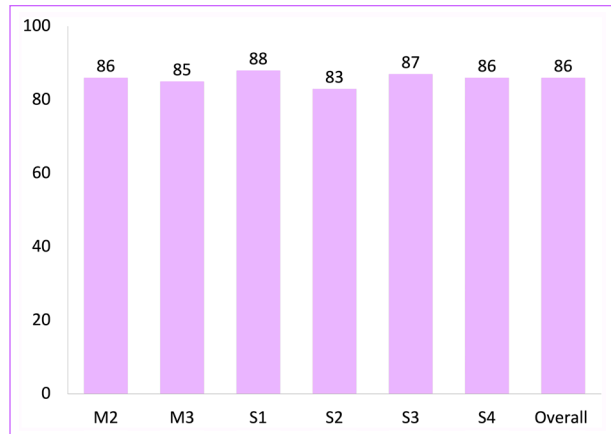


Figure 3.2.7. Family rewards for prosocial involvement scale by grade level and overall.

School Opportunities for Prosocial Involvement

Giving students opportunities to participate in important activities at school helps to reduce the likelihood that they will become involved in problem behaviours. Students who feel they have opportunities to be involved are more likely to contribute to school activity. This bond can protect a student from engaging in behaviours that violate socially accepted standards.

The protective factor *School Opportunities for Prosocial Involvement* is measured by a single scale using five survey items:

- ✓ In my school, students have lots of chances to help decide things like class activities and rules.
- ✓ Teachers ask me to work on classroom projects.
- ✓ There are a lot of chances for student in my school to get involved in sports, clubs, and other school activities outside of class.
- ✓ There are lots of chances for students in my school to talk with a teacher one-on-one.
- ✓ I have lots of chances to be part of class discussions or activities.

- Across grade levels, percentile scores for *School Opportunities for Prosocial Involvement* range from a low of 74 among S2 students to a high of 80 among S1 students.
- In 2015, across grade levels, percentile scores for *School Opportunities for Prosocial Involvement* ranged from a low of 81 among S3 students to a high of 89 among M2 students.
- Overall, students received a percentile score of 76 on the *School Opportunities for Prosocial Involvement* scale (84 in 2015).

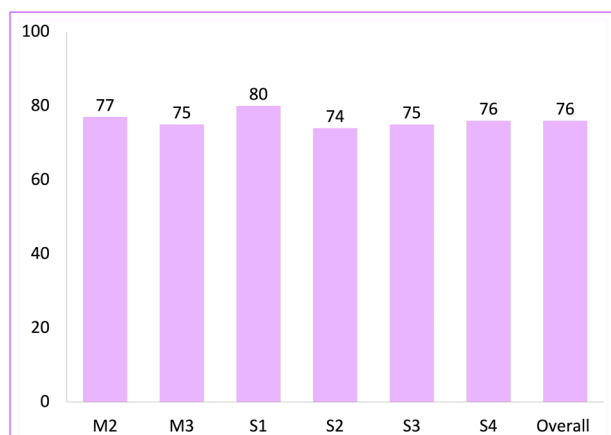


Figure 3.2.8. School opportunities for prosocial involvement scale by grade level and overall.

School Rewards for Prosocial Involvement

Making students feel appreciated and rewarded for their involvement at school helps reduce the likelihood of their involvement in drug use and other problem behaviours. This is because students who feel appreciated for their activity at school bond to their school.

The protective factor *School Rewards for Prosocial Involvement* is measured by a single scale using four survey items:

- ✓ My teacher(s) notices when I am doing a good job and lets me know about it.
 - ✓ I feel safe at my school.
 - ✓ The school lets my parents know when I have done something well.
 - ✓ My teachers praise me when I work hard in school.
- Across grade levels, percentile scores for *School Rewards for Prosocial Involvement* range from a low of 68 among S2 students to a high of 73 among S1 students.
 - In 2015, across grade levels, percentile scores for *School Rewards for Prosocial Involvement* ranged from a low of 79 among S2 and S3 students to a high of 87 among M2 students.
 - Overall, students received a percentile score of 71 on the *School Rewards for Prosocial Involvement* scale (score of 82 in 2015).

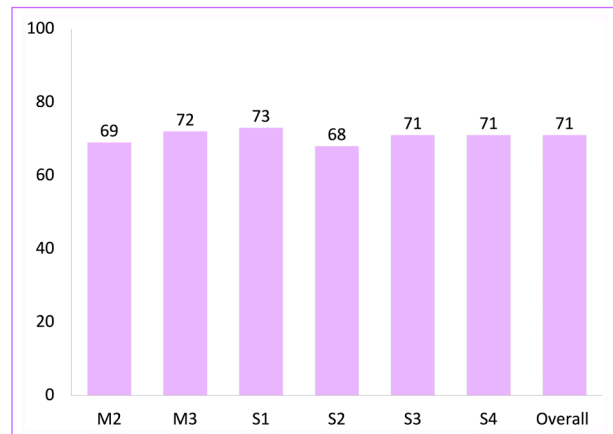


Figure 3.2.9. School rewards for prosocial involvement scale by grade level and overall.

Peer-Individual Rewards for Prosocial Involvement

Often peer acceptance of certain behaviours leads to increased social status amongst young people. Being rewarded by peers for involvement in antisocial behaviours may increase the likelihood of involvement in drug use and other problem behaviours.

The protective factor *Peer-Individual Rewards for Prosocial Involvement* is measured by a single scale using four survey items:

- ✓ What are the chances that you would be seen as cool if you worked hard at school?
 - ✓ What are the chances that you would be seen as cool if you defended someone who was being verbally abused at school?
 - ✓ What are the chances that you would be seen as cool if you regularly volunteered to do community service?
 - ✓ What are the chances that you would be seen as cool if you made a commitment to stay drug-free?
- Across grade levels, percentile scores for *Peer-Individual Rewards for Prosocial Involvement*

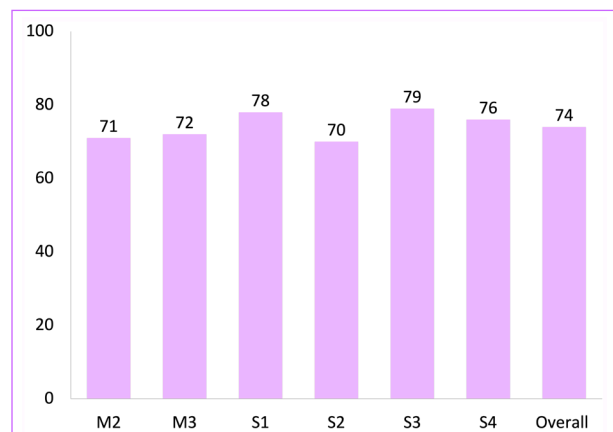


Figure 3.2.10. Peer-individual rewards for prosocial involvement scale by grade level and overall.

range from a low of 70 among S2 students to a high of 79 among S3 students.

- In 2015, across grade levels, percentile scores for *Peer-Individual Rewards for Prosocial Involvement* ranged from a low of 86 among M2 students to a high of 89 among S3 students.
- Overall, students received a percentile score of 74 on the *Peer-Individual Rewards for Prosocial Involvement* scale versus a score of 87 in 2015.

Interaction with Prosocial Peers

Students who feel they have opportunities to be involved are more likely to contribute to school activity. These students are likely to avoid negative behaviours and delay use of alcohol and drugs. This bond can protect a student from engaging in behaviours that violate socially accepted standards.

The protective factor *Interaction with Prosocial Peers* is measured by a single scale using five survey items:

In the past year (12 months), how many of your four (4) best friends have....

- ✓ Participated in clubs, organisations, or activities at school?
- ✓ Made a commitment to stay drug-free?
- ✓ Liked school?
- ✓ Regularly attended religious services?
- ✓ Tried to do well in school?

- Across grade levels, percentile scores for *Interaction with Prosocial Peers* range from a low of 69 among M2 students to a high of 80 among S4 students.
- In 2015, across grade levels, percentile scores for *Interaction with Prosocial Peers* ranged from a low of 89 among M3 students to a high of 93 among S3 students.
- Overall, students received a percentile score of 76 on the *Interaction with Prosocial Peers* scale versus a score of 91 in 2015.

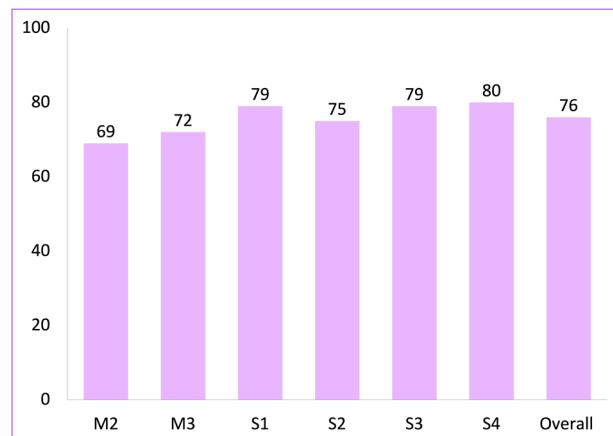


Figure 3.2.11. Interaction with prosocial peers scale by grade level and overall.

Belief in the Moral Order

When people feel bonded to society, they are more motivated to follow society's standards and expectations. It is important for families, schools, and communities to have clearly stated policies on drug use. Young people who have developed a positive belief system are less likely to become involved in problem behaviours. For example, young people who believe that drug use is socially unacceptable or harmful are likely to be protected against peer influences to use drugs.

The protective factor *Belief in the Moral Order* is measured by a single scale using four survey items:

- ✓ It is important to be honest with your parents, even if they become upset or you get punished.
- ✓ I think sometimes it is okay to cheat at school.
- ✓ I think it's okay to take something without asking if you can get away with it.
- ✓ It is all right to beat up people if they start the fight.

- Across grade levels, percentile scores for *Belief in the Moral Order* range from a low of 42 among M3 students to a high of 76 among S3 students.

- In 2015, across grade levels, percentile scores for *Belief in the Moral Order* ranged from a low of 32 among M2 students to a high of 44 among S3 students.
- Overall, students received a percentile score of 64 on the *Belief in the Moral Order* scale (score of 38 in 2015).

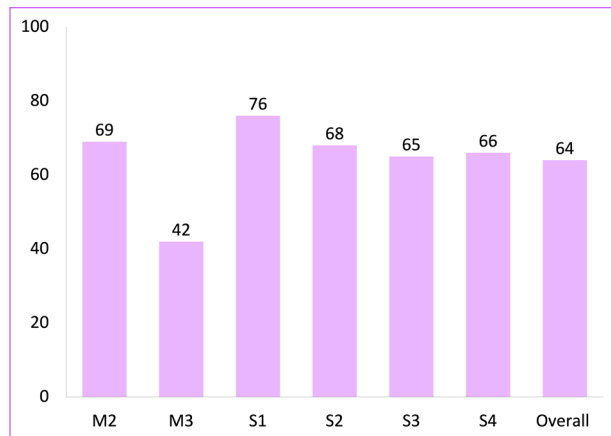


Figure 3.2.12. Belief in moral order scale by grade level and overall.

Peer Prosocial Involvement

Students who feel recognised and rewarded by peers are less likely to engage in negative behaviours, because that acceptance helps increase a student’s self-esteem and the feeling of being bonded with their peers. This protective factor is measured using the Peer Prosocial Involvement scale.

The protective factor *Peer Prosocial Involvement* is measured by a single scale using three survey items:

How many times in the past year (12 months), have you....

- ✓ Participated in clubs, organisations, or activities at school?
- ✓ Done extra work on your own for school?
- ✓ Volunteered to do community service?

- Across grade levels, percentile scores for *Peer Prosocial Involvement* range from a low of 65 among M2 students to a high of 80 among S4 students.
- In 2015, across grade levels, percentile scores for *Peer Prosocial Involvement* ranged from a low of 85 among M2 students to a high of 93 among S4 students.
- Overall, students received a percentile score of 74 on the *Peer Prosocial Involvement* scale versus a score of 90 in 2015.

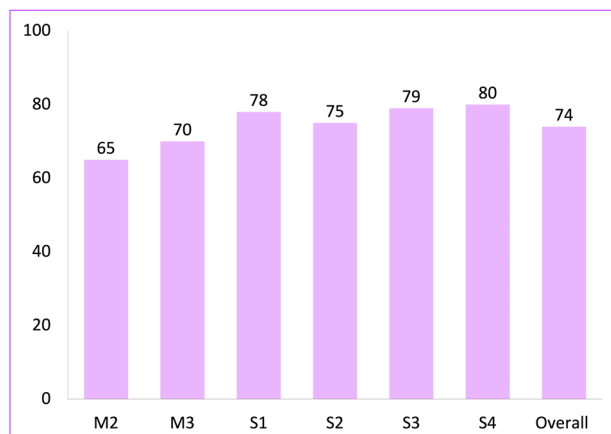


Figure 3.2.13. Peer-individual prosocial involvement scale by grade level and overall.

Religiosity

Religious institutions can help students develop firm prosocial beliefs. Students who have high levels of religious connection are less vulnerable to becoming involved in antisocial behaviours, because they have already adopted a social norm against those activities.

The protective factor *Religiosity* is measured by a single scale using one survey item:

- ✓ How often do you attend religious services?

This score was calculated by collapsing two response categories, “1-2 times a month” and “about once a

week or more”, to determine respondents attending religious activities at least once a month.

- Across grade levels, percentile scores for Religiosity range from a low of 47 among M3 students to a high of 59 among S1 students.
- In 2015, across grade levels, percentile scores for Religiosity ranged from a low of 33 among S2 and S4 students to a high of 45 among M2 students.
- Overall, students received a percentile score of 51 on the Religiosity scale versus a score of 38 in 2015, indicating that students are more religious as of 2019.

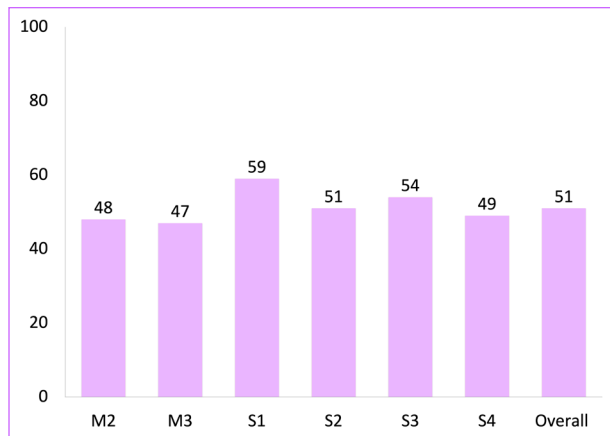


Figure 3.2.14. Religiosity scale by grade level and overall.

Social Skills

Students who have developed a high level of social skills are more likely to do well interacting with others, and will find these interactions rewarding. If they are skilled at avoiding trouble, they are less likely to engage in problem behaviours, such as drug use.

The protective factor *Social Skills* is measured by presenting students with four different scenarios and giving them four possible responses to each scenario. The following four scenarios were included on the survey:

- ✓ You are looking at CD’s in the music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, “Which one do you want? Go ahead, take it while nobody’s around”. There is no one in sight, no employees or other customers. What would you do now?
- ✓ It is 8:00 on a weeknight and you are about to go over to a friend’s house when your mother asks you where you are going. You say, “Oh, just going to go hang out with some friends.” She says, “No, you’ll just get into trouble if you go out. Stay home tonight” What would you do?
- ✓ You are visiting another part of town, and you don’t know any of the people your age there. You are walking down the street, and some teenager you don’t know is walking toward you. He is about your size, and as he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you do or say?”
- ✓ You are at a party at someone’s house, and one of your friends offers you a drink containing alcohol. What would you say or do?

- Across grade levels, percentile scores for *Social Skills* range from a low of 70 among M2 students to a high of 80 among S1 students.
- In 2015, across grade levels, percentile scores for *Social Skills* ranged from a low of 80 among S4 students to a high of 92 among M2 students.
- Overall, students received a percentile score of 74 on the *Social Skills* scale compared to a score of 85 in 2015.

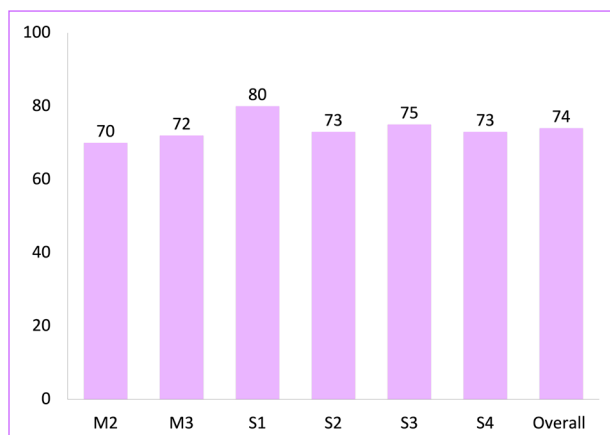


Figure 3.2.15. Social Skills by grade level and overall.

3.2.4 Risk Factors

Risk factors are characteristics in the community, family, school, peer, and individual’s environments that are known to increase the likelihood of a student engaging in one or more problem behaviours (substance abuse, depression and anxiety, delinquency, teen pregnancy, school dropout, or violence). For example, a risk factor in the community environment is the existence of laws and norms favourable to drug use, which can affect the likelihood that a young person will try alcohol, tobacco, or other drugs. In those communities where there is acceptance or tolerance of drug use, students are more likely to engage in alcohol, tobacco, and other drug use.

On the following pages, each of the risk factor scales, measured in the Community, Family, School, Peer-Individual domains, is described and the results are reported. In contrast to the protective factor scales, lower scores on the risk factors scales are preferred as they indicate lower levels of risk.

Low Neighbourhood Attachment

Higher rates of drug usage, delinquency, and violence occur in communities or neighbourhoods where people feel little attachment to the community. This situation is not specific to low-income neighbourhoods. It also can be found in affluent neighbourhoods. Perhaps the most significant issue affecting community attachment is whether residents feel they can make a difference in each other’s lives. If the key players in a neighbourhood – such as merchants, teachers, clergy, police, and human and social services personnel – live outside the neighbourhood, residents’ sense of commitment will be lower. This low sense of commitment may be reflected in lower rates of voter participation and parental involvement in schools.

The *Low Neighbourhood Attachment* scale was developed to measure a component of the risk factor *Low Neighbourhood Attachment* and *Community Disorganisation*. This scale is measured by three survey items:

- ✓ I’d like to get out of my neighbourhood.
- ✓ If I had to move, I would miss the neighbourhood I now live in.
- ✓ I like my neighbourhood.

To obtain a score, one survey item comprising the *Low Neighbourhood Attachment* scale was reverse coded, that of “I’d like to get out of my neighbourhood”.

- Across grade levels, percentile scores for *Low Neighbourhood Attachment* range from a low of 9 among M2 students to a high of 12 among S1 students.
- In 2015, across grade levels, percentile scores for *Low Neighbourhood Attachment* ranged from a low of 17 among M2 students to a high of 22 among S1 students.
- Overall, students received a percentile score of 11 on the *Low Neighbourhood Attachment* scale (score of 19 in 2015).

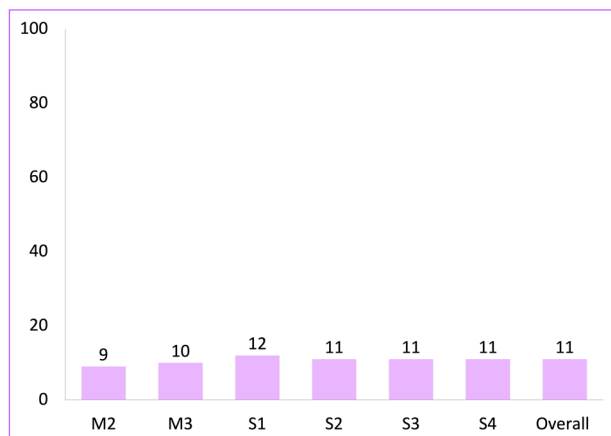


Figure 3.2.16. Low neighbourhood attachment scale by grade level and overall.

Community Disorganisation

The *Community Disorganisation* scale pertains to students' perceptions of their communities' appearance and other external attributes.

The *Community Disorganisation* scale was developed to measure a component of the risk factor *Low Neighbourhood Attachment and Community Disorganisation*. This scale is measured by five survey items that describe the neighbourhood in which the student resides. These items include:

- ✓ I feel safe in my neighbourhood.
- ✓ Neighbourhood has crime and/or drug selling.
- ✓ Neighbourhood has lots of empty or abandoned buildings.
- ✓ Neighbourhood has lots of graffiti.
- ✓ Neighbourhood has fighting.

To obtain a score, one survey item comprising the *Community Disorganisation* scale was reverse coded, that of “*I feel safe in my neighbourhood*”.

- Across grade levels, percentile scores for *Community Disorganisation* range from a low of 8 among M2 students to a high of 16 among S3 and S4 students.
- In 2015, across grade levels, percentile scores for *Community Disorganisation* ranged from a low of 6 among M2 students to a high of 12 among S2 students.
- Overall, students received a percentile score of 13 on the *Community Disorganisation* scale (score of 10 in 2015).

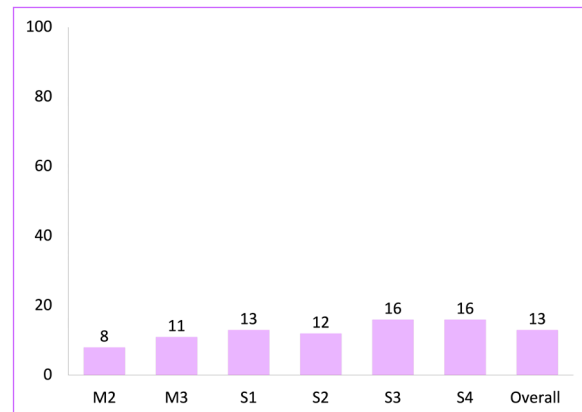


Figure 3.2.17. Community disorganisation scale by grade level and overall.

Transitions and Mobility

Even normal school transitions are associated with an increase in problem behaviours. When children move from elementary school to middle school or from middle school to high school, significant increases in the rates of drug use, school dropout, and antisocial behaviour may occur. This is thought to occur because by making a transition to new environments, students no longer have the bonds they had in their old environments. Consequently, students may be less likely to become attached to their new environments and develop the bonds that help protect them from involvement in problem behaviours.

The risk factor *Transitions and Mobility* is measured by a single scale using four survey items:

- ✓ Have you changed homes in the past year?
- ✓ Have you changed schools in the past year?
- ✓ How many times have you changed homes since kindergarten?
- ✓ How many times have you changed schools since kindergarten?

To obtain a score, two survey items comprising the *Transitions and Mobility* scale was recoded, that of “*How many times have you changed schools since kindergarten?*” and “*How many times have you changed homes since kindergarten?*”.

- Across grade levels, percentile scores for *Transitions and Mobility* range from a low of 43 among S1 students to a high of 63 among M3 students.
- In 2015, across grade levels, percentile scores for *Transitions and Mobility* ranged from a low of 49 among

M2 students to a high of 66 among S1 students.

- Overall, students received a percentile score of 58 on the *Transitions and Mobility* scale, similar to 2015.

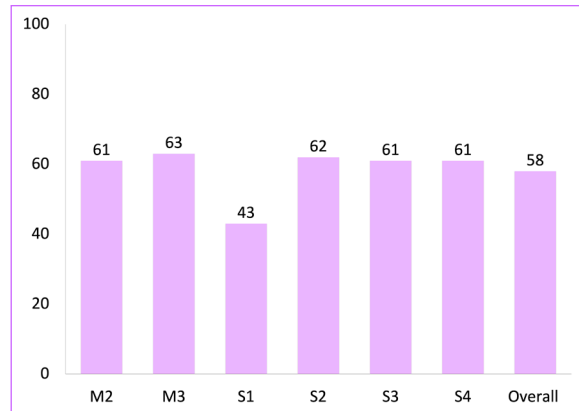


Figure 3.2.18. Transitions and mobility scale by grade level and overall.

Perceived Availability of Drugs

The perceived availability of alcohol, tobacco, and other drugs in a community is directly related to the incidence of delinquent behaviour. For example, in schools where children believe that drugs are more available, a higher rate of drug use occurs.

The risk factor scale *Perceived Availability of Drugs* was developed to measure a component of the risk factor *Availability of Drugs*. This scale is measured by four survey items:

- ✓ If you wanted to get some cigarettes, how easy would it be for you to get some?
- ✓ If you wanted to get some beer, wine, or hard liquor, how easy would it be for you to get some?
- ✓ If you wanted to get some marijuana, how easy would it be for you to get some?
- ✓ If you wanted to get a drug like cocaine, LSD, or amphetamines, how easy would it be for you to get some?

