

# Communities That Care Youth Survey

**Bermuda**

Survey Administration: January and February 2007



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## Building Protection: Social Development Strategy





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# Section 1

## The Survey

### Introduction

This report describes the administration and findings for the Bermuda *Communities That Care Youth Survey*. Rothenbach Research and Consulting, LLC, prepared this report.

Based on the work of Dr. J. David Hawkins and Dr. Richard F. Catalano, the *Communities That Care Youth Survey* is designed to identify the levels of **risk factors** related to problem behaviors such as alcohol, tobacco and other drug use—and to identify the levels of **protective factors** that help guard against those behaviors. (For a more detailed discussion, see Section 2 of this report.) In addition to measuring risk and protective factors, the *Communities That Care Youth Survey* also measures the actual prevalence of drug use, violence and other antisocial behaviors among surveyed students. Three articles (Pollard, Hawkins & Arthur, 1999; Arthur, Hawkins, Pollard, Catalano & Baglioni, 2002; Glaser, Van Horn, Arthur, Hawkins & Catalano, 2005) describe the survey, its uses and its ongoing development.

The administration of the *Communities That Care Youth Survey* has helped Bermuda to assess the risk and protective factors in the lives of young people. This report identifies the risk and protective factors most in need of attention in the community. This information can be used to guide prevention efforts, to help address existing problems, and to promote healthy and positive youth development.

All together, 2,997 students in grades M2 through S4 participated in the survey.

### Summary of Results

This report presents findings in three separate sections: 1) risk and protective factors, 2) drug use, and 3) other antisocial behaviors. A brief summary of the findings from each section is presented on the next page. A more detailed summary is presented at the start of each section, followed by an item-by-item discussion of the results.

#### *Risk and Protective Factor Profile*

For the overall sample of M2 through S4 students in Bermuda, percentile scores across the 9 protective factor scales range from a low of 45 to a high of 58, with an average score of 51, which is one point higher than the normative average of 50. The three lowest overall scores were for the following protective factor

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scales: *School Opportunities for Prosocial Involvement* (45), *Community Rewards for Prosocial Involvement* (46) and *Social Skills* (48). Bermuda students reported the three highest overall scores for the following protective factor scales: *Belief in the Moral Order* (58), *Family Rewards for Prosocial Involvement* (56) and *School Rewards for Prosocial Involvement* (56). Please see Section 2 for information on protective factors, risk factors, scales and scoring.

Overall percentile scores across the 23 risk factor scales range from a low of 37 to a high of 59, with an average score of 49, which is one point lower than the normative average of 50. Bermuda students reported the three highest overall scores for the following risk factor scales: *Community Disorganization* (59), *Friends' Delinquent Behavior* (59) and *Peer Rewards for Antisocial Behavior* (59). The three lowest overall scores were for the following risk factor scales: *Perceived Availability of Handguns* (37), *Lack of Commitment to School* (38) and *Sensation Seeking* (41).

While policies that target any risk or protective factor could potentially be an important resource for students in Bermuda, focusing prevention planning in high risk and low protection areas could be especially beneficial. Similarly, factors with low risk or high protection represent strengths that Bermuda can build on. These objective data, in conjunction with a review of community-specific issues and resources, can help direct prevention efforts for Bermuda. It is important to keep in mind, however, that overall scores can mask problems within individual grades. Section 2 of this report provides grade-level results that will enable prevention planners to more precisely target opportunities for intervention.

## Alcohol, Tobacco and Other Drug Use

Bermuda students recorded the highest lifetime prevalence-of-use rates for alcohol (66.9%), marijuana (23.9%), cigarettes (21.9%) and inhalants (10.8%). Other lifetime prevalence rates ranged from 0.5% for heroin to 2.8% for smokeless tobacco. The rate of illicit drug use excluding marijuana is summarized by the indicator “any illicit drug (other than marijuana),” with 11.9% of surveyed students reporting use of these drugs in their lifetimes. Bermuda students reported the highest past-30-day prevalence-of-use rates for alcohol (37.5%) and marijuana (12.8%). Other past-30-day prevalence rates ranged from 0.3% for methamphetamine, cocaine and heroin to 4.5% for cigarettes. Overall, 4.2% of Bermuda students reported the use of any illicit drug (other than marijuana) in the past 30 days.

## Other Antisocial Behaviors

For the overall sample, the annual prevalence rates recorded for the 10 other problem, or antisocial, behaviors cover a broad range. In Bermuda, 21.2% of students reported *Attacking Someone with Intent to Harm* in the past year, making it the most prevalent of the 10 behaviors. *Carrying a Bladed Weapon* is the second most prevalent antisocial behavior, with 18.5% of Bermuda students reporting that behavior in the past year. Students in Bermuda reported low levels of participation for *Carrying a Handgun* and *Taking a Handgun to School*.

## Survey Methodology

The *Communities That Care Youth Survey* was developed to provide scientifically sound information to communities. It measures a variety of risk and protective factors by using groups of survey items, which are called scales. Please note that some of the risk factors are measured with more than one scale.

The *Communities That Care Youth Survey* was developed from research funded by the Center for Substance Abuse Prevention of the U.S. Department of Health and Human Services. This research supported the development of a student survey to measure the following items:

- risk and protective factors that predict alcohol, tobacco and other drug (ATOD) use, delinquency and other problem behaviors in adolescents.



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- the prevalence and frequency of drug use.
  - the prevalence and frequency of antisocial behaviors.

This survey instrument became the *Communities That Care Youth Survey*. The original research involved data collection in five states: Kansas, Maine, Oregon, South Carolina and Washington. Over 72,000 students participated in these statewide surveys, and analysis of the collected data contributed to the development of the *Communities That Care Youth Survey*.

### Administration

The survey was administered in the classroom and required approximately one class period to complete. Each teacher received an appropriate number of surveys and survey collection envelopes. The teachers reviewed the instructions with their students and asked the students to complete the survey. The instructions informed the students that there were no right or wrong answers. The instructions also explained the proper way to mark the answers.

Students were asked to complete the survey but were also told that participation is voluntary. Furthermore, students were told that they could skip any question that they were not comfortable answering. Both the teacher and the written instructions on the front of the survey form assured students that the survey was anonymous and confidential.

### Survey Validation

Four strategies were used to assess the validity of the surveys. The first two strategies eliminated the surveys of students who appeared to exaggerate their drug use and other antisocial behavior. The third strategy eliminated students who reported use of a fictitious drug. The fourth strategy eliminated the surveys of students who repeatedly reported logically inconsistent patterns of drug use.

- In the first strategy, surveys from students who reported an average of four or more daily uses of the following drugs—inhalants, cocaine, LSD/Psychedelics, Ecstasy, methamphetamine and heroin—were eliminated from the survey data set. This strategy removes the survey of any student who did not take it seriously.
- The second strategy supplements the drug use exaggeration test by examining the frequency of five other antisocial behaviors: *Attacking Someone with Intent to Harm*, *Attempting to Steal a Vehicle*, *Being Arrested*, *Getting Suspended* and *Taking a Handgun to School*. Respondents who reported an unrealistically high frequency of these behaviors—more than 120 instances within the past year—were removed from the analysis.
- In the third strategy, students were asked if they had used a fictitious drug in the past 30 days or in their lifetimes. If students reported any use of the fictitious drug, their surveys were not included in the analysis of the findings.
- The fourth strategy was used to detect logical inconsistencies among responses to the drug-related questions. Students were identified as inconsistent responders in the following circumstances only: (1) if they were inconsistent on two or more of the following drugs: alcohol, cigarettes, smokeless tobacco and marijuana/hashish; or (2) if they were inconsistent on two or more of the remaining drugs. An example of an inconsistent response would be if a student reported that he or she had used alcohol three to five times in the past 30 days but had never used alcohol in his or her lifetime.

Bermuda students were cooperative—all but 65 students (2.1%) completed valid surveys. Of the 65 surveys identified and eliminated by one or more of the four strategies described above, 12 exaggerated drug use (strategy 1), 12 exaggerated other antisocial behavior (strategy 2), 43 reported the use of the fictitious drug (strategy 3) and 38 responded in a logically inconsistent way (strategy 4). The elimination total produced by these four strategies equals more than 65 because some surveys were identified by more than one strategy.

## Sample Analysis

A number of variables—such as the readability of the survey questionnaire, the effectiveness of the administration process and the amount of time students have to complete the survey—can affect the quality of survey data. In addition to factors like these, which influence the ability of students to provide good information, the way students are selected to participate in the survey can affect the results.

In order for the survey report to truly reflect the attitudes and behaviors of the surveyed population, the sample of students drawn to participate in the study should accurately represent the surveyed population. Three of the most important factors in this selection process are: (1) the grades chosen to participate in the survey effort, (2) the grade distribution of the sample relative to the grade distribution of school enrollment, and (3) the size of the sample within each grade.

## Surveyed Grades

The results of the *Communities That Care Youth Survey* are presented in two ways: (1) for each surveyed grade and (2) for the overall sample. The overall results must be interpreted in light of the sampling composition, especially which grades were included in the sample.

In Bermuda, students in grades M2 through S4 participated in the survey. Since this includes the full range of grade levels in the school(s) surveyed, the overall survey results can be interpreted as representing the attitudes and behaviors of the student population as a whole.

## Grade Distribution and Weighting

In addition to considering which grades to survey, it's also important to compare the grade distribution of the sample to the grade distribution of a school's enrollment. Ideally, the percentage of students in each grade of the sample should match the school's enrollment to get a truly representative sample.

In order to adjust for any inconsistencies between the sample and enrollment grade-level distributions that are shown in Table 1, the results presented in this report are weighted by grade enrollment to reflect the population distribution of grades within the school. Only overall statistics reported for the entire school are affected by sample weighting. Grade-level statistics—such as drug prevalence rates for 11<sup>th</sup> students—are unaffected.

For each grade, the grade weight was derived by calculating the grade enrollment as a proportion of the total school enrollment, which was then divided by the grade surveyed N as a proportion of the school surveyed N.

$$GW = \frac{GE}{SE} \div \frac{GS}{SS}$$

Where:

GW = Grade Weight  
 GE = Grade Enrollment  
 SE = School Enrollment  
 GS = Grade Surveyed N  
 SS = School Surveyed N

## Sample Size

When reviewing survey results people often ask, “What is the margin of error?” This is referred to as the “confidence interval,” and it reflects the precision of a statistical estimate. For example, a confidence interval of  $\pm 3.0$  points for a drug use prevalence rate of 50.0% means that there is a 95% chance that the true score is between 47.0% and 53.0%.

For school-based survey research, confidence intervals are determined by the size of the sample relative to the school’s enrollment. The higher the percentage of a school’s total enrollment that is included in the sample, the smaller the confidence interval and the more precise the results. Table 1 presents confidence intervals for both grade-level and overall estimates. Note that these confidence intervals are for prevalence rates of 50%. For less prevalent behaviors, such as heroin use and taking a handgun to school, the confidence interval narrows substantially.

As Table 1 shows, maximum grade-level confidence intervals range from a low of  $\pm 1.5\%$  for M3 students to a high of  $\pm 3.1\%$  for S3 students. Estimates for the overall sample have a maximum confidence interval of  $\pm 0.9\%$ . For an overall drug use prevalence rate of 50%, there is a 95% chance that the true prevalence rate ranges between 49.1% and 50.9%.

**Table 1. Weighting Factor Adjustments and Confidence Intervals for Sample**

Grade	Enrollment		Sample		Weights	Confidence Interval
	Number	Percentage	Number	Percentage		
<b>M2</b>	733	19.0%	586	19.7%	0.964	$\pm 1.8\%$
<b>M3</b>	688	17.9%	598	20.1%	0.887	$\pm 1.5\%$
<b>S1</b>	760	19.7%	600	20.2%	0.977	$\pm 1.8\%$
<b>S2</b>	637	16.5%	490	16.5%	1.002	$\pm 2.1\%$
<b>S3</b>	616	16.0%	386	13.0%	1.230	$\pm 3.1\%$
<b>S4</b>	417	10.8%	309	10.4%	1.040	$\pm 2.8\%$
<b>Totals</b>	<b>3,851</b>	<b>100.0%</b>	<b>2,969</b>	<b>100.0%</b>	<b>1.000</b>	<b><math>\pm 0.9\%</math></b>

Note: Rounding can produce totals that do not equal 100%.

## Demographic Profile of Surveyed Youth

The survey measures a variety of demographic characteristics. Table 2 shows selected characteristics of surveyed youth: sex, ethnicity and the primary language spoken at home. The primary language spoken at home refers to the primary language the student speaks at home (rather than what the parents speak at home).

A higher percentage of surveyed Bermuda students were female (53.8% female versus 45.2% male). A majority of students identified themselves as Black (62.9%). The largest minority group is White (14.9%), followed by Portuguese (6.3%) and Asian or Pacific Islander (1.4%).

Nearly all of the surveyed students (94.5%) reported English as the language they most often speak at home.

**Table 2. Selected Demographic Characteristics of Surveyed Youth**

	<i>Number of Students</i>	<i>Percentage of Students</i>
<b>Overall Valid Surveys</b>	2,977	100.0%
<b>Sex</b>		
Male	1,356	45.2%
Female	1,613	53.8%
Did not respond	28	0.9%
<b>Ethnicity</b>		
Black	1,884	62.9%
White	448	14.9%
Portuguese	188	6.3%
Asian or Pacific Islander	41	1.4%
Other	233	7.8%
Multiple	175	5.8%
Did not respond	28	0.9%
<b>Primary Language Spoken at Home</b>		
English	2,831	94.5%
Portuguese	61	2.0%
Other Language	61	2.0%
Did not respond	44	1.5%

Note: Rounding can produce totals that do not equal 100%.

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# Section 2

## Risk and Protective Factors

### Introduction

Just as eating a high-fat diet is a risk factor for heart disease and getting regular exercise is a protective factor for heart disease and other health problems, there are factors that can help protect youth from, or put them at risk for, drug use and other problem behaviors.

**Protective factors**, also known as “assets,” are conditions that buffer children and youth from exposure to risk by either reducing the impact of the risks or changing the way that young people respond to risks. Protective factors identified through research include strong bonding to family, school, community and peers. These groups support the development of healthy behaviors for children by setting and communicating healthy beliefs and clear standards for children’s behavior. Young people are more likely to follow the standards for behavior set by these groups if the bonds are strong. Strong bonds are encouraged by providing young people with opportunities to make meaningful contributions, by teaching them the skills they need to be successful in these new opportunities, and by recognizing their contributions.

**Risk factors** are conditions that increase the likelihood of a young person becoming involved in drug use, delinquency, school dropout and/or violence. For example, children living in families with poor parental monitoring are more likely to become involved in these problems.

Research during the past 30 years supports the view that delinquency; alcohol, tobacco and other drug use; school achievement; and other important outcomes in adolescence are associated with specific characteristics in the student’s community, school and family environments, as well as with characteristics of the individual (Hawkins, Catalano and Miller, 1992). In fact, these characteristics have been shown to be more important in understanding these behaviors than ethnicity, income or family structure (Blum et al., 2000).

There is a substantial amount of research showing that adolescents’ exposure to a greater number of risk factors is associated with more drug use and delinquency. There is also evidence that exposure to a number of protective factors is associated with lower prevalence of these problem behaviors (Bry, McKeon and Pandina, 1982; Newcomb, Maddahian and Skager, 1987; Newcomb and Felix-Ortiz, 1992; Newcomb, 1995; Pollard et al., 1999).

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The analysis of risk and protective factors is the most powerful tool available for understanding what promotes both positive and negative adolescent behavior and for helping design successful prevention programs for young people. To promote positive development and prevent problem behavior, it is necessary to address the factors that predict these outcomes. By measuring these risk and protective factors, specific factors that are elevated should be prioritized in the community. This process also helps in selecting targeted tested-effective prevention programming shown to address those elevated factors and consequently provide the greatest likelihood for success.

This system of risk and protective factors is organized into a strategy that families can use to help children develop healthy behaviors—the Social Development Strategy (Hawkins et al., 1992). The Social Development Strategy is a theoretical framework that organizes risk and protective factors for adolescent problem behavior prevention.

## Measurement

The *Communities That Care Youth Survey* provides the most comprehensive measurement of risk and protective factors currently available for 6<sup>th</sup> to 12<sup>th</sup> grade students. Risk and protective factors are measured by sets of survey items called scales. Because they are very broad, some risk factors are measured by multiple scales. For example, “Favorable Parental Attitudes and Involvement in the Problem Behavior” is a single risk factor, but it is measured by two risk factor scales: *Parental Attitudes Favorable toward ATOD Use* and *Parental Attitudes Favorable toward Antisocial Behavior*. In total, 16 risk factors are measured by 23 risk factor scales, while each of the nine protective factors is measured by a single protective factor scale.

Risk and protective factor scales are scored against the *Communities That Care* normative database. This bed of normative data, which contains survey responses from over 280,000 students in grades 6 through 12, was compiled by combining the results of selected *Communities That Care Youth Survey* efforts that were completed in 2000, 2001 and 2002. To enhance representativeness, statistical weights were applied to adjust the sample to exactly match the population of U.S. public school students on four key demographic variables: ethnicity, sex, socioeconomic status and urbanicity. Information on the U.S. public school student population was obtained from the Common Core of Data program at the U.S. Department of Education’s National Center for Educational Statistics (National Center for Education Statistics, 2004).

Like the scoring systems used by many national testing programs—such as the SAT<sup>®</sup> and ACT<sup>™</sup>—this method of norm-referencing generates percentile scores ranging from 0 to 100. A score of 50, which matches the normative median, indicates that 50% of the respondents in the normative sample reported a score that is lower than the average for Bermuda and 50% reported a score that is higher. Similarly, a score of 75 indicates that 75% of the normative sample reported a lower score and 25% reported a higher score. Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better behavioral outcomes, it is better to have higher protective factor scale scores, not lower.

Percentile scores are calculated on a grade-by-grade basis. This means that risk and protective factor scales for a community’s M3 students, for example, are scored against the responses of 8<sup>th</sup> students in the *Communities That Care* normative database. For survey samples with more than one grade, overall percentile scores for risk and protective factor scales are created by weighting the *Communities That Care* normative database to match the grade-level distribution of the community’s sample. If, for example, a community only surveyed S1 and S2 students, statistical weights would be applied so that the overall risk and protective factor percentile scores for that community will be calculated against only the 9<sup>th</sup> and 10<sup>th</sup> students in the *Communities That Care* normative database.

Please note that this risk and protective factor scoring system differs from the system used with the 2003 Bermuda *Communities That Care Youth Survey*. In order to provide accurate trend comparisons, the risk

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and protective factor results from the 2003 survey that are presented in Appendix D have been rescored using the new system.

## Overall Results

Overall risk and protective factor scale scores are presented in Graphs 1 and 2. These results provide a general description of the prevention needs of Bermuda M2 through S4 students as a whole.

As Graph 1 shows, overall percentile scores across the 9 protective factor scales range from a low of 45 to a high of 58, with an average score of 51, which is one point higher than the normative average of 50. The three lowest overall scores were for the following protective factor scales: *School Opportunities for Prosocial Involvement* (45), *Community Rewards for Prosocial Involvement* (46) and *Social Skills* (48). While policies that target any protective factor could potentially be an important resource for students in Bermuda, focusing prevention planning in these areas could be especially beneficial. Bermuda students reported the three highest overall scores for the following protective factor scales: *Belief in the Moral Order* (58), *Family Rewards for Prosocial Involvement* (56) and *School Rewards for Prosocial Involvement* (56). The higher scores reported by students in these areas represent strengths that Bermuda can build on.

As Graph 2 shows, overall scores across the 23 risk factor scales range from a low of 37 to a high of 59, with an average score of 49, which is one point lower than the normative average of 50. The three highest risk factor scales are *Community Disorganization* (59), *Friends' Delinquent Behavior* (59) and *Peer Rewards for Antisocial Behavior* (59). Once again, while policies that target any risk factor could potentially be an important resource for students in Bermuda, directing prevention programming in these areas is likely to be especially beneficial. The three lowest risk factor scales are *Perceived Availability of Handguns* (37), *Lack of Commitment to School* (38) and *Sensation Seeking* (41). The lower scores reported by students in these areas represent strengths that Bermuda can build on.