Elevation of this risk factor scale score may indicate the need to make alcohol, tobacco, and other drugs more difficult for students to acquire. For instance, a number of policy changes have been shown to reduce the availability of alcohol and cigarettes. Minimum-age requirements, taxation, and responsible beverage service have all been shown to affect the perception of availability of alcohol.

- Across grade levels, percentile scores for *Perceived Availability of Drugs* range from a low of 11 among M2 students to a high of 50 among S4 students.
- In 2015, across grade levels, percentile scores for *Perceived Availability of Drugs* ranged from a low of 10 among M2 students to a high of 66 among S4 students.
- Overall, students received a percentile score of 29 on the *Perceived Availability of Drugs* scale versus a score of 37 in 2015.

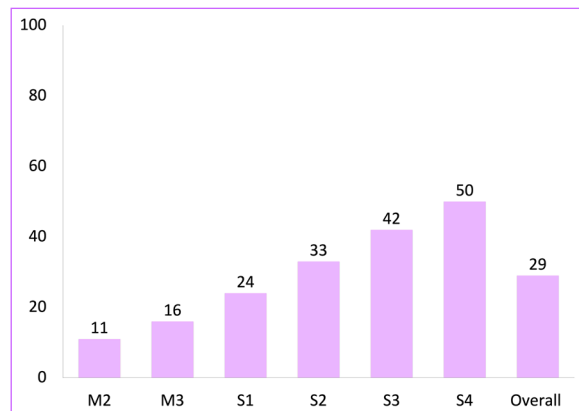


Figure 3.2.19. Perceived availability of drugs scale by grade level and overall.

Perceived Availability of Handguns

While a few studies report no association between firearm availability and violence, more studies do show a relationship. Given the lethality of firearms, the greater likelihood of conflict escalating into homicide when guns are present, and the strong association between the availability of guns and homicide rates, the availability of handguns is included in this survey.

The *Perceived Availability of Handguns* scale was developed to measure a component of the risk factor Availability of Handguns. This scale is measured using one survey item:

- ✓ If you wanted to get a handgun, how easy would it be for you to get one?

During analysis categories of “*sort of easy*” and “*very easy*” were collapsed for ease of reporting.

- Across grade levels, percentile scores for *Perceived Availability of Handguns* range from a low of 2 among M2 students to a high of 7 among S3 students.
- In 2015, across grade levels, percentile scores for *Perceived Availability of Handguns* ranged from a low of 3 among M2 and M3 students to a high of 13 among S3 students.
- Overall, students received a percentile score of 4 on the *Perceived Availability of Handguns* scale compared to a score of 7 in 2015.

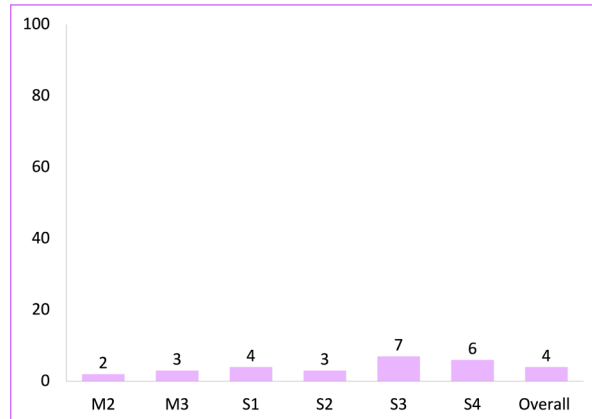


Figure 3.2.20. Perceived availability of handguns scale by grade level and overall.

Laws and Norms Favourable to Drug Use

Students’ perceptions of the rules and regulations concerning alcohol, tobacco, and other drug use that exist in their neighbourhoods are also associated with problem behaviours in adolescence. Community norms – the attitudes and policies a community holds in relation to drug use and other antisocial behaviours – are communicated in a variety of ways: through laws and written policies, through informal social practices, and through the expectations parents and other members of the community have of young people. When laws and community standards are favourable toward drug use, violence and/or other crime, or even when they are just unclear, young people are more likely to engage in negative behaviours.³⁶

An example of conflicting messages about drug use can be found in the acceptance of alcohol use as a social activity within the community. The visual promotion of alcohol and spirits at sporting events are in contrast to the “*stopping use before it starts*” messages that schools, parents, and prevention specialist may be promoting. These conflicting and ambiguous messages are problematic in that they do not have the positive impact on preventing alcohol and other drug use as compared to the impact of a clear community-level anti-drug message.

The *Laws and Norms Favourable to Drug Use* scale was developed to measure a component of the risk factor *Community Laws and Norms Favourable toward Drug Use, Firearms, and Crime*. This scale is measured by five survey items:

- ✓ If a kid drank some beer, wine, or hard liquor in your neighbourhood, or the area around where you live, would he or she be caught by the police?

³⁶ L. L. Eggert, E. A. Thompson, J. R. Herting, & B. P. Randall. (2001). Reconnecting youth to prevent drug abuse, school dropout, and suicidal behaviors among high-risk youth. In Wagner, E., and Waldron, H. B. (Eds.). *Innovations in Adolescent Substance Abuse Intervention*. Oxford: Elsevier Science, 51–84. p. 80.

- ✓ If a kid smoked marijuana in your neighbourhood, or the area around where you live, would he or she be caught by the police?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke marijuana?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to drink alcohol?
- ✓ How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke cigarettes?

- Across grade levels, percentile scores for *Laws and Norms Favourable to Drug Use* range from a low of 18 among S4 students to a high of 25 among M3 students.
- In 2015, across grade levels, percentile scores for *Laws and Norms Favourable to Drug Use* ranged from a low of 18 among M2 students to a high of 37 among S4 students.
- Overall, students received a percentile score of 20 on the *Laws and Norms Favourable to Drug Use* scale (score of 30 in 2015).

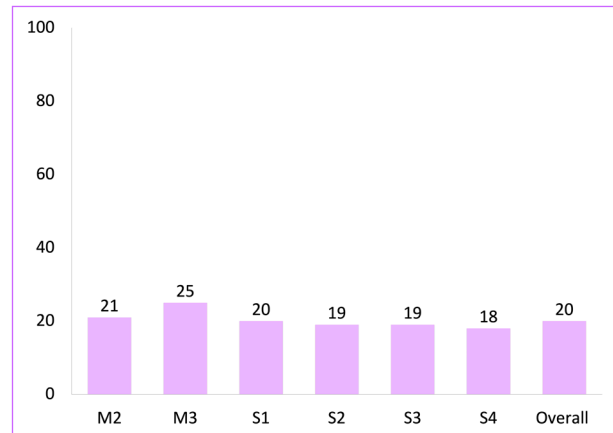


Figure 3.2.21. Laws and norms favourable to drug use scale by grade level and overall.

Laws and Norms Favourable to Handguns

As with drug use, students' perceptions of the laws regarding illegal use of firearms may be related to violence. That is, when students perceive laws to be strict and consistently enforced, they may be less likely to carry guns and to engage in gun violence.

The *Laws and Norms Favourable to Handguns* scale was developed to measure a component of the risk factor *Community Laws and Norms Favourable toward Drug Use, Firearms and Crime*. This scale is measured using one survey item:

- ✓ If a kid illegally carried a handgun in your neighbourhood, or the area you live, would he or she be caught by the police?

- Across grade levels, percentile scores for *Laws and Norms Favourable to Handguns* range from a low of 20 among M2 to a high of 49 among S4 students.
- In 2015, across grade levels, percentile scores for *Laws and Norms Favourable to Handguns* ranged from a low of 24 among M2 to a high of 55 among S3 students.
- Overall, students received a percentile score of 36 on the *Laws and Norms Favourable to Handguns* scale versus a score of 42 in 2015.

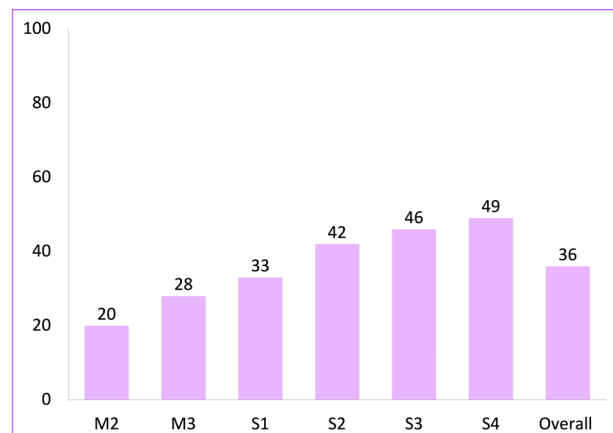


Figure 3.2.22. Laws and norms favourable to handguns scale by grade level and overall.

Family History of Antisocial Behaviour

If children are raised in a family where a history of addiction to alcohol or other drugs exists, the risk of having alcohol or other drug problems themselves increases. If children are born or raised in a family where criminal activity is present, their risk for delinquency increases. Similarly, children who are born to teenage mothers are more likely to become teen parents, and children of dropouts are more likely to drop out of school themselves. Children whose parents engage in violent behaviour inside or outside the home are at greater risk for exhibiting violent behaviour themselves. Students' perceptions of their families' behaviour and standards regarding drug use and other antisocial behaviours are measured by the survey.

The *Family History of Antisocial Behaviour* scale was developed to measure a component of the risk factor *Family History of Problem Behaviour*. This scale is measured by ten survey items:

- ✓ Has anyone in your family ever had a severe alcohol or drug problem?
- ✓ Have any of your brother(s) or sister(s) ever drunk beer, wine, or hard liquor?
- ✓ Have any of your brother(s) or sister(s) ever smoked marijuana?
- ✓ Have any of your brother(s) or sister(s) ever smoked cigarettes?
- ✓ Have any of your brother(s) or sister(s) ever taken a handgun to school?
- ✓ Have any of your brother(s) or sister(s) ever been suspended or expelled from school?
- ✓ About how many adults have you known personally who in the past year have used marijuana, crack, cocaine, or other drugs?
- ✓ About how many adults have you known personally who in the past year have sold or dealt drugs?
- ✓ About how many adults have you known personally who in the past year have done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.?
- ✓ About how many adults have you known personally who in the past year have gotten drunk or high?

To obtain a score, five survey items comprising the *Family History of Antisocial Behaviour* scale were recoded, that of “Have any of your brother(s) or sister(s) ever drunk beer, wine, or hard liquor?”, “Have any of your brother(s) or sister(s) ever smoked marijuana?”, “Have any of your brother(s) or sister(s) ever smoked cigarettes?”, “Have any of your brothers or sisters brother(s) or sister(s) ever taken a handgun to school”, and “Have any of your brother(s) or sister(s) ever been suspended or expelled from school?”

- Across grade levels, percentile scores for *Family History of Antisocial Behaviour* range from a low of 18 among M2 students to a high of 41 among S3 students.
- In 2015, across grade levels, percentile scores for *Family History of Antisocial Behaviour* ranged from a low of 21 among M2 students to a high of 58 among S4 students.
- Overall, students received a percentile score of 29 on the *Family History of Antisocial Behaviour* scale compared to a score of 40 in 2015.

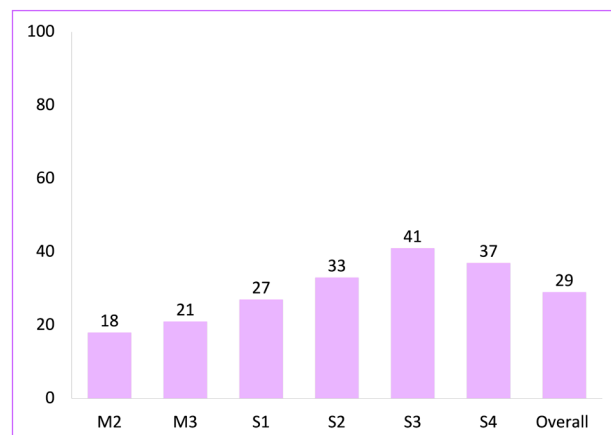


Figure 3.2.23. Family history of antisocial behaviour scale by grade level and overall.

Poor Family Management

The risk factor scale *Poor Family Management* measures two components of family life: “*poor family supervision*”, which is defined as parents failing to supervise and monitor their children, and “*poor family discipline*”, which is defined as parents failing to communicate clear expectations for behaviour and giving excessively severe, harsh or inconsistent punishment. Children who experience poor family supervision and poor family discipline are at higher risk of developing problems with drug use, delinquency, violence, and school dropout.

The risk factor scale *Poor Family Management* was developed to measure a component of the risk factor *Family Management Problems*. This scale is measured by the following eight survey items:

- ✓ The rules in my family are very clear.
 - ✓ My parents ask if I have gotten my homework done.
 - ✓ When I am not home, one of my parents know where I am and who I am with.
 - ✓ Would your parents know if you did not come home on time?
 - ✓ My family has clear rules about alcohol and drug use.
 - ✓ If you drank some beer, wine, or other hard liquor without your parents’ permission, would you be caught by your parents?
 - ✓ If you carried a handgun without your parents’ permission, would you be caught by your parents’?
 - ✓ If you skipped school without your parents’ permission, would you be caught by your parents’?
- Across grade levels, percentile scores for *Poor Family Management* range from a low of 3 among M2 students to a high of 11 among S4 students.
 - In 2015, across grade levels, percentile scores for *Poor Family Management* ranged from a low of 4 among M2 students to a high of 12 among S4 students.
 - Overall, students received a percentile score of 7 on the *Poor Family Management* scale compared to 8 in 2015.

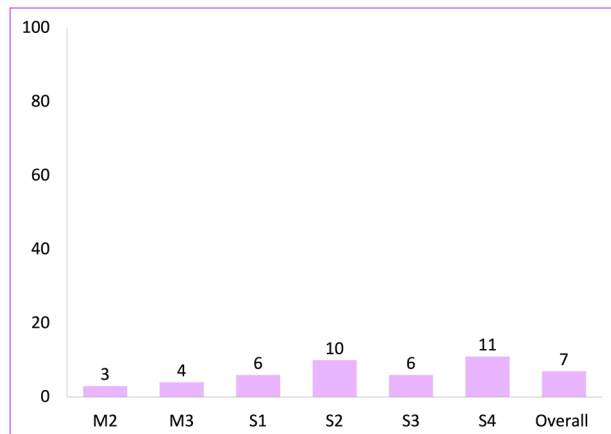


Figure 3.2.24. Poor family management scale by grade level and overall.

Family Conflict

Bonding between family members, especially between children and their parents or guardians, is a key component in the development of positive social norms. High levels of family conflict interfere with the development of these bonds, and increase the likelihood that young people will engage in illegal drug use and other forms of delinquent behaviour.

The risk factor *Family Conflict* is measured by a single scale using three survey items:

- ✓ We argue about the same things in my family over and over.
 - ✓ People in my family have serious arguments.
 - ✓ People in my family often insult or yell at each other.
- Across grade levels, percentile scores for *Family Conflict* range from a low of 26 among M2 students to a high of 35 among S3 students.
 - In 2015, across grade levels, percentile scores for *Family Conflict* ranged from a low of 29 among M2 students to a high of 44 among S3 students.
 - Overall, students received a percentile score of 31 on the *Family Conflict* scale (37 in 2015).

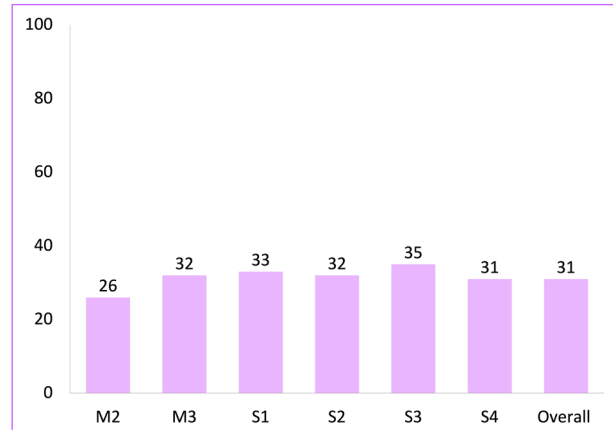


Figure 3.2.25. Family conflict scale by grade level and overall.

Parental Attitudes Favourable toward ATOD Use

Students' perceptions of their parents' opinions about alcohol, tobacco, and other drug use are an important risk factor. In families where parents use illegal drugs, are heavy users of alcohol, or are tolerant of use by their children, children are more likely to become drug users in adolescence.

The *Parental Attitudes Favourable toward ATOD Use* scale was developed to measure a component of the risk factor Favourable Parental Attitudes and Involvement in Problem Behaviour. This scale is measured by three survey items:

- ✓ How wrong do your parents feel it would be for you to drink beer, wine or hard liquor regularly?
 - ✓ How wrong do your parents feel it would be for you to smoke cigarettes?
 - ✓ How wrong do your parents feel it would be for you to smoke marijuana?
- Across grade levels, percentile scores for *Parental Attitudes Favourable toward ATOD Use* range from a low of 1 among M2 students to a high of 11 among S4 students.
 - In 2015, percentile scores for *Parental Attitudes Favourable toward ATOD Use* ranged from a low of 2 among M2 and M3 students to a high of 14 among S4 students.
 - Overall, students received a percentile score of 5 on the *Parental Attitudes Favourable toward ATOD Use* scale compared to 7 in 2015.

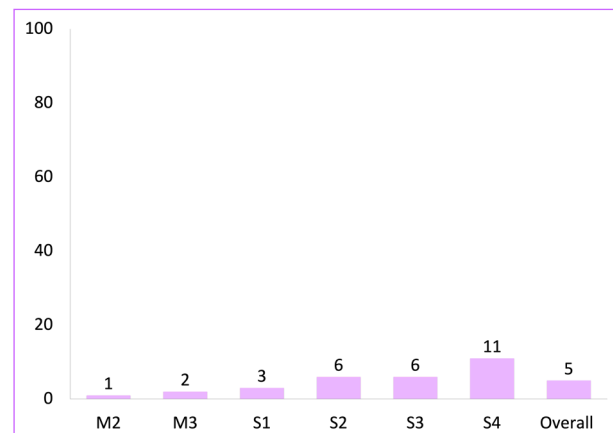


Figure 3.2.26. Parental attitudes favourable toward ATOD use scale by grade level and overall.

Parental Attitudes Favourable to Antisocial Behaviour

Students' perceptions of their parents' opinions about antisocial behaviour are also an important risk factor. Parental attitudes and behaviour regarding crime and violence influence the attitudes and behaviour of children. If parents approve of, or excuse, their children for breaking the law, then the children are more likely to develop problems with juvenile delinquency.

The *Parental Attitudes Favourable to Antisocial Behaviour* scale was developed to measure a component of the risk factor *Favourable Parental Attitudes and Involvement in Problem Behaviour*. This scale is measured by three survey items:

- ✓ How wrong do your parents feel it would be for you to steal anything worth more than \$5.00?
 - ✓ How wrong do your parents feel it would be for you to draw graffiti, write things, or draw pictures on buildings or other property?
 - ✓ How wrong do your parents feel it would be for you to pick a fight with someone?
- Across grade levels, percentile scores for *Parental Attitudes Favourable to Antisocial Behaviour* range from a low of 3 among M2 students to a high of 8 among S2 and S4 students
 - In 2015, across grade levels, percentile scores for *Parental Attitudes Favourable to Antisocial Behaviour* ranged from a low of 6 among M2 and M3 students to a high of 10 among S3 students.
 - Overall, students received a percentile score of 6 on the *Parental Attitudes Favourable to Antisocial Behaviour* scale (score of 8 in 2015).

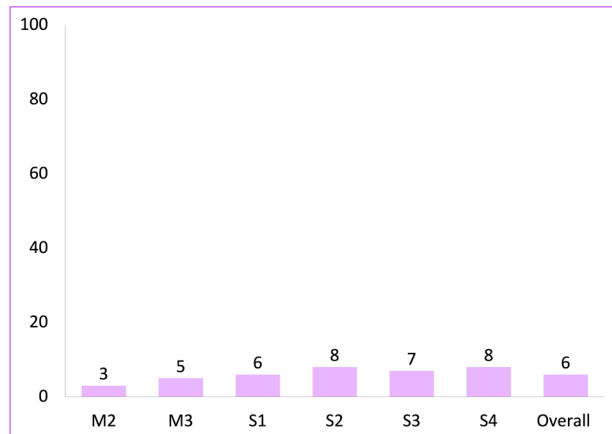


Figure 3.2.27. Parental attitudes favourable to antisocial behaviour scale by grade level and overall.

Poor Academic Performance

Beginning in the late elementary grades, poor academic performance increases the risk of drug use, delinquency, violence, and school dropout. Children fail for many reasons, but it appears that the experience of failure increases the risk of these problem behaviours.

The *Poor Academic Performance* scale was developed to measure a component of the risk factor *Academic Failure Beginning in Late Elementary School*. This scale is measured by two survey items:

- ✓ Putting them all together, what were your grades like last year?
- ✓ Are your school grades better than the grades of most students in your class?

To assess poor academic performance, grades were ranked according to pass/fail and then combined with the second item to determine a score. Elevated findings for this risk factor scale suggest that not only do students believe that they have lower grades than they might expect to get, but also that they perceive that compared to their peers, they have below-average grades.

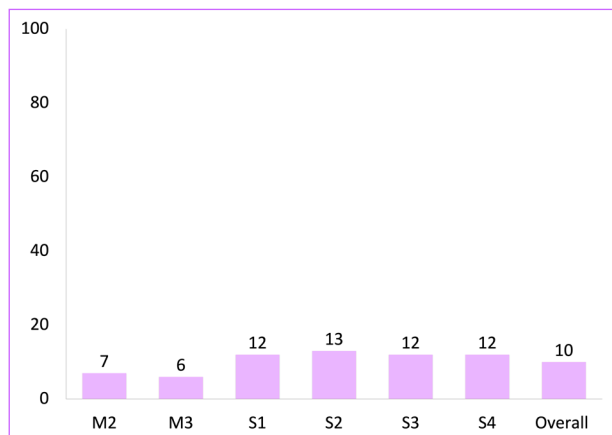


Figure 3.2.28. Poor academic performance scale by grade level and overall.

- Across grade levels, percentile scores for *Poor Academic Performance* range from a low of 6 among M3 students to a high of 13 among S2 students.
- In 2015, across grade levels, percentile scores for *Poor Academic Performance* ranged from a low of 6 among S3 students to a high of 9 among S1 and S2 students.
- Overall, students received a percentile score of 10 on the *Poor Academic Performance* scale (score of 12 in 2015).

Lack of Commitment to School

Lack of Commitment to School assesses a student’s general feelings about his or her schooling. Elevated findings for this risk factor scale can suggest that students feel less attached to, or connected with, their classes and school environment. Lack of commitment to school means the child has ceased to see the role of student as a positive one. Young people who have lost this commitment to school are at higher risk for a variety of problem behaviours.

The risk factor *Lack of Commitment to School* is measured by a single scale using seven survey items:

- ✓ During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or cut?
- ✓ How often do you feel that the school work you are assigned is meaningful and important?
- ✓ How interesting are most of your courses to you?
- ✓ How important do you think things you are learning in school are going to be for your later life?
- ✓ Now thinking back over the past year in school, how often did you enjoy being in school?
- ✓ Now thinking back over the past year in school, how often did you hate being in school?
- ✓ Now thinking back over the past year in school, how often do you try to do your best work in school?

- Across grade levels, percentile scores for *Lack of Commitment to School* range from a low of 8 among S1 students to a high of 19 among S3 students.
- In 2015, across grade levels, percentile scores for *Lack of Commitment to School* ranged from a low of 5 among M2 students to a high of 13 among S3 students.
- Overall, students received a percentile score of 13 on the *Lack of Commitment to School* scale versus a score of 9 in 2015.

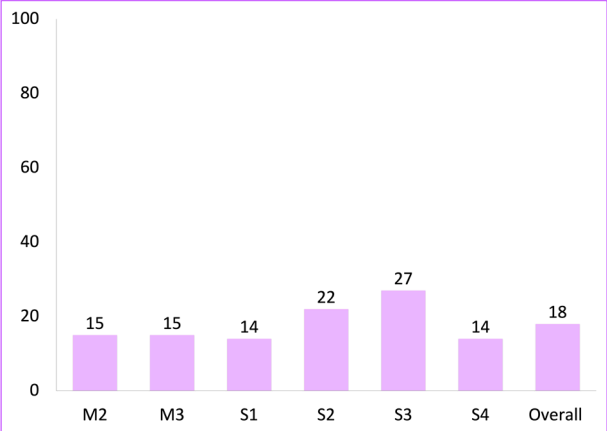


Figure 3.2.29. Lack of commitment to school scale by grade level and overall.

Rebelliousness

The survey also determines the number of young people who feel they are not part of society, who feel they are not bound by rules, and who do not believe in trying to be successful or responsible. These students are at higher risk of drug use, delinquency, and school dropout.