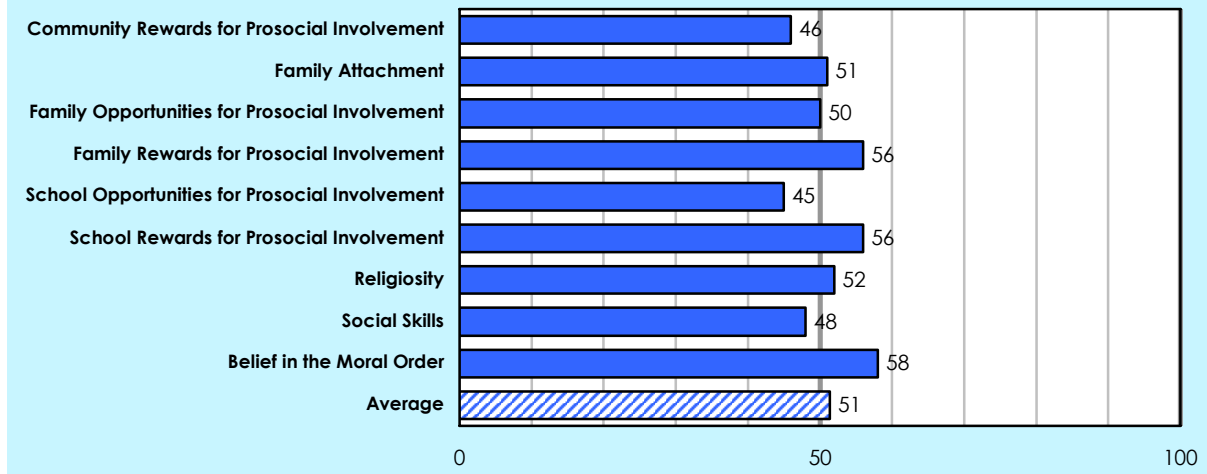
## Grade-Level Results

While overall scores provide a general picture of the risk and protective factor profile for Bermuda, they can mask problems within individual grades. Tables 3 and 4 in this section of the report as well as a series of graphs in Appendix B, present individual-grade data for risk and protective factor scale scores. This detailed information provides prevention planners with a snapshot revealing which risk and protective factor scales are of greatest concern by grade. 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.

For example, younger students tend to report different factors than older students as being the most elevated or suppressed. Bermuda M2 students reported their four highest levels of risk for *Community Disorganization* (56), *Low Neighborhood Attachment* (53), *Family History of Antisocial Behavior* (53) and *Peer Rewards for Antisocial Behavior* (53). Bermuda S4 students reported their four highest levels of risk for *Laws and Norms Favorable to Drug Use* (65), *Community Disorganization* (64), *Friends' Delinquent Behavior* (61) and *Family History of Antisocial Behavior* (59).

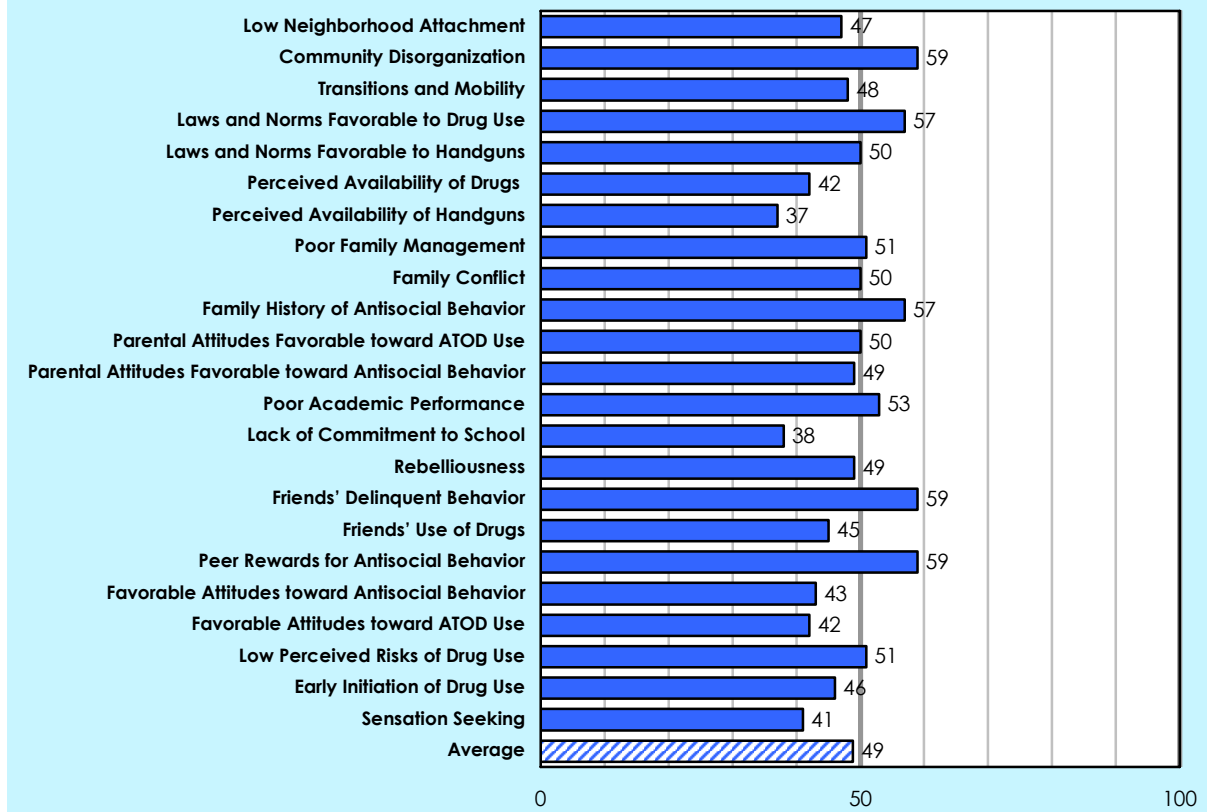
## Comparisons Across Protective Factors

**Graph 1. Overall Protective Factor Scale Scores**



## Comparisons Across Risk Factors

**Graph 2. Overall Risk Factor Scale Scores**





		<b>M2</b>	<b>M3</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>
<b>Community Domain</b>	<b>Community Rewards for Prosocial Involvement</b>	46	41	49	43	50	51
<b>Family Domain</b>	<b>Family Attachment</b>	56	49	52	49	47	53
	<b>Family Opportunities for Prosocial Involvement</b>	54	47	49	50	45	54
	<b>Family Rewards for Prosocial Involvement</b>	59	55	55	53	54	57
<b>School Domain</b>	<b>School Opportunities for Prosocial Involvement</b>	50	46	40	44	44	47
	<b>School Rewards for Prosocial Involvement</b>	58	54	55	56	56	62
<b>Peer and Individual Domain</b>	<b>Religiosity</b>	53	47	54	50	56	51
	<b>Social Skills</b>	56	48	46	48	44	44
	<b>Belief in the Moral Order</b>	62	57	57	56	58	58
<b>Average</b>		<b>55</b>	<b>49</b>	<b>51</b>	<b>50</b>	<b>50</b>	<b>53</b>

		<b>M2</b>	<b>M3</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>
<b>Community Domain</b>	<b>Low Neighborhood Attachment</b>	53	52	46	47	40	39
	<b>Community Disorganization</b>	56	58	59	59	61	64
	<b>Transitions and Mobility</b>	47	49	45	49	47	47
	<b>Laws and Norms Favorable to Drug Use</b>	52	58	56	59	55	65
	<b>Laws and Norms Favorable to Handguns</b>	48	48	51	49	54	56
	<b>Perceived Availability of Drugs</b>	44	44	42	41	40	42
	<b>Perceived Availability of Handguns</b>	39	40	38	34	39	33
<b>Family Domain</b>	<b>Poor Family Management</b>	49	54	50	51	50	50
	<b>Family Conflict</b>	51	50	52	49	50	50
	<b>Family History of Antisocial Behavior</b>	53	53	56	60	60	59
	<b>Parental Attitudes Favorable toward ATOD Use</b>	47	50	47	51	47	56
	<b>Parental Attitudes Favorable toward Antisocial Behavior</b>	45	51	49	52	48	52
<b>School Domain</b>	<b>Poor Academic Performance</b>	52	49	50	56	58	56
	<b>Lack of Commitment to School</b>	37	39	41	40	37	33
<b>Peer and Individual Domain</b>	<b>Rebelliousness</b>	45	52	52	52	50	44
	<b>Friends' Delinquent Behavior</b>	48	56	59	60	66	61
	<b>Friends' Use of Drugs</b>	42	45	47	44	45	41
	<b>Peer Rewards for Antisocial Behavior</b>	53	62	63	59	60	56
	<b>Favorable Attitudes toward Antisocial Behavior</b>	39	45	48	44	44	37
	<b>Favorable Attitudes toward ATOD Use</b>	41	45	44	41	41	39
	<b>Low Perceived Risks of Drug Use</b>	50	55	50	47	53	51
	<b>Early Initiation of Drug Use</b>	41	47	49	46	48	46
	<b>Sensation Seeking</b>	42	40	40	39	43	39
<b>Average</b>		<b>47</b>	<b>50</b>	<b>49</b>	<b>49</b>	<b>49</b>	<b>49</b>

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## Protective Factors

Protective factors are characteristics that are known to decrease the likelihood that a student will engage in problem behaviors. For example, bonding to parents reduces the risk of an adolescent engaging in problem behaviors.

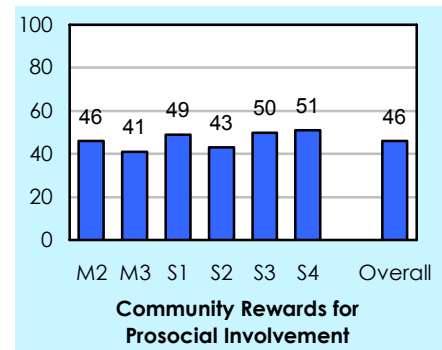
The Social Development Strategy organizes the research on protective factors. Protective factors can buffer young people from risks and promote positive youth development. To develop these healthy positive behaviors, young people must be immersed in environments that consistently communicate healthy beliefs and clear standards for behavior; that foster the development of strong bonds to members of their family, school and community; and that recognize the individual characteristics of each young person.

The *Communities That Care Youth Survey* measures a variety of protective factor scales across four domains: Community Domain, Family Domain, School Domain, and Peer and Individual Domain. Unlike some risk factors, each of the protective factors is measured using a single protective factor scale. Below, each protective factor scale is described and the results for Bermuda are reported.

### Community Rewards for Prosocial Involvement

Students who feel recognized and rewarded by members of their community are less likely to engage in negative behaviors, 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 survey items such as “There are people in my neighborhood who are proud of me when I do something well.”



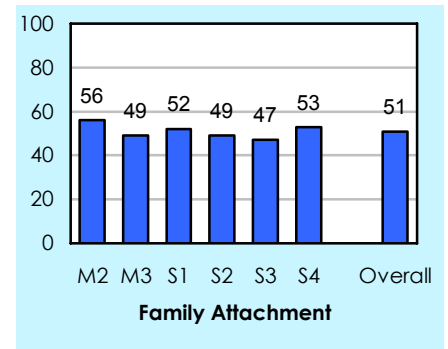
- Across grade levels, percentile scores for *Community Rewards for Prosocial Involvement* range from a low of 41 among M3 students to a high of 51 among S4 students.
- Overall, Bermuda students received a percentile score of 46 on the *Community Rewards for Prosocial Involvement* scale, four points lower than the normative average of 50.

## Family Attachment

One of the most effective ways to reduce the risk of problem behaviors 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 use drugs, commit crimes or drop 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 their parents strongly disapprove of.

The protective factor **Family Attachment** is measured by a single scale using survey items such as “Do you share your thoughts and feelings with your mother?”

- Across grade levels, percentile scores for *Family Attachment* range from a low of 47 among S3 students to a high of 56 among M2 students.
- Overall, Bermuda students received a percentile score of 51 on the *Family Attachment* scale, one point higher than the normative average of 50.

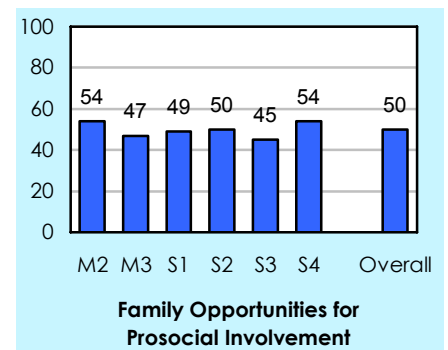


## Family Opportunities for Prosocial Involvement

When students have the opportunity to make meaningful contributions to their families, they are less likely to get involved in risky behaviors. By having the opportunity to make a contribution, students feel as if they're 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 survey items such as “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 45 among S3 students to a high of 54 among M2 and S4 students.
- Overall, Bermuda students received a percentile score of 50 on the *Family Opportunities for Prosocial Involvement* scale, equaling the normative average of 50.

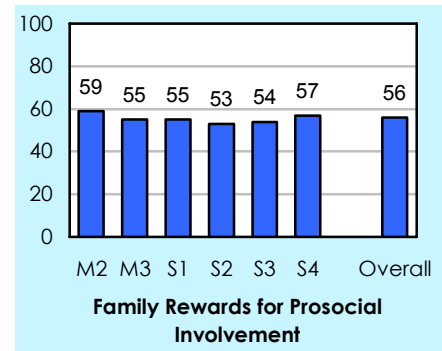


## Family Rewards for Prosocial Involvement

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 behaviors. When families promote clear standards for behavior, and when young people consequently develop strong bonds of attachment and commitment to their families, young people’s behavior becomes consistent with those standards.

The protective factor **Family Rewards for Prosocial Involvement** is measured by a single scale using survey items such as “How often do your parents tell you they’re proud of you for something you’ve done?”

- Across grade levels, percentile scores for *Family Rewards for Prosocial Involvement* range from a low of 53 among S2 students to a high of 59 among M2 students.
- Overall, Bermuda students received a percentile score of 56 on the *Family Rewards for Prosocial Involvement* scale, six points higher than the normative average of 50.

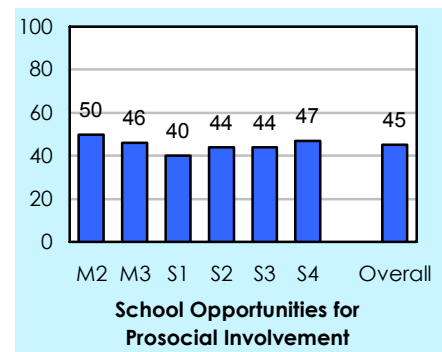


## School Opportunities for Prosocial Involvement

Giving students opportunities to participate in important activities at school helps to reduce the likelihood that they will become involved in problem behaviors. 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 behaviors that violate socially accepted standards.

The protective factor **School Opportunities for Prosocial Involvement** is measured by a single scale using survey items such as “In my school, students have lots of chances to help decide things like class activities and rules.”

- Across grade levels, percentile scores for *School Opportunities for Prosocial Involvement* range from a low of 40 among S1 students to a high of 50 among M2 students.
- Overall, Bermuda students received a percentile score of 45 on the *School Opportunities for Prosocial Involvement* scale, five points lower than the normative average of 50.

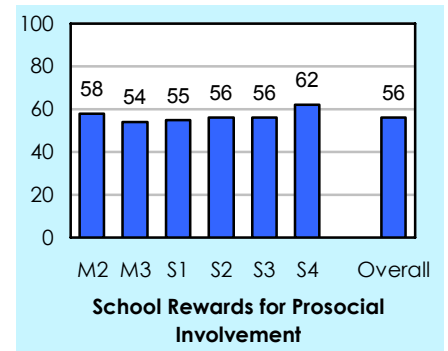


## School Rewards for Prosocial Involvement

Making students feel appreciated and rewarded for their involvement at school helps reduce the likelihood of their involvement in drug use and other problem behaviors. 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 survey items such as “The school lets my parents know when I have done something well.”

- Across grade levels, percentile scores for *School Rewards for Prosocial Involvement* range from a low of 54 among M3 students to a high of 62 among S4 students.
- Overall, Bermuda students received a percentile score of 56 on the *School Rewards for Prosocial Involvement* scale, six points higher than the normative average of 50.

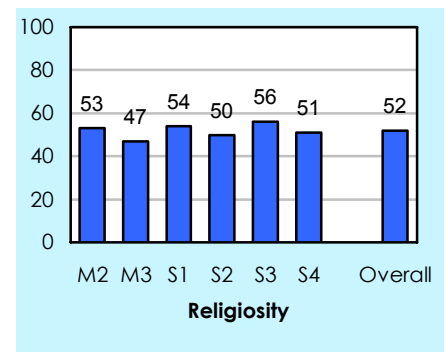


## Religiosity

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 behaviors, because they have already adopted a social norm against those activities.

The protective factor **Religiosity** is measured by a single scale using the survey item “How often do you attend religious services or activities?”

- Across grade levels, percentile scores for *Religiosity* range from a low of 47 among M3 students to a high of 56 among S3 students.
- Overall, Bermuda students received a percentile score of 52 on the *Religiosity* scale, two points higher than the normative average of 50.

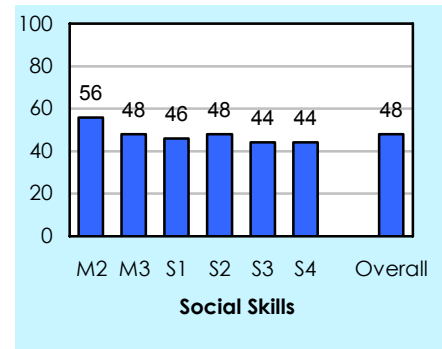


## Social Skills

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 behaviors, such as drug use.

The protective factor **Social Skills** is measured by presenting students with a series of scenarios and giving them four possible responses to each scenario. The following is one scenario on the survey: “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?”

- Across grade levels, percentile scores for *Social Skills* range from a low of 44 among S3 and S4 students to a high of 56 among M2 students.
- Overall, Bermuda students received a percentile score of 48 on the *Social Skills* scale, two points lower than the normative average of 50.

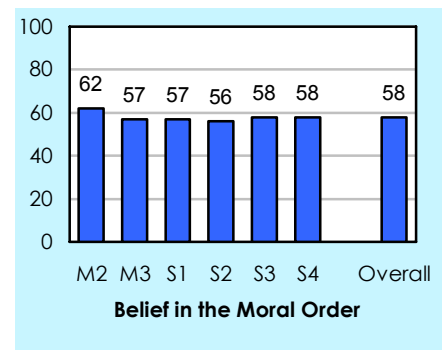


## Belief in the Moral Order

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 behaviors. 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 survey items such as “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 56 among S2 students to a high of 62 among M2 students.
- Overall, Bermuda students received a percentile score of 58 on the *Belief in the Moral Order* scale, eight points higher than the normative average of 50.



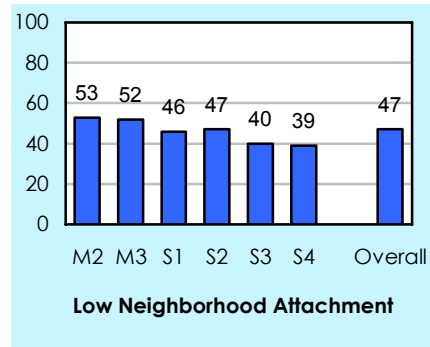
## Risk Factors

Risk factors are characteristics in the community, family, school and individual’s environments that are known to increase the likelihood that a student will engage in one or more problem behaviors. For example, a risk factor in the community environment is the existence of laws and norms favorable 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.

The *Communities That Care Youth Survey* measures a variety of risk factor scales across four major domains. On the following pages, each of the risk factor scales measured in the Community, Family, School, and Peer and Individual Domains is described and the results for Bermuda are reported.

### Low Neighborhood Attachment

Higher rates of drug usage, delinquency and violence occur in communities or neighborhoods where people feel little attachment to the community. This situation is not specific to low-income neighborhoods. It also can be found in affluent neighborhoods. 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 neighborhood—such as merchants, teachers, clergy, police and human and social services personnel—live outside the neighborhood, 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.



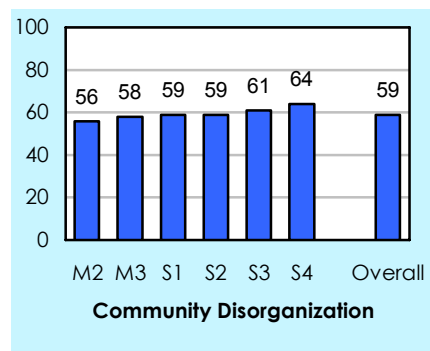
The *Low Neighborhood Attachment* scale was developed to measure a component of the risk factor **Low Neighborhood Attachment and Community Disorganization**. This scale is measured by survey items such as “I’d like to get out of my neighborhood” and “If I had to move, I would miss the neighborhood I now live in.”

- Across grade levels, percentile scores for *Low Neighborhood Attachment* range from a low of 39 among S4 students to a high of 53 among M2 students.
- Overall, Bermuda students received a percentile score of 47 on the *Low Neighborhood Attachment* scale, three points lower than the normative average of 50.

### Community Disorganization

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

The *Community Disorganization* scale was developed to measure a component of the risk factor **Low Neighborhood Attachment and Community Disorganization**. This scale is measured by several survey items that would indicate a neighborhood in disarray (e.g., the existence of graffiti, abandoned buildings, fighting and drug selling) as well as the item “I feel safe in my neighborhood.”



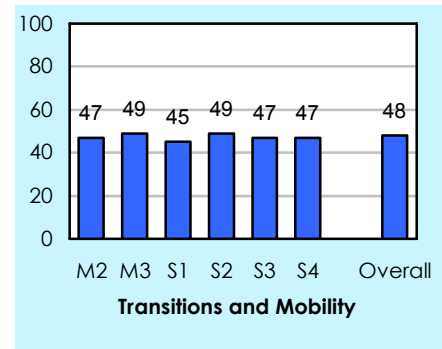
- Across grade levels, percentile scores for *Community Disorganization* range from a low of 56 among M2 students to a high of 64 among S4 students.
- Overall, Bermuda students received a percentile score of 59 on the *Community Disorganization* scale, nine points higher than the normative average of 50.

## Transitions and Mobility

Even normal school transitions are associated with an increase in problem behaviors. 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 behavior 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 behaviors.

The risk factor **Transitions and Mobility** is measured by a single scale using survey items such as “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 45 among S1 students to a high of 49 among M3 and S2 students.
- Overall, Bermuda students received a percentile score of 48 on the *Transitions and Mobility* scale, two points lower than the normative average of 50.



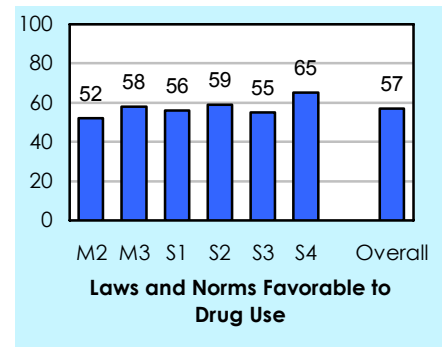
## Laws and Norms Favorable to Drug Use

Students’ perceptions of the rules and regulations concerning alcohol, tobacco and other drug use that exist in their neighborhoods are also associated with problem behaviors in adolescence. Community norms—the attitudes and policies a community holds in relation to drug use and other antisocial behaviors—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 favorable toward drug use, violence and/or other crime, or even when they are just unclear, young people are more likely to engage in negative behaviors (Bracht and Kingsbury, 1990).

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 beer gardens popular at street fairs and community festivals are in contrast to the “just say no” messages that schools and parents 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 that a clear community-level anti-drug message can have.

The *Laws and Norms Favorable to Drug Use* scale was developed to measure a component of the risk factor **Community Laws and Norms Favorable toward Drug Use, Firearms and Crime**. This scale is measured by survey items such as “How wrong would most adults in your neighborhood think it was for kids your age to drink alcohol?” and “If a kid smoked marijuana in your neighborhood, would he or she be caught by the police?”

- Across grade levels, percentile scores for *Laws and Norms Favorable to Drug Use* range from a low of 52 among M2 students to a high of 65 among S4 students.



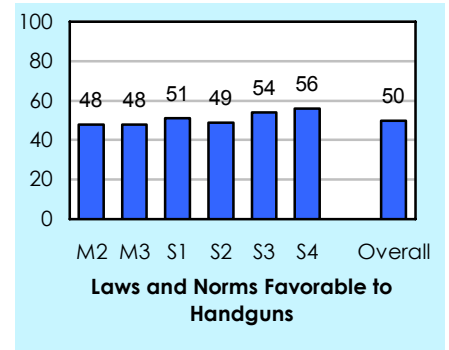


- Overall, Bermuda students received a percentile score of 57 on the *Laws and Norms Favorable to Drug Use* scale, seven points higher than the normative average of 50.

### Laws and Norms Favorable 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 Favorable to Handguns* scale was developed to measure a component of the risk factor **Community Laws and Norms Favorable toward Drug Use, Firearms and Crime**. This scale is measured using the survey item “If a kid carried a handgun in your neighborhood, would he or she be caught by the police?”

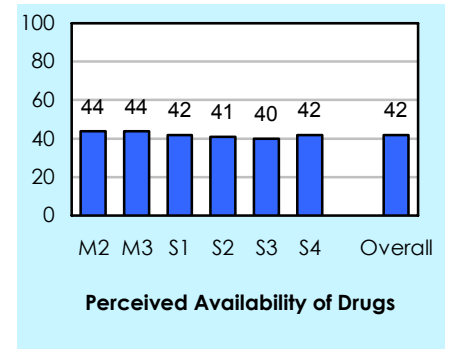


- Across grade levels, percentile scores for *Laws and Norms Favorable to Handguns* range from a low of 48 among M2 and M3 students to a high of 56 among S4 students.
- Overall, Bermuda students received a percentile score of 50 on the *Laws and Norms Favorable to Handguns* scale, equaling the normative average of 50.

### Perceived Availability of Drugs

The perceived availability of alcohol, tobacco and other drugs in a community is directly related to the incidence of delinquent behavior. 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 survey items such as “If you wanted to get some marijuana, 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.

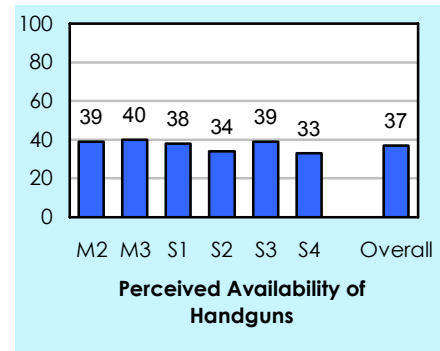
- Across grade levels, percentile scores for *Perceived Availability of Drugs* range from a low of 40 among S3 students to a high of 44 among M2 and M3 students.
- Overall, Bermuda students received a percentile score of 42 on the *Perceived Availability of Drugs* scale, eight points lower than the normative average of 50.

## 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 the survey item “If you wanted to get a handgun, how easy would it be for you to get one?”

- Across grade levels, percentile scores for *Perceived Availability of Handguns* range from a low of 33 among S4 students to a high of 40 among M3 students.
- Overall, Bermuda students received a percentile score of 37 on the *Perceived Availability of Handguns* scale, 13 points lower than the normative average of 50.

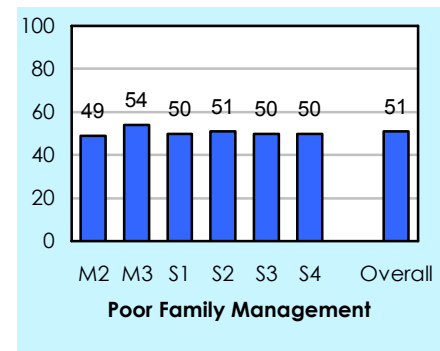


## Poor Family Management

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 behavior 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 using items such as “Would your parents know if you did not come home on time?” and “My family has clear rules about alcohol and drug use.”

- Across grade levels, percentile scores for *Poor Family Management* range from a low of 49 among M2 students to a high of 54 among M3 students.
- Overall, Bermuda students received a percentile score of 51 on the *Poor Family Management* scale, one point higher than the normative average of 50.

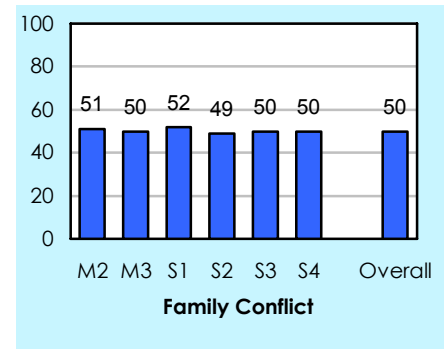


## Family Conflict

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 behavior.

The risk factor **Family Conflict** is measured by a single scale using survey items such as “People in my family have serious arguments” and “People in my family often insult or yell at each other.”

- Across grade levels, percentile scores for *Family Conflict* range from a low of 49 among S2 students to a high of 52 among S1 students.
- Overall, Bermuda students received a percentile score of 50 on the *Family Conflict* scale, equaling the normative average of 50.

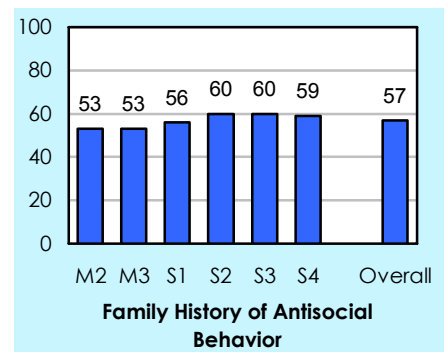


## Family History of Antisocial Behavior

If children are raised in a family where a history of addiction to alcohol or other drugs exists, the risk of their 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 behavior inside or outside the home are at greater risk for exhibiting violent behavior themselves. Students’ perceptions of their families’ behavior and standards regarding drug use and other antisocial behaviors are measured by the survey.

The *Family History of Antisocial Behavior* scale was developed to measure a component of the risk factor **Family History of the Problem Behavior**. This scale is measured by survey items such as “Has anyone in your family ever had a severe alcohol or drug problem?”

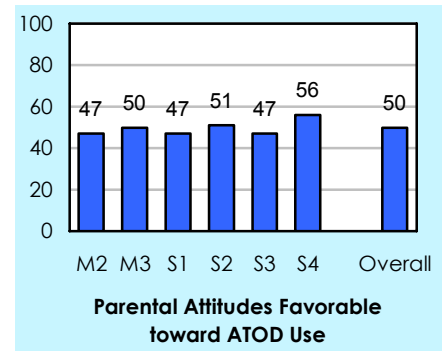
- Across grade levels, percentile scores for *Family History of Antisocial Behavior* range from a low of 53 among M2 and M3 students to a high of 60 among S2 and S3 students.
- Overall, Bermuda students received a percentile score of 57 on the *Family History of Antisocial Behavior* scale, seven points higher than the normative average of 50.



## Parental Attitudes Favorable 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 Favorable toward ATOD Use* scale was developed to measure a component of the risk factor **Favorable Parental Attitudes and Involvement in the Problem Behavior**. This scale is measured by survey items such as "How wrong do your parents feel it would be for you to smoke marijuana?"

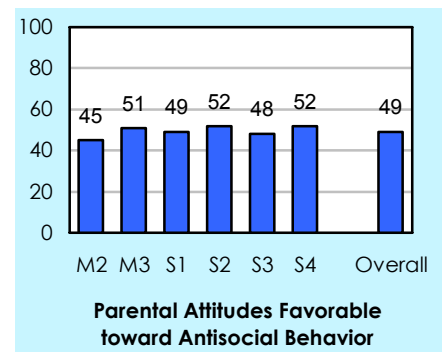


- Across grade levels, percentile scores for *Parental Attitudes Favorable toward ATOD Use* range from a low of 47 among M2, S1 and S3 students to a high of 56 among S4 students.
- Overall, Bermuda students received a percentile score of 50 on the *Parental Attitudes Favorable toward ATOD Use* scale, equaling the normative average of 50.

## Parental Attitudes Favorable toward Antisocial Behavior

Students' perceptions of their parents' opinions about antisocial behavior are also an important risk factor. Parental attitudes and behavior regarding crime and violence influence the attitudes and behavior 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 Favorable toward Antisocial Behavior* scale was developed to measure a component of the risk factor **Favorable Parental Attitudes and Involvement in the Problem Behavior**. This scale is measured by survey items such as "How wrong do your parents feel it would be for you to pick a fight with someone?"



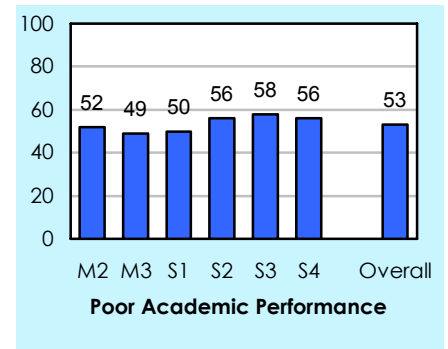
- Across grade levels, percentile scores for *Parental Attitudes Favorable toward Antisocial Behavior* range from a low of 45 among M2 students to a high of 52 among S2 and S4 students.
- Overall, Bermuda students received a percentile score of 49 on the *Parental Attitudes Favorable toward Antisocial Behavior* scale, one point lower than the normative average of 50.

## 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 behaviors.

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 the survey items “Putting them all together, what were your grades like last year?” and “Are your school grades better than the grades of most students in your class?” 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.

- Across grade levels, percentile scores for *Poor Academic Performance* range from a low of 49 among M3 students to a high of 58 among S3 students.
- Overall, Bermuda students received a percentile score of 53 on the *Poor Academic Performance* scale, three points higher than the normative average of 50.

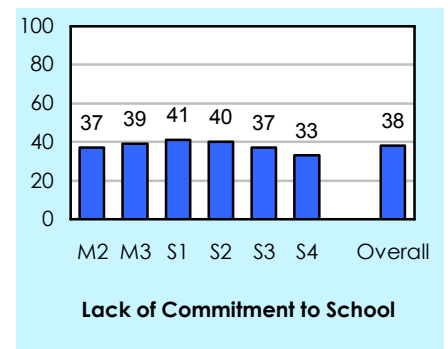


## Lack of Commitment to School

*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 behaviors.

The risk factor **Lack of Commitment to School** is measured by a single scale using survey items such as “How important do you think the things you are learning in school are going to be for your later life?” and “Now, thinking back over the past year in school, how often did you enjoy being in school?”

- Across grade levels, percentile scores for *Lack of Commitment to School* range from a low of 33 among S4 students to a high of 41 among S1 students.
- Overall, Bermuda students received a percentile score of 38 on the *Lack of Commitment to School* scale, 12 points lower than the normative average of 50.

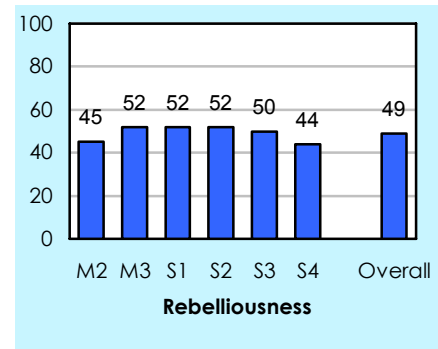


## Rebelliousness

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 don't 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 survey items such as "I ignore the rules that get in my way."

- Across grade levels, percentile scores for *Rebelliousness* range from a low of 44 among S4 students to a high of 52 among M3, S1 and S2 students.
- Overall, Bermuda students received a percentile score of 49 on the *Rebelliousness* scale, one point lower than the normative average of 50.

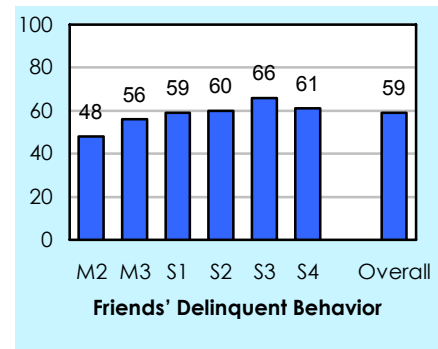


## Friends' Delinquent Behavior

Young people who associate with peers who engage in delinquent behavior are much more likely to engage in delinquent behavior 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 behavior greatly increases the risk of their becoming involved in delinquent behavior.

The *Friends' Delinquent Behavior* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "In the past year, how many of your four best friends have been suspended from school?" Elevated scores can indicate that students are interacting with more antisocial peers than average. Low scores can suggest that students' delinquent behavior is not strongly influenced by their peers.

- Across grade levels, percentile scores for *Friends' Delinquent Behavior* range from a low of 48 among M2 students to a high of 66 among S3 students.
- Overall, Bermuda students received a percentile score of 59 on the *Friends' Delinquent Behavior* scale, nine points higher than the normative average of 50.

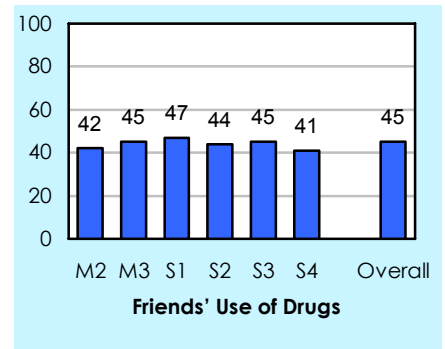


## Friends' Use of Drugs

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 behavior.

The *Friends' Use of Drugs* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "In the past year, how many of your best friends have used marijuana?"

- Across grade levels, percentile scores for *Friends' Use of Drugs* range from a low of 41 among S4 students to a high of 47 among S1 students.
- Overall, Bermuda students received a percentile score of 45 on the *Friends' Use of Drugs* scale, five points lower than the normative average of 50.

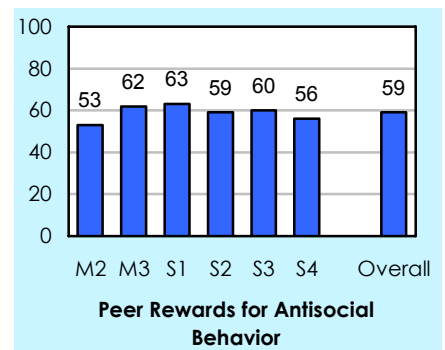


## Peer Rewards for Antisocial Behavior

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

The *Peer Rewards for Antisocial Behavior* scale was developed to measure a component of the risk factor **Friends Who Engage in the Problem Behavior**. This scale is measured by survey items such as "What are the chances you would be seen as cool if you smoked marijuana?"

- Across grade levels, percentile scores for *Peer Rewards for Antisocial Behavior* range from a low of 53 among M2 students to a high of 63 among S1 students.
- Overall, Bermuda students received a percentile score of 59 on the *Peer Rewards for Antisocial Behavior* scale, nine points higher than the normative average of 50.

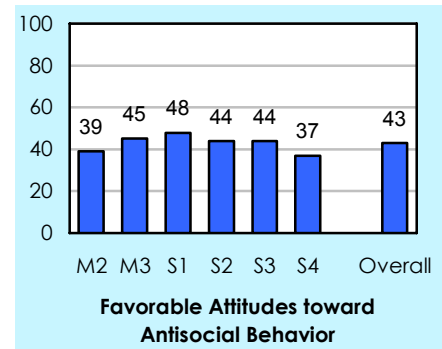


## Favorable Attitudes toward Antisocial Behavior

During the elementary 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 behaviors. This acceptance places them at higher risk for antisocial behaviors.

The *Favorable Attitudes toward Antisocial Behavior* scale was developed to measure a component of the risk factor **Favorable Attitudes toward the Problem Behavior**. This scale is measured by survey items such as “How wrong do you think it is for someone your age to pick a fight with someone?”

- Across grade levels, percentile scores for *Favorable Attitudes toward Antisocial Behavior* range from a low of 37 among S4 students to a high of 48 among S1 students.
- Overall, Bermuda students received a percentile score of 43 on the *Favorable Attitudes toward Antisocial Behavior* scale, seven points lower than the normative average of 50.

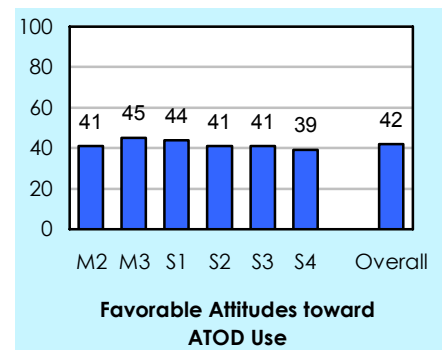


## Favorable Attitudes toward ATOD Use

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 behaviors. This acceptance places them at higher risk. The risk factor scale *Favorable Attitudes toward ATOD Use* assesses risk by asking young people how wrong they think it is for someone their age to use drugs.

The *Favorable Attitudes toward ATOD Use* scale was developed to measure a component of the risk factor **Favorable Attitudes toward the Problem Behavior**. This scale is measured by survey items such as “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?” An elevated score for this risk factor can indicate that students see little wrong with using drugs.

- Across grade levels, percentile scores for *Favorable Attitudes toward ATOD Use* range from a low of 39 among S4 students to a high of 45 among M3 students.
- Overall, Bermuda students received a percentile score of 42 on the *Favorable Attitudes toward ATOD Use* scale, eight points lower than the normative average of 50.



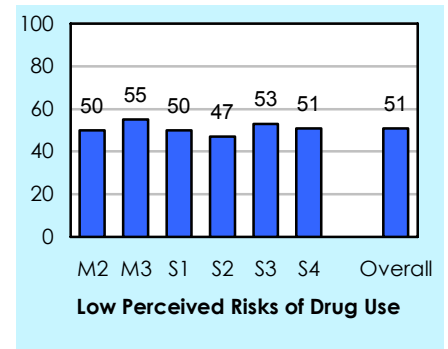


## Low Perceived Risks of Drug Use

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 **Favorable Attitudes toward the Problem Behavior**. This scale is measured by survey items such as “How much do you think people risk harming themselves if they try marijuana once or twice?” 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 47 among S2 students to a high of 55 among M3 students.
- Overall, Bermuda students received a percentile score of 51 on the *Low Perceived Risks of Drug Use* scale, one point higher than the normative average of 50.