The risk factor *Rebelliousness* is measured by a single scale using the following three survey items:

- ✓ I like to see how much I can get away with.
- ✓ I ignore the rules that get in my way.
- ✓ I do the opposite of what people tell me, just to get them mad.

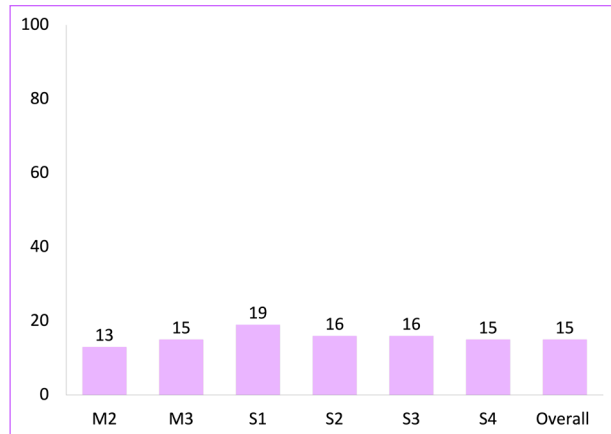


Figure 3.2.30. Rebelliousness scale by grade level and overall.

- Across grade levels, percentile scores for *Rebelliousness* range from a low of 13 among M2 students to a high of 19 among S1 students.
- In 2015, across grade levels, percentile scores for *Rebelliousness* ranged from a low of 14 among M3 students to a high of 30 among S4 students.
- Overall, students received a percentile score of 15 on the *Rebelliousness* scale. A score of 22 was obtained on this scale in 2015.

Gang Involvement

Gangs have long been associated with crime, violence, and other antisocial behaviours. Evidence suggests that gangs can contribute to antisocial behaviour beyond simple association with delinquent peers.

The risk factor *Gang Involvement* is measured by a single scale using four survey items:

- ✓ Have you ever belonged to a gang?
- ✓ If you have ever belonged to a gang, did the gang have a name?
- ✓ Think of your four best friends (the friends you feel closest to), in the past (12 months), how many of your best friends have been members of a gang?
- ✓ How old were you when you first belonged to a gang?

- Across grade levels, percentile scores for *Gang Involvement* range from a low of 1 among M2 and M3 students to a high of 4 among S3 and S4 students.
- In 2015, across grade levels, percentile scores for *Gang Involvement* ranged from a low of 2 among M2 and M3 students to a high of 7 among S2 students.
- Overall, students received a percentile score of 2 on the *Gang Involvement* scale versus a score of 4 received in 2015. This would indicate fewer students engaging in gang activity.

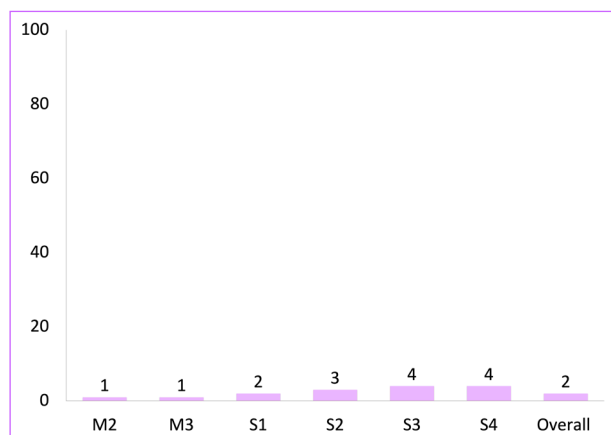


Figure 3.2.31. Gang involvement scale by grade level and overall.

- Of respondents indicating gang involvement, 0.9% or 24 students compared to 1.5% or 40 students in 2015, said they first belonged to a gang by age 10 years or younger (see Table 3.2.3).

Table 3.2.3
Age of First Belonging to a Gang by Grade Level and Overall

Age (Years)	M2		M3		S1		S2		S3		S4		Overall	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
10 or younger	3	0.5	3	0.6	3	0.6	4	0.9	3	0.8	8	2.4	24	0.9
11	3	0.5	2	0.4	4	0.8	4	0.9	2	0.5	1	0.3	16	0.6
12	2	0.3	1	0.2	4	0.8	3	0.6	12	0.3	-	-	13	0.5
13	-	-	1	0.2	4	0.8	1	0.2	4	1.0	3	0.9	13	0.5
14	-	-	-	-	1	0.2	1	0.2	3	0.8	1	0.3	6	0.2
15	1	0.2	-	-	1	0.2	2	0.4	4	1.0	-	-	8	0.3
16	-	-	-	-	-	-	1	0.2	-	-	6	1.8	7	0.3
17 or older	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Favourable Attitudes toward ATOD Use

During the elementary school years, children usually express anti-drug attitudes and have difficulty imagining why people use drugs. However, in middle school, as others they know begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviours. This acceptance places them at higher risk. The risk factor scale *Favourable Attitudes toward ATOD Use* assesses risk by asking young people how wrong they think it is for someone their age to use drugs.

The *Favourable Attitudes toward ATOD Use* scale was developed to measure a component of the risk factor *Favourable Attitudes toward Problem Behaviour*. This scale is measured by four survey items:

How wrong do you think it is for someone your age to:

- ✓ Drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly?
- ✓ Smoke cigarettes?
- ✓ Smoke marijuana?
- ✓ Use LSD, cocaine, amphetamines or another illegal drug?

- Across grade levels, percentile scores for *Favourable Attitudes toward ATOD Use* range from a low of 2 among M2 students to a high of 27 among S4 students.
- In 2015, across grade levels, percentile scores for *Favourable Attitudes toward ATOD Use* ranged from a low of 3 among M2 students to a high of 37 among S4 students.
- Overall, students received a percentile score of 12 on the *Favourable Attitudes toward ATOD Use* scale (score of 17 in 2015).

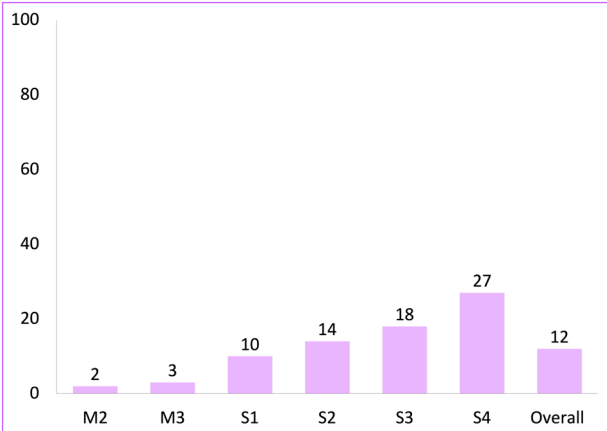


Figure 3.2.32. Favourable attitudes toward ATOD use scale by grade level and overall.

Favourable Attitudes toward Antisocial Behaviour

During the primary school years, children usually express anticrime and prosocial attitudes and have difficulty imagining why people commit crimes or drop out of school. However, in middle school, as others they know begin to participate in such activities, their attitudes often shift toward greater acceptance of these behaviours. This acceptance places them at higher risk for antisocial behaviours.

The *Favourable Attitudes toward Antisocial Behaviour* scale was developed to measure a component of the risk factor *Favourable Attitudes toward Problem Behaviour*. This scale is measured by five survey items:

- ✓ How wrong do you think it is for someone your age to take a handgun to school?
 - ✓ How wrong do you think it is for someone your age to steal anything worth more than \$5.00?
 - ✓ How wrong do you think it is for someone your age to attack someone with the idea of seriously hurting them?
 - ✓ How wrong do you think it is for someone your age to pick a fight with someone?
 - ✓ How wrong do you think it is for someone your age to stay away from school all day when their parents think they are at school?
- Across grade levels, percentile scores for *Favourable Attitudes toward Antisocial Behaviour* range from a low of 2 among M2 and M3 students to a high of 6 among S1 and S2 students.
 - In 2015, across grade levels, percentile scores for *Favourable Attitudes toward Antisocial Behaviour* ranged from a low of 3 among M2 students to a high of 8 among S2 and S3 students.
 - Overall, students received a percentile score of 4 on the *Favourable Attitudes toward Antisocial Behaviour* scale compared to 6 in 2015.

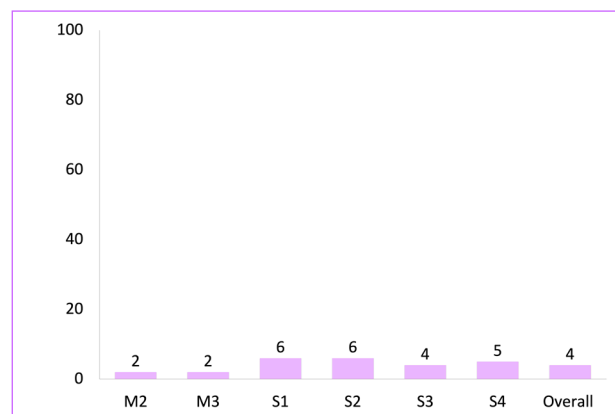


Figure 3.2.33. Favourable attitudes toward antisocial behaviour scale by grade level and overall.

Sensation Seeking

Individual characteristics that may have a biological or physiological basis are sometimes referred to as “constitutional factors”. *Sensation Seeking* is among those constitutional factors that appear to increase the likelihood of a young person using drugs, engaging in delinquent behaviour and/or committing violent acts.

Sensation Seeking is assessed by asking how often students participate in behaviours to experience thrills or a particular feeling or emotion.

The *Sensation Seeking* scale was developed to measure a component of the risk factor *Constitutional Factors*. This scale is measured by three survey items:

- ✓ How many times have you done what feels good no matter what?
- ✓ How many times have you done something

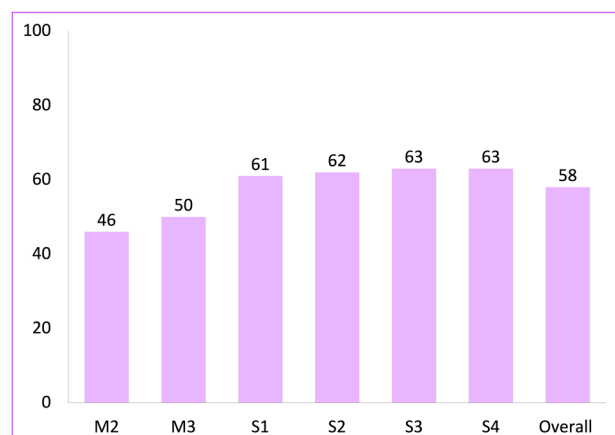


Figure 3.2.34. Sensation seeking scale by grade level and overall.

dangerous because someone dared you to do it?

✓ How many times have you done crazy things even if they are a little dangerous?

- Across grade levels, percentile scores for *Sensation Seeking* range from a low of 46 among M2 students to a high of 63 among S3 and S4 students.
- In 2015, across grade levels, percentile scores for *Sensation Seeking* ranged from a low of 57 among M2 students to a high of 80 among S4 students.
- Overall, students received a percentile score of 58 on the *Sensation Seeking* scale (69 in 2015).

Peer Rewards for Antisocial Behaviour

Students' perceptions of their peer groups' social norms are also an important predictor of involvement in problem behaviour. When students feel that they get positive feedback from their peers for using alcohol, tobacco, or other drugs, or getting involved in delinquent behaviours, they are more likely to engage in these behaviours. When young people believe that their peer groups are involved in antisocial behaviours, they are more likely to become involved in antisocial behaviours themselves.

The *Peer Rewards for Antisocial Behaviour* scale was developed to measure a component of the risk factor *Friends Who Engage in the Problem Behaviour*. This scale is measured by four survey items:

- ✓ What are the chances you would be seen as cool if you smoked cigarettes?
- ✓ What are the chances you would be seen as cool if you began drinking alcoholic beverages regularly?
- ✓ What are the chances you would be seen as cool if you smoked marijuana?
- ✓ What are the chances you would be seen as cool if you carried a handgun?

- Across grade levels, percentile scores for *Peer Rewards for Antisocial Behaviour* range from a low of 15 among M2 students to a high of 51 among S3 students.
- In 2015, across grade levels, percentile scores for *Peer Rewards for Antisocial Behaviour* ranged from a low of 25 among M2 students to a high of 63 among S3 students.
- Overall, students received a percentile score of 38 on the *Peer Rewards for Antisocial Behaviour* scale versus a score of 47 in 2015.

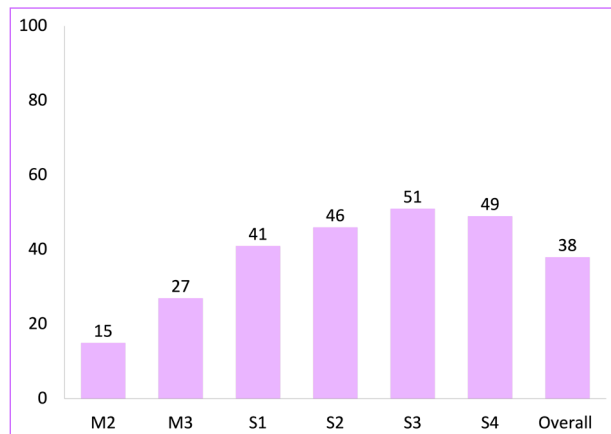


Figure 3.2.35. Peer rewards for antisocial behaviour scale by grade level and overall.

Friends' Use of Drugs

Young people who associate with peers who engage in substance use are much more likely to engage in it themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who use drugs greatly increases a youth's risk of becoming involved in such behaviour.

The Friends' Use of Drugs scale was developed to measure a component of the risk factor Friends Who Engage in the Problem Behaviour. This scale is measured by four survey items:

- ✓ In the past year, how many of your four best friends have smoked cigarettes?
 - ✓ In the past year, how many of your four best friends have tried beer, wine, or hard liquor?
 - ✓ In the past year, how many of your four best friends have used marijuana?
 - ✓ In the past year, how many of your four best friends have used LSD, cocaine, amphetamines, or other illegal drugs?
- Across grade levels, percentile scores for Friends' Use of Drugs range from a low of 6 among M2 students to a high of 62 among S4 students.
 - In 2015, across grade levels, percentile scores for Friends' Use of Drugs ranged from a low of 12 among M2 students to a high of 80 among S4 students.
 - Overall, students received a percentile score of 36 on the Friends' Use of Drugs scale compared to a score of 50 in 2015. This would suggest that fewer students felt that their friends were using drugs.

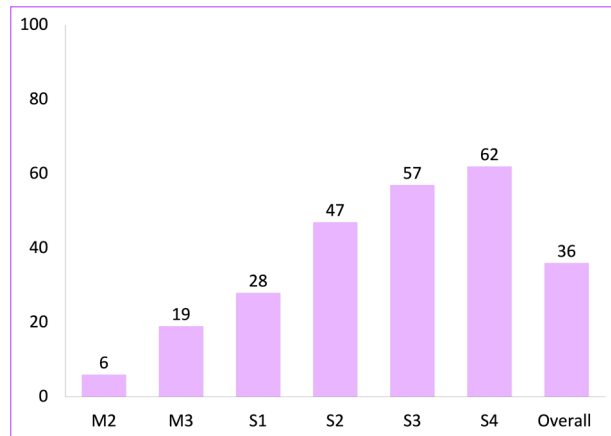


Figure 3.2.36. Friends' use of drugs scale by grade level and overall.

Friends' Delinquent Behaviour

Young people who associate with peers who engage in delinquent behaviour are much more likely to engage in delinquent behaviour themselves. This is one of the most consistent predictors identified by research. Even when young people come from well-managed families and do not experience other risk factors, spending time with peers who engage in delinquent behaviour greatly increases the risk of their becoming involved in delinquent behaviour.

The Friends' Delinquent Behaviour scale was developed to measure a component of the risk factor Friends Who Engage in the Problem Behaviour. This scale is measured by six survey items:

In the past year, how many of your four best friends have:

- ✓ Been suspended from school?
- ✓ Carried a handgun?
- ✓ Sold illegal drugs?
- ✓ Stolen or tried to steal a motor vehicle?
- ✓ Been arrested?
- ✓ Dropped out of school?

Elevated scores can indicate that students are interacting with more antisocial peers than average. Low scores can suggest that students' delinquent behaviour is not strongly influenced by their peers.

- Across grade levels, percentile scores for *Friends' Delinquent Behaviour* range from a low of 5 among M2 students to a high of 17 among S3 students.
- In 2015, across grade levels, percentile scores for *Friends' Delinquent Behaviour* ranged from a low of 9 among M2 students to a high of 26 among S2 students.
- Overall, students received a percentile score of 12 on the *Friends' Delinquent Behaviour* scale compared to the score of 19 observed in 2015.

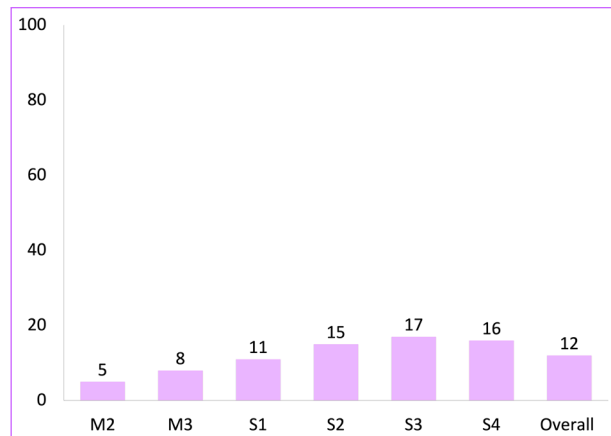


Figure 3.2.37. Friends' delinquent behaviour scale by grade level and overall.

Low Perceived Risks of Drug Use

The perception of harm from drug use is related to both experimentation and regular use. The less harm that an adolescent perceives as the result of drug use, the more likely it is that he or she will use drugs.

The Low Perceived Risks of Drug Use scale was developed to measure a component of the risk factor Favourable Attitudes toward Problem Behaviour. This scale is measured by four survey items:

How harmful is each of the following to your health?

- ✓ Smoking cigarettes frequently.
- ✓ Drinking alcoholic beverages frequently.
- ✓ Smoking marijuana sometimes.
- ✓ Smoking marijuana frequently.

An elevated score can indicate that students are not aware of, or do not comprehend, the possible harm resulting from drug use.

- Across grade levels, percentile scores for Low Perceived Risks of Drug Use range from a low of 8 among M2 and M3 students to a high of 58 among S4 students.
- In 2015, across grade levels, percentile scores for Low Perceived Risks of Drug Use ranged from a low of 2 among M2 students to a high of 21 among S3 students.
- Overall, students received a percentile score of 33 on the Low Perceived Risks of Drug Use scale versus a score of 11 in 2015. This indicates that more students believe that drug use is a risky behaviour.

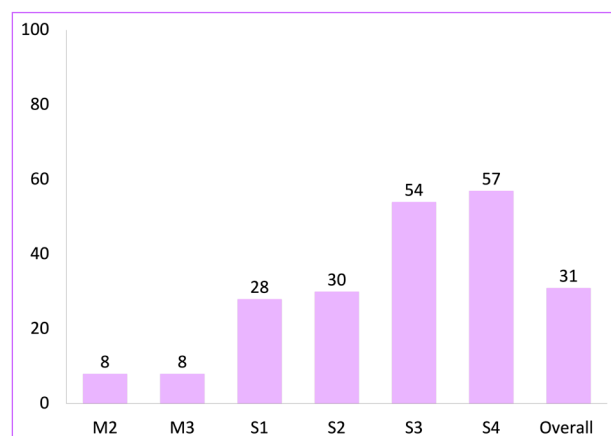


Figure 3.2.38. Low perceived risks of drug use scale by grade level and overall.

Early Initiation of Drug Use

The initiation of alcohol, tobacco, or other drug use at an early age is linked to a number of negative outcomes. The earlier that experimentation with drugs begins, the more likely it is that experimentation will become consistent, regular use. Early initiation may lead to the use of a greater range of drugs, as well as other problem behaviours. In this current survey, early initiation of drug use is defined as drug use at age 11 years or younger.

The risk factor scale *Early Initiation of Drug Use* was developed to measure a component of the risk factor *Early Initiation of Problem Behaviour*. This scale is measured by survey items that ask when drug use began.

- Across grade levels, percentile scores for *Early Initiation of Drug Use* range from a low of 7 among M2 students to a high of 11 among M3 students.
- In 2015, across grade levels, percentile scores for *Early Initiation of Drug Use* ranged from a low of 12 among S4 students to a high of 30 among M2 students.
- Overall, students received a percentile score of 8 on the *Early Initiation of Drug Use* scale compared to a score of 19 in 2015.

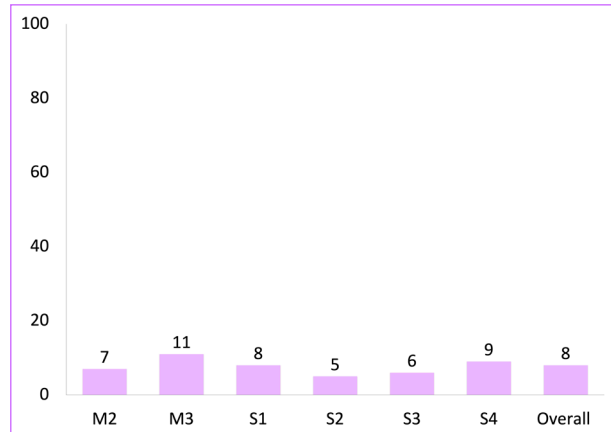


Figure 3.2.39. Early initiation of drug use scale by grade level and overall.

Intention to Use

The intended use of alcohol and drugs later in life was assessed by asking students their intent to participate in certain behaviours when they become adults. This information may be helpful in stopping substance use behaviour before it starts. Prevention specialists are encouraged to review grade level results which may be predictive of future substance use behaviours.

The risk factor scale *Intention to Use* is measured by three survey items:

- ✓ When I am an adult I will smoke cigarettes.
- ✓ When I am an adult I will drink beer, wine, or liquor.
- ✓ When I am an adult I will smoke marijuana.
- Across grade levels, percentile scores for *Intention to Use* range from a low of 2 among M2 students to a high of 16 among S3 students.
- In 2015, across grade levels, percentile scores for *Intention to Use* ranged from a low of 3 among M2 students to a high of 22 among S2 students.
- Overall, students received a percentile score of 9 on the *Intention to Use* scale compared to a score of 12 in 2015.

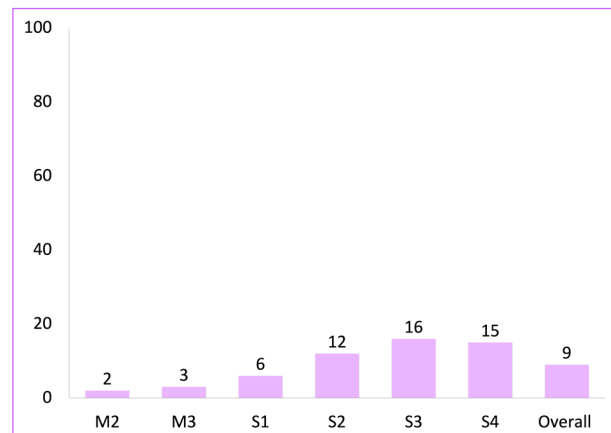


Figure 3.2.40. Intention to use scale by grade level and overall.

CHAPTER 3.3

RESULTS

Outcome Measures



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3.3.1 Introduction

The following section reports the results of three additional topics of interest two from the *Communities That Cares Survey*, that of *Depression and Other Antisocial Behaviours*. Four survey items comprise the *Depression* scale:

- ✓ Sometimes I think that life is not worth it.
- ✓ At times I think I am no good at all.
- ✓ All in all, I am inclined to think that I am a failure.
- ✓ In the past year have you felt depressed or sad MOST days, even if you felt OK sometimes?

Other Antisocial Behaviours were assessed by the following 11 statements, which were preceded by “How many times in the year (the last 12 months) have you...”:

- ✓ Been suspended from school?
- ✓ Carried a Handgun.
- ✓ Sold Illegal Drugs.
- ✓ Stolen or Tried to Steal a Motor Vehicle.
- ✓ Being Arrested.
- ✓ Attacked Someone with the Idea of Seriously Hurting Them.
- ✓ Been Drunk or High at School.
- ✓ Taken a Handgun to School.
- ✓ Stolen Something Worth More than \$5.
- ✓ Purposely Damaged or Destroyed Property that did not Belong to You.
- ✓ Taken Something from a Store Without Paying for It.

3.3.2 Measurement

As with alcohol, tobacco, and other drug use, as well as risk and protective factors, prevalence tables and graphs are presented to illustrate the percentage of students who reported depression and other antisocial behaviours over the past 12 months. Instead of reporting on each item in the Depression section, responses to all four questions were summed to create a single score measuring Depression. The score is then presented by grade level and overall for all survey respondents.

The outcome measure *Other Antisocial Behaviours* assesses students on various delinquent behaviours they might engage in. For *Other Antisocial Behaviours*, a score was not created. Instead, each statement is reported by percentile for each grade level and overall for all survey respondents.

3.3.3 Depression

The *Depression* scale was designed to measure how students think about life. Research indicates that young people with undiagnosed or behavioural problems often use drugs and alcohol as a way to relieve their frustrations. A depressed teen may self-medicate with drugs or alcohol to escape the sense of hopelessness.³⁷

³⁷ A. M. Libby, H. D. Orton, S. K. Stover, & P. D. Riggs. (2005). What came first, major depression or substance use disorder? Clinical characteristics and substance use comparing teens in a treatment cohort. *Addictive Behaviors* 30(9), 1649-1662. p. 1655.

- Across grade levels, percentile scores for *Depression* range from a low of 27 among M2 students to a high of 60 among S2 students.
- In 2015, across grade levels, percentile scores for *Depression* ranged from a low of 28 among M2 students to a high of 41 among S4 students.
- Overall, students received a percentile score of 37 on the *Depression* scale in the current survey as well as in 2015.

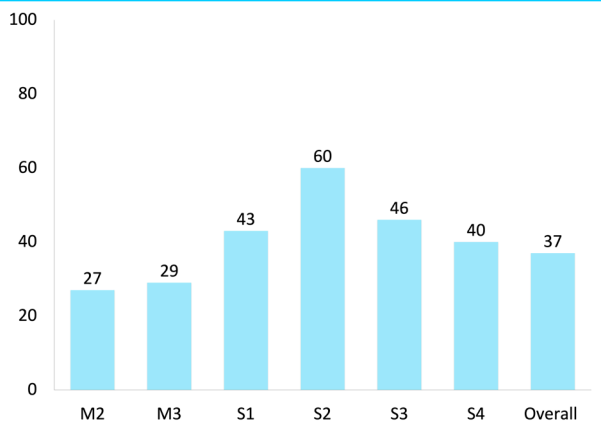


Figure 3.3.1: Depression scale by grade level and overall.

3.3.4 Treatment

The *Treatment* scale was designed to measure the number of students who have received treatment for alcohol and/or drug related problems and those who have seen a health professional for emotional and/or behavioural problems. Research indicates that young people who get into treatment early enough can mitigate a long-term relationship with drugs and those who seek out assistance for an undiagnosed or behavioural issue may be less likely to use drugs and alcohol as a way to relieve their frustrations. A depressed adolescent may self-medicate with drugs or alcohol to escape the sense of hopelessness. The 2019 survey was the first to assess this variable; therefore, no comparable information is provided.

- Across grade levels, percentile scores for *Treatment* range from a low of 14 among M2 students to a high of 20 among S2 and S4 students.
- Overall, students received a percentile score of 18 on the *Treatment* scale.

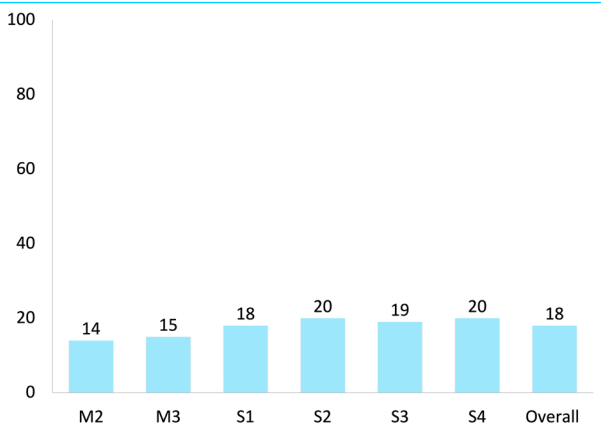


Figure 3.3.2: Treatment scale by grade level and overall.

3.3.5 Other Antisocial Behaviours

Overall Results

Other antisocial behaviour prevalence rates for the combined sample of M2 through S4 students are presented in Figure 3.3.3 and in the overall results column of Table 3.3.1. Overall, all 11 antisocial behaviours decreased from 2015 levels. Across all grades, “*Suspended from School*” was reported at 11.3% (14.0% in 2015) making it the most prevalent of the 11 behaviours. In the current survey, the three most prevalent, the categories are “*Suspended from School*” (11.3%), “*Stolen Something Worth More than \$5*” (10.4%), and “*Taking Something from a Store Without Paying For It*” (9.4%).

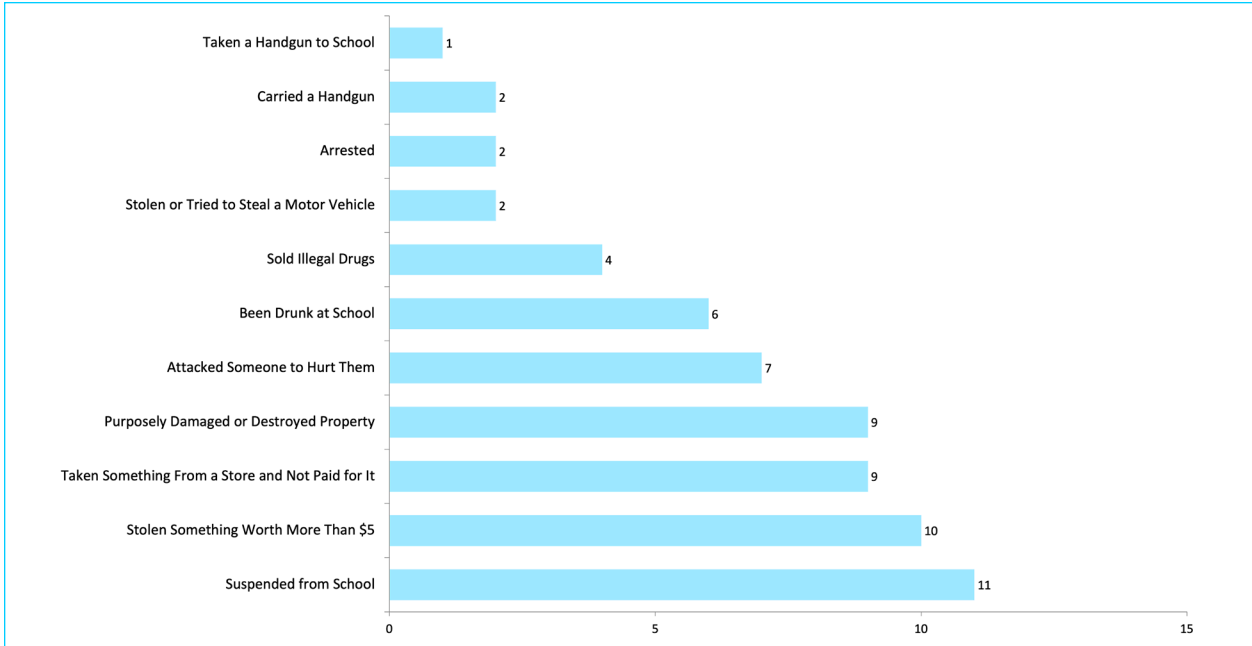


Figure 3.3.3: Overall prevalence of antisocial behaviours.

Grade Level Results

Other antisocial behaviour prevalence rates within individual grades are presented in Figure 3.3.3 and Table 3.3.1. In many communities, these behaviours reveal a complex pattern of changes across grades. Typically, reports of “Being Drunk or High at School” and “Selling Drugs” follow the ATOD model, with prevalence rates increasing through the upper grade levels. Prevention planners should review the other antisocial behaviour profiles within individual grades, with special attention toward behaviours that show a marked deviation from these patterns.

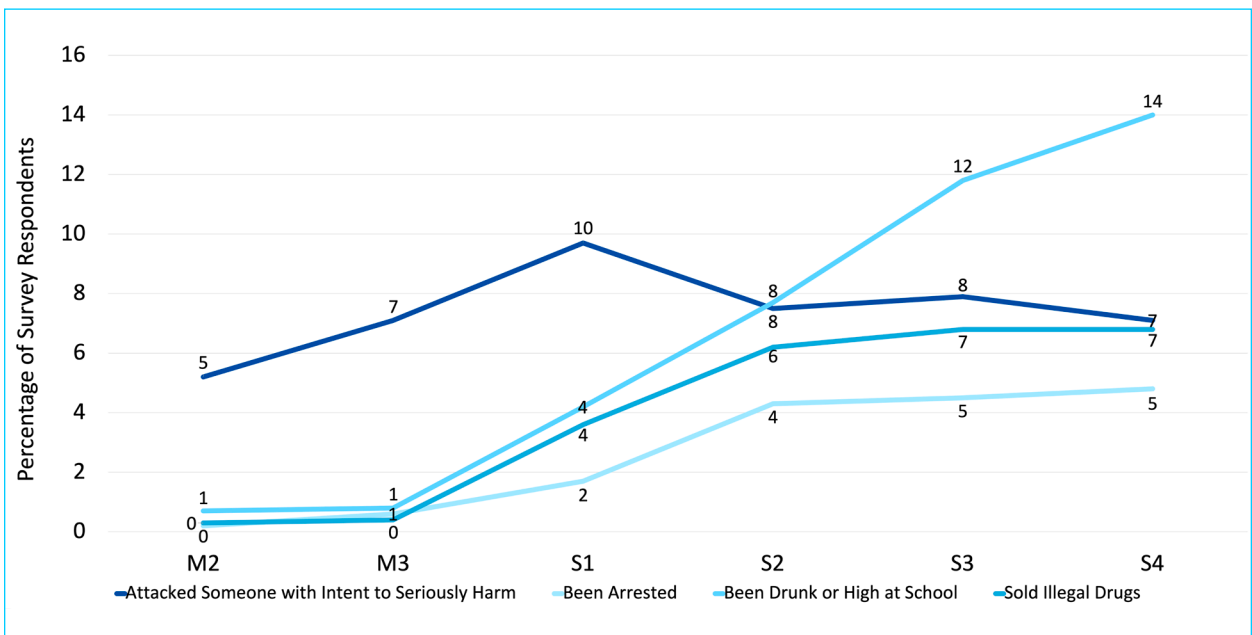


Figure 3.3.3: Overall prevalence of antisocial behaviours.

Table 3.3.1*Antisocial Behaviours of Survey Respondents by Grade Level and Overall*

Antisocial Behaviours	M2		M3		S1		S2		S3		S4		Overall	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Getting Suspended from School	49	8.3	52	8.8	72	15.2	54	11.6	47	12.3	38	11.3	312	11.3
Carrying a Handgun	2	0.3	3	0.5	8	1.7	13	2.8	6	1.6	12	3.6	44	1.6
Sold Illegal Drugs	2	0.3	2	0.4	17	3.6	29	6.2	26	6.8	23	6.8	99	3.6
Attempting to Steal a Motor Vehicle	5	0.8	3	0.6	13	2.7	74	15.8	14	3.7	17	5.1	66	2.4
Being Arrested	1	0.2	3	0.6	8	1.7	20	4.3	17	4.5	16	4.8	65	2.3
Attacked Someone with Intent to Seriously Harm	31	5.2	36	7.1	46	9.7	35	7.5	30	7.9	24	7.1	202	7.3
Being Drunk or High at School	4	0.7	4	0.8	20	4.2	36	7.7	45	11.8	47	14.0	156	5.6
Taking a Handgun to School	1	0.2	1	0.2	4	0.8	9	1.9	2	0.5	8	2.4	25	0.9
Stolen Something Worth More Than \$5	34	5.7	38	7.5	66	13.9	64	13.7	41	10.7	44	13.1	287	10.4
Purposely Damaged or Destroyed Property That Did not Belong to You	30	5.1	37	7.3	57	12.0	52	11.1	32	8.4	32	9.5	235	8.5
Taken Something from a Store Without Paying for It	24	4.1	35	6.9	56	11.8	63	13.5	43	11.3	38	11.3	259	9.4
Average	17	2.8	19	3.7	33	7.0	41	8.7	28	7.2	27	8.1	159	5.8

Attacking Someone with Intent to Harm

“Attacking someone with intent to harm” is measured by the question “How many times in the past year (12 months) have you attacked someone with the idea of seriously hurting them?” The question does not ask specifically about the use of a weapon; therefore, occurrences of physical fighting without weapons will be captured with this question.

- Prevalence rates for “Attacking Someone with Intent to Harm” range from a low of 5.2% among M2 students to a high of 9.7% among S1 students.
- In 2015, prevalence rates for “Attacking Someone with Intent to Harm” ranged from a low of 7.9% among M2 students to a high of 14.5% among S2 students.
- Overall, 7.3% of students reported having attacked someone with intent to harm in the past year (10.8% in 2015).

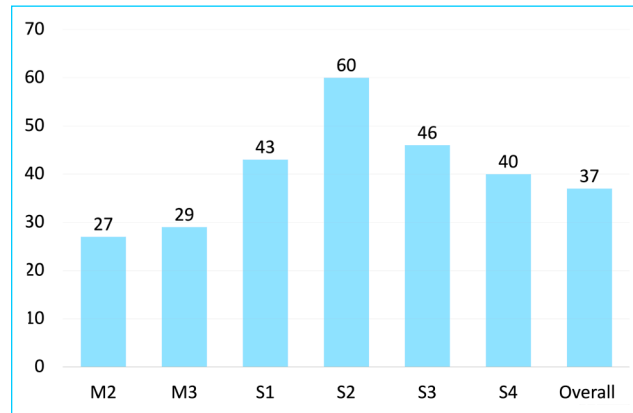


Figure 3.3.4: Attacking someone with the intent to harm.

Attempting to Steal a Motor Vehicle

Vehicle theft is measured by the question “How many times in the past year (12 months) have you stolen or tried to steal a motor vehicle such as a car or motorcycle?”

- When it came to “Attempting to Steal a Vehicle” M3 students were the lowest at 0.6% and S2 students were the highest at 16.0% (6.7% in 2015).
- In 2015, prevalence rates for “Attempting to Steal a Vehicle” ranged from a low of 1.6% among M2 students to a high of 6.7% among S2 students
- Overall, 5.0% of students reported having attempted to steal a vehicle in the past year compared to 4.6% observed in 2015.

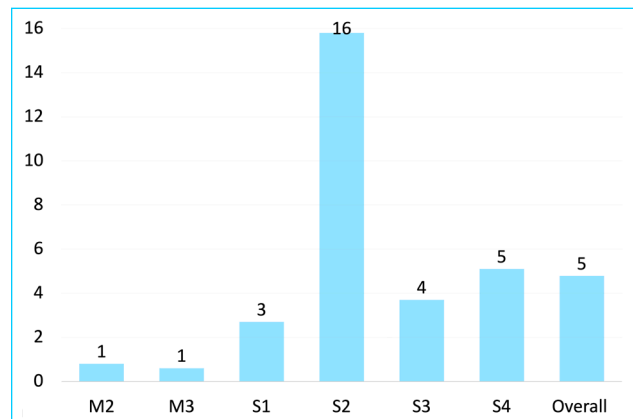


Figure 3.3.5: Stolen or tried to steal a motor vehicle such as a car or motorcycle.

Being Arrested

Any student experience with “being arrested” is measured by the question “How many times in the past year (12 months) have you been arrested?” Note that the question does not define “arrested.” Rather, it is left to the individual respondent to define. Some youths may define any contact with police as an arrest, while others may consider that only an official arrest justifies a positive answer to this question.

- Prevalence rates for “Being Arrested” range from a low of 0.2% among M2 students to a high of 4.8% among S4 students.
- In 2015, prevalence rates for “Being Arrested” ranged from a low of 1.4% among M2 students to a high of 5.4% among S2 and S3 students.
- Overall 2.3% (versus 3.8% in 2015) of students reported having been arrested in the past year.

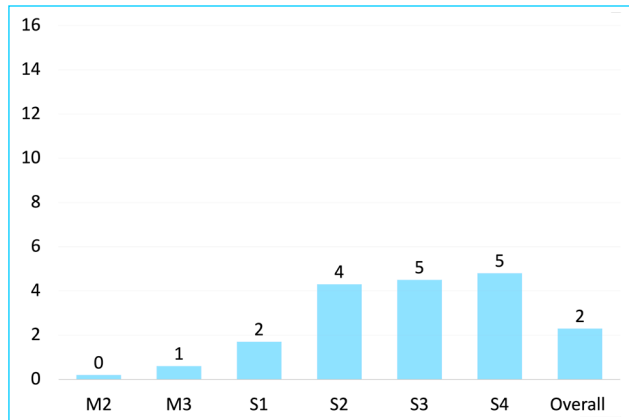


Figure 3.3.6: Been arrested.

Being Drunk or High at School

Having been “drunk or high at school” is measured by the question “How many times in the past year (12 months) have you been drunk or high at school?”

- Prevalence rates for “Being Drunk or High at School” range from a low of 0.7% among M2 students to a high of 14.0% among S4 students.
- In 2015, prevalence rates for “Being Drunk or High at School” ranged from a low of 1.6% among M2 students to a high of 14.8% among S4 students.
- Overall, 5.6% of students reported having been drunk or high at school in the past year (7.7% in 2015).

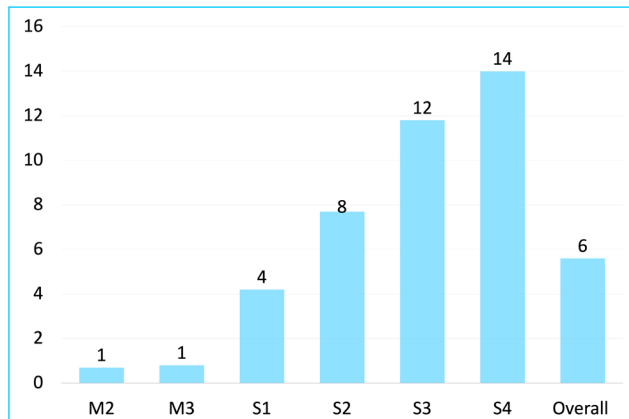


Figure 3.3.7: Drunk or high at school.

Carrying a Handgun

“Carrying a handgun” is measured by the question “How many times in the past year (12 months) have you carried a handgun?”

- Prevalence rates for “Carrying a Handgun” range from a low of 0.3% among M2 students to a high of 3.6% among S4 students.
- In 2015, prevalence rates for “Carrying a Handgun” ranged from a low of 0.6% among M3 students to a high of 3.4% among S3 students.
- Overall, 1.6% of students reported having carried a handgun in the past year versus 2.4% in 2015.

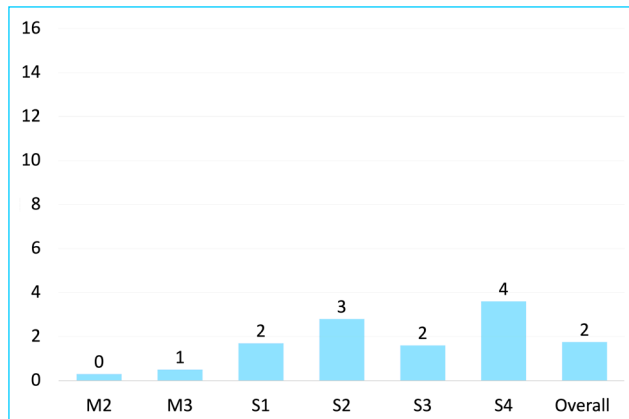


Figure 3.3.8: Carrying a handgun.

Getting Suspended from School

Suspension is measured by the question “How many times in the past year (12 months) have you been suspended from school?” Note that the question does not define “suspension.” Rather, it is left to the individual respondent to make that definition. School suspension rates may vary substantially from school to school. Therefore, these rates should be interpreted by someone knowledgeable about local school suspension policy.

- Prevalence rates for “Getting Suspended” range from a low of 8.3% among M2 students to a high of 15.2% among S1 students.
- In 2015, prevalence rates for “Getting Suspended” ranged from a low of 9.3% among M2 students to a high of 16.2% among S3 students.
- Overall, 11.3% of students reported having been suspended in the past year (14.0% in 2015).

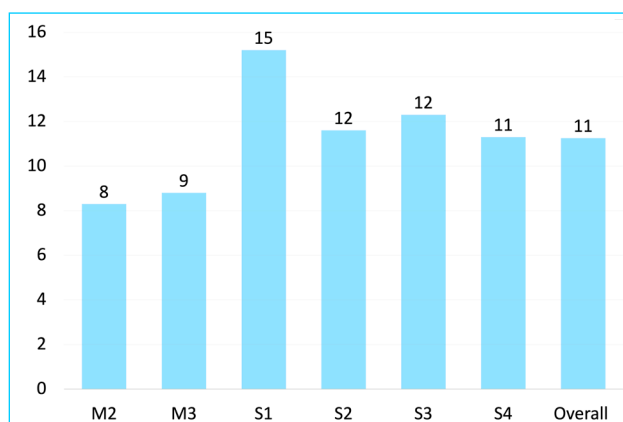


Figure 3.3.9: Getting suspended from school.

Sold Illegal Drugs

Selling drugs is measured by the question “How many times in the past year (12 months) have you sold illegal drugs?” Note that the question asks about, but does not define or specify, “illegal drugs”.

- Prevalence rates for selling drugs range from a low of 0.3% among M2 and M3 students to a high of 6.8% among S3 and S4 students.
- In 2015, prevalence rates for selling drugs ranged from a low of 0.5% among M2 students to a high of 8.7% among S4 students.
- Overall 3.6% (versus 4.8% in 2015) of students reported having sold drugs in the past year.

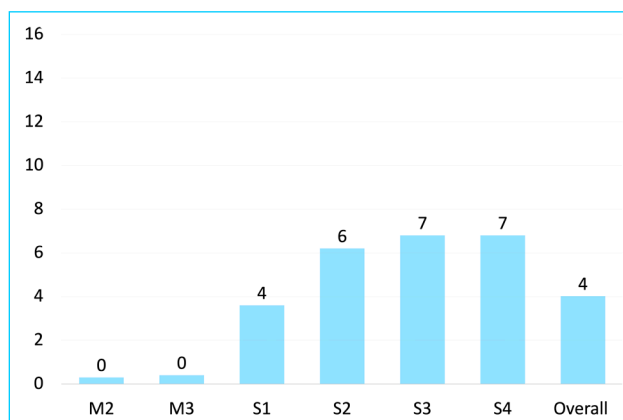


Figure 3.3.10: Sold illegal drugs.

Taking a Handgun to School

“Taking a handgun to school” is measured by the question “How many times in the past year (12 months) have you taken a handgun to school?”

- Prevalence rates for “Taking a Handgun to School” range from a low of 0.2% among M2 and M3 students to a high of 2.2% among S4 students.
- In 2015, prevalence rates for “Taking a Handgun to School” ranged from a low of 0.4% among M3 students to a high of 2.7% among S2 students.
- Overall 0.9% of students reported having taken a handgun to school in the past year (1.5% in 2015).

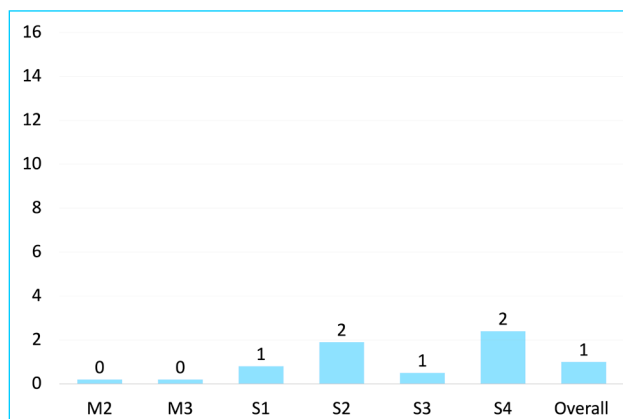


Figure 3.3.11: Taking a handgun to school.

Stolen Something Worth More Than \$5

“Stealing something worth more than \$5” is measured by the question “How many times in the past year (12 months) have stolen something worth more than \$5?”

- Prevalence rates for “Stolen something Worth More Than \$5” range from a low of 5.7% among M2 students to a high of 13.9% among S1 students.
- In 2015, prevalence rates for “Stolen something Worth More Than \$5” ranged from a low of 6.7% among M2 students to a high of 17.0% among S1 students.
- Overall, 11.0% of students reported stealing something worth more than \$5 in the past year (13.2% in 2015).

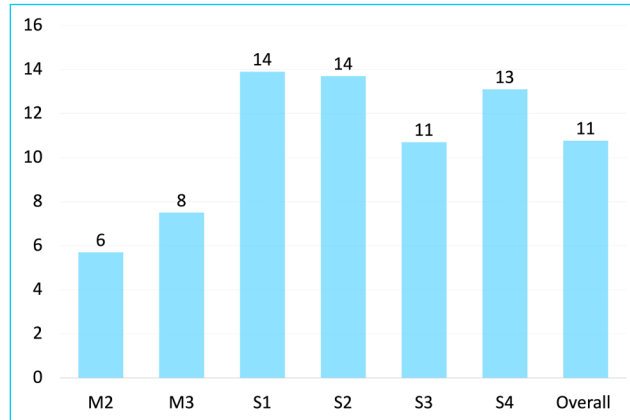


Figure 3.3.12: Stolen something worth more than \$5.