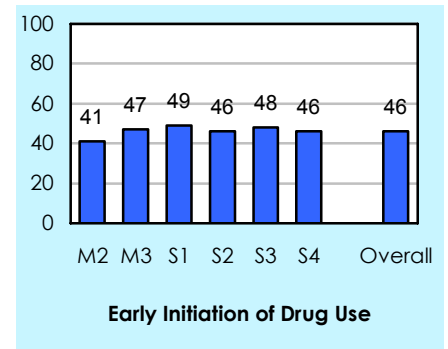


## Early Initiation of Drug Use

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 behaviors.

The risk factor scale *Early Initiation of Drug Use* was developed to measure a component of the risk factor **Early Initiation of the Problem Behavior**. 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 41 among M2 students to a high of 49 among S1 students.
- Overall, Bermuda students received a percentile score of 46 on the *Early Initiation of Drug Use* scale, four points lower than the normative average of 50.



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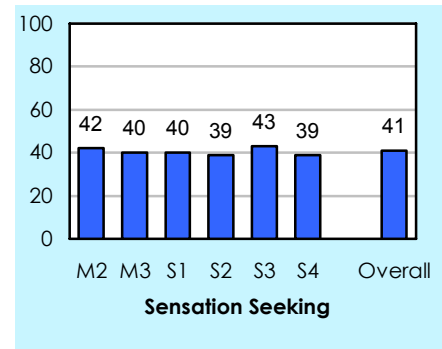
## Sensation Seeking

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’s using drugs, engaging in delinquent behavior and/or committing violent acts.

*Sensation Seeking* is assessed by asking how often students participate in behaviors 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 survey items such as “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 39 among S2 and S4 students to a high of 43 among S3 students.
- Overall, Bermuda students received a percentile score of 41 on the *Sensation Seeking* scale, nine points lower than the normative average of 50.



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# Section 3

## Alcohol, Tobacco and Other Drug Use

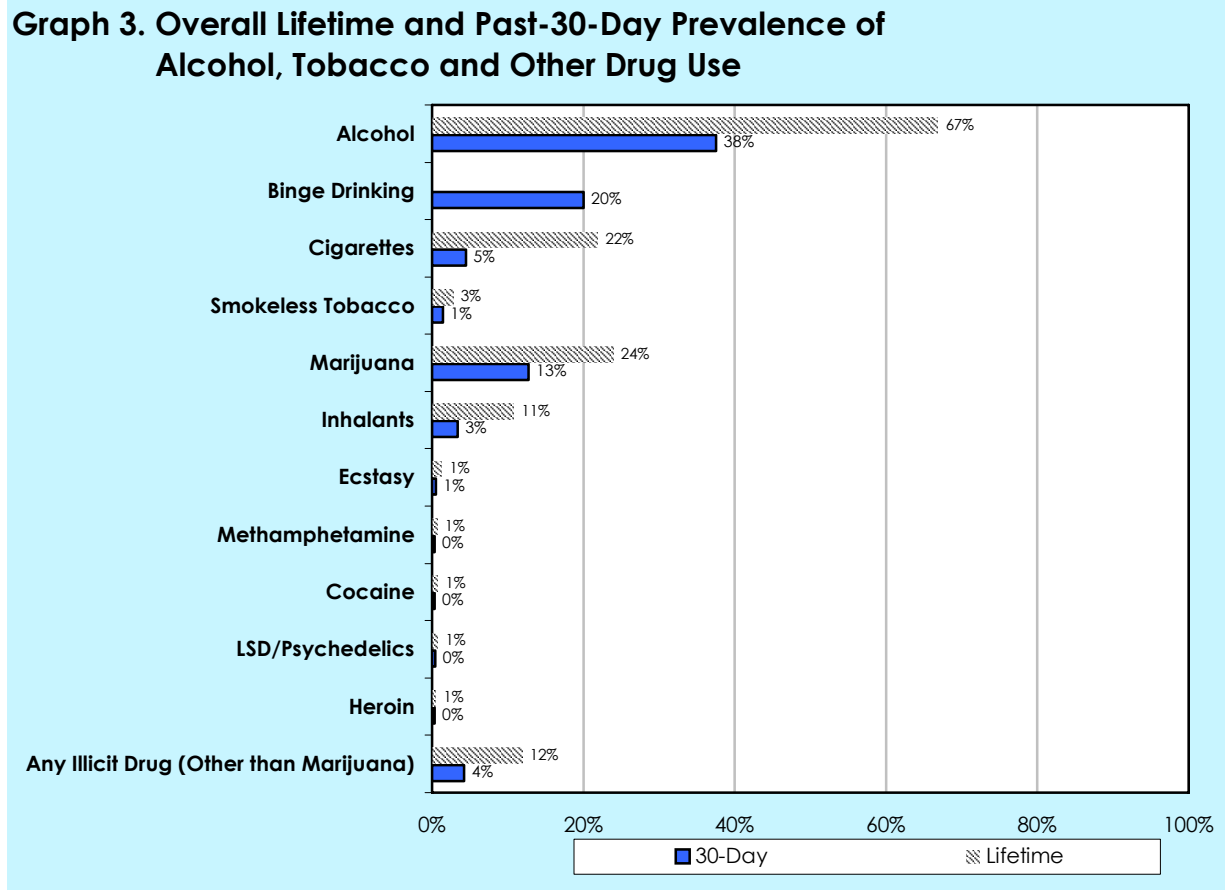
### Measurement

Drug use is measured by a set of 23 survey questions on the *Communities That Care Youth Survey*. The questions are similar to those used in the *Monitoring the Future* study, a nationwide study of drug use by middle and high school students. Consequently, national data as well as data from other similar surveys can be easily and accurately compared to data from the *Communities That Care Youth Survey*.

Prevalence-of-use tables and graphs are used to illustrate the percentages of students who reported using alcohol, tobacco and other drugs (ATODs). These results are presented for both lifetime and past-30-day prevalence of use periods. Lifetime prevalence of use (whether the student has ever used the drug) is a good measure of student experimentation. Past-30-day prevalence of use (whether the student has used the drug within the last month) is a good measure of current use. In addition to the standard lifetime and past-30-day prevalence rates for alcohol use, binge drinking behavior (defined as a report of five or more drinks in a row within the past two weeks) is also measured.

A final indicator—“any illicit drug (other than marijuana)” —measures the use of one or more of the following drugs: Ecstasy, methamphetamine, cocaine, LSD/Psychedelics and heroin. The purpose of this drug combination rate is to provide prevention planners with an overall gauge of so-called “hard” drug use (Johnston, O’Malley, Bachman and Schulenberg, 2005).

## Overall Results

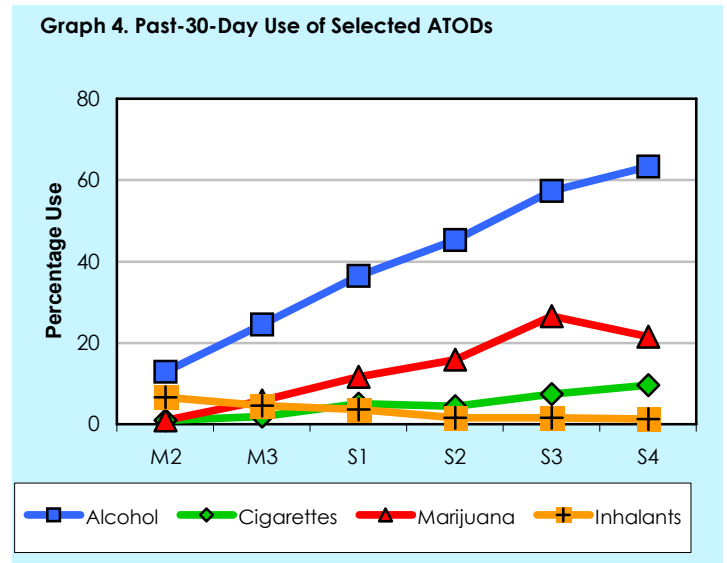


ATOD prevalence rates for the combined sample of M2 through S4 students are presented in Graph 3, and in the overall results column of Tables 5 and 6. As these results show, Bermuda students recorded the highest lifetime prevalence-of-use rates for alcohol (66.9%), marijuana (23.9%), cigarettes (21.9%) and inhalants (10.8%). Other lifetime prevalence rates ranged from 0.5% for heroin to 2.8% for smokeless tobacco. The rate of illicit drug use excluding marijuana is summarized by the indicator “any illicit drug (other than marijuana),” with 11.9% of surveyed students reporting use of these drugs in their lifetimes.

Bermuda students reported the highest past-30-day prevalence-of-use rates for alcohol (37.5%) and marijuana (12.8%). Other past-30-day prevalence rates ranged from 0.3% for methamphetamine, cocaine and heroin to 4.5% for cigarettes. Overall, 4.2% of Bermuda students reported the use of any illicit drug (other than marijuana) in the past 30 days.

## Grade-Level Results

ATOD prevalence rates for individual grade levels are presented in Graph 4 and Tables 5 and 6. Typically, prevalence rates for the use of most substances increase as students enter higher grades. In many communities, 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. Past-30-day alcohol use in Bermuda ranges from a low of 12.9% among M2 students to a high of 63.4% among S4 students. Past-30-day marijuana use ranges from a low of 0.9% among M2 students to a high of 26.5% among S3 students. Past-30-day cigarette use ranges from a low of 1.0% among M2 students to a high of 9.6% among S4 students. Past-30-day inhalant use ranges from a low of 1.3% among S4 students to a high of 6.6% among M2 students.



**Table 5. Lifetime Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth**

	M2 %	M3 %	S1 %	Bermuda			Overall %
				S2 %	S3 %	S4 %	
Alcohol	38.4	58.1	70.6	78.3	81.7	86.8	66.9
Cigarettes	7.8	15.7	24.9	23.7	30.9	34.8	21.9
Smokeless Tobacco	1.9	2.9	3.0	3.2	2.4	4.6	2.8
Marijuana	3.5	14.2	23.1	29.1	42.0	42.1	23.9
Inhalants	15.2	12.9	14.3	8.2	5.8	5.0	10.8
Ecstasy	0.9	0.9	1.2	0.8	1.3	3.0	1.3
Methamphetamine	0.7	0.5	1.1	0.2	0.5	0.7	0.7
Cocaine	0.2	0.3	1.7	1.3	0.5	0.3	0.8
LSD/Psychedelics	0.7	0.9	1.1	0.2	0.8	0.7	0.8
Heroin	0.5	0.7	0.7	0.8	0.3	0.0	0.5
Any Illicit Drug (Other than Marijuana)	15.1	13.4	15.8	9.2	7.3	7.1	11.9

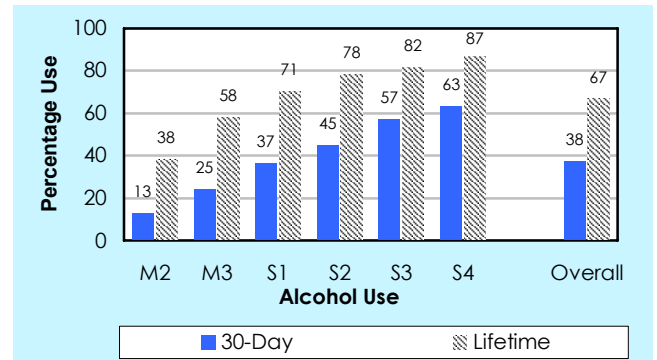
**Table 6. Past-30-Day Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth**

	M2 %	M3 %	S1 %	Bermuda			Overall %
				S2 %	S3 %	S4 %	
Alcohol	12.9	24.5	36.5	45.2	57.3	63.4	37.5
Binge Drinking	7.4	12.9	18.2	21.6	32.7	36.4	20.0
Cigarettes	1.0	1.9	5.0	4.4	7.4	9.6	4.5
Smokeless Tobacco	0.7	1.4	1.4	1.7	1.6	2.0	1.4
Marijuana	0.9	5.8	11.7	15.9	26.5	21.5	12.8
Inhalants	6.6	4.5	3.6	1.5	1.6	1.3	3.4
Ecstasy	0.5	0.3	0.5	0.2	0.5	0.7	0.5
Methamphetamine	0.2	0.2	0.5	0.0	0.5	0.3	0.3
Cocaine	0.2	0.3	0.7	0.2	0.3	0.0	0.3
LSD/Psychedelics	0.5	0.5	0.2	0.2	0.3	0.0	0.4
Heroin	0.2	0.3	0.2	0.4	0.3	0.3	0.3
Any Illicit Drug (Other than Marijuana)	6.9	4.9	4.8	2.1	2.1	2.3	4.2

## Alcohol

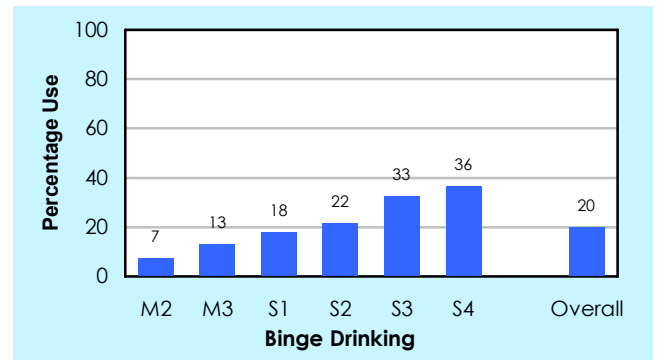
Alcohol, including beer, wine and hard liquor, is the drug used most often by adolescents today. Findings from the *Monitoring the Future* study highlight the pervasiveness of alcohol in middle and high schools today. In comparison, cigarette use (the second most pervasive category of ATOD use) is only about half as prevalent as alcohol use. Given the national pattern, it is not surprising that alcohol is the most used drug among students in Bermuda.

- Lifetime prevalence of alcohol use ranges from a low of 38.4% for M2 students to a high of 86.8% for S4 students. Overall, 66.9% of Bermuda students have used alcohol at least once in their lifetimes.
- Past-30-day prevalence of alcohol use ranges from a low of 12.9% for M2 students to a high of 63.4% for S4 students. Overall, 37.5% of Bermuda students have used alcohol at least once in the past 30 days.



Binge drinking (defined as a report of five or more drinks in a row within the past two weeks) is extremely dangerous. Several studies have shown that binge drinking is related to higher probabilities of drinking and driving as well as injury due to intoxication. As with alcohol use in general, binge drinking tends to become more pervasive as students grow older.

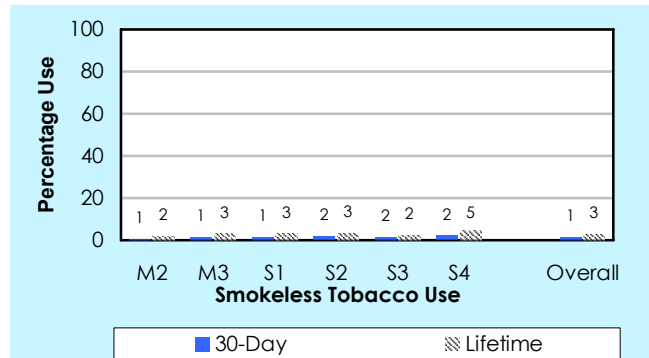
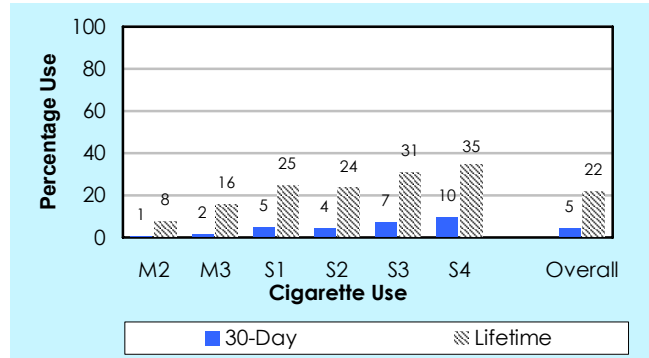
- Across grades, binge drinking prevalence rates range from a low of 7.4% for M2 students to a high of 36.4% for S4 students. Overall, 20.0% of Bermuda students have reported at least one episode of binge drinking in the past two weeks.



## Tobacco

After alcohol, tobacco (including cigarettes and smokeless tobacco) is the most commonly used drug among adolescents. In the United States, tobacco use (including both cigarettes and smokeless tobacco) has declined substantially since the late 1990s (Johnston et al., 2006).

- Lifetime prevalence of cigarette use ranges from a low of 7.8% for M2 students to a high of 34.8% for S4 students. Overall, 21.9% of Bermuda students have used cigarettes at least once in their lifetimes.
- Past-30-day prevalence of cigarette use ranges from a low of 1.0% for M2 students to a high of 9.6% for S4 students. Overall, 4.5% of Bermuda students have used cigarettes at least once in the past 30 days.
- Lifetime prevalence of smokeless tobacco use ranges from a low of 1.9% for M2 students to a high of 4.6% for S4 students. Overall, Bermuda students reported lower lifetime use of smokeless tobacco as compared with lifetime use of cigarettes (2.8% for smokeless tobacco, 21.9% for cigarettes).
- Past-30-day prevalence of smokeless tobacco use ranges from a low of 0.7% for M2 students to a high of 2.0% for S4 students. Overall, Bermuda students reported lower past-30-day use of smokeless tobacco as compared with past-30-day use of cigarettes (1.4% for smokeless tobacco, 4.5% for cigarettes).

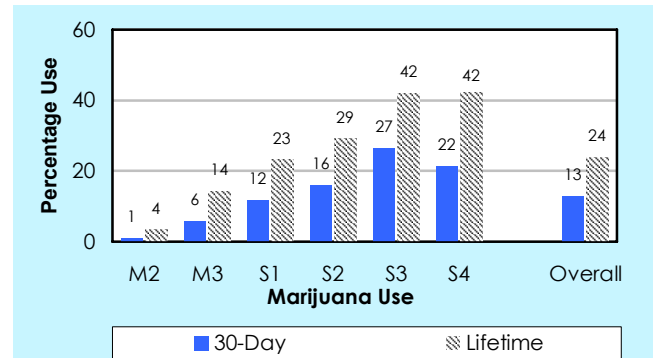




## Marijuana

During the 1990s, there were major changes in trends of marijuana use throughout the United States. Results from the *Monitoring the Future* study show dramatic increases in both lifetime and past-30-day prevalence rates through the early and mid 1990s (Johnston et al., 2006). For 8<sup>th</sup> and 10<sup>th</sup> grade students, the past-30-day rates more than doubled during this period. Since 1996 and 1997, when past-30-day marijuana use peaked, rates have declined.

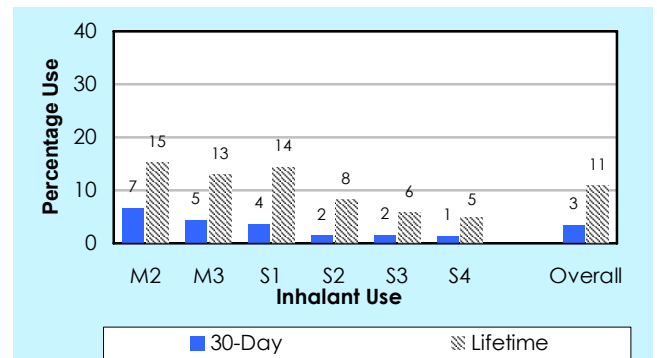
- Lifetime prevalence of marijuana use ranges from a low of 3.5% for M2 students to a high of 42.1% for S4 students. Overall, 23.9% of Bermuda students have used marijuana at least once in their lifetimes.
- Past-30-day prevalence of marijuana use ranges from a low of 0.9% for M2 students to a high of 26.5% for S3 students. Overall, 12.8% of Bermuda students have used marijuana at least once in the past 30 days.



## Inhalants

Inhalant use is more prevalent with younger students, perhaps because inhalants are often the easiest drugs for them to obtain. The health consequences of inhalant use can be substantial, including brain damage and heart failure. Inhalant use was measured by the survey question “On how many occasions (if any) have you used inhalants (whippets, butane, paint thinner, or glue to sniff, etc.)?” Comparisons with the *Monitoring the Future* study should be made carefully because there are differences in survey questions for this class of drugs.