Purposely Damaged or Destroyed Property that Did Not Belong to You

“Purposely Damaged or Destroyed Property that Did Not Belong to You” is measured by the question “How many times in the past year (12 months) have you purposely damaged or destroyed property that did not belong to you (not counting family property)?”

- “Purposely Damaged or Destroyed Property that Did Not Belong to You” ranges from a low of 5.1% among M2 to a high of 12.0% among S1 students.
- In 2015, “Purposely Damaged or Destroyed Property that Did Not Belong to You” ranged from a low of 9.2% among M3 to a high of 16.7% among S2 students.
- Overall, 8.5% of students reported having purposely damaged or destroyed property that did not belong to them in the past year (11.5% in 2015).

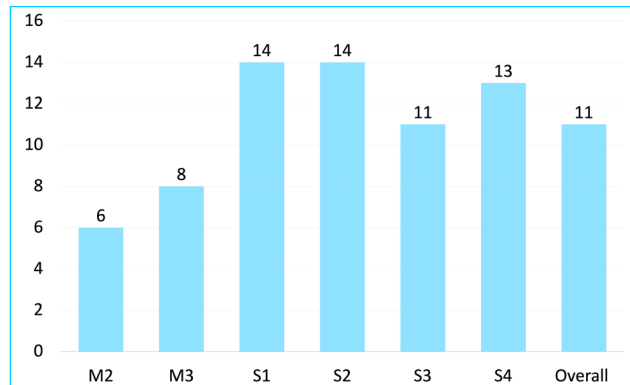


Figure 3.3.13: Purposely damaged or destroyed property that did not belong to you.

Taken Something from a Store without Paying for It

“Taken Something from a Store Without Paying for It” is measured by the question “How many times in the past year (12 months) have you taken something from a store without paying for it?”

- “Taken Something from a Store Without Paying for It” ranges from a low of 4.1% among M2 students to a high of 13.5% among S2 students.
- In 2015, “Taken Something from a Store Without Paying for It” ranged from a low of 7.0% among M2 students to a high of 13.3% among S2 students.
- Overall, 10.0% of students reported having taken something from a store without paying for it in the past year (10.8% in 2015).

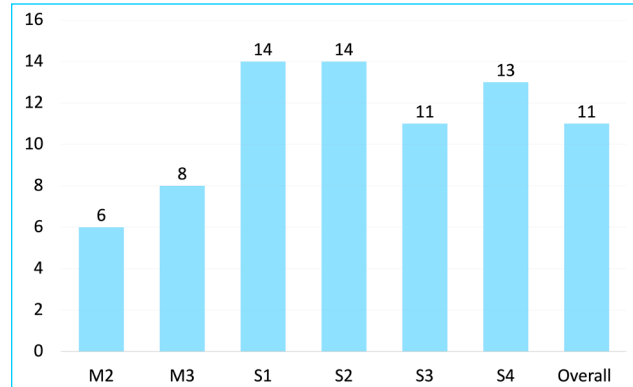
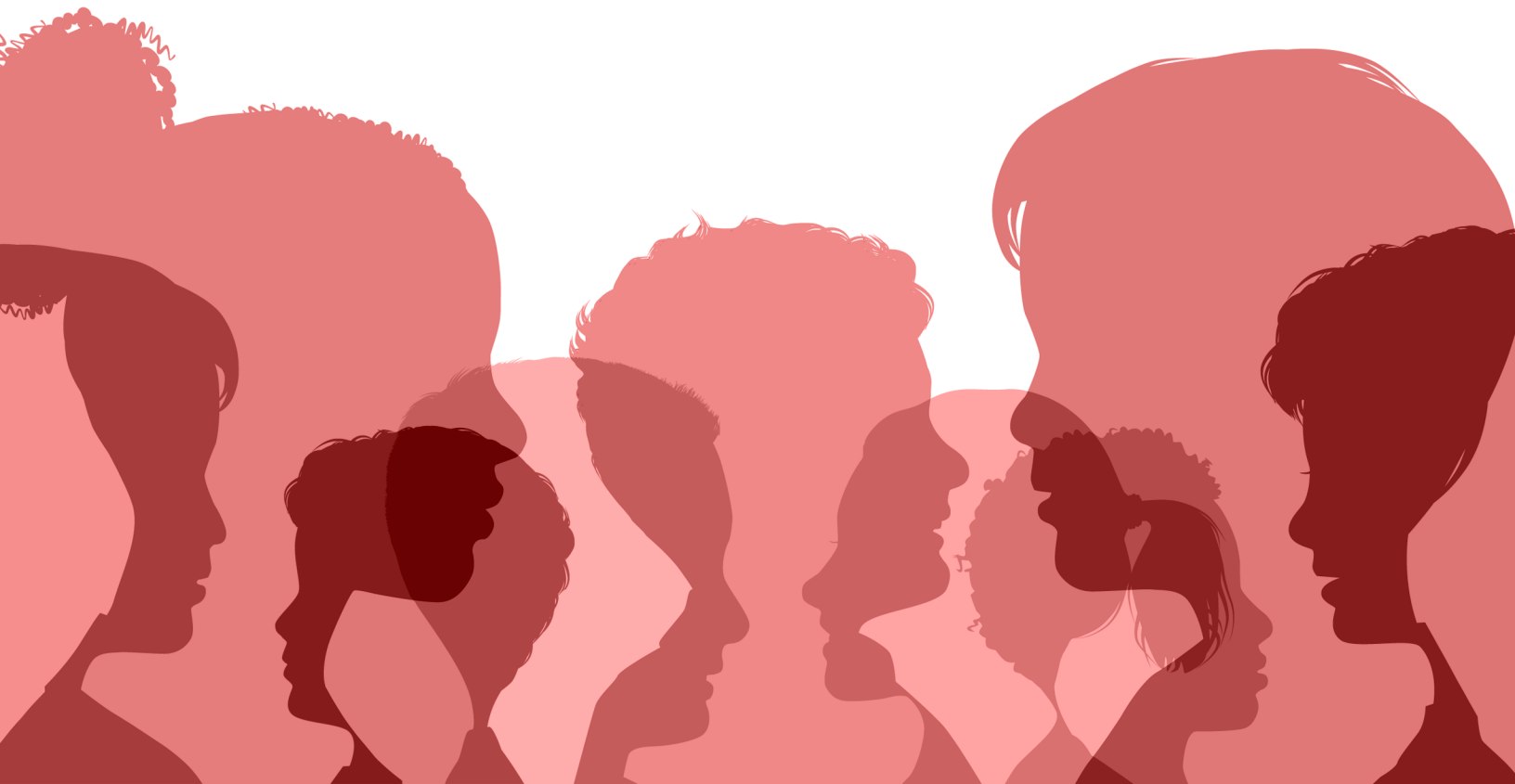


Figure 3.3.14: Taken something from a store without paying for it.

CHAPTER 3.4

RESULTS

Relationships with ATOD USE



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3.4.1 Introduction and Measurement

In terms of ATOD use, it has been hypothesised that its use can likely influence certain perceptions, attitudes, risks, or protective factors; while, at the same time, its use can influence certain kinds of behaviours. This section of the report seeks to examine some of the relationships that may exist with ATOD use, specifically marijuana use and other variables that relate to ATOD use. The following questions were asked and examined:

- Is there a relationship between a student's perception of ease of access to marijuana and his or her consumption of marijuana?
- Is there a relationship between a student's perception of ease of access to marijuana and his or her perception of ease of access to alcohol?
- Is there a relationship between the opportunity of trying an illicit drug and the student's consumption of marijuana? and
- Is there a relationship between the opportunity of trying an illicit drug and the possibility of consuming marijuana as an adult?

An in-depth examination of these relationships are outside the scope of this report.

TECHNICAL NOTES

What is statistical significance and how is it measured?

Statistical significance is a way to quantify or measure if a relationship between two or more variables (characteristics, events, beliefs, etc.) is occurring by chance or some other association.

One of the most common ways to "check" for statistical significance is to use the p-value obtained from the statistics when two variables were compared. The *s*-value shows statistical significance as it is the numerical probability (likelihood) of getting the outcome of a statistical measure. For all tests conducted in this report, the p-value must have been below .05 to be considered statistically significant.

What is correlation?

Correlation is the connection between two or more variables or "things," that points to a mutual relationship. For the purposes of the analytics presented here, correlation has been measured through Pearson correlation. The (Pearson) correlation coefficient, *r*, is a measure of the strength of the *linear* relationship between two variables. The correlation coefficient ranges from 1 to -1, with 1 being perfect positive relationship, -1 is perfect negative relationship, and 0 means no relationship. A positive value for the correlation implies a positive association (large values of one variable tend to be associated with large values of the other variable and small values of one variable tend to be associated with small values of the other variable). A negative value for the correlation implies a negative or inverse association (large values of one variable tend to be associated with small values of the other variable and vice versa).

What is Chi-Square?

A chi-square (χ^2) test for independence measures how expectations compare to actual observed data (or model results). This test is used with categorical data for two independent variables to see if there is any relationship between the variables.

3.4.2 Relationship between Marijuana Accessibility and Marijuana Use

During this survey round, a statistically significant relationship existed between a student’s perception of ease of getting marijuana and both their lifetime and current use of marijuana. The student’s perception of his or her ability to get marijuana was associated with his or her use of marijuana. Table 3.4.1 highlights that of the 421 student who indicated that getting marijuana would be “*very easy*”, 62.2% of them used marijuana in their lifetime and 31.5 % of students who perceived it to be “*sort of easy*” have, in fact, used marijuana. The correlation coefficient, $r=0.554$, shows that a moderately strong positive relationship exists between the perception of ease of getting marijuana and marijuana use. In other words, when students perceive that it would be easy to get marijuana, it is likely that they would try marijuana for the first time in their lifetime.

Similarly, in Table 3.4.2, a positive relationship presented itself, in terms of the association between the perception of ease of getting marijuana and current marijuana use, with the majority (84.7%) of students indicating that it would be “*very easy*” and “*sort of easy*” to get marijuana also being current users. However, the correlation coefficient ($r=0.188$) for this association revealed an inverse relationship between the perception of ease of getting marijuana and students’ current use of marijuana; indicating that although students viewed getting marijuana to be easy the number of current marijuana users were lower. This finding may be due to other underlying factors affecting current use of marijuana apart from the perception of ease of accessing it or that the relationship is not linear.

Table 3.4.1
Relationship between Accessibility to Marijuana and Lifetime Use of Marijuana

If you wanted to get marijuana, how easy would it be for you to get some?	Have you ever consumed marijuana?						Total
	Yes		No		Not Stated		
	n	%	n	%	n	%	
Very Hard	30	2.2	1,309	97.5	3	0.2	1,342
Sort of Hard	54	13.2	352	85.9	4	1.0	410
Sort of Easy	137	31.5	296	68.0	2	0.5	435
Very Easy	262	62.2	155	36.8	4	1.0	421
Not Stated	23	14.7	105	67.3	28	17.9	156
Total	506	18.3	2,217	80.2	41	1.5	2,764

Table 3.4.2
Relationship between Accessibility to Marijuana and Current Use of Marijuana

If you wanted to get marijuana, how easy would it be for you to get some?	Have you consumed marijuana in the past 30 days?						Total
	Yes		No		Not Stated		
	n	%	n	%	n	%	
Very Hard	8	26.7	9	30.0	13	43.3	30
Sort of Hard	12	22.2	21	38.9	21	38.9	54
Sort of Easy	46	33.6	52	38.0	39	28.5	137
Very Easy	134	51.1	72	27.5	56	21.4	262
Not Stated	10	43.5	2	8.7	11	47.8	23
Total	210	41.5	156	30.8	140	27.7	506

3.4.3 Relationship between the Ease of Getting Marijuana and the Ease of Getting Alcohol

When asked how easy it would be to get marijuana and alcohol, 873 students indicated that it would be “easy” to do so. The correlation coefficient ($r=0.549$) for the relationship between students’ ability to get marijuana and ease of accessing alcohol showed that a positive relationship exists between these two variables. In other words, when students’ perceived that it would be “easy” to get marijuana, they were also likely to indicate that it was “easy” to get alcohol. This relationship highlights that although alcohol use has age restrictions and legal implications, and with marijuana being illegal in Bermuda, there are a large number of students reporting that gaining access to either substance is easy for them.

The need for more stringent regulations around underage drinking, whether at establishments (such as bars) and/or liquor stores, is vital to reducing alcohol use by adolescents. In terms of marijuana accessibility, though illegal in Bermuda, students have indicated that getting this illicit drug would be easy, perhaps calling for prevention officials to get creative in targeting methods of risk and harm reduction for young people. Therefore, awareness around access and prevention in the home and in schools should be informed by creative and holistic targeting methods for risk and harm reduction for young people.

Research has shown that the reasons young people use cannabis are important. Curiosity or experimentation often lead only to occasional use. Youth may use cannabis as a way to feel better, reducing anxiety in social situations, and helping them connect with friends. While using cannabis can help reduce the symptoms of anxiety and depression, if young people use cannabis regularly to ease troubling feelings, use can become problematic. If youth use cannabis to perform better at school or fit in with a particular group, they may be listening to others, rather than valuing their own needs and wants, which can result in poor choices³⁸.

3.4.4 Relationship between Curiosity about Trying an Illicit Drug and Marijuana Use

The current data revealed a relationship between the opportunity to try an illicit drug and lifetime marijuana use. Under most circumstances, for those who have ever consumed a substance, risk is assessed for the likelihood of engaging with other, potentially more dangerous, substances. Table 3.4.3 indicates that of the 249 students who reported that, “yes”, they would try an illicit drug if given the opportunity, 73.0% of them used marijuana in their lifetime; 25.7% who did not report marijuana use indicated that they would try an illicit drug if given the opportunity. The correlation coefficient, $r=0.510$, shows that a moderately strong positive relationship exists between the opportunity to try an illicit drug and marijuana use. In other words, as students are presented with the opportunity to try an illicit drug, their likelihood of consuming marijuana in their lifetime increases. Further analysis showed that of the students who were ever curious to try an illicit drug, there were a number of them who said that they would indeed do so if given the opportunity ($n=213$, $\chi^2= 1559.9$, $p<.001$). Additionally, 349 students who said that they were curious to try an illicit drug also admitted to having had behavioural or discipline problems ($\chi^2=96.0$, $p<.001$).

A similar relationship also exists between the opportunity to try an illicit drug and current marijuana use. Table 3.4.4 shows that the majority (53.3%) of students who indicated “yes” they would try an illicit drug if given the opportunity consumed marijuana in the past 30 days, whilst 29.1% of those students who indicated “no” to current use of marijuana reported that “yes” they would try an illicit drug if given the opportunity. It is important to note, however, that this relationship does not imply causation: that the opportunity to try an illicit drug leads to increased marijuana use. Instead, it is indicating a behaviour; engaging with a substance that is currently illegal for all individuals, shows increased likelihood of continuing that behaviour in other ways later in life. The relationship, here, is statistically significantly

³⁸ Canadian Institute for Substance Use Research. (2018). *Cannabis Use and Youth: A parent’s guide*. <https://www.heretohelp.bc.ca/workbook/cannabis-use-and-youth-a-parents-guide> (accessed April 21, 2020)

higher than for behaviours that will, at some point (or may already be), become legal for individuals (for example, alcohol consumption or cigarette smoking).

Table 3.4.3

Relationship between Curiosity about Trying an Illicit Drug and Lifetime Use of Marijuana

If you had the opportunity would you try an illicit drug?	Have you ever consumed marijuana?						Total
	Yes		No		Not Stated		
	n	%	n	%	n	%	
Yes	182	73.0	64	25.7	3	1.2	249
No	154	7.8	1799	91.3	18	0.9	1971
Not Sure	165	32.6	336	66.4	5	1.0	506
Not Stated	5	13.2	18	47.4	15	39.5	38
Total	506	18.3	2,217	80.2	41	1.5	2,764

Table 3.4.4

Relationship between Curiosity about Trying an Illicit Drug and Current Use of Marijuana

If you had the opportunity would you try an illicit drug?	Have you consumed marijuana in the past 30 days?						Total
	Yes		No		Not Stated		
	n	%	n	%	n	%	
Yes	97	53.3	53	29.1	32	17.6	182
No	53	34.4	37	24.0	64	41.6	154
Not Sure	58	35.2	64	38.8	43	26.1	165
Not Stated	2	40.0	2	40.0	1	20.0	5
Total	210	41.5	156	30.8	140	27.7	506

3.4.5 Relationship between Curiosity about Trying an Illicit Drug and Marijuana Use when an Adult

There is value in reporting that there was also an association between a student's curiosity of trying an illicit drug and if he or she will use marijuana as an adult. The correlation coefficient ($r= 0.519$) shows that there is a positive relationship between students who were curious to try an illicit drug if presented with the opportunity and whether they would use marijuana when they are adults. In other words, as students indicated that they were curious to try an illicit drug, the chances of them smoking marijuana when they are adults increased.

This relationship highlights the need for increased prevention methods at the adolescent level, in the hopes that these measures will act as a deterrent for marijuana use as these youth reach adulthood. The relationship is also likely more complex and influenced by other behaviours in which students are currently engaging. It is entirely conceptual and predictive, on behalf of the student, which may be more telling about the perceptions students have about drug use, generally, than what the student will actually do.

3.4.6 Other Relationships with ATOD Use

Perceptions and Use of Alcohol and Marijuana

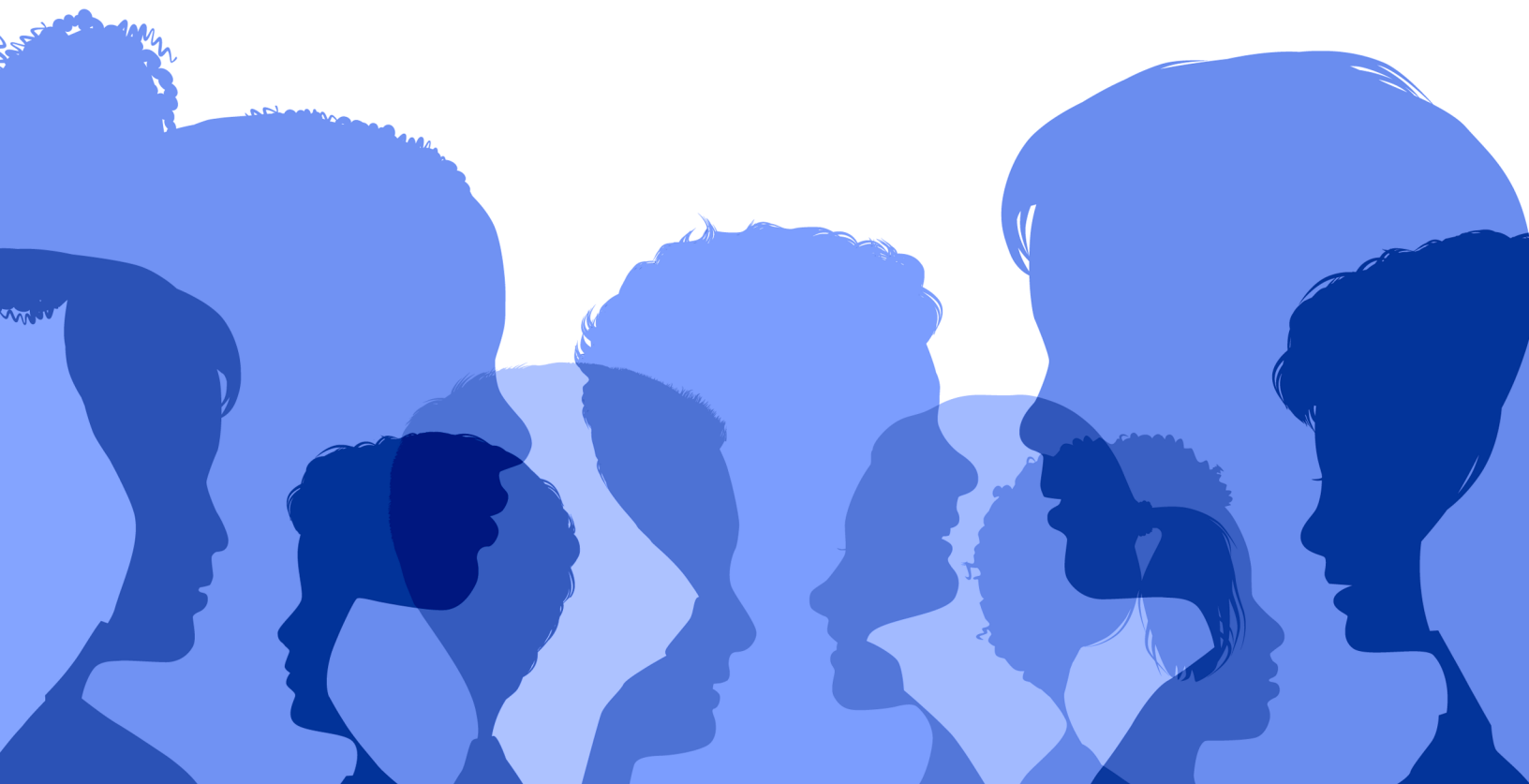
Of current alcohol users, there were some ($n=100$) who indicated that it is not at all wrong for someone their age to drink alcohol or use illicit drugs ($\chi^2=57.1, p<.001$). Additionally, of students who said they consumed alcohol in the past 30 days, there were 188 students who admitted to riding in a car ($\chi^2=14.2, p<.01$) or on a bike ($n=95, \chi^2=33.5, p<.001$) with someone who had been drinking alcohol. It is possible, in this instance that both the driver/rider and the passenger were under the influence of alcohol on these occasions. Similarly, of current marijuana smokers, there were a number of them who said that there was nothing at all wrong with someone their age smoking marijuana ($n=104, \chi^2=19.1, p<.001$).

Family History and Use

Students who admitted to ever having used marijuana were more likely to say they had a family member who had a severe alcohol or drug problem ($n=532, \chi^2=74.2, p<.001$). Interestingly, students who responded that they had a brother or sister who had consumed alcohol, were also more likely to have used alcohol themselves ($n=651, \chi^2=196.3, p<.001$). A similar relationship was found with siblings who used marijuana ($n=393, \chi^2=187.4, p<.001$). Lastly, a number of students admitted to seeing a health professional in the past 12 months for alcohol and/or drug-related problems and also indicated having a family member who had a severe alcohol and/or drug problem ($n=58, \chi^2=20.8, p<.001$). Substance abuse intervention programmes that target genetic and environmental aspects of substance misuse may benefit youth who are involved in a generational cycle of alcohol and drug abuse.

CHAPTER 4

Discussion



4.1 Discussion of Findings

The Good News

The National School Survey on alcohol, tobacco, and other drug use remains the primary tool used to assess M2, M3, and S1 to S4 students in Bermuda. A number of encouraging results came out of this latest installment, such as a decrease in use of the top legal and illegal drugs and an overall significant decline in the number of students who said they used at least one drug in their lifetime; while the age of initiation or onset of drug use remained the same as observed in 2015. When we look at the two substances most used among Bermuda's youth, namely alcohol and marijuana, statistics on past-month use are good indicators of how many adolescents are using drugs or alcohol regularly. In this survey, 13.2% of students admitted to using alcohol and 7.6% said they had used marijuana in the past 30 days, down from 2015. This is good news. Additionally, the use of illegal drugs, such as crack, cocaine, ecstasy, and heroin, remain low amongst students.

There are many noteworthy factors that continue to protect youth in this community and, although some variation is reported by protective factors, there was no change in the overall average of protection factors since 2015. Students' average level of protection did decrease slightly by 1% to 69 but, generally speaking, the level of protection remains stable. The highest proportions reflected in the protective factor results were scales related to family rewards for prosocial involvement, school opportunities for prosocial involvement, interaction with prosocial peers, and peer prosocial involvement. In other words, if students receive rewards or positive affirmations from their family, have opportunities to participate in sports, clubs, and other school-based activities, and also have friends who participate in these prosocial behaviours, they are more likely to delay substance use and problem behaviours. These are areas on which the community should continue to build.

The average level of risk for all students was reported at 21%, approximately 3% lower risk than that reported in 2015. Extended levels of risk were observed for sensation seeking, transitions and mobility, and peer rewards for antisocial behaviour, indicating that policies and/or prevention programming in these areas are likely to be especially beneficial in reducing overall levels of risk. Further optimistic news to report is for the factors assessing "religiousity" and "belief in moral order". These factors have increased over the past four years. This is especially beneficial to young people as the literature indicates that adolescents, who perceive religion as important in their lives, may lower their likelihood of cigarette smoking, heavy alcohol drinking, and marijuana use.

Areas for Concern

There has been growing concern for Bermuda's young people, over the years, as academic failure and antisocial behaviours continue to impact their health, well-being, and success. In 2018, there were 537 students classified as potentially at risk and high risk within the public school system.³⁹ The three domains in the risk assessment survey with highest proportions for risk were: school performance, child behaviours, and social interaction. With a number of young people already being classified as at risk, coupled with current use of alcohol and marijuana by youth, and an increase in pro-marijuana use perceptions, along with an ease of availability of marijuana, there is a need to provide harm reduction strategies to mitigate the negative outcomes of early and, in some cases, sustained substance use.

Other factors to note include the fact that young people continue to say their friends provide them with alcohol and marijuana. At the same time, a large number of youths (27.9%) admitted to riding in a car with someone who was intoxicated with alcohol, a 123.2% increase from that reported in 2015 (12.5%). This finding is worrisome.

³⁹ Ministry of National Security (2018). *Report of the Trauma Indicator Checklist*. Government of Bermuda.

While new to this age cohort, vaping has become popular in Bermuda among young people as demonstrated by this very survey. The US Surgeon General has deemed e-cigarette use among youth an epidemic. There is a common assumption that all vaporizer users inhale nicotine,⁴⁰ however, vaping of both marijuana and tobacco is common and poses an even greater challenge for prevention specialist trying to reduce the harms associated with vaping. Given that 22% of young people indicated having vaped in their lifetime, intervention by way of education and awareness of the damages associated with vaping could prove beneficial. It is imperative that the work that has been done to eradicate tobacco use, namely use of cigarettes by young people, is not eroded.

There are many challenges in preventing substance abuse and intervening with those who develop dependency. Scientifically-based prevention programmes with rigor and fidelity that are correctly implemented and adequately staffed and funded are an important part of reducing the negative outcomes associated with substance use. Hand in hand with this philosophy is the provision of services to treat young people who develop dependency or abuse of substances. However, without a young adult rehabilitation facility that can treat young people 12 to 18 years old in a safe, and secure environment, there is little by the way of treatment to help young people heal and recover from early addiction.

The effort to minimize the impact of alcohol and drugs on this community is now even more important given the increased level of chaos introduced by the current coronavirus pandemic. Protecting our youth and equipping them with the skills, tools, and community resources in a time of public health crisis is paramount. As a country, we must continue to push forward to diminish the long-term negative outcomes that early substance use amongst youth may have on the future of our Island.

⁴⁰ R. Miech, M.E. Patrick, P.M. O'Malley et al. (2017). What are kids vaping? Results from a national survey of US adolescents. *Tobacco Control*, 26(3), pp. 86-391.

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APPENDIX A

Demographic Trends: 2003, 2007, 2011, 2015, and 2019

	Number of Students					Percentage of Students				
	2003	2007	2011	2015	2019	2003	2007	2011	2015	2019
TOTAL	2,966	2,977	3,182	3,017	2,764	100.0	100.0	100.0	100.0	100.0
<i>Sex</i>										
<i>Male</i>	1,322	1,356	1,463	1,384	1,292	44.6	45.2	46.0	45.9	46.7
<i>Female</i>	1,615	1,613	1,685	1,592	1,414	54.5	53.8	53.0	52.8	51.2
<i>Not Stated</i>	29	28	34	41	58	1.0	0.9	1.1	1.4	2.1
Grade										
<i>M2</i>	544	586	597	490	590	18.3	19.6	18.8	16.2	21.3
<i>M3</i>	592	598	553	547	499	20.0	20.0	17.4	18.1	18.1
<i>S1</i>	581	600	578	584	479	19.6	20.0	18.2	19.4	17.3
<i>S2</i>	548	490	566	511	469	18.5	16.3	17.8	16.9	17.0
<i>S3</i>	412	386	465	457	382	13.9	12.9	14.6	15.1	13.8
<i>S4</i>	259	309	383	427	337	8.7	10.3	12.0	14.0	12.2
<i>Not Stated</i>	30	28	40	1	8	1.0	0.9	1.3	0.0	0.3
Age¹										
<i>10-11</i>	...	...	107	88	115	...	...	3.3	2.9	4.2
<i>12</i>	...	...	527	460	517	...	...	16.6	15.2	18.7
<i>13</i>	...	...	517	516	483	...	...	16.2	17.1	17.5
<i>14</i>	...	...	537	477	408	...	...	16.9	15.8	14.8
<i>15</i>	...	...	511	476	411	...	...	16.1	15.8	14.9
<i>16</i>	...	...	461	440	369	...	...	14.5	14.6	13.4
<i>17</i>	...	...	305	342	270	...	...	9.6	11.3	9.8
<i>18</i>	...	...	32	34	21	...	...	1.0	1.1	0.8
<i>19</i>	...	...	6	4	1	...	...	0.2	0.1	0.0
<i>Not Stated</i>	...	...	179	180	168	...	...	5.6	6.0	6.1
Race										
<i>Black</i>	1,791	1,884	1,994	1,596	1,347	60.4	62.9	62.7	52.9	48.7
<i>White</i>	555	448	511	583	619	18.7	14.9	16.1	19.3	22.4
<i>Portuguese</i>	200	188	164	171	172	6.7	6.3	5.2	5.7	6.2
<i>Asian or Pacific Islander</i>	37	41	48	48	34	1.2	1.4	1.5	1.6	1.2
<i>Mixed</i>	150	175	323	539	519	5.1	2.8	10.2	17.9	18.8
<i>Other</i>	205	233	118	64	48	6.9	7.8	3.7	2.1	1.7
<i>Not Stated</i>	28	28	24	16	25	0.9	0.9	0.8	0.5	0.9
Language²										
<i>English</i>	...	2,813	3,052	..	..	...	94.5	95.9	..	..
<i>Portuguese</i>	...	61	46	..	..	...	2.0	1.4	..	..
<i>Another Language</i>	...	61	46	..	..	...	2.0	1.4	..	..
<i>Not Stated</i>	...	44	38	..	..	...	1.5	1.2	..	..

Notes:

¹ In both 2003 and 2007, data was not analysed by age of respondent.

² In 2003, the language demographic characteristic was not analysed (... means not available); and in 2015 and 2019 it was not asked as part of the questionnaire (... means not applicable).

APPENDIX B

Enrolment and Respondents by School and Grade

Schools	Enrolment							Respondents						
	M2	M3	S1	S2	S3	S4	Total	M2	M3	S1	S2	S3	S4	Total
Public Schools	324	280	351	312	307	234	1,808	312	241	262	250	213	182	1,460
Middle Schools Total	324	280	-	-	-	-	604	312	241	-	-	-	-	553
1. Clearwater Middle School	47	32	-	-	-	-	79	42	31	-	-	-	-	73
2. Dellwood Middle School	104	87	-	-	-	-	191	100	76	-	-	-	-	176
3. Sandys Secondary Middle School	89	88	-	-	-	-	177	89	64	-	-	-	-	153 ³
4. Whitney Institute Middle School	84	73	-	-	-	-	157	81	70	-	-	-	-	151
Senior Schools Total	-	-	351	312	307	234	1,204	-	-	262	250	213	182	907
5. The Berkley Institute	-	-	185	156	167	119	627	-	-	120	132	133	106	491 ⁴
6. Cedarbridge Academy	-	-	166	156	140	115	577	-	-	142	118	80	76	416 ⁵
Special School Total	-	-	-	-	2	2	7	-	-	1	2	-	1	4
Success Academy II	-	-	1	2	2	2	7	-	-	1	2	-	1	4
Private Schools Total	315	285	245	213	282	117	1,427	274	250	208	204	160	147	1,243
7. Bermuda High School for Girls	59	41	33	38	58	29	228	51	37	30	38	25	28	209
8. Bermuda Institute	35	35	25	15	25	15	150	27	29	18	10	20	8	112
9. Mount Saint Agnes Academy	39	35	33	39	22	26	194	35	31	35	36	18	24	179
10. Saltus Grammar School	59	65	60	53	53	47	337	52	51	40	53	39	34	269 ⁶
11. Somersfield Academy ¹	47	31	22	11	14	-	125	41	30	21	11	10	-	113 ⁷
12. Warwick Academy	76	78	72	57	110	-	393	68	72	64	56	48	53	361 ⁸
Home Schools² Total														
				63							49			
TOTAL							N = 3,305							n = 2,764

Notes:

¹Somersfield Academy does not have students enrolled in grades S4.

²Enrolment and respondents for the 11 Home Schools were grouped because of the low count for each grade level.

³There was one student who did not report their grade level.

⁴There were three students who did not report their grade level.

⁵There was one student who did not report their grade level.

⁶There was one student who did not report their grade level.

⁷There was one student who did not report their grade level.

⁸There was one students who did not report their grade level.

APPENDIX C

Trend Analysis of ATOD Use: 2011 and 2015

Lifetime Use of ATODs and Energy Drink by Grade Level of Survey Respondents (Percentage)

ATODs ¹	Grade Level/Year												Overall	
	M2		M3		S1		S2		S3		S4		2011	2015
	2011	2015	2011	2015	2011	2015	2011	2015	2011	2015	2011	2015		
Alcohol	24.5	48.8	40.9	58.5	52.6	55.1	68.4	49.9	76.6	48.8	79.9	53.4	54.9	52.6
Cannabis Resin	0.8	1.4	1.1	1.1	4.2	4.3	6.4	5.5	5.2	9.4	7.3	11.9	3.9	5.3
Cigarettes	3.2	5.5	6.5	5.9	9.0	8.2	14.1	15.7	16.3	15.5	18.0	24.1	10.7	12.0
Cocaine	0.3	0.8	0.5	0.5	0.7	2.1	0.2	2.3	0.6	1.5	1.3	4.4	0.6	1.9
Crack	0.5	1.8	0.9	0.7	0.3	1.5	0.7	1.6	0.4	1.1	0.8	2.8	0.6	1.6
Ecstasy	0.3	1.0	0.2	0.5	1.0	1.5	1.2	2.2	1.5	1.8	1.3	4.0	0.9	1.8
Hallucinogens	0.3	..	0.2	..	0.7	..	1.1	..	0.9	..	1.6	..	0.7	..
Hashish	0.3	0.8	0.0	0.7	1.9	1.5	3.0	2.5	3.4	6.1	3.7	8.7	1.9	3.1
Heroin	0.2	1.2	0.5	0.4	0.7	1.5	0.2	0.6	0.2	0.9	0.5	0.0	0.4	1.2
Inhalants	14.6	16.7	14.1	17.6	16.3	19.3	12.0	14.1	6.9	10.5	6.3	10.8	12.1	15.1
Marijuana	4.9	5.3	6.0	8.4	21.3	19.0	28.3	32.9	36.1	44.9	40.2	54.6	21.2	26.2
Any Illicit Drug (Other than Marijuana)	1.5	4.3	2.5	3.5	1.4	5.7	2.3	7.2	1.9	5.9	2.3	6.8	1.9	5.5
Energy Drinks	54.1	39.2	65.6	56.1	65.2	65.2	73.9	66.9	68.4	70.7	70.2	69.8	65.5	61.1

Current Use of ATODs and Energy Drinks by Grade Level of Survey Respondents (Percentage)¹

ATODs ^{2,3}	Grade Level/Year												Overall	
	M2		M3		S1		S2		S3		S4			
	2011	2015	2011	2015	2011	2015	2011	2015	2011	2015	2011	2015	2011	2015
Alcohol	3.0	18.0	6.5	23.2	15.9	19.0	26.3	13.1	32.0	16.2	41.0	18.0	19.1	18.0
Binge Drinking	1.2	6.5	0.2	10.4	9.3	7.5	11.7	4.7	17.2	6.8	20.1	5.6	9.5	7.0
Cigarettes	0.3	1.2	1.6	1.1	1.7	1.4	3.7	3.7	3.4	3.9	5.5	8.7	2.5	3.1
Cocaine	0.2	0.20	0.4	0.2	0.3	0.3	0.2	0.6	0.0	0.7	0.3	1.6	0.2	0.6
Crack	0.2	0.4	0.0	0.2	0.2	0.3	0.0	0.2	0.0	0.7	0.3	1.2	0.1	0.5
Ecstasy	0.2	-	0.0	-	0.7	0.7	0.0	0.2	0.2	0.2	0.3	1.6	0.2	0.4
Heroin	..	0.2	..	0.2	..	0.3	..	0.2	..	0.7	..	0.7	..	0.4
Inhalants	2.8	2.9	3.8	2.6	3.6	4.5	1.4	3.3	0.6	1.5	1.3	3.0	2.4	3.0
Marijuana	1.7	0.4	1.3	1.6	8.1	6.3	11.3	13.3	14.0	18.2	14.4	29.5	7.9	10.8
Any Illicit Drug	14.6	16.7	14.1	17.6	16.3	19.3	12.0	14.1	6.9	10.5	6.3	10.8	12.1	15.1
(Other than Marijuana)	0.3	1.0	0.2	0.5	0.2	1.7	0.7	1.6	0.0	2.0	0.0	2.1	0.3	1.5
Energy Drinks	26.1	13.3	31.8	20.3	31.3	22.9	37.1	24.5	31.6	18.8	..	24.1	..	20.7
Energy Drinks	54.1	39.2	65.6	56.1	65.2	65.2	73.9	66.9	68.4	70.7	70.2	69.8	65.5	61.1

¹Percentages are computed with the current use number as a proportion of total grade level survey respondents for each substance.

²Of students who responded to "ever" consuming the substance, and reported use in the past 12 months, who then have consumed it in the "past 30 days" (asked only of all lifetime and recent users but reported as a proportion of all survey respondents). There were thirty-five students for whom the grade level was not reported; hence responses were not included in the table above.

³Survey did not measure current use of cannabis resin and hashish.

APPENDIX D

Risk and Protective Results: 2011 and 2015

Protective Factor Scales by Grade Level of Survey Respondents

Domain	Scale	M2	M3	S1	S2	S3	S4	All
Community Domain	Community Rewards for Prosocial Involvement							
	2011	75	74	68	67	65	63	69
	2015	79	73	68	64	65	66	69
	Community Opportunities for Prosocial Involvement							
	2011	39	37	43	39	45	43	41
	2015	62	63	63	66	59	67	63
Family Domain	Family Attachment							
	2011	86	83	77	73	76	73	78
	2015	89	83	78	76	76	75	80
	Family Opportunities for Prosocial Involvement							
	2011	83	78	72	69	70	70	74
	2015	84	82	79	70	75	76	78
	Family Rewards for Prosocial Involvement							
2011	92	89	82	79	81	9	84	
2015	94	91	83	82	81	82	86	
School Domain	School Opportunities for Prosocial Involvement							
	2011	89	89	83	79	80	85	84
	2015	89	85	83	82	81	85	84
	School Rewards for Prosocial Involvement							
	2011	91	85	82	79	81	81	83
2015	87	84	80	79	79	82	82	
Peer Individual Domain	Reward for Prosocial Involvement							
	2011	70	61	61	55	62	62	62
	2015	86	87	87	86	89	87	87
	Interaction with Prosocial Peers							
	2011	71	72	71	68	67	69	70
2015	90	89	91	90	93	91	91	

Protective Factor Scales by Grade Level of Survey Respondents cont'd

Domain	Scale	M2	M3	S1	S2	S3	S4	All
Peer Individual Domain	Prosocial Involvement							
	2011	78	80	79	80	77	85	80
	2015	85	88	90	91	90	93	90
	Religiosity							
	2011	44	44	47	42	39	42	43
	2015	45	44	41	33	35	33	39
	Social Skills							
	2011	91	88	79	70	76	73	80
	2015	92	90	84	82	82	80	85
	Belief in Moral Order							
	2011	27	37	45	54	47	52	44
	2015	32	34	37	41	44	41	38

Risk Factor Scales by Grade Level of Survey Respondents

Domain	Scale	M2	M3	S1	S2	S3	S4	All
Community Domain	Low Neighbourhood Attachment							
	2011	16	18	21	21	20	24	20
	2015	18	18	22	21	17	18	19
	Community Disorganisation							
	2011	9	11	12	13	10	14	12
	2015	6	8	11	12	9	11	10
	Transitions and Mobility							
	2011	59	57	70	60	56	61	60
	2015	49	55	66	55	62	59	58
	Laws and Norms Favourable to Drug Use							
	2011	18	23	28	36	36	43	31
	2015	18	23	29	34	36	37	30
	Laws and Norms Favourable to Handguns							
	2011	30	39	52	62	63	66	52
	2015	24	30	41	47	55	53	42
	Perceived Availability of Drug							
	2011	14	24	40	58	65	72	46
	2015	10	17	31	44	56	66	37
Perceived Availability of Handguns								
2011	6	7	10	14	17	16	12	
2015	3	3	5	7	13	12	43	

Risk Factor Scales by Grade Level of Survey Respondents cont'd

Domain	Scale	M2	M3	S1	S2	S3	S4	All
Family Domain	Poor Family Management							
	2011	4	6	7	10	8	12	8
	2015	4	5	8	10	9	12	8
	Family Conflict							
	2011	32	33	28	45	38	44	37
	2015	29	30	42	41	44	37	37
	Family History of Antisocial Behaviour							
	2011	30	36	50	64	68	74	54
	2015	21	27	38	44	54	58	40
	Parental Attitudes Favourable toward ATOD Use							
	2011	3	4	7	8	10	10	7
	2015	2	2	4	8	11	14	7
	Parental Attitudes Favourable toward Antisocial Behaviour							
	2011	4	8	14	11	9	8	9
2015	6	6	9	9	10	9	8	
School Domain	Poor Academic Performance							
	2011	9	9	9	13	9	9	10
	2015	8	7	9	9	6	7	8
	Lack of Commitment to School							
	2011	5	8	11	15	12	12	11
	2015	5	7	10	10	13	11	9

Risk Factor Scales by Grade Level of Survey Respondents cont'd

Domain	Scale	M2	M3	S1	S2	S3	S4	All
Peer Individual Domain	Rebelliousness							
	2011	17	22	30	41	35	34	30
	2015	15	14	24	25	25	30	22
	Friend's Delinquent Behaviour							
	2011	10	17	23	36	29	30	24
	2015	9	12	18	22	26	25	19
	Friends' Use of Drugs							
	2011	18	31	53	69	76	81	54
	2015	12	24	44	61	76	80	50
	Peer Rewards for Antisocial Behaviour							
	2011	13	19	24	31	30	28	24
	2015	25	35	46	56	63	59	47
	Favourable Attitudes toward Antisocial Behaviour							
	2011	4	5	11	12	11	7	8
	2015	3	4	7	8	8	6	6
	Favourable Attitudes toward ATOD Use							
	2011	5	6	17	30	33	33	21
	2015	3	4	11	21	28	37	17
	Low Perceived Risks of Drug Use							
	2011	9	3	4	8	12	10	8
	2015	2	4	9	14	16	21	11
	Early Initiation of Drug Use							
	2011	69	51	30	22	10	6	31
	2015	30	17	19	21	17	12	19
	Sensation Seeking							
	2011	61	64	72	77	77	81	72
	2015	57	65	67	71	74	80	69
	Intention to Use							
	2011	5	7	12	17	16	16	12
	2015	3	4	10	13	18	22	12
Gang Involvement								
2011	5	5	9	12	8	8	8	
2015	2	3	4	5	7	5	4	

APPENDIX E

Public vs. Private School Comparisons on Substance Use

Lifetime Use of Selected Substances by Public School Students as a Proportion of Overall Grade Level Survey Respondents

Substance	Grade Level							Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	NS (n = 8)	
Alcohol	74 (12.5%)	79 (15.8%)	119 (24.8%)	123 (26.2%)	114 (29.8%)	105 (31.2%)	1 (12.5%)	615 (22.3%)
Cigarette	7 (1.2%)	12 (2.4%)	9 (1.9%)	16 (3.4%)	18 (4.7%)	14 (4.2%)	-	76 (2.7%)
Energy Drinks	135 (22.9%)	105 (21.0%)	155 (32.4%)	129 (27.5%)	125 (32.7%)	107 (31.8%)	1 (12.5%)	757 (27.4%)
Inhalants	43 (7.3%)	32 (6.4%)	38 (7.9%)	36 (7.7%)	28 (7.3%)	12 (3.6%)	1 (12.5%)	190 (6.9%)
Marijuana	13 (2.2%)	15 (3.0%)	50 (10.4%)	85 (18.1%)	87 (22.8%)	68 (20.2%)	-	318 (11.5%)

Current Use of Selected Substances by Public School Students as a Proportion of Overall Grade Level Survey Respondents

Substance	Grade Level							Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	NS (n = 8)	
Alcohol	9 (1.5%)	15 (3.0%)	23 (4.8%)	35 (7.5%)	40 (10.5%)	41 (12.2%)	-	163 (5.9%)
Cigarette	2 (0.3%)	4 (0.8%)	3 (0.6%)	3 (0.6%)	3 (0.8%)	6 (1.8%)	-	21 (0.8%)
Energy Drinks	42 (7.1%)	39 (7.8%)	55 (11.5%)	42 (9.0%)	38 (9.9%)	41 (12.2%)	-	257 (9.3%)
Inhalants	15 (2.5%)	1 (0.2%)	9 (1.9%)	8 (1.7%)	6 (1.6%)	4 (1.2%)	-	43 (1.6%)
Marijuana	4 (0.7%)	6 (1.2%)	17 (3.5%)	34 (7.2%)	35 (9.2%)	30 (8.9%)	-	126 (4.6%)

Lifetime Use of Selected Substances by Private School Students as a Proportion of Overall Grade Level Survey Respondents

Substance	Grade Level							
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	NS (n = 8)	
Alcohol	57 (9.7%)	91 (18.2%)	109 (22.8%)	135 (28.8%)	103 (27.0%)	109 (32.3%)	1 (12.5%)	605 (21.9%)
Cigarette	-	3 (0.6%)	7 (1.5%)	9 (2.0%)	20 (5.2%)	26 (7.7%)	-	65 (2.4%)
Energy Drinks	84 (14.2%)	98 (19.6%)	118 (24.6%)	140 (29.9%)	106 (27.7%)	103 (30.6%)	-	649 (23.5%)
Inhalants	21 (3.6%)	20 (4.0%)	23 (4.8%)	17 (3.6%)	5 (1.3%)	7 (2.1%)	-	93 (3.4%)
Marijuana	-	7 (1.4%)	20 (4.2%)	32 (6.8%)	51 (13.4%)	64 (19.0%)	-	174 (6.3%)

Current Use of Selected Substances by Private School Students as a Proportion of Overall Grade Level Survey Respondents

Substance	Grade Level							Overall (n = 2,764)
	M2 (n = 590)	M3 (n = 499)	S1 (n = 479)	S2 (n = 469)	S3 (n = 382)	S4 (n = 337)	NS (n = 8)	
Alcohol	4 (0.7%)	17 (3.4%)	26 (5.4%)	53 (11.3%)	42 (11.0%)	50 (14.8%)	-	192 (6.9%)
Cigarette	-	1 (0.2%)	4 (0.8%)	4 (0.9%)	9 (2.4%)	7 (2.1%)	-	25 (0.9%)
Energy Drinks	19 (3.2%)	31 (6.2%)	54 (11.3%)	79 (16.8%)	45 (11.8%)	31 (9.2%)	-	259 (9.4%)
Inhalants	7 (1.2%)	2 (0.4%)	4 (0.8%)	3 (0.6%)	-	2 (0.6%)	-	18 (0.7%)
Marijuana	-	1 (0.2%)	8 (1.7%)	14 (3.0%)	26 (6.8%)	24 (7.1%)	-	73 (2.6%)



APPENDIX F

Questionnaire

SURVEY of MIDDLE AND SENIOR SCHOOL STUDENTS ON ALCOHOL, TOBACCO, OTHER DRUGS, AND HEALTH

Good day!

The Department for National Drug Control (DNDC) is carrying out a school survey on the topic of public health. The objective is to obtain information to address, in the best way possible, the problems related to public health in Bermuda. Your cooperation in this survey would be of great value to this effect. Your answers are **absolutely confidential and are completely anonymous**. This means that no one will know your answers. To help us keep your answers in confidence, please **DO NOT** write your name on this survey form. Thus, we ask you to respond very honestly.

SECTION I

INSTRUCTIONS

1. This is not a test. There is no right or wrong answer.
2. Answer **ALL** questions, UNLESS you are instructed to **skip** to another set of questions because you answered "No" or "Never" to a given question. (You must select a response to these questions before skipping). If you don't find an answer that fits exactly, use one that comes closest.
3. **Check** the appropriate response.