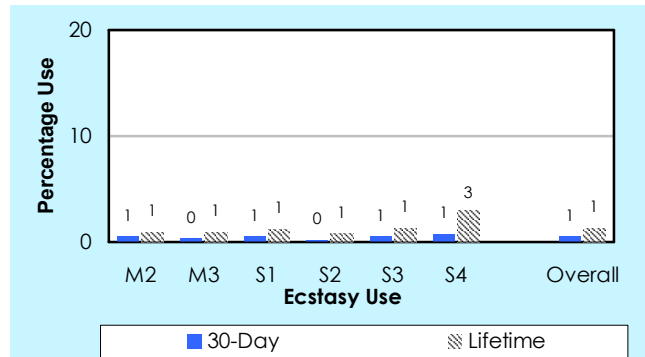
- Lifetime prevalence of inhalant use ranges from a low of 5.0% in S4 to a high of 15.2% in M2. Overall, 10.8% of Bermuda students have used inhalants at least once in their lifetimes.
- Past-30-day prevalence of inhalant use ranges from a low of 1.3% in S4 to a high of 6.6% in M2. Overall, 3.4% of Bermuda students have used inhalants at least once in the past 30 days.



## Ecstasy

Ecstasy (also known as MDMA) has both stimulant and hallucinogenic effects. After showing a rapid increase in use in the United States from 1998 to 2001, use of Ecstasy has declined in recent years, while the proportion of young people perceiving it as dangerous has increased (Johnston et al., 2006).

- Lifetime prevalence of Ecstasy use ranges from a low of 0.8% for S2 students to a high of 3.0% for S4 students. Overall, 1.3% of Bermuda students have used Ecstasy at least once in their lifetimes.
- The past-30-day prevalence rates for Ecstasy use reported by Bermuda students are low, ranging from a low of 0.2% for S2 students to a high of 0.7% for S4 students. Overall, just 0.5% of Bermuda students have used Ecstasy at least once in the past 30 days.



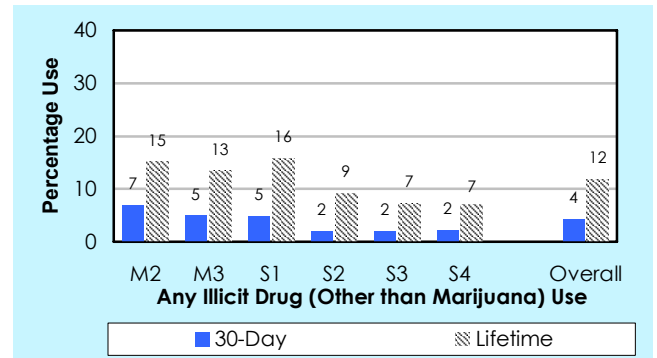
## Other Drugs

The *Communities That Care Youth Survey* also measures the prevalence of use for a variety of other drugs. This includes student use of the following: methamphetamine, cocaine, LSD/Psychedelics and heroin. The rates for prevalence of use of these other drugs are generally lower than the rates for alcohol, tobacco, marijuana, inhalants and club drugs. Additionally, use of these other drugs tends to be concentrated in the upper grade levels.

- Students in Bermuda reported relatively little use of the other drugs that are measured by the survey. Specifically, no more than 0.8% of students indicated use of methamphetamine, cocaine, LSD/Psychedelics or heroin during their lifetimes.
- For the purposes of the *Communities That Care Youth Survey*, methamphetamine was defined as “meth, crystal meth, crank.” Lifetime prevalence of methamphetamine ranges from a low of 0.2% for S2 students to a high of 1.1% for S1 students. Overall, 0.7% of Bermuda students have used methamphetamine at least once in their lifetimes.
- Lifetime prevalence of cocaine ranges from a low of 0.2% for M2 students to a high of 1.7% for S1 students. The overall lifetime prevalence rate is 0.8%.
- Lifetime prevalence of LSD/Psychedelics ranges from a low of 0.2% for S2 students to a high of 1.1% for S1 students. The overall lifetime prevalence rate is 0.8%.
- Lifetime prevalence of heroin ranges from a low of 0.0% for S4 students to a high of 0.8% for S2 students. The overall lifetime prevalence rate is 0.5%.

## Any Illicit Drug (Other than Marijuana)

The final ATOD indicator reports on the use of any illicit drug other than marijuana. This drug combination rate—which includes use of one or more of the following drugs: inhalants, Ecstasy, methamphetamine, cocaine, LSD/Psychedelics and heroin—provides prevention planners with an overall indicator of so-called “hard” drug use. Marijuana use is excluded from this index because the higher prevalence of marijuana use tends to wash out the presence or absence of the other drugs. In other words, an indicator of “Any Illicit Drug Use (*Including* Marijuana)” primarily measures marijuana use.



- Lifetime prevalence of any illicit drug (other than marijuana) rises from a low of 7.1% among S4 students to a high of 15.8% among S1 students. Overall, 11.9% of Bermuda students have used an illicit drug (other than marijuana) at least once in their lifetimes.
- Past-30-day prevalence of any illicit drug (other than marijuana) rises from a low of 2.1% among S2 and S3 students to a high of 6.9% among M2 students. Overall, 4.2% of Bermuda students have used an illicit drug (other than marijuana) at least once in the past 30 days.



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# Section 4

## Other Antisocial Behaviors

### Introduction

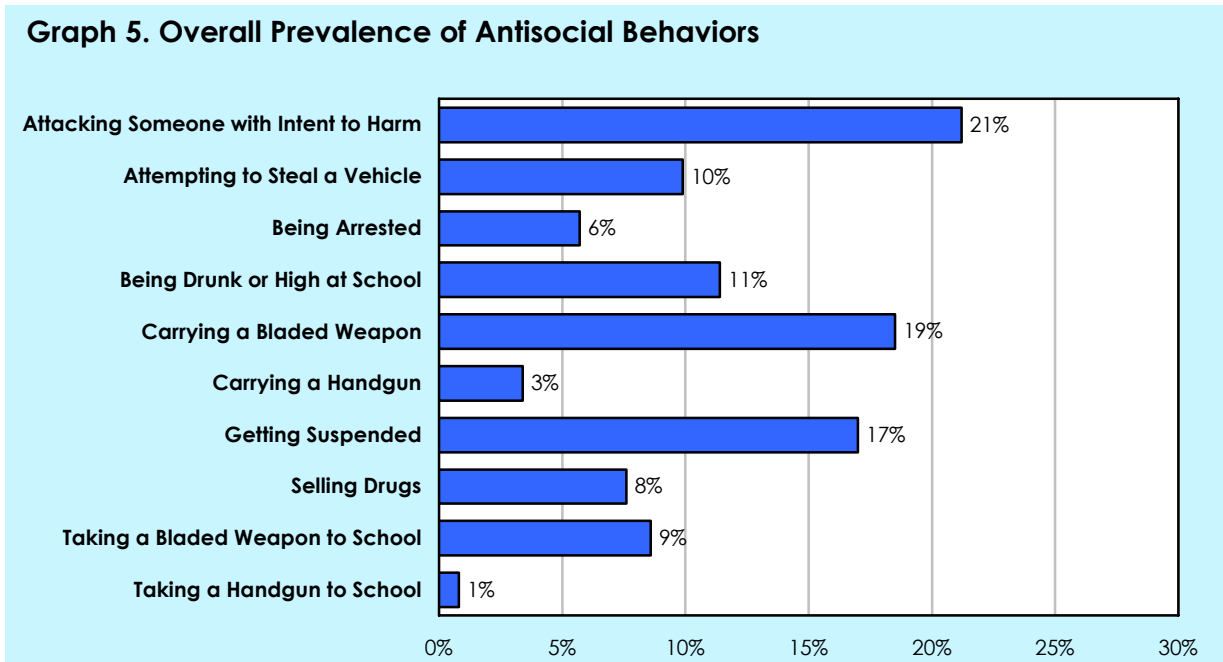
The *Communities That Care Youth Survey* also measures a series of 10 other problem, or antisocial, behaviors—that is, behaviors that run counter to established norms of good behavior.

- Attacking Someone with Intent to Harm
- Attempting to Steal a Vehicle
- Being Arrested
- Being Drunk or High at School
- Carrying a Bladed Weapon
- Carrying a Handgun
- Getting Suspended
- Selling Drugs
- Taking a Bladed Weapon to School
- Taking a Handgun to School

### Measurement

As with alcohol, tobacco and other drug use, prevalence tables and graphs are employed to illustrate the percentages of students who reported other antisocial behaviors. In contrast to the lifetime and past-30-day prevalence rates reported for alcohol, tobacco and other drug use, other antisocial behavior prevalence rates are for the incidence of behavior over the past 12 months.

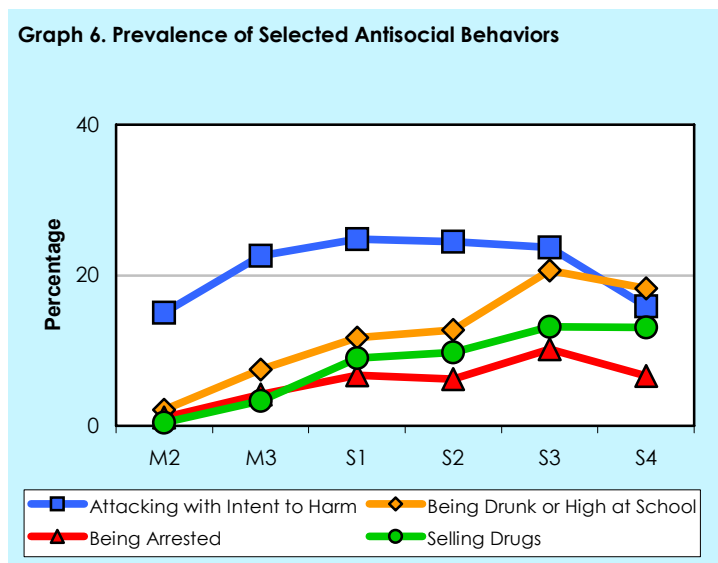
## Overall Results



Other antisocial behavior prevalence rates for the combined sample of M2 through S4 students are presented in Graph 5, and in the overall results column of Table 7. Across all grades, 21.2% of students reported *Attacking Someone with Intent to Harm* in the past year, making it the most prevalent of the 10 behaviors in Bermuda. *Carrying a Bladed Weapon* is the second most prevalent antisocial behavior, with 18.5% of Bermuda students reporting having carried a bladed weapon in the past year. Students in Bermuda reported low levels of participation in *Carrying a Handgun* and *Taking a Handgun to School*.

## Grade-Level Results

Other antisocial behavior prevalence rates within individual grades are presented in Graph 6 and Table 7. In many communities, these behaviors 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. In contrast, reports of *Attacking Someone with Intent to Harm*, *Getting Suspended* and *Being Arrested* often peak in the late middle school or early high school years. Prevalence rates for *Attempting to Steal a Vehicle*, *Carrying a Handgun* and *Taking a Handgun to School* are generally too low to allow meaningful comparisons across grade levels. Prevention planners in



Bermuda should review the other antisocial behavior profiles within individual grades, with special attention toward behaviors that show a marked deviation from these patterns.

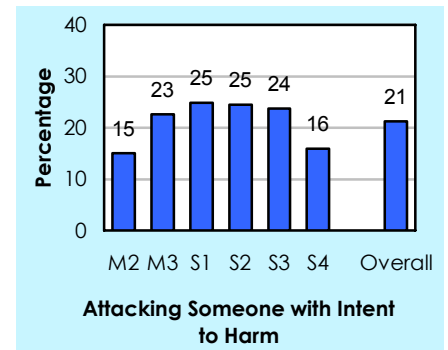
**Table 7. Percentage of Surveyed Youth Who Reported Engaging in Antisocial Behaviors, by Grade**

	M2 %	M3 %	S1 %	S2 %	S3 %	S4 %	Overall %
<b>Attacking Someone with Intent to Harm</b>	15.0	22.6	24.8	24.5	23.7	15.9	<b>21.2</b>
<b>Attempting to Steal a Vehicle</b>	3.5	10.3	12.5	10.1	15.0	8.3	<b>9.9</b>
<b>Being Arrested</b>	1.1	4.2	6.7	6.2	10.2	6.6	<b>5.7</b>
<b>Being Drunk or High at School</b>	2.1	7.5	11.7	12.7	20.6	18.3	<b>11.4</b>
<b>Carrying a Bladed Weapon</b>	11.3	18.2	21.2	22.4	21.9	15.7	<b>18.5</b>
<b>Carrying a Handgun</b>	1.8	2.6	4.4	3.4	3.4	5.3	<b>3.4</b>
<b>Getting Suspended</b>	11.6	15.9	19.5	20.6	20.3	14.2	<b>17.0</b>
<b>Selling Drugs</b>	0.4	3.3	9.0	9.8	13.2	13.1	<b>7.6</b>
<b>Taking a Bladed Weapon to School</b>	4.2	9.6	9.3	11.7	10.8	5.9	<b>8.6</b>
<b>Taking a Handgun to School</b>	0.2	0.5	0.3	0.6	1.9	1.6	<b>0.8</b>
<b>Average</b>	<b>5.1</b>	<b>9.5</b>	<b>11.9</b>	<b>12.2</b>	<b>14.1</b>	<b>10.5</b>	<b>10.4</b>

### 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.

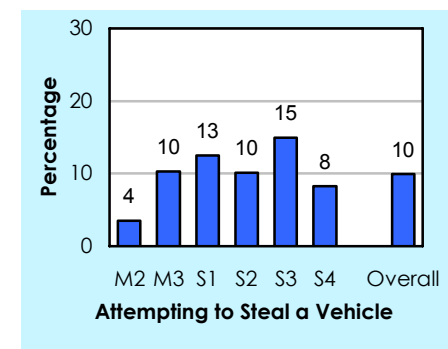
- Prevalence rates for *Attacking Someone with Intent to Harm* range from a low of 15.0% among M2 students to a high of 24.8% among S1 students. Overall, 21.2% of Bermuda students reported having attacked someone with intent to harm in the past year.



### Attempting to Steal a 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?”

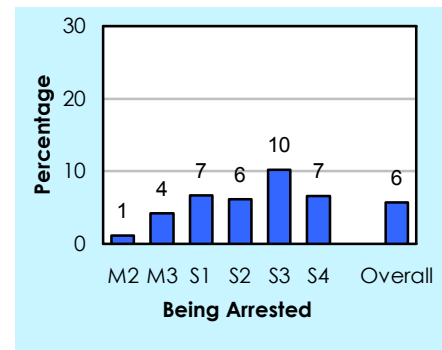
- Prevalence rates for *Attempting to Steal a Vehicle* range from a low of 3.5% among M2 students to a high of 15.0% among S3 students. Overall, 9.9% of Bermuda students reported having attempted to steal a vehicle in the past year.



## 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 1.1% among M2 students to a high of 10.2% among S3 students. Overall, 5.7% of Bermuda students reported having been arrested in the past year.

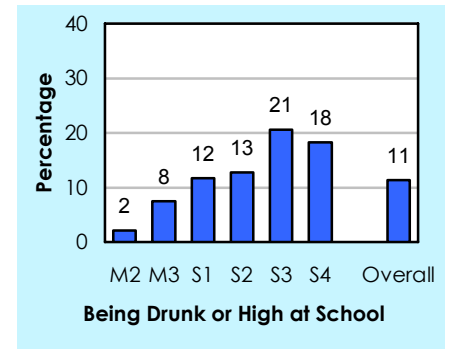




## Being Drunk or High at School

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?”

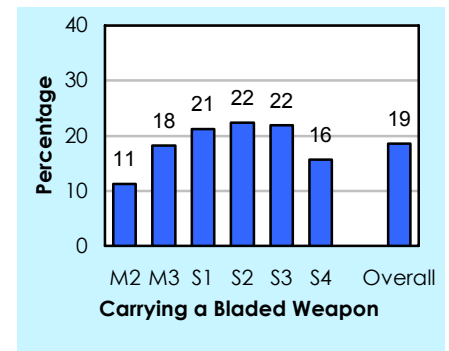
- Prevalence rates for *Being Drunk or High at School* range from a low of 2.1% among M2 students to a high of 20.6% among S3 students. Overall, 11.4% of Bermuda students reported having been drunk or high at school in the past year.



## Carrying a Bladed Weapon

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

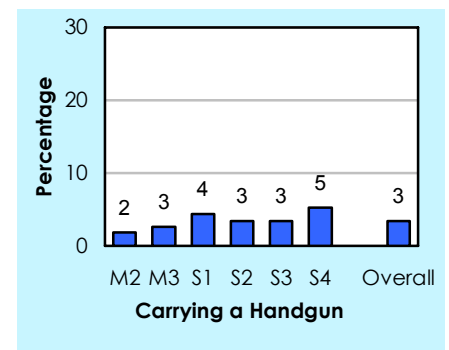
- Prevalence rates for *Carrying a Bladed Weapon* range from a low of 11.3% among M2 students to a high of 22.4% among S2 students. Overall, 18.5% of Bermuda students reported having carried a bladed weapon in the past year.



## 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?”

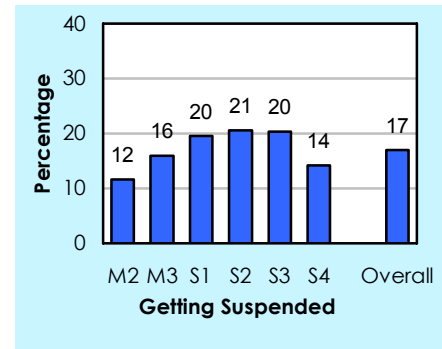
- Prevalence rates for *Carrying a Handgun* range from a low of 1.8% among M2 students to a high of 5.3% among S4 students. Overall, 3.4% of Bermuda students reported having carried a handgun in the past year.



## Getting Suspended

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 vary substantially from district to district. Therefore, these rates should be interpreted by someone knowledgeable about local school suspension policy.

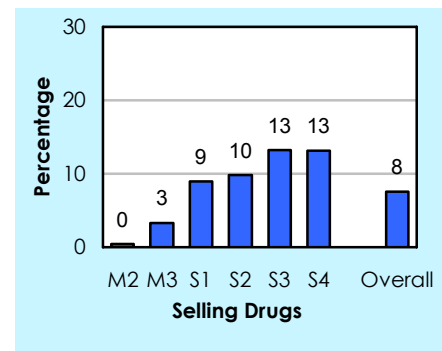
- Prevalence rates for *Getting Suspended* range from a low of 11.6% among M2 students to a high of 20.6% among S2 students. Overall, 17.0% of Bermuda students reported having been suspended in the past year.



## Selling 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.”

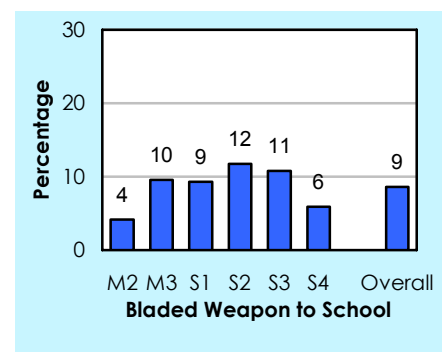
- Prevalence rates for *Selling Drugs* range from a low of 0.4% among M2 students to a high of 13.2% among S3 students. Overall, 7.6% of Bermuda students reported having sold drugs in the past year.



## Taking a Bladed Weapon to School

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

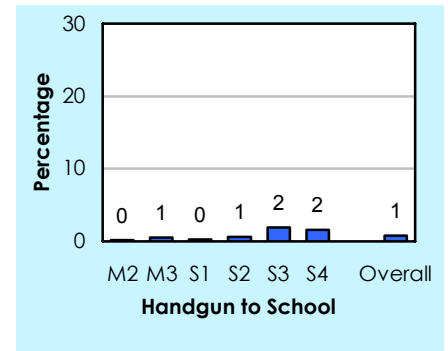
- Prevalence rates for *Taking a Bladed Weapon to School* range from a low of 4.2% among M2 students to a high of 11.7% among S2 students. Overall, 8.6% of Bermuda students reported having taken a bladed weapon to school in the past year.



## 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* are very low across all grade levels. Overall, 0.8% of Bermuda students reported having taken a handgun to school in the past year.





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# Appendix A

## Additional Prevention Planning Data

### Introduction

The following section presents detailed response data for survey items that may be of particular interest to prevention planners. Some of this information has already been presented earlier in this report in the form of several of the risk factor scale scores (see Section 2). These detailed response data have been provided to help communities form a more complete picture of the attitudes and behaviors held by the youth who were surveyed. It is important, however, to view this information within the context of the risk and protective factor framework covered earlier in this report.