1. School	2. What grade are you in? <input type="checkbox"/> 1) M2 <input type="checkbox"/> 3) S1 <input type="checkbox"/> 5) S3 <input type="checkbox"/> 2) M3 <input type="checkbox"/> 4) S2 <input type="checkbox"/> 6) S4
3. Sex <input type="checkbox"/> 1. Male <input type="checkbox"/> 2. Female	4. Age <input type="text"/> years old
5. What do you consider yourself to be? <input type="checkbox"/> 1. Black <input type="checkbox"/> 2. White <input type="checkbox"/> 3. Portuguese <input type="checkbox"/> 4. Asian or Pacific Islander <input type="checkbox"/> 5. Mixed <input type="checkbox"/> 6. Other (specify)	6. In which parish do you most often reside? (Tick only one(1) response) <input type="checkbox"/> 1. Devonshire <input type="checkbox"/> 2. Hamilton <input type="checkbox"/> 3. Paget <input type="checkbox"/> 4. Pembroke <input type="checkbox"/> 5. St. George's <input type="checkbox"/> 6. Sandys <input type="checkbox"/> 7. Southampton <input type="checkbox"/> 8. Warwick <input type="checkbox"/> 9. Smith's

15. How easy would it be to get the following drugs? Check the appropriate response for EACH.	1. Easy	2. Difficult	3. Impossible to get	4. Don't know
1. Alcohol				
2. Marijuana				
3. Cocaine				
4. Crack				
5. Heroin				

16. When was the last time that you were offered any of these drugs, either to buy or to consume? Check the appropriate response for EACH.	1. During the last 30 days	2. More than a month ago, but less than a year ago	3. More than a year ago	4. I have never been offered
1. Alcohol				
2. Marijuana				
3. Cocaine				
4. Crack				
5. Heroin				

<p>17. Have you ever been curious about trying an illicit drug?</p> <p><input type="checkbox"/> 1. No <input type="checkbox"/> 2. Not sure <input type="checkbox"/> 3. Yes</p>	<p>18. If you had the opportunity, would you try an illicit drug?</p> <p><input type="checkbox"/> 1. No <input type="checkbox"/> 2. Not Sure <input type="checkbox"/> 3. Yes</p>
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<p>19. Have you <u>ever</u> smoked cigarettes? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #27)</p>	<p>20. How old were you when you smoked for the first time?</p> <p style="text-align: center;"> <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/> years old </p>
<p>21. When was the first time you smoked cigarettes? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #27) <input type="checkbox"/> 2. During the past 30 days <input type="checkbox"/> 3. More than 1 month ago, less than 1 year ago <input type="checkbox"/> 4. More than a year ago</p>	<p>22. Have you smoked cigarettes in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #27)</p>
<p>23. Have you smoked cigarettes in the <u>past 30 days</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #27)</p>	<p>24. Approximately, how many cigarettes have you smoked a day in the past month?</p> <p><input type="checkbox"/> 1) 1 to 5 <input type="checkbox"/> 3) 11 to 20 <input type="checkbox"/> 2) 6 to 10 <input type="checkbox"/> 4) More than 20</p>
<p>25. Where do you most often smoke cigarettes? (Tick only <u>one(1)</u> response.)</p> <p><input type="checkbox"/> 1. At home <input type="checkbox"/> 5. At sporting events <input type="checkbox"/> 2. At school <input type="checkbox"/> 6. At other social event <input type="checkbox"/> 3. On the corner/block <input type="checkbox"/> 7. Other (specify) <input type="checkbox"/> 4. At a friend's house </p>	<p>26. From whom/where do you usually get cigarettes? (Tick only <u>one(1)</u> response.)</p> <p><input type="checkbox"/> 1. Friends <input type="checkbox"/> 5. Street vendor <input type="checkbox"/> 2. Parents <input type="checkbox"/> 6. Shop <input type="checkbox"/> 3. Brother/Sister <input type="checkbox"/> 7. Other (specify) <input type="checkbox"/> 4. Other relative(s) </p>

<p>27. During the <u>past 7 days</u>, on how many days did someone smoke tobacco products in your home while you were there?</p> <p><input type="checkbox"/> 1) 0 days <input type="checkbox"/> 4) 3 days <input type="checkbox"/> 7) 6 days <input type="checkbox"/> 2) 1 days <input type="checkbox"/> 5) 4 days <input type="checkbox"/> 8) 7 days <input type="checkbox"/> 3) 2 days <input type="checkbox"/> 6) 5 days</p>	<p>28. During the <u>past 7 days</u>, on how many days did you ride in a vehicle where someone was smoking a tobacco product?</p> <p><input type="checkbox"/> 1) 0 days <input type="checkbox"/> 4) 3 days <input type="checkbox"/> 7) 6 days <input type="checkbox"/> 2) 1 days <input type="checkbox"/> 5) 4 days <input type="checkbox"/> 8) 7 days <input type="checkbox"/> 3) 2 days <input type="checkbox"/> 6) 5 days</p>
<p>29. Thinking about the first time you brought cigarettes, did you buy...? (Tick <u>all</u> that apply)</p> <p><input type="checkbox"/> Never purchased cigarettes <input type="checkbox"/> Whole pack to share with friend's <input type="checkbox"/> Whole packs for use on your own <input type="checkbox"/> Loose or single cigarettes from shops <input type="checkbox"/> Loose or single cigarettes from friends <input type="checkbox"/> Single cigarettes for adults who smoke</p>	

<p>30. To "vape" is to use a device such as a vape-pen, an e-cigarette, and e-hookah, or e-vaporizer to inhale a mist or vapor into the lungs.</p> <p>Have you <u>ever</u> vaped? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #33)</p>	<p>31. The last time you vaped what was in the mist or vapor you inhaled? (You must check a response.)</p> <p><input type="checkbox"/> 1. Nicotine <input type="checkbox"/> 2. Marijuana or hash oil <input type="checkbox"/> 3. Just flavoring <input type="checkbox"/> 4. Other <input type="checkbox"/> 5. Don't Know</p>
<p>32. During the past 30 days, on how many days did you use an electronic vapor product? (You must check a response.)</p> <p><input type="checkbox"/> 1) 0 days <input type="checkbox"/> 2) 1 or 2 days <input type="checkbox"/> 3) 3 to 5 days <input type="checkbox"/> 4) 6 to 9 days <input type="checkbox"/> 5) 10 to 19 days <input type="checkbox"/> 6) 20 to 29 days <input type="checkbox"/> 7) All 30 days</p>	<p>33. How difficult would it be for you to get a vaping device used to inhale a mist or vapor into the lungs (like an e-pen or e-cigarette)? (You must check a response.)</p> <p><input type="checkbox"/> 1. Probably Impossible <input type="checkbox"/> 2. Very Difficult <input type="checkbox"/> 3. Fairly Difficult <input type="checkbox"/> 4. Fairly Easy <input type="checkbox"/> 5. Very Easy <input type="checkbox"/> 6. Can't Say, Drug Unfamiliar (skip to #37)</p>

34. On how many occasions (if any) have you vaped NICOTINE... Check the appropriate response for EACH.	1) 0 Occasions	2) 1-2 Occasions	3) 3-5 Occasions	4) 6-9 Occasions	5) 10-19 Occasions	6) 20-39 Occasions	7) 40 or More
1. In your lifetime?							
2. During the last 12 months?							
3. During the last 30 days?							
4. Crack							
5. Heroin							

35. On how many occasions (if any) have you vaped MARIJUANA... Check the appropriate response for EACH.	1) 0 Occasions	2) 1-2 Occasions	3) 3-5 Occasions	4) 6-9 Occasions	5) 10-19 Occasions	6) 20-39 Occasions	7) 40 or More
1. In your lifetime?							
2. During the last 12 months?							
3. During the last 30 days?							
4. Crack							
5. Heroin							

36. On how many occasions (if any) have you vaped just FLAVORING... Check the appropriate response for EACH.	1) 0 Occasions	2) 1-2 Occasions	3) 3-5 Occasions	4) 6-9 Occasions	5) 10-19 Occasions	6) 20-39 Occasions	7) 40 or More
1. In your lifetime?							
2. During the last 12 months?							
3. During the last 30 days?							
4. Crack							
5. Heroin							

<p>37. Have you <u>ever</u> consumed alcoholic beverages? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #46)</p>	<p>38. How old were you when you consumed an alcoholic beverage for the first time?</p> <p style="text-align: center;"><input style="width: 40px; height: 20px;" type="text"/> years old</p>				
<p>39. When was the <u>first time</u> you consumed an alcoholic beverage? (You must check a response)</p> <p><input type="checkbox"/> 1. Never (skip to #46) <input type="checkbox"/> 2. During the past 30 days <input type="checkbox"/> 3. More than 1 month ago, less than 1 year ago <input type="checkbox"/> 4. More than a year ago</p>	<p>40. Have you consumed alcoholic beverages in the <u>past 12 months</u>? (You must check a response)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #46)</p>				
<p>41. Have you consumed alcoholic beverages in the <u>past 30 days</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No (skip to #46)</p>	<p>42. How many days <u>in the past month</u> have you had too much to drink and got drunk?</p> <p style="text-align: center;"><input style="width: 40px; height: 20px;" type="text"/> days</p>				
<p>43. Where do you most often drink alcohol? (Tick only <u>one(1)</u> response.)</p> <p><input type="checkbox"/> 1. At home <input type="checkbox"/> 6. At other social events <input type="checkbox"/> 2. At school <input type="checkbox"/> 7. Other (specify) <input type="checkbox"/> 3. On the corner/block <input type="checkbox"/> 4. At a friend's house <input type="checkbox"/> 5. At sporting events</p>	<p>44. From whom/where do you usually get alcohol? (Tick only <u>one(1)</u> response.)</p> <p><input type="checkbox"/> 1. Friends <input type="checkbox"/> 5. Street vendor <input type="checkbox"/> 2. Parents <input type="checkbox"/> 6. Shop <input type="checkbox"/> 3. Brother/Sister <input type="checkbox"/> 7. Other (specify) <input type="checkbox"/> 4. Other relative(s)</p>				
<p>45. In the <u>past 30 days</u>, what type of alcoholic beverage did you consume, and with what frequency? Check the appropriate response for <u>EACH</u>.</p>					
	1. Daily	2. Weekends	3. Some week days	4. Only in social events	5. Never
1. Beer, Guinness, Breezes, Wickets					
2. Wine					
3. Hard liquor (rum, rum punch, vodka, whisky, liqueurs)					
<p>46. Have you ever ridden in a vehicle driven by someone who had been drinking alcohol?</p> <p style="margin-left: 40px;">Bike <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/> 3. I do not know</p> <p style="margin-left: 40px;">Car <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/> 3. I do not know</p>					

47a. Have you <u>ever</u> consumed any of these substances? Check the appropriate response for EACH.		47b. How old were you when you <u>first</u> tried?	
	NO	YES	
1. Inhalants (e.g. glue, diesel fuel, other solvents)		→	years old
2. Marijuana		→	years old
3. Cannabis resin		→	years old
4. Cocaine		→	years old
5. Crack		→	years old
6. Heroin		→	years old
7. Hashish		→	years old
8. Amphetamines and Methamphetamines (e.g. Speed)		→	years old
9. GHB (e.g. Blue Nitro)		→	years old
10. Ketamine (e.g. Special K)		→	years old
11. Grabba (tobacco leaf)		→	years old
12. Beedi		→	years old
13. E-cigarettes (hookah pens/ hookah sticks)		→	years old
14. Tranquilizers (e.g. valium) without prescription		→	years old
15. Amphetamine-type stimulant (e.g. Ritalin)		→	years old
16. Analgesics (e.g. Codeine)		→	years old
17. Poppers (nitrites) (e.g. Rush)		→	years old
18. Hallucinogens (e.g. LSD)		→	years old
19. MDMA (e.g. Ecstasy)		→	years old
20. Other drugs (specify): years old		→	years old

<p>48a. When was the <u>first time</u> you tried inhalants (e.g., glue, diesel fuel, other solvents)? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #49a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More 1 year ago</p>	<p>48b. Have you consumed inhalants in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #49a)</p>
<p>48c. With what frequency have you consumed inhalants?</p> <p><input type="checkbox"/> 1. Only once</p> <p><input type="checkbox"/> 2. Sometimes in the past 12 months</p> <p><input type="checkbox"/> 3. Sometimes during the month</p> <p><input type="checkbox"/> 4. Sometimes during the week</p> <p><input type="checkbox"/> 5. Daily</p>	<p>48d. Have you consumed inhalants in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>

<p>49a. When was the <u>first time</u> you tried marijuana? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #50a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More 1 year ago</p>	<p>49b. Have you consumed marijuana in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #50a)</p>
<p>49c. With what frequency have you used marijuana?</p> <p><input type="checkbox"/> 1. Only once</p> <p><input type="checkbox"/> 2. Sometimes in the past 12 months</p> <p><input type="checkbox"/> 3. Sometimes during the month</p> <p><input type="checkbox"/> 4. Sometimes during the week</p> <p><input type="checkbox"/> 5. Daily</p>	<p>49d. Have you consumed marijuana in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
<p>49e. Where do you most often use marijuana?</p> <p><input type="checkbox"/> 1. At home</p> <p><input type="checkbox"/> 2. At school</p> <p><input type="checkbox"/> 3. On the corner/block</p> <p><input type="checkbox"/> 4. At a friend's house</p> <p><input type="checkbox"/> 5. At sporting events</p> <p><input type="checkbox"/> 6. At other social events</p> <p><input type="checkbox"/> 7. Other (specify)</p>	<p>49f. From whom/where do you usually get marijuana?</p> <p><input type="checkbox"/> 1. Friends</p> <p><input type="checkbox"/> 2. Parents</p> <p><input type="checkbox"/> 3. Brother/Sister</p> <p><input type="checkbox"/> 4. Other relative(s)</p> <p><input type="checkbox"/> 5. Street pusher</p> <p><input type="checkbox"/> 6. Other (specify)</p>
<p>49g. Have you ever used marijuana in any of the following forms? (Choose <u>all</u> that apply)</p> <p><input type="checkbox"/> 1. Drinks (tea, juice etc.)</p> <p><input type="checkbox"/> 2. Edibles (pastries, candy/sweets, cooked/uncooked meals)</p> <p><input type="checkbox"/> 3. Concentrates (oils, shatter, budder wax etc.)</p> <p><input type="checkbox"/> 4. Other (specify)</p> <p><input type="checkbox"/> 5. I have never used marijuana in any of these forms</p>	

<p>50a. When was the <u>first time</u> you tried cocaine? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #51a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>50b. Have you consumed cocaine in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #51a)</p>
<p>50c. With what frequency have you used cocaine?</p> <p><input type="checkbox"/> 1. Only once</p> <p><input type="checkbox"/> 2. Sometimes in the past 12 months</p> <p><input type="checkbox"/> 3. Sometimes during the month</p> <p><input type="checkbox"/> 4. Sometimes during the week</p> <p><input type="checkbox"/> 5. Daily</p>	<p>50d. Have you consumed cocaine in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>

<p>51a. When was the <u>first time</u> you tried crack? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #52a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>51b. Have you consumed crack in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #52a)</p>
<p>51c. With what frequency have you used crack?</p> <p><input type="checkbox"/> 1. Only once</p> <p><input type="checkbox"/> 2. Sometimes in the past 12 months</p> <p><input type="checkbox"/> 3. Sometimes during the month</p> <p><input type="checkbox"/> 4. Sometimes during the week</p> <p><input type="checkbox"/> 5. Daily</p>	<p>51d. Have you consumed crack in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>

<p>52a. When was the <u>first time</u> you tried heroin? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #53a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>52b. Have you consumed heroin in the <u>past 12 months</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #53a)</p>
<p>52c. With what frequency have you used heroin?</p> <p><input type="checkbox"/> 1. Only once</p> <p><input type="checkbox"/> 2. Sometimes in the past 12 months</p> <p><input type="checkbox"/> 3. Sometimes during the month</p> <p><input type="checkbox"/> 4. Sometimes during the week</p> <p><input type="checkbox"/> 5. Daily</p>	<p>52d. Have you consumed heroin in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>

<p>53a. When was the <u>first time</u> you tried ecstasy? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #54a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>53b. Have you consumed ecstasy in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
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<p>54a. When was the <u>first time</u> you tried stimulants (e.g., ritalin, adderall, pseudoephedrine) without medical prescription? (You must check a response)</p> <p><input type="checkbox"/> 1. I have never consumed stimulants without medical prescription (skip to #55a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>54b. Have you consumed stimulants without medical prescription in the <u>past 30 days</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
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<p>55a. When was the <u>first time</u> you consumed tranquilizers (e.g., valium, xanax) without medical prescription? (You must check a response.)</p> <p><input type="checkbox"/> 1. Never (skip to #56a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>55b. Have you consumed tranquilizers without medical prescription in the <u>past 30 days</u>? (You must check a response.)</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
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<p>56a. When was the <u>first time</u> you tried other drugs? (You must check a response.)</p> <p><input type="checkbox"/> 1. I have never tried other drugs (skip to #57a)</p> <p><input type="checkbox"/> 2. In the past 30 days</p> <p><input type="checkbox"/> 3. More than 1 month ago, but less than 1 year ago</p> <p><input type="checkbox"/> 4. More than 1 year ago</p>	<p>56b. Have you consumed other drugs in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>
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<p>The next set of questions asks about energy drinks.</p>													
<p>57a. Have you <u>ever</u> had energy drinks (Monster, Red Bull, etc.)?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No (skip to #58)</p> <p><input type="checkbox"/> 3. I do not know</p>	<p>57b. Have you consumed energy drinks in the <u>past 30 days</u>?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p>												
<p>57c. When do you drink energy drinks? (Please tick Yes or No for <u>each</u> of the following.)</p> <table border="0"> <tr> <td>While studying</td> <td><input type="checkbox"/> 1. Yes</td> <td><input type="checkbox"/> 2. No</td> </tr> <tr> <td>Before or after sporting activities</td> <td><input type="checkbox"/> 1. Yes</td> <td><input type="checkbox"/> 2. No</td> </tr> <tr> <td>While hanging out</td> <td><input type="checkbox"/> 1. Yes</td> <td><input type="checkbox"/> 2. No</td> </tr> <tr> <td>Other (specify) _____</td> <td></td> <td></td> </tr> </table>		While studying	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No	Before or after sporting activities	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No	While hanging out	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No	Other (specify) _____		
While studying	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No											
Before or after sporting activities	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No											
While hanging out	<input type="checkbox"/> 1. Yes	<input type="checkbox"/> 2. No											
Other (specify) _____													
<p>57d. Have you <u>ever</u> consumed a mixture of an alcoholic beverage and an energy drink (e.g., Whiskey and Red Bull)?</p> <p><input type="checkbox"/> 1. Yes</p> <p><input type="checkbox"/> 2. No</p> <p><input type="checkbox"/> 3. I do not know</p>													

58. How do you think your parent(s)/guardian would react in <u>each</u> of the following? Check the appropriate response for <u>EACH</u>.	1. Extremely Upset	2. Very Upset	3. Somewhat Upset	4. Not Upset	5. I have no idea how they would react	4. Not applicable (I have no living parent(s)/guardian or I have never seen them.)
1. If your parent(s)/guardian catches you coming home tipsy or drunk.						
2. If your parent(s)/guardian finds out you are smoking marijuana.						
59. Have you ever had any serious conversations with any of your parents/guardian(s) about the dangers of drug use? <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No						

Check the appropriate response for <u>EACH</u> statement below.	1. Yes	2. No	3. I do not know
60a. In general, do you believe that there are drugs (alcohol, marijuana, cigarettes, etc.) at your school?			
60b. In general, do you believe that there are students who bring, try, or deal with drugs at your school?			
61a. Do you believe that there are drugs in the area surrounding or next to your school?			
61b. Do you believe that some students try to buy or deal in drugs amongst themselves just outside the school or surrounding area?			
62. Have you personally ever seen a student selling or giving drugs at school or in the area surrounding the school?			
63. Have you personally ever seen a student using drugs at school or in the area surrounding the school?			

64a. If your close friends knew you were smoking marijuana, how many of them would try to convince you to stop? <input type="checkbox"/> 1. All <input type="checkbox"/> 2. Some <input type="checkbox"/> 3. None	64b. If your close friends knew you were smoking marijuana, how many of them would disapprove? <input type="checkbox"/> 1. All <input type="checkbox"/> 2. Some <input type="checkbox"/> 3. None
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65a. If you tried alcohol once in your lifetime, would you say so in this questionnaire? <input type="checkbox"/> 1. Yes, I have just said so <input type="checkbox"/> 2. Definitely yes <input type="checkbox"/> 3. Probably yes <input type="checkbox"/> 4. Probably no <input type="checkbox"/> 5. I would definitely not say so	65b. If you tried marijuana once in your lifetime, would you say so in this questionnaire? <input type="checkbox"/> 1. Yes, I have just said so <input type="checkbox"/> 2. Definitely yes <input type="checkbox"/> 3. Probably yes <input type="checkbox"/> 4. Probably no <input type="checkbox"/> 5. I would definitely not say so
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END OF SECTION

SECTION II

This section of the survey asks your opinion on a number of things in your life, including your friends, family, neighbourhood, and community. You are reminded that your answers to these questions are **confidential**.

INSTRUCTIONS

1. This is not a test. There is no right or wrong answers.
2. Provide a response to **ALL** questions. If you don't find an answer that fits exactly, use one that comes closest.
3. Some of the questions have the following format:

Please check the box for the word that best describes how you feel.

EXAMPLE: Pepperoni pizza is one of my favourite foods.

1. NO! 2. No 3. Yes 4. YES!

Mark the Big "NO!" if you think the statement is definitely not true for you.

Mark the little "No" if you think the statement is mostly not true for you.

Mark the little "Yes" if you think the statement is mostly true for you.

Mark the Big "YES!" if you think the statement is definitely true for you.

These questions ask about your neighbourhood and community where you live.

1. I'd like to get out of my neighbourhood. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
2. If I had to move, I would miss the neighbourhood I now live in. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
3. I like my neighbourhood. Pick one:
 1. NO! 2. No 3. Yes 4. YES!

4. How much does each of the following statements describe your neighbourhood?

	1. NO!	2. No	3. Yes	4. YES!
1. I feel safe in my neighbourhood				
2. Crime and/or drug selling				
3. Fights				
4. Lots of empty or abandoned buildings				
5. Lots of graffiti				

5. How many times have you changed homes since kindergarten/P-1? Pick one:

1) Never 4) 5 – 6 times
 2) 1 – 2 times 5) 7 or more times
 3) 3 – 4 times

6. Have you changed homes in the past year (the last 12 months)? Pick one:

1. No 2. Yes

7. Have you changed schools (including changing from elementary to middle and middle to high school) in the past year (the last 12 months)? Pick one:

1. No 2. Yes

8. How many times have you changed schools (including changing from elementary to middle and middle to high school) since kindergarten? Pick one:

1) Never 4) 5 – 6 times
 2) 1 – 2 times 5) 7 or more times
 3) 3 – 4 times

9. If you wanted to get some cigarettes, how easy would it be for you to get some? Pick one:

1. Very hard 3. Sort of easy
 2. Sort of hard 4. Very easy

10. If you wanted to get some beer, wine, or hard liquor (for example, vodka, whiskey, or gin), how easy would it be for you to get some? Pick one:

1. Very hard 3. Sort of easy
 2. Sort of hard 4. Very easy

11. If you wanted to get some marijuana, how easy would it be for you to get some? Pick one:

1. Very hard 3. Sort of easy
 2. Sort of hard 4. Very easy

12. If you wanted to get a drug like, cocaine, LSD, or amphetamines, how easy would it be for you to get some? Pick one:

1. Very hard 3. Sort of easy
 2. Sort of hard 4. Very easy

13. If you wanted to get a handgun, how easy would it be for you to get one? Pick one:
1. Very hard 3. Sort of easy
 2. Sort of hard 4. Very easy
14. If a kid drank some beer, wine, or hard liquor (for example vodka, whiskey, or gin) in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:
1. NO! 2. No 3. Yes 4. YES!
15. If a kid smoked marijuana in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:
1. NO! 2. No 3. Yes 4. YES!
16. If a kid illegally carried a handgun in your neighbourhood, or the area around where you live, would he or she be caught by the police? Pick one:
1. NO! 2. No 3. Yes 4. YES!
17. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke marijuana? Pick one:
1. Very wrong 3. A little bit wrong
 2. Wrong 4. Not wrong at all
18. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to drink alcohol? Pick one:
1. Very wrong 3. A little bit wrong
 2. Wrong 4. Not wrong at all
19. How wrong would most adults in your neighbourhood, or the area around where you live, think it is for kids your age to smoke cigarettes? Pick one:
1. Very wrong 3. A little bit wrong
 2. Wrong 4. Not wrong at all
20. There are a lot of adults in my neighbourhood I could talk to about something important. Pick one:
1. NO! 2. No 3. Yes 4. YES!
21. Which of the following activities for people your age are available in your community?

Activities	1. Yes	2. No
1. Sports teams		
2. Boys and girls clubs (e.g., Pathfinders, Girl Guides, Boy Scouts, Sea Cadets)		
3. Community clubs (e.g., Majorettes, Dancerettes, Twirlers)		
4. Community service (e.g., Candy striping, Volunteer work)		

22. There are people in my neighbourhood, or the area around where I live, who are proud of me when I do something well. Pick one:
1. NO! 2. No 3. Yes 4. YES!
23. There are people in my neighbourhood, or the area around where I live, who encourage me to do my best. Pick one:
1. NO! 2. No 3. Yes 4. YES!
24. My neighbours notice when I am doing a good job and let me know about it. Pick one:
1. NO! 2. No 3. Yes 4. YES!

These questions ask about your family.

1. Has anyone in your family ever had a severe alcohol or drug problem? Pick one:
1. No 2. Yes
2. Have any of your brother(s) or sister(s) ever drunk beer, wine, or hard liquor (for example vodka, whiskey, or gin)? Pick one:
1. No 2. Yes
 3. I don't have any brother(s) or sister(s)
3. Have any of your brother(s) or sister(s) ever smoked marijuana? Pick one:
1. No 2. Yes
 3. I don't have any brother(s) or sister(s)
4. Have any of your brother(s) or sister(s) ever smoked cigarettes? Pick one:
1. No 2. Yes
 3. I don't have any brother(s) or sister(s)
5. Have any of your brothers or sisters brother(s) or sister(s) ever taken a handgun to school? Pick one:
1. No 2. Yes
 3. I don't have any brother(s) or sister(s)
6. Have any of your brother(s) or sister(s) ever been suspended or expelled from school? Pick one:
1. No 2. Yes
 3. I don't have any brother(s) or sister(s)

7. About how many adults have you known personally who in the past year have used marijuana, crack, cocaine, or other drugs? Pick one:

- 1) None 4) 3 or 4 adults
 2) 1 adult 5) 5 or more adults
 3) 2 adults

8. About how many adults have you known personally who in the past year have sold or dealt drugs? Pick one:

- 1) None 4) 3 or 4 adults
 2) 1 adult 5) 5 or more adults
 3) 2 adults

9. About how many adults have you known personally who in the past year have done other things that could get them in trouble with the police, like stealing, selling stolen goods, mugging or assaulting others, etc.? Pick one:

- 1) None 4) 3 or 4 adults
 2) 1 adult 5) 5 or more adults
 3) 2 adults

10. About how many adults have you known personally who in the past year have gotten drunk or high? Pick one:

- 1) None 4) 3 or 4 adults
 2) 1 adult 5) 5 or more adults
 3) 2 adults

11. The rules in my family are very clear. Pick one:

1. NO! 2. No 3. Yes 4. YES!

12. My parents ask if I have gotten my homework done. Pick one:

1. NO! 2. No 3. Yes 4. YES!

13. When I am not at home, one of my parents know where I am and who I am with. Pick one:

1. NO! 2. No 3. Yes 4. YES!

14. Would your parents know if you did not come home on time? Pick one:

1. NO! 2. No 3. Yes 4. YES!

15. My family has clear rules about alcohol and drug use. Pick one:

1. NO! 2. No 3. Yes 4. YES!

16. If you drank some beer, wine, or other hard liquor (for example vodka, whiskey, or gin) without your parents' permission, would you be caught by your parents? Pick one:

1. NO! 2. No 3. Yes 4. YES!

17. If you carried a handgun without your parents' permission, would you be caught by your parents? Pick one:

1. NO! 2. No 3. Yes 4. YES!

18. If you skipped school without your parents' permission, would you be caught by your parents? Pick one:

1. NO! 2. No 3. Yes 4. YES!

19. We argue about the same things in my family over and over. Pick one:

1. NO! 2. No 3. Yes 4. YES!

20. People in my family have serious arguments. Pick one:

1. NO! 2. No 3. Yes 4. YES!

21. People in my family often insult or yell at each other. Pick one:

1. NO! 2. No 3. Yes 4. YES!

22. How wrong do your parents feel it would be for you to...

	1. Very Wrong	2. Wrong	3. A little bit wrong	4. Not wrong at all
1. drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly (at least once or twice a month)?				
2. smoke cigarettes?				
3. smoke marijuana?				
4. steal anything worth more than \$5.00?				
5. draw graffiti, write things, or draw pictures on buildings or other property (without the owner's permission)?				
6. pick a fight with someone?				

23. Do you feel very close to your mother? Pick one:

1. NO! 2. No 3. Yes 4. YES!

24. Do you share your thoughts and feelings with your mother? Pick one:

1. NO! 2. No 3. Yes 4. YES!

25. Do you feel very close to your father? Pick one:

1. NO! 2. No 3. Yes 4. YES!

26. Do you share your thoughts and feelings with your father? Pick one:

1. NO! 2. No 3. Yes 4. YES!

27. If I had a personal problem, I could ask my mom or dad for help. Pick one:

1. NO! 2. No 3. Yes 4. YES!

28. My parents give me lots of chances to do fun things with them. Pick one:

1. NO! 2. No 3. Yes 4. YES!

29. My parents ask me what I think before most family decisions affecting me are made. Pick one:

1. NO! 2. No 3. Yes 4. YES!

30. My parents notice when I am doing a good job and let me know about it. Pick one:

1. Never or Almost Never 3. Often
 2. Sometimes 4. All the time

31. How often do your parents tell you they're proud of you for something you've done? Pick one:

1. Never or Almost Never 3. Often
 2. Sometimes 4. All the time

32. Do you enjoy spending time with your mother? Pick one:

1. NO! 2. No 3. Yes 4. YES!

33. Do you enjoy spending time with your father? Pick one:

1. NO! 2. No 3. Yes 4. YES!

This section asks questions about your experiences at school.

1. Putting them all together, what were your grades like last year? (E.g., Mostly Bs, Mostly Fs)

2. Are your school grades better than the grades of most students in your class? Pick one:

1. NO! 2. No 3. Yes 4. YES!

3. During the LAST FOUR WEEKS, how many whole days have you missed because you skipped or cut? Pick one:

- 1) None 5) 4 to 5
 2) 1 6) 6 to 10
 3) 2 7) 11 or more
 4) 3

4. How often do you feel that the school work you are assigned is meaningful and important? Pick one:

1. Almost always
 2. Often
 3. Sometimes
 4. Seldom
 5. Never

5. How interesting are most of your courses to you? Pick one:

1. Very interesting and stimulating
 2. Quite interesting
 3. Fairly interesting
 4. Slightly dull
 5. Very dull

6. How important do you think things you are learning in school are going to be for your later life? Pick one:

1. Very important
 2. Quite important
 3. Fairly important
 4. Slightly important
 5. Not at all important

7. Now thinking back over the past year in school, how often did you enjoy being in school? Pick one:

1. Almost always 4. Seldom
 2. Often 5. Never
 3. Sometimes

8. Now thinking back over the past year in school, how often did you hate being in school? Pick one:

1. Almost always 4. Seldom
 2. Often 5. Never
 3. Sometimes

9. Now thinking back over the past year in school, how often do you try to do your best work in school? Pick one:

1. Almost always 4. Seldom
 2. Often 5. Never
 3. Sometimes

10. In my school, students have lots of chances to help decide things like class activities and rules. Pick one:

1. NO! 2. No 3. Yes 4. YES!

11. Teachers ask me to work on classroom projects. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
12. There are a lot of chances for students in my school to get involved in sports, clubs, and other school activities outside of class. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
13. There are lots of chances for students in my school to talk with a teacher one-on-one. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
14. I have lots of chances to be part of class discussions or activities. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
15. My teacher(s) notices when I am doing a good job and lets me know about it. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
16. I feel safe at my school. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
17. The school lets my parents know when I have done something well. Pick one:
 1. NO! 2. No 3. Yes 4. YES!
18. My teachers praise me when I work hard in school. Pick one:
 1. NO! 2. No 3. Yes 4. YES!

This section asks questions about your feelings and experiences in other parts of your life and about your friends.

1. I like to see how much I can get away with. Pick one:
 1. Very false 3. Somewhat true
 2. Somewhat false 4. Very true
2. I ignore rules that get in my way. Pick one:
 1. Very false 3. Somewhat true
 2. Somewhat false 4. Very true
3. I do the opposite of what people tell me, just to get them mad. Pick one:
 1. Very false 3. Somewhat true
 2. Somewhat false 4. Very true
4. Have you ever belonged to a gang? Pick one:
 1. Yes 2. No

5. If you have ever belonged to a gang, did the gang have a name? Pick one:
 1. Yes
 2. No
 3. I never have belonged to a gang
6. Think of your four best friends (the friends you feel closest to), in the past (12 months), how many of your best friends have been members of a gang? Pick one:
 1) None
 2) 1
 3) 2
 4) 3
 5) 4
7. How old were you when you first belonged to a gang? Pick one:
 1) Never have 6) 14
 2) 10 or younger 7) 15
 3) 11 8) 16
 4) 12 9) 17 or older
 5) 13
8. How wrong do you think it is for someone your age to...

	1. Very Wrong	2. Wrong	3. A little bit wrong	4. Not wrong at all
1. drink beer, wine or hard liquor (e.g., vodka, whiskey or gin) regularly, that is, at least once or twice a month?				
2. smoke cigarettes?				
3. smoke marijuana?				
4. use LSD, cocaine, amphetamines or another illegal drug?				
5. take a handgun to school?				
6. steal anything worth more than \$5.00?				
7. attack someone with the idea of seriously hurting them?				
8. pick a fight with someone?				
9. stay away from school all day when their parents think they are at school?				

9. How many times have you done what feels good no matter what. Pick one:

- 1. Never
- 2. I've done it, but not in the past year
- 3. Less than once a month
- 4. About once a month
- 5. 2 or 3 times a month
- 6. Once a week or more

10. How many times have you done something dangerous because someone dared you to do it? Pick one:

- 1. Never
- 2. I've done it, but not in the past year
- 3. Less than once a month
- 4. About once a month
- 5. 2 or 3 times a month
- 6. Once a week or more

11. How many times have you done crazy things even if they are a little dangerous? Pick one:

- 1. Never
- 2. I've done it, but not in the past year
- 3. Less than once a month
- 4. About once a month
- 5. 2 or 3 times a month
- 6. Once a week or more

12. What are the chances you would be seen as cool if you smoked cigarettes? Pick one:

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

13. What are the chances you would be seen as cool if you began drinking alcoholic beverages regularly, that is, at least once or twice a month? Pick one:

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

14. What are the chances you would be seen as cool if you smoked marijuana? Pick one:

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

15. What are the chances you would be seen as cool if you carried a handgun (other than for hunting or sport)? Pick one:

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

16. What are the chances that you would be seen as cool if you worked hard at school?

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

17. What are the chances that you would be seen as cool if you defended someone who was being verbally abused at school?

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

18. What are the chances that you would be seen as cool if you regularly volunteered to do community service?

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

19. What are the chances that you would be seen as cool if you made a commitment to stay drug-free?

- 1. None or very little chance
- 2. Little chance
- 3. Some chance
- 4. Pretty good chance
- 5. Very good chance

20. Think of your four best friends (the friends you feel closest to), in the past (12 months), how many of your best friends have....

	None	1	2	3	4
1. smoked cigarettes?					
2. tried beer, wine, or hard liquor (for example, vodka, whiskey, or gin) when their parents didn't know about it?					
3. used marijuana?					
4. used LSD, cocaine, amphetamines, or other illegal drugs?					
5. been suspended from school?					
6. carried a handgun?					
7. sold illegal drugs?					
8. stolen or tried to steal a motor vehicle such as a motorcycle or a car?					
9. been arrested?					
10. dropped out of school?					
11. participated in clubs, organizations, or activities at school?					
12. made a commitment to stay drug-free					
13. liked school?					
14. regularly attended religious services?					
15. tried to do well in school?					

21. Sometimes we don't know what we will do as adults, but we may have an idea. Please indicate how true these statements may be for you.

	1. NO!	2. No	3. Yes	4. YES!
1. When I am adult I will smoke cigarettes				
2. When I am an adult I will drink beer, wine, or liquor				
3. When I am an adult I will smoke marijuana				

22. It is important to be honest with your parents, even if they become upset or you get punished. Pick one:

1. NO! 2. No 3. Yes 4. YES!

23. I think sometimes it is okay to cheat at school. Pick one:

1. NO! 2. No 3. Yes 4. YES!

24. I think it is okay to take something without asking if you can get away with it. Pick one:

1. NO! 2. No 3. Yes 4. YES!

25. It is all right to beat up people if they start the fight. Pick one:

1. NO! 2. No 3. Yes 4. YES!

26. How many times in the past year (12 months), have you participated in clubs, organizations, or activities at school?

- 1) Never
 2) 1 or 2 times
 3) 3 to 5 times
 4) 6 to 9 times
 5) 10 to 19 times
 6) 20 to 29 times
 7) 30 to 39 times
 8) 40+ times

27. How many times in the past year (12 months), have you done extra work on your own for school?

- 1) Never
 2) 1 or 2 times
 3) 3 to 5 times
 4) 6 to 9 times
 5) 10 to 19 times
 6) 20 to 29 times
 7) 30 to 39 times
 8) 40+ times

28. How many times in the past year (12 months), have you volunteered to do community service?

- 1) Never
 2) 1 or 2 times
 3) 3 to 5 times
 4) 6 to 9 times
 5) 10 to 19 times
 6) 20 to 29 times
 7) 30 to 39 times
 8) 40+ times

29. How often do you attend religious services or activities? Pick one:

- 1) Never
 2) Rarely
 3) 1 – 2 times a month
 4) About once a week or more

30. In the past 12 months, have you seen a health professional (e.g. General Practitioner, Psychologist, and School Counsellor) because of any alcohol use, drug use, emotional problems or behavioral problems?

- 1. Yes, I have seen a health professional for alcohol and/or drug related problems
- 2. Yes, I have seen a health professional for emotional and/or behavioral problems
- 3. No, I have not seen a health professional for these reasons

These questions ask about how you would act in certain situations. They also ask your opinion about certain things.

1. You are looking at CD's in the music store with a friend. You look up and see her slip a CD under her coat. She smiles and says, "Which one do you want? Go ahead; take it while nobody's around". There is no one in sight, no employees or other customers. What would you do now? Pick one:

- 1. Ignore her
- 2. Grab a CD and leave the store
- 3. Tell her to put the CD back
- 4. Act like it is a joke, and ask her to put the CD back

2. It is 8:00 on a weeknight and you are about to go over to a friend's house when your mother asks you where you are going. You say, "Oh, just going to go hang out with some friends." She says, "No, you'll just get into trouble if you go out. Stay home tonight" What would you do? Pick one:

- 1. Leave the house anyway
- 2. Explain what you are going to do with your friends, tell her when you will get home, and ask if you can go out
- 3. Not say anything and start watching TV
- 4. Get into an argument with her

3. You are visiting another part of the Island, and you do not know any of the people your age there. You are walking down the street, and some teenager you do not know is walking toward you. He is about your size, and as he is about to pass you, he deliberately bumps into you and you almost lose your balance. What would you say or do? Pick one:

- 1. Push the person back
- 2. Say "Excuse me"; and keep walking
- 3. Say "Watch where you're going"; and keep walking
- 4. Swear at the person and walk away

4. You are at a party at someone's house, and one of your friends offers you a drink containing alcohol. What would you say or do? Pick one:

- 1. Drink it
- 2. Tell your friend "No thanks, I don't drink" and suggest that you and your friend go and do something else
- 3. Just say, "No thanks" and walk away
- 4. Make up a good excuse, tell your friend you had something else to do, and leave

The next few questions ask about how think about life and certain antisocial behaviours.

1. Sometimes I think that life is not worth it. Pick one:

- 1. NO! 2. No 3. Yes 4. YES!

2. At times I think I am no good at all. Pick one:

- 1. NO! 2. No 3. Yes 4. YES!

3. All in all, I am inclined to think that I am a failure. Pick one:

- 1. NO! 2. No 3. Yes 4. YES!

4. In the past year have you felt depressed or sad MOST days, even if you felt OK sometimes? Pick one:

- 1. NO! 2. No 3. Yes 4. YES!

5. How many times in the year (the last 12 months) have you...

	1) Never	2) 1 to 2 Times	3) 3 to 5 Times	4) 6 to 9 Times	5) 10 to 19 Times	6) 20 to 29 Times	7) 30 to 39 Times	8) 40+ Times
1. been suspended from school?								
2. carried a handgun (other than for hunting or sport)?								
3. sold illegal drugs?								
4. stolen or tried to steal a motor vehicle such as a car or a motorcycle?								
5. been arrested?								
6. attacked someone with the idea of seriously hurting them?								
7. been drunk or high at school?								
8. taken a handgun to school?								
9. stolen something worth more than \$5?								
10. purposely damaged or destroyed property that did not belong to you (not counting family property)?								
11. taken something from a store without paying for it?								

THANK YOU FOR YOUR PARTICIPATION

END OF SURVEY

REFERENCES

- Arria, A. M., Caldeira, K. M., Kasperski, S. J., O'Grady, K. E., Vincent, K. B., Griffiths, R. R., & Wish, E. D. (2010). Increased alcohol consumption, nonmedical prescription drug use, and illicit drug use are associated with energy drink consumption among college students. *J Addict Med*, 4(2), 74–80. doi:10.1097/ADM.0b013e3181aa8dd4. Retrieved January 23, 2012, from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3058776/pdf/nihms-240328.pdf>
- Arria, A. M., Caldeira, K. M., Kasperski, S. J., Vincent, K. B., Griffiths, R. R., & O'Grady, K. E. (2011). Energy drink consumption and increased risk for alcohol dependence. *Alcoholism: Clinical and Experimental Research*, 35, 365–375. doi: 10.1111/j.1530-0277.2010.01352.x. Retrieved January 18, 2012, from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2923814/pdf/nihms115856.pdf>
- Bejarano, B., Ahumada, G., Sa´nchez, G., Cadenas, N., de Marco, M., Hynes, M., & Cumsille, F. (2011). Perception of risk and drug use: An exploratory analysis of explanatory factors in six Latin American countries. *The Journal of International Drug, Alcohol and Tobacco Research*, 1(1), 9–17. Retrieved February 10, 2012, from <http://www.idatjournal.com/issues/Perception%20of%20Risk%20and%20Drug%20Use%20An%20Exploratory%20Analysis%20of%20Explanatory%20Factors%20in%20Six%20Latin%20American%20Countries.pdf>
- Bjarnason, T. (1995). Administration mode bias in a school survey on alcohol, tobacco and illicit drug use. *Addiction*, 90(4), 555-560.
- Canadian Institute for Substance Use Research. (2018). Cannabis Use and Youth: A parent's guide. <https://www.heretohelp.bc.ca/workbook/cannabis-use-and-youth-a-parents-guide> (accessed April 21, 2020)
- Department for National Drug Control (2007). *Communities that care youth survey 2007. Bermuda*. Government of Bermuda.
- Department for National Drug Control (2010). *National household survey 2009*. Government of Bermuda.
- Department for National Drug Control (2014). *2013 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda*. Government of Bermuda.
- Department for National Drug Control (2017). *2017 National Household Survey. Report of the National Household Survey on Drug Use and Health among the Adult Population in Bermuda*. Government of Bermuda.
- Dillman, D. A., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J., & Messer, B.L. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, 38, 1-18.
- Eggert, L. L., Thompson, E. A., Herting, J. R., & Randall, B. P. (2001). Reconnecting youth to prevent drug abuse, school dropout, and suicidal behaviors among high-risk youth. In Wagner, E., and Waldron, H. B. (Eds.). *Innovations in Adolescent Substance Abuse Intervention*. Oxford: Elsevier Science, 51–84. p. 80.

- Gordon, L. P. (2019). *Vaping: What You Need To Know*. KidsHealth from Nemours. Retrieved February 3, 2020, from <http://kidshealth.org/en/parents/e-cigarettes.html>
- Hammond, D., Reid, J. L., Raynard, V. L., Fong, G. T., Cummings, K. M., McNeill, A., Hitchman, S., Thrasher, J.F., Goniewicz, M.L., Bansal-Travers, M., O'Connor, R., Levy, D., Borland, R., White, C.M. (2019). *Prevalence of Vaping and Smoking among Adolescents in Canada, England, and the United States: Repeat National Cross Sectional Surveys*. *BMJ* 2019; 365:12219. Retrieved February 3, 2020, from <http://bmj.com/content/365/bmj.12219>
- Jamaican Patwah. (2020). Definitions of "Grabba". Retrieved from <https://jamaicanpatwah.com/term/Grabba/1372#.XsvkILpFzN9>
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2012). *Monitoring the future national results on adolescent drug use: Overview of key findings, 2011*. Ann Arbor: Institute for Social Research, The University of Michigan. Retrieved January 28, 2012, from <http://monitoringthefuture.org/pubs/monographs/mtf-overview2011.pdf>
- Leonard, J. (2020). Is Amyl Nitrate Safe? Retrieved from <https://www.medicalnewstoday.com/articles/324000>
- Libby, A. M., Orton, H. D., Stover, S. K, & Riggs, P. D. (2005). What came first, major depression or substance use disorder? Clinical characteristics and substance use comparing teens in a treatment cohort. *Addictive Behaviors* (30)9, 1649-1662.
- Lohmann C. Raychelle. (2019). *Lethally High: Teenagers and Synthetic Drugs*. Retrieved from <https://www.rehabs.com/pro-talk/lethally-high-teenagers-and-synthetic-drugs/>
- Miech R., Patrick M. E., O'Malley P.M., Johnston, L.D. (2017). What are kids vaping? Results from a national survey of US adolescents. *Tobacco Control*, 26(3), pp. 86-391.
- Ministry of National Security (2018). *Report of the Trauma Indicator Checklist*. Government of Bermuda.
- National Center on Addiction and Substance Abuse. (1994). National study shows "Gateway" drugs lead to cocaine use. In R. J. Hackett (Ed.), *Columbia University Record*, 20(4). Columbia University, NY: Office of Public Information. Retrieved January 23, 2012, from http://www.columbia.edu/cu/record/archives/vol20/vol20_iss10/record2010.24.html
- National Institute on Drug Abuse. (Unknown). *Drugs of abuse. Alcohol*. Retrieved January 28, 2012, from <http://www.drugabuse.gov/category/drugs-abuse/alcohol>
- National Institute on Drug Abuse. (2011). *Topics in brief: Tobacco addiction*. Retrieved January 28, 2012, from <http://www.drugabuse.gov/publications/topics-in-brief/tobacco-addiction>
- O'Brien, M. C., McCoy, T. P., Rhodes, S. D., Wagoner, A., & Wolfson, M. (2008). Caffeinated cocktails: Energy drink consumption, high-risk drinking, and alcohol-related consequences among college students. *Academic Emergency Medicine*, 15(5). Retrieved January 23, 2012, from <http://onlinelibrary.wiley.com/doi/10.1111/j.1553-2712.2008.00085.x/pdf>
- Office of Adolescent Health. (2019). *Risks of Adolescent Alcohol Use*. Retrieved from <https://www.hhs.gov/ash/oah/adolescent-development/substance-use/alcohol/risks/index.html>

- Reissig C. J., Strain E. C., & Griffiths R. R. (2009). Caffeinated energy drinks – a growing problem. *Drug and Alcohol Dependence*, 99(1–3), 1–10. Retrieved January 23, 2012, from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2735818/pdf/nihms90556.pdf>
- Spruit, I. P. (Ed.). (2002). *Cannabis 2002 Report*. Ministry of Public Health of Belgium. Retrieved January 28, 2012, from http://www.cpha.ca/uploads/portals/substance/Cannabis_report_2002.pdf
- The Global Youth Network. (Unknown). *Drug trends. Cannabis: A few issues*. Retrieved January 28, 2012, from http://www.unodc.org/youthnet/en/youthnet_youth_drugs_trends_cannabis.html
- United Nations Office on Drugs and Crime. (2003). *Conducting school surveys on drug abuse. Global assessment programme on drug abuse toolkit module 3*. Retrieved November 28, 2011, from <http://www.unodc.org/documents/GAP/GAP%20Toolkit%20Module%203%20ENGLISH.pdf>
- Wikipedia. (2020). *Beedi*. Retrieved from <https://en.wikipedia.org/wiki/Beedi>
- World Health Organization. (1999). *Volatile solvents abuse: A global overview*. Substance Abuse Department Geneva, Switzerland: World Health Organization. p. 54. Retrieved January 28, 2012, from http://www.unodc.org/pdf/youthnet/trends_five.pdf



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