### Age of Onset

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

Surveyed youth were asked to report on when they began using alcohol, cigarettes and marijuana. These drugs are generally considered to be the major gateway drugs, usually preceding the use of harder drugs (National Center on Addiction and Substance Abuse at Columbia University [CASA], 1994). The question related to cigarettes is “How old were you when you first smoked a cigarette, even just a puff?” The question about marijuana is “How old were you when you first smoked marijuana?” Two questions about alcohol were asked, one asking when the student first “had more than a sip or two of beer, wine or hard liquor (for example, vodka, whiskey or gin)” and one asking the student when he or she “began drinking alcoholic beverages regularly, that is, at least once or twice a month.” Table A1 presents the average age of onset students reported within each grade level. These four survey questions form part of the risk factor scale *Early Initiation of Drug Use*. Table A1 also presents the average age of onset for six of the other antisocial behaviors.

For most of the data included in this report, readers are encouraged to examine both overall results and findings for each participating grade. In contrast, to best determine when young people first start using ATODs, it is important to examine the responses of the youth in the highest grade in the sample. This is because scores for this item are based only on students who reported engaging in the behavior. Consequently, younger students who eventually experiment with ATODs as they enter higher grades are excluded from the analysis, resulting in misleadingly early age-of-onset scores for the lower grades.

**Table A1. Average Age of Onset Reported by Surveyed Youth, by Grade**

	M2	M3	S1	S2	S3	S4	Overall
Trying Alcohol	11.1	11.6	12.1	12.6	13.1	13.7	12.4
Drinking Alcohol Regularly	11.3	11.9	12.8	13.9	14.7	15.5	13.9
Smoking Cigarettes	11.0	11.2	12.2	12.7	12.8	13.3	12.4
Smoking Marijuana	11.8	12.0	12.4	13.2	13.8	14.0	13.2
Being Suspended from School	11.1	11.8	12.4	12.9	13.4	13.5	12.6
Being Arrested	11.5	12.2	13.0	13.7	14.4	14.8	13.7
Carrying a Handgun	11.9	11.6	13.0	12.6	14.4	13.8	13.0
Attacking Someone with Intent to Harm	11.3	11.6	12.2	12.5	13.3	13.0	12.3
Belonging to a Gang	11.2	11.8	12.5	13.0	13.3	13.2	12.6

## Risk of Harm

Perception of risk is an important determinant in the decision-making process young people go through when deciding whether or not to use alcohol, tobacco or other drugs (Bachman, Johnston, O’Malley and Humphrey, 1988). Data analysis across a range of *Communities That Care Youth Survey* communities shows a consistent negative correlation between perception of risk and the level of reported ATOD use. That is, generally when the perceived risk of harm is high, reported frequency of use is low. Evidence also suggests that perceptions of the risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns in a community (Bachman, Johnston, O’Malley and Humphrey, 1986). Table A2 presents prevalence rates for surveyed youth assigning “great risk” of harm to four drug use behaviors: regular use of alcohol (one or two drinks nearly every day), regular use of cigarettes (a pack or more daily), trying marijuana once or twice, and regular use of marijuana. These four survey items form the risk factor scale *Low Perceived Risks of Drug Use*.

**Table A2. Percentage of Surveyed Youth Who Reported Perception of “Great Risk” of Harm, by Grade**

	M2 %	M3 %	S1 %	S2 %	S3 %	S4 %	Overall %
Drinking Alcohol Regularly	45.7	33.8	36.8	39.8	36.8	36.0	38.3
Smoking Cigarettes Regularly	68.6	66.7	69.7	77.8	76.4	76.1	71.9
Trying Marijuana Once or Twice	42.9	30.2	23.1	21.0	15.6	14.9	25.7
Smoking Marijuana Regularly	76.3	67.8	58.7	50.3	37.7	39.6	56.7

## Disapproval of Drug Use

Personal approval or disapproval is another key attitudinal construct that influences drug use behavior (Bachman et al., 1988). Like risk of harm, disapproval is negatively correlated with the level of reported ATOD use across a range of *Communities That Care Youth Survey* communities. Personal disapproval was measured by asking surveyed youth how wrong it would be for someone their age to drink alcohol regularly, smoke cigarettes, smoke marijuana, or use other illicit drugs (“LSD, cocaine, amphetamines or another illegal drug”). The rates presented in Table A3 represent the percentages of surveyed youth who



thought it would be “wrong” or “very wrong” to use each drug. These four survey items form the risk factor scale *Favorable Attitudes toward ATOD Use*.

**Table A3. Percentage of Surveyed Youth Who Indicated Personal Disapproval of Drug Use, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Drinking Alcohol Regularly</b>	88.0	75.7	60.9	58.7	49.9	41.0	<b>64.5</b>
<b>Smoking Cigarettes</b>	96.7	92.6	86.4	85.2	81.6	75.9	<b>87.3</b>
<b>Smoking Marijuana</b>	98.0	87.2	78.8	69.8	60.6	61.7	<b>77.7</b>
<b>Using Other Illicit Drugs</b>	98.3	98.2	97.7	96.2	97.7	97.9	<b>97.6</b>

## Social Norms

In addition to students’ own attitudes, social norms—the written and unwritten rules and expectations about what constitutes desirable behavior—shape drug use choices. Since drug-related attitudes and behaviors are often acquired through peer group interactions, expectations of how one’s peer group might react have an especially strong impact on whether or not young people choose to use drugs. The data presented in Table A4 show the percentage of surveyed youth who said that there is a “pretty good” or “very good” chance that they would be seen as cool if they smoked cigarettes, drank alcohol regularly (once or twice a month) or smoked marijuana. These three survey items form part of the risk factor scale *Peer Rewards for Antisocial Behavior*.

**Table A4. Percentage of Surveyed Youth Who Indicated Peer Approval of Drug Use, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Drinking Alcohol Regularly</b>	8.3	17.6	18.3	21.4	24.0	21.0	<b>17.9</b>
<b>Smoking Cigarettes</b>	7.2	10.9	6.0	5.1	3.4	2.6	<b>6.1</b>
<b>Smoking Marijuana</b>	7.1	18.0	22.6	21.7	26.3	21.9	<b>19.2</b>

In addition to peer attitudes, social norms toward drug use were measured by asking how most neighborhood adults would view student alcohol, cigarette and marijuana use. Table A5 presents the percentage of surveyed youth who thought other adults would feel it was “wrong” or “very wrong” to use each drug. These three survey items form part of the risk factor scale *Laws and Norms Favorable to Drug Use*.

**Table A5. Percentage of Surveyed Youth Who Indicated “Other Adults” Disapprove of Drug Use, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Drinking Alcohol</b>	84.6	72.6	67.1	62.0	56.4	48.1	<b>66.7</b>
<b>Smoking Cigarettes</b>	94.3	88.5	86.8	84.4	79.8	69.6	<b>85.1</b>
<b>Smoking Marijuana</b>	96.0	88.2	84.0	80.3	73.0	66.1	<b>82.7</b>

## Frequency of Drug Use

While the prevalence rates presented in Section 3 are useful for determining how many kids are currently using or have experimented with a drug, they give no indication of the frequency or intensity of use. A respondent who reports 1 or 2 occasions of use in the past 30 days is counted the same as one who reports 40 or more occasions of use, even though the level of use is drastically different. Tables A6-A9 present the past-30-day frequency of use reported by surveyed youth for the following drugs: alcohol, cigarettes, marijuana or hashish, and inhalants.

**Table A6. Past-30-Day Frequency of Alcohol Use Reported by Surveyed Youth, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>0 occasions</b>	87.1	75.5	63.5	54.8	42.7	36.6	<b>62.5</b>
<b>1 or 2 occasions</b>	9.2	14.4	19.1	25.2	29.1	29.0	<b>20.0</b>
<b>3 to 5 occasions</b>	2.3	6.2	8.1	9.0	15.5	16.8	<b>8.9</b>
<b>6 to 9 occasions</b>	1.2	2.4	3.8	5.0	6.9	6.9	<b>4.1</b>
<b>10 to 19 occasions</b>	0.0	0.7	3.3	4.0	2.4	5.9	<b>2.5</b>
<b>20 to 39 occasions</b>	0.2	0.2	0.9	1.1	1.6	2.6	<b>0.9</b>
<b>40 or more occasions</b>	0.0	0.7	1.4	0.8	1.9	2.0	<b>1.1</b>

**Table A7. Past-30-Day Frequency of Cigarette Use Reported by Surveyed Youth, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Not at all</b>	99.0	98.1	95.0	95.6	92.6	90.4	<b>95.5</b>
<b>Less than one cigarette per day</b>	1.0	1.7	3.8	3.4	2.9	7.3	<b>3.0</b>
<b>One to five cigarettes per day</b>	0.0	0.0	0.7	0.6	2.9	2.0	<b>0.9</b>
<b>About one-half pack per day</b>	0.0	0.2	0.2	0.4	0.3	0.0	<b>0.2</b>
<b>About one pack per day</b>	0.0	0.0	0.0	0.0	0.8	0.0	<b>0.1</b>
<b>About one and one-half packs per day</b>	0.0	0.0	0.0	0.0	0.0	0.3	<b>0.0</b>
<b>Two packs or more per day</b>	0.0	0.0	0.3	0.0	0.5	0.0	<b>0.2</b>

**Table A8. Past-30-Day Frequency of Marijuana or Hashish Use Reported by Surveyed Youth, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>0 occasions</b>	99.1	94.2	88.3	84.1	73.5	78.5	<b>87.2</b>
<b>1 or 2 occasions</b>	0.3	3.1	3.8	8.1	10.6	9.6	<b>5.5</b>
<b>3 to 5 occasions</b>	0.2	0.9	2.9	2.5	4.8	2.6	<b>2.2</b>
<b>6 to 9 occasions</b>	0.2	0.7	1.0	1.5	3.4	2.3	<b>1.4</b>
<b>10 to 19 occasions</b>	0.2	0.3	1.2	1.5	2.7	2.0	<b>1.2</b>
<b>20 to 39 occasions</b>	0.0	0.0	0.9	0.8	1.3	1.0	<b>0.7</b>
<b>40 or more occasions</b>	0.0	0.9	1.9	1.5	3.7	4.0	<b>1.8</b>

**Table A9. Past-30-Day Frequency of Inhalant Use Reported by Surveyed Youth, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>0 occasions</b>	93.4	95.5	96.4	98.5	98.4	98.7	<b>96.6</b>
<b>1 or 2 occasions</b>	3.7	2.7	1.6	1.1	1.1	0.7	<b>1.9</b>
<b>3 to 5 occasions</b>	2.1	1.0	0.7	0.2	0.3	0.0	<b>0.8</b>
<b>6 to 9 occasions</b>	0.7	0.3	0.5	0.2	0.0	0.0	<b>0.3</b>
<b>10 to 19 occasions</b>	0.2	0.3	0.7	0.0	0.0	0.0	<b>0.2</b>
<b>20 to 39 occasions</b>	0.0	0.0	0.0	0.0	0.3	0.3	<b>0.1</b>
<b>40 or more occasions</b>	0.0	0.0	0.2	0.0	0.0	0.3	<b>0.1</b>

Note: Rounding on the above tables can produce totals that do not equal 100%.

## Gang Involvement

Gangs have long been associated with crime, violence and other antisocial behaviors. Evidence suggests that gangs contribute to antisocial behavior beyond simple association with delinquent peers. Table A10 presents the percentage of surveyed youth indicating gang involvement.

**Table A10. Percentage of Surveyed Youth Who Indicated Gang Involvement, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Ever Belonged to a Gang</b>	8.7	17.9	20.5	19.7	18.9	10.8	<b>16.4</b>
<b>Belonged to a Gang with a Name</b>	6.9	16.5	20.4	19.7	17.7	10.4	<b>15.4</b>

## New Survey Items

Table A11 presents results for four items that were added to the questionnaire in 2007. Please note that the first data row shows the average number of ATOD lessons reported by Bermuda students, while the following three data rows show prevalence rates.

**Table A11. Results for New Questionnaire Items, by Grade**

	<b>M2</b>	<b>M3</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>Overall</b>
<b>Average number of lessons during the last school year about ATOD use</b>	2.4	2.8	2.7	2.2	1.5	1.2	<b>2.2</b>
<b>Percentage of students who found ATOD lessons to be useful or very useful</b>	75.8	60.9	51.2	48.9	41.2	52.5	<b>56.4</b>
<b>Percentage reporting that these lessons changed their attitude about ATOD use</b>	77.6	62.4	53.0	48.7	36.4	50.0	<b>56.6</b>
<b>Percentage of students who have driven bikes, mopeds or scooters while under the influence of alcohol</b>	6.8	11.6	15.3	15.0	26.9	39.5	<b>17.7</b>



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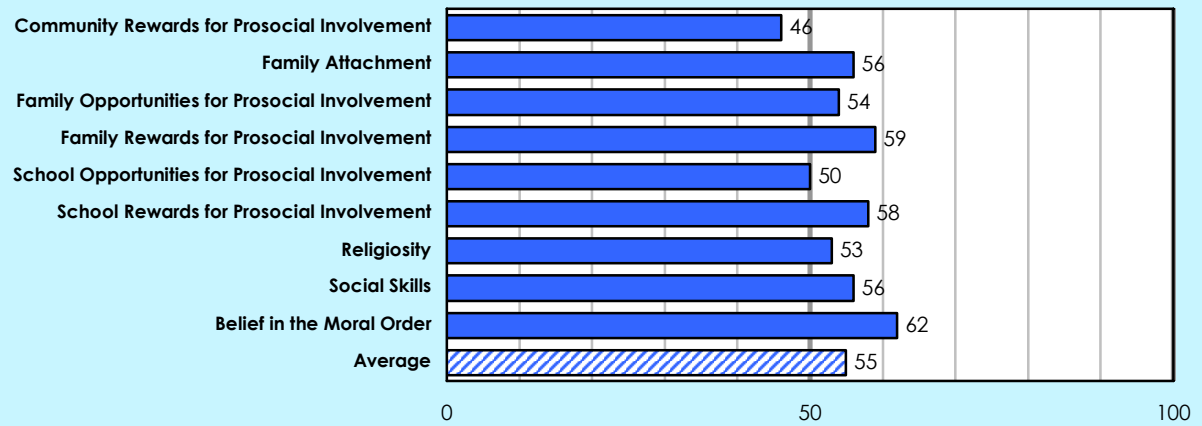
# Appendix B

## Grade-Level Graphs

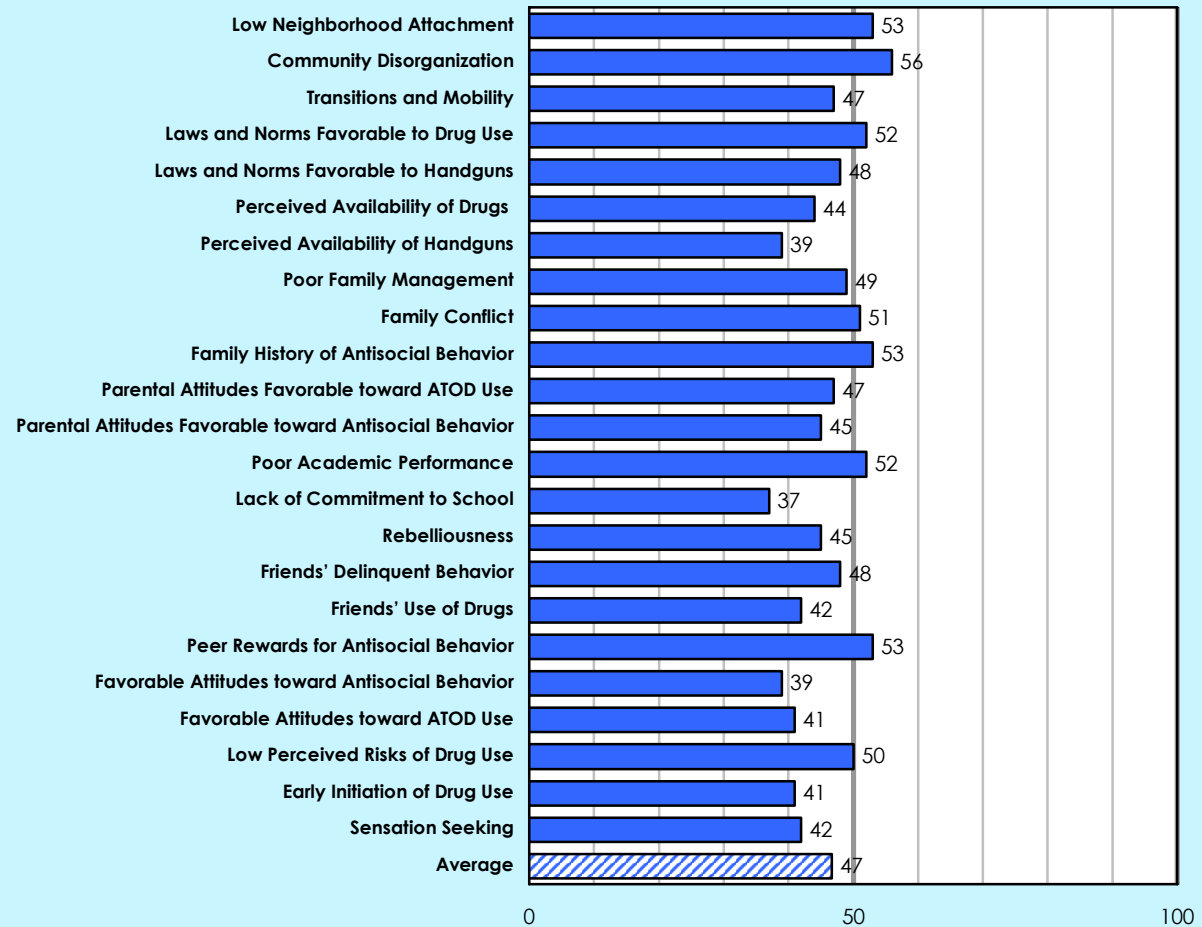
The following section provides grade-level graphs for risk and protective factor scale scores. The information is presented in this format to facilitate prevention planning at the grade level.

# M2

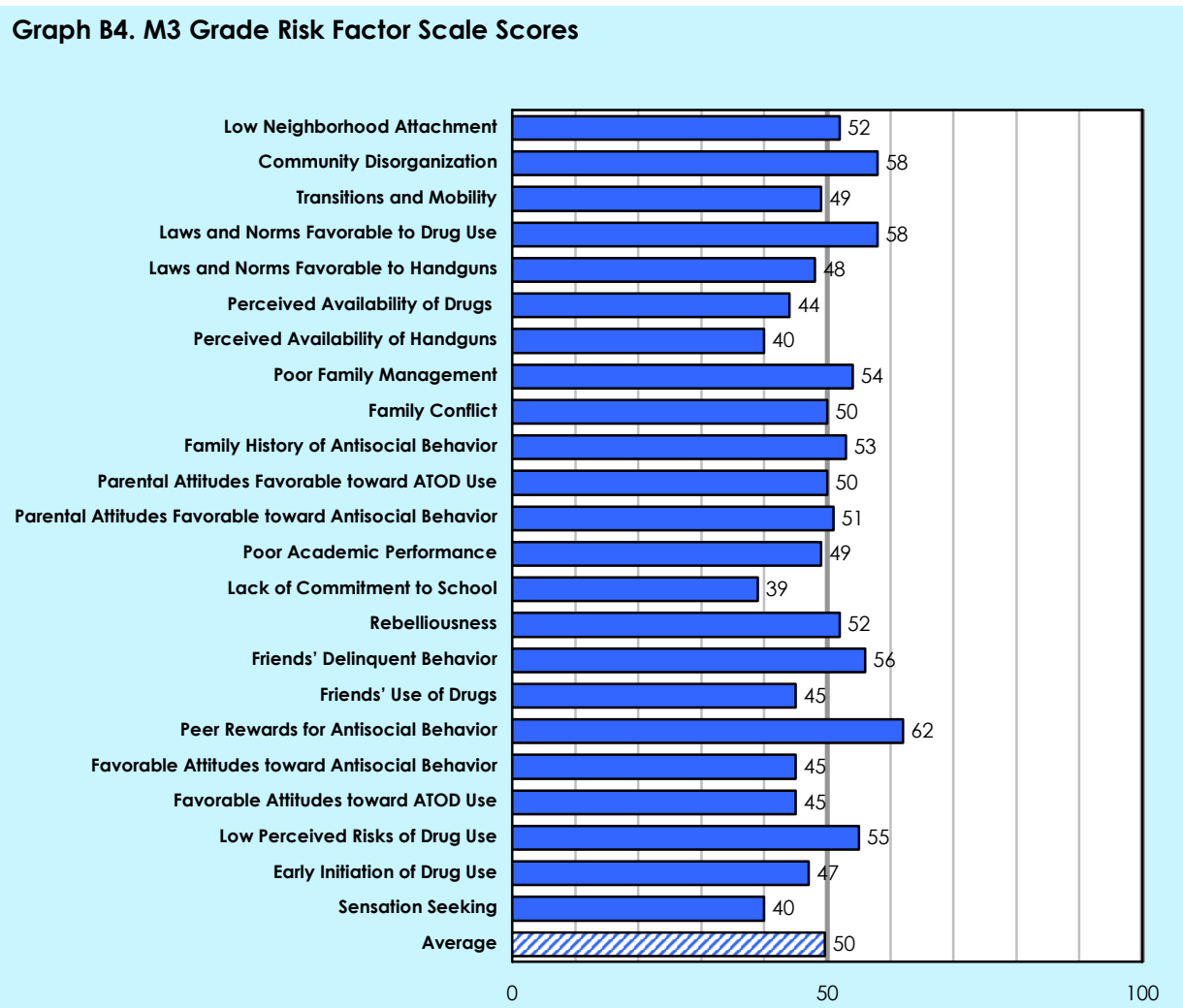
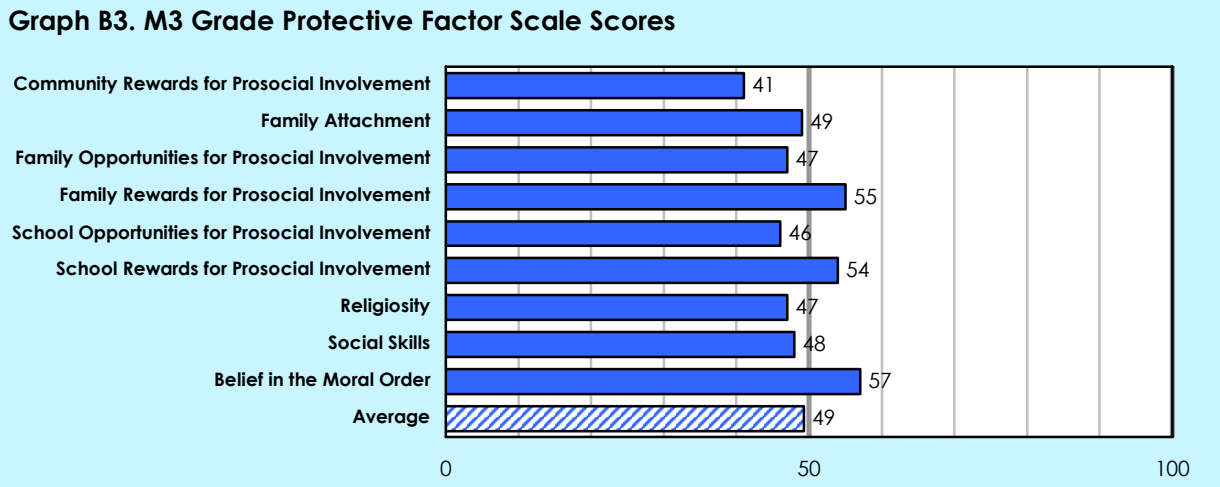
**Graph B1. M2 Grade Protective Factor Scale Scores**



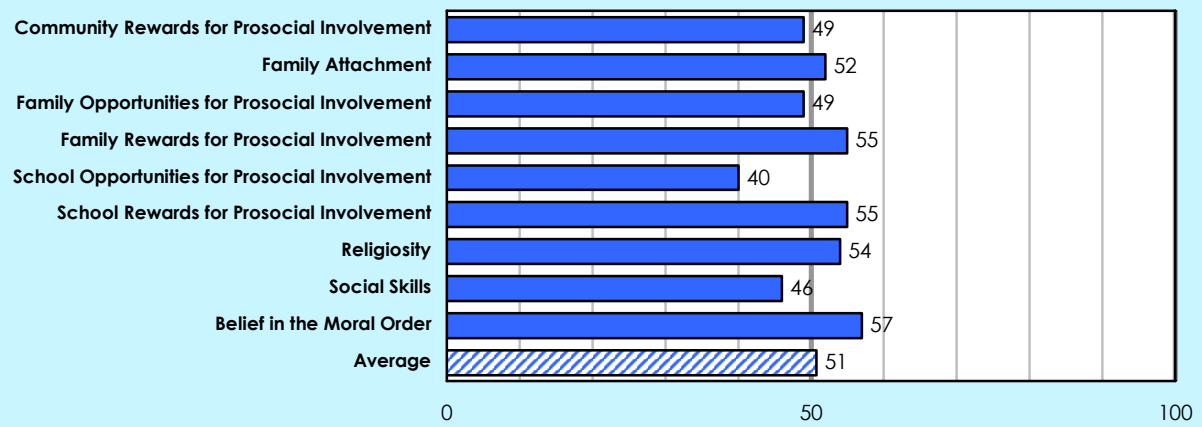
**Graph B2. M2 Grade Risk Factor Scale Scores**



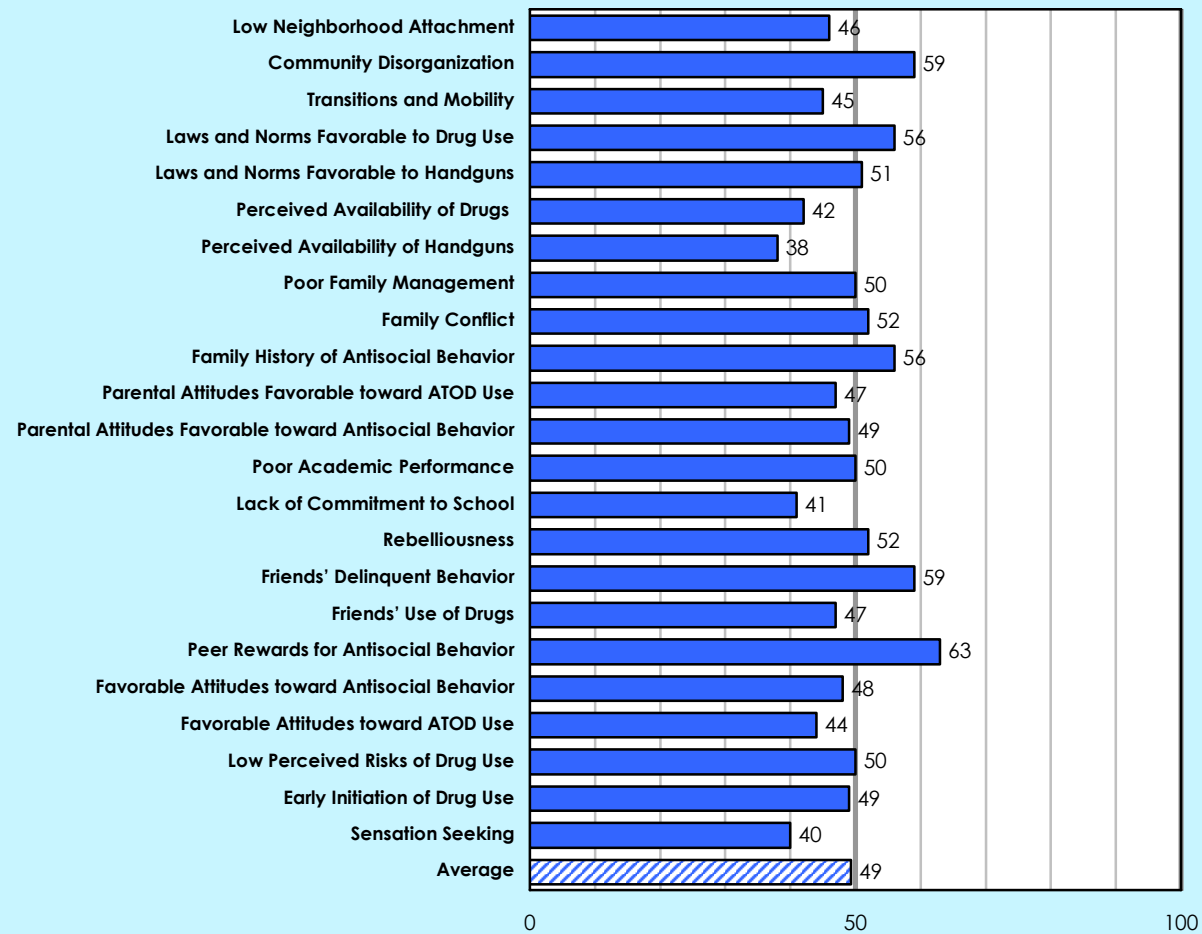
# M3



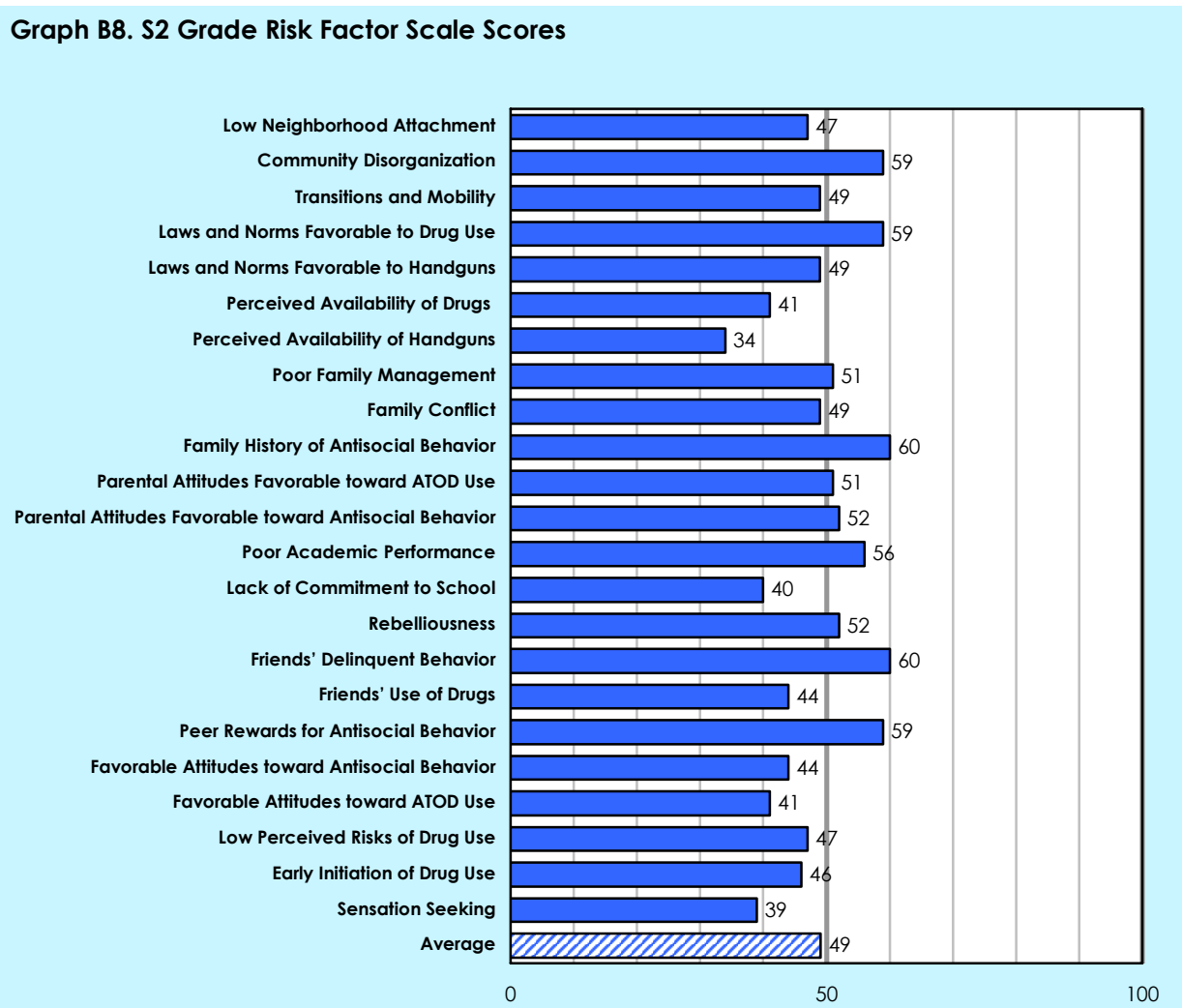
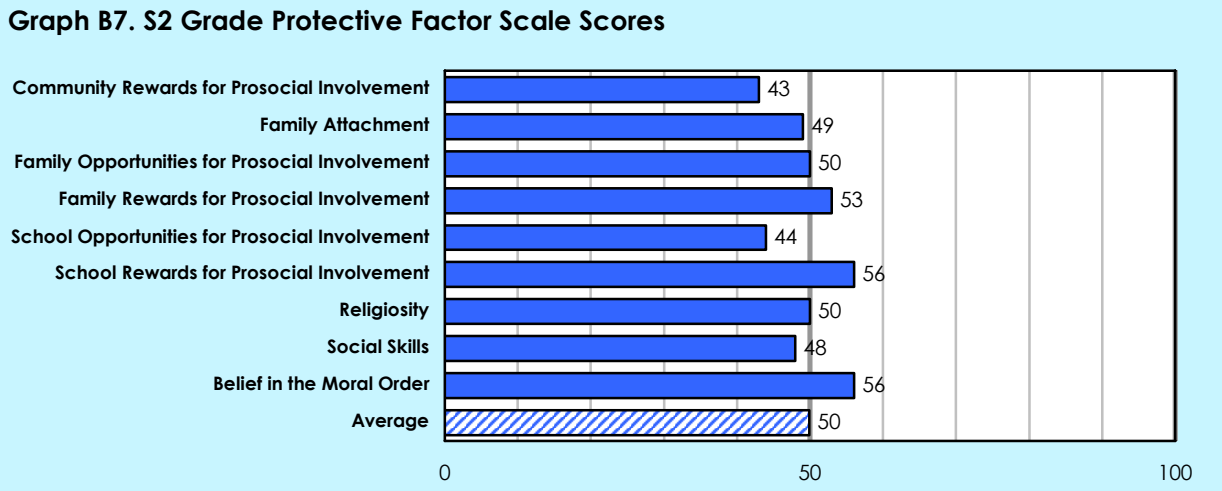
**Graph B5. S1 Grade Protective Factor Scale Scores**



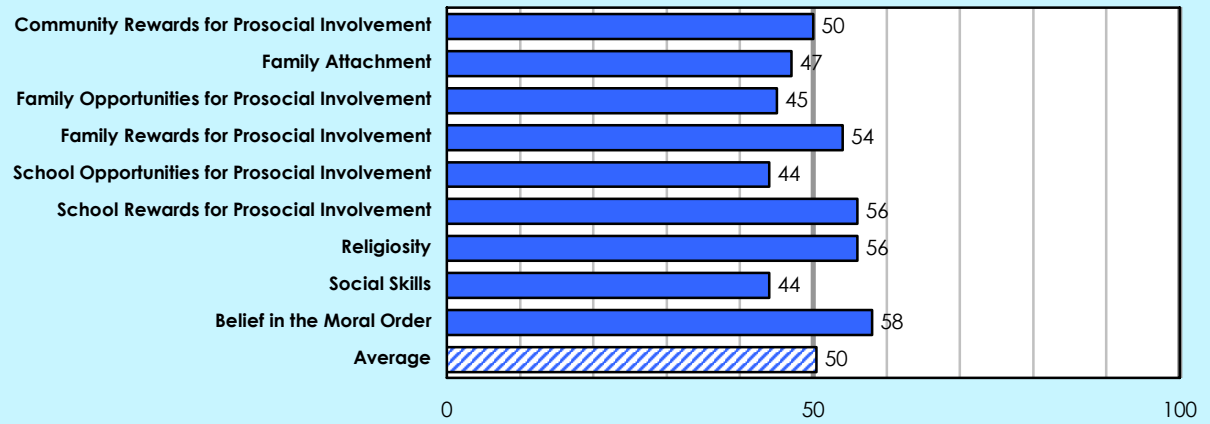
**Graph B6. S1 Grade Risk Factor Scale Scores**



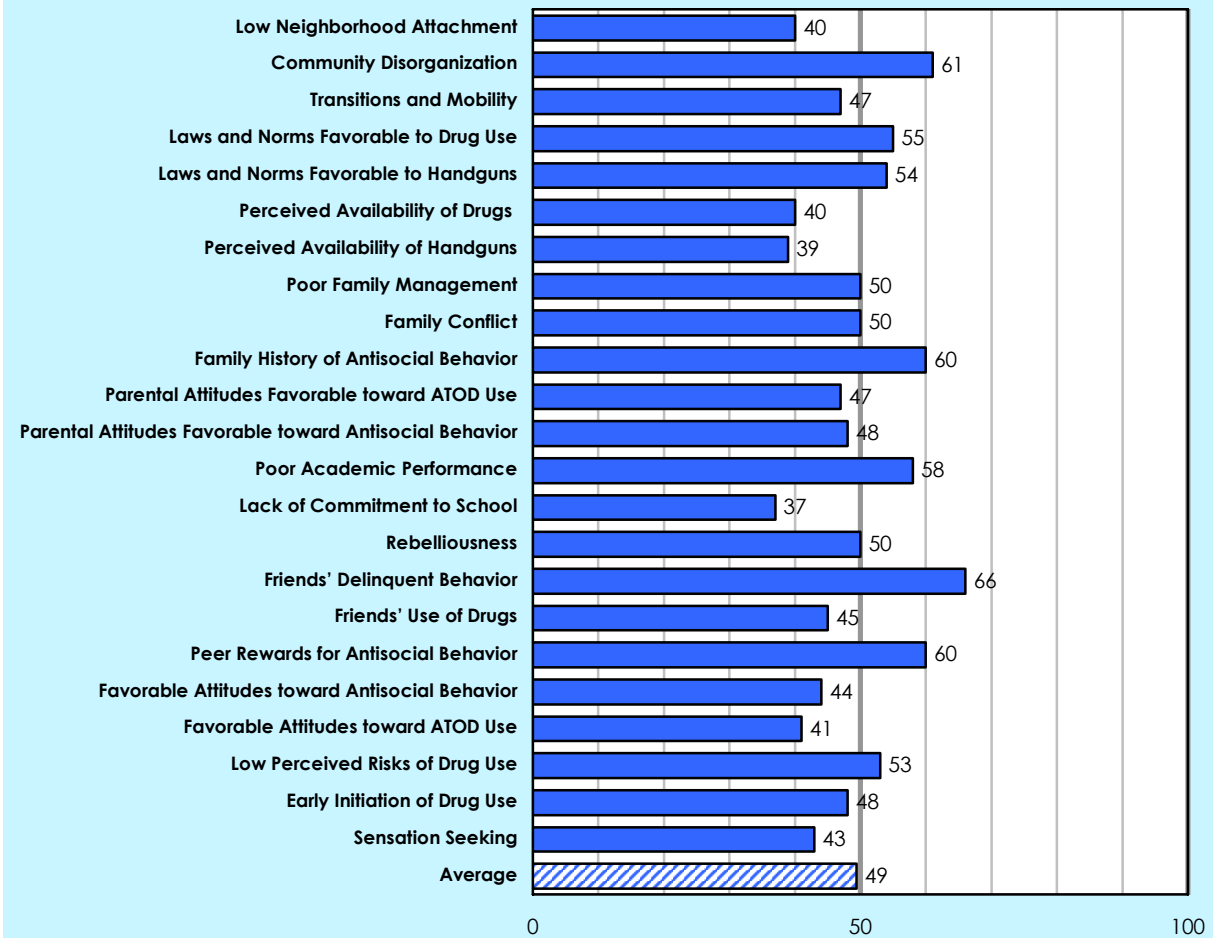




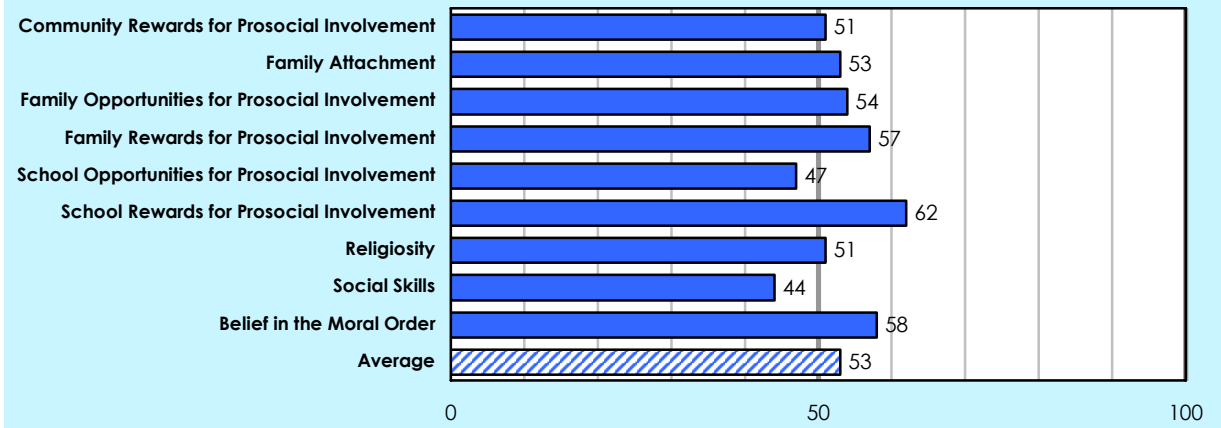
**Graph B9. S3 Grade Protective Factor Scale Scores**



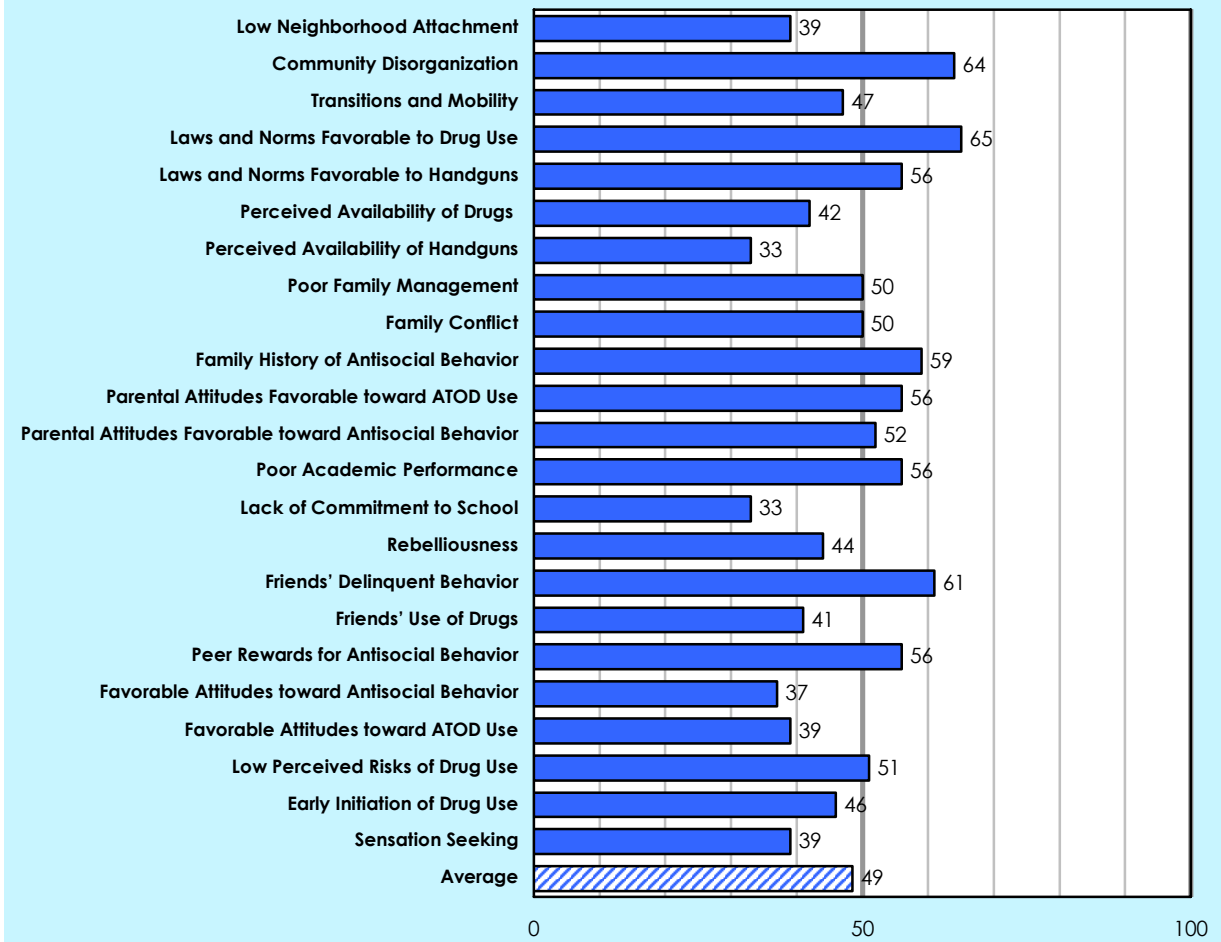
**Graph B10. S3 Grade Risk Factor Scale Scores**



**Graph B11. S4 Grade Protective Factor Scale Scores**



**Graph B12. S4 Grade Risk Factor Scale Scores**





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# Appendix C

## Prescription Drug Use Items

### Introduction

In recent years the nonmedical use of prescription drugs has emerged as a major public health issue. Both the *National Survey on Drug Use and Health* (Substance Abuse and Mental Health Services Administration, 2003) and the *Monitoring the Future* (Johnston et al., 2006) study, two major sources of youth drug abuse prevalence data, have reported increases in the unauthorized use of prescription drugs. 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, the research community is still in the early stages of developing survey instruments that can accurately measure 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 recognized 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 they may have difficulty distinguishing between prescription and over-the-counter medications.

With these challenges in mind, the *Communities That Care Youth Survey* recently included six new questions designed to measure prevalence-of-use rates across the three prescription drug categories that, according to the National Institute on Drug Abuse, are among the most likely to be abused: pain relievers, stimulants and tranquilizers. Each question includes examples of some of the best known drugs within that category.

On how many occasions (if any) have you:

- Used prescription pain relievers, such as Vicodin<sup>®</sup>, OxyContin<sup>®</sup> or Tylox<sup>®</sup>, without a doctor's orders, in your lifetime?
- Used prescription pain relievers, such as Vicodin<sup>®</sup>, OxyContin<sup>®</sup> or Tylox<sup>®</sup>, without a doctor's orders, during the past 30 days?
- Used prescription stimulants, such as Ritalin<sup>®</sup> or Adderall<sup>®</sup>, without a doctor's orders, in your lifetime?

- 
- Used prescription stimulants, such as Ritalin<sup>®</sup> or Adderall<sup>®</sup>, without a doctor's orders, during the past 30 days?
  - Used prescription tranquilizers, such as Xanax<sup>®</sup>, Valium<sup>®</sup> or Ambien<sup>®</sup>, without a doctor's orders, in your lifetime?
  - Used prescription tranquilizers, such as Xanax<sup>®</sup>, Valium<sup>®</sup> or Ambien<sup>®</sup>, without a doctor's orders, during the past 30 days?

Initial steps have been taken to validate these items—that is, to confirm that respondents understand the questions and are reporting unauthorized use of prescription drugs. The first step in this process involved comparing prevalence rates recorded in a county-level sample to data gathered in the 2002 *National Survey on Drug Use and Health*. In this national sample, respondents between the ages of 12 and 17 reported lifetime prevalence rates of 11.2% for pain reliever use and 4.3% for stimulant use. In the county-level sample, respondents across all four surveyed grades (6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup>) reported lifetime rates of 11.5% and 4.8% for pain relievers and stimulants, respectively. (A comparison of tranquilizer prevalence rates is not appropriate because the *National Survey on Drug Use and Health* separates tranquilizers and sedatives into two distinct categories.) While it is difficult to directly compare results across studies because of differences in question formatting and sample composition, the similarity in prevalence rates supports the validity of the *Communities That Care Youth Survey* prescription drug questions.

The second step in the initial validity testing involved correlating unauthorized prescription drug use with other types of illegal drug use. Research has consistently shown that young people who report one form of illegal ATOD use are more likely to report other forms of ATOD use as well (Everett, Giovino, Warren, Crossett & Kann, 1998). Students who smoke cigarettes, for example, are much more likely than nonsmokers to regularly use alcohol. As expected, reports of unauthorized prescription drug use in the sample schools correlated highly with other types of illegal ATOD use. For example, 12<sup>th</sup> students who reported the use of prescription pain relievers without a doctor's orders within the past 30 days were 5.5 times more likely to be current marijuana users than were 12<sup>th</sup> students who did not report prescription pain reliever use. Similarly, 12<sup>th</sup> students who reported the use of prescription stimulants without a doctor's orders within the past 30 days were 12.5 times more likely to be current cocaine users than were 12<sup>th</sup> students who did not report prescription stimulant use.

It is important to note, however, that these statistical tests, while promising, represent only a preliminary effort at measurement validation. While the data in tables C1 and C2 are presented to help guide prevention planning efforts in your community, they should be interpreted with caution. Further testing and refinement of these questions are likely to have an impact on response patterns and reported prevalence rates.

## Prevalence of Prescription Drug Use

**Table C1. Percentage of Surveyed Youth Who Reported Lifetime Prescription Drug Use, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Pain Relievers</b>	4.2	5.2	5.6	6.4	5.9	5.6	<b>5.5</b>
<b>Stimulants</b>	0.9	0.5	0.7	1.1	1.1	0.7	<b>0.8</b>
<b>Tranquilizers</b>	1.4	0.9	0.9	1.1	0.5	1.0	<b>1.0</b>

**Table C2. Percentage of Surveyed Youth Who Reported Past-30-Day Prescription Drug Use, by Grade**

	<b>M2</b> %	<b>M3</b> %	<b>S1</b> %	<b>S2</b> %	<b>S3</b> %	<b>S4</b> %	<b>Overall</b> %
<b>Pain Relievers</b>	2.1	2.6	3.4	3.0	3.2	2.0	<b>2.8</b>
<b>Stimulants</b>	0.7	0.0	0.4	0.0	0.5	0.3	<b>0.3</b>
<b>Tranquilizers</b>	0.4	0.7	0.2	0.2	0.3	0.3	<b>0.3</b>





# Appendix D

## Historical Data

### Introduction

In addition to the current survey effort, Bermuda administered the *Communities That Care Youth Survey* in 2003. This section of the report presents results from this previous survey effort. Caution should be exercised when comparing overall results across survey administrations. This is because differences in the distribution of the sample across grade levels can dramatically impact overall results, making trend comparisons of overall results inaccurate for some communities.

### Demographic Trends

The survey measures a variety of demographic characteristics. Table D1 shows selected characteristics of surveyed Bermuda youth for 2003 and 2007.

<b>Table D1. Selected Demographic Characteristics of Surveyed Youth</b>				
	<i>Number of Students</i>		<i>Percentage of Students</i>	
	<b>2003</b>	<b>2007</b>	<b>2003</b>	<b>2007</b>
<b>Overall Valid Surveys</b>	2,966	2,997	100.0%	100.0%
<b>Sex</b>				
Male	1,322	1,356	44.6%	45.2%
Female	1,615	1,613	54.5%	53.8%
Did not respond	29	28	1.0%	0.9%
<b>Ethnicity</b>				
Black	1,791	1,884	60.4%	62.9%
White	555	448	18.7%	14.9%
Portuguese	200	188	6.7%	6.3%
Asian or Pacific Islander	37	41	1.2%	1.4%
Other	205	233	6.9%	7.8%
Multiple	150	175	5.1%	5.8%
Did not respond	28	28	0.9%	0.9%
<b>Grade Level</b>				
M2	544	586	18.3%	19.6%
M3	592	598	20.0%	20.0%
S1	581	600	19.6%	20.0%
S2	548	490	18.5%	16.3%
S3	412	386	13.9%	12.9%
S4	259	309	8.7%	10.3%
Did not respond	30	28	1.0%	0.9%

Note: Rounding can produce totals that do not equal 100%.

## ATOD Results, 2003

Table D2. Lifetime Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth							
	M2	M3	S1	Bermuda			Overall
	%	%	%	S2	S3	S4	%
				%	%	%	
Alcohol	33.7	43.7	58.9	70.8	79.6	76.1	58.0
Cigarettes	8.6	16.5	27.3	32.7	41.3	38.4	25.7
Smokeless Tobacco	1.3	2.2	3.3	2.6	3.6	1.9	2.5
Marijuana	2.3	8.2	19.4	25.3	39.2	35.0	19.7
Inhalants	10.5	11.4	8.4	9.6	2.9	3.9	8.2
Ecstasy	0.2	1.0	0.5	2.2	1.0	1.6	1.0
Methamphetamine	0.0	0.0	0.2	0.6	0.2	0.8	0.3
Cocaine	0.0	0.7	1.0	1.3	0.5	2.3	0.8
LSD/Psychedelics	0.6	0.5	0.4	0.9	0.7	0.8	0.7
Heroin	0.6	0.3	1.6	0.9	0.5	0.0	0.7
Any Illicit Drug (Other than Marijuana)	11.0	12.8	9.9	11.5	5.1	6.9	9.8

Table D3. Past-30-Day Use of Alcohol, Tobacco and Other Drugs for Surveyed Youth							
	M2	M3	S1	Bermuda			Overall
	%	%	%	S2	S3	S4	%
				%	%	%	
Alcohol	6.2	13.9	24.3	35.1	46.4	50.6	26.9
Binge Drinking	3.2	6.6	12.3	16.6	23.1	25.7	13.4
Cigarettes	1.9	2.2	5.9	9.0	10.5	14.0	6.5
Smokeless Tobacco	0.6	0.9	2.1	1.8	1.0	1.6	1.3
Marijuana	0.8	2.6	9.5	12.6	23.0	20.6	10.3
Inhalants	3.8	4.5	3.0	3.1	0.7	1.9	2.9
Ecstasy	0.0	0.2	0.5	0.9	0.0	0.4	0.4
Methamphetamine	0.2	0.0	0.2	0.4	0.0	0.4	0.2
Cocaine	0.0	0.0	0.7	0.6	0.2	1.9	0.5
LSD/Psychedelics	0.0	0.2	0.2	0.4	0.2	0.4	0.2
Heroin	0.2	0.0	1.1	0.6	0.0	0.0	0.3
Any Illicit Drug (Other than Marijuana)	3.9	5.0	4.0	4.2	1.0	3.9	3.7

## Other Antisocial Behavior Results, 2003

**Table D4. Percentage of Surveyed Youth Who Reported Engaging in Antisocial Behaviors, by Grade**

	<b>M2 %</b>	<b>M3 %</b>	<b>S1 %</b>	<b>S2 %</b>	<b>S3 %</b>	<b>S4 %</b>	<b>Overall %</b>
<b>Attacking Someone with Intent to Harm</b>	9.0	15.1	18.5	21.1	22.7	17.1	<b>16.8</b>
<b>Attempting to Steal a Vehicle</b>	3.2	6.0	11.2	11.4	11.4	6.7	<b>8.2</b>
<b>Being Arrested</b>	0.9	2.6	5.9	7.4	7.7	6.0	<b>4.8</b>
<b>Being Drunk or High at School</b>	1.9	2.2	7.4	8.3	16.9	11.1	<b>7.3</b>
<b>Carrying a Bladed Weapon</b>	--	--	--	--	--	--	<b>--</b>
<b>Carrying a Handgun</b>	2.2	2.1	4.1	5.7	5.5	4.7	<b>3.9</b>
<b>Getting Suspended</b>	6.0	10.5	19.9	13.4	16.0	11.0	<b>12.6</b>
<b>Selling Drugs</b>	0.6	2.1	4.5	8.4	11.9	10.0	<b>5.7</b>
<b>Taking a Bladed Weapon to School</b>	--	--	--	--	--	--	<b>--</b>
<b>Taking a Handgun to School</b>	0.4	0.5	0.9	1.7	0.7	1.2	<b>0.8</b>
<b>Average</b>	<b>3.0</b>	<b>5.1</b>	<b>9.1</b>	<b>9.7</b>	<b>11.6</b>	<b>8.5</b>	<b>7.5</b>

## Risk and Protective Results, 2003

		<b>M2</b>	<b>M3</b>	<b>S1</b>	<b>S2</b>	<b>S3</b>	<b>S4</b>	<b>All</b>
<b>Community Domain</b>	<b>Community Rewards for Prosocial Involvement</b>	52	54	51	49	51	51	<b>51</b>
<b>Family Domain</b>	<b>Family Attachment</b>	60	58	53	47	43	46	<b>52</b>
	<b>Family Opportunities for Prosocial Involvement</b>	59	56	53	49	43	50	<b>52</b>
	<b>Family Rewards for Prosocial Involvement</b>	62	59	58	53	50	52	<b>56</b>
<b>School Domain</b>	<b>School Opportunities for Prosocial Involvement</b>	58	53	54	43	43	54	<b>51</b>
	<b>School Rewards for Prosocial Involvement</b>	67	69	68	59	53	65	<b>64</b>
<b>Peer and Individual Domain</b>	<b>Religiosity</b>	46	48	51	50	57	56	<b>51</b>
	<b>Social Skills</b>	61	59	49	46	44	49	<b>52</b>
	<b>Belief in the Moral Order</b>	71	69	66	59	57	65	<b>65</b>
<b>Average</b>		<b>60</b>	<b>58</b>	<b>56</b>	<b>51</b>	<b>49</b>	<b>54</b>	<b>55</b>

<b>Community Domain</b>	<b>Low Neighborhood Attachment</b>	46	45	49	48	48	38	46
	<b>Community Disorganization</b>	46	46	55	59	59	57	53
	<b>Transitions and Mobility</b>	46	47	43	47	49	47	46
	<b>Laws and Norms Favorable to Drug Use</b>	44	42	51	56	54	51	50
	<b>Laws and Norms Favorable to Handguns</b>	39	39	46	49	52	41	44
	<b>Perceived Availability of Drugs</b>	38	34	37	39	42	36	38
	<b>Perceived Availability of Handguns</b>	37	35	37	35	37	29	35
<b>Family Domain</b>	<b>Poor Family Management</b>	42	44	48	53	55	46	48
	<b>Family Conflict</b>	42	40	44	45	49	44	44
	<b>Family History of Antisocial Behavior</b>	41	43	51	47	54	52	48
	<b>Parental Attitudes Favorable toward ATOD Use</b>	46	43	45	48	46	52	47
	<b>Parental Attitudes Favorable toward Antisocial Behavior</b>	40	43	47	53	50	46	46
<b>School Domain</b>	<b>Poor Academic Performance</b>	48	54	50	56	60	61	54
	<b>Lack of Commitment to School</b>	30	28	31	37	35	29	32
<b>Peer and Individual Domain</b>	<b>Rebelliousness</b>	31	34	39	47	46	42	39
	<b>Friends' Delinquent Behavior</b>	41	43	51	55	61	53	51
	<b>Friends' Use of Drugs</b>	39	35	40	40	42	37	39
	<b>Peer Rewards for Antisocial Behavior</b>	47	48	53	58	60	50	52
	<b>Favorable Attitudes toward Antisocial Behavior</b>	32	35	40	47	42	38	39
	<b>Favorable Attitudes toward ATOD Use</b>	37	36	38	41	37	36	38
	<b>Low Perceived Risks of Drug Use</b>	45	47	50	52	51	50	49
	<b>Early Initiation of Drug Use</b>	38	39	45	47	52	44	44
<b>Sensation Seeking</b>	35	34	42	40	40	37	38	
<b>Average</b>		<b>40</b>	<b>41</b>	<b>45</b>	<b>48</b>	<b>49</b>	<b>44</b>	<b>44</b>

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# Appendix E

## Other Resources

### Web Sites

Office of National Drug Control Policy [www.whitehousedrugpolicy.gov](http://www.whitehousedrugpolicy.gov)

National Clearinghouse for Alcohol and Drug Information [www.health.org/index.htm](http://www.health.org/index.htm)

Substance Abuse and Mental Health Services Administration (SAMHSA) [www.samhsa.gov](http://www.samhsa.gov)

Monitoring the Future [www.monitoringthefuture.org](http://www.monitoringthefuture.org)

National Institute on Drug Abuse (NIDA) [www.nida.nih.gov](http://www.nida.nih.gov) and [www.drugabuse.gov](http://www.drugabuse.gov)

National Institute on Alcohol Abuse and Alcoholism (NIAAA) [www.niaaa.nih.gov](http://www.niaaa.nih.gov)

Social Development Research Group <http://depts.washington.edu/sdrg>

### Prevention Program Guides

Center for Substance Abuse Prevention, Western Center for the Application of Prevention Technologies. (2004). *Building a successful prevention program: list of all practices*. [Data file]. Available at the University of Nevada Reno's Web site, <http://casat.unr.edu/bestpractices/alpha-list.php>.

Center for the Study and Prevention of Violence, Institute of Behavioral Science. (2004). *Blueprints for Violence Prevention*. [Data file]. Available from the University of Colorado Boulder's Web site, [www.colorado.edu/cspv/blueprints](http://www.colorado.edu/cspv/blueprints).

Hawkins, J. D., & Catalano, R. F. (2004). *Communities That Care Prevention Strategies Guide*. [Data file]. Available from the SAMHSA Web site, <http://preventionplatform.samhsa.gov/>.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2004). *Model Programs list*. [Data file]. Available from the SAMHSA Web site, <http://modelprograms.samhsa.gov>.

### Prevention Planning

Hawkins, J. D., Catalano, R. F., & Associates. (1992). *Communities that care: Action for drug abuse prevention* (1<sup>st</sup> ed.). San Francisco: Jossey-Bass